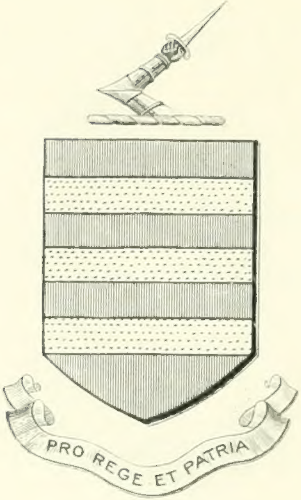

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CLINICAL LECTURE
ON
THE VARIOUS MODES OF TESTING FOR SUGAR IN THE URINE.

By GEORGE JOHNSON, M.D., F.R.S.,

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In a previous lecture (British Medical Journal, December 8th, 1883) I described and demonstrated the various modes of testing for albumen in the urine; and on the present occasion I propose to show the chief tests for sugar, and to estimate the relative value of each. I will first show you what is called Moore's test. I pour about a drachm of saccharine urine into a test-tube, and add half its bulk of liquor potassæ, and heat it over the lamp; and after boiling it for a minute or two, you see it gradually assume a brandy-brown colour. This test is easily applied, but it is not very delicate, since it will not indicate a proportion of sugar less than about two grains to the ounce. I will presently show you far more delicate tests. Then Moore's test has sometimes misled inexperienced observers in this way:—Liquor potassæ often contains lead from the bottles in which it has been kept, and when lead-contaminated liquor potassæ is boiled with albuminous urine, the sulphur of the albumen combines with the lead to form a dark sulphide, which unpractised observers might mistake for the brown colour produced in saccharine urine.

The Fermentation-Test.—When saccharine urine is mixed with yeast and kept warm, fermentation takes place with the evolution of carbonic acid and the formation of alcohol. Dr. Wm. Roberts (on *Urinary and Renal Diseases*) has shown that this test may be made use of for a quantitative analysis. As the sugar is decomposed, the specific gravity of the urine falls. Each degree of specific gravity lost indicates one grain of sugar to the ounce. The great objection to this method is the length of time, at least twenty-four hours, required for its completion. The urine is capable of absorbing about its own bulk of carbonic acid, and, according to Dr. Roberts, urine containing two and a half grains to the ounce or less, gives no visible sign of fermentation. It is therefore less sensitive than even Moore's test.

Trommer's Test.—To this saccharine urine in a test-tube I add a drop or two of a solution of sulphate of copper, and to this an excess of liquor potassæ. The oxide of copper, which is first thrown down, is redissolved, and forms a clear blue liquid. Now, on applying heat the oxide of copper is reduced to a suboxide, which forms a dense red or yellow deposit. An excess of copper, not being dissolved, may cause confusion, and the dark brown colour, from the action of the potash on the sugar, may interfere with the result.

Fehling's Solution.—A more satisfactory mode of applying the copper-test is in the form of Fehling's solution, which contains the following ingredients:—Sulphate of copper, 90½ grains, neutral tartrate of potash, 364 grains, solution of caustic soda, specific gravity 1.12, four fluid ounces, cold water to make up six fluid ounces. To use this solution, a column of about three quarters of an inch is poured into a test-tube, and heated until it boils, and then a drop or two of the urine to be tested is added. In a few seconds, if the urine contain much sugar, the liquid becomes of an opaque yellow colour, and a copious red or yellow precipitate falls. If the quantity of sugar be small, the urine is added more freely, but not beyond the volume of the copper-solution. Fehling's solution soon undergoes change by keeping, a portion of the oxide of copper becomes precipitated, and then, of course, the strength of the test is changed. When the test has been kept for some time, it will deposit suboxide on boiling without the presence of sugar. This is one reason for boiling the test before adding the suspected urine. If boiling the liquid render the test turbid, it must be filtered, or a fresh solution prepared. When the solution is used for a quantitative analysis, it must be freshly prepared, and its strength is such that 100 minims are decomposed by half a grain of sugar, the decomposition being shown by the decoloration of the liquid, and the precipitation of the suboxide of copper. When the urine is highly saccharine, it must be diluted to a definite proportion, five, ten, or more times, before the analysis is made, and then the result is to be multiplied by the number of dilutions.

For laboratory-work, Dr. Pavy has modified and improved upon Fehling's method of analysis. The essential difference between the method of Dr. Pavy and that of Fehling consists in the addition of a sufficient quantity of ammonia to the copper-solution to prevent the precipitation of the cuprous oxide, after its production by the reducing action of the glucose. Rochelle salt (potassic tartrate of soda), though it effectually dissolves cupric oxide, is incapable of dissolving cuprous oxide, and some difficulty is often experienced by Fehling's process in ascertaining the exact moment of disappearance of the blue colour due to cupric copper, on account of the turbidity and red tint imparted by the precipitated cuprous oxide. This difficulty is removed by Dr. Pavy's process, since the ammonia altogether prevents the precipitation of cuprous oxide, and in a clear solution the exact amount of sugar required to completely decolorise the cupric blue tint may be much more easily determined. The only precaution necessary is to completely exclude air during the determination, because a colourless ammoniacal cuprous solution is rapidly rendered blue by exposure to atmospheric oxygen, the cupric hydrate being thereby reproduced.

The Picric Acid and Potash Test for Sugar.—In a letter which I published in a medical paper, November 18th, 1882, I stated that I had accidentally stumbled upon the fact that picric acid, when boiled with caustic potash, forms a most delicate test for glucose. I added some picric acid solution to a boiling specimen of diabetic urine, which had been previously mixed with liquor potassæ, and found, to my surprise, that the liquid at once assumed an intensely dark colour. I was not then aware of the fact that the reaction of picric acid with grape-sugar had been observed by Braun, a German chemist, nearly twenty years ago ("Ueber die Umwandlung der Pikrinsäure in Pikramminsäure, und ueber die Nachweisung der Trauben-Zucker." C. D. Braun. *Zeitschrift für Chemie*, 1865). In this paper, it is shown that grape-sugar, when boiled with picric acid and potash, reduces the yellow picric acid to the deep red picramic acid, the depth of colour depending on the amount of sugar present. I am not aware that hitherto any attempt has been made to utilise this as a qualitative clinical test for sugar in the urine, or as a means of accurately estimating the amount of sugar in a saccharine solution. I think, however, that, after having been the subject of much hostile criticism, the value of the test for both purposes has been completely proved and established. I take a fluid drachm of a solution of grape-sugar, in the proportion of a grain to the fluid ounce, mix it with half a drachm of liquor potassæ (*P.B.*), and ten minims of a saturated solution of picric acid, and make up the mixture to four drachms with distilled water. The mixture is conveniently made in a boiling tube, ten inches long and three-fourths of an inch in diameter, which should be marked at the height of four drachms. With a long boiling tube, there is little risk of the liquid boiling over; and the steam, condensing in the upper cooler part of the tube, flows back as liquid, so that there is little loss by evaporation. The liquid is now raised to the boiling point, and kept boiling for sixty seconds, so as to ensure complete reaction between the sugar and the picric acid. During the process of boiling, the pale yellow colour of the liquid is changed to a beautiful claret-red.

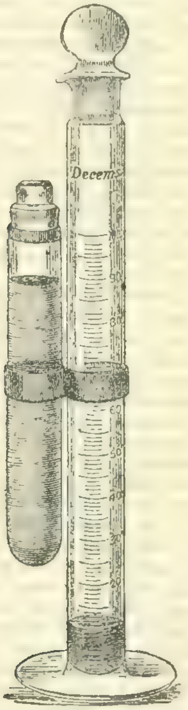
The liquid having been cooled by cautiously immersing the tube in cold water, we ascertain that its level is that of the four-drachm mark on the tube; and if found below the mark, it is brought up to it by the addition of distilled water. The colour now is that which results from the decomposition of picric acid by a grain of sugar to the ounce four times diluted; in other words, it indicates one quarter of a grain of sugar to the ounce, and this colour is a convenient standard for comparison in making a quantitative analysis. The picramic acid solution, however, on exposure to the light even for a few hours, becomes paler; but the colour may be exactly imitated by a solution of ferric acetate with an excess of ferric perchloride, and a slight excess of acetic acid. The following is the formula for the standard solution, for which I am indebted to my son, G. Stillingfleet Johnson.

Liq. ferri perchlor. fort., ʒj; liq. ammon. acet., ʒiv; acid. acet. glacial ʒiv; aq. dest. ad. ʒiiss.[1]

The colour of this is equal to a quarter of a grain of grape-sugar to the ounce. When a fresh solution is made, it should be checked by comparison with a grain-solution of sugar, boiled with picric acid and potash, and four times diluted.

I have here an iron standard solution, which was made six months ago, and which, having been kept for the most part in the dark, retains its colour unchanged. I have also a solution of grape-sugar, one grain to the ounce, in eighty per cent. of water and twenty per cent. of rectified spirit, which has kept without change in an accurately stoppered bottle for the same period. The alcohol prevents the spontaneous decomposition of the sugar, but has no reducing action on picric acid.

If, now, a drachm of a solution of grape-sugar, containing two grains to the ounce, be mixed with the same quantity of liquor potassæ (half a drachm) as before, but with double the amount of picric acid (*i.e.*, twenty minims), and made up to four drachms in the boiling tube, the result of boiling the mixture as before for sixty seconds will be the production of a much darker colour than when the one-grain solution was acted upon; but, if now the dark liquid be diluted with its own volume of water, the colour will be the same as that of the one-grain solution.



The picro-saccharimeter, as described in the text. The shading of the side-tube indicates the ferric acetate standard. The darker shading at the bottom of the graduated tube shows the saccharine fluid, darkened by boiling with picric acid and potash, and occupying ten divisions before dilution.

The dilution is accurately done in a stoppered tube, twelve inches long and three-quarters of an inch in diameter, graduated into 10 and 100 equal divisions. By the side of this tube, and held in position by an S-shaped band of metal, is a stoppered tube of equal diameter, and about six inches long, containing the standard iron-solution.[1] (See Fig.)

Sufficient of the dark saccharine liquid to be analysed is poured in to occupy exactly ten divisions of the graduated tube. Distilled water is then added cautiously, until the colour approaches that of the standard. The level of the liquid is then read off and noted. A more exact comparison of the saccharine liquid with the standard is made by pouring into a flat-bottomed colourless tube, about six inches long and an inch in diameter, as much of the standard as will form a column of liquid about an inch in height, and an exactly equal column of the saccharine liquid in a precisely similar tube. The operator then looks down through both tubes at once, one being held in each hand, upon the surface of a white porcelain slab, or a piece of white paper. In this way, a slight difference of tint is readily recognised; and, if the liquid to be analysed be found to be darker than the standard, it is returned to the graduated tube, and diluted until the two liquids are found to be identical in colour, when the final reading is taken. The saccharine liquid having been diluted four times before it was boiled, a colour equal to that of the quarter-grain standard would indicate one grain of sugar per fluid ounce. If further dilution were required—say from ten to twenty divisions—the proportion of sugar would be two grains per ounce, and so on to thirty or forty or upwards, or to intermediate divisions. Thus, dilution from ten to thirty-five divisions would indicate 3.5 grains of sugar per ounce.

We have found, by experiment, that ten minims of a cold saturated solution of picric acid are rather more than sufficient for decomposition by one drachm of a solution of grape-sugar in the proportion of one grain to the ounce. A drachm of the solution would, of course contain one-eighth of a grain of sugar. In making an analysis, the picric acid must be added in proportion to the amount of sugar. If the proportion of sugar be as high as six grains per ounce, a drachm of the picric acid solution will be required. If the proportion of sugar be higher than this, the saccharine fluid should be diluted with distilled water, in a definite proportion, before commencing the analysis, and the product of the analysis of the diluted fluid is then to be multiplied by the degree of dilution—two, five, or ten, as the case may be, to which the original liquid has been subjected.

When the urine has been diluted ten times, the figures on the saccharimeter indicate the number of grains per ounce. Thus, when the diluted urine, after boiling with picric acid and potash, is further diluted from 10 divisions to 35, to obtain the standard colour, the amount of sugar is 35 grains to the ounce.

Distilled water, or clear rain-water, should be used for diluting. Hard water, containing salts of lime, is rendered turbid by the carbonate of lime precipitated by mixture with caustic potash, and any turbidity in the liquid interferes with the estimation of the depth of colour. In testing undiluted urine, a slight turbidity often results from separation of phosphates by the potash. This turbidity may be removed by allowing the phosphates to form a sediment, or more speedily by filtration. When a highly saccharine liquid is diluted five or ten times before mixture with the testing materials, no phosphatic turbidity occurs. In making a volumetric analysis, care must, of course, be taken that the measurements and dilutions are accurately made.

The preliminary dilution of a strongly saccharine specimen may be made in the graduated tube; or, into a flask graduated to contain fifty cubic centimètres, five or ten cubic centimètres of the saccharine liquid may be delivered from a graduated pipette; then, the flask being filled up to the graduation with distilled water, the dilution will be ten times with five cubic centimètres, and five times with ten cubic centimètres of the liquid to be analysed. Or, without any special apparatus, an accurately measured drachm of urine may be diluted up to five or ten drachms with distilled water.

Another important point is that, while the amount of potash remains the same, the picric acid must be in proportion to the amount of sugar in solution. It has already been mentioned that ten minims of the picric acid solution are more than equal to one-eighth of a grain of glucose, which is the amount contained in one drachm of a solution, in the proportion of a grain to a fluid ounce. A slight or even a considerable excess of picric acid does not appreciably affect the colour of the picramic acid, while a deficiency would, of course, lead to an underestimate of the amount of sugar. If an analysis with thirty minims of picric acid solution indicate, say, from three to four grains of sugar, it is probable that some sugar has been left undecomposed; and a second analysis, with a larger proportion of picric acid, might therefore give a higher and a more correct result. If, on the other hand, a second analysis, with a larger proportion of picric acid, give an identical result, we may feel certain that the whole of the sugar has been decomposed, and the amount indicated by the resulting picramic coloration. In any case, when the amount of sugar indicated is less than would suffice to react upon the amount of picric acid employed, the result may be relied upon as correct.

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[1] This standard solution may be obtained from Messrs. Bell and Co., and probably from other pharmaceutical chemists.

[1] This picro-saccharimeter was made for me by E. Cetti, 36, Brooke Street Holborn, E.C.

The presence of albumen, even in large amount, has but little influence on the picric acid test for sugar. In illustration of this, the following experiments will suffice. A specimen of urine, normal as regards the amount of saccharine or saccharoid material, but containing a large amount of albumen, was boiled with picric acid and potash, with sufficient water to dilute the urine by its own volume of liquid. A second portion was treated in the same way after the separation of the albumen by boiling and filtration, and the first specimen gave a darker tint than the second, to a degree that might be considered to indicate one-tenth of a grain of sugar per ounce. Another portion of the urine was decolorised by repeated filtering through charcoal; and, of this, one specimen was tested while it retained its albumen, another after the separation of the albumen; the result being that both yielded identical tints of colour, and this was very slightly paler than that of the specimen which was tested after having been deprived of its albumen without previous decolorisation by charcoal. The explanation is, that pure albumen has no reducing influence on picric acid when boiled with dilute potash, such as is used in testing for sugar; but with seralbumen, as with white of egg, there is associated a colouring matter which is partly separated by filtering off the coagulated albumen, and entirely removed by repeated filtering through charcoal. The colouring matter in question has a reducing influence on picric acid, although the colouring matter of normal urine has been found to have none. The coagulated albumen collected on the filter, after being thoroughly washed, gives no red reaction when boiled with picric acid and potash diluted in the same proportion as that employed in testing for sugar. This has been proved by repeated experiments.

When I first published to the profession my observations in picric acid and potash as a test for sugar, it was suggested that unoxidised sulphur-compounds in the urine, and especially in albuminous urine, would form an alkaline sulphide when boiled with potash, and this would decompose the picric acid and render the test fallacious. Experience has proved that these theoretical objections were quite groundless. My son proved conclusively that, when pure albumen is boiled with diluted solutions of potash, such as are used in testing for sugar, no alkaline sulphide is formed.

The final communication of my son, in which he demonstrates that the apparently contradictory results obtained by different observers are explained by the varying proportions of the caustic potash employed, is published in the *Chemical News*, February 23rd, 1883, page 87.

The accuracy of the picric acid method of volumetric sugar-analysis has been fully and fairly tested. Our plan has been to compare the results of this process with those obtained by Dr. Pavy's ammonio-cupric method. We have analysed the same specimens, many of them albuminous as well as saccharine, by the two processes, my son employing Dr. Pavy's method in the laboratory at King's College, and I the picric acid process at home; and our results are found to be practically identical, the differences being only such as are due to unavoidable slight errors in conducting an experiment. Both methods, in fact, are based upon the same chemical principle—namely, that glucose, when heated with potash in the presence of an oxidizing agent, has a tendency to rob it of its oxygen. In the one process, the reducing action of the sugar is exerted upon an oxide of copper; in the other, on picric acid. A definite weight of sugar reduces, in the one case, a proportional amount of cupric oxide, and in the other an equivalent proportion of picric acid, with resulting picramic acid and a corresponding measurable intensity of colour.

In the majority of cases, the ammonio-cupric process gives results slightly in excess of the picric acid method. This excess is due to some non-saccharine ingredients in the urine, which reduce cupric oxide, but not picric acid. Amongst other ingredients of normal urine, uric acid and urates are known to have this reducing effect on cupric oxide.

I claim for the picric acid and potash method of analysis that it is as accurate as any other, and that for the estimation of sugar in the urine it is even more accurate than either Fehling's or Dr. Pavy's process, because the picric acid is not acted on by uric acid or urates, which reduce the oxide of copper. The method of analysis by the picro-saccharimeter is at least as speedy and as easily acquired as any other. The materials and apparatus required are easily prepared, inexpensive, and not, like Fehling's copper-solution, liable to undergo rapid changes. The standard iron-solution, as I have shown, may be kept in the dark for months without the slightest change of colour; and a solution of grape-sugar in water, one grain to the ounce, with twenty per cent. by volume of rectified spirit, may be kept unchanged for an indefinite period, and used occasionally for comparison with the ferric acetate standard.

During the last nine months, I have tested with the picric acid and potash a large number of specimens of normal urine, with the almost uniform result of a depth of colour indicating the proportion of 0.6 grain of sugar in the fluid ounce, the indication usually varying between the limits 0.5 and 0.7 grain in the fluid ounce. In a considerable number of cases, my son has tested the same specimens by the ammonio-cupric method, with the indication usually of from 0.7 grain to 0.9 grain in the fluid ounce; *i.e.*, an excess of that obtained by picric acid of from 0.1 to 0.3 grain in the fluid ounce.

The following have been the proportions of the various liquids: a drachm of urine, $\frac{1}{2}$ a drachm of liquor potassæ, 10 minims of picric acid solution, made up to 2 drachms with distilled water. The mixture is kept boiling for a minute, and, when cooled, is compared with the standard. The urine having been diluted by its own volume, a depth of colour equal to that of the standard would indicate 0.5 grain of sugar; but, in nearly every case, I have found it so much darker than the standard, as to require further dilution equal to 0.1 grain before the standard colour is reached, thus giving an indication of 0.6 grain.

When the mixture is rendered turbid by phosphates, these must be removed by filtration before the colour can be quite accurately estimated.

So constant is this degree of coloration with normal urine that if, instead of diluting up to 2 drachms, the dilution be carried further by 24 minims, the resulting colour might be taken as an approximation to an exact quarter-grain standard, and, in the absence of a more exact standard, might be used for making a quantitative analysis. The question arises: Does normal urine contain as much as 0.6 to 0.7 grain of glucose in the fluid ounce? I am not prepared to assert this without further evidence than we have as yet been able to obtain; but, if it be not glucose which gives these almost identical analytical results with the two processes, it must surely be some nearly allied substance.

For bedside sugar-testing, I carry in my pocket-case, in addition to powdered picric acid, grain-lumps of caustic potash, and a test-tube which is graduated up to four drachms. I put into the test-tube a small brass measure of picric acid about one-third grain, urine to the half-drachm mark, and water up to a drachm, then drop in a grain-lump of caustic potash, and boil for about thirty seconds.

In normal urine, the resulting colour is usually darker than the quarter-grain standard, until the dilution is carried up to the twelve-minim mark above the drachm, indicating 0.6 grain. If the colour be still darker than the standard, more water is to be added until the standard colour is obtained. Dilution to two drachms would indicate one grain per ounce, and each further dilution of a drachm indicates an additional half-grain per ounce, so that dilution to the top of the graduated four-drachm tube would show two grains per ounce, which is about three times the average normal amount. For the quantitative analysis of an amount of sugar beyond this, the saccharimeter must be used.

The Indigo-Carmine Test. Dr. Oliver has recently had papers prepared by drying after immersion in a solution of indigo-carmine with carbonate of soda. These papers form a delicate qualitative test for sugar. A paper is placed in a test-tube and covered with distilled water; heat is then applied until a blue solution is formed. A drop of diabetic urine is then added, and the heating continued. The solution changes from blue to violet, purple, red, yellow, and finally straw-colour. After cooling and exposure to the air, the liquid passes back through the various colours into the original blue. The delicacy of the test is increased by using a carbonate of soda paper with the indigo-carmine paper. This paper-test, delicate and easy of application as it is, is not more so than the picric acid and potash test before described, and, so far as we at present know, it affords but an imperfect indication of the amount of sugar.

Since using the picric acid and potash test, I have so often found an excess of sugar in urine, when, from the comparatively low specific gravity, I should not have suspected it, that I now invariably test for both sugar and albumen in every specimen of urine. This double qualitative testing, which occupies less than two minutes, is done as follows. To about a drachm of urine in a test-tube is added an equal volume of a saturated solution of picric acid. If albumen be present, the liquid is rendered more or less turbid, and this turbidity is increased by boiling. Then half a drachm of liquor potassæ is added to the boiling mixture, the albumen, if present, is redissolved, and the boiling is continued for about thirty seconds. If sugar be present in the proportion of a grain to the ounce, the liquid will become darker than the quarter-grain standard, and two grains or more to the ounce will make the mixture black. The presence of an excess of sugar having thus been ascertained, the actual amount may be speedily and accurately determined by the quantitative method of analysis before described.

AN ADDRESS
ON
COLLECTIVE INVESTIGATION OF DISEASE.

Delivered at a Meeting of the Northern District of the Metropolitan Counties Branch.

BY DYCE DUCKWORTH, M.D.,
Physician to St. Bartholomew's Hospital, etc.

GENTLEMEN,—Addresses on the subject of Collective Investigation of Disease have become a part of the machinery employed by the Committee of the Association which I represent here to-night. Most of those who now hear me have, I suppose, read the masterly addresses delivered this year by Sir William Gull, Sir James Paget, Dr. Wilks, and others, and may even have been stirred by their voices. I assume that you all know the design of our Committee, and that I have nothing to tell you in respect of that, or of the method in which it is sought to garner the fruit of the experience of many capable and hard-working members of the Association. I can, therefore, only ask you to take my remarks as a text for the discussion which your district Branch has, as I think wisely, determined to hold on this subject to-night. I have been told that there are members of the Association not in sympathy with this great movement. I cannot believe that they are numerous. It is conceivable that objection may be taken to parts of the scheme, and, as a matter of fact, I know that objections have reached the Committee in respect of this. I may add, at once, that such objections are in all cases carefully considered. It were too much to expect that a vast piece of machinery, such as we have set going, should work smoothly all at once. And that it is truly vast, cannot be gainsaid, for I hold it to be very remarkable that so many inquiries should have been issued, and responded to, within the last eighteen months, and that so much addition to general medical knowledge should have been furnished by this Committee as was embodied in the first volume of its *Record* in July last. So far, the work is certainly encouraging, and there is clear prospect of greater things to come. For my part, I think the Association never before so vindicated its existence as when it determined to employ its unrivalled resources for this good purpose.

I take it that, as a profession, we are bound not only to do all we can for the sick committed to our care, to seek constantly for truth and for increase of knowledge that shall help us, but also to make known our experience for the common welfare of humanity.

Now, gentlemen, it cannot be denied that, day by day, the grave closes over members of our body, who are taken to their well-earned rest, who leave us not only the poorer for their personal work, but who carry with them stores of knowledge and experience, honestly and hardly gained, which never went further than to do good service to the sick they tended.

Of course, much of this is inevitable, much of the art of medicine (and, gentlemen, it is well to emphasise it in these days, our profession is an art, and we are artists, if we are worth anything, as ministers to the sick), I say, much of the art of medicine is personal to the possessor of it, and is, in the nature of things, incommunicable by word or letter. Albeit, there is much, very much, that may be unburdened from the well-stored mind, and that ought so to be passed on to the stock of common knowledge. This is our special work. Systematically, categorically, and with exactness, to gather in the fruits of careful and observant practitioners; to do this in full recognition of the many calls and claims upon the time and energies of men who are mostly busy, mostly pressed as bread-winners, and without, in many cases, the unquestionable stimulus that urges on some to seek position and fame as just recompense for their efforts.

This has been nobly achieved, in many instances, long before this Committee was formed. Some of the hardest-worked men have done much in this direction, and it would be easy to adduce examples.

Those who have preceded me in offering addresses of this kind, have indicated well how private practitioners must naturally bear the largest share in building up the particular knowledge we seek. You have the special privilege of retaining your patients, for the most part, under long-continued observation, both in health and disease; and pray remember that, much of the best knowledge needed in treating a case of disease, is derived from accurate acquaintance with the healthy or ordinary life-history of the patient. The family-practitioner is at a great advantage here, as compared with a consultant, or a hospital-physician, who is often heavily handicapped in this respect.

The great doctrines of diathesis and heredity, which are happily coming back to prominence, enlarged and rendered more certain and trustworthy by the light of advancing knowledge, are available as material guides for better therapeutics; so that we now, more than formerly, treat our patients rather than their diseases. With family- and life-histories before you, you have great aids to diagnosis and prognosis.

As you are aware, several inquiries are now in progress. The question of the contagiousness of pulmonary phthisis is not yet fully answered. This is, perhaps, the largest and most difficult problem issued by our Committee, and, perhaps, none has excited more wide-spread interest, and, at the same time, more obloquy.

It is all very well to scoff, as some have done, at the idea of contagion in connection with phthisis, but the question still waits for an answer; and facts alone, if they can be had, and not opinions, will furnish the reply. I may say here that the residuum of evidence adduced so far by the inquiry, goes to prove that any fears on this head, fears which, if they exist, are either justifiable or unwarrantable, are all but vain. We have learned that only under conditions of extreme contiguity and of most vicious hygiene, can this malady prove communicable. It was surely worth the effort to learn this; we had no knowledge at all on the subject previously, and, without doubt, ere the inquiry is closed, we shall be wiser still.

The endeavour to gain more exact particulars about the workings and manifestations of syphilitic virus is one set on foot, and such an inquiry at once commends itself, and cannot fail to be helpful to us. The same may be surely said of the inquiries as to diphtheria, chorea, acute rheumatism, pneumonia, and acute gout; and I may remind you that the subcommittee on pneumonia desires soon to issue its report, and therefore begs for a return of cases as soon as possible.

Objection has been raised to the number of inquiries set going almost simultaneously, and I think there is some reason in this, though I cannot but suspect that the objections come, in some instances, from Gallios amongst us, who consign all the documents of the Committee, without qualms of conscience, to their waste paper-baskets. It is, I believe, the experience of our subcommittees and secretaries, that the men from whom a report is expected on one subject, are equally to be depended on for efforts in respect of all; and this only confirms what is well-known, that the men who have least time to lose, contrive to do more work and have more true leisure than less active men. As I am seizing as many points upon which objection has been raised as I can, I may here refer to those which have reached me in respect of the card issued upon acute gout. As an instigator of that inquiry, and having taken a share in drawing up the questions upon it, I was surprised to hear that some of these were thought incapable of reply. In respect of the temperature-curve of acute gout, it seemed not a hard matter for a practitioner to secure this. It has been said that no one attends a case of acute gout more than once a day, and that, therefore, no two temperatures can be secured in twenty-four hours. Surely, there can be no insuperable difficulty here. The public are rapidly learning to use the clinical thermometer—too rapidly, as some may think—and a duly set instrument may safely be left with a patient for his use. Patients with acute gout, in every rank of life, are commonly possessed of more than the average intellect, and can therefore afford particular aid in this and kindred investigations. It is certain that, in hospital-practice, we cannot pursue this inquiry, for cases either do not present themselves early enough, or are not deemed fit objects for a bed. Meantime, we remain in ignorance of the particular type of gouty pyrexia, an ignorance that could be removed within one month if fitting use were made of opportunities.

Another objection has been made to our definition of the disease. To avoid endless errors, which are only too easy to fall into, the subcommittee agreed to limit the gout-inquiry to cases in which a great toe was alone, or at all events primarily, involved. This is classical podagra. It will hardly be believed that one member of the Association made objection to this, because he had happened to see more cases of acute gout in the knee than in the great toe.

Other inquiries are about to be issued. The subject of puerperal pyrexia is a pressing one, and we want better knowledge of this important matter. A card has been prepared on cholera; and if, as is not unlikely, this pest invades us next autumn, it will be well to have our inquiries systematised, and available in good time.

Complaint is sometimes made that more time would be required for response to these inquiries than can be fairly demanded from busy men. We well know how ways can be found for willing minds, and I might here adduce as a monument of industry, erected, almost imperceptibly, at odd moments in a busy life, that valuable work of Dr. Neale's, the *Medical Digest*, to which I am ready to acknowledge my frequent indebtedness.

The art of collective investigation can be best cultivated by acquiring a habit of recording, even in mere jottings, the points and prominent features of cases. A note of one line in length at the time is worth a page written from memory a few days afterwards. The value of committal to paper, too, is very great as an incentive to accurate, and corrective of superficial, observation. And all this demands an interest in our work, and calls upon us to show how much we really love our art. To judge by some men's conduct, it would seem that they did not love their daily work for its own sake, and I will illustrate what I mean by some personal experience.

To take a class of diseases about which we want information, and which we too often fail to reach in hospital practice;—I allude to abdominal tumours. Perhaps there is no more difficult subject of diagnosis than this. Years of experience (and, as my great predecessor at St. Bartholomew's, Latham, remarked once, "great experience is not all experience") are required to render one's opinion valuable in this direction. What do we find but too frequently? That, as soon as we have paid careful attention to a case of this kind, and shared our difficulties with our colleagues, the patient becomes alarmed at the concern his malady creates, and forthwith quits the hospital. In too many instances we never hear more of the case. It will certainly fall into the hands of some practitioner; but the occasion is rare when it excites sufficient interest, or becomes the subject of a necropsy; and still more rare, if this should be made, that the hospital-physician ever hears the result. And thus great *lacunæ* in our knowledge come to exist, for want of timely interest and enterprise. It would be but kind, and it would certainly be wise, for the practitioner to communicate the fact of his having such a case to those who preceded him in charge of it; and in many instances the hospital would provide for an inspection, and thus secure a fragment of knowledge for common benefit. All this entails some trouble; but I hold it to be a duty, and no work is worth doing that gives no trouble. Indeed, nothing in the way of our duty can possibly be a trouble, properly so called.

Gentlemen, I have expanded the remarks I purposed to make, and have taken up an undue amount of your time. I desired to give you a text for your discussion, and have avoided touching any topic which my predecessors have exhausted. Let me conclude by commending the efforts of the Committee to your best consideration and support. If you possess the first *Record* of its work, you will not fail to procure the second, just about to be issued; and, if you do not find your own share of contribution in either of these volumes, I am confident you will not allow the third one to appear without some token of your sympathy with this good work. My last words shall be those of one of the greatest and most painstaking physicians of our time, and they are very pertinent to the subject of collective investigation: "In the medical profession, all truly valuable and practical knowledge is only to be gained by appropriate sacrifice of time and labour; and, as a general rule, the one may very fairly be measured by the other." Thus wrote Thomas Addison. For those who are faint-hearted, or lack confidence in their powers of observation, I would commend a daily reading of this inspiring epigram, which has before now served good purpose: "Maximum mediocris ingenii adjumentum diligentia."

RODENT ULCER, AND ITS RELATIONS TO EPITHELIOMA.

By G. H. HUME, M.D.,
Surgeon to the Infirmary, Newcastle-on-Tyne.

THERE seems to be now almost an agreement among pathologists on the subject of rodent ulcer and its relation to epithelioma. But the question is not yet entirely settled, and the investigation of which this paper is a record was undertaken with the desire to aid in definitely determining the pathology of the former disease.

It is not necessary to enter at any length upon the history of this question. But it is convenient to have in mind the leading facts, and it is found that these group themselves into two periods. In the first period, in which rodent ulcer was first clinically distinguished by Jacob, no special cell-growth was detected as characterising the disease, and it was therefore classed among the non-cancerous ulcerations. The second period dates from the description by Thiersch in his *Atlas* of the existence of a special cell-growth. Since the publication of Thiersch's *Atlas*, there has been practically little added to the description he gives of the masses in which this cell-growth occurs. Later observers may have differed as to more minute details, but the existence of peculiar glandiform cell-masses has been accepted as the distinctive pathological feature of rodent ulcer, just as Jacob's description has remained the clinical picture of the disease. The point on which opinions have mainly differed has been as to the genesis of these cell-masses. Thiersch considered them to be of epithelial origin, and he therefore distinguished the cases in which they occur as flat epithelial cancer. He does not seem to have directly traced the cell-masses to any one of the skin-structures, but, from their general form and character, he was of opinion that they originated in the hair-follicles. This view, both as to the epithelial character of the masses and as to their origin, has been generally adopted, and among recent writers has been especially advocated by Drs. Tilbury and Colcott Fox (*Pathological Society's Transactions*, vol. xxx), who traced the growth to the external root-sheath of the follicles. This sheath being an extension of the Malpighian layer of the epidermis, from which the growth in epithelioma is known to spring, this view necessarily reduces the difference between the two diseases to a minimum. In the one disease, the new growth takes the form of prolongation from the rete Malpighii; in the other, the portion of the Malpighian layer attacked is that belonging to the follicles. But in opposition to this view, Dr. Thin has maintained the belief that rodent ulcer is in reality a cancerous adenoma of the sweat-glands (*Pathological Society's Transactions*, vol. xxx). He traces the origin of the cell-growth to the secreting epithelium of these glands, and not to any epidermic structure, and thus assigns to the disease a pathological connection altogether distinct from the epithelial cancers. Between these two views, there can be no doubt that the balance of evidence is decidedly in favour of the former; but on neither side has the endeavour to trace the actual development of the new growth from its origin been altogether satisfactory.

During the past five years, I have had opportunity of examining specimens from eight cases of rodent ulcer. Five of these cases were under my own care; the remaining three were under the care of my colleagues in the Newcastle Infirmary, and I was enabled in these instances also to see the patients previously to treatment. To the earlier of these eight cases, I do not here make more than a passing reference. Their examination familiarised me with the ordinary histology of rodent ulcer, but the portions of skin obtained were too completely involved in the disease to admit of other than a conjectural opinion as to its origin. I therefore determined, as opportunity occurred, to obtain portions of skin as far removed as possible from the edge of the ulcer. It seemed a reasonable assumption that the mode in which the disease is propagated into the surrounding healthy skin (apart from the direct growth of the glandiform masses) is a repetition of the process by which it at first started; and that therefore a methodical examination from the healthy skin towards the ulcer would yield important evidence as to the structure in which the morbid action begins. So far as could be judged from the few published cases, the development of the disease did not seem to be more easily traced in the earlier or pre-ulcerating period, than after ulceration had occurred; and the opportunity of examining any case in this earlier stage did not present itself to me.

Three cases—the correspondence of which in all particulars with typical rodent ulcer was exact—have afforded me material for continuing the examination in the way proposed. In these cases, the margins of the ulcer were removed by incision well into the apparently healthy skin, and the material so obtained was, after hardening, cut into sections, all of which were preserved. These were stained in logwood, or double-stained in eosin and logwood, or in picro-carmine and logwood, and were so mounted as to admit of being examined in consecutive order. The history of the cases is, briefly, as follows.

CASE I.—H. G., a woman, aged 54, was first seen November, 1882. She had suffered from an ulcer affecting the left side of the face for twelve years. It had begun at the side of the nose near the angle of the eye, had gradually extended to the cheek and brow, and had now attacked the eye. The ulcer presented the usual characters of a rodent ulcer. There was no glandular affection, and the patient was in excellent general health. The eye and contents of the orbit, and the margins and floor of the ulcer, were removed by the knife, and the surface cauterised with the thermo-cautery. Sound healing took place, and the patient remained free from the disease till September this year, when a small ulcer formed in the depression of the skin, which now covers in the empty socket.

CASE II.—J. E., a pitman, aged 59, had been under treatment in 1878 for an ulcer of the side of the nose of six years' duration. The ulcer was then treated with chloride of zinc paste with promising effect, but the patient ceased attendance before healing was completed. He was not again seen till June of this year. The ulcer had then extended towards the cheek, the inner canthus, and the brow.

CASE III.—J. L., aged 60, was admitted into the infirmary in May, under Dr. Armstrong, who kindly allowed me to see the case, and gave me a portion of the excised margin of the ulcer. The disease had existed for four and a half years, and its progress had been somewhat rapid. It had begun close to the lower eyelid, and had destroyed the lid and a portion of the brow and cheek. But there was no infection of glands, nor was the health affected.

It would lead to unnecessary repetition to give a separate report of the examination in each of these cases. The facts observed were the same in all three; and it was found that certain changes could be clearly traced in passing from the healthy skin to the neighbourhood of the ulcer. I shall therefore proceed to describe these changes from their first appearance to their outcome in the production of the glandiform masses.

The first appearance of disease (Fig. 1, A) is noticed in a broadening from increased cell-formation of certain hair-follicles. The portion of the follicle affected seems usually to be the neck, or that part between the opening of the sebaceous gland into the follicle and the epidermis. The canal of these broadened follicles usually widens (Fig. 1, B.), producing an elliptical cavity in the section. In some follicles the broadening is not general, but takes the form of distinct outgrowth from the edge (Fig. 1, C.), and in such the connection of the outgrowth with the external sheath of the follicle can be plainly traced.

At the same time, there are evidences in the corium of irritative action, in increased vascularity, in the presence of groups of leucocytes, and, later, in general œdematous infiltration. Then, partly owing to the cell-production going on in connection with the follicle, and partly in consequence of the swelling of the corium, the diseased follicle, with its sebaceous gland, tends to take a deeper position as regards the epidermis; and, at one point or other, it breaks off. The beginning of this breaking off is, in some specimens, indicated by a constriction, and by the apparent growing towards each other of the cells of the Malpighian sheath. There is then seen to stretch across the follicle, at this part, a loop of rod-shaped cells; and, the constriction increasing, the follicle is broken into two portions. It is the deeper portion which seems invariably to become changed into the patch of rodent tissue. That the upper fragment frequently, if not usually, disappears, is suggested by the almost unbroken contour which the atrophied epidermis often exhibits. The further change of the deeper portion of the follicle into a patch of rodent tissue consists in the multiplication of cells which are unmistakably derived from those of the Malpighian sheath. They are more or less elongated in form, and often quite rod-shaped. In Fig. 2 are shown two follicles which have become detached from the epidermis, and which are undergoing transformation. A portion of one of them is shown more highly magnified in Fig. 3. Here the root of the follicle is breaking up in a brush-like manner, due to the elongated form of the cells; while quite the upper part of it remains as yet unchanged. Where the transformation of a follicle is in this way seen in progress, the two parts—the changed and the still unchanged—offer a striking contrast in their behaviour towards staining agents. The old follicle-cells are seen to be feebly stained, while the proliferating part is deeply coloured in exactly the same manner as the rodent patches; and a positive demonstration is thus afforded of the development of rodent tissue from folicle-transformation.

The changes which attack the sebaceous glands appear quickly to follow the first evidence of disease in the follicle. The proper sheath of the gland, which is continuous with the Malpighian sheath of the follicle, becomes the seat of proliferation. A broadened layer of cells shows itself often first on the shoulder of the gland, and spreads gradually downwards, so as to surround the gland and enter between its subdivisions. As this layer becomes more marked, the proper secreting cells show signs of retrograde change. They become pale, granular; their margins are less sharply defined, and their nuclei less distinct. In Fig. 4 is shown a sebaceous gland, in which this process is tolerably far advanced. The proliferating band, which is composed of small rounded, or more or less elongated cells, is seen to surround the gland, and to pass in loops between its incomplete subdivisions. And in this arrangement is undoubtedly to be found the explanation of the loop-like, or apparently tubular, formation of some of the patches of rodent tissue. This explanation is at once suggested by the appearance of the gland in process of transformation; and the transition from such a gland to the typical rodent patch in Fig. 5 is unmistakable. Further, the identity of this latter patch with a transformed sebaceous gland is still more clearly demonstrated by the occurrence in the tubular spaces of atrophying cells, which, from their size and appearance, are evidently those of sebaceous gland-epithelium. (Fig. 6).

The patches originating in this two-fold manner preserve for a time their distinctive outline. A cell-mass, which owed its origin to the transformation of a follicle, may be recognised by its elongated form, regular outline, and the absence of honeycomb-spaces. On the other hand, a patch originating in a sebaceous gland is rounded in shape, and distinguished by the tubular spaces. No doubt, however, the rapid growth of these cell-masses, shooting out in the directions of least resistance, soon causes them to lose their original forms; and in the areas of advanced disease, the masses are characterised by the greatest diversity of outline. As regards the cells composing these masses, I have nothing to add to the account given by previous observers. The cells were for the most part small, rounded, and contained a proportionately large nucleus; those in the periphery of the masses were frequently rod-shaped.

One point to which careful attention was directed, is the occurrence of *globes epidermiques*; but in none of the large number of sections examined was there found one true epithelial nest. There were found, more markedly in some of my cases, than in others, cell-masses of two distinct kinds, which bore a superficial resemblance to epithelial nests, and which might, on casual scrutiny, be mistaken for them. The first of these consisted of detached portions of sebaceous glands, or rather of rodent masses still enclosing gland-cells. The structure represented in Fig. 6, detached from the rest of the mass, and examined under a low power, gives much the appearance of an epithelial nest. But more careful examination, under a higher power, at once reveals its true character; and such masses have been described as pseudo-nests, by Dr. Sangster (BRITISH MEDICAL JOURNAL, 1882) and others. The second kind of pseudo-nests, described also by Dr. Thin and by Dr. Sangster, were situated both in the epidermis and in the cell-masses, and consisted of groups of flat cells which, more closely than the first variety, resembled true *globes epidermiques*. This was especially the case when such masses happened to be divided in transverse section. But when divided in vertical or oblique section, they were plainly seen to be hair-fragments, or the results of imperfect hair-formation.

In none of my specimens did the rete appear to take part in the formation of the special cell-growth. As a rule the epidermis was atrophied, and, as the ulcer was approached, was found to be divested of connection with the follicles or interpapillary prolongations; so that it appeared as a narrow band with straight bounding lines. In some portions, however, considerable thickening of the epidermis did exist, but this seemed to occur only when there were marked signs of inflammation and infiltration of the skin. It was one of the secondary results of the disease, and not one of the factors in its production.

Another point which I carefully examined in these three cases was the condition of the sweat-glands, and their relation to the disease. This was the more necessary, on account of the view as to the origin of the cell-growth from these glands which has been advanced by Dr. Thin. But I have nowhere been able to discover any relation between the rodent masses and the sweat-glands. The latter certainly undergo changes, but these are changes of disintegration, not of morbid growth; and they are to be detected, not in portions of the skin becoming affected, but in those portions in which secondary inflammatory changes have been set up. The sweat-coils seem indeed to be the last of the skin-structures to be affected, and a quite normal gland may frequently be seen side by side with a glandiform mass, or with a diseased hair-follicle or sebaceous gland. But so soon as the skin becomes inflamed and infiltrated, the sweat-glands suffer. In consequence of obstruction the coiled tube becomes dilated, and its lumen choked with epithelial *débris*. (Fig. 7.) In some specimens the gland-epithelium appears unaltered, or the cells may be at first diminished in size from pressure. But, as the ulcerating edge is approached, and the skin is found more infiltrated, the gland-epithelium becomes swollen. The cells are larger, and their outline becomes less distinct, so that the nuclei seem embedded in a granular mass. (Fig. 8.) As this cloudy swelling of the gland-epithelium takes place, the behaviour of the cells towards staining agents is markedly changed. In striking contrast to what happens in the case of developing rodent tissue, these swollen gland-cells stain very imperfectly, or scarcely at all, indicating, in this manner, that they are involved in a process of disintegration, not of proliferation. The stages of their disintegration may, in fact, be readily followed, keeping pace with the general infiltration of the skin, till the glands become finally broken up.

These facts, with regard to three cases of rodent ulcer, are altogether in agreement with the results of my previous study of the disease. They seem to me, therefore, to justify certain definite conclusions. In the first place, they are entirely opposed to the view of Dr. Thin that rodent ulcer is a cancerous adenoma of the sweat-glands. The number of cases which I have examined in an exhaustive manner, would certainly not warrant the position that rodent ulcer never begins in these glands. But even in Dr. Thin's investigations the connection between the rodent masses and the sweat-glands was not traced; and it seems probable that, where morbid changes have been found in them, these have been of the secondary character which was undoubted in the cases I have described.

The only conclusion which seems to be borne out by all the facts, both pathological and clinical, is that rodent ulcer is a form of epithelial cancer which begins in the external root-sheath of the follicles and in the sebaceous glands. It is of the same essential nature, therefore, as epithelioma; but it differs pathologically in the mode of development of its cell-growth, just as it differs clinically in the absence of gland-infection and in its slight general malignancy.

Some explanation of these clinical differences may be found in the character of the cell-growth in the two diseases. In epithelioma, there is a marked tendency to an unrestrained cell-infiltration of surrounding structures, so that infection of the lymphatic system readily occurs. The cell-growth of rodent ulcer, on the other hand, is in the form of isolated masses which, originating in the follicles and sebaceous glands, are, at least for some time, restrained by the firm fibrous sheaths of these structures. The tendency of these masses is, therefore, to cause, by their pressure on the tissues, a persistent ulceration in which they, as well as the tissues, perish. But because this local destruction takes place rapidly, and because of the absence of cell-wandering, lymphatic infection is not prone to occur.

The suggestion was made some years ago by Mr. Jonathan Hutchinson, that the difference between the two forms of epithelial cancer must be determined in some way by the difference of locality in which they occur. The foregoing account of the genesis of the cell-growth in rodent ulcer, seems to supply the *rationale* of this suggestion. Commencing in the continuity of a skin-surface, rodent ulcer is peculiarly apt to attack that part of the face—the side of the nose—in which the sebaceous glands are strongly developed, and I have endeavoured to point out the manner in which the structure, when the disease begins, determines its onward course. As bearing upon this supposed influence of locality, it would be an important point to decide whether an ulcer which [illegible] in the upper [illegible] the epitheliomatous type, [illegible] reaches the [illegible] mouth. One or two cases which [illegible] in a very advanced period of their course, in which the invasion of the region of the mouth appeared to be speedily followed by glandular infection, seemed to lend countenance to this view.

EXPLANATION OF PLATE.

FIG. 1.—*a.* Broadened follicle with widened cavity (*b*). *c.* Outgrowth from one side of follicle. *d.* Groups of leucocytes.

FIG. 2.—*aa.* Two follicles undergoing transformation.

FIG. 3.—*a.* Lower portion of follicle breaking up in a brush-like manner. *b.* Upper portion still unchanged. *c.* Sebaceous gland with cell-proliferation around margin.

FIG. 4.—*a.* Sebaceous gland surrounded by broad band of cells. *b.* Sweat-coil, dilated.

FIG. 5.—A patch of rodent tissue resulting from the transformation of a sebaceous gland.

FIG. 6.—A small portion of Fig. 5, more highly magnified. *a.* Band of cells enclosing (*b*) atrophying gland-cells.

FIG. 7.—*a.* Dilated sweat-coils containing epithelial *débris.*

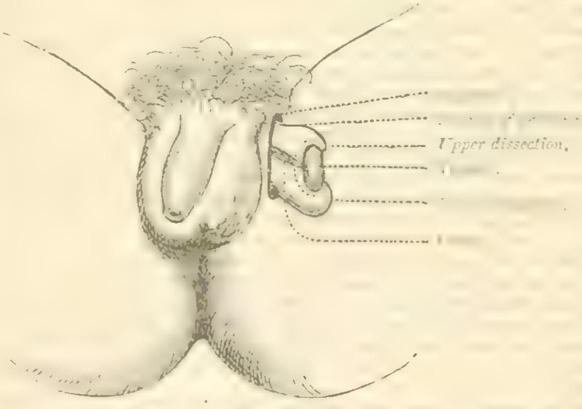
FIG. 8.—*a.* Sweat-gland, showing retrograde changes.

REMOVAL OF TESTIS IN PERINÆO ATTACHED TO PERITONEUM.

BY SURGEON J. W. H. FLANAGAN, A.M.D.

WITH reference to a case of testis *in perinæo* published in the BRITISH MEDICAL JOURNAL of July 21st, by Mr. J. A. Williams, I forward the notes of a case of this kind in which I lately removed the misplaced testicle. The case may be of interest, on account of the complication met with and the successful results of the operation.

S. S., aged 21, a private in the 2nd Battalion, Lancashire Fusiliers, stationed at Mhow, had been in hospital some time, suffering from the effects of an inflamed misplaced testicle. He had been in the service for about a year and a half, and during that time had been constantly coming into hospital from this cause. He stated that, whenever he marched or had to make any exertion, the testicle became swollen and painful, and he could walk with difficulty. He had suffered in this way before he enlisted. The left testicle, which could be felt to be very small, was situated in the left side of the



perinæum, beside the scrotum. This appeared to be normal, except for the absence of the testicle. [illegible] to the touch; but [illegible] and then did not appear to be [illegible] case about the beginning of June last; and as the man, in this condition, was perfectly useless as a soldier, [illegible] anxious to have the disability removed, I determined to [illegible] the testicle. [illegible] lity of the funicular process of the peritoneum covering t[illegible] being continuous with the abdominal peritoneum.

On June 20th, [illegible] I proceeded, with [illegible] A.M.D. [illegible] cision over the testicle, I dissected the superficial structu[illegible] a quite unlooked for complication presented itself. The [illegible] which was less than an inch in length, was found to be attached by almost its entire circumference (about half an inch being free) to a large flat process of peritoneum which came down through the inguinal canal into the sac, down the centre of which the cord could be felt running to the testicle. This process of peritoneum was a double layer of thick membrane, and was freely movable in the canal, and felt as if it could be pulled down to any extent. I dissected this from the testicle, commencing at the free extremity at each side, and cutting close to the cord and vessels. These were then tied with carbolised catgut ligature. The wound was next thoroughly cleaned out with weak carbolic lotion, and sewn up with carbolised ligature. Lint, soaked with carbolic lotion, was then applied to the wound, and a piece of ice kept on it all day. Slight oozing of blood—just sufficient to stain the dressing—took place during the day. In the evening, I applied a dressing of lint soaked in a mixture of one part of compound tincture of benzoin to two parts of glycerine, and kept tight by a spica-bandage. A pill composed of half a grain of opium and two grains of quinine was given every third hour.

June 21st.—He was doing well; no fever; pulse 88. He slept well; felt some pain in the left side of the abdomen. The pills were continued. The temperature rose to 100.2° the previous evening; the pulse was 88 in the evening.

June 22nd.—Temperature 99°; pulse 88. There was some pain along the course of the spermatic cord, but no pain or swelling in the rest of the abdomen. Evening temperature 100°; pulse 88.

June 23rd.—He had considerable pain along the course of the cord. Temperature 98°, pulse 84. There was a good deal of swelling about the seat of the wound, which had almost healed up. The pills were discontinued and an enema administered, which produced a copious evacuation, after which patient felt much better. Evening temperature 98°, pulse 84. The patient, according to the accounts of the other patients in the ward, had a fit in the evening, which only lasted a minute or two, and was over before the apothecary could get to the ward. He did not froth at the mouth; the convulsion appears to have been a very slight one.

June 24th.—The patient complained of considerable pain all over the abdomen, but especially severe on the left side. There was no swelling or tympanitis. Temperature 98°; pulse 84. The wound had completely healed up, but as I did not consider this desirable as yet, I made a small opening with a probe at the lower angle, and introduced a small piece of lint soaked in carbolic oil. There was a good deal of swelling about the seat of the wound, which felt very hard. Hot poppy-fomentation was applied to the abdomen, which gave great relief, and the patient felt quite easy in the evening.

June 29th.—The case had progressed very favourably. There was still some pain in the seat of the wound and a small swelling just below the interior extremity of the wound, which had a feeling of fluctuation, as if a collection of pus had formed. I made a small incision, but only some blood escaped. The bowels were acting regularly.

From this time, the case progressed in the most favourable manner. A hard swelling, due, doubtless, to the effusion of lymph from the cut surfaces of the peritoneum, remained in the perinæum, at the seat of wound, for some time; but this gradually disappeared, and the man was discharged cured from the hospital on July 23rd. I had been removed from the station a few days previously. I hear that he has since been doing his duty in the ranks, but was again admitted a few days ago for a small fistula, which is now nearly healed.

In this case the man was useless already, and would have been very likely to have had a hernia on any severe exertion, from the condition of the inguinal canal. I do not think there is much fear of this now, as the canal has most probably been firmly closed by the contraction of the effused lymph; and he is at present quite fit for the duties of his calling.

Presentation.—A representative deputation of the inhabitants of Cramlin waited upon Dr. Magill of Lisburn, on December 7th, and presented him with an address and testimonial on the occasion of his removal to that town from Cramlin. The address referred in complimentary terms to the high regard and esteem entertained for him, and wished him every success in the new sphere of his labours.

Frauds on Medical Men.—A man, who refused his name and address, has been sentenced to three months' imprisonment, at Leamington, for a series of frauds upon medical men. He represented that his name was John Murray Gibbes, brother of Dr. Heneage Gibbes, with whom he was on unfriendly terms; and that he had returned, weakened by rheumatic fever and with five motherless children, from New Zealand, where he had lost both wife and practice.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

PROCEEDINGS OF SECTIONS.

THE INFLUENCE OF IODOFORM ON THE BODY-WEIGHT IN PHTHISIS.[1]

Read in the Section of Medicine.

By A. Ransome, M.D., Manchester.

About a year ago, iodoform was introduced to the English medical public, mainly by Dr. Dreschfeld, as a drug likely to be of service in the treatment of phthisis, when used internally and by means of inhalation. I determined to give it a trial at the Hospital for Consumption in this city. At first, I met with some disappointment; many persons, especially women, were unable to take it in consequence of the nausea and disturbance of the digestive organs that it caused. However, I still persevered, and gave it in the form of a pill, a grain and a half three times a day, to all the cases of phthisis who could take it. Shortly afterwards, at the suggestion of Dr. Marsh, I combined it with two grains of croton-chloral, and found that it was then much better borne by the patients, both male and female. Iodine and iodoform inhalations were also prescribed as a general test of its influence upon the disease. The weight of the patients was recorded for some little time before its use, and after its administration; and on the accompanying charts I have traced curves showing the loss or gain in weight during the treatment.

It seemed better to make no selection of cases; and it was given at all stages of the disease; and as patients seldom presented themselves in the incipient stage, the largest number of cases were in the more advanced stages of phthisis. The drug in several cases was stopped for various causes, and again recommenced.

Owing to the causes that I have mentioned, there are only 21 complete cases recorded at the present time. Of these, 4 were in the first, 5 in the second, and 12 in the third stage of the disease.

Of the 4 cases in the first stage, 3 appear to have received benefit; one (R. Jones) gained 2½ lbs. in three weeks, and maintained her position for at least six weeks afterwards; another (S. Menzies) gained 2 lbs. in about one month, and although she lost weight somewhat on discontinuing the drug, she regained it again when the pills were recommenced. A third case (E. Lancell) gained 11 lbs. in four months, and was then lost sight of. The fourth (M. Clevorty) lost weight on the whole to the extent of 8 lbs. in three months.

Of the 5 cases in the second stage of the disease, No. 1 (McMillen) was losing weight rapidly when he commenced the treatment, at the rate of 3 lbs. in a fortnight; he then gained 1 lb. in the same space of time; lost weight on discontinuing the drug, gained again slightly on its recommencement, lost ground a third time on its omission, and entered on the third stage in about three months from the beginning of the treatment; but after again taking iodoform for several weeks, he improved and regained his former weight.

No. 2 (Ross) also took the drug intermittingly; he gained 2½ lbs. in ten days after first taking it; but after this it seemed to have little influence in arresting his downward course.

No. 3 (Brackenridge) presented a similar history, except that, in spite of sundry alternations of weight, he had on the whole gained somewhat in the course of seven months' treatment, during which time he had only omitted the iodoform for about three weeks.

No. 4 (Lockett) was a case of chronic pneumonia, which developed into phthisis after a lapse of four months. He was losing weight rapidly when he commenced the iodoform-pills; but since then he has gradually improved both in weight and in the condition of the lungs.

No. 5 (Matthews) has only been a short time under treatment; but he has gained 3½ lbs. in the first fortnight.

Of the 12 cases in the third stage of the complaint, 2 (Burns and

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[1] This paper was accompanied by charts showing the progress of each case under the use of iodoform.

Barker) have distinctly gained weight since taking iodoform. Six, after sundry variations, remain approximately at the same weight, several after six or eight months of the treatment. The remaining 4 have all diminished in weight, with more or less rapidity. It is, however, remarkable that, even in these advanced cases, there is often a temporary rise for a short time after commencing to take the iodoform. Thus I note that, after a total number of 35 times of such administration, there were 28 periods in which there was an increase of weight, and only 7 in which the loss of weight continued without intermission.

From a review of all the cases, I am inclined, therefore, to attribute to iodoform some slight improvement, even in cases in which it was manifestly hopeless to expect cure; and I think that, in the earlier stages of the disease, it is decidedly worthy of further trial.

January 2nd, 1884. Since the above observations were made (August 1883), the same treatment has been pursued in many other cases presenting themselves at the hospital, with very similar results. A. R.

CLINICAL MEMORANDA.

PROLONGED MAINTENANCE OF LIFE WITHOUT FOOD.

I **THINK** the following case is worthy of record, as showing the length of time for which life can be sustained with the administration of very little nourishment. Mrs. B., aged 58, widow, of comfortable means, mother of five children, and having as many grandchildren, suffered from medullary cancer of the uterus. The pain was considerable, and, to relieve it, morphia was administered, hypodermically, beginning with a quarter of a grain at bed-time, and gradually increasing till I injected as much as three grains twice a day. The cancer increased to such an extent that, two months before the death of the patient, the bowels were completely occluded, neither allowing the injection of food, nor permitting defæcation. There was secondary deposit of cancer in the stomach, causing very considerable pain on taking nourishment, and excessive vomiting, so that, from August 14th to September 24th, the day of her death, the patient took nothing but water, with the slight exception of what is reported below.

On August 14th, at 11 A.M., Mrs. B. took four ounces of mutton broth. This caused her so much pain that she declined to take anything afterwards, except water, milk even causing agony, according to her statement. Twelve hours before her death she asked for some tea, of which she only took a teaspoonful, it causing pain. Six hours later she asked for some jam and bread. This she took, and apparently it caused her no suffering. Six hours later she died. Thus, she had been thirty-nine days, fourteen hours, supported on morphia and water only. CHARLES J. RENSHAW, M.D.,

Beech Hurst, Ashton-on-Mersey.

A SUPPLEMENTAL NOTE UPON A CASE OF INCREASE OF WEIGHT IN PRETUBERCULAR PHTHISIS.

ON December 8th, I published a brief note upon the case of E. B., who had been under the treatment by mullein from the 1st of last October until November 5th, and had during that time increased her weight from 90 lbs. 4 ozs. to 102 lbs. 12 ozs., with corresponding benefit to her pulmonary symptoms. On her discharge she was sent to the Convalescent Home of St. Vincent's Hospital at Linden Grove, Blackrock; and then we placed her upon cod-liver oil (discontinuing the mullein) in order to compare the weight-increasing powers of these two remedies. She commenced with a teaspoonful of cod-liver oil morning and evening, and rapidly increased the quantity to a tablespoonful; and it agreed with her well. She remained at the Convalescent Home for thirty-three days, and then returned to the hospital to be weighed. We found that she had increased 7 lb. 8 ozs. under the cod-liver oil, against 12 lb. 8 ozs., under the mullein, and that although she had had the advantages of the best country-air and of a very liberal dietary. Her cure was complete; and the respiration all over the lungs perfectly normal.

F. J. B. QUINLAN, M.D., F.K.Q.C.P.

THERAPEUTIC MEMORANDA.

ACUTE RHEUMATISM TREATED WITH SALICYLATE OF SODA.

THE case described by Mr. Meharry in the BRITISH MEDICAL JOURNAL of December 8th, is a most typical one, such as I encounter frequently in the course of my practice, and I am gratified to find him endorsing my opinion respecting the successful results attending the treatment of acute rheumatism by the administration of the salicylate of soda. The district over which the more immediate portion of my practice extends, was formerly noted for the prevalence of ague; but it is now an essentially rheumatic one. For the last five years I have been in the habit of prescribing the aforesaid remedy most extensively in acute cases of rheumatism, and with almost unexceptional success. I have found it also of very high utility in chronic rheumatic cases, but not to such an universal extent as in the more acute form. My experience leads me to regard the salicylate of soda as bearing the same relation, as a specific in acute rheumatism, as the perchloride of iron in erysipelas. In one respect, my line of treatment differs a little from that of Mr. Meharry. I commence by administering a brisk purgative; and after the bowels have been well relieved, I prescribe ten grains of the sodic salicylate in an ounce of infusion of gentian, to be taken every two hours; and if, after the first day, there be no reduction of temperature or subsidence of pain, I add five grains of potassic iodide. This treatment I have never yet found ineffectual. As a preliminary purgative, six grains of a mixture of equal parts of calomel and sugar is unexceptional, it tends at once to open the alimentary canal, and to reduce the temperature. Where the patient is troubled with insomnia, I always find this remedied by the administration of ten grains of Dover's powder at bed-time. Mr. Meharry says nothing respecting purgatives or any other concomitants, but I most heartily agree with him respecting the specific pre-eminence of salicylate of soda in the treatment of these cases; and I trust that the publicity given to our united experiences respecting the success attending its use, may tend to diffuse the knowledge of its utility among our professional brethren.

J. BRINDLEY JAMES.

HYPERICUM OIL FOR THE PREVENTION AND CURE OF BED-SORES: A CORRECTION.

SINCE my note on this subject in the JOURNAL of December 8th, I have been favoured by Mr. Fenn Clark, honorary consulting-surgeon to the Leamington Provident Dispensary, with a communication, from which I subjoin the following extracts: "I see that you have alluded to the value of hypericum oil; may I be allowed to add my testimony, as I have made and used it in my practice for the last twenty years, with manifest advantage in severe cases of bed-sore? It is an old favourite in the country; and our American friends think highly of it also.......I observe that you recommend a few days as the time which hypericum oil will require to perfect it. May I mention that my friend, who first introduced it to Mr. Garrad, and to Leamington generally, always recommended a period of three months in a sunny window; as it could not in less time acquire the reddish-brown tint. It is prepared from the blossoms of the *Hypericum medium perforatum*, which flowers in July."

HERBERT L. SNOW, M.D. (Lond.)

IODIDE OF POTASSIUM AS AN ANTIGALACTAGOGUE.

IN a recent case of excessive secretion of milk after weaning, I have found the above drug of great service. The child had been weaned more than a week, and the breasts were very large, hard, and tender. Belladonna and aconite, applied freely, together and singly, had failed; this, although combined with firm compression of the breasts by a bandage, and the administration of salines and purgatives—a form of treatment generally successful. Ten grains of iodide of potassium were taken three times a day, and decided relief was obtained after the fourth dose. In all, 160 grains were taken, and then all trace of swelling had disappeared. With each dose I gave half a grain of quinine, as I always do when giving the iodide in rather large doses. There was no symptom of iodism. Before taking the drug internally, my patient had used the iodide and soap liniment for two days without much benefit, and continued to use it till treatment ceased.

As long ago as 18[illegible], [illegible], and, in 18[illegible], [illegible], recommended the iodide, and were supported by [illegible] in 1861. Dr. [illegible], [illegible], in the *Practitioner* of 1881, quotes Dr. Morris, but reports that the drug, given by himself in larger doses than Dr. Morris had used—namely, fifteen grains against a drachm—had produced no effect. At the time of my case, I had not seen these papers, and was led to use the iodide solely on account of its known action on glandular tissue. I could find no mention of it in Ringer, Woods, Bartholow, or Phillips.

T. JENNER VERRALL, Brighton.

SURGICAL MEMORANDA.

SEBACEOUS CYSTS IN THE HAND.

IN corroboration of Mr. Treves's case, which appeared in the JOURNAL of December 8th, I wish to say that I removed, about eight months ago, from the hand of a lead-miner, a sebaceous cyst, situated on the thenar aspect of the hand. It was about the size of a small marble; and, as it occasioned him much inconvenience, I proposed to remove it, which I did by making a longitudinal incision, and enucleated it, with the same ease as I have removed many sebaceous cysts from the scalp. It had a perfect sac-wall, and contained cheesy-like matter. GEORGE HARVEY, Wirksworth.

WOUND OF LUNG: RECOVERY.

ON the morning of November 2nd, I was called to see P. P., of Ballylaneen, who was suffering from a stab inflicted with a penknife, some hours previously. On making a careful examination I discovered five wounds, four of them were insignificant, but the fifth penetrated deeply between the eighth and ninth ribs on the left side, leaving an opening from which a piece of lung, about three and a half inches long, was protruding. An attempt to reduce it failed, owing to the wound constricting the protruding portion; having therefore put on a piece of wet lint and a bandage over it, I allowed it to remain and slough of its own accord, which it did on the twenty-second day after the receipt of the injury. After the third or fourth day, I employed carbolic oil, owing to the fœtor of the discharge, and continued its use until the portion of lung had come away. Then the wound healed rapidly with zinc and carbolic ointment. On the twenty-fifth day after the injury, I allowed the patient to get up, and since then he has been able to return to his ordinary occupation, without any interference with the movements of the chest. All through there were no bad symptoms, the pulse never going above 100 beats in the minute, nor the temperature above 99° Fahr. This was remarkable, as the man used to drink freely; but in the treatment I kept him strictly low, refusing to allow him stimulants of any sort. ALFRED A. HAYES.

TOXICOLOGICAL MEMORANDA.

POISONING BY FISH.

ON Saturday, December 8th, Mrs. B., aged 68, had supper about eight o'clock, consisting of the fish called "ray," which is a large flat fish, and is supposed sometimes to produce slight gastric derangements. In about a quarter of an hour, her face began to swell very much, and she complained of a burning sensation in the hands and back of the head; her feet became extremely cold: her tongue in a short time was so swollen that it completely filled the mouth. She complained of a choking sensation at the root of the tongue; her eyes protruded, and were much swollen: she was slightly convulsed, and seemed to suffer from great dyspnœa. She was conscious, was in no pain, but complained of intense itching of the skin, and of thirst.

I was about to administer an emetic, when she vomited freely, and soon felt better. I directed her to inhale the steam from boiling water, and applied hot fomentations to the throat, which gave her relief. A sharp purgative was prescribed, and the glycerine of tannic acid applied to the tongue, which in a few hours diminished in size. A bismuth-mixture was also given her; and next day the symptoms had disappeared, and her tongue was not much larger than normal. It seems that her son was taken ill at breakfast, about five years ago, with similar symptoms, after eating fish; so that there is probably some hereditary predisposition to the influence of poisonous fish.

JAMES EDWARDS,
Honorary Assistant-Surgeon, Liverpool Ladies'
Charity and Lying-in Hospital.

PICRIC ACID AS A TEST FOR ALBUMEN. Dr. I. E. Atkinson (*Maryland Medical Journal*) was much pleased with the results obtained when first using picric acid as a test for albumen in the urine. Later, he was surprised to find the reaction for albumen present in the urine of malarious patients, even when heat and nitric acid failed to show it. Following up a hint that this was caused by the presence of the cinchona salts, Drs. Cook and Watkins have embodied the results of their researches in a paper, in which they report that there is no question that patients taking cinchonidia give the same reaction with picric acid [illegible]

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

LIVERPOOL EYE AND EAR INFIRMARY.

A CASE OF DOUBLE NEURO-RETINITIS, APPARENTLY DUE TO SIMPLE ANÆMIA.

(Under the care of Mr. RICHARD WILLIAMS.)

B. J., aged 17, presented herself on November 1st, 1882. On examination, she was found to be suffering from intense neuro-retinitis in both eyes; vision = $\frac{20}{70}$ each eye, and she read some words of No. 1 Jäger. She was ordered a purgative powder and an alterative mixture, and advised to become an in-patient. She was admitted the following day; and, on November 3rd, Mr. Shears, the house-surgeon, took full and accurate notes of her case. Seven years before admission, she had scarlet fever; and, two years later, an attack of typhoid. With these exceptions, she had enjoyed excellent health until August 1882, when she had rather severe headache, which continued pretty constantly for three weeks. She had no vomiting at that time or since. At that time, she noticed her sight becoming dim, and she suffered from occasional giddiness. Her general health also became impaired, and her appetite failed. She first menstruated at thirteen years of age, the flow coming on since at short intervals and in large quantities. She had never had any swelling of the feet, and she did not believe her kidneys were affected after the scarlatina. Her family-history was very good. There was a somewhat dilated condition of the capillaries of the face, so that, at first sight, her appearance was not at all suggestive of chlorosis, but the mucous membrane of the mouth and eyelids was extremely blanched, and there was a soft basic murmur. There was no enlargement of the liver or spleen, and no enlarged glands in other parts of the body. There was no evidence of syphilis. The hæmoglobin only amounted to 38 per cent. The urine contained no albumen. There was no paralysis of the cranial nerves. Colour-vision was normal. The field was restricted peripherally in both eyes. On examination with the ophthalmoscope, the right disc was quite indefinable, its position being occupied by a large irregular greyish-red swelling, which extended towards the macula. The vessels were dilated and extremely tortuous, being hidden in places by the swelling. There were no hæmorrhages. Between the macula and the disc, and surrounding the latter to about three-fourths of its extent, the fundus was occupied by a fan-shaped patch of white rod-like glistening spots, which reflected the light very strongly. The macula itself was of a deep red colour. The appearances in the left fundus were much the same as in the right, but somewhat less marked, and there was in this eye a flame-shaped hæmorrhage to the lower and inner side of the disc.

November 4th. The patient was ordered a mixture, containing ʒss of liquor hydrargyri bichloridi, and 10 minims of tincture of perchloride of iron, three times a day; and, three days later, the dose was increased to a drachm of the former, and 15 minims of the latter.

November 10th. The urine was again examined, and found normal. Vision = $\frac{20}{40}$ in each eye. The hæmoglobin was 45 per cent.

November 18th. The dose of tincture of iron was again increased to 20 drops. Vision = $\frac{20}{30}$ (some letters).

November 29th. The swelling of both discs had decreased. A fresh hæmorrhage was to be seen in the left fundus. The corrosive sublimate was discontinued. Since admission, the patient's general health seemed quite good.

December 12th. Vision, right = $\frac{20}{20}$; left, $\frac{20}{20}$ (some letters). The fundus in each eye was rapidly clearing, and the outlines of the disc were reappearing. The hæmorrhage in the left eye had ceased to be visible.

December 16th. The hæmoglobin was 65 per cent. The dose of tincture of iron was ordered to be increased to 25 minims.

On December 19th, she was discharged, and directed to continue the mixture, and attend weekly as an out-patient.

On January 10th, 1883, the patient attended in good health. Vision = $\frac{20}{20}$ each eye, and Jäger No. 1, at 10 in. The swollen condition of the discs had quite disappeared, and the site of the swelling was occupied by numerous white silvery spots and lines. The rod-shaped markings around the macula were disappearing, and the macula itself was not nearly so red as formerly.

Up to the time of writing (October 1883), the patient has remained apparently quite well, but there is still a very blanched condition of the mucous membrane of the mouth, etc. The eyes only contain traces of their former condition, and vision is quite normal.

REMARKS BY MR. WILLIAMS. This case seems to come under the same category as three others reported by Dr. Gowers in his work on *Medical Ophthalmoscopy*. It simulated very closely, in its ophthalmoscopic aspect, an ordinary case of retinitis albuminurica, the principal difference being in the appearance of the patch of white spots. These consisted of a series of rod-like glistening spaces, diverging from the yellow spot in all directions, and ending abruptly at the margin of the macula. In other respects, the neuritis seemed similar to that occurring in the course of an ordinary case of kidney-disease. There were absolutely no symptoms referable to the kidneys, and, with the exception of headache, the same may be said in regard to the brain. This fact, coupled with the condition of the blood, and the rapid improvement under the iron treatment, seems to complete the chain of evidence in favour of the diagnosis.

LEEDS GENERAL INFIRMARY.

CASE OF TABETIC ARTHROPATHY.

(Under the care of Dr. CLIFFORD ALLBUTT.)

[Abstract of clinical report by Mr. H. CHILD.]

ANN P., aged 39, a charwoman, was admitted into the surgical ward on May 18th, 1883, and transferred to Dr. Allbutt's beds on May 30th. Her father died of dropsy, in advanced life; mother died at age of 66, of bronchitis. The patient was the youngest child; two brothers were living and well. One sister died of a heart-affection. Her relatives had been long-lived. The patient lost her husband five years ago. She had never been pregnant, and there was no history of specific infection. Two years ago the patient began to suffer from what she called bad bilious attacks, consisting in nausea, vomiting, and pain in the gastric region. These attacks lasted two or three days, and returned at intervals varying from two to five weeks. Two or three years ago, also, she began to experience what she termed rheumatic pains. These were brief in duration. At times she would be free from them for several days. The pains were acute in character, as though a knife were thrust into the part. They were present in both lower extremities, shooting thence to the back, and were most constantly present in the left limb. The patient was aware of no difference in gait, beyond that due to lameness. Five weeks before admission, she noticed a swelling on the outer side of the left knee, of the size of a hen's egg. She could remember no injury which might have caused it. The knee gave her neither pain nor inconvenience until ten days before admission, when, after much kneeling, she experienced pain in the joint. In two days, she was unable to work, from increase of pain and swelling. A peculiar cracking sensation was noticed on moving the joint. She was still able to walk, but not without support. Nine months ago the right leg became swollen from the knee downwards, but had returned to its normal condition three months later, except the foot, which remained in a position of almost pure talipes varus. (This was so marked as to suggest a previous malformation, which, however, was denied by the patient.)

The patient had a somewhat alcoholic appearance, otherwise there was nothing of note in her general appearance.

The pupils were greatly contracted, and equal. It was very difficult, on account of their smallness, to test the irido-reflex, but there was apparently no want of contraction to light. Beyond slight hypermetropia, the ophthalmoscope showed no changes. The upper extremities were normal.

The left leg was enlarged for the greater part of its extent, the enlargement being greatest at the knee, thus producing a fusiform swelling. The skin of the knee was brown, and covered with scurf. The muscles were flabby to the touch. There were slight irregularities in the generally fusiform character of the swelling, which extended some distance above the knee, terminating below more abruptly. On exact measurement, the difference in the circumference of the two limbs, at three corresponding points, was found to be 3, 3, and 2 inches; the right being the larger. The swelling had an elastic feel, and the patella appeared to float, and on lateral movement a rough surface was found beneath it. The patella itself seemed to be enlarged, and on its inner side a rounded body could be felt, moving under the finger. At points, the tissues outside the joint were manifestly œdematous. On flexing, the joint-creaking sounds were heard, and grating felt. There was no laxity of ligaments, but slight genu valgum had been acquired. The right foot presented a painless thickening of the sole, undue prominence of the heel, and a general shortening and widening of the whole foot.

Reflexes.—The knee-jerk was absent on both sides. There was no ankle-clonus. The plantar reflex was normal. Voluntary movement and tactile sense was normal in both limbs.

The gait of the patient showed complete control. She balanced well, and could turn suddenly without falling. She walked awkwardly on account of the affection of the joints, and condition of the right foot.

She had a typical abdominal attack, with pains in the arms and other parts of the body, on June 4th.

Some slight improvement in the local condition was noticed before she left the hospital.

REPORTS OF SOCIETIES.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, NOVEMBER 7TH, 1883.

NORMAN CHEVERS, C.I.E., M.D., President, in the Chair.

Medico-Topographical and Health Histories for Districts and Towns.—The PRESIDENT delivered the inaugural address on this subject. He said that such histories would aid the great work of Public Health, which had long been in progress throughout the British Isles and in our Colonies. Upon a plan suggested by Sir Ranald Martin, the Government of India directed, in 1835, that medico-topographical histories of districts and military and civil stations throughout British India, should be prepared by medical men and published. Accordingly, between 1842 and 1844, the Medical Board of Madras published a complete history in three volumes (which the President laid on the table), of the Medical Topography and Statistics of the whole of the Madras Presidency, founded upon reports by local medical officers. As evidence that, upon a well-arranged plan, and with the aid of a very few well-chosen men, the great, but in no way formidable, work of preparing a health-history for every district and town in the United Kingdom, might be carried on at no very heavy cost, and with an expedition commensurate with the strength of the officers employed, it was shown that, in Madras, the vast labour of compiling these reports was completed in three years by the Medical Board's secretary, Dr. George Pearse, most efficiently aided by Dr. Lorimer, garrison-surgeon of Fort St. George, each of these officers performing, at the same time, the proper duties of his own appointment. The Presidency of Madras alone succeeded in fully giving effect to the wishes of Government, but much good work in this direction was done by the separate action of medical officers in the other two presidencies. Although he believed that a systematic work for the British Isles had never been attempted, he urged that for each of our districts and towns there should be prepared a concise but very comprehensive manual, illustrated by maps, in which would be recorded all needful geographical and meteorological data; brief descriptions of the water-supply, and systems of town and land drainage; a history of all reported epidemics, endemics, and epizootics; the dates of the first appearance and disappearance of the recent ones being accurately given; all that was worthy of recollection as illustrating vital statistics, especially recent death-rates; full health-histories, covering the last five years; numerical lists of the prevailing diseases, with brief but clear accounts of those diseases which pointed to the fact that the land was malarious, or the town air impure. In short, these little works should comprise every fact which tended to illustrate the medical topography of their localities. The maps should especially define, with rigid accuracy, the locality and original extent of all extant or reclaimed lakes, marshes, harbours, bays, estuaries, water-courses, and moats. The work of so-called "improvement" now advanced so rapidly, and the information derivable from oral tradition was so uncertain, that all authentic facts of this kind should be placed on record with the least possible delay. Each of these manuals should receive annually an appendix, containing a brief but comprehensive health-history of the place for the past twelve months, and giving all needful particulars regarding outbreaks of disease, fluctuation in the death-rate, sanitary improvements and the like. These periodical supplementary reports would afford to every medical man in the empire a complete view, frequently renewed, of the geographical distribution of disease throughout these islands. This work ought thus to become an invaluable aid in fulfilling the noble objects of the Epidemiological Society. Complete series ought to be in the possession of every officer of health, and to be available in all public libraries and museums. With a view to obtaining the best information regarding the health-histories of districts and towns, it would be well to seek the co-operation everywhere of the clergy, archæologists, and librarians. It was urged that, although the publication of such histories might at first meet with considerable opposition, it was probable that, when the sanitary shortcomings of a place had been for some time clearly set forth in a popular work within the reach of everyone, the inhabitants would be shamed or convinced into reform, a healthy rival spirit of comparison and emulation arising between town and town, or that local benefactors would generously relieve them of the work. When it could be decided that a publication of this kind ought to be instituted, the manner of conducting it might be readily planned. While every district and important town would have its "history," these little works would be combined in one or two volumes for each of the three kingdoms, purchasable at a remunerative price. It appeared clear that this system could only be successful under the control of Government. The President thought that health-officers and medical men desiring to hold these appointments would contribute nearly the whole of the local articles, which, if worked out with due care and fully acknowledged, would add much to the writers' professional reputation. It was probable that nearly the whole of the needful statistical, meteorological, and geological data stood ready for collation. It was suggested that a director for each kingdom, posted at London, Edinburgh, and Dublin, efficiently supported by officers of health, and assisted by a staff of about four highly qualified assistants, could prepare and publish the first edition of these works within a twelvemonth of starting. The cost of printing the local histories was doubtful, but it was considered that the average expense ought not to exceed £20. The cost of the annual supplementary reports would be small, and two officers at head-quarters could edit them; consequently, there would be no heavy expenditure after the first eighteen months. The President concluded by saying that, in the cause of suffering humanity, he would be glad to see this plan carried into effect, not only in the United Kingdom, in India, and in our colonies, but also in America, and in every country throughout the civilised world.—In the discussion which followed, Sir Joseph Fayrer, Sir William Smart, Surgeons-General Gordon and Manifold, Drs. Don, Dickson, Cock and Thorne, and the Rev. J. Long, took part.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

NOVEMBER 22ND, 1883.

H. F. BANHAM, M.D., President, in the Chair.

Idiopathic Anæmia.—Mr. **PYE-SMITH** exhibited, under the microscope, specimens of blood from a supposed case of idiopathic anæmia.

Bilateral Facial Spasm.—Dr. **THOMAS** introduced a patient with bilateral facial spasm, of central origin.

Tumour in Abdomen.—Mr. E. **SKINNER** introduced this patient, a boy aged 4. The tumour was situated in the right lumbar region, extending to the middle line; it was firm and irregular, and almost fluctuating at parts. There was little or no pain. After a fall six months previously, the swelling was first noticed, and at this time he passed bloody urine, but which afterwards became clear. There was no trace of albumen. The patient's health had been good, with the exception of a slight attack of illness when two years of age.

Ruptured Heart.—Mr. **BALDWIN** exhibited this specimen. The patient, aged 54, had been under treatment, a year and a half ago, for muscular pains in the legs, which yielded to ordinary remedies in a few days. On November 16th, Mr. Baldwin was sent for, and the patient then complained of pain across the chest, extending from the sternum, about the level of the fourth costal cartilage, to the left mamma; there was nothing particular in the pain, except it troubled him in breathing. He was a fairly nourished and muscular man. He had not had syphilis. All the organs were sound, exccept the heart; a soft systolic *bruit*, to be heard from the apex to the centre, was audible, and was heard, also, in the pulmonary area. Hydrocyanic acid, with carbonate of soda, in cinnamon-water, was prescribed. He was relieved for two days; then the pain returned, and he was restless. Tincture of belladonna gave no relief. On the fourth night of his illness, he suddenly died. He had been in bed the whole time, so no exertion had taken place. The pulse had always been soft; the urine normal. At the *post mortem* examination, all organs were healthy. The pericardium was bulging, and, on section, was found to be filled with clots. The left ventricle was ruptured at the apex to the extent of nearly two inches; and above, to the extent of three-fourths of an inch. The aorta and valves were healthy; the mitral were slightly fringed with old vegetations. A huge clot filled the apical rupture, and, in the heart around the columnæ carneæ, some *ante mortem* clots were found; the ventricular walls being thin at the seat of rupture. The patient had, eight months previously, lost a son from aneurysm of the third part of the aorta; he had no other symptoms than persistent pain in the left mammary region, and in the neck.

Intestinal Obstruction.—Dr. **THOMAS** first related two cases of obstruction from impacted fæces, and then brought some particulars forward to illustrate the value of kneading in such cases. The first, a man, aged 36, had a swelling between the spleen and iliac region, measuring three to four inches wide, and five inches long. It was hard, irregular, and movable. There was vomiting, not stercoraceous; obstinate constipation; the bowels had not been moved for six weeks. Impaction of fæces was diagnosed. A strong purgative, gruel injections, and castor-oil were administered with effect. Kneading of the tumour was then resorted to, especially at its lower part; the injections were continued; in four days the swelling had disappeared. Dr. Thomas stated that the sound of the moving fæces was heard with the stethoscope. He referred to another case in a young married lady, in which kneading equally proved of service, and he raised the question as to the cases in which friction was allowable. A third case was related in which death resulted at the end of a week of obstruction, with stercoraceous vomiting. At the *post mortem* examination, the sigmoid flexure was found bent on itself at an acute angle. This, with a fold of gut, at once completely closed the canal. Dr. Thomas then related particulars of a patient, aged 35, who had had obstruction, with stercoraceous vomiting, for three days, when admitted into the public hospital. After admission, he vomited some food he had taken before leaving his home, but was afterwards easy, and had no vomiting until the next afternoon. Then the stercoraceous vomiting commenced again; and, after a consultation with his surgical colleagues, Mr. Thorpe opened the abdomen in the median line, under strict antiseptic precautions. A strong band of lymph was found stretching across the ileum, an inch from the ileo-cæcal valve. This was severed, but the patient died in an hour after the operation. Dr. Thomas remarked on the points of interest in this and the other cases.

MANCHESTER MEDICAL SOCIETY.

ORDINARY MEETING, WEDNESDAY, NOVEMBER 7TH, 1883.

ADJOURNED MEETING, WEDNESDAY, NOVEMBER 21ST, 1883.

D. J. LEECH, M.D., President, in the Chair.

The late Dr. Borchardt.—Before opening the business of the adjourned meeting, Dr. **LEECH** alluded in feeling terms to the loss the Society had sustained by the death of Dr. Borchardt; and a letter of condolence, which was directed to be sent to his family, was read to the meeting by the Honorary Secretary.

Case of Trephining. Dr. **ARTHUR WATSON** showed a boy, aged 8, on whose head a ladder had fallen, causing a small scalp-wound over the right frontal bone, and fissuring the skull to the extent of half an inch. The lad was comatose for a week after the accident, when it was resolved to use the trephine. A piece of the inner table was found loose on the dura mater, and everything went well, the patient recovering consciousness two days after operation. Ten days after this, hernia cerebri began to form, and noisy delirium set in. He was then removed to the Workhouse Hospital, where he lay unconscious for two weeks. Six weeks later, left hemiplegia supervened; thereupon, the hernia cerebri began to diminish and heal over. In the course of three months, he was able to walk about without assistance, and was otherwise in good health.

Three Cases of Trephining.—Mr. **WRIGHT** and Mr. **POLLARD** showed three cases of trephining for compound depressed fracture of the skull. In all three cases, the fractures were of the nature of punctured fractures in external appearance, though in only one was the dura mater wounded. In none were there any symptoms of compression, and only the one where there was wound of the dura mater had even concussion. Two of the cases were in children, and one in a young adult. All did well; and, beyond irritability of temper, and in one case occasional twitching of the leg of the opposite side, no evil result remained. The importance of elevating at once in all such cases was urged, especially on the grounds that it was impossible to know the extent of the injury without doing so; that it was impossible to clean the wound when dirt and hair were often driven in; that tedious suppuration from necrosis was averted; that the risks of meningitis and subsequent chronic irritation were avoided; and that the patients were none the worse for the operation. The plan, where possible, of passing a broad flat raspatory beneath the sound bone, on which to work the trephine, and thus protect the dura mater, was recommended.

Ring-Pessary Removed after Fourteen Years' Impaction.—Dr. **Herbert Renshaw** related the case of a lady, aged 55, who consulted him, complaining of severe pain in the back and legs, and unpleasant vaginal discharge. She was also obliged to pass her motions in the upright position, owing to the intense pain caused by any attempt to relieve the bowels in a sitting posture. On examination a smooth raised fleshy ridge was found, running from before backward, on each side of the vagina, terminating before and behind in a rough semicircular ridge. Fourteen years previously, the patient suffered from a troublesome bearing down. She consulted a "wise woman," who introduced a ring, and asserted that it would never required to be removed. For many years she obtained great benefit from this support. The ring was removed by shelling it out from the fleshy overgrowth, by picking through with the finger-nail. Half an hour after the operation, all her pains disappeared. There was no incontinence of urine, and no fæcal matter in the vaginal discharge. From the mineral earthy deposit on the surface, it appeared to have been coated by lime-salts.

Decomposition of a Greenhalgh's Pessary.—Dr. **Renshaw** also exhibited a pessary which he had removed from a patient after being worn some months. From some internal decomposition of the India-rubber, an inflated ball, of the size of a small cherry, had formed on the side of the pessary, producing much discomfort by displacing the instrument.

Compound Fracture of the Humerus treated by Resection and Wiring.—Mr. **Wright** showed a case of resection of the humerus and wiring in a recent compound fracture. There was a large lacerated wound nearly severing the arm, but leaving the skin, vessels, and nerves on the inner side intact. The periosteum was torn off a part of the humerus, the forearm was also fractured. The base-ends of the humerus were removed, and two silver sutures inserted. Good union and a nearly perfect limb resulted.

Recovery from Excision of Tongue and Sublingual Glands.—Mr. **Whitehead** showed a man, aged 54, whose tongue he had removed in July. The disease was extensive, and the submaxillary glands were infiltrated. He had excised the tongue in the first instance by his usual method; and two weeks afterwards removed the glands by a submental incision. His reasons for dividing the operation into two stages were based upon his experience in dealing with primary epithelioma and secondary infiltration of glands in other regions of the body. For instance, in two cases he had excised the whole chain of inguinal glands several months after amputation of the penis for epithelioma; the patients still remaining apparently free from the disease, respectively one and two years after the operations. From these and other facts, he inferred that the malignant cells, in their migration from the primary disease to the glands next in order, were, in some instances, inactive in transit through the intermediate lymphatic channels.

Hypertrophic Lupus.—Mr. **Whitehead** showed a boy suffering from what, he supposed, would generally be regarded as hypertrophic lupus of the lip and nose, and made some brief remarks on the clinical analogy, if not identity, of lupus, and the rhinoscleroma, as described by Kaposi.

Curative Gymnastics.—Dr. **Wahltuch** pointed out the value of modern gymnastics and massage, if executed by competent and skilful manipulators, in predisposition to phthisis, in sluggishness of the abdominal muscles and digestive organs, in strumous disease, in rickets, in spinal curvature, in uterine affections, in hysteria, and in paralysis. In conclusion, Mr. **Gramko** demonstrated his new method of measurement of the spine and thorax by his spinometer, and also his manipulations in the treatment of spinal curvatures.

Operation for Radical Cure of Hernia in a Child.—Mr. **Dacre Fox** showed a case in which he had performed an operation for the radical cure of a congenital inguinal hernia in a child aged eight months. The hernia was unusually large, and caused considerable constitutional irritation and distress. The operation was performed on September 14th. Antiseptic precautions were observed. An incision, about two inches long, was made through the skin over the inguinal ring; the pillars were brought together by three interrupted sutures of strong carbolised catgut, the superficial incision being closed with silver sutures. The wound was healed in a week. For the first three days, there was considerable swelling of the scrotum, which gradually subsided, and nearly all traces had now disappeared. The hernia had not protruded since. Mr. Fox drew attention to the improvement in the child's general health, and to the simplicity of the operation; and remarked that, if it was too soon to be assured of complete success as a radical cure, such an operation might be an useful adjunct to the ordinary method of treatment by means of a truss.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, NOVEMBER 2ND, 1883.

G. M. Humphry, M.D., F.R.S., President, in the Chair.

Cyst in the Brain.—Dr. **Smith** (Newport) communicated this case. Wm. C., aged 43, was admitted into the hospital at Saffron Walden, on November 22nd, 1882. Fourteen years ago he had a fall from a horse, and hurt the back of his head and broke his clavicle. About three or four weeks before admission he began to suffer a little pain in the right shoulder and to lose power in the right arm, which was soon quite paralysed. Shortly afterwards, the right leg became powerless. The right side of the face became paralysed suddenly. There was no affection of the special senses, but his intellect had become dull and his speech affected. He complained of great pain in the fore part of the head, but there was no tender spot. The bowels were confined, and the tongue was protruded to the right. The temperature in the left axilla was 97° Fahr., and in the right 97½°. His intellect became more feeble, and there were well-marked symptoms of aphasia. His right arm became gradually stiff and painful if moved. He died on February 23rd, 1883. Several unsuccessful attempts were made during life to examine the optic discs. The *post mortem* examination revealed a cyst in the anterior part of the left hemisphere, about the size of a Tangerine orange, situated under the ascending frontal and parietal and hinder part of the superior and middle frontal convolutions and parietal lobule, directly over the lateral ventricle, with which no communication could be detected. The cyst contained about four ounces of clear limpid yellow fluid, which gave a firm clot on standing, and presented, microscopically, no trace of hooklets or crystals. On the outer wall of the cyst was a hardish nodule, about half an inch long, projecting into the cavity and extending some slight distance into the substance of the convolution, besides other dark-coloured bodies. On microscopical examination, the growth appeared to be a mixed celled sarcoma, undergoing cystic change.—Remarks were made by the **President**, Mr. **Hodson**, and others.

Hydatid Cyst of the Liver, Perforating the Diaphragm, and Invading the Thoracic Cavity.—Dr. **Bradbury** read the notes of this case. John T., aged 17, was admitted into Addenbrooke's Hospital in May, 1882. Ten weeks before he was hit on the breast with a milk-pan; an hour later he complained of a stabbing pain in the epigastrium, increased by breathing. For a week he felt feverish and lost his appetite, and he had had slight cough and shortness of breath ever since. There was marked bulging of the right chest, the intercostal spaces being obliterated, and the movement, during respiration, much diminished. There was absolute dulness over the whole of the right chest; respiration was tubular and distant. The heart was displaced to the left. The liver-dulness extended two inches below the thoracic margin. The urine contained a trace of albumen. On May 24th, nearly five pints of bile-stained fluid were drawn off, by paracentesis; and, in July, thirty-two ounces of bile-stained serum. He left the hospital on August 9th, 1882, and attended as an out-patient until September, 1883, when he was re-admitted. There was much dyspnœa, but no cough or night-sweats. He was much emaciated and cyanosed. The right chest was much distended with fluid. After admission the right side was tapped, and forty-eight ounces of glairy yellow opaque fluid drawn off, containing bile-pigment and small globules. The fluid coagulated on boiling, but did not contain any hooklets. On October 5th, a large-sized trocar was introduced, and some more fluid drawn off, containing numbers of hydatid cysts from the size of a pea to a marble. The patient died suddenly the next day. The *post mortem* examination revealed an enormous hydatid cyst on the upper surface of the liver. The cyst occupied the space between the liver and the diaphragm, and was adherent above to the diaphragm, communicating through it with the right pleural cavity, by a round orifice admitting three fingers. The cyst and the right pleural cavity were filled with hydatids of different sizes. There was much displacement of the mediastinum; the anterior third of the left chest was invaded by the distended right pleura. The right lung was flattened, and contained a few hydatids. No hydatids were found elsewhere. Dr. Bradbury thought the case was a good illustration of the great difficulty of differential diagnosis between pleural effusion and hydatid disease.—A discussion followed, in which the PRESIDENT, Dr. LATHAM, and Dr. SMITH took part.

Lumbar Abscess with Peculiar Symptoms. Mr. STEAR (Saffron Walden) related the case of a medical man who died in June, 1883, aged 51. He had always been a strong man, and worked hard at his profession, without ever taking a holiday. During the last four months of 1882 it was noticed that he was thinner and looked aged, but he could ride twenty miles without fatigue. At the end of January he caught cold, and was confined to his bed with severe rheumatic pains in the right gluteal region. After a brisk purge he was better and able to get up, but he did not make much improvement. On February 5th he was seen with Dr. Latham, the symptoms being vomiting after dinner and pain in the hip and thigh. He left home for Ventnor, and afterwards went to Clifton, and returned home much emaciated and very weak. He was seen again by Dr. Latham, but no tumour or evidence of spinal disease could be discovered. On April 8th, Dr. Humphry opened an abscess which had been detected in the back, a large quantity of laudable pus escaping. The discharge continued until his death, on June 25th, from exhaustion. At the *post mortem* examination there was found to be extensive disease on the right side of the bodies of the second, third, and fourth lumbar vertebræ, and erosion of the transverse processes of all of them, extending half way along the crest of the ileum. The iliacus muscle had disappeared, and its sheath was filled with pus. There was also pus in the psoas muscle. The cartilages were healthy. The stomach was dilated. All the other organs were healthy. Mr. Stear thought it probable that the spinal disease was caused by a fall from a horse, or at lawn-tennis in 1882. The case was of interest from the deceptive nature of the cause of vomiting and emaciation, and from the fact that, although there must have been extensive disease of the vertebræ, he was able to carry on his work.—Remarks were made by the PRESIDENT and Dr. LATHAM.

Hæmorrhagic Ecchymoses in the Cardiac Substance.—The PRESIDENT related this case. The patient was 68 years old, active, and usually enjoyed good health. He had a large appetite, and suffered occasionally from flatulence and consequent oppression, for which tonic and aperient medicine was prescribed and outdoor exercise recommended. On September 12th he had an attack of dyspnœa, with great distress of the præcordial region. The heart-sounds were clear though feeble, and the respiratory sounds and percussion natural. The urine contained no albumen or sugar, but was passed more frequently. The abdomen was tympanitic. Poultices were applied, and calomel and colocynth given, and nitrite of amyl inhaled, without relief. An enema caused expulsion of flatus and dark fæces, and his condition was improved. All through the next night there was urgent dyspnœa, yielding to no remedies except an enema, which caused expulsion of flatus. His condition became better for the next few days, though the bowels were very obstinate. On the 19th the symptoms returned with increasing distress and oppression, and Dr. Paget saw him in consultation. On October 3rd he went to town on business and walked about, and returned next day. On the 5th, after a good lunch, he felt much oppressed and distended with flatus, looking very ill and distressed. Almost immediately afterwards he fell forward and died. On *post mortem* examination, the stomach was found dilated and filled with partially digested food. The pleural cavities contained much fluid. Beneath the pericardium there was an ecchymosed appearance in the substance of the left ventricle at its hinder and lower part, and spots of a yellowish colour, probably consequent on former ecchymoses. In the interior, at the apex, was a fibrinous clot as large as a filbert, adherent, and evidently of some days' standing, containing, in its cavity, some dirty brownish fluid. Under the microscope, the muscular tissue was seen to have undergone some fatty change, and there were numerous altered blood-corpuscles extravasated amongst the muscular fibres. The kidneys were healthy.

STAFFORDSHIRE BRANCH.

THURSDAY, NOVEMBER 29TH, 1883.

CHARLES ORTON, M.D., President, in the Chair.

Extra-uterine Gestation: Recovery.—Mr. SPANTON exhibited a patient, on whom he had performed abdominal section for extra-uterine gestation in May, about twelve months after the full term of pregnancy. The woman was married, aged 26. In March 1882 she was at full term, had pains, and flow of some fluid from the uterus. Sickness and other symptoms followed, and movements of the child ceased. The swelling gradually diminished, and in November 1882 she was not much beyond her usual size. After that date the abdomen gradually increased, and, when first seen, she presented the appearance of a woman at the sixth month of pregnancy. Her general health was not good; the cyst was evidently suppurating. A central incision was made in the abdominal wall. The cyst was opened, and a putrid mass of a fully developed fœtus and pus cleared out. The edges were stitched to the abdominal wound, and a drainage-tube used. The discharge continued some time, and the temperature ran high; and about a month afterwards, under ether, the cyst was fully explored, and some fœtal bones found embedded in its lower wall. These were cleared out, and recovery was then rapid and complete.

Spleen Removed by Abdominal Section. This was exhibited by Mr. SPANTON. The patient was a married woman, aged 47. Two years before the operation enlargement was first noticed, and she had been under medical treatment ever since without any good result. Her life had become a burden, and she was, when seen, unable to move in bed without assistance. The urine was normal, and the blood showed no increase of white corpuscles, and well-formed red ones. The tumour extended from the fifth rib to Poupart's ligament on the left side, to two inches below, and to the right of the umbilicus. The operation was performed on July 17th by a central incision of twelve inches. Not much blood was lost, and the chief pedicle was secured by a wire clamp. After the operation she rallied well and was quite cheerful, but retching became troublesome. About seven hours later signs of collapse began, and she sank rapidly. The spleen weighed eight pounds three ounces, and was simply hypertrophic. A necropsy showed about a pint of blood-clot in the abdominal cavity, with a loose ligature-band lying on it, but no open vessel was found. The pedicle was quite secure.

Cyst of the Breast.—Mr. SPANTON exhibited a large cystic tumour of the breast from a married lady. The wound was quite healed on the fourth day after operation.

Oophorectomy.—Mr. SPANTON exhibited a pair of ovaries and Fallopian tubes removed from a patient, married, aged 26, who had been sent for operation from abroad on account of severe suffering from prolapsed and enlarged ovary. She had previously been under prolonged treatment without any relief, and the pain during menstruation, and at every defæcation, was agonising. She recovered quickly from the operation without a bad symptom, and returned home quite well and free from pain. The right ovary weighed 170 grains, the left 160 grains, both having the appearance of chronic ovaritis well marked.

Removal of Thyroid Gland.—Mr. SPANTON exhibited an enlarged thyroid gland removed by operation from a patient in the North Staffordshire Infirmary, who had made a good recovery.

Radical Cure of Hernia.—Mr. SPANTON exhibited two patients upon whom he had operated two years and a half ago for the cure of hernia by his own method, to illustrate the excellent results which might be obtained in young patients. One was five months and the other thirteen months old when operated on. The cure was immediate and complete in both cases, no truss being required.

Pressure-Forceps.—Mr. SPANTON exhibited a new form of spring-pressure forceps (made by Maw and Son) for holding large bands of bleeding surfaces.

Arrested Development of the Upper Extremities. Dr. CLARE exhibited a woman, aged 63. She had no thumb on her right hand. At birth, the thumb had existed, hanging by a pellicle of skin; it was removed. The left arm was very imperfect, about seven inches long, terminating in one finger; it appeared to articulate with the scapula below the usual position of the glenoid cavity. In place of the usual rounded shoulder, there was an entire absence of the deltoid and other muscles, and the acromion process of the scapula formed a sharp angle.

General Paralysis.—Mr. J. G. U. WEST showed a case of general paralysis of the insane in a man aged 45.

Chorea in Adult Males.—Mr. WEST showed a case of chorea in a man aged 45. The patient's brother had died of chorea at the age of 50. The duration of this case was seven years. He had never suffered from rheumatism, nor from any illness confining him to bed. No cardiac murmur was present. The choreic movements were sometimes continued during sleep. He had improved since admission to the workhouse hospital, where large doses of arsenic were given. The chorea was considered to be due to some organic disease, and not functional. Mr. West also showed a case of hemi-

chorea in a soldier aged 37. Seven years ago, he had received a sunstroke in India, and was at Netley Hospital for two subsequent years suffering from right hemiplegia, with partial aphasia, following the attack. Very marked contraction of the right foot and right hand resulted. Three months ago, he had a fright, being attacked by a large dog; and, ten days afterwards, violent clonic spasms commenced, affecting the right side of the face, the right arm, and the right leg. The movements were worse when the patient was excited. He had never had rheumatism. There was no cardiac murmur. Hyperæmia of the right optic disc had been detected. His mother had had chorea when a child.

Acute Ulcerative Endocarditis.—Dr. HATTON showed three hearts from patients who died in the North Staffordshire Infirmary of acute ulcerative endocarditis. The symptoms in each case were septicæmic in character, and all developed pneumonia some days before death. The spleen was enlarged in each instance, but in only one was an infarct found after death. In this case, the left eye became disorganised during the last forty-eight hours of life. Neither patient had suffered from rheumatism.

[illegible] Treated by Lead-paint.—Mr. J. G. U. WEST read notes of [illegible].

Treatment of Varicose Veins.—Mr. FOLKER described a new operation he had performed for the cure of varicose veins. His instruments, and the patient upon whom he had operated, were exhibited. In the operation, the vein was securely tied, and ultimately obliterated, without any disturbance of the surrounding parts. The man exhibited was operated on one Saturday, and the following Tuesday week (eleven days) he was up in the ward in his present condition. The operation was as follows. A small incision was made on each side of the vein; and a curved needle, passing in at one incision and out at the other, carried the ligature under the vein, and was withdrawn. A flat instrument was now, in the same manner, passed in at one and out at the other incision, and threaded with one end of the ligature, which then, by its withdrawal, passed the ligature over the vein. The two ends of the ligature, which now surrounded the vein, projected through one opening. This was repeated in as many places as might require it, and then the lowest one was tied first, and the ligature cut off close; firm pressure was made over it just to press out any drop of blood that might be present, and the little opening was closed with collodion. Each ligature from below upwards was tied in a similar way, pressing the blood out of the vein up to each ligature before tying it. The ligature used in the present case was pure silk, well carbolised; but Mr. Folker hoped to tie some with tendon-ligatures, which would become thoroughly absorbed sooner than the silk.

ACADEMY OF MEDICINE IN IRELAND: SURGICAL SECTION.

FRIDAY, NOVEMBER 9TH.

W. I. WHEELER, M.D., F.R.C.S.I., in the Chair.

Living Specimens.—Dr. McARDLE showed a case of Fracture of the Patella, also a case of Detachment of the Quadriceps Extensor Cruris from the Patella.

Specimens Exhibited by Card.—The PRESIDENT showed (1) Hypertrophied Mamma, weighing 18½ lbs., removed from a [illegible]; (2) Cast of Mammary Tumour; (3) portion of Skull removed [illegible] Temporal Caries; (4) Foot Removed above Ankle-joint [illegible]. Mr. STOKES showed the Feet Removed in [illegible] from a patient aged 32, and in a patient aged 10.

[illegible] Ulcers.—The PRESIDENT demonstrated [illegible] the progress of [illegible].

Fractured Patella.—Mr. COPPINGER exhibited [illegible] patella removed from a [illegible] [illegible] Mr. Lister's method of freely opening the joint and suturing the patella was advocated for cases of ununited fracture of [illegible] in which the late Mr. Amphlett had sutured the fragments of a fractured patella, and [illegible] was concerned, was perfect. Unfortunately, however, the joint was flexed: there was no movement in it, and the patient slipped one evening, and ruptured the joint completely across, refracturing the patella. As the [illegible] of examining carefully the condition of the parts, and it was found that the patella had undoubtedly united by bone. But, in discussing this operation before the British Medical Association at Worcester, he objected to a procedure of the kind [illegible] of the patella. He had had in hospital a man with two fractured patellæ, who fell from a fort-wall in India during the Mutiny, breaking both the patellæ. The fragments were united, at a distance of some inches, by fibrous band, and he was still able to go about with comparatively great comfort. Concerning the question of opening the knee-joint, he concurred with Mr. Coppinger that upon no ground, except where the patient would have an absolutely useless limb, was it justifiable. In the hands of competent persons who comprehended the Listerian method, the operation would be safe.—Dr. MAPOTHER said that, in transverse fracture of the patella, there was [illegible] adhesive rubber-plaster above and below, the fragments could be kept very closely together, and he believed that ligamentous union was very often better than bony union. In fracture of the patella, allowing the synovia to flow completely through the fragments, [illegible] of the [illegible] Many instances of fractured patella occurred in father and son, and it was well known as a usual thing that if a man broke one patella, he was apt to break another. He thought there was a hereditary tendency to the injury. It might be accounted for by congenital shortness of the muscular apparatus. On reading Professor Lister's paper, it occurred to him that, in many forms of fracture to the clavicle, the two fragments could be kept together by suturing; but in fracture of the patella, the practice advocated as to the synovial cavity seemed to be attended with extraordinary danger.—Mr. BARTON took it as proved, by the complicated apparatus in use for many years, and the theories put forward, that surgeons were not satisfied in the result of ligamentous union. Dr. Mapother had observed that a man who had broken one patella was apt to break the other. This was because the broken patella united by ligament was weak. Whatever exception might be taken to the advisability of drilling the fragments, that had been done with perfect safety. He did not advocate the general adoption of the procedure in recent fractures, for he had attempted the operation of suturing the olecranon process, and he knew the difficulties that attended it.—Mr. CORLEY said that, at a former discussion on the subject, the President (Mr. Wheeler) was the exhibitor of an apparatus for producing bony union; and some time afterwards Mr. Wheeler showed a patella which exhibited bony union, the inference being that it resulted from the application of the apparatus. But to-night they had a patella in which there was bony union without any apparatus at all.—Dr. McARDLE observed that the case he exhibited was [illegible] treated by rubber-plaster, a piece above the patella and one below it, drawing the parts together. The leg could be flexed now as well as the one the patella of which was not broken; and therefore, it seemed [illegible] [illegible] The second case he had [illegible] [illegible] Mr. [illegible] [illegible] Dun's Hospital, in which the fragments were widely separated.

and there was effusion into the knee-joint, so that it was impossible to bring the fragments into apposition, and he aspirated the knee-joint. After removing the fluid, the fragments were brought together, and the man left the hospital with the fragments in close apposition. The aspiration was conducted under the spray, and with all antiseptic precautions. Mr. **Stokes** said that Professor Lister's address recorded seven surgical results, which could only be characterised as brilliant. Although he did not concur with Mr. Thomson in thinking that they should not hope for or care for osseous union in these fractures, yet the surgeon who operated undertook a tremendous responsibility. Even occasional failure, in spite of the most careful antiseptic Listerian precautions, should make them very slow in recommending or performing the operation until some other method of carrying out antiseptic practice than that now used and advocated by Lister was discovered. —Dr. R. **M'Donnell** said the really important question for the surgeon to consider in a matter of this kind was, would he conscientiously and honestly, being in the position of the patient, submit to the operation himself?—Mr. **Tufnell** said that was the practical way of putting the question to the test.—Dr. **Lentaigne** had perfect confidence in the Listerian method. If he fractured his patella, he would submit to the operation at Mr. Lister's hands. —The **President** had drawn attention to the fact that the displacement of the lower fragment was due to gravitation, and not the ligament of the patella, as Malgaigne supposed. Undoubtedly, in fracture, bony union might be obtained without the application of any apparatus. This result, however, was impossible in wide separation of the fragments. In the case which he exhibited of bony union resulting from the use of his own splint, the separation was approximately the width of three of his fingers, about two inches and a half. That case was seen by Mr. Colles, Mr. Butcher, and Mr. Tufnell, and ultimately the use and perfect motion of the joint was recovered. About two years afterwards the man died of phthisis in the Richmond Hospital. Through the courtesy of Dr. Gordon he obtained the patella, in which was found complete bony union. The patella was examined by Professor Macalister, and seen by Mr. Hamilton and others. As to Mr. Lister's treatment of fracture of the patella—opening the joints and suturing the fragments together—he would make no comment beyond remarking that, in his recent publication, Mr. Lister made drainage and cleanliness the prominent essential factors.—Mr. **Coppinger** said that he had suggested that inefficient bony union was much more dangerous than fibrous union, and much more liable to lead to dangerous injury, such as a compound fracture into the knee-joint, an injury which would not occur if the union were by fibrous tissue. The speakers had concurred in the views laid down in his paper, and there was no surgeon who considered Mr. Lister had made a sufficiently strong case for such serious treatment as opening into the knee-joint.

REVIEWS AND NOTICES.

A Guide to the Practical Examination of Urine, for the Use of Physicians and Students. By **James Tyson**, M.D. Fourth Edition. Revised and corrected, with coloured plates and wood-engravings. Philadelphia: P. Blakiston, Son and Co., 1883.

In a short preface to this edition of his *Guide*, Dr. **Tyson** says that it is intended to be a working guide for the examination of urine, and not an exhaustive treatise; and we may at once say that the book appears, on the whole, exceedingly well adapted to fulfil this purpose. At the beginning, a full list of all the reagents and apparatus likely to be required in the clinical examination of the urine is given, and this is followed by a rapid survey of the physical properties of the urine, its acidity, colour, specific gravity, and quantity, and the variations which occur in disease. Dr. Tyson, we see, recommends for calculating the total amount of solids from the specific gravity, Hæser's co-efficient, which is 2.33. The use of this brings us, as Dr. Tyson says, to the result that, taking the mean normal total excretion in 24 hours at 1,500 c. c., and the mean specific gravity as 1020, the average amount of solid matter passed in the 24 hours is 70 grammes. Parkes deduced, from the collection he had made of observations on the total solid in which the amount was determined by evaporation and weighing, that the mean amount of urinary solids was 61.14 grammes, and added a note which shows that he thought that this was probably too high. If Trapp's co-efficient, which is 2, be used, we arrive, by a similar calculation to that named above, at 60 grammes as the average total solids, a number which agrees very closely with the observed quantity. The table to which we refer is to be found in Dr. Parkes' *Composition of the Urine*, p. 23. Trapp's co-efficient is recommended, not only by the late Dr. Parkes, but also by Dr. William Roberts, of Manchester, in the last edition of his well-known treatise. However, Dr. Tyson follows most of the other latest authorities in advising the use of the higher co-efficient; for instance, in Neubauer and Vogel's *Analyse des Harns*, Hæser's co-efficient is recommended, and is stated to give remarkably accurate results. The chapter which treats of the detection of albumen under varying circumstances is excellent, and the precautions advised are such as are most necessary for every student to be well-acquainted with; the same remarks apply also to the chapter on Sugar in the Urine. It is justly remarked that much of the criticism of clinical methods of testing for the presence of sugar is not justified, and arises partly from the fact that the chemist and the physician view the subject from different standpoints. It is one thing to establish what is the minutest proportion of sugar, dissolved in pure water, which will show a given colour or other re-action, but it is a thing of much greater difficulty to recognise with certainty the presence of a trace of sugar in a complex liquid like the urine. Dr. Tyson agrees with Dr. Pavy, that the copper-test, applied either by Trommer's or by Fehling's method, is quite delicate enough; Dr. Pavy has even said that it would be a misfortune if any more delicate test came into general clinical use, and Dr. Tyson, speaking of the minute traces of sugar which can be extracted from urine, says that it is not necessary that they should be recognised by the physician; for, he adds, "such amounts of sugar have no more clinical significance than has the normal proportion of urea in a specimen." From this statement it might be supposed that Dr. Tyson believed sugar to be a constant constituent of normal urine. The question has been long in dispute; Brücke and Bence Jones believed that they had obtained evidence that sugar was always present, in minute quantities, in the healthy urine; Schunk, in 1862, announced that healthy urine, boiled with acids, gradually deposited a resinous substance, and acquired the power of reducing cupric oxide, that is that a substance having the properties of glucose was thus obtained; it was said to be derived from the colouring matter. Schunk's theory, however, did not meet with general acceptance, and the view commonly held that sugar was contained in minute quantities in normal urine was confirmed by the more recent researches of Dr. Pavy. Dr. Tyson, however, states his belief, on the authority of Professor Wormley, of Pennsylvania University, that Dr. Pavy mistook uric acid for sugar; if the filtrate obtained by the lead-process be at once tested with the copper-test it gives a re-action, but if allowed to stand for twenty-four hours it does not, a considerable sediment of uric acid having fallen in the interval.

The account given of the nature and reactions of the urinary pigments is unusually full, and forms, indeed, a very clear summary of a difficult subject. For the estimation of urea, Dr. Tyson recommends Liebig's process with nitrate of mercury; but he also gives full directions for the hypobromate process; it is probable that the latter process leads to more correct results, the observed error being almost constant in amount.

The author rejects the fermentation-theory of the deposit of acid urates from clear acid urine after it is passed, in favour of the chemical theory advanced by Voit and Hoffmann. By this theory, the increase of acidity is attributed to the action of the acid sodium-phosphate on basic urates. He also states that the urine grows less acid during this period of deposition; this is contrary to the doctrine usually held, which teaches that acid urine increases in acidity after it is passed, and that the acidity attains the maximum on the third day. Indeed, the author is far from happy when he discusses the subject of fermentation, for his account of alkaline fermentation strikes us as meagre.

The last part of the book will probably be found to be the best and most useful; it treats in a practical comprehensive manner of the sediments of urine, and is well illustrated by drawings, which are chiefly borrowed. The chapter on the "Differential Diagnosis of Renal Disease" is very good indeed, and if Mr. Jonathan Hutchinson's suggestion to provide, for use in emergency, or at the bedside, *schemata* of diagnosis and treatment, be ever carried out, some such *schema* as this here drawn up by Dr. Tyson, ought to be among the number. Altogether, we can strongly recommend this book as fulfilling the purpose for which it is designed, namely, a guide to the practical examination of the urine. It is a distinct advance on previous manuals for the use of physicians and students, and reference to its pages will often save both classes from tedious delays and vexatious errors.

Hospital-Management; being the authorised Report of a Conference on the Administration of Hospitals, held under the auspices of the Social Science Association in July 1883. Edited by J. L. **Clifford-Smith**, Secretary of the Association. London: Kegan Paul, Trench, and Co. 1883.

This octavo volume of 190 pages contains the papers which were read at the recent Conference on Hospital-Administration, and the discussions which followed thereon. The subject of hospital-management was treated in all its length and breadth; and, as great pains were taken to bring together from all parts of the country persons who were conversant with the subject, we have here a most valuable record of facts, opinions, and suggestions.

To consider the opinions and suggestions that were offered would require more space than we can afford. But we have culled a few of the facts that were stated by various speakers, and they are such as call loudly for reforms.

1. While ten of the largest general hospitals are all grouped within a radius of a mile and a half from Charing Cross, giving 3,439 beds for that region, the whole of the north, east, and west of London, with a population of millions, has only five hospitals, affording respectively 33 beds in the north, 810 in the east, and 232 in the west.

2. The annual income of all the medical charities cannot be taken at less than three quarters of a million sterling, divided very unequally among about 200 institutions.

3. The number of persons obtaining gratuitous medical relief at the metropolitan hospitals and dispensaries does not fall short of a million, or one-fourth of the whole population of the metropolis.

4. The last report of the Leeds General Infirmary says: "Amongst the number of persons applying for relief as out-patients, there were 2,099 whose cases were too trivial for treatment, who were consequently sent away; and about 150 were rejected as being in a position to pay for medical treatment." The number of out-patients admitted was 15,873. If the same proportions were applied to the million out-patients of London, in what a striking way the abuse of hospitals would be represented!

5. There are in the metropolitan hospitals 1,000 beds daily unoccupied.

6. In 1882, the deficit at nine of the general hospitals amounted in the aggregate to £40,000; nor does this represent the total excess of expenditure over income, for, at these same institutions, the income expended included no less than £69,700 derived from legacies.

7. Hospital-accounts are not kept according to any uniform plan, and in but few instances is a balance-sheet presented at all.

8. As regards the audit of accounts, out of 54 institutions, only 15 employ professional auditors, and at five hospitals the accounts are audited by the hospital-officials themselves.

9. The number of hospitals in London and the neighbourhood that are now receiving money from their patients is 41.

10. Last year, the receipts from "poor paying patients," who are received in the ordinary wards at St. Thomas's Hospital, were £65; while the fees from patients at St. Thomas's Home amounted to £5,774.

11. The persons of the middle and lower middle class who were last year received into the Bolingbroke House Pay Hospital paid 73 per cent. of their cost.

These facts show how large are the interests involved, how unequally the medical charities are distributed over the vast area of 122 square miles which constitutes Greater London, how much hampered many of these institutions are for lack of funds, and how ready people are to contribute according to their means when paying systems are brought within their reach. That these questions can only be dealt with by a Royal Commission, seems to be the growing conviction of those who are best able to judge. We trust that the Committee which was appointed at the close of this Conference may be able to induce the Home Secretary to grant such a Commission.

The Organs of Speech, and their Application in the Formation of Articulate Sounds. By Georg Hermann von Meyer, Professor in Ordinary of Anatomy at the University of Zurich. London: Kegan Paul, Trench, and Co. 1883.

This book forms the forty-seventh volume in the International Scientific Series, and was written with special reference to the requirements of the philologist on the subject of the structure and function of the organs of speech. The anatomical and physiological handbooks, as the author says in his preface, are little adapted to this purpose, much of them being discussed at length which is of little use to the philologist, while, on the other hand, points which to him are of considerable importance are only briefly alluded to.

The book is divided into a short introduction of a few pages, and three long chapters, which again are divided into convenient sections and subsections. The first chapter, on the Formation of the Organs of Speech, opens with an account of the production of the air-current, the structure of the lungs, and the mechanism of respiration. A detailed description is then given of the anatomy of the larynx, pharynx, mouth, and nasal cavities. This part of the book is well illustrated by woodcuts, arrows being used to indicate the direction of the force in the action of the muscles of the larynx. At the end of the description of the various organs, a short summary is appended, in which are briefly recapitulated the chief points discussed in the preceding pages, a practice, we think, that might with advantage be more frequently adopted by authors. In the second chapter, on the Relation between the Organs of Speech and the Formation of Sound, the physiology of the subject is treated of. In the third chapter, on the Formation of Articulate Sounds, the facts and theories discussed and explained in the two former chapters are applied. The author, as we should have expected, adopts the physiological classification of articulate sounds in place of the old classification usually given in the grammars, and founded on the erroneous assumption that any alphabet furnishes in its various letters the whole of the sounds of the language of which it constitutes the symbols. The noises employed in the formation of articulate sounds are classed under the heads of *strepitus continuus*, and *strepitus repentinus*; the former being subdivided into *spirans*, *stridulus*, and *vibrans*, the latter into *avulsivus*, *explosivus*, and *occlusivus*. As an example of the *spirans*, we of course have H, the air passing through the open mouth; of the *stridulus*, ach (German) and loch (Scotch), the air being forced during this sound through a narrow opening between the palate and the dorsum of the tongue. Of the *vibrans* we have, as an example, the lingual R; of the *avulsivus*, the peculiar clicking noise of the Hottentots produced by suddenly withdrawing the anterior part of the tongue from the hard palate, and occasionally used by us in the whispered P, to produce which we have to suddenly separate the lips. But space does not permit us to give further examples of this very interesting subject, and for such we must refer the reader to the work itself.

The section on the production of the vowel-sounds is particularly interesting; and the position of the tongue, soft palate, and larynx during the emission of these sounds is admirably illustrated by diagrams of longitudinal sections of the parts.

The book is well printed on capital paper, and is provided with a good index. We can recommend it as likely to supply a want which has doubtless long been felt by those interested in the subject.

NOTES ON BOOKS.

The Electro-Magnet, and its Employment in Ophthalmic Surgery. By **Simeon Snell**. London: J. and A. Churchill. 1883.—This little book forms a capital summary of all that is known up to the present on the use of the electro-magnet in eye-surgery, a subject which the author has done so much to elucidate. He gives as many as sixteen cases of his own in which the magnet was used to extract small pieces of iron, with a successful result, and gives explanations—apparently not unsatisfactory—of the three cases in which the removal of the foreign body was not accomplished. He anticipates good results in practice from the employment of the magnetised needle in the detection of fragments of metal within the globe. With such a record of eyes saved by the magnet, any surgeon practising in a manufacturing district would be unwise if he neglected to make a trial of this procedure in suitable cases. We cordially commend the book to all such.

Birmingham Health-Lectures.—The useful lectures on health at the Birmingham and Midland Institute are being continued with much success, and are published at one penny each by Messrs. Hamilton, Adams and Co., London. The very interesting and excellent series already issued includes *Ways and Means of Health*, by Dr. Hislop; *Coughs and Colds*, by Balthazar Foster, M.D., F.R.C.P.; *Facts about Food and Feeding*, by Alfred H. Carter, M.D.Lond., M.R.C.P.; *On Wounds and Broken Bones, [illegible] Burns and Bruises*, by Oliver Pemberton, F.R.C.S.; *Lessons of Defective Drainage*, by Alfred Hill, M.D., F.I.C., Medical Officer of Health, Birmingham. To these will now be added, *Address to Women*, by Lawson Tait, F.R.C.S., Surgeon to the Hospital for Women, Birmingham. Women only were admitted to this lecture

REPORTS AND ANALYSES

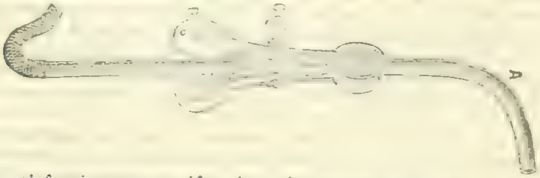
AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

AN INSTRUMENT FOR THE ADMINISTRATION OF ANÆSTHETICS THROUGH THE NOSE IN OPERATIONS ABOUT THE MOUTH AND FACE.

FOR some time, I was in the habit of using a piece of catheter attached to the tube of a Junker's anæsthetic administrator, and passed into the naso-pharynx, as a means of maintaining insensibility in operations about the mouth and face, such as staphyloraphy, excision of Meckel's ganglion, etc. This method, however, having many shortcomings, I have devised the instrument of which the annexed woodcut is a representation. I have now used it in a number of cases with satisfaction to myself and to the operators, and I am desirous now of bringing it under the notice of the profession. It has been made for me in two sizes by Messrs. Salt and Son, of Birmingham, to whom my acknowledgments are due for the careful manner in which they have carried out my ideas. The instrument consists primarily of a tube of ductile metal (A) about 25.0 centimètres long, bent so as to pass through the nares into the pharynx, and attached at one end to the tube of a Junker's apparatus, instead of the face-piece usually attached thereto. On this first tube slides a second, of firm metal, about 5.0 centimètres long (B), capable of being fixed at any point by a small screw (C) passing through it, and impinging on the ductile tube. The sliding tube carries on each side a wing about 7.0 centimètres in length (D), armed at its distal end and inner surface with a serrated ivory plate, which is pressed against the ductile tube by a spring (E) attached to its proximal end, and acting on the tube of firm metal. The method of using the instrument is as follows. The patient is first deeply anæsthetise in the ordinary manner with ether or chloroform. The screw fixing the sliding tube is loosened, and the tube itself drawn back to the proximal end of the ductile tube, which is then passed by the nostrils into the pharynx to such a position as may be convenient to the operator. This being accomplished, the short tube is slid downwards until it is possible, by divaricating the distal extremities of the wings, and pushing the tube a little further down, to clasp the sides of the nose tightly between the serrated ivory plates. The adjusting screw is then fixed, and the vapour of chloroform can be pumped through the tube by means of the Junker's apparatus. Should the operation be one in which the patient's mouth is constantly open, as in staphyloraphy, the wings may be made to clasp both nostrils, so as to prevent air from passing through either. Should the operation, on the contrary, be one in which the mouth is kept closed, the wings should clasp the outer surface of the nostril containing the tube and the opposite surface of the septum nasi, so that air may pass through the passage unoccluded by the tube.



The advantages which I claim for the instrument are as follows.

1. Once *in situ*, there is no danger of the tube slipping upwards or downwards, and the administrator can, therefore, place himself in such a position as least to incommode the operator.
2. Perfect anæsthesia can be maintained by its use throughout an operation about the face of any length, without interfering with the operator's actions. On the other hand, in operations about the mouth and palate, the patient can be maintained at that point of anæsthesia which may be considered desirable.
3. The supply of chloroform can be regulated by the strokes of the pump, and that of air by occluding one or both nostrils.

BERTRAM C. A. WINDLE, M.A., M.D.Dub.,
General Hospital, Birmingham.

MR. MARK H. JUDGE, A.R.I.B.A., has been elected on the Health Committee of the Social Science Association, Adam Street, Adelphi.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

1884.

THE FOUNDATION OF A MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

IN another column will be found the full tables of rates for the proposed new society, as prepared by Mr. F. G. P. Neison, F.I.A. It will be seen that they embrace all the improvements which recent knowledge and inquiry have found to be requisite, and are, in fact, constructed on strictly scientific and trustworthy lines. This is an advantage fortunately within the reach of similar societies instituted at the present time, as the careful work of experts makes it comparatively easy to profit by the sometimes painful experience of the older societies, and to avoid the difficulties into which error has led them. Thus the new society is not likely to have much to reform or amend.

It will be seen that the payments are graduated for all ages, thus securing initial equality, by taking from each member such a sum as will cover, and only fairly cover, his average risk. In the sickness-pay a fair range has been taken—two, three, or four guineas per week; and a further advantage, not so immediately apparent, is that this rate is never reduced below one-half, no matter how long the sickness may last, or, indeed, if it become permanent. The absolute and unconditional nature of the annuities, ranging from £20 to £50, their receipt being only conditional on the attainment of the specified age, is a distinct advantage, as they may thus be enjoyed with perfect dignity and independence. The age for their commencement may, at first sight, seem a high one, but an examination of the mortality-tables reveals the fact that, of a given number alive at 30 years of age, very nearly one-half will be still living at 65, so that the chance of an annuity being received is by no means a remote one. The business of life-assurance has been so well considered generally that any novelty of treatment could scarcely be looked for; there is, however, an excellent provision that the payment of premiums of all descriptions shall cease absolutely when a member attains the age of 65, thus affording full relief at that period from any further trouble or anxiety whatever.

There are two or three incidental advantages also worthy of mention; notably the elasticity of the regulations which will enable a member to vary his assurances almost at pleasure, and the liberal provision to be made when a policy is surrendered. In some cases, too, the right to extinguish periodical contributions by a single payment may prove a valuable one.

The salient feature of the whole plan is, however, its mutual and self-acting principle, which gives to the members who provide the funds effective general control over the whole machinery, and enables them to reap the full benefit of any profit made on their payments for assurances of a necessary nature, without deterioration from excessive management-expenses, or the payment of large shareholders' profits.

A number of letters, expressing general commendation of the rules, have been received. In some directions, however, there are amendments suggested; and there seems to be a general wish that the right to join shall be extended beyond the stipulated age (49 last birthday). All these will be carefully considered at a committee meeting to be held on Wednesday next (the 9th instant), and any further comments or suggestions might with advantage be then entertained. At this meeting, more definite and real shape will be given to the project, and the society will very shortly commence what we trust and believe will be a long and useful existence.

ERNEST HART.

The British Medical Journal.

SATURDAY, JANUARY 5th, 1884.

THE BRITISH MEDICAL ASSOCIATION IN INDIA AND THE COLONIES.

THE large increase in the number of the subscribers to the JOURNAL throughout India, America, and the Colonies, which has taken place of late years, has ended in a considerable accession to the number and strength of the Association, and, recently, has culminated in the establishment of numerous and powerful Branches in the Australian Colonies, India, and in Jamaica. These Branches are kept in touch with the Association chiefly by the BRITISH MEDICAL JOURNAL, which every member receives, and which keeps him informed of the progress of medical and surgical science in Great Britain, and of the march of public affairs, and the social movements within the profession, and, to the extent that it specially affects medical men, in the outside world also.

The success of the JOURNAL abroad, and the favour with which it is regarded, have had the satisfactory effect of multiplying our Indian and Colonial membership, and extending the influence of the Association wherever the British tongue is spoken; one correspondent, indeed, writes to us this week seriously contemplating the formation of a Branch of the Association in China. It has also given rise to accessory journals, which are the special literary organs of distant Branches in India and Australia, and are the expression of their literary and scientific activity. Our distant Branches, where they represent communities so widely separated in time and space from the centre, and so intellectually active and highly organised as the Branches in Australasia and India, have judged wisely, as we think, that it would neither be hopeful nor well-advised to trust exclusively to the BRITISH MEDICAL JOURNAL to do all that is needful to keep them in active intercommunication. It would not be possible for us to publish with sufficient promptitude and fulness—looking to long postal intervals and other necessary sources of delay and uncertainty—the abundant scientific and clinical results of their meetings; still less to collect, discuss, and issue the current medical news of Australia and New Zealand, or to throw light on local, medical, and social politics. Setting that excellent example in scientific and professional brotherhood which it is one of the chief aims of our Association to inculcate and promote, and which the Australian colonies appear to be about to emulate politically on a great scale, our combined Australian Branches have now issued for some little time a monthly medical journal, which the members receive for a special annual subscription of £1, and which is known as the *Australasian Medical Gazette*. It would be considered high-priced in this country, each monthly number consisting only of about 26 large octavo pages; but, of course, in the colonies, the cost of production is much higher proportionately, and the circulation relatively restricted. We are glad to be able, however, to give an excellent account of the contents of the paper; they are varied, of good clinical character, having the true seal of special local information, and having a real scientific value. Thus, in the first number of the volume now commencing, which is the third of the series, we may especially mention articles entitled, "Notes on Diseases prevailing among the New Zealanders and other Inhabitants of the Polynesian Islands," by George Bennett, M.D., F.R.C.S.; "Notes of Cases of Skin-diseases treated at Rotoma, New Zealand," by T. Hope Lewis, M.R.C.S.; and "An Analysis of Three Hundred Cases of Typhoid Fever admitted into the Sydney Hospital," by P. Muskett, L.R.C.P., F.R.C.S.Ed., as excellent clinical records possessed of the *genius loci*. A paper by Baron Sir Ferd. von Mueller, K.C.M.G., M.D., "On the Therapeutic Value of Eucalyptus," is, as might be anticipated from the pen of that distinguished naturalist, a contribution of exceptional value. A very noteworthy paper of physiological research is contributed by Professor T. P. Anderson Stewart, one of the University teachers, "On the Physiological Action of Large Doses of Nickel and Cobalt." This work was done in Strasburg; for, unfortunately, the colonial obstacles to physiological research are, we believe, even greater than those which exist in this country. The Australasian Branches alone now number in all 205 members.

We have noticed thus fully the character and contents of this very able and interesting *Medical Gazette;* because it is to us a source of pride and pleasure, and, we think, will be a source of gratification to the Association generally, that from small beginnings, and not without tribulation and occasional abuse, we have not only succeeded in bringing the BRITISH MEDICAL JOURNAL to a position in which it may claim with truth to be the largest, fullest, and by far the most widely circulated and most influential medical journal in this country, or, as we are informed on various hands, in any part of the world; but also that, as of Falstaff it was stated, as a merit, that he was not only himself "witty, but a cause of wit in others," so of the BRITISH MEDICAL JOURNAL it may be said that it is not only itself a successful journal, but the cause of successful journalism in others.

Not only has the American Medical Association, after the reports by Drs. Sayre, Toner, and others, of the influence exercised by the JOURNAL within their observation, started a like weekly journal, which is already highly interesting, and which promises to grow rapidly in usefulness and favour, but our Branches are taking a leaf of the same book, and find themselves the better for it.

The Proceedings of the North-West Provinces and Oudh Branch of the British Medical Association, "with which," as the title-page informs us, "is incorporated a Journal of Medical and Sanitary Science, specially devoted to the interests of the Medical Services," is a very able publication, full of matter of special interest to Indian medical officers, but also conveying a large amount of information on the subject of tropical diseases and conditions of life, and in special surgery, which will well repay the European reader. It has contained among others a series of papers by Surgeon-Major Boileau, on the "Normal Promotion-List of the Army Medical Department," showing the prospects of promotion of all officers of the Army Medical Department above twelve years' service, which is deeply and painfully instructive, and which has, indeed, all the importance of a State paper. We shall shortly return to it; meanwhile, it is sure to attract the attention of the officers of the service.

We find, in the last number which has reached us, that Surgeon-Major Boileau, addressing lately the members of the North-West Provinces and Oudh Branch of the British Medical Association, said, "I know, and can bear testimony to the good work that has been done, and that is being done, for the medical officers of the [illegible] services through the medium of the JOURNAL of the Association, and by the exertions of the Parliamentary Bills Committee. Our interests have occupied a good deal of the time and attention of the [illegible] of the Association, and these interests have been very [illegible] [illegible] by [illegible] their work. We owe the British Medical Association a debt of gratitude which every medical officer holding Her Majesty's commission should, by becoming a member, contribute to repay. He will find himself in goodly company, and will receive weekly for his annual guinea the worth of it in full, in the BRITISH MEDICAL JOURNAL, a periodical second to none." Other excellent papers abound in this journal.

A South Indian Branch of the Association has just been formed in Madras, and a third Indian Branch is in course of formation. Soon we hope to be able to congratulate our readers, and the Association generally, on a time now rapidly approaching, when, even in our most distant colonies and dominions, the British Medical Association and the BRITISH MEDICAL JOURNAL shall be as much a household word in every medical home as they now are in Great Britain.

MR. BRIGHT AND THE ANTIVACCINATIONISTS.

IF enthusiasm in the maintenance of opinion could be accepted as any criterion of truth, the opponents of vaccination would certainly have a strong case in their favour; for they are instant, both in season and out of season, not only in promulgating their views, but in endeavouring to secure for them an expression of approbation, however faint, from anyone who can be suspected of the slightest leaning to that form of legislation which relies rather upon moral suasion than on possible compulsion for its support. Mr. Bright's proclivities in this direction are well known, and it is not surprising, therefore, that the opponents of vaccination should have attempted to draw from him an expression of sympathy, which would be likely to be excited by his antipathy to anything having the slightest semblance of legalised punishment of heresy, quite as much as by his intellectual adhesion to an irrational creed. When a man believes that the exaction of tithes is an unrighteous exercise of the powers of a majority, however little that impost may, in its present form, have to do with religious domination, it is not at all improbable that he will be inclined to look sympathetically on the case of those who resist vaccination as an equally tyrranous abuse of power, and thus affect to pose as martyrs "for righteousness' sake." Some member of this persecuted class, who modestly conceals his identity under the general name of "a correspondent," but who is, as likely as not, one of the officials of the Antivaccination League, appears to have called Mr. Bright's attention to the manner in which the Vaccination Acts are enforced by the seizure of goods and imprisonment, and to cases in which respectable men have been imprisoned for declining to comply with the Acts. To this ingenuous invitation Mr. Bright makes a characteristic reply. He confesses that he is of opinion that "the facts are in favour of vaccination, though it often fails of any good effect, and sometimes causes much evil, and even death."

It seems, therefore, very doubtful what, in Mr. Bright's opinion, is the real force of the "facts," which, he thus admits, make for vaccination, though it must be assumed that their weight is, on the whole, against the antivaccinationists' theory, since he urges that they should be set before the public rather "by persuasion and example" than by compulsion. Now, we should be much interested to learn whether Mr. Bright has ever taken the least trouble to make himself acquainted with the "facts" whose value he thus attempts to minimise by this damaging qualification. Has he, for instance, read the memoranda on the influence of vaccination in the prevention and diminution of small-pox, which have been issued at different times by Dr. Buchanan, Mr. Simon, the late Dr. Seaton, Mr. Ernest Hart, and other competent authorities, who have taken the trouble of collecting and sifting these "facts," in order to ascertain what inferences are deducible from them? If he had done so, we can scarcely understand how he could state that vaccination "often fails of any good effect," unless he had felt it right to qualify this remark by the addition that, "the cases in which it thus fails are out of all proportion to those in which it succeeds in effectually protecting against the attack of small-pox." Some such addition as this we feel sure that Mr. Bright would have felt it proper to make, had he taken the trouble to make himself familiar with the facts which he thus seeks to explain away; for Mr. Bright is a man of candour and intelligence, and it is impossible to suppose that he is unable to appreciate the force of evidence such as these memoranda contain, if he had honestly set himself to master it.

But probably, even if Mr. Bright entertained a higher opinion of the value of the facts in favour of vaccination than he appears to do, he would still disapprove of any attempt to impose the practice of vaccination on those who are unwilling to adopt it. He believes, though in a somewhat half-hearted way, that persuasion and example would do as much as, if not more than, is now effected by compulsion. The answer to this suggestion appears to us to be extremely simple. All the effect that persuasion and example could ever produce on those who have failed to recognise the force of the evidence in favour of vaccination, they ought to produce now. The antivaccinationists have the example of an overwhelming majority of their fellow-citizens constantly before them; they cannot but see that the whole weight of the intelligence of the country is in the scale against them; and it rarely happens that one of them is brought before the magistrates for his contumacy, without a very decided attempt being made by the bench to try the effect of moral suasion before having recourse to the *dura ilia* of the law. But example and persuasion are alike impotent to turn men who are dominated by so obstinate an intellectual crank as that which twists the mind of the antivaccinationist. The only question which remains, therefore, is whether, if the merits of vaccination so enormously overweigh its dangers as the public generally believe, and if the risk of allowing any considerable proportion of the population to go unprotected, whether from ill-grounded apprehensions, or, as would certainly be largely the case, from mere thoughtlessness, is so serious to the rest of the population, it is not right that those who entertain conscientiously this latter belief should coerce a refractory minority, who are in no different position in this respect from other minorities whom the law, as expressing the opinion of the majority, finds it necessary to compel to do what they dislike, or to refrain from doing that for which they have a fancy. Mr. Bright asks whether, "after so much contest for mildness in our laws, such things (as repeated penalties and imprisonment) are still possible in our country?" And he professes to be quite shocked at such instances of harshness and cruelty being still found amongst us. But has he no sympathy to spare for the unfortunate people who are repeatedly fined for, say, adulterating milk, or who are sent to prison because they will not pay their just debts? In what respect, it may be asked, are these victims of social oppression less worthy of his lacrymose condolence than those who, by their wrong headedness and obstinacy, would, if they were allowed, scatter disease and death in all their horrors broadcast through the community?

We fancy that it is not very long since Mr. Bright gave some rather pithy advice to those who advocate the representation of minorities in Parliament, to the effect that the best way in which minorities could get their opinions represented was by converting the majority to their way of thinking. Would it not be well that he should impress this view upon the antivaccinationists, with the force of language which he knows so well how to use? He talks of the infliction of incessant penalties and imprisonment on parents for refusing to subject their children to an operation which is not unfrequently injurious and sometimes fatal, as "a needless and monstrous violation of the freedom of our homes and of the rights of parents." But Mr. Bright is too clever a man not to know, if he will calmly reflect on the matter, that this is unmitigated absurdity. He must be aware that the whole tenour of a good deal of modern legislation proceeds upon the assumption that the State, and not the parent, is the ultimate guardian of the interests of a minor, whether physical, intellectual, or spiritual; and that if the State, as embodied in public opinion and the legislation founded thereon, think that a parent is not consulting the interests of his children, however good may be his intentions, it will interpose, and without hesitation take them out of his hand, and, through the operation of a court of law, punish him by fine or imprisonment if he set himself up in opposition. It is only upon this assumption that the legislation which enforces education, prevents overworking of young persons, compels parents to provide medical assistance for their children when they are ill, and which protects in various other ways those who are legally incapable of protecting themselves, can be defended. Some ill-natured critics of the right honourable member for Birmingham, have charged him with not having exhibited in past years a too friendly disposition to the Factory Acts; and it is to be regretted that such ill-judged and indefensible expressions of opinion, as that to which he has in this case given utterance, should lend weight to such a charge. It is, of course, unnecessary to point out the fallacy of any attempt to discredit the punishment of recalcitrant antivaccinationists by calling it a persecution of opinion. No one objects to these people holding their opinions, or to their maintaining as effective a propaganda of them as they can carry on. What they are punished for, is not for their opinions, but for their acts, and for the overt treason to the public authority of which they are contumaciously guilty.

Whether it would be desirable or not to trust to the force of public opinion in enforcing vaccination, rather than to compulsion by law, is a question which it is quite open both to Mr. Bright and to the antivaccinationists to argue; and, if they can convince their fellow-citizens on the point, they will have no difficulty in getting the law altered in that sense. But, until they have succeeded in doing this, it appears to us that a statesman who speaks with the authority and the responsibility which Mr. Bright enjoys, would do well to guard any future communications of the kind which he may see fit to make, by informing the opponents of vaccination that, so long as the law continues in its present state, they have no more claim for sympathy in their wilful determination to defy it, than any other persons who may choose to take it into their heads that they have conscientious objections to any particular statute.

Mr. Bright makes an implied point against the present mode of enforcing the Vaccination Acts, by referring to the infliction of "incessant penalties." But it is obvious that there is no alternative between such a course and suspending prosecutions altogether, except the illusory one of being satisfied with a single penalty as a *pro formâ* vindication of the majesty of the law. To adopt such a course as this latter would be, as has been often pointed out, practically to license immunity on payment of a fee, a course which is entirely inconsistent with any intelligible view of the question. It may, indeed, be doubted whether the plan of repeatedly fining parents who refuse to have their children vaccinated without any sufficient excuse for so doing, is altogether the proper one; and whether, after a first enforcement of a penalty, the law should not proceed, as the courts of law do in cases in which the rights of minors are involved in other ways, by requiring the child to be brought into court for the purpose of being vaccinated; and, if it be not forthcoming, of imprisoning the father until it is. It is clear that the present method of leaving the decision as to repeated prosecution of recalcitrants in the hands of bodies like boards of guardians, who are so easily amenable to a little local pressure, and who, even if they are not, have no better criterion as to when to repeat the prosecution, and when to cease doing so, than anyone else has, is eminently irrational in its nature and unsatisfactory in its results. "Local option" may have something to say for itself in some cases to which it can be applied, but this is certainly not one of them.

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PROFESSOR CHIARLEONI is translating Dr. Fancourt Barnes' *Manual for Midwives* into Italian, from the second edition of the work.

A CONSIDERABLE accession of new applicants for membership has, as usual, followed the extra issue of the BRITISH MEDICAL JOURNAL last month, and the present weekly issue of the JOURNAL is now raised from 11,650 to over 12,000.

THE regularity which has now for a series of years marked this annual accession of numbers to the Association is remarkable, and offers a problem of interest to statisticians who, like Buckle, find everywhere an orderly law of figures indicating that even apparently voluntary intellectual operations have something of a fixed mathematical relation. Up to the year 1867, the increase of membership of the British Medical Association had, for several years, ranged from thirty to forty; but in that year, when the JOURNAL first assumed its present character, and began to be employed by the editor systematically as a recruiting agent, the annual increase of new members rose to about five hundred; and this average rate of increase has been maintained with the most singular steadiness, and with relatively few gaps or discrepancies, up to the present moment. In 1867, being the thirty-fifth year of the Association, the issue was 2,000; it is now 12,000. A large majority of the applications follow the special issues of the JOURNAL, and are made directly to the office. The rate of increment is even now maintained for the present year, although it must be evident that the residuum of active, working, and independent medical practitioners on the *Register*, capable of becoming subscribing members of the Association, is growing every year less; while the ordinary losses, in so large a number of members, due to deaths, partnership-combinations, and other causes, must become absolutely greater. At present, it may be calculated that, of the actual working members of the profession on the British *Medical Register*, not being assistants, or retired from practice, or members of partnership, two out of every three are subscribing members of the Association. This still leaves a margin for expansion; and the increasing popularity of the JOURNAL in the Colonies, in India, and in America, opens a yet wider field. Already, the circulation of the JOURNAL exceeds that of the combined circulation of all the other weekly medical journals in Great Britain.

THE President and Council of the Harveian Society of London have issued cards for a *conversazione* on the evening of January 17th.

M. DAMASCHINO, professor *agrégé* of the Faculty of Medicine of Paris, has been appointed to the chair of medicine (*pathologie interne*).

THE annual general meeting of the Odontological Society will take place on Monday, January 7th, at 8 P.M., for the election of officers and council for the ensuing session, when a paper by Mr. Bland Sutton, on Comparative Dental Pathology, will be read; and an address will be given by the President.

DR. REICHERT, late professor of anatomy in the University of Berlin, died last week at the age of 73. He was appointed to the professorship in 1858, on the death of Johannes Müller, when the Chair of Anatomy and Physiology, held by that distinguished physiologist, was divided; the department of physiology being assigned to Dr. Du Bois-Reymond. A few months ago Dr. Reichert retired from his chair, and was succeeded by Dr. Waldeyer, of Strasburg.

THE French Government has decided that the importation of American salted meats into France shall continue to be prohibited, until Parliament has pronounced upon the Bill which M. Hérisson, the Minister of Commerce, proposes to introduce on the subject at the beginning of next session. At the same time, for a very brief period, which is intended to cover actual bargains, and to apply to cargoes afloat, the importation of such meats will be permitted at the ports of Havre, Nantes, and Bordeaux, subject, however, to rigorous inspection, at the cost of importers.

IN our obituary record of provincial surgeons for the year 1883 we omitted to mention the name of Jonathan Wybrants, M.D., F.R.C.S., etc., who died at Shepton Mallet on January 1st, 1883, aged 65. He was for many years coroner for the south-east division of the county of Somerset. He enjoyed a large practice, and the affectionate respect of all who knew him. He was a most able and energetic practitioner, and an upright, large-hearted, and benevolent man.

THE HOSPITALS ASSOCIATION.

THE inaugural meeting of this Association will be held, by permission of the Lord Mayor, at the Mansion House on Friday, February 1st, at three o'clock. His lordship will preside. Further particulars will be duly announced.

THE PARIS EXTERNAT.

OUR Paris correspondent writes :—The competitive examination for the post of *externes* to the Paris hospitals has just terminated. Three lady-candidates passed it with success. Among 254 candidates Madame Sarrante passed sixth, Mdlle. Mathieu 87th, Mdlle. Chopin 142nd. The duties of the *externe* in a ward consist of superintending all the dressings, and performing minor surgical operations; he replaces the *interne*, or house-surgeon, when the latter is absent, and always accompanies him in his evening round.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

AT the next meeting of the Society, to be held on Tuesday, January 9th, in the rooms of the Medical Society at 11, Chandos Street, Cavendish Square, Surgeon-General W. G. Hunter will read a paper on "The Origin of the Cholera-Epidemic of 1883 in Egypt," a subject which is sure to excite much interest in the minds of epidemiologists, especially in view of the fact that the author of the paper, Dr. Hunter, was officially engaged in the investigation of the outbreak. It would be well for visitors to note that the Society will in future meet at 11, Chandos Street, instead of at University College as heretofore.

HARVEIAN SOCIETY OF LONDON.

THE following is a list of the names of gentlemen proposed by the Council as officers of the Society for the year 1884. :—*President;* *G. P. Field, Esq. *Vice-Presidents:* Percy Boulton, M.D.; *D. Ferrier, M.D.; *Henry Power, Esq.; *J. H. P. Staples, M.D. *Treasurer:* Thomas Buzzard, M.D. *Honorary Secretaries:* J. Ernest Lane, Esq.; *William Ewart, M.D. *Council:* W. Allen Aldred, M.D.; W. Hickman, M.B.; S. H. Davson, M.D.; W. R. Gowers, M.D.; Charles Vasey, Esq.; James E. Pollock, M.D.; Malcolm Morris, Esq.; *E. Symes Thompson, M.D.; *John Cavafy, M.D.; *Henry E. Juler, Esq.; *Thomas Bryant, Esq.; *A. Dunbar Walker, M.D. An asterisk is prefixed to the names of those gentlemen who did not hold the same office the preceding year.

CLINICAL SOCIETY OF LONDON.

THE following gentlemen have been proposed for election as officers and council of the Society for the year 1884. The members whose names are marked with an asterisk were not on the Council, or did not hold the same office, during the preceding year. The ballot will take place on Friday, January 11th. *President:* Sir Andrew Clark, Bart., M.D., LL.D. *Vice-Presidents:* *J. W. Ogle, M.D; F. W. Pavy, M.D., F.R.S.; R. Southey, M.D.; John Croft; Arthur E. Durham; *W. Morrant Baker. *Treasurer:* Christopher Heath. *Council:* *H. R. Crocker, M.D.; *A. W. Edis, M.D.; *William Ewart, M.B.; Robert Liveing, M.D.; R. J. Lee, M.D.; *Stephen Mackenzie, M.D.; F. A. Mahomed, M.D.; W. M. Ord, M.D.; T. Gilbart Smith, M.D.; Frederick Taylor, M.D.; Arthur E. J. Barker; *Clinton T. Dent; *J. W. Haward; R. C. Lucas; J. H. Morgan; *Henry Morris; H. W. Page; R. W. Parker; *Gifford Ransford; W. J. Walsham. *Honorary Secretaries:* Sidney Coupland, M.D.; *R. J. Godlee, M.S.

PATHOLOGICAL SOCIETY OF LONDON.

THE following are the officers and council proposed for election for the year 1884. The gentlemen whose names are marked with an asterisk were not on the council, or did not hold the same office, during the preceding year. *President:* John W. Hulke, F.R.S. *Vice-Presidents:* William H. Broadbent, M.D., *William Cayley, M.D., *George Johnson, M.D., F.R.S., Samuel Wilks, M.D., F.R.S., Sir William Bowman, Bart., F.R.S., John Croft, Arthur E. Durham, *George Lawson. *Treasurer:* *John Wood, F.R.S. *Honorary Secretaries:* James F. Goodhart, M.D., *Henry T. Butlin. *Council:* Robert Barnes, M.D., John Curnow, M.D., Frederick A. Mahomed, M.D., Joseph F. Payne, M.D., George V. Poore, M.D., Frederick T. Roberts, M.D., *Seymour J. Sharkey, M.B., Reginald Southey, M.D., *Francis C. Turner, M.D., *Samuel West, M.D., *Arthur E. J. Barker, *Henry H. Clutton, William H. Cripps, Alban H. G. Doran, Alfred P. Gould, Thomas R. Jones, M.D., John Langton, R. Clement Lucas, *Henry Morris, Edward Nettleship.

PROPORTIONS OF THE SEXES.

THE new census-figures giving the relative proportions of the sexes are very striking. Out of a total population of twenty-six millions, females are in excess of males to the extent of nearly seven hundred thousand. Yet, at birth, the males are in a majority. Within a year, the balance turns the other way, and so continues until the period between ten and fifteen years of age, when the males are again the greater number. But the ascendency is only temporary; and, in the next five years, the strength of numbers is with the female sex, who retain this position until the close. In the advanced periods of life, the numerical superiority of the gentler sex is specially manifest. At the figure of "95 and upwards," we find the females more than twice as numerous as the males; while of the 141 persons who are recorded as having attained the age of "100 and upwards," ninety-seven, or 68 per cent., are females.

THE OCCUPATIONS OF BLIND PERSONS.

THE recently published official report of the last census-returns of England and Wales, gives a total number of 23,000 persons described as blind out of a population of twenty-six millions. Of such blind persons, a large proportion are engaged in pursuits of an industrial or professional character. Fourteen of their number, including two females, come under the head of "officers and clerks" in the civil service. Among these we should doubtless find Mr. Fawcett, as Postmaster-General. Two blind persons are described as prison-officers, while four are in the police-force. There are twenty-eight blind clergymen of the Church of England. More than five hundred blind persons are enumerated as musicians. It is curious to find one hundred and fifty-six blind persons returned as engaged in the "washing and bathing service." There are four hundred blind farmers, while there are 600 blind agricultural labourers. Twenty blind persons are described as commercial clerks, and sixteen as commercial travellers. As makers and sellers of mats the blind are, of course, relatively numerous, also as makers of boots and shoes, brushes and brooms. There are 800 blind basket-makers, and 300 blind costermongers or street sellers. Amongst the unoccupied class, whether as persons possessing property and having no industrial or professional calling, or as children under five years of age, the blind amount to 14,000. About one in eleven of the total number of blind persons is described as having been born blind.

THE PREVENTION OF TRAMCAR-ACCIDENTS.

AN official investigation of the circumstances of the fatal accidents which have recently occurred at Huddersfield, Birkenhead, Blackburn, and elsewhere, through the overturning of street-tramcars, and upon which we have already commented with the view of pointing out certain preventive precautions, has led the Board of Trade to recommend that steam-tramway companies be not licensed to carry roof-passengers on steep grade lines having sharp curves on the inclines. It is obvious that a "top-heavy" tramcar is especially liable to topple over when it is rapidly rounding a sharp curve, as when such a curve exists on a steep incline, and defective brake-power permits the attainment of a dangerous speed. When a tramcar turns a corner, there is always and necessarily a certain amount of what is called "overhang" of the car; and if a passenger-load, and particularly a heavy load of roof-passengers, happen to be unequally distributed, so that it preponderates on the overhanging side of the car, the vehicle presents a considerable tendency to turn over, especially if the tramcar be travelling at a high speed, and upon a curve in a gradient. To reduce or obviate this serious risk, it has lately been suggested that only short cars should be used; and that if long tramcars, which present certain advantages for roof-passengers, are to continue to be employed, they should be divided transversely into vertical sections, and the several portions so jointed together that they move freely in lateral directions, and so take the sharpest curves with ease, while each portion tends to keep the others on the rails. We understand that tramcars constructed on these principles will shortly be used upon some of the metropolitan suburban lines. Tramways in thoroughfares have become firmly established amongst us as popular modes of transit. It is satisfactory to note that substantial progress is being made in the reduction of the risks of their traffic, and that the lessons of recent disasters have not been allowed to be fruitless.

THE HOMES OF THE POOR.

ALTHOUGH the immensity and exceptional position of London makes the question as to the housing of its poor one of very considerable general concern, it is proper to bear in mind that the metropolis is by no means alone in the misery and filth of its poorer inhabitants. The special commissions organised by our contemporaries the *Liverpool Daily Post* and the *Bristol Mercury*, and the articles and reports which have appeared in other provincial papers, make it abundantly clear that the poor of our large manufacturing towns suffer from the same causes and in the same manner as their brethren of the metropolis. Nothing could in its way be more saddening or pathetic than a description given in the *Bristol Mercury* of a suburb below flood-level, which has recently been made the scene of the operations of the jerry-builder. But time and space would fail us to tell of all the squalor and misery which the recent discussions have brought to the surface. The evil is one that has long been known to sanitary officers, who have grappled with it to the best of their ability against the overwhelming odds of apathy by the local authority, obstruction by the owners, and the filthy habits of the occupiers themselves. As we have before indicated, it is idle to clamour for more legislation on the subject while the powers that already exist have not had a fair trial; and it is satisfactory to find that the Local Government Board are so far impressed with this view, that they have issued a circular to the local authorities of the metropolis, drawing their attention to the powers as to tenement-houses conferred by the Sanitary Act of 1866 (see page 1249 of the last volume), and urging them to a fuller exercise of these powers. It would be an advantage if this circular were sent as well to the corporations of all our large towns, in order that a simultaneous experiment of the efficacy of the powers in question might be made throughout the kingdom. In a considerable number of metropolitan parishes and districts, by-laws with regard to the registration and inspection of tenement-houses already exist, though they have practically remained a dead letter. All that is necessary in these districts is, therefore, that the local authority shall proceed to put their by-laws in force. As regards the nineteen districts where the Act has not yet been declared in force (St. Marylebone, St. Pancras, Paddington, Newington, Camberwell, Clerkenwell, Shoreditch, Bermondsey, St. George's, St. Martin-in-the-Fields, Hampstead, Greenwich, Wandsworth, Holborn, Fulham, St. Saviour's, Plumstead, Lewisham, and St. Olave's), the Local Government Board have dispensed with the usual preliminary application by the local authority, by declaring, in last Friday's *Gazette*, the section as to tenement-houses to be in force in those districts. The next step will be for the local authority to submit by-laws for the control of houses inhabited by the lowest class, and it is to be hoped that the Local Government Board will continue to press upon them the necessity and importance of doing this.

CHOLERA IN INDIA.

THE following deductions have been arrived at by Dr. C. Little, the Sanitary Commissioner of the Hyderabad Assigned Districts, after a careful review of the circumstances attending the prevalence of cholera there during 1882 and previous years: That, after one or more years of comparative immunity from cholera, a severe outbreak or new epidemic invasion of the disease occurs, and that, in cholera-years, the epidemic usually appears coincidently with the advent of the south-west monsoon, reaches its height in August when the subsoil-water is at its highest, and dies out durin the cold weather months, or before the setting-in of the hot weather; that the invasion of one year becomes revitalised the year following, and then dies a natural death; or, in other words, that the lifetime of each new outbreak is two years. The first outbreaks are, he adds, invariably associated with filth, a damp subsoil, and a polluted water-supply contaminated with animal excrement. Putting aside all theories as to the origin and propagation of cholera, it must be admitted, Dr. Little observes, in the light of these facts, that cleanliness, pure air, pure water, and good drainage, are the most likely preventitives that can be employed against this terrible disease, which, once it has seized upon the human body, runs its own course, irrespective of any known remedy or reputed specific. No doubt, much may be done for a cholera-patient by proper care and nursing, with all practical treatment for the relief of urgent symptoms; but, notwithstanding all the theoretical methods which have from time to time appeared, we are, Dr. Little thinks, as far as ever from possessing a specific cure for the disease.

QUACK MEDICINES.

THE worship of success, even when that success has been attained by dubious means, has recently been well shown in the laudations showered by the Press on the late Mr. Holloway. So proud are this lamented pill-vendor's friends of his, to speak mildly, hyperbolic advertisements (one of our contemporaries rudely terms them fibbing advertisements), that one of them has written to the *Times* to correct the statement made in that paper that Holloway spent £40,000 a year in advertising, and puts the figures at £45,000. We think that this is more a matter for regret than for boasting. Whatever good may result from the occasional use of quack remedies—and it is probable that good does occasionally arise from their use—the indiscriminate taking of secret nostrums by an ignorant public, for all sorts of purposes, is a most pernicious habit. We have been led to make these remarks, not so much with the view of combating the eulogiums passed on Mr. Holloway, as for the purpose of drawing attention to an inquest, held by the Coroner for Central Middlesex, reported in the daily papers of January 1st. A child, seven months of age, and brought up by hand, was suffering from whooping-cough. For its relief "Holt's specific" for that disease, formerly called "Hooper's," was given in teaspoonful doses every four hours. After the fifth dose the child succumbed, and no wonder, for, according to the evidence of Mr. Price, who made a quantitative analysis of the medicine, each dose of this contained half a grain of tartar emetic. There were patches of inflammation in the stomach and intestines, and death was due to failure of the heart, from poisoning by antimony, when suffering from whooping-cough. The jury, on this evidence, remarked that the Government ought to interpose to prevent the sale of these medicines, which were simply poisons.

rubbish. The coroner stated that under the existing law there was no mode of stopping the sale of these dangerous medicines. Mr. Curgenven also gave evidence to the effect that he had seen two children suffering, lately, from the effects of the same medicine; one had died, and an inquest had been held, and the other had a narrow escape. The deadly "specific" was vended by a woman who kept a confectioner's shop. The jury returned the following verdict:—"That the deceased had died from syncope through failure of the heart's action, when suffering from whooping-cough; and the said jurors are further of opinion that the said death was accelerated by the administration of antimony contained in a mixture called "Holt's specific for whooping-cough," and the jurors desire to call the attention of the Home Secretary to the want of protection to the public, in the sale of patent medicines, with a view to some legislation restricting the sale of those containing poisons and other dangerous remedies." Speaking with some knowledge of these patent medicines, we have no hesitation in stating that we believe there is annually a large loss of life from their use. No inconsiderable number of these containing tartar emetic as a constituent. We have now before us a pink powder nearly entirely composed of tartar emetic, advertised and sold as a cure for dipsomania. Its use for this purpose must be attended with extreme danger.

BIOLOGICAL APPOINTMENTS.

WE are informed that the appointment of the successor of Sir Richard Owen will probably not be made until the middle of the present month, or later. The rumours of a permanent division of the present appointment of conservator to the Museum of the Royal College of Surgeons into a comparative anatomical and a pathological curatorship are, of necessity, quite premature, though such a step may, we understand, be contemplated in view of the present conservatorship becoming vacant by the appointment of Professor Flower as superintendent of the Natural History Museum. Under the existing regulations, the College appointment can only be held by a Fellow or Member of the Royal College of Surgeons of England. It is interesting to observe how biological science is, at the present time, taken up as a profession quite separate from medicine. At the beginning of the century, the *Philosophical Transactions* contained numerous medical contributions; science and medicine were very closely linked in the same individuals; and even now most of the older British scientists, such as Professors Owen, Huxley, and Flower, hold medical degrees or diplomas. A large proportion of the rising generation of biologists have never entered a medical school, excepting as lecturers.

FREE MEDICAL SCHOLARSHIPS.

THE late Dr. William Carr, of Lee, Kent, who was medical adviser to the Duke of Connaught when the Prince was a cadet at the Royal Military Academy, Woolwich Common, conceived the idea of founding four free medical scholarships in the Royal Medical Benevolent College, at Epsom, intended for the benefit of orphans of medical men. We are glad to be able to chronicle the successful completion of this admirable and generous scheme. Dr. Carr contributed largely himself, and obtained subscriptions to a considerable amount, but his death, in March 1877, prevented his seeing his project carried out, a portion of the necessary sum being then deficient. Mrs. Carr, his widow, set herself resolutely to accomplish her husband's purpose, and has at length collected a sum sufficient to do even more than Dr. Carr contemplated. The original intention was to give each of the scholars £50 per annum, but Mrs. Carr finds herself enabled to increase the allowance to £60, and, in addition to this, she will have it in her power to present to each of the scholars on the completion of his studies, £60, with which to commence the world. In this work Mrs. Carr has been liberally assisted by the Duke of Connaught and other eminent persons, and it was but a week before his Royal Highness started on his Indian journey that he addressed a letter to Mrs. Carr, congratulating her upon the success of her efforts. Twelve young men have already benefited by these scholarships, and several have now begun to practise their profession with good promise of success.

TEA IN WORKHOUSES.

FEW comforts are left the poor who seek in their declining years the shelter of the workhouses; but one, which is prized by long habit, is the old woman's cup of tea made in her own teapot. From a recent police-court case, reported in the daily journals, it seems that poor women under sixty years of age are not allowed to have teapots and make their own tea. Even to have a little tea in their possession, to be made into the comforting beverage surreptitiously in drinking cans or any convenient vessel, is against the iron rule, it seems, of St. Luke's workhouse. Surely this is carrying dietetic rules too far; "robbed of their beer," deprived of their tea, limited in their meat-food, the rule of the workhouse is made harder perhaps than it need be; at all events, we think the custom universally adopted in hospitals might be allowed in workhouses, namely, of allowing each inmate to have his or her own little teapot and small store of tea. To those who have lost all, even a small possession is of great value, and to those who have been accustomed to live chiefly on tea, the boiled beverage that goes by that name in workhouses must be peculiarly distasteful. We trust that the guardians of St. Luke's workhouse will relax their rules in this respect.

WESTON'S WALK.

THE cessation from walking throughout Christmas Day, after the sixty-eight miles' record of the preceding day, would have been a welcome rest to most people, but, strange to say, when he ought to have been asleep Weston passed a very restless time. When he resumed his great task shortly after midnight he was exceedingly drowsy, and, after forcing himself to do ten miles, had to take two hours' sleep about three o'clock on the Wednesday morning. But this was not enough, and during the forenoon he had repeatedly to retire for brief snatches of repose. After noon he shook off this uncontrollable drowsiness, and walked steadily and well during the rest of the day on the track at Kidderminster, finishing fifty miles shortly after 6.30 p.m., and continuing the day's march till he had added fifteen miles to the record. This was really a remarkable performance, such as probably was never before exhibited on Boxing Day. For the first half of the day there was a gallant struggle against an overpowering sense of heaviness which forced Weston time after time to retire, yet in the latter part of the day he walked forty-five miles without leaving the track, thus completing 1,533 miles. Next morning he left Kidderminster soon after five o'clock, in a cold, damp, unpleasant mist, in such capital form that he covered the twenty-one miles to Birmingham by 10.45. After an hour's rest Weston did ten miles before dinner. When the usual two hours' interval had expired the plucky American walked nineteen miles, and then delivered a lecture at the close of the fiftieth mile under the presidency of Canon Bowlby, and wound up the day's programme with five miles more. In the same Lower Aston grounds at Birmingham he has been doing his daily portion ever since, and he is to continue to do so during all this week. On the Friday morning he was so tired that he did not start till nearly six o'clock, and he walked very slowly at first. But after a rest from five minutes past seven till nearly five minutes past nine, he walked regularly and well till he had accomplished forty miles by a quarter past six p.m., having done the last thirty-six miles without a halt. Then he retired for half an hour, finished the fifty miles by half-past nine, lectured, and, resuming his walk, covered five miles more. On Saturday Weston's record was fifty-seven miles. It may be remembered that he was not to walk on Christmas Day, but had to make up the fifty miles which would have fallen to that day on the other secular days in the week, thus having to do 300 miles in five working days, a stipulation he fulfilled to the letter. He made up eighteen miles on the Monday by walking sixty-eight miles, fifteen on the Wednesday, five on the Thursday, five on the Friday, and seven on the Saturday. This extra exertion, with the disturbance of the usual routine, made Weston very drowsy again on Saturday, but after the first few hours he walked splendidly all day. This week, apparently none the worse for the added exertion of the previous week, Weston set out at six o'clock last Monday morning. After walking four miles an hour for seven-and-a-half hours, on rising from dinner he covered the remainder of the daily distance at the same speed. On Tuesday he began at six a.m. and ended the fifty miles at nine p.m., with four hours' rest at dinner time, so as not to finish too early in the evening. The asphalte on the track having hurt his weak heel, Weston had the rink covered with rough roof-felting, which greatly increased his comfort.

CHRISTMAS ON THE HIGH ALPS.

DR. THEODORE WILLIAMS writes to us:—The number of high altitude stations in Europe, which have been hitherto utilised for the treatment of phthisis, is small, and, for many years, Davos has been practically the only one recommended by English physicians. This place, whose development I have watched for upwards of 20 years, has attained a well merited success, and now contains 950 visitors, of whom 350 are English, and about a third of these are invalids, although, in many cases, their appearance belies the charge, and they spend most of their time in increasing their muscles and expanding their lungs. Of the new drainage-scheme, by which the Davos sewage is emptied into the Landwasser river some distance below the village, two-thirds is finished. The rest will be completed during next summer. This will clear Davos from suspicion on this head, for the system includes good traps, an excellent fall, and arrangements for thorough flushing. The charge of the air being rendered less pure than formerly by the increase in the numbers of buildings, seems quite unfounded, for a comparison of the thin straggling line of hotels and houses, with here and there a few outposts of châlets, with the great length and width of the valley, bordered on each side by vast tracts of mountains, forests, and glaciers, will show how groundless this is. If Davos grows to four times its present size, there will be still ample room and abundant pure air for all. It is, however, desirable that there should be a choice of health-resorts, and the neighbouring Wiesen (4,990 feet) is already in use, and its position, on a commanding plateau, well sheltered from winds by lofty mountains, and abounding in exquisite views of the Tinsenhorn, the Piz D'Aela, and the Piz Peverin, recommends it for the purpose. It is fairly accessible from Davos and Churn, and has two good hotels, with very moderate charges, under the management of the former director of the Hotel Buol at Davos, Herr Palmy, who is constructing a long level walk, at present a want for invalids. The place, however, which, from beauty of scenery, abundant exposure to sunshine, and resources for exercise, seems indicated, is St. Moritz (6,118 feet), where, for many winters past, a few true believers in the mountain-cure have lingered with profit after the fashionable crowd, who haunt the Kulm during July, August, and September, have taken their leave. The liberal and enterprising proprietor of the Kulm Hotel, Herr Badrutt, has increased the accommodation by adding a solidly-built wing for winter residence, which includes a splendid salon and dining-room, billiard-room, corridors, lofty bedrooms, besides the old public rooms, the whole being well-warmed with stoves and open fireplaces, and the greater part illuminated by the electric light (Jablochkoff and Swan systems). Two excellent skating-rinks and a lawn-tennis court adjoin the hotel, and toboggin-runs are kept open for miles round, in addition to the ordinary sleigh-roads. This winter there are about 130 visitors, mostly English, and about 20 to 30 more live in a smaller hotel kept by one of the Badrutt sons. A few English also board in other houses. Of this number, from 40 to 50 are invalids; the rest consist of their friends and relatives, and a few Alpine clubsmen and members of the London Skating Club, whom the good ice, fine weather, and facilities for exercise have attracted, thus making the combination of sick and healthy folk, which promotes a spirit of activity and cheerfulness so desirable in these winter stations. Most patients are out for most of the five or six hours during which the sun shines into the valley in midwinter, and enjoy the exquisite views, often basking for hours in the warm sunshine, or skating, walking, or tobogganing; while at sunset, the wonderful tints of the sky, familiar to glacier-climbers in summer, enwrap and render glorious these snow-scenes of the lower Alps, lighting up the peaks in roseate glow against a daffodil sky. At the head of the Maloja Pass, two hours' drive from St. Moritz, and about five from Chiavenna, Count Renesse, a Belgian, has nearly completed an enormous establishment, almost on the level of the Sils Lake, to receive over 300 guests, and arranged chiefly with a view to winter residence, being warmed by *calorifères* and ventilated by extraction-apparatus. Meteorological observations are being conducted this winter on the spot by Dr. Wise, to ascertain the exact conditions of the climate, and it is expected that the hotel will be opened next July. In no class of health-resorts does the medical man come more to the front than in the Alpine; and, in good sooth, taken without careful medical watching, such as is exercised by Dr. Buedi at Davos, and Dr. Holland at St. Moritz, these climates are apt to prove a double-edged weapon, inflicting injury instead of rendering aid. The patients in these quarters are kept well under control, and look to their doctor for daily instructions. Between 6 and 7 A.M. he starts on his round of visits so as to enable the invalids to get out early. The food and exercise of the day are prescribed; the lazy ones are ejected from bed, the too active restrained from over-exertion; precautions, in the way of snow-shoes and warm clothing, are enjoined, and the particular form of exercise ordered. If the snow be so heavy that skating, walking, and tobogging are impossible, the indefatigable doctor shoulders his wooden shovel and leads his gang, consisting of the more robust consumptives, to clear the rinks and toboggin-runs. The *menu du jour* is regularly supervised; and, for the evenings, the various entertainments, musical, dancing, theatrical and literary, have to be arranged and regulated, to ensure compatibility with early hours and the hygiene of the patients.

SCOTLAND.

THE weather in Scotland, especially on the west coast, has been exceedingly mild during the past week, having been on some days of a summer-like character.

ILLNESS OF PROFESSOR MCKENDRICK.

WE regret to learn that Professor McKendrick has been laid aside for three weeks from the discharge of his university duties, owing to a severe attack of rheumatic cyclitis of the right eye. He is now somewhat better, and the condition of the eye is giving less cause for anxiety. He is under the care of his [illegible] Dr. [illegible], and has been seen in consultation with Dr. Argyll Robertson of Edinburgh, and Dr. Thomas Reid of Glasgow.

GLASGOW SAMARITAN SOCIETY.

THE Samaritan Society, in connection with the Western Infirmary of Glasgow, has just concluded another year of very useful work, and has been very successful in accomplishing [illegible], which are to assist patients on their leaving the infirmaries with such things as clothing, food, travelling expenses, and necessary surgical appliances, besides helping them to [illegible] convalescent homes, or to find suitable work. Since December 1882 more than 870 persons have, in some form or other, been aided by the Society, whose benevolent work is entirely carried on by a committee of ladies. The funds show a balance of £62 in favour of the Society, and a perusal of the report indicates what a valuable adjunct it is to the infirmary with which its work is intimately associated.

HEALTH OF GLASGOW.

FROM Dr. Russell's report for the fortnight ending December 22nd, 1883, it appears there were 507 deaths registered, being a death-rate of 26 per 1,000 living. The fatality of all classes of disease is from 10 to 40 per cent. less than in the corresponding fortnight of last year, when the temperature was very much lower than at present. This is well seen in the case of pulmonary diseases, which in this fortnight are 26 per 1,000, while last year they amounted to 36. There was one death registered from small-pox, six from enteric fever, and one from typhus fever. The deaths from infectious diseases of children numbered 51—viz., 28 from whooping-cough, 22 from scarlet fever, and one from measles. It will thus be seen that there is again a considerable increase in the fatality of scarlet fever; and, of the 22 fatal cases, 10 were registered in the eastern district. On December 24th, there were in the hospitals of the Council 331 cases of infectious disease, as compared with 382 that day fortnight, and 260 at the corresponding period of 1882. In the fortnight, 10 cases of small-pox were registered, as compared with 7 in the preceding fortnight; and a most striking account is given of the connection between the members of this group.

THE GLASGOW SICK CHILDREN'S HOSPITAL.

AN important meeting has just been held by the supporters and friends of this institution, with the object of devising the best plan of raising a capital fund for its support. The hospital is now in full working order, and, with the exception of a ground-rent of £10, is entirely free of debt; the whole cost of the building, with furniture and fittings, amounting to £13,000, having been paid. This is a very satisfactory state of matters, and reflects credit on those having the financial management of the affairs. We understand that the course resolved on for obtaining the object in view, is to hold a fancy fair at the end of the year, in which not only Glasgow, but the five surrounding counties will be represented.

GLASGOW TRAINED NURSES' ASSOCIATION.

THE object of this Association is to provide hospital-trained and experienced nurses to attend the sick poor in their own homes, and midwifery nurses to attend the very poor gratuitously, and the working classes at a moderate fee. The report shows that the staff of nurses at present consists of 57, and that the work accomplished by them during the past year is far in excess of the previous one, there having been 1,938 cases attended in 1883, against 1,035 in 1882. The visits paid numbered 28,180. Dr. Russell, medical officer of health, spoke very strongly at the annual meeting, held on December 26th, of the good being done by the Association, and warmly commended it to the public support.

CURIOUS CAUSE OF ABDOMINAL DISEASE.

AT an inquest held before Sheriff Grahame, at Perth, on the body of Rebecca Bell, recently an inmate of the General Prison, Perth, who had died from abdominal disease, and in which the sheriff found that death resulted from natural causes, and that she had received every care and attention, it was stated by Dr. Macnaughtan, the prison-surgeon, that, in all probability, the disease from which she died was caused by the deceased swallowing money. She confessed, it seems, to having swallowed some coins about four years ago; and, at the *post mortem* examination, six pieces of silver money, amounting to 3s. 3d., were found in the body. We hope Dr. Macnaughtan will publish a description of this interesting case.

IRELAND.

ELECTION OF MEDICAL CORONERS.

DR. PARKE, of Newtownards, has been elected coroner for the northern division of the county Down; and Dr. A. Caldwell for Coleraine district.

JERVIS STREET HOSPITAL.

THE election of a surgeon to this hospital, in the place of Mr. James Kelly, who has left Dublin for San Francisco, took place on the 28th ultimo. There were two candidates, the successful one being Dr. Charles Gunn, Demonstrator of Anatomy in the Carmichael College of Medicine, and Temporary Physician to the Cork Street Fever Hospital.

MEDICAL OFFICER OF HEALTH FOR CORK.

A MEETING of the Corporation of Cork was held on the 28th ultimo, for the purpose of electing a superintendent medical officer of health in the vacancy caused by the death of Dr. John Wall. A Committee of the Corporation recommended that the salary be £200 a year, as heretofore; but, after some discussion, it was determined that the annual remuneration should be only £150 The following gentlemen were candidates, namely, Drs. Nicholas Grattan, Thomas Hunt, D. Donovan, and P. J. Cremen. The election was by open voting, and Dr. P. J. Cremen, a graduate in medicine of the Queen's University in Ireland with honours, was ultimately elected. Before the appointment was made, it was agreed to that whoever was appointed should not be entitled to any extra fees for attending prosecutions under the Public Health Act.

SANITARY INSPECTION OF PRISONS.

AT a recent meeting of the Guardians of Mountmellick Union, a communication was received from Dr. Jacob, sanitary officer, in reference to a letter received from the governor of the prison at Maryborough, informing him that the General Prisons Board had appointed him (the Governor) to act as sanitary officer within the prison, and requesting his written recognition of such appointment. Dr. Jacob replied that he failed to discover any authority under the Sanitary Act for such recognition. After some discussion, a resolution was adopted by the guardians that Dr. Jacob should not pay any attention to the appointment by the General Prisons Board, who are altogether without the authority they have assumed; and that they would hold their own medical officer responsible for the sanitary condition of the prison.

CHRISTMAS AT THE BELFAST HOSPITALS.

IN the Belfast Royal Hospital the patients were provided with the usual Christmas dinner; the wards, lobbies, wings, and sheds, being tastefully decorated for the occasion. At the Hospital for Children at the Throne Lands the decorations, which the lady-superintendent and the staff of nurses arranged, were an important feature of the day. The spacious corridors, entrance-halls, and the well-ventilated roomy wards were festooned and draped in every way so as to produce a good effect, and the result was most satisfactory. A motto, "Our friends are ever welcome," faced the central entrance, and "A contented mind is a continual feast," in the lower children's ward, was constructed of wool, sugar, rice, corn, and other materials. The entertainment at the Belfast Hospital for Sick Children, Queen Street, was unusually brilliant, and two handsome Christmas trees attracted much attention; the toys, etc., with which they were laden, being afterwards distributed to the inmates of the hospital. The decorations at the Ulster Hospital for Children and Women were tastefully arranged, and were carried out by the students attending the hospital.

THE MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

A MEETING of the provisional committee of the above society will be held at 4 P.M. on Wednesday next (the 9th instant) at the offices of the British Medical Association, when the rules and tables will be further considered, more especially with reference to several letters and suggestions which have been received. It is also intended to appoint a provisional committee and temporary officers to serve until the society is fully constituted at the first meeting of members in July next; and it is further intended at the meeting on the 9th instant to consider the advisability of fixing an early date for the actual commencement of business.

The following are the full tables, as prepared by Mr. Neison.

MEDICAL SICKNESS, ANNUITY, AND ASSURANCE FUND.

TABLE I.—[illegible]

(a.) The Sickness Assurance terminates at age 65, and the full [illegible] of the allowance is payable for the first six months of protracted [illegible], and one-half the amount for the remainder of the same [illegible] of sickness.

(b.) The Annuity commences at age 65, and is contingent only on the duration of the assured's life, that is to say, it is payable [illegible] of the state of his health.

Age last Birthday.	Sickness Allowance, £2 2s. *per week.* Annuity, £25 *per annum.*	Sickness Allowance, £3 3s. *per week.* Annuity, £37 10s. *per annum.*	Sickness Allowance, £4 4s. *per week.* Annuity, £50 *per annum.*	Age last Birthday.	Sickness Allowance, £2 2s. *per week.* Annuity, £25 *per annum.*	Sickness Allowance, £3 3s. *per week.* Annuity, £37 10s. *per annum.*	Sickness Allowance, £4 4s. *per week.* Annuity, £50 *per annum.*
	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.
20	1 1 4	1 12 0	2 2 8	35	1 [illegible]	2 13 7	[illegible]
21	1 1 11	1 12 10	2 3 10	36	1 17 3	2 15 11	[illegible]
22	1 2 6	1 13 9	2 5 1	37	1 18 11	[illegible]	[illegible]
23	1 3 3	1 14 10	2 6 5	38	2 0 9	[illegible]	[illegible]
24	1 3 11	1 15 11	2 7 11	39	2 [illegible]	[illegible]	[illegible]
25	1 4 9	1 17 1	2 9 5	40	2 4 [illegible]	[illegible]	[illegible]
26	1 5 7	1 18 4	2 11 1	41	2 7 1	[illegible]	[illegible] 1
27	1 6 5	1 19 7	2 12 10	42	2 9 7	[illegible]	4 19 1
28	1 7 4	2 1 0	2 14 8	43	[illegible]	[illegible]	[illegible]
29	1 [illegible]	2 2 6	2 16 8	44	2 [illegible]	[illegible]	[illegible]
30	1 9 5	2 4 1	2 18 [illegible]	45	2 18 7	[illegible]	[illegible] 2
31	1 10 6	2 5 9	[illegible] 1 [illegible]	46	[illegible] 2 3	[illegible]	[illegible]
32	1 11 8	2 7 6	[illegible]	47	[illegible] 6 4	[illegible]	6 12 8
33	1 13 0	2 9 5	3 [illegible] 11	48	[illegible] 11 0	[illegible]	7 1 11
34	1 14 3	2 11 5	3 8 7	49	[illegible] 16 2	[illegible]	[illegible]

F. G. P. NEISON, Actuary, December 21st, 1883.

MEDICAL SICKNESS, ANNUITY, AND ASSURANCE FUND.

TABLE II.—[illegible]

Age last Birthday.	Annuity [illegible] payable Quarterly. £25.	£3[illegible].	[illegible]	£50.	Age last Birthday.	Annuity [illegible] payable Quarterly. £25.	[illegible]	[illegible]	[illegible]
	£ s. d.	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.	£ s. d.
20	[illegible]	[illegible]	0 11 [illegible]	[illegible]	35	[illegible]	[illegible]	[illegible]	[illegible]
21	0 6 1	0 9 1	0 12 2	0 15 2	36	[illegible] 15 10	1 0 [illegible]	1 7 [illegible]	[illegible] 7
22	0 6 4	0 9 7	0 12 9	0 15 11	37	[illegible] 14 [illegible]	1 2 2	[illegible]	1 16 11
23	[illegible]	[illegible] 1	[illegible]	[illegible]	38	[illegible]	[illegible]	1 11 [illegible]	[illegible]
24	[illegible]	[illegible] 7	[illegible] 14 1	[illegible] 17 7	39	[illegible] 16 1[illegible]	[illegible]	1 13 [illegible]	[illegible]
25	[illegible]	0 11 1	0 14 1[illegible]	[illegible] 18 6	40	[illegible] 18 1	1 7 1	[illegible]	[illegible]
26	[illegible] 7 10	0 11 9	[illegible]	[illegible] 19 7	41	0 19 5	1 9 1	[illegible]	[illegible]
27	[illegible]	[illegible] 12 4	[illegible] 16 [illegible]	[illegible]	42	1 [illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	0 17 5	1 1 [illegible]	43	1 2 [illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	0 18 1	[illegible]	44	1 [illegible] 1	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible] 14 7	0 19 5	1 4 3	45	1 [illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	[illegible]	1 0 [illegible]	[illegible]	46	1 [illegible]	[illegible]	[illegible]	[illegible]
32	[illegible]	[illegible]	1 1 [illegible]	[illegible]	47	[illegible]	[illegible]	[illegible]	[illegible]
33	[illegible]	[illegible]	[illegible]	[illegible]	48	1 [illegible]	[illegible]	[illegible]	[illegible]
34	[illegible]	[illegible]	[illegible]	[illegible] 7	49	1 17 [illegible]	[illegible]	[illegible]	[illegible]

F. G. P. NEISON, Actuary, [illegible]

MEDICAL SICKNESS, ANNUITY, AND ASSURANCE FUND.

TABLE III.—[illegible]

Age last Birthday.	Amount assured at Death. £25	£50	£75	£100	£125	£150	£175	£200	Age last Birthday.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
20	[illegible] 2 5	[illegible] 4 [illegible]	0 7 [illegible]	0 9 7	0 11 11	0 14 4	0 16 9	0 19 1	20
21	[illegible] 2 5	[illegible] 4 11	0 7 4	[illegible]	[illegible] 12 [illegible]	[illegible]	[illegible] 17 [illegible]	[illegible]	21
22	[illegible] 2 6	[illegible] 5 1	0 7 7	[illegible] 2	[illegible]	0 15 [illegible]	[illegible]	1 [illegible] 4	22
23	0 2 7	[illegible] 5 3	0 7 10	[illegible]	[illegible]	0 15 [illegible]	0 18 3	1 0 11	23
24	[illegible] 2 8	[illegible]	[illegible]	[illegible]	0 13 6	0 16 [illegible]	[illegible]	[illegible] 1 7	24
25	[illegible] 2 9	0 5 7	[illegible] 4	0 11 1	0 13 11	0 16 [illegible]	0 19 5	1 2 2	25
26	[illegible]	[illegible] 5 9	[illegible]	0 11 6	0 14 [illegible]	[illegible]	[illegible]	[illegible]	26
27	[illegible]	[illegible] 11	[illegible]	0 11 11	0 14 10	0 17 [illegible]	1 0 10	1 3 [illegible]	27
28	0 3 1	0 6 2	[illegible] 3	0 12 4	0 15 5	[illegible]	[illegible]	[illegible]	28
29	[illegible] 2	[illegible] 6 5	[illegible]	[illegible] 12 9	0 16 0	0 19 [illegible]	[illegible]	[illegible] 6	29
30	[illegible] 4	[illegible] 6 [illegible]	[illegible]	0 13 3	[illegible]	0 19 10	[illegible]	[illegible] 5	30
31	[illegible] 5	0 6 [illegible]	[illegible] 4	0 13 9	[illegible] 17 [illegible]	[illegible]	1 4 1	1 7 6	31
32	[illegible] 7	0 7 2	0 10 [illegible]	0 14 3	0 17 10	[illegible]	[illegible]	[illegible] 6	32
33	[illegible]	[illegible] 7 5	[illegible] 1	0 14 10	[illegible]	[illegible]	[illegible]	1 9 [illegible]	33
34	[illegible] 3 10	[illegible] 7 8	0 11 6	[illegible]	[illegible]	[illegible]	[illegible]	1 10 9	34
35	[illegible] 4 [illegible]	[illegible]	[illegible] 12 [illegible]	[illegible] 16 [illegible]	1 [illegible]	1 4 [illegible]	[illegible]	1 1[illegible]	35
36	[illegible]	[illegible]	[illegible] 2 6	[illegible]	1 [illegible]	[illegible]	[illegible]	[illegible] 4	36
37	[illegible] 4 4	[illegible]	[illegible]	[illegible] 17 [illegible]	1 1 [illegible]	[illegible] 1	[illegible]	1 14 [illegible]	37
38	[illegible] 4 6	[illegible] 9 1	[illegible] 7	0 18 1	1 2 7	[illegible] 7 [illegible]	[illegible]	[illegible]	38
39	0 4 [illegible]	[illegible] 6	[illegible] 2	[illegible]	1 [illegible]	[illegible] 5	1 13 2	1 17 10	39
40	[illegible] 4 1[illegible]	[illegible]	[illegible] 10	0 19 9	1 [illegible]	[illegible]	1 14 7	1 19 [illegible]	40
41	[illegible] 5 2	[illegible] 4	[illegible]	1 0 9	[illegible]	[illegible] 1	1 16 3	2 1 [illegible]	41
42	[illegible] 5 5	[illegible] 11	0 16 4	1 1 9	1 7 [illegible]	1 1[illegible]	[illegible]	[illegible] 6	42
43	[illegible] 5 9	[illegible]	0 17 2	1 2 10	1 8 7	1 14 [illegible]	[illegible]	[illegible]	43
44	0 6 [illegible]	0 12 1	[illegible] 1	1 4 1	1 10 1	1 16 [illegible]	[illegible]	[illegible]	44
45	[illegible] 4	0 12 [illegible]	[illegible] 0	1 5 4	1 11 9	1 18 [illegible]	[illegible]	[illegible] 9	45
46	[illegible] 6 [illegible]	[illegible] 5	1 0 [illegible]	[illegible]	1 13 6	[illegible]	[illegible]	[illegible]	46
47	[illegible] 7 1	[illegible] 14 [illegible]	1 1 [illegible]	1 8 5	1 15 6	[illegible]	[illegible]	[illegible]	47
48	[illegible] 7 [illegible]	[illegible]	1 2 [illegible]	1 10 2	1 17 9	[illegible]	[illegible]	[illegible]	48
49	0 8 1	[illegible]	[illegible] 4	1 1[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	49

F. G. P. NEISON, Actuary, [illegible]

I have computed the foregoing Tables (Nos. I to III.) [illegible] which my signature is attached, and I hereby certify that [illegible] they may be employed for the purposes of the [illegible] Sickness, Annuity, and Assurance Fund [illegible]

(a.) That the rates of sickness and mortality [illegible] various [illegible] and [illegible]

(b.) That the accumulated funds of the society will be continuously invested [illegible] (without losses of principal).

(c.) That the amount deducted from the contributions of members to make provision [illegible] tables. F. G. P. NEISON, F.I.A., etc., Actuary.

30, Moorgate Street, London, December 21st, 1883.

CHRISTMAS AND NEW YEAR FESTIVITIES AT THE METROPOLITAN HOSPITALS.

WE publish this year, according to our annual custom, an account of the Christmas and New Year festivities at some of the metropolitan and provincial hospitals. These festivities have now become so universal, that we find [illegible] full reports [illegible] space than we have at our disposal; moreover, the practice has now grown so thoroughly into an institution, that [illegible] the stimulus of expressed approval. We shall therefore, in future notice these hospital-festivities very briefly, and shall not give, as a rule, the full reports we have published in previous years.

CHARING CROSS HOSPITAL.

The fourth annual entertainment to patients at Charing Cross Hospital was given by the Students' Club, in the [illegible] very successful performance of Charles Dance's comedy, "A Wonderful Woman," was presented. The acting [illegible] as the Marquis de [illegible], and Mr. [illegible] was far [illegible] the usual amateur achievements, and [illegible] of Miss [illegible] characters were [illegible] Messrs. [illegible] [illegible] Messrs. [illegible] inspection by the visitors, besides some songs and glees by the Students' Glee Club. Mr. Leech officiated as stage-manager, Mr. Crocker as musical director, and to them great credit is due for the great success of the performance.

GUY'S HOSPITAL.

At Guy's, the festivities on Christmas Day and during the week ending on New Year's eve, were of the same animated and cheerful character as in former years. The patients and nurses were regaled on Christmas Day with the orthodox roast beef and plum-pudding, eked out with fruit, light wines, and tobacco, the generous gift of the students, while the children were made joyous with excellent toys and new sixpences, mostly sent them by the readers of *Truth.* The wards presented a gay, elegant, and even picturesque appearance, a generous rivalry always existing among sisters, nurses and students, to make the ward to which they were specially attached outshine its neighbours. For this purpose banners, evergreens, mottoes, Christmas trees and Chinese lanterns, were plentifully made use of; and when the latter were lit up, in the course of the evening, the effect was pleasing in the extreme. The Christmas trees, which were very general in the wards, were laden with fruit of the most substantial character, inasmuch as each patient drew from their branches a number corresponding to that on the bed-card, which entitled the recipient to an article of wearing apparel, or some equally useful object of domestic life. During the week, a series of appropriate concerts were held in all the wards in which the patients were well enough to bear the unusual strain; and expressions of satisfaction and gratitude were heard on all sides at the kindness shown them by both male and female attendants in their efforts to render their sojourn in the hospital as cheerful and happy as the surroundings would admit. Several members of the medical staff attended the concerts held in their respective wards; the musical recitals, both vocal and instrumental, being given by the sisters and students, assisted by a few amateurs from the outside. Mr. Corney Grain kindly gave his services to the accident-ward on Saturday night, and won thunders of applause from the broken heads, by his humorous description of "Master Tommy's Holidays" and other musical sketches. It may be invidious to specify names, where all have more or less contributed to make the present season one not likely soon to be forgotten in the hospital; but we cannot refrain from alluding to Mr. Gordon Phillips's versatile exertions, his excellent get-up as a Chinaman, a Frenchman, and an Irishman, in all of which he convulsed his audiences with capital songs, characteristic of their nationality. A dramatic performance, which was to have been held in one of the empty wards, has been unavoidably postponed.

ST. MARY'S HOSPITAL.

The annual Christmas entertainment of St. Mary's Hospital was held this year on January 2nd. The accident-ward of the new wing which has just been completed, was decorated and fitted up for the occasion, and an audience of several hundred people assembled. Among this audience were eighty-six patients, some of whom had been carried down, and, indeed, lay during the entertainment, on stretchers; the children under treatment were largely represented, and enjoyed "Mrs. Jarley's Wax-works" as much as their elders. The "wax-works" were admirably mounted, and were marshalled under the direction of Miss Calthrop. The characters taken by the various performers, about fifty in number, ranged from Queen Elizabeth to the typical Jack Tar. After this exhibition, a concert was given in which Mr. Critchett, Mr. Mivart, Mr. Ernest Lane, Mr. Harley, Mr. Walter Pearce, Mr. Rundle Cater, Mr. Philip Hayes, Mr. Potter, and several ladies took part; the exertions of these musicians were highly appreciated by the audience, who expressed their approval by vehement applause.

THE MIDDLESEX HOSPITAL.

The Christmas festivities at this hospital were of the same character as they have been now for some years. Owing mainly to the exertions of Miss Thorold, the lady-superintendent, assisted liberally in the way of subscriptions and gifts of toys and clothing from other friends, a large tree laden with fruit, sweets, and more substantial toys and gifts was provided on the evening of Christmas Day in the board-room of the hospital, and such patients as could suitably do so came down to witness the distribution of its presents. In addition to the tree, every patient in the hospital received some useful gift, and the nurses and servants were not forgotten. In the children's ward a smaller tree was set up for the sake of the little ones who were too ill to come to the board-room. Every child, too, had given to it a new sixpence, the gift of an anonymous donor through the editor of *Truth.*

NORTH-EASTERN HOSPITAL FOR CHILDREN.

This hospital, which contains 63 beds, is in great need of money; but this unfortunate fact, too common in the present state of so many useful hospitals, was not allowed to interfere with an orthodox celebration of Christmas Day, by the eating of a Christmas dinner, in which the old-fashioned roast beef, as being somewhat beyond the capabilities of sickly children, was replaced by rabbit, though the historic plum-pudding could not, it was felt, be dispensed with. By the kindness of several friends, a special entertainment was given on Christmas-eve by a conjuror; the entertainment was repeated in each of the wards, so that all the little patients might have an opportunity of seeing and hearing. These pleasures were also participated in by a number of children who had formerly been in-patients in the hospital, and who were invited to be present. All appeared highly delighted with the performances, while the gifts distributed amongst them by the conjuror evoked the most unmistakable delight. The children were afterwards regaled with a good tea. The wards were decorated with mottoes, flowers, and evergreens, and the children with blue and pink ribbons.

ST. THOMAS'S HOSPITAL.

The wards were beautifully decorated by the sisters and nurses in anticipation of Christmas, and the chapel, in which service was conducted on Christmas morning by the Rev. J. G. Mills, had also been appropriately decorated. After service, the congregation returned to their wards, where a substantial dinner was provided, consisting of over 300 lbs. of choice sirloins and ribs of beef, followed by 250 lbs. of plum-pudding. This enormous quantity of food was cooked in the kitchen of the institution, and gave general satisfaction. While the patients were partaking of their Christmas fare, they were visited by the treasurer, Mr. Alderman Stone, the matron, Mrs. Wardroper, and the visiting directors. Over the entrance to Elizabeth and Alexandra Wards, which have been newly painted, were the words "Welcome the coming—speed the parting." In the Victoria Ward, which is set apart for children, there were only nine beds out of thirty-five occupied; but the matron, as usual, presented the children with a Christmas tree decorated with toys. The wards were visited and admired during the afternoon by several hundreds of visitors; and the friends of the patients, who mustered in large numbers, were allowed to remain to an hour considerably later than the ordinary regulations permit. After the evening service, the probationary nurses sang carols in the Albert Edward and Leopold Wards, and afterwards in the Elizabeth, Magdalen, and Alexandra Wards, occupied by female patients.

SAMARITAN FREE HOSPITAL.

On Thursday, December 27th, an entertainment was held in the largest ward of this hospital, concluding with a series of magic-lantern views of the Holy Land, which proved of great interest to the patients. On Friday a Christmas tree was exhibited at the Dorset House Branch, followed by the usual distribution of prizes. Towards the end of the evening the tree caught fire, causing a slight panic, but it was promptly extinguished.

SEAMEN'S HOSPITAL (LATE DREADNOUGHT).

Divine service was held in the hospital-chapel at 10.30. At 12.30 every man who was not absolutely forbidden it by the doctor had a dinner of roast turkey and plum-pudding. There was an alteration this year in the arrangements. Owing to the larger number of patients, it was found utterly impossible to spare the only large ward in the building, so that, instead of all the patients dining together, as has been the practice of late, the inmates of each floor had to dine in their floor dining halls. After dinner an ounce of tobacco was served to each man. The decorations throughout the building were very tastefully carried out. There were 205 patients in the hospital, including sixteen Norwegians, eleven Swedes, eight Germans, five Russians and Russian Finns, two Italians, and also representatives from the United States, Austria-Hungary, Spain, China, Denmark, and Canada. The average daily number during 1883 has been 198, as compared with 190 during 1882, and 171, the average of the nine years from 1874 to 1882. An entertainment, got up by the exertions of the secretary, Mr. Evans, and the resident officers, was thrice repeated. On December 27th a full dress rehearsal was attended by some of the officers' friends and the residents in the neighbourhood, and on this occasion only Mr. Eric Lewis, of the Savoy Theatre, went down to Greenwich and gave a musical sketch, which filled up a blank caused by the withdrawal of a farce owing to the illness of one of the performers. The entertainment was repeated on the following day for the benefit of the nurses, servants, and their friends. On this occasion, after a concert, the farce entitled "Larkin's Love-Letters" was given, and afterwards the audience, to the number of 140, sat down to a supper under the presidency of the secretary. On the following evening, December 29th, the performance was repeated, and attended by all the patients who could leave their beds. We regret to learn that this admirable and nobly philanthropic institution, which stands as it were in the vanguard of English charities, since it stretches a helping hand to the stranger in a strange land, owing to the unprecedented difficulty experienced this year in raising funds, has been forced to borrow £1,000 to meet liabilities; contributions to liquidate this debt will be gratefully acknowledged by Mr. Evans, the secretary at the hospital.

UNIVERSITY COLLEGE HOSPITAL.

The Christmas treat for the patients, which has grown into an annual observance at this as at many other hospitals, was duly observed on Thursday, December 27th. The wards were, as usual, through the united exertions of sisters, nurses, house-surgeons and physicians, and students, tastefully decorated, and, as has been for some years the custom, a central display on the table of each ward, appealing to the imaginations and the memories of old and young, was provided. These emblematic designs, worked out into picture-models by the sisters, the senior students, and the resident officers, represented, by the grouping of dolls in the midst of appropriate scenery, fairy-tales, and nursery-rhymes. The stories of the Three Bears, of Little Red Riding Hood, and of the Sleeping Beauty—or of another legend very much resembling it—were all ingeniously illustrated. Other devices not less picturesque, though somewhat more matter-of-fact, represented a gipsy-camp and a field-hospital. Two Christmas trees also supplied a plentiful crop of presents for the patients; and the *entente cordiale*, which has always been maintained between the lay authorities of this hospital and the sisterhood of All Saints, Margaret Street, to whom they entrust the nursing of the hospital, was again evidenced by a large series of gifts, purchased out of a special fund collected by the sisters among their friends, and presented to every member of the nursing staff, to the resident officers, and to the secretary and his subordinate officers. A proportion of the 5,000 sixpences, given by the Editor of *Truth* for distribution among the hospitals, found their welcome way, with a whole heap of toys, to the patients in this hospital. Among the amusements provided for patients who could leave their beds were a magic lantern, borrowed from the University School opposite, and manipulated by Mr. Gerrard, the hospital-dispenser; a pianoforte accompaniment was played by Mr. Buss, one of the students; and a concert, in which the Strolling Players' Orchestral Society gave valuable assistance, their instrumental performances alternating with songs by Miss May Olding, Professor Roberts, Mr. Olding, and Miss Fraser, a cornet solo being played by Mr. Ellerton. This hospital is again obliged to make a very urgent appeal for increased funds; and old students of University College who can trace their success in life to the teachings given in the wards of the hospital by the great men formerly connected with it—by Liston, and Quain, and Erichsen, by Elliotson, and Walshe, and Jenner—could not testify their gratitude better than by coming forward with a little timely help for the hospital in its present dire straits.

NUGÆ HIBERNICÆ. No. IV.

DEATH-PUNISHMENT BY HANGING.

THE original punishment for treason was, "that the traitor be laid on a hurl, or sledge, drawn to the gallows, there hanged, but cut down while alive, the entrails pulled out and burnt before the criminal's face, then his head and quarters cut off and impaled where the king shall judge meet."

This punishment necessarily implied a "short drop" and simple strangulation, and excluded a "long drop" and fracture of the vertebræ.

This method of hanging continued in England down to the death of Calcraft, and often led to disgusting and painful scenes, when artificial means were used to hasten death. It is right, however, to add that these proceedings gave more pain to the spectator than to the victim, who felt nothing after the first one hundred seconds, although the reflex movements of the body led the spectators to think that he did.

The Irish, being an ingenious race, and not so conservative as the English, developed this clumsy death punishment into the "long drop," with consequent fracture of the transverse processes of the second cervical vertebra, and instantaneous death by injury to the medulla oblongata.

The drops in Ireland ranged from 10 feet to 17 feet, and death was instantaneous. Two cases occurred in which the weight of the criminals was the same, viz., 160 lbs., and the "long drop" the same, viz., 14 feet; but in one case the transverse processes of the second vertebra were broken across, and in the other case, the head was cut off by the rope. A scientific investigation of the ropes followed, and the cutting off the head was found to be due to deficient elasticity of the rope.

These cases led to a full discussion of the whole question, in which all the leading surgeons of Ireland took part, and particular attention was paid to the position of the noose, for which three positions were advocated, viz.: 1. The occipital position; 2. The subaural position; 3. The submental position.

1. The "occipital knot" had practice in its favour, handed down from the old times of the "short drop;" but experience showed that the "long drop" and "occipital knot" divided all the soft tissues of the neck, except the skin, before the blow reached the second cervical vertebra and medulla oblongata, and that there was not sufficient margin of resistance left to prevent the head from coming off.

2. The "subaural knot" was merely a hangman's ignorant idea, and had no support from anatomy.

3. The "submental knot" and "long drop" delivers the first shock on the spine (like killing rabbits by a blow on the back of the neck), and causes immediate death, without dividing the soft parts of the neck, which remain to protect the head from coming off.

After a full discussion, the third method was unanimously adopted, and this decision of the Irish surgeons became known to Marwood, who introduced it into England, and claimed it to be his own. It is really founded on the knowledge of the best surgeons and anatomists of Ireland. After the adoption of the "submental knot," the "long "drop" was reduced from 12 feet or 14 feet to 8 feet, and the results have proved that an eight-foot drop, with submental knot, will produce a greater destruction of the transverse processes of the cervical vertebræ, than a fourteen-foot drop with the occipital knot.

The transverse processes have been fractured as far down as the fourth vertebra, and death is, of course, instantaneous, and that without risk of taking off the head.

ANTIVIVISECTORS DEFEATED.

THE pressure on our space has prevented our noticing hitherto more fully the interesting results of the meeting to which we referred recently as having been held at Bournemouth, under the auspices of the London Antivivisectionist Society, to adopt a petition to Parliament for the prohibition of vivisection. The **BISHOP OF WINCHESTER** was in the chair. A deputation attended from the Society, including Mr. T. G. Vawdrey, L.R.C.P., M.R.C.S.; and there was a large audience, comprising the leading persons in the town and representatives of the medical profession.

The **BISHOP** opened the meeting by an address which commenced with a warm eulogium of the profession in general, and of the medical men in Bournemouth especially. He discussed metaphysically the relations of pain as it existed among mankind and in the animal creation, and said that, great and terrible as pain in the human being might be, human pain had never puzzled him; but he confessed that all the difficulties that had ever been raised by speculators as to the existence of a good and powerful God, the greatest difficulty, and the only one that had ever tried or troubled him, was the existence of pain so largely and so extensively, [illegible] centuries—perhaps for many millions of years—in the unsinning brute creation. He did not deny that [illegible] to make use of beasts, and [illegible] beasts, for the benefit of man; but the [illegible] they might make some use of animals in that way, [illegible] should be put to that use.

The Rev. [illegible] the deputation of the Society, made a [illegible] the [illegible] ladies to leave the hall, and [illegible] and those with him on this question objected to vivisection on many grounds. Men held licences as vivisectors who were utterly unfit to hold them, owing to their opinions on the matter; and another objection of his was, that experiments on animals were useless, because there was a want of analogy between the constitutions of animals and of human beings. He exhorted his hearers that, as far as they were concerned, they should show by their votes that they did not want any painful experiments for their sakes to be practised on animals; and that, if there were any risk to be run, they would take that risk; for, after all, risk was the very spice of life.

Mr. VAWDREY went over the same ground, and concluded his speech by stating that they wanted no compromise, and they would have none. They demanded the absolute prohibition of vivisection: and they appealed with confidence to all humane persons to extend their sympathy towards breaking the yoke of the oppressor and letting the oppressed go free.

The CHAIRMAN then read the resolution and petition.

Dr. THOMSON, whose appearance on the platform was in the first instance objected to, said that the opponents of vivisection had taken nearly two hours to state their case, and he would reply very shortly. He thought that Mr. Vawdrey should, in fairness, have mentioned that the experiments which he had so graphically described were performed before the passing of the Act of 1877, and that no such experiments now took place. Man's duty to man was greater than man's duty to beast; and, if it could be seen by experiments on animals that either the knowledge of disease was extended, or their power for dealing with and curing disease or alleviating suffering was extended, then he thought that such experiments were justifiable. He instanced cases in which many lives had been saved owing to a knowledge (hitherto not existing) procured by experiments on animals......As regarded the necessity and wisdom of vivisection, Dr. Thomson mentioned that, at the International Congress in London in 1881, there were more than three thousand medical men present from all parts of the world; and they unanimously passed a resolution to the effect that experiments on living animals were of the greatest service; and that, while deprecating unnecessary pain, they were of opinion that competent vivisectors should not be restricted. It might be said that doctors differed; but they did not appear to have differed much in that case. The British Medical Association, which met the same year in the Isle of Wight, passed a somewhat similar resolution, there being only one dissentient. In conclusion, he moved, "That further restrictive legislation on this matter is unnecessary."

Mr. HUSBAND, who was cheered on rising, seconded the amendment, and said that at the late period of the afternoon, and especially after the weak case that had been made out by those who opposed the advancement of medicine by experiments on animals, he would throw aside all his papers with which he had intended to meet the anticipated arguments of the promoters of the meeting, and would merely address a few observations that occurred to him. He remarked that those who had that afternoon contended that the Act passed in 1877 ought to be abolished, had not given one single instance, nor had they even hinted at one, in which that Act had been tampered with or abused, nor in which any cruel experiment had been performed since the passing of that Act. Some of the most extraordinary results had been produced for the benefit of mankind, and he was prepared to prove this statement by facts; but nothing, he contended, had been proved against vivisection. He referred to Harvey's discovery of the circulation of the blood, and to the demonstrations of the nervous system, and asserted that galvanism was undoubtedly discovered by experiments on animal tissue. Was he to be told that Galvani did not discover galvanism by experiments on frogs? Was a clerical opinion to be preferred in this matter to a medical? Mr. Husband next quoted some cases to show that lives had been saved by the transfusion of blood, discovered by experiments on animals. Referring to the Wimbledon poisoning case, he remarked that, as they all knew, that charge would not have been brought home had it not been for experiments on a few mice, performed to ascertain the symptoms of poison. Dr. Swaine Taylor, who had been quoted that afternoon as being against experiment on animals, stated before the Royal Commission that Palmer, the notorious murderer, was convicted on the evidence afforded by experiments on animals; and, still further, that an innocent woman was proved to be such by experiments never before performed on animals. Was it not monstrous that they were to be told that no scientific man must poison an animal even for the benefit of science; but that, if a house were infested with mice and rats, they might be poisoned with impunity? What had his lordship said? Why, that, for certain purposes, vivisection might be practised. That was all that was asked—that it should be allowed where there was no pain, or with as little pain as possible. The medical profession was a humane profession. Its members were entrusted with the lives of their patients, and surely they could trust them in this matter of vivisection, knowing that they would not cause unnecessary pain. Were they not as fond as anyone of their four-footed domestic friends? He had been brought up in the midst of animals all his life—horses and dogs had been his familiar friends. It was a mistake to suppose that medical men were hardened by their profession. They would not crush a worm! He could read to them the names of those who were foremost in the profession, and were noted for their kind and humane feelings to animals. All they wished was that their efforts for the relief of suffering humanity should not be fettered—that they should not so often be obliged to leave the bedside of the dying patient powerless to avert death. This was pain to him; but he thanked God that he lived in days when he was able to apply remedies which were unknown to those who had gone before him; and he felt he should be guilty of a want of moral courage if he did not now stand up to defend those who had done so much for him and for suffering humanity.

On a vote being taken, less than a dozen hands (for the most part those of ladies) were held up against the amendment, and it was carried with an overwhelming majority.

THE BOWER AND KEATES CASE

THE following contributions to the Indemnity Fund (fourth list) were received up to Saturday, December 29th. Since that date the number of replies sent in has been very large, and it has been found impossible to acknowledge them in the present issue:—

Wilson Fox, F.R.S., £10 10s.; W. S. Savory, F.R.C.S., £10 10s.; Sir Henry Thompson, F.R.C.S., £10; Thomas Smith, F.R.C.S., £10; Chas. A. Adey, M.D., St. Leonards-on-Sea, £5 5s.; Wm. F. Butt, Esq., £5 5s.; Ed. Clapton, M.D., £5 5s.; John E. Erichsen, F.R.C.S., £5 5s.; Barnard Holt, F.R.C.S., £5 5s.; Sir Edwin Saunders, F.R.C.S., £5 5s.; W. H. Walshe, M.D., £5 5s.; E. G. Barron, Esq., Plymouth, £5; W. W. Kershaw, Esq., Surbiton, £5; A. Farre, M.D., £3 3s.; Ed. Lund, F.R.C.S., Manchester, £3 3s.; W. S. Playfair, M.D., £3 3s.; Wm. Priestley, M.D., £3 3s.; Septimus Sibley, F.R.C.S., £3 3s.; Edgcombe Venning, F.R.C.S., £3 3s.; John Wood, F.R.S., £3 3s.; J. M. Bright, M.D., £2 12s. 6d.; J. J. Eyre, Esq., £2 12s. 6d.

The name of Sir Andrew Clark, Bart., £10 10s., was accidentally omitted from the first list.

The following have sent Two Guineas each:—T. McCall Anderson, M.D., Glasgow; E. R. Bickersteth, F.R.C.S., Liverpool; Robert L. Bowles, M.D., Folkestone; J. Bridge, Esq. (Magistrate), T. Brunton, M.D.; J. M. Burton, F.R.C.S.; F. Le Gros Clark, F.R.S., Sevenoaks; Frederick Cock, M.R.C.P.; George Corfe, M.D., Brighton; L. J. Cumberbatch, M.D.; Thos. Dickenson, Esq.; C. F. Du Pasquier, F.R.C.S., A. Evershed, M.R.C.P.; W. F. Favell, Esq., Sheffield; Geo. P. Field, Esq.; R. Temple Frere, M.A.; S. O. Habershon, M.D.; G. E. Herman, M.B.; Sir Trevor Lawrence, M.P., Dorking; J. Wickham Legg, F.R.C.P.; Thos. R. Lombe, M.D., Bemerton; J. W. Ogle, M.D., J. McCarthy, F.R.C.S.; F. Orton, M.D., E. Pearl, Esq., Windsor; Aug. J. Pepper, M.B.; C. D. F. Phillips, M.D.; H. T. Philpot, Esq.; Alex. Shaw, Esq.; Wm. Travers, M.D.; W. D. West, M.D., Epsom.

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The following have sent One Pound each:—Thos. Edward Amyot, F.R.C.S., Diss; J. S. Bartrum, F.R.C.S., Bath; Palemon Best, M.B., Louth; [illegible] Mac Cormac, F.R.C.S.; Geo. P. Dale, F.R.C.S., Scarborough; Ridley Dale, M.D., Sunderland; Francis Darwin, M.D., Cambridge; James Dawson, M.D.; [illegible] McDonnell, M.D., Dublin; J. Langdon Down, M.D.; Saml. J. Dyer, M.D., Ringwood; Geo. F. Elliott, M.D., Hull; J. W. Hembrough, Esq., Waltham; J. G. Douglas Kerr, M.B., Bath; Thos. Langston, Esq.; H. M. Macpherson, Esq.; Alex. Stewart Merrick, M.D., Belfast; George Rowles, Esq., Richmond Hill; E. D. Saunders, Esq., Tenterden; P. C. Smyly, Esq., Dublin; H. C. Stewart, F.R.C.S.; J. M. Todd, M.D., Bognor; John S. Walter, Esq., Great Yarmouth; F. Clowes, Esq., Windermere.

Alfred Taylor, Esq., Ainsworth, Fifteen Shillings.

The following have sent Half-a-Guinea each:—Geo. Abbott, Esq., [illegible]; E. Abbott, Esq., Bocking; T. Rutherford Adams, M.D., Croydon; Chas. Edward Addison, Esq., Colchester; J. C. Armstrong, Esq., Gravesend; B. Russell Baker, Esq., Prestwich; Samuel Barker, M.D., Brighton; M. W. Berry, Esq.; Henry Bowen, Esq., Blockley; M. M. Bradley, M.D., Jarrow-on-Tyne; J. Carey, M.D., Taunton; John William Coles, Esq.; William Harry Cooke, M.D., Aldridge; G. Dickson, M.D., Edinburgh; Theo. Duka, M.D.; A. Eddowes, Esq., Loughboro'; J. H. Eddowes, Esq., Loughboro'; Jonathan Elmes, M.B., Limerick; P. H. Emerson, Esq., Cambridge; F. W. Evans, M.D., Cardiff; Jas. W. Fleming, M.D., Glasgow; Lewis Ford, Esq.; W. Fell, M.B.; D. H. Forty, Esq., Wootton-under-Edge; J. F. France, F.R.C.S.; [illegible], M.D., [illegible] Furness; Thos. Scott Gray, Esq., Dundee; Charles Gross, F.R.C.S.; F. T. Gobat, Esq., Overton; Stanford Harris, Esq., Pendlebury; Frederick H. Haynes, M.D., Leamington; N. Fenwick Hele, Esq., Aldeburgh-on-Sea; H. Howard, M.B.; E. Humby, M.D.; Edward Ilott, F.R.C.S., Bromley; Joseph Brindley James, Esq.; J. Elmes Jennings, Esq., Coleford; T. Johnson, Esq., Knottingley; C. Jones, Esq.; W. Owen Jones, Esq., Bowden; H. Jackson, M.D., Aberdeen; Robert Lyon, M.B., Darvel; R. Macdonald, M.D., Millwall; W. F. Mayne, Esq., Wimston; William Ogle, M.D., Derby; Edward V. Perry, Esq., Reedham; C. H. Perry, Esq., Reedham; C. H. Phillips, Esq., Hanley; G. Pilkington, Esq., Southport; H. Richard Powell, Esq., Liverpool; J. W. Renshaw, Esq., Stretford; B. Ridge, M.D.; Wm. S. [illegible], M.D.; [illegible] R. M. Robson, Esq., Durham; Alfred Roper, F.R.C.S., Croydon; E. H. Ruddersforth, Esq.; H. Sieveking, Esq.; John Southern, Esq., Ludlow; H. Stear, Esq., Saffron Walden; W. Stear, Esq., Rotherhithe; J. Dodd Swallow, M.D.; G. R. Tatum, F.R.C.S., Salisbury; Geo. Taylor, M.D., Derby; [illegible] Thomas, Esq., Ashby-de-la-Zouch; [illegible] F. Way, Esq., Leamington; J. [illegible] White, M.D., St. Leonards-on-Sea; W. M. Whitmarsh, M.D., Hounslow; C. E. Winckworth, Esq., Sheffield; Messrs. Syme and Goodchild, [illegible]

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Garraway, Esq., Faversham; Bruce Goff, M.D., Bothwell; Arthur R. Graham, M.B., Weybridge; Archd. Hamilton, M.D., Windermere; James A. Harris, M.D., Chorley; J. F. Hillier, Esq., Ramsgate; J. Hochee, Esq.; C. A. Holcombe, M.D., Liverpool; S. Holdsworth, M.D., Wakefield; Henry Horsley, Esq., Croydon; V. Holberton, Esq., Hampton-on-Thames; A. R. Hopper, Esq., Liverpool; R. Howard, M.D., Hyde; J. D. Hulme, M.D., Wigston Magna; Chas. H. Humphrey, Esq., Chislehurst; W. Tiffin Iliff, M.D.; J. J. Jamieson, M.D., Edinburgh; J. R. Kealy, M.D., Gosport; David King, M.D., Eltham; W. Kidd, M.D., Blackheath; T. Wilson Laird, Esq., Exeter; T. Warner Lacey, Esq., Plumstead; Josiah Leale, Esq., Guernsey; Joseph Cooper Leah, F.R.C.S., Hyde; Henry Lewis, M.D., Folkestone; Edward R. Lock, Esq., Debenham; T. Lamont Macartney, Esq., Wrothen; M. J. Malone, M.D., Limerick; Joseph Matthew, Esq., Liverpool; John McCormac, Esq., Snidley; James McGregor, Esq., Portsmouth; W. J. Marshall, M.D., Greenock; James Morris, Esq., Dunfermline; H. Minchin, M.B., Dublin; T. H. Mulock, M.D., Moate; E. S. Norris, M.B., Windsor; D. C. O'Connor, Esq., LL.D., Cork; C. Ogden, Esq., Rochdale; J. O'Flaherty, Esq., Kingstown; William Alex. Orr, M.B., Johnstone, N.B.; L. Parnell, Esq.; S. B. Partridge, Esq., Anerley; Wm. Pearson, Esq., Glasgow; G. M. Pittock, M.B., Margate; P. K. Picard, M.D.; A. Playne, M.B., Maidenhead; William Powell, M.B., Torquay; R. E. Power, Esq., Portsea; A. G. Proctor, Esq., Witham; A. Rabagliati, M.A., M.D., Bradford; Hugh Rees, Esq., Carnarvon; H. P. Roberts, F.R.C.S.; J. W. Robinson, M.D.; J. M. Ryan, M.B., Colchester; H. R. O. Sankey, M.B., Hatton; Thos. Sharpley, M.D., Eastgate; H. W. Sharpin, F.R.C.S., Bedford; Edward Skinner, Esq., Sheffield; H. N. Smith, Esq., Brighton; E. G. C. Snell, Esq.; Thos. Smith, F.R.C.S.; G. Stock, Esq., Bristol; Wm. G. Stutter, F.R.C.S., Wickhambrook; Wm. Smith, [illegible]; G. B. [illegible], Lynn; Henry T. Sylvester, M.D.; J. Wm. Taylor, F.R.C.S., Birmingham; G. C. Tayler, M.D.; A. Teevan, Esq.; J. Archer Thompson, M.B., Brighton; William Thorne, Esq.; J. Y. T. Totherick, M.D., Wolverhampton; J. C. Uhthoff, M.D., Hove; Robt. Wallace, F.R.C.S., Carlisle; John Watson, M.D., Ardwick; Saml. Watson, F.R.C.S., Hull; Thos. Walker, Esq., Wakefield; W. A. E. Waller, Esq., Rugby; A. Weir, M.D., Malvern; J. Bywater Ward, M.D., Oxford; W. M'C. Watson, M.D., Montrose; Richard H. Wilbe, M.D.; Geo. Weller, Esq., Wanstead; J. Mitchell Wilson, M.D., Doncaster; N. V. Wise, Esq., Trowbridge; J. W. Workman, Esq., Reading; F. S. Worthington, Esq., Lowestoft; John H. Wood, M.B., Ledbury; H. T. Woodd, Esq., Calstock; T. H. Wright, Esq., Halifax; W. E. Wyllys, Esq., Great Yarmouth; Moffatt Young, Esq., West Hartlepool; E. H. Lendon, M.B.

The following have sent Seven Shillings and Sixpence each:—W. F. Brook, Esq., Fareham; J. A. Brown, Esq., Peckham; A. B. Kernot, Esq., Reeth; H. W. Page, F.R.C.S.; J. Sloane, M.P., Bramley.

The following have sent Five Shillings each:—[illegible], Esq., Weston-super-Mare; R. Alford, F.R.C.S., Weston-super-Mare; A. Allen, M.D., Kendal; J. [illegible], M.B., [illegible]; [illegible], M.B., Southsea; A. H. Bampton, M.D., Plymouth; T. Batton, F.R.C.S., Coleford; R. L. Batterbury, M.D., Berkhampstead; W. J. Beatty, Esq., Stockton-on-Tees; A. Benson, M.B., Sutton; W. Berry, Esq., Holmforth; W. Berry, Esq., Wigan; F. T. Bond, M.D., Gloucester; W. S. [illegible], Esq., [illegible]; G. [illegible], Esq., Oughtibridge; Jno. Brown, Esq., Bacup; R. Bryden, Esq., Uffculme; J. H. Buchanan, M.D., Thirsk; S. J. Burrows, Esq., Witheridge; Hatton Castle, M.B., Newport; Horace Chaldecott, Esq., Dorking; A. Chawner, Esq., Clay Cross; B. Chevallier, M.D., Ipswich; C. C. Claremont, M.B.; A. Clarke, Esq., [illegible] Clegg, Esq., Liverpool; C. S. W. Cobbold, M.D., Redhill; W. Cockcroft, Esq., Cutterick; T. Collier, Esq., Ripon; G. E. Coleman, Esq., Hemsworth; J. B. Collyns, Esq., Dulverton; J. Connel, M.D., Peebles; S. W. Coombs, F.R.C.S., [illegible] Esq., Alderley Edge; J. Daniel, Esq., Cheadle; W. A. Dartnell, Esq., Rochester; [illegible] chester; A. B. Elliott, F.R.C.S., Rochdale; C. Elliott, M.D., Clifton; H. D. Ellis, M.D., Eastbourne; R. Eustace, M.D., County Down; M. G. Evans, M.D., Cardiff; W. E. Evans, Esq., Bath; T. Fiddes, M.B., Urmston; R. Forsyth, M.D., Birstall; A. Fry, Esq., Moate; T. Fulton, Esq., Saintfield; J. C. Garman, [illegible] Gray, Esq., Cannock; M'Grigor, Esq.; N. Hannah, Esq., Ashton-in-Makerfield; W. J. V. Harle, Esq.; J. Harrison, Esq., Braintree; J. Harrison, jun., Esq., Braintree; C. J. Harris, Esq.; W. H. Hayes, Esq., Farnham; W. Hickman, M.B.; J. Sinclair Holden, M.D., Sudbury; S. W. Hope, Esq., Petworth; J. Hopkins, Esq.; W. Hoyle, M.A., Edinburgh; J. H. Hutchins, F.R.C.S., Rochester; W. E. Hyde, Esq., Leominster; W. Inman, M.D., Liverpool; H. J. [illegible] Marshall, Esq., Dover; F. Mason, Esq., Bath; P. B. Mason, Esq., Burton-on-Trent; C. E. Matthews, Esq., Bristol; T. Maxwell, M.D.; G. F. W. Meadows, Esq., Otley; J. Meredith, M.D., Wellington; T. C. Mitchell, Esq., Thirsk; G. Moore, M.D., Jersey; J. Gidley-Moore, Esq., Ongar; R. Wilson Moore, Esq., [illegible]

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The following have sent Two-and-sixpence each:—G. N. Adams, M.D., Rippingdale; J. Anthony, Esq., Skipton; D. B. Bain, M.D., Dundee; Wm. Barron, M.B., Lettham; H. T. Bassett, M.B., Birmingham; G. Buchan, M.B., Kilmaurs; J Clarke, Esq., Belfast; J. Comrie, Esq., Peterhead; R. G. Coombe, Esq., Burnham; P. M. Cullinan, M.B., Ennis; C. F. George, Esq., Kirton-in-Lindsey; H. George, Esq., North Thoresby; J. W. Edgar, M.D., Kirby-Stephen; M. R. Farrer, M.B., Kirkby-Stephen; E. Exell, Esq., Sheffield; W. P. Fisher, Esq., Norbiton; D. A. Fraser, Esq., Burnham; G. Gray, M.D., Castle Wellan; C. E. Hewitson, Esq., Weardale; J. M. Hobson, M.D., Croydon; G. R. Howat, Esq., W. McCormac, Esq., Glenluce; D. S. McDonald, M.D., Inverness; F. W. D. McGachen, Esq., Olney; J. Lawrence, M.D., Darlington; H. Marshall, M.D., Clifton; B. A. Mossman, F.R.C.S., Brough; R. H. Newell, Esq., Belfast; F. Palmer, F.R.C.S., Great Yarmouth; W. Pearce, Esq., Paddington; G. S. Penny, Esq., Cheltenham; D. McConnell Reed, Esq., Southampton; J. Robertson, M.D., Dumbarton; E. O'Ryan, M.D., Shanacoole; E. F. Scougal, Esq., Huddersfield; J. H. Sewart, Esq., Lostwithiel; A. Steven, M.D., Clifton; D. Stewart, M.D., Nottingham; J. M. K. Taylor, Esq.; H. Teevan, Esq.; J. Thompson, M.D.; C. Thompson, M.B.; W. Walker, Esq., Redcar.

Other smaller sums:—J. Galt, F.R.C.S., St. Boswells; L. A. C. M.; E. Swinden, Esq., Watford; T. G. Thursfield, M.D., Brosley; A. Wallace, Esq., Colchester; C. H. Well, Esq., Hawkhurst; R. G. Burton, M.D., Hanwell.

ERRATUM.—In last week's list, for Henry J. Buck, read "Henry J. Brick."

P. A. MAHOMED, } Hon. Secs.
R. W. BURNET, }

Royal College of Physicians, Pall Mall East, S.W.

[See note on page 39.]

THE ROGERS TESTIMONIAL.

THE following additional subscriptions to the fund for a testimonial to Dr. Joseph Rogers have been received. It should be understood that the subscription to this fund is not confined to Poor-law medical officers. The Treasurer is Mr. J. Wickham Barnes, 3, Bolt Court, Fleet Street, E.C.; and subscriptions are received by the Editor of the BRITISH MEDICAL JOURNAL.

Tenth List. An admirer of "Disinterested work" (per *Lancet*), £5; J. Harris Ross, Esq., M.D., C.M., Brighton, £1 1s.; Daniel Iles, Esq., Fairford, 10s. 6d.; B. Powne, Esq., Chard, 10s. 6d.; F. J. Flower, Esq., Warminster, 10s.: Geo. Hepworth, Esq., Gloucester, 10s.; Dr. A. Robertson, Town Hospital, Glasgow, 10s.; Dr. Hugh McLean, Corbridge, 10s.; J. W. Wolfenden, Esq., Tutbury, 5s.; John Russell, Esq., Neath, 5s.; Geo. W. Rhodes, Esq., Huddersfield, 5s.; Thomas Fuller, Esq., M.D., New Shoreham, 5s.; Dr. Nathan Hannah, Ashton-in-Makerfield, 5s.; John Clare, Esq., Hanley, 5s.; George Harrison, Esq., Chester, 5s.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, January 16th, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 20th, June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of Exeter Hall, Strand, London, on Wednesday, the 16th day of January next, at 2 o'clock in the afternoon.

Subcommittees will meet as follows. At 161A, Strand, W.C.—Tuesday, January 16th, 1884: Office and Printing Subcommittee, 4 P.M. Wednesday, January 16th, 1884: Arrangement Committee, 12 A.M. At Exeter Hall, Council, 2 P.M.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, December 22nd, 1883.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

- I. Acute Pneumonia.
- II. Chorea.
- III. Acute Rheumatism.
- IV. Diphtheria, clinical.
- V. Syphilis, acquired.
- V*a*. „ inherited.
- VI. Acute Gout.

URGENT.—*The Committee propose to publish a final report on Acute Pneumonia as soon as possible. Cases are therefore urgently needed. Cards will be received until further notice.*

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
September, 1883. 161A, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

NORTH OF IRELAND BRANCH.—A meeting of this Branch will be held in the Bar Room of the County Court-house, Omagh, on Thursday, January 24th, at 1 P.M.—ALEXANDER DEMPSEY, M.D., Honorary Secretary, 26, Clifton Street, Belfast.

MIDLAND BRANCH.—A meeting of this Branch will be held in the Board Room of the Infirmary, Derby, on January 10th, to amend the rules of the Branch in accordance with the recent alteration of the laws of the Association.—L. W. MARSHALL, M.D., Honorary Secretary and Treasurer, Nottingham, December 24th, 1883.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

DUBLIN BRANCH.—The seventh annual general meeting of the Dublin Branch will, by kind permission of the President and Fellows, be held on Wednesday, January 30th, at 4 P.M., in the Hall of the King and Queen's College of Physicians, Kildare Street. The officers and council for the ensuing year will be elected by ballot, and any other necessary business transacted. Mr. Edward Hamilton, President-elect, will deliver the annual address. The following addition to By-law VII will be proposed: "All interim vacancies may be filled up by the council." The annual dinner of the Branch will be in the College Hall, at 7 P.M. on the day of the meeting. Dinner tickets for members who purchase their tickets on or before Tuesday, the 29th inst., 17s. 6d.; for members purchasing their tickets after that date, and for guests, £1.—GEORGE F. DUFFEY, M.D., Honorary Secretary and Treasurer, 30, Fitzwilliam Place, Dublin.—January 2nd, 1884.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

AN ordinary meeting was held in the Medical Institute, New Edmund Street, on Thursday, December 13th. The chair was taken by the President, Dr. BALTHAZAR FOSTER.

New Members.—The following members of the Association were elected members of the Branch: Walter Clarke, M.R.C.S.; Hosack Fraser, M.B.; Theodore Martin, M.R.C.S.; J. A. Powell, M.B.

Papers.—The following were read.

1. Dr. J. J. Nason: Notes, with Remarks, on a Case of Operation for Vesico-Vaginal Fistula.
2. Mr. E. B. Whitcombe: On Certificates of Lunacy.

STAFFORDSHIRE BRANCH: GENERAL MEETING.

THE first general meeting of this session was held at the Station Hotel, Stoke-upon-Trent, on Thursday, November 29th, 1883. There were present Dr. C. ORTON, President, and nineteen members.

Specimens.—The following specimens were shown:

1. Mr. Spanton: Extra-uterine Pregnancy.
2. Mr. Spanton: Spleen removed by Abdominal Section.
3. Mr. Spanton: Large Cystic Tumour of the Breast.
4. Mr. Spanton: Ovaries and Fallopian Tubes removed by Oöphorectomy.
5. Mr. Spanton: Enlarged Thyroid Gland removed by Operation.
6. Mr. Spanton: Cases of Operation for Radical Cure of Hernia.
7. Mr. Spanton: New Spring-pressure Forceps.
8. Dr. Clare: Arrested Development of the Upper Extremities.
9. Mr. J. G. U. West: Case of General Paralysis of the Insane.

10. Mr. J. G. U. West: Case of Cholera in a Man.
11. Dr. Hatton: Hearts from Cases of Ulcerative Endocarditis.

Papers.—The following were read:

1. Mr. J. G. U. West: Two Cases of Erysipelas treated by Lead-paint.
2. Mr. Folker: Operation for the Cure of Varicose Veins.
3. Mr. Vincent Jackson: The Curative Treatment of Varicocele by the Application of a Single Ligature Subcutaneously. (A patient who was operated upon in the Wolverhampton and Staffordshire General Hospital was exhibited.)

BRITISH GUIANA BRANCH: ORDINARY MEETING.

A MEETING of this Branch was held at the Colonial Hospital, Berbice, on November 20th, 1883. Present: Dr. CAMERON, President, in the Chair, and eleven members.

New Member.—Dr. Flanagan was unanimously elected a member of the Branch.

The late Dr. Pearless.—It was resolved: "That this meeting regrets deeply the death of Dr. Pearless, who was known to, and had the personal affection and professional esteem of, all the members; and that his executors be asked to convey the expression of the Branch's sympathy to his bereaved relatives."

The Bacillus of Leprosy.—Dr. Hillis's "Note on Bacillus of Leprosy" was read in his absence by the Secretary. The meeting regretted that Dr. Hillis was not present to give further explanations of the relation of the text to the figures. The Secretary was directed to ask Dr. Hillis to fix a convenient day on which he could attend an adjourned meeting, to favour members with further explanation.

A communication from the Government was read by the Secretary. It was moved by Dr. Fisher, and seconded by Dr. Corbould, that the Secretary be instructed to acknowledge, with thanks, the communication with enclosures.

Pathological Specimens. — Dr. Brebner showed pathological specimens, which led to some discussion.

Regulation of Practice of Medicine.—The President read the draft of an ordinance to regulate the general practice of medicine in the Colony. It was resolved: That a committee of the whole Branch be formed to consider and add to or amend this draft, and as soon as possible to submit such ordinance, amended or not, to the Branch, that the Branch may petition Government to pass such an ordinance.

Quarantine.—The President read a paper on Quarantine in cases where cholera appeared in previously uninfected ships after leaving Calcutta.

Votes of Thanks.—A vote of hearty thanks was given to the President and other readers of papers, for their interest in the work of the Branch.

GLOUCESTERSHIRE, AND WORCESTERSHIRE AND HEREFORDSHIRE BRANCHES.

AN united meeting of these Branches was held at Cheltenham, under the presidency of Dr. F. COOK (President-elect of the Gloucestershire Branch). Mr. J. Cornwall, F.R.C.S., of Fairford, was elected President of the Gloucestershire Branch for the year 1884.

New Members.—Dr. Paul Bevan, Dr. Hogarth, Dr. Kirkland, and Mr. Glover were elected members of the Gloucestershire Branch.

A vote of sympathy with Dr. Rogers was also unanimously passed.

President's Address.—The President (Dr. F. Cook), in his address, touched upon some of the medical questions of the day, and especially upon that of the compulsory notification of diseases in its relation to present medical practitioners.

Sporadic Puerperal Septicæmia. Dr. Strange (Worcester) read a very exhaustive paper upon the causes of sporadic puerperal septicæmia. It was published in the JOURNAL of December 22nd.

Treatment of Fractures. Mr Gamgee (Birmingham) gave a very interesting account and practical demonstration of his own mode of treating wounds and fractures.

Papers were also read by Mr. Cripps, of Cirencester, on the Treatment of Tetanus by Hydrate of Chloral; by Mr. Smith, of Bromsgrove, on the Treatment of Persistent Vomiting by Carbolic Acid; and cases were shown by Mr. Shirley, of the Worcester Infirmary, of Compound Fracture of the Skull, with removal of the pieces of bone and hernia cerebri; and of Fractured Patella treated by Wiring the fragments.

The remaining papers, by Dr. Bond, of Worcester, Dr. Currie, of Lydney, Dr. Chapman, of Hereford, Dr. Crowe, of Worcester, Mr. Ellis, of Gloucester, and Mr. Cardew, of Cheltenham, were unfortunately obliged to stand over for another time.

Dinner.—The members afterwards dined together at the Plough Hotel, the President inviting as his guests several of the leading gentlemen of Cheltenham holding official positions.

The meeting was acknowledged by all to have been a most marked success, and was a proof of how much advantage it is to the smaller Branches to unite, at any rate occasionally, together; such union leading not merely to increased numbers, but to a higher class of paper, to a deeper interest in the subjects, and to a more generally profitable and pleasant meeting.

CORRESPONDENCE.

HIGH AMPUTATION FOR SENILE GANGRENE.

SIR,—I think that much may be said in favour of the views expressed by Mr. Hutchinson in his paper, read at the Royal Medical and Chirurgical Society on December 11th. I think that a large majority of persons who are attacked by senile gangrene tend to die of the affection; and there can be no doubt that the hesitation which surgeons have to resort to amputation in such cases, is founded on the fear that the gangrenous process will re-appear in the flaps. It is, however, quite reasonable to suppose that by amputating high up in the limb, where the arteries are, presumably, comparatively free from disease, and by avoiding all reactionary inflammation by careful antiseptic precautions, this risk may be very materially diminished. Mr. Hutchinson's cases, and those of Mr. James, of Exeter, to which he refers, certainly, so far as they go, lend support to such a supposition; and I feel that his paper will induce surgeons to reconsider the treatment of senile gangrene from this stand-point.

But I think it may fairly be asked on what grounds does Mr. Hutchinson recommend amputation in the lower third of the thigh in such cases, rather than through the knee-joint? If the latter be otherwise preferable, it can hardly be because the former is a few inches more remote from the seat of disease. Is amputation through the knee not otherwise preferable? I take it that the great end to be held in view, under the special circumstances, is to select a part where the accidents which may befal an amputation-wound are least likely to occur, and where union is likely to be speedy, complete, and secure. Such a part would be one free from muscular tissue, possessing few large vessels, and requiring no section of bone. Of all regions of the body where such requirements are most perfectly met with, the knee-joint is surely the chief. It is true that the lower third of the thigh compares favourably in these respects with the upper third of the leg; but, as compared with the joint itself, there are the still bulky quadriceps, the still muscular hamstrings, and the sawn femur, instead of soft parts, reduced to a minimum and almost entirely tendinous, and the cartilage-covered condyles. Such a comparison seems greatly to the disadvantage of amputating through the femur. The question, then, again presents itself, has this situation any counterbalancing advantages?

I believe that in many quarters there exists an objection to amputating through the knee-joint. For what reason? With myself it is a favourite operation, and I am always glad when, in the interests of my patients, I can select it. Healing almost always takes place at once; there is no fear of exfoliation of bone; and the resulting stump is in all respects admirable. I believe that, in this situation, all round success may more uniformly be obtained than in any other major amputation. In a paper which I read at the meeting of the Association in Liverpool, I referred to this subject, and, as it will probably appear shortly in your report of the proceedings, I shall not at present enter into details. I also showed, on the same occasion, two patients on whom the operation had been performed—in one case for gangrene, which was probably embolic. Meantime, however, if there be any positive objections to amputation through the knee-joint, either in the class of cases with which Mr. Hutchinson dealt, or in general surgery, I think it would be well to have them stated.—I am, sir, yours etc.,

JAMES HARDIE.

Manchester, December 1883.

EARLY AMPUTATION IN GANGRENE.

SIR,—With reference to Mr. Savory's remarks on a paper read by Mr. Jonathan Hutchinson at the recent meeting of the Royal Medical and Chirurgical Society in London, on "High Amputations for Senile Gangrene," will you kindly allow space, in your next issue, for a brief note of a case of gangrene from "constitutional causes," which occurred in my practice some time ago, in which I amputated with the most satisfactory result: proving, I think (at least, on the *ceteris paribus* principle), the fallacy of Mr. Savory's conclusion that "so far as the mischief was constitutional, he regarded amputation as unlikely to do good." My case was that of a young woman aged 23, who had been bed-ridden for years with scrofula, and who also had the misfortune to be the subject of a severe attack of acute rheumatism early in life, which had caused mitral regurgitant disease of her heart. She was an unpromising patient for operation. Her left ankle-joint, which had been diseased about three years, became gangrenous (no doubt from embolic obstruction), and spreading with amazing rapidity, the gangrene soon involved all the soft tissues in front of the joint, laying bare the tendons as well as the upper parts of the tarsal and metatarsal bones, presenting a very ugly appearance indeed. The gangrene was extending up the leg in a most irregular fashion—the highest point being about a couple of inches above the internal malleolus—but no line of demarcation seemed to form, and the patient was beginning to sink. No cause, other than constitutional, could be discovered as producing the gangrene in this case: and, as a *dernier resort*, with the assistance and concurrence of two medical neighbours, I amputated the leg immediately below the knee. The patient made a speedy and excellent recovery. She was in a fit condition to be brought into town a few weeks after the operation to have "herself and the stump" photographed.—Yours faithfully,

J. D. McCaw, F.R.C.S.Ed.

Portglenone, Belfast, December, 1883.

CHRONIC INFLAMMATION IN BONE.

Sir,—Will you allow me to add to my paper the substance of the reply I made to the discussion, more particularly with regard to the specimens exhibited by Mr. Parker? These specimens, shown to counteract my statements, are of course more important than opinions or theories. Both Mr. Parker's bones, however, instead of being in antagonism to my conclusions, do, with a different reading in the one, and a clearer understanding of my point in the other, really support the view put forward. The femur shown was much thickened and very dense, in the centre was a sequestrum it is true, but, on examining it carefully, it proved to contain the original outer compact layers of the bone. This, I think, Mr. Parker afterwards admitted. Though the long duration of the case seemed at first opposed to the periosteal nature of all the new bone, viewed now by the light thrown upon the subject by "quiet necrosis," it can be understood. Another specimen was a beautiful example of a thickened femur, from an infant affected with congenital syphilis. It was shown to prove that other causes than osteitis deformans, could produce a uniformly enlarged bone. This is true of the bone when seen from without; but on section, the original compact layer, white and dense, still existed, and was completely ensheathed by a new periosteal deposit of considerable thickness. Between the two a slight interval existed. The point in my paper was, that, osteitis deformans will alone produce a uniformly enlarged bone, having a compact layer externally, but cancellous throughout the rest of its extent. The specimen shown does not disprove this point. Similar specimens I had studied at the College Museum, and Mr. Parker has been kind enough to present one to our museum at Guy's Hospital. I believe the difference at first seen on reading Dr. Coats's remarks is only an apparent one, and due to a different use of terms. That there is an absorption of the bone produced by the inflammation, there is, of course, no doubt; but instead of putting it, as Dr. Coats does, as "expansion entailing absorption," I would rather say, "enlargement entailed by absorption," for I think the use of the term expansion is productive of confusion.—I remain, faithfully yours,

St. Thomas's Street, S.E. Charters J. Symonds.

SUNDAY EARNINGS.

Sir,—I desire to suggest to the medical profession an easy mode of forming a fund, from which to draw when it is wished to contribute towards any subscription—British Medical Benevolent, a "Rogers" testimonial, a "Bower and Keates" persecution, an orphan's appeal, or allied object. This is by putting aside all Sunday receipts for the purpose. I find it easy to do this; while entering work in my ledger, a cross is placed over each Sunday's date; when the account is paid I deduct the amount received for the Sunday work, and place it in my "charity-box," kept with which is a debtor and creditor account, showing from what patients' payments the fund has been raised, and for what purposes help has been given. On principle, I do as little professional work as I can on Sundays, without neglect of my patients; but I find I always have something in my box when I wish to contribute towards the aid of my professional brethren and poor deserving neighbours.—Yours truly,

H. M.

A DENIAL.

Sir,—In your summary of 1883 I find a repetition of the unfounded and libellous statement that an alleged death from vaccination in the Derby Union was caused by the use of "dirty appliances" by the vaccinator. I have from the first protested against this charge as false. I have challenged Dr. Barry to substantiate it, I have (backed by my board) demanded from the Local Government Board a proper investigation, but in vain. I should have brought an action for libel against Dr. Barry, but was advised that he could plead a confidential official statement; how reliable his report is may be judged by the one fact, that he stated therein the father of the child to be perfectly healthy, when he never even saw him, and when the contrary is a notorious fact. I have to request that you will give as prominent a place in the Journal to this letter as to your repetition of this slander.—I am, sir, your obedient servant,

50, Friar Gate, Derby, January 1st, 1884. William Legge.

UNSWEETENED CONDENSED MILK.

Sir,—Seriously ill effects are, by Dr. Borchardt and other eminent authorities on the diseases of children, attributed to the use of the highly sugared condensed milk, now largely used as food for infants. Dr. Borchardt, in a published paper, which greatly impressed me, attributed a large amount of the prevalence of rickets among children to this cause. Since then I have been using unsweetened condensed milk, but I find among my friends that the subject has yet attracted but little attention. I should be glad to see some subjects of preventive hygiene taken up as matters for collective investigation by our committee; and I should like to suggest this as being one of vast importance to the rising generation, and one which might well be settled by collective investigation.—I am, sir, yours, etc., Philoteknos.

January 2nd, 1884.

SPECIAL CORRESPONDENCE.

PARIS.

[From our Correspondent.]

Action of Coffee—Pus and Micro-organisms—Pathogenetic Power of Bacilli in Dried Sputa of Phthisical Patients—Inoculation of Charbon—Case of Arrested Development of Olfactory Nerves—Cholera and "English Commercial Interests"—Destruction of Dead Bodies by Sulphuric Acid—The Influence of Chemical Salts on the Bacillus of Glanders.

Allusion was made in the Journal of December 15th to M. Guimaraès' experiments on the action of coffee. In a recent publication (*Comptes Rendus de l'Académie des Sciences*, 1882) that observer demonstrated that a moderate quantity of coffee, given daily to a dog fed on meat, resulted in causing the animal, after a few days, to consume a larger quantity. M. Guimaraès ascertained, by weighing the urine and excrement, and likewise the animal, that the extra food served as nourishment; he, therefore, concluded that coffee acted as a stimulus to the nerve-centres, and increased the process of assimilation and elimination of proteids. M. Guimaraès then sought to determine if coffee had the same action on all nutritive substances; he therefore fed four dogs on the fat of pork and pap made with maize-flour; the quantity of food the animals swallowed was considerably lessened when he gave them coffee. When coffee was administered to a dog which was allowed to eat meat and pap made with maize-flour without restriction, it would eat the meat and leave the pap. A diet composed of this pap, fat, and 100 grammes of meat, caused the animal to grow thin: if coffee were administered, it lost still more flesh and consumed less food.

M. Strauss has made some interesting and valuable experiments in order to ascertain whether pus forms if micro-organisms be absent. He injected, beneath the skin and in the substance of muscles, water, five parts of almond-oil mixed with one of croton-oil, and turpentine. These irritating substances had been previously sterilised at 115° Cent. (239° Fahr.) The aperture was cauterised by the thermo-cautery before and after the introduction of the nozzle. When these antiseptic precautions prevented the development of micro-organisms, pus was absent at whatever epoch the animal was killed. Neither fragments of charcoal nor cloth introduced under the skin provoked the formation of pus. This result is the opposite to that obtained by M. Pasteur, 1878, when he adopted the same method of investigation (*Comptes Rendus de l'Académie des Sciences*). But M. Strauss, on consulting with M. Pasteur, perceived that the distinction between inflammation and suppuration had been overlooked by M. Pasteur, and that the few white blood-corpuscles observed round the fragments of cloth and coal, were living white corpuscles, whereas pus is composed solely of dead white corpuscles. M. Strauss' experiments are valuable in themselves, inasmuch as they demonstrate that the suppuration which accompanies certain medical affections, such as grey hepatisation in pneumonia and acute abscesses (cold abscesses are of tuberculous origin), is due to the presence of micro-organisms; also as additional evidence of the accuracy of Lister's theory, and the incalculable service rendered by antiseptic treatment. MM. Malassez and Vignal have made a further communication on the pathogenetic power of bacilli in dried sputa of phthisical patients, to the Paris Biological Society. In a summary of their first communication (May 19th, 1882), published in the JOURNAL, it was stated that these investigators sought to submit the sputa of phthisical patients to the same conditions as those which naturally befel them; therefore, sputa in which bacilli were present were dried in a receptacle. After an interval of twelve days, bacilli were present in a normal state of vitality, although the sputa had been moistened,dried, and pulverised eight times. Since determining these facts, MM. Malassez and Vignal, in order to ascertain the pathogenetic power which the bacilli retain, after the above treatment, inoculated with the sputa two guinea-pigs beneath the skin of the abdomen. The animals were inoculated on May 15th, 1882; one of them died from obstruction of the bowels on the 21st; after death, it was impossible to detect any indications of tuberculosis. It is evident that the results of this inoculation are neither affirmative nor negative. The remaining guinea-pig was well fed, and carefully kept in a healthy locality; when inoculated it weighed 325 grammes, a month later 460, and it continued to increase in weight until September 7th, when it weighed 760 grammes; from that date it grew thinner, until its weight fell to 695 grammes. It died on September 21st. The necropsy showed that tuberculous nodules were more or less abundant in all the organs, spleen, liver, lungs, omenta, and glands; they generally presented cheesy degeneration in the centre, excepting the lungs, where cavities were observed. The nodules were not softened. Bacilli were also present in the different organs; they were not abundant, but nevertheless easily detected. This condition characterises chronic phthisis. This research of MM. Malassez and Vignal lead to the deduction that the sputa of phthisical patients which fall to the ground are a source of danger to those not affected. This danger, evidently, is still greater for those who present a receptive condition, and in a locality where there are a number of phthisical patients congregated together.

The researches of MM. Arloin, Cornevin, and Thomas, to determine the conditions which render inoculation of charbon-virus innocuous, or even preservative, when practised in certain regions, but fatal in others, indicate that the result depends on the local temperature. The virus of peripneumonia, removed from an ox and introduced into the cellular tissue of the neck or the thigh, will certainly prove fatal to the animal under experiment. On the contrary, the same virus, introduced into the cellular tissue of the extremity of the tail, renders the animal exempt from the malady. MM. Whilelou and Bouley explained this difference in results by saying that the cellular tissue of the tail is but slightly vascular, also very dense; thus absorption of the virus is very imperfect. However, the following interesting experiment furnishes a more probable explanation. After inoculation, the tail was enveloped in cotton-wool, in order to raise its temperature, which is normally 70° less than that of the animal's body. Death soon followed. A sheep was inoculated in the tail. As, in the case of this animal, the temperature of the tail is not lower, and the virus takes effect, ice was applied, and the inoculation was harmless and preservative. A deep wound was made; and the blood, presenting bacteria, bathed the cellular tissue of the edges of the wound, and the animal died of charbon. Thus, the inoculation proving harmless was not owing to the absence of virus in the animal's [illegible].

M. Le Bec, a hospital prosector, has communicated to the Biological Society of Paris the following interesting communication. A woman died at the Hôpital St. Antoine, from a surgical affection. The brain was removed for purposes of demonstration, and it was observed that the olfactory nerves were apparently absent. On the left side there was a nerve-stump presenting the aspect of a small flat band, measuring eight millimetres in length and two wide. It rose at the spot where the roots of the olfactory nerves normally unite, was directed forwards, reached the inferior surface of the left optic nerve, adhered to it by means of the pia mater, and stopped abruptly. On the right side, the olfactory nerve was still less developed, and was represented by a slight swelling, of about the size of a pea, of the grey substance behind the optic nerve, exactly on the spot where the olfactory nerve ought to exist. Backwards, on a deeper plane, the olfactory nerve was represented by a grey band two millimetres long; this did not reach the optic nerve. The external roots presented an equal degree of development. The inner white root was detected with difficulty. The convolutions of the inferior surface of the frontal lobe differed from those of a normal brain. On the left side, where the nerve-stump existed, the olfactory sulcus was normally placed. On the right side, where the olfactory nerve was practically wanting, the olfactory sulcus was absent. The cribriform plate of the ethmoid bone was normal. During life, the patient possessed olfactory perception as keenly as most people, enjoyed the scent of flowers, and especially disliked the smell of meat and fish. M. Mathias Duval examined the pituitary body, and discovered grey nerve-fibres, apparently belonging to the olfactory nerve, which suggested the hypothesis that the olfactory nerve was reduced to fine filaments, which had adhered to the pia mater and had been removed with this membrane. This hypothesis indicates the advisability of preserving the pia mater and arachnoid membrane of the orbital surface of the frontal lobe, in order to examine it with the microscope.

M. A. Fauvel, in a communication to the Académie de Médecine, examines the question of cholera in the East as it now presents itself. The report of M. Mahé on the epidemic in Egypt—contrary to the opinion of Dr. Hunter—asserts, on evidence, that cholera was imported into Egypt either by the merchants who went to the Damietta fair, or by the stoker of the *Timor*. The last cases of cholera must not be regarded as a recrudescence of the epidemic, but the result of a local condition. M. Fauvel maintains that the prophylactic measures which have hitherto rendered such important service should be observed, for it must not be forgotten that the English persist in giving clean bills of health at Bombay, although cholera is there prevalent. M. Fauvel argues that this endemic form is not dangerous in the country, but is capable of breeding in a distant country a centre of contagion. He concludes by asserting that facts warrant his view, notwithstanding the more interested views of the English medical men. M. Jules Guérin refrained from criticising M. Fauvel's assertions, and protested against the expression "doctrines interessées" as qualifying the opinions of eminent English and German medical men, also shared by him. M. Fauvel answered that he had no intention to attack the English, but commercial interests naturally suffered from the practice of quarantine; and it is undeniable, he said, that the English have placed commercial interests before those of humanity.

M. Aimé Girard recently announced to the Académie des Sciences that he had succeeded in completely destroying sheep which had succumbed from malignant pustule, by plunging them in their weight of sulphuric acid, thus destroying the virus which, as M. Pasteur shows, survives burial. M. Regnard, fearing that this discovery might prevent the detection of crime, tested the efficacy of the method, and with regret was convinced that, in cases of abortion and infanticide, all traces of the crime can be thus removed. He therefore suggests that sulphuric acid ought not to be so easily obtainable, also that the chemists should discover a method of detecting the presence of sulphuric acid when it has been thrown down a water-closet, when it combines with carbonate of ammonia and is decomposed into sulphate of ammonia and carbonic acid; thus all traces of crime and the means adopted disappear. In the case of adults the method is not to be feared, as the quantity of sulphuric acid required is too considerable, and the receptacle for immersion too large for it to be practical.

At a recent meeting of the Biological Society, M. Paul Bert announced that he and his colleague, M. Capitan, had obtained a decided result in connection with their research on the bacillus of glanders. Artificial cultivation was attempted, a decigramme of the following [illegible] added to a litre of [illegible]. The chemicals thus employed were nitrate of silver, sulphate of copper, sulphate of zinc, sulphate of iron, permanganate of potash, monochloride of gold, acetate of lead, potash alum, potassium [illegible], bichloride of mercury, and oxidised water (10 per cent.). Where sulphate of copper, monochloride of gold, bichloride of mercury, and oxidised water were added, the cultivation was sterile; but all the others were more or less successful. In the cultivation-tube containing permanganate of potash and potash-alum, the bacilli were especially abundant.

Dr. Brouardel has handed in to the Minister of Commerce a report embodying his investigations regarding trichinosis. He has come to the conclusion that the malady is only caused by eating raw pork. Dr. Brouardel has announced his intention of completing his work by writing a book on the treatment of trichinosis.

INDIA AND THE COLONIES.

NEW INDIAN BRANCHES.

WE had recently the satisfaction of announcing the formation of another Indian Branch, and we believe that a Branch is also projected in the Punjab.

We have received numerous letters recently, in some instances collective communications, from Indian medical officers concerning the affairs of the service, couched in terms expressing the kind and warm appreciation of the officers of Her Majesty's service and of the Indian army for the work done on their behalf by the editor of the JOURNAL, and by the Chairman of the Parliamentary Bills Committee. To many of these we have returned a requested written answer; those to which we have not replied by letter—and we must plead overwhelming pressure of work for indulgence in this respect —have not the less engaged our attention. We fully appreciate the difficulties of distance and discipline under which these officers labour, and it has been for many years a pleasure to us to give such personal attention to their claims, and such personal assistance in bringing them forward, as we are able to bring to their aid.

THE SANITARY CONDITION OF SCHOOLS. It is satisfactory, says the *Australian News*, to be able to produce evidence of the care taken by the Government in the social advancement of the people. Dr. Clark, who was appointed by the New South Wales Government to inquire into the sanitary condition of the public schools in the city and suburbs, has sent in an exhaustive report to the Government. He recommends various alterations in the designs of school-buildings, and that means be adopted for proper ventilation. The question of teaching cookery in the public schools was engaging the attention of the department of Public Instruction.

IT is understood that the Government of Ceylon has approved of the appointment of Dr. Van Dersmagt as Senior Medical Officer and Inspector of Vaccination of the Eastern Province of Ceylon, and of his drawing travelling allowances the same as colonial surgeons when on inspection-duty.

MILITARY AND NAVAL MEDICAL SERVICES.

THE INDIAN ARMY MEDICAL DEPARTMENT.

THE August, September, and October numbers of the *Proceedings of the North-Western and Oudh Branch of the British Medical Association* contain Dr. Boileau's tables. These elaborate and valuable tables show the chances of promotion to the higher grades of the Army Medical Department for every medical officer down to Dr. McCutchan, whose date of retirement, under the Warrant of 1879, is October 8th, 1899. He will probably be promoted to brigade-surgeon by August 10th, 1896, and will be further promoted to deputy surgeon-general by November 2nd, 1898. The two officers next senior to him—Surgeon-Majors H. T. Brown and V. A. Jennings—cannot count on being promoted beyond brigade-surgeons; for the former is shown as having twelve senior officers of younger age than himself, while he will have been retired six months before the normal date (November 2nd, 1898) for the next vacancy in deputy surgeons-general to occur; the tables show further that six lives stand between himself and the possibility of promotion. As there are 337 medical officers on the list senior to Dr. Brown, and as casualties, calculated at 20 per cent., would give some sixty-six vacancies, his chances of promotion are good. In Dr. Jennings's case, the bracketted figures are thirty-five, twenty-two, and eighteen respectively; his chances of promotion are, therefore, not so good as those of Dr. Brown. The November number will contain a table showing the services of administrative officers for several years past, giving the regiments and corps with which they served under the old *régime*. The number promoted to the administrative rank in each year will also be shown. These tables show that there are only thirty-five vacancies in the administrative ranks for the 135 senior executives next for promotion.

PROMOTIONS AND RETIREMENTS IN THE ARMY MEDICAL DEPARTMENT.

IN the Army Medical Department a number of important retirements and promotions will next year take place under clauses of the Royal Warrant. The retirements will be three in number, and from the surgeons-general list, viz., Dr. Alexander Smith, C.B., principal medical officer at Gibraltar, October 14th; Dr. James Lamprey, principal medical officer at Portsmouth, October 15th; and Mr. Richard Gilborne, principal medical officer at Aldershot, November 20th. These retirements may be expected to promote Deputy Surgeons-General A. H. Fraser, principal medical officer at Dublin; John Hendley, C.B., principal medical officer at Allahabad; and H. B. Hassard, C.B., principal medical officer at Umballa. It may be mentioned that Dr. Crawford attains his sixtieth birthday in March next, but under Paragraph 317 of the Royal Warrant, the Director-General of the Army Medical Department, who is appointed for a fixed period of seven years, is not affected by attaining the age of sixty years during his tenure of office.

DEPUTY Surgeon-General R. Wolseley, A.M.D., has vacated his appointment of Secretary to the Surgeon-General of the British Forces (India), and comes to England shortly.

SURGEON-MAJOR J. AITCHISON, lately Officiating Secretary to the Surgeon-General, British Forces, is posted to the Sirhind Division for duty.

THE NAVAL MEDICAL SERVICE.

ANOTHER "Iron-clad" wishes to know how he can obtain specimens of the examination-papers for the Navy. Would anyone who has lately passed give him a few details?

HOSPITAL AND DISPENSARY MANAGEMENT.

A NEW DEPARTURE IN THE DISPENSARY MOVEMENT.

SIR,—With regard to the "dispensary" referred to in the JOURNAL of December 8th, p. 1167, under the above heading, we beg to say that, when it was first established, we called the attention of our Committee to the matter, and a deputation was appointed to wait on the "young medical man, qualified," with reference to his connection therewith. He informed the deputation that he had only been at the place three or four days; and that, when he entered into the engagement with the Rev. Dr. Garrett, he was quite unaware of its unprofessional character. The interview resulted in his expressing his determination to leave the place as soon as possible, which he did.

We regret to have to add that the Rev. Dr. Garrett has again succeeded in obtaining the services of a duly qualified local medical man. We append a copy[1] of the inscription on the door-plate at the "dispensary," and also enclose a card and printed circular, both of which have been freely circulated in the district, and copies left in the letter-boxes of, yours faithfully,

A. WAHLTUCH, M.D.; and J. BROADBENT, M.R.C.S., etc., Secretaries,
Manchester Medico-Ethical Association, 27, King Street, Dec. 11th, 1883.

The Card.—"Please keep this card safe for reference, and show it to your friends and neighbours. Moss Side Dispensary and Family Club, 164, Moss Lane East, Manchester. Established by the Rev. Dr. Garrett, 1st August, 1883. Hours of attendance: Morning, 10 to 11 o'clock; evening, 6 to 8 o'clock; Sunday, 4 to 5, and 8.30 to 9. Vaccination: Monday, 1 to 5. Private patients at 2.30. Branch Dispensary, 109, Upper Lloyd Street: Week-day evenings from 8 to 9. Sunday, 4 to 5. N.B.—All messages should be sent in between 10 and 11 in the forenoon. Dispensary Fees: Consultation and medicine, 1s.; visit at patient's house, 1s.; medicine to home-patients, 6d.; home-visits for a week, 3s., if paid in advance. Teeth extracted for 6d. each. Vaccination, 1s. Private patients at special monthly fees. Family Club.—Families in health may enter as follows: Three members, or under, 6d. per week; five, 9d. per week; above five members, 1s. per week. N.B.—Attendance and medicine will commence when members have been admitted for two weeks. Confinements, with medicine and four after-visits, 10s. 6d., to dispensary and club patients."

The Circular.—"Moss Side Dispensary and Medical Practice, 164, Moss Lane East; 88, Embden Street; 109, Upper Lloyd Street.—An Explanation: To the people of Moss Side and its vicinity.—Dear Friends and Neighbours,—I feel it right to explain a few points to you. While living amongst you for more than nineteen years, I have been constantly grieved at the loss and trouble which so very many pass through in seeking for "recommends" and medical attendance at moderate cost, and such sufferings became more painfully impressed upon me as a member of the Manchester School Board and the Chorlton Board of Guardians. Having ascertained that the Committee would not open a dispensary in this now populous district, I took these premises, and established a suitable institution of the kind. Unexpected events, which I may, perhaps, hereafter find it advisable to fully and publicly open out to you, caused me, as you will have perceived, to rearrange my appointment of medical officers, which I have been able to do with considerable advantage; so that we can now proceed steadily with this dispensary, as well as with the private medical practice which I have no doubt will grow up connected with it, according as skill and attention secure your confidence. To assist in gaining this, I have myself come to live here, while builders are preparing a residence for me to occupy within the parish of Christ Church. Relying upon your kind sympathy and firm support, believe me to remain, yours always faithfully, JOHN GARRETT, D.D., Rector, etc., 164, Moss Lane East, 8th October, 1883. P.S.—You will help us very much by keeping these for reference and information, and circulating them as widely as you can."

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[1] J. W. Littler, M.R.C.S., L.S.A.; T. J. Galloway Garratt; William F. Garratt, L.M.R.D., Accoucheur.

CORK FEVER HOSPITAL.

AT a recent meeting of the Town Council the minutes of the Public Health Committee during October were read, from which it appeared that a communication had been received from the Committee of the Fever Hospital, stating that there was a considerable increase of patients suffering from fever and scarlatina in the city. That there were 67 patients in their hospital, and requesting to know whether they should continue to receive patients into the hospital, sent them by dispensary medical officers, without reference to whether the cases were proper cases for theirs or the Union Fever Hospital. Pending the consideration of the matter, the Committee of the Fever Hospital received permission to admit the cases as sent to them. Subsequently a joint meeting of the Public Health and Law and Finance Committees was held, the dispensary medical officers and Dr. Brodie, Local Government Board inspector, being present. At this meeting the following recommendations were adopted:—

"That, with a view to enforcing the 141st section of the Health Act, which gives power to the sanitary authority to compel the removal to hospital of cases of infectious disease so situated that their presence in their homes would probably lead to the spread of the disease, and also with a view to checking the admission of cases to the North Fever Hospital, which more properly ought to go to the Union Hospital, the dispensary doctors are asked in every case coming under their notice, in which they considered it necessary to have the patient removed to hospital, to furnish the sanitary authority with certificates such as are prescribed by the Act, and arrangements will be made by which these certificates will be collected by the sanitary staff twice a day. On receipt of the certificate the sanitary officer is to be directed to at once send the ambulance-van to the house of the sick person, and he is to decide which of the two hospitals the case is a proper one for. In case of a refusal to go, the sanitary officer is at once to get a justice's order compelling the removal to the hospital selected by him, and if the order be obstructed or disobeyed, the sanitary officer is to proceed under that section of the Act of Parliament against the persons causing the obstruction."

MEDICO-LEGAL AND MEDICO-ETHICAL.

MEDICAL ETIQUETTE.

SIR,—I shall be glad if you will give your opinion on the following case. A., B., and C., medical practitioners in the same town, are suddenly called to attend D., who had taken poison, viz., carbolic acid. A., who is the family attendant, arrives first; then, in a few minutes after, B., when a consultation is held. From the quantity of poison taken, the moribund and unconscious state of D., etc., they decide that nothing is possible to be done; this decision is told to the attendants. At this time, C. makes his appearance, and is told by A. and B. the nature of the case, and also their united decision, and he is asked to judge also. After time had been given him to form an opinion, and he had not spoken, A. suggests that they all should adjourn downstairs, when A. and B. go and give their opinion to the family, and wait a few minutes, expecting C. to follow them, which he did not. A. informs the family he will call again shortly, and then A. and B. leave the house together, walking slowly, expecting C. to join them and give them his opinion, because, as yet, he had not said anything either about the diagnosis, prognosis, or if any treatment was advisable or not. C. never makes his appearance, nor afterwards makes any communication, either written or oral, to A. or B. Later on, A. makes a second call, and again a third call, each time finding D. worse; and it was only on his third visit that A. became aware of the fact that C. has taken charge of the case, and had also led the family and attendants to believe that he might be able to make D. recover consciousness, at least, which made the attendants make uncomplimentary remarks on A. and B. A., on finding out the state of affairs, expressed his surprise that C. should act in the way he had done, especially as C. was the last comer; and gave up the case then, and only then. D. died shortly after this (in a few hours). Although C. knows that A. and B. thought his conduct in the case, and to them personally, was most uncourteous and unprofessional, still he has never given them any explanation; so I should be glad if you will say whether C. was (1) right or wrong; and, (2) independently of being the family attendant, was the case in charge of A., he being the first to arrive? I enclose my card, and remain, yours faithfully,

SURGEON A.

*** According to the following rule, extracted from the *Code of Medical Ethics*, which expresses our own view on the subject, "Surgeon A." will find that he, as the ordinary family attendant, and, moreover, the first practitioner to arrive and see the patient, was justly entitled to take charge of the case, and, further, that he acted advisedly in associating B. and C. in the consultation.

"In cases of sudden illness, or of accidents and injuries, it frequently happens, owing to the alarm and anxiety of friends, that several practitioners are simultaneously sent for. Under these circumstances, courtesy should assign the patient to the first who arrives, and he should select from those in attendance any additional assistance that may be necessary. In all such cases, however, the officiating practitioner should request that the family doctor (if there be one) be summoned, and, unless his further attendance be desired, should at once resign the case to the latter on his arrival."

C.'s conduct, if correctly reported, cannot, we regret to add, be regarded otherwise than most discourteous and unprofessional.

PURCHASE OF PRACTICE.

SIR,—Be good enough to allow me to ask those experienced in such matters an answer to the following: What would be a fair sum for two partners to offer to a retiring partner for the purchase of his third share of book debts, amounting to £1,270, of which £800 are presumed to be "good" debts, £200 "doubtful," and £270 "bad?" I think, too, a reply would be of service to others than yours obliged,

JUSTICE.

December, 1883.

CLUB-PAYMENTS.

INQUIRER will feel obliged for information. Some few years ago, a club-patient who was neglected by his club-doctor called in another practitioner, who sued the club for his attendance successfully, the judge holding that the patient had contracted with the club for due medical attendance, and, not getting it from the club-doctor, the club was liable, and gave a decree accordingly.

*** Benefit-clubs vary in their rules, but it seems improbable that any rules would be so framed as to give a medical man called in by a member a right to claim payment from the society. The member who calls him in is primarily liable to pay his doctor's charges, and he might have a right under the rules to obtain payment or an allowance from his society. The decision, as "Inquirer" reports it, seems extraordinary. Was it given by your late county court judge, or by the present one.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

A HARD CASE.

WE have received a slip from the *Evesham Journal and Advertiser* which states that, at a recent meeting of the Evesham Board of Guardians, Mr. H. E. Haynes, district medical officer, made a personal application to the board, asking them to reverse their decision not to pay the fee of £5 for amputating the arm of one Henry Rogers, who, in a fit of epilepsy, had fallen into the fire and seriously burnt his arm. Mr. Haynes had attended this man for several months, at his own home, as a pauper-patient, and, finding that he was going to the bad, decided on sending him into the Cottage Hospital, where he amputated the arm. The man subsequently made a good recovery. The Cottage Hospital, it would appear, was in Mr. Haynes' district. The guardians refused to reverse their decision not to pay, alleging, as the principal ground for so doing, that, by sending the man into the Cottage Hospital, he had ceased to be a pauper.

We consider this decision to be unfortunate, and that it will operate most prejudicially to the working of such establishments; for Poor-law medical officers, who are notoriously ill-paid, will not be induced to send their pauper-patients to such institutions, if, by so doing, their very limited poor-law stipends are to be thus mulcted thereby. We would advise Mr. Haynes to lay the case before the Local Government Board; not that we anticipate that much good will arise therefrom, save that it will enable some friendly member to raise the question in the House of Commons, and so secure more satisfactory arrangement for the future.

It should also be understood that the patient absolutely refused to go into the workhouse infirmary, where, as the guardians assert, he might have been operated on for nothing.

A COMPLAINT AGAINST GUARDIANS.

SIR,—I desire to bring to the notice of the profession the treatment I have just received at the hands of the guardians of the X—— Union.

I have held the appointment of medical officer to one of the districts of the union for six years, during which time not a single complaint has ever been made as to the way in which I discharged my duties. I do not live in my district, and the appointment has, therefore, to be confirmed annually. At a recent meeting of the guardians, an old practitioner, who has resided in the district for years, and whose diploma dates back forty-six years, was appointed in my place, he having applied for the office. Although the house of this practitioner is situated within the district, it is not in any way more conveniently situated for the sick poor than my own.

At the same meeting the guardians appointed a practitioner to another district who does not reside in the district, although an application was made by a practitioner living in the district, and who was in every way a suitable candidate.

The above facts speak for themselves, and further illustrate the treatment to be expected from Boards of Guardians. I am, sir, yours faithfully,

I. H. N.

*** Although we hold that our correspondent has been very badly treated, we doubt whether he has any remedy. An appeal to the Local Government Board would be useless, as the department would send the letter to the guardians, who would desire their clerk to reply, and the explanation, however untruthful, would be accepted as correct. The only advice we can give, is to suggest that our correspondent should compete for the office of guardian at the next election.

THE PUBLIC HEALTH SERVICE.

SIR,—Writing of the sanitary service, the lay press is generously asking that the medical profession should have power to carry out their own convictions. It behoves the profession itself, and its press, to take advantage of this spontaneous expression of feeling of a very influential portion of the community. The niggardly guardians and vestries, holding the power, insult the profession, in the first instance, by their paltry salaries; and then, regarding the medical officer as their special property, or servant, finding him too zealous in the discharge of his duties, threaten him with dismissal. Is this relative position of inferiority of the profession to be any longer admitted as the normal one? Is it well for the public weal? The leading members of our profession give their services gratuitously to the charitable institutions of the country. This, whether rightly or wrongly so designated, is called philanthropy. If they, however, were perpetually hampered in the execution of their noble calling, would they long tolerate the obstruction? Why, then, do they look on unconcernedly, and see their less fortunate *confrères* struggling year after year, and holding appointments as urban, sanitary, and Poor-law officers, and parish and club doctors, which, if the labour and skill were only fairly remunerated, would be worth, in many instances, four times the amount they receive. These gentlemen, duly registered practitioners, dare not take up a dignified position, and throw up their appointments; for they know too well that poorer brethren would rush in to fill the gap. (I am rather borne out, I think, in these ideas by letters in your very latest issues. It is high time something more was done to put the profession upon a higher basis. My own conviction is, that it is the "drag" of poverty that keeps us so much in the background. The educational attainments of the profession are surely on a par with the general public, and yet those of our profession filling high and honourable appointments may be counted on one's fingers. I think the profession might achieve more for itself; but, to avoid degenerating into a condition of trades-unionism, the movement should originate from the ornaments of the profession—those men whose sympathy and keen sense of justice moved them so promptly to take action in the case of Messrs. Bower and Keates.—Your obedient servant, M.B., M.A.

OBITUARY.

GEORGE DELANDRE, A.B., M.B.,

SURGEON TO BARRINGTON'S HOSPITAL, LIMERICK.

THE death of Dr. Delandre, at Rock Abbey, Cashel, the residence of his father-in-law, Dr. Russell, will be heard with great regret by his large circle of friends. Born in Waterford in 1838, he entered Trinity College at an early age, and graduated with distinction as a Bachelor in Arts and Medicine in 1859. He also studied in the Royal College of Surgeons, of which he became a Fellow in 1865. For some years he served as surgeon in the Royal Navy, but his liability to sea-sickness compelled him to resign his commission, when he entered the United States Army, as surgeon in the 158th Regiment of New York Infantry, and saw much active service in the American war. Marching through the day, and sleeping on the ground by night, enfeebled by hunger and cold, he passed with his gallant companions through the thick of many a bloody fight to endure still greater privations in the trenches before Richmond. In the official reports of the Commander-in-Chief to his Government, the bravery and coolness, no less than the great humanity of Surgeon Delandre, is the subject of marked praise. Under the murderous fire of the enemy, nothing daunted, he succoured the wounded while death beset him at every step; and where a wounded man needed his assistance, he knew no distinction of friend or foe. When Richmond fell, and the war ended, Dr. Delandre returned to his native land, and commenced practice in Limerick, where his skill as a surgeon and success as an operator soon placed him in the front rank of his profession. Dr. Delandre left Limerick just five weeks before his death, in the hope that country air, and rest from the labours of an extensive practice, would renew his failing health.

It would be impossible to speak without seeming exaggeration of the benevolence and charity of Dr. Delandre. Though his good works were done in studied secrecy, they were sounded trumpet-tongued by the poor, to whom his devotion was unbounded.

Dr. Delandre was a classical and scientific scholar. In physics and chemistry, his knowledge was as exact as it was extensive; and in botany he quite excelled. A pupil of the illustrious Professor Harvey, himself a native of this city, he caught up the enthusiasm of his master, and so obtained a surprising acquaintance, not only with the native flora to the most infrequent way-side weed, but even, while in America, with the species indigenous there.

An illuminated address from the members of the profession in this and the surrounding districts was already prepared and only awaited a fitting opportunity for its presentation. His fatal illness, however, prevented it; and it was ordained that he should not live to receive this flattering presentation from his colleagues.

His remains were interred in the family burial-place at Waterford, and many of his friends from Limerick accompanied them to the grave. Amongst those attending the funeral were Dr. M. J. Malone, F.R.C.S.I.; Dr. Holmes, Resident Physician, Barrington's Hospital; Dr. Courtenay, Resident Physician, Lunatic Asylum; Dr. Nolan, etc.

JAMES HINDS, M.B.LOND., HALSTEAD, ESSEX.

WE regret to record the death of this amiable and respected practitioner. He died at his residence at Halstead, on December 22nd, after a short illness. Born in Birmingham in the year 1840, James Hinds pursued his medical education at Queen's College, where his uncle, the late Dr. William Hinds, was professor of botany. He was a successful and promising student; he took high honours at the University of London, and graduated as a bachelor of medicine in the year 1864. Shortly after taking his degree, Dr. James Hinds was appointed resident medical tutor and demonstrator of anatomy in the Queen's College, Birmingham. He held this office for some years, and proved himself a very popular and successful teacher. About fourteen years ago he married, left Birmingham, and settled in Halstead, where he was busily engaged in professional work up to his fatal illness, holding the appointment of local medical officer of health, and several other public offices, while conducting a large general private practice. In the premature death of James Hinds, the Association has lost a well known member, whose kindliness of heart, geniality of manner, and industrious discharge of professional duty, had endeared him to a large circle of friends.

COUNT GIAMBATTISTA ERCOLANI,

PROFESSOR IN THE UNIVERSITY OF BOLOGNA.

PROFESSOR G. B. ERCOLANI, one of the most distinguished of the modern scientists of Italy, died at Bologna on November 16th. Count Giambattista Ercolani was born in Bologna in 1819, of an ancient and noble family. He was the favourite pupil of the famous Antonio Alessandrini, and devoted himself early to comparative anatomy and pathology. The revolution which swept over Europe in 1849 found in him an earnest defender of the liberties of Italy; and, as its result, he became an exile. He sought refuge in Turin, and there was appointed Professor, afterwards Director, of the Veterinary School connected with the University. He remained there until 1863, when he returned to Bologna, where he accepted a similar position in the University. By his energy and influence, new buildings were erected, and the school reorganised and greatly enlarged, and a large pathological museum established. He held the position of Rector of the University for a number of years, and was permanent Secretary of the Academy of Sciences of the Institute. Like his friend Virchow of Berlin, his reputation was not alone that of a teacher and scientist, but his early career as a defender of popular rights made him a favourite with the citizens, and he was three times elected and served in the Roman Parliament.

His publications have been numerous, and are characterised by a careful scholarship and scientific accuracy. Most of his contributions appeared originally, with illustrations of the highest order, in the *Memoirs of the Academy of Bologna*. The work by which he is best known is the *Histology and Physiology of the Placenta of Mammals*, in which he deduces a single law of anatomical and physiological modality of embryonic nutrition in all vertebrates. To his first publication upon this subject was awarded the prize of the French Academy. These publications were gathered into a completed treatise (a part of which was written by the author expressly for this purpose) by Dr. Henry O. Marey of Boston, and published in two volumes, in London and Boston, in 1880. Professor Ercolani's researches upon the pathology of the placenta are of a value and importance scarcely second to any of the brilliant demonstrations made in the entire field of physiological science. To the anatomist, the physiologist, and the biologist, as well as to the physician, the work of Ercolani will ever stand as a monument to science.

HULL GENERAL INFIRMARY.—This building is, we hear, to be entirely remodelled, and to have two new wings added to it, in accordance with the plans prepared by Messrs. H. Saxon Snell and Son, architects, London. The plan of the present structure, erected in 1784, is such that the administrative offices and sick wards are all contained under one roof, with the result that a large proportion of the officers are continually reported as suffering from hospitalism. It is, in consequence, proposed to cut two gaps through the principal front, and place the officers' rooms and kitchen offices in the centre block so formed, and the sick wards in the detached portions at each end, and, when to these are added the proposed new wings, the building will accommodate 262 patients. An out-patients' department is also to be erected as a detached building upon a site adjoining the Infirmary grounds.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS IN IRELAND. At a meeting of the Court of Examiners, held on December 10th and following days, the undernamed gentlemen, having passed their several examinations for the letters testimonial, and taken the declaration and signed the roll, were admitted Licentiates of the College, viz.:

E. L. Aherne, H. O. Beattie, H. B. Beatty, J. J. Bolger, W. Boake, H. J. Butler, J. F. B. Campbell, G. O. Cuppage, E. B. Denny, G. A. Draper, T. G. Drake, G. B. A. Flanagan, C. H. P. C. Graves, J. W. Green, J. H. Griffin, R. F. Herron, J. Keys, J. E. M'Craith, E. J. R. MacMahon, M. Macnamara, F. J. Maguire, F. B. Manning, F. J. Maunsell, T. G. Melberick, A. Murphy, W. M. Nugent, T. O'Donnell, E. G. Peters, T. G. J. Sheehan, C. N. Simons, H. W. Smartt, F. J. W. Stoney, W. Stokes, F. W. Sullivan, W. G. Ternan, T. R. Torney, J. S. Walsh, H. Whitby, and G. R. Williams.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, December 20th, 1883.

Bean, Charles Edward, Brooklyn House, Shepherd's Bush, W.
Bower, Edward Ignatius, Acton Street, Gray's Inn Road, W.C.
Carvell, John Maclean, East India Road, E.
Ferguson, George Henry Fletcher, Clyde Road, Croydon.
Foot, Ernest George, Bigbury, near Kingsbridge, Devon.
Hartzhorne, Bernard Frederick, Chichester Road, Bayswater, W.
Harvey, Frank, Endsleigh Place, Plymouth.
Ogg, George, St. Anthony's, Newcastle-on-Tyne.
Pring, Frederick Arthur, Northlands, Exeter.
Roe, Montagu Walter, Newland Street, W.
Sumpter, Walter John Ernely, Cley-next-the-Sea, Norfolk.
Thirkell, Joseph, Aberford, Leeds.

The following gentleman also on the same day passed the Primary Professional Examination.

Muspratt, Ernest Lambert Chambers, King's College.

The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, December 27th, 1883.

Bennett, Edwin Alfred, Cornwall Road, Bayswater, W.
Dent, Herbert Crowley, Wood Street, Woolwich.
Frames, Alfred Cromwell, Belsize Park, N.W.
Hudson, Charles Leopold, Bungay, Suffolk.
Lawrence, Laurie Asher, Belsize Avenue, N.W.
Lewis, Edward John, Great Coram Street, W.C.
Rugg, George Lewis, Stockwell Villa, Clapham Road.
Wetwan, William Albert, Tavistock Place, W.C.

The following gentlemen also on the same day passed their Primary Professional Examination.

Hunter, George Douglas, St. George's Hospital.
Tatam, Edwin Charles, King's College.

UNIVERSITY OF DURHAM. Michaelmas Term, 1883.

Examination for the Degree of Doctor in Medicine for Practitioners of Fifteen Years' Standing. T. M. Dolan, L.R.C.S., L.R.C.P.Ed.; R. Macdonald, L.R.C.P., L.R.C.S.Ed.

One candidate was rejected.

Examination for the Degree of Doctor in Medicine.—H. H. Austen, M.B., M.R.C.S.; F. W. East, M.B., L.R.C.P., M.R.C.S., L.S.A.; C. Green, M.B., T. J. Hudson, M.B., M.R.C.S.

One candidate was rejected.

The Gold Medal for the best essay for the Year 1883 was awarded to F. W. East.

Second Examination for the Degree of Bachelor in Medicine. First Class Honours.—None. *Second Class Honours in Order of Merit.*—1. W. R. Awdry, M.R.C.S.; 2. W. O. Travis, M.R.C.S.; 3. H. M. Hughes; 4. E. A. Opie; 5. A. T. F. Brown, M.R.C.S., L.S.A.; 6. S. Powell, M.R.C.S., L.S.A.; 7. H. P. Keatinge, M.R.C.S. *Pass List in Alphabetical Order.*—T. E. Gordon; J. C. Grimling, M.R.C.S.; R. Hardie; S. Lowes, L.R.C.S.Edin., L.S.A.; H. R. Mosse, M.R.C.S., L.S.A.; W. A. Norry, M.R.C.S., L.S.A.; T. H. Openshaw, M.R.C.S.; J. I. Parsons; A. Robinson, M.R.C.S., L.S.A.; J. M. Robson, B.A.; C. Y. Shuter, M.R.C.S., L.S.A.; E. W. Simmons; F. Spicer; J. H. S. Sumner, M.R.C.S., L.S.A.; A. Triay; A. W. Wheatley, M.R.C.S., L.S.A.

Two candidates were rejected.

Examination for the Degree of Master in Surgery. W. O. Travis, M.R.C.S.

Four candidates were rejected.

UNIVERSITY OF DUBLIN. At the Winter Commencements, held at the close of Michaelmas Term, on Wednesday, December 19th, 1883, in the Examination Hall of Trinity College, the following degrees in Medicine and Surgery were conferred by the University "Caput":

Bachelors in Surgery. A. Ambrose (*stip. cond.*), H. E. Blandford, C. C. De Burgh Daly, W. N. Denning, G. M. Dobson, W. W. Fenton, R. H. Fleming, A. F. W. Geoghegan, J. S. Green, H. M'Quade, R. Miller, R. Nunn, G. H. Symes, R. E. Sproule.

Bachelors in Medicine. A. Ambrose, C. C. De Burgh Daly, G. N. Denning, H. H. Fleming, A. F. W. Geoghegan, J. S. Green, C. R. Kilkelly, R. Miller, R. Nunn, G. H. Symes.

Doctors in Medicine. A. Ambrose, T. Donnelly, G. C. Kingsbury (*stip. cond.*), T. W. Lewis, A. Murray, D. C. Smith, D. Tucker.

MEDICAL VACANCIES.

The following vacancies are announced:

ALNWICK AND DISTRICT PROVIDENT DISPENSARY.—Qualified Practitioner. Applications to W. Wright, 1, West Parade, Alnwick, by January 15th.

BELGRAVE HOSPITAL FOR CHILDREN, 79, Gloucester Street, S.W.—Surgeon. Applications to Captain Stopford by January 9th.

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon. Salary, £150 per annum. Applications by January 15th.

BIRSAY, HARRAY, AND SANDWICK MEDICAL AID ASSOCIATION.—Medical Officer. Salary, £70 per annum. Applications to Mr. Moar, Quoyloo by Stromness.

CITY OF DUBLIN HOSPITAL.—House-Surgeon. Salary, £100 per annum. Applications by January 12th.

COTON HILL LUNATIC HOSPITAL, Stafford.—Assistant Medical Officer. Salary, £100 per annum. Applications by January 14th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Assistant Dental Surgeon. Applications by January 14th.

GRANARD UNION.—Medical Officer, Street Dispensary. Salary, £120 per annum, and £16 as Sanitary Officer, with fees. Applications to John Kenny, Hon. Sec., to January 7th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by January 5th.

HYDRO-THERAPEUTIC ESTABLISHMENT.—Resident Physician. Salary, £300 per annum. Applications to the Manager, The Hall, Bushey, near Watford.

METROPOLITAN ASYLUMS BOARD.—Assistant Medical Officer. Salary, £120 per annum. Applications by January 14th.

RADCLIFFE INFIRMARY, Oxford.—Honorary Physician. Applications by February 6th.

ST. THOMAS'S HOSPITAL.—Junior Anæsthetist. Applications to the Treasurer by January 10th.

SUSSEX COUNTY HOSPITAL.—Physician. Applications by February 6th.

SUSSEX COUNTY HOSPITAL.—Assistant-Physician. Applications by February 6th.

TAUNTON UNION.—Medical Officer. Salary, £60 per annum. Applications by the 14th instant.

UNIVERSITY OF EDINBURGH.—Additional Examiner in Medicine in the Department of Medical Jurisprudence. Applications to J. Christison, by January 14th.

WEST HERTS INFIRMARY.—House-Surgeon and Dispenser. Salary, £100 per annum. Applications by February 6th.

MEDICAL APPOINTMENTS.

Bateman, Alfred George, M.B., M.Ch., L.S.A.Lond., appointed Honorary Medical Officer to the Holloway and North Islington Dispensary, *vice* J. Grey Glover, M.D., resigned.

Gunning, J., L.R.C.P., appointed Medical Officer to the Castlebar Union, *vice* M. J. Lyden, M.D.

Hewkley, F., M.R.C.S., appointed House-Surgeon to the London Hospital.

Holyoake, Ralph, M.R.C.S., appointed House-Surgeon to the London Hospital.

Hudson, Ernest, M.R.C.S., appointed Junior House-Surgeon to the Royal London Ophthalmic Hospital, Moorfields, *vice* J. B. Lawford, M.D., appointed Senior House-Surgeon.

Johnston, Robert Henry, B.A., M.B., B.Ch., appointed Medical Officer for the Bungay District of the Wangford Union; and for the No. 4 District of the Loddon and Clavering Union.

Mills, W., L.R.C.S., appointed House-Surgeon to the Chorlton-upon-Medlock Dispensary.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

Barnes. On December 26th, 1883, at 6, Portland Square, Carlisle, the wife of Henry Barnes, M.D., F.R.S.E., of a daughter.

Davies. On the 31st ult., at Cwm-dws House, near Newport, Monmouthshire, the wife of W. H. Davies, L.R.C.P., etc., of a son.

DEATHS.

Barrow. On December 26th, at his residence, "Battenberg," Manley Road, Manchester, John Charles Barrow, M.R.C.S., L.S.A., eldest son of the late John Barrow, of Loughborough Fields, Leicestershire, aged 61 years. Formerly House-Surgeon at the Leeds House of Recovery.

Hinds. At Halstead, Essex, on December 22nd, James Hinds, M.B., aged [illegible]

THE BOWER AND KEATES CASE.

AT a meeting of the Committee, held on January 3rd, 1884, at 8.30 P.M., there were present Sir William Jenner (in the chair), Dr. Wilson Fox, Dr. Moxon, Dr. Bright, and Dr. Quain. It was resolved that the Committee, having obtained subscriptions sufficient to meet the legal expenses incurred in the case of Messrs. Bower and Keates, beg to intimate that the list will be closed on Saturday, the 5th inst. They will, however, be glad to receive further signatures to the memorial.

OPERATION DAYS AT THE HOSPITALS.

MONDAY ....St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY..........St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY........St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY............King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY.........St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1 30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W. 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu., F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu F., 9 30; Dental, W. S., 9.30.

ST. THOMAS'S. Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu., F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. R. Brudenell Carter will deliver the first Lettsomian Lecture. Subject: Cataract.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. F. Treves: The Direct Treatment of Spinal Caries by Operation. Dr. Radcliffe Crocker: Three Cases of Xeroderma Pigmentosum (Kaposi).

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be shown. Dr. E. S. Tait: Observations of Puerperal Temperatures. Dr. J. Williams: On the Corroding Ulcer of the Os Uteri.—Hunterian Society, 7 P.M. Council. 8 P.M. Mr. Reeves: The Treatment of Rectal Stricture, with Special Reference to Inguinal Colotomy. Mr. Charters J. Symonds: The Reliable Signs of Fracture of the Neck of the Femur.—Royal Microscopical Society, 8 P.M. Dr. L. S. Beale, F.R.S.: Sewage-Constituents in Thames Mud.

THURSDAY.—Abernethian Society, St. Bartholomew's Hospital, 8 P.M. Mr. Robert Jones: What constitutes Insanity?

FRIDAY.—Clinical Society of London, 8.30 P.M. Annual general meeting for election of officers and council. Dr. J. K. Fowler: On a Case of Subcutaneous Nodule. Dr. Caswell: On a Case of Cortical Tumour with Unusual Frequency of Epileptiform Attacks. Dr. R. J. Lee: On a Second Case of Creeping Eruption.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

ROCHE'S EMBROCATION.

SIR,—Would you kindly inform me, through your next issue, what the com position of "Roche's embrocation is? It is very much lauded, and extensively used in this district as a specific for whooping-cough. In two cases, I have noticed alarming prostration and collapse, with very dilated pupils, as one sees after the administration of belladonna. I cannot help attributing these symptoms to the use of this patent remedy.—I am, sir, yours, etc.,

E. T. DAVIES, M.B.

191, Heyworth Street, Liverpool, November 21st, 1883.

*** Two formulæ are published alleged to correspond to Roche's embrocation: 1. Olive oil mixed with half its weight of oil of cloves and amber; 2. Olive oil, two ounces; oil of amber, one ounce; oil of cloves and oil of lemons, of each one drachm. The oil of amber is made by distilling amber with an equal weight of sand in a glass retort. Applied externally, it is a rubefacient, and is often used as a liniment in rheumatism. Rubbed along the spine, it was recommended by Parrish as a remedy for whooping-cough. He mixed it with an equal quantity of laudanum, and diluted with three or four parts of olive oil and brandy.

INSTRUCTION OF THE DEAF AND DUMB.

SIR,—I should be glad if you would let me know where I can send a little boy, gratis (who has lost his hearing, after scarlatina), that he may learn the deaf and dumb alphabet, and be instructed in some trade.—I am, sir, yours faithfully,

F. B J. BALDWIN.

Cawdor House, Rotherham.

*** Three of the schools belonging to the School Board in London teach the deaf and dumb on the oral method, and, of course, persons residing in their neighbourhood send their children free of payment. Beyond this, there are no schools for deaf and dumb "where a child can be sent gratis." The Association for the Oral Instruction of the Deaf and Dumb at 12, Fitzroy Square, educates children for small fees, according to the circumstances of the parents, and the amount is settled for each case by the committee. The lowest charge is £5 *per annum.* This is only a day-school, and the children are boarded out at the parents' expense. The director (Mr. Van Praagh) will arrange this. In other cases, the deaf and dumb are educated in the various institutions for the purpose throughout the country. To obtain an education and be taught a trade gratis is not more easy for a deaf and dumb than for a hearing child. The Old Kent Road institution is probably the best to apply to in such a case as our correspondent's.

SPES should append his name in order to insure publication of his contribution. See Note above.

MEDICAL ADVERTISING AND THE COLLEGE OF SURGEONS.

SIR,—A few days ago, I was surprised to see a flaming advertisement occupying a prominent position in a railway-station, with the name of a L.D.S.R.C.S. England attached to it. I thought it would be the best plan to acquaint the College with the fact, in order that it might immediately put a stop to such a nefarious practice on the part of one of its licentiates. I am also surprised to find he is a member of the Odontological Society. I enclose a copy of my reply from the Secretary. Comment on my part is unnecessary.—Yours truly,

ANTI-HUMBUG.

[*Copy.*]

"Royal College of Surgeons of England, Lincoln's Inn Fields, W.C.,
"21st day of December, 1883.

"Sir,—In reply to your letter of the 20th inst., I have to acquaint you that, although advertising in the manner referred to by you is greatly to be deprecated, it is not in the power of this College to take any steps in the matter.—I am, sir, your obedient servant, FRED. G. HALLETT, Assistant-Secretary."

THE "SALT-RHEUM" OF CALIFORNIA: CHRONIC DIARRHŒA.

SIR,—I should feel very much obliged by any information from any member on the following.

1. What is the disease which is known in the States (the case I am particularly interested in occurs in the State of California) as "salt-rheum"? I have looked over various books, but can find no mention of it.

2. What is the treatment?

3. I have a patient, a lady of about 60 or 63, of gouty diathesis; she suffers from a troublesome diarrhœa, from which she is quite free in the day-time, but coming on in the morning, at 4 or 5 o'clock, is obliged to get up out of bed; and between that time and 8 or 9, has several evacuations. I have tried various remedies without success, and would be glad to get any advice on the matter.—Yours faithfully,

M.K Q.C.P.I.

Dublin, December 31st, 1883.

THE EFFECT OF COFFEE IN FLATULENT DYSPEPSIA AND TORPID LIVER.

SIR,—I am making some researches on strong coffee in the above disorders, and I can find no reliable information in any of our standard works. Will some of your readers give me the benefit of their experience? I also hope this letter may reach the eye of some of our great authorities on gastric and hepatic disorders. But little is known about the effects of strong coffee; and as its use is daily increasing in this country, its physiological, as well as its therapeutical effects should be more closely studied. I am not sure that strong coffee, like small and repeated doses of alcohol, does not favour gastric catarrh.—Yours truly, A BILIOUS PHYSICIAN

PORTRAIT OF DR. E. JENNER.

SIR,—The portrait in the possession of the Plymouth Medical Society, painted by H. Northcote, R.A., a local artist, is the one of which Dr. Vinen has a proof I think, as Dr. Jenner is sitting on a chair, legs crossed, with his arm resting on an open book showing coloured drawings of vaccine vesicles. The face is clean shaven. The hair is grey. The coat, open I think, has been of a garnet colour. The waistcoat is yellow. He has a white neckcloth. The head is looking to his own right. The portrait is that of a man about 60 years of age. Northcote painted a similar portrait for the Devonport Medical Society, which is still in their possession. Yours faithfully, A. H. BAMPTON, M.D.

2, North Devon Place, North Hill, Plymouth.

THE LATE MR. J. F. SOUTH.

A LIFE of this well-known surgeon, by Professor Feltoe, of St. David's College, Lampeter, will shortly be published by Mr. John Murray. Mr. South, who was a twice elected President of the Royal College of Surgeons, was for many years surgeon to St. Thomas's Hospital, in both of which institutions he ever took the greatest interest.

DISPOSAL OF SEWAGE.

SIR,—Would you be so kind as to inform me, in the next number of the BRITISH MEDICAL JOURNAL, which are the latest works published in England upon the disposal of sewage, especially in a technical point of view? I know the official report of 1876, and would like to know if this important question has been the subject of new publications.—Believe me, sir, very truly yours,

Liège, December 27th, 1883. F. PUTZEYS.

*** Nothing new of any authority since 1876; but the Report of the Royal Commission on the Pollution of the Lower Thames is expected soon.

HYGEIA.—The most usual and convenient compression is C.S.S.

THE GERM-THEORY.

SIR,—Can you inform me, in the JOURNAL, where I can find the best account of recent researches on the germ-theory of disease, the cultivation and attenuation of infective fluids, or any compendium of the work done by Pasteur and Koch. I would gladly invest in any literature published on these subjects. The information would be a great obligation to

A. C. M., Memb. Brit. Med. Assoc.

*** There is no complete summary of the work done by Pasteur and Koch. In the various JOURNALS numerous notices will be found; and we have from time to time published leading articles and notes on these matters.

AN ALLEGED DANGER IN TREATING DOUBTFUL CASES OF AMENORRHŒA.

SIR,—In the JOURNAL for December 1st, under the head of "Strange Medical Evidence," you made some remarks on the alleged statement of a medical man with regard to the so-called impropriety of giving aloes and iron to a pregnant patient.

As two or three of your correspondents have lately touched upon the danger of treating patients who consult them for amenorrhœa with the above drugs, for fear of causing abortion, should the case prove to be one of pregnancy, I may state that I have long regarded this idea as utterly groundless. For twelve years, I held a large village medical club, consisting largely of married women, where the only water-supply was from a strong chalybeate stream. During that period, I used to recommend the harmless compound rhubarb-pill very indiscriminately, forgetting that it contained aloes and myrrh; also I know the people used often to get "Cockle's pills," which contain aloes. During the twelve years, I had not a single miscarriage, though there were plenty of confinements. Often, too, it has happened to me, as it has to many others, to have to attend patients, both single and married, for amenorrhœa, in whom there was no reason whatever to suspect pregnancy, but who eventually proved to be pregnant. In all these cases, I never found that the conventional treatment for amenorrhœa, even when adopted under erroneous impressions, did the slightest harm, but rather good, to my patient. I have mentioned this subject to Dr. Barnes, and find he is quite of the same opinion, and that he has actually been called upon to give evidence to this effect in court, to shield a medical man who was charged with trying to induce abortion, because he had treated a supposed case of amenorrhœa with steel and aloes. Dr. Barnes also stated that he had often given steel to delicate pregnant women to prevent their aborting, and that he considered aloes one of the best aperients in pregnancy.

If medical men are to be so extremely cautious in treating doubtful cases of amenorrhœa, they will be withholding what is at least perfectly harmless in pregnancy, while they will be neglecting to treat a genuine case properly; for it is often impossible to distinguish these cases at first with certainty. Even with regard to ergot, I feel certain that a moderate dose, given, we will say, for neuralgia, would be perfectly harmless: and in this view, I find I am supported by the same eminent authority. Many treat dysmenorrhœa by giving a dose or two of ergot just as the event is coming on, and very valuable I have found this plan; it relieves the pain wonderfully; but is one to refrain from using it because, perhaps, one patient out of thirty may be three weeks pregnant? I firmly believe that, given a healthy woman with a healthy embryo, only such a drug as will produce violent disturbance of the system, and perhaps produce peritonitis, is likely to bring about abortion, while delicate anæmic women who threaten to miscarry, will be enabled to go their full time if you give them iron.

This is a matter of considerable importance to the profession, for it is not fair that a man who treats his patients rationally should be ill judged by those who adhere to what twenty-two years of practice among such cases tells me is quite a mistaken notion.—I am, sir, yours,

19, Finchley New Road. WALTER G. WALFORD, M.D.

AMBULANCE-CARRIAGES.

IF "Ambulance" will call upon Mr. Furley at St. John's Gate, Clerkenwell, he will receive all the information he desires, and may himself inspect the carriages and litters employed. The system in use is believed to be by far the most economical to be obtained in London.

HOUSING THE POOR.

SIR,—As the above question has been noticed in the BRITISH MEDICAL JOURNAL, it may not be out of place that a few suggestions should be made in the JOURNAL by members of the profession, for the improved housing of the poorest of the working classes; with this view I beg to offer my opinion of the matter.

Improved dwellings are not the only things the poor require to improve their moral condition, they must be educated to appreciate the benefit of decent lodgings; it is folly to expect that a person made wolfish by hunger, misery, and dirt, is going to become a model tenant by merely giving him a clean room; assistance must be given them in food, warmth, cleanliness and clothing, with mental culture and amusement; then the tenant will learn how to appreciate the benefit of a clean and wholesome lodging.

It is necessary to begin with the poorest class, say those whose earnings are not more, for man and wife, than 10s. per week, or for a family earning not more than 6d. per day each. The rent of a room for two persons, whose conjoint earnings be not more than 10s. per week, should be 1s. per week; if with two children earning another 5s., 1s. 6d. per week; or, for a family earning £1, two rooms at 1s. each; but there should be opportunity for purchasing cooked and uncooked food, clothing, and firing, at the lowest possible rates, with an unlimited supply of hot and cold water, a library and reading room, where instruction and amusing lectures might be given; workshops at a rent of 1s. per week, barrow-stands, barrows and trade-implements on loan at a small charge.

To do this, a building should be erected so that each 1s. room should not exceed in cost £[illegible], and this should include the ground and all necessary offices; the basement of the building should contain a public kitchen for the supply of soup, tea, coffee, and cooked food, sold at the lowest possible rate; a general store, coal-shed, drying room for wet garments, workshops, barrow-stands, depot for gifts of old clothes, tepid baths, with water constantly renewed; and outside, the dust-bins, refuse-bins, and slop-drain tank with grating; the rooms and corridors should be lined with hard cement, so that they could be coloured and whitewashed yearly at a trifling cost; there should be a panel of perforated zinc ventilators over each door, and the rooms should open on to a wide corridor with ventilation and light at each end, and in communication with a suction ventilating shaft; hot and cold water laid on in each corridor, an additional structure at each end of corridor, shut off by doors and separately ventilated for closets, dust-bins, shoots, and slop-shoot, with grating at bottom to prevent solid refuse going into drain. No slops to be thrown down the closets; on the roof should be a drying ground, with wash-houses and fittings for washing of clothes, etc.

Power should be given to some corporate body to give notice of repairs to owners of uninhabitable property, with power to condemn, and compulsory purchase if repairs not carried out within certain time, and to acquire the property at —— years rental purchase, less cost of repairs. Government should advance money for purchase and building at 2½ per cent., and it should be possible to purchase ground and erect a building on the plan stated at a cost which, at 1s. and 1s. 6d. weekly rental for each room, would bring 5 per cent. or sufficient to pay interest and keep the building in proper going and repair; as these buildings would decrease the poor-rates, they should be free from all rates and taxes.—I am, sir, your obedient servant, A MEMBER.

K. (Dublin) is entirely mistaken in his interpretation of the Levitical passages in question; not only was the restriction in question universal during the Rabbinical periods of Judaic history, but up to the present day it is also extensively observed as part of the Levitical law.

A CASE OF MELANCHOLIA.

SIR,—Can you give me any information as to what public institutions there are within easy distance of London, where a young lady, formerly a governess, but now suffering from melancholia, can be received at moderate terms, and where the main object is cure, if possible? Some time ago, when the subject did not interest me, I saw an account of a proposed institution meeting such cases being erected by a Mr. Holloway. Can any of your readers tell me whether such institution actually exists? and, if so, how admission may be obtained?—Yours, etc., MATER.

*** There are asylums of every class in and near London suitable for a non-paying patient, or one who can pay but little. Hanwell and Colney Hatch are the Middlesex county asylums. St. Luke's is partly for non-paying cases and partly for those who can pay at the rate of 7s., 14s., or 31s. a week. Bethlem Royal Hospital is an establishment on a similar scale, that is, it receives educated patients, as well as those of a humbler sphere. Should a more expensive, but at the same time very economical, establishment be required, Dr. Paul of Camberwell would give every information.

LIFE-ASSURANCE AND DELIRIUM TREMENS.

SIR,—*Apropos* of life-assurance and delirium tremens, you may, perhaps, consider the following case worthy of insertion in the JOURNAL.

Twelve years ago, an upper workman was engaged in perfecting a piece of machinery at some iron-works. Becoming much knocked-up by long hours and anxiety, he, a rigid teetotaller, was persuaded to get in a nine-gallon cask of Dublin stout. He finished his job most successfully. Whether he quite finished the stout, I forget, but the result was a smart attack of delirium tremens. I saw him a few months ago. He is still a total abstainer, and a hale and hearty man.—Yours truly, CHARLES ORTON, M.D.

Nelson Place, Newcastle-under-Lyne.

SIR,—Dr. Fergusson, in his book on *[illegible]*, refers to some experiments made by Caspard and Fontana, which show that poisons, introduced into the system, find their way in very many cases to the liver, the channel, as it would seem, for their elimination from the body. Could you, or any of your readers, kindly tell me where I can find an account of these experiments in detail? I have unsuccessfully looked in the Catalogue of the College of Surgeons's library, where the only book by Fontana is that well known, referring to his experiments with the poison of vipers.—Faithfully yours,

Clapham Common, December [illegible], 1883. CHAS. R. FRANCIS.

CATHETER FEVER.

SIR,—As a brief commentary on a surgical question, propounded by an eminent physician, kindly allow a general practitioner to make a few observations, by relating a case which occurred in his own practice, and which he will take the liberty of calling "Catheter neglected Fever."

On March 28th, 1865, I was requested to go a few miles into the country to see a man who had been ill for nearly a month. To my surprise, on my arrival at his house, as he had been under medical treatment, I found him with a distended bladder, running over; in a state of restless delirium, with a pulse quick and small, and clammy perspiring skin; with an odour surrounding him to be felt, rather than smelt. In fact, he appeared to be at the point of dissolution. Not suspecting such a condition, I had gone without a catheter, and had to return home to fetch one; this took about an hour-and-a-half. Having obtained the necessary instrument, I had some difficulty in passing it, in consequence of his delirium; however, having succeeded, a large quantity of water was drawn off, and then I tied the instrument in the bladder (it was a silver-plated catheter), and plugged it with a quill; giving his wife directions to remove the plug every few hours, to allow any accumulated water to escape. The next day, he had decidedly improved. On the 29th, I removed the catheter; it required to be passed on the 30th and 31st, from which date he was able to empty his bladder without assistance, making a good recovery, and living in health and strength till April, 1881, when he died in the seventy-eighth year of his age, of cystitis and uræmia, not even now having the chance of dying of catheter fever, for his friends did not send for assistance till too late; he having, however, lived just over sixteen years from his first attack in good health.

As a general practitioner in the country, and, of course, therefore, an ignoramus, perhaps it may be permitted me to hint—just to hint an opinion—that Sir A. Clark has discovered what may be called a "mare's nest, quite empty;" and that Sir H. Thompson and other gentlemen have only been too polite to say so plainly; and, if allowed, I would suggest the name "Catheter-neglected Fever," as more appropriate than "Catheter-Fever," being more likely to have the effect of directing attention to the danger of neglecting proper treatment till too late.—I am, sir, yours truly,

JOHN GABB, M.R.C.S.E., etc.

PSORIASIS PALMARIS SYPHILITICA.

SIR,—In reply to the question of "M.B., C.M.," the treatment depends very much upon the age, so to speak, of the disease. This eruption will frequently show itself in quite the early stages of the disease, co-existent with other papular or squamous eruptions, and then requires a treatment similar to that followed by your questioner; but if this eruption appears at a later period, when it is probably the only visible manifestation of disease, the treatment will resolve itself into tonics, Donovan's solution, abstinence from alcohol, and locally chrysophanic acid ointments, or red iodide of mercury ointment.

If "M.B., C.M.," will give ten minim doses of Donovan's solution ter. die, and an ointment, ten or fifteen grains to the ounce, of either chrysophanic acid, or red iodide of mercury in vaseline, I think he will be pleased with the result.—I remain, faithfully yours,

G. HOULTON BISHOP.

11 and 12, Clement's Lane, London, January 2nd, 1884.

SIR,—In answer to the questions of "M.B., C.M.," in your issue of 29th ult., I beg to say that I have been getting very satisfactory results lately in cases of above affection from the local application of oil of cade, coupled with the internal administration of arsenic and iodide of potassium.

Blackpool. GEO. C. KINGSBURY, M.A., M.D.

ALKARAM.

IN reply to Mr. Jeffries of Chesterfield, Mr. Francis Toulmin (Upper Clapton) writes: The following is the formula I have used. I cannot recollect where I obtained it; but I have had it frequently prepared when I had a surgery. ℞ Acid carbolic. ♏ viij; ammon. sesquicarbon. ʒij; pulv. carbonis ligni. ℥ij; olei lavanduræ ♏ vj; tincturæ benzoine comp. ℥j; liq. ammon. fort. q. s. Misce bene.

HOUSEMAID'S KNEE.

SIR,—I was recently consulted for the above complaint, by a young woman, who stated that the swelling, which was very considerable, but free from pain, had come on in two days. The size of the bursa (the lower one) was such as to allow but very slight flexure of the knee, the tumour completely overlapping the patella on all sides. There were no symptoms of inflammation, even rough manipulation failing to produce pain. I emptied the sac of about four ounces of clear mucilaginous fluid, by means of a small incision with a tenotome, in the lower centre; and the firm application of a roller round the knee, at first above and below, and gradually surrounding the opening, over which I applied a pad of lint, and bound up the whole securely. In three days, notwithstanding this pressure, the bursa had filled again, and, on the fourth, was as large and painless as before. I now determined to set up inflammation in the sac, and bring about adhesion of its walls, by introducing a seton, which I easily accomplished by means of two small incisions with the tenotome, drawing six threads through them with an eyed probe, knotting them together in front. The seton, which was drawn through every day, and had a pad outside, tightly bandaged down, produced the desired pus, with very little pain, and, at the end of a week, I was enabled to withdraw it, to find the bursa completely solidified. I had ordered the girl to continue her daily household duties, except if attacked by severe pain, which never occurred.

I record the case, simple as it is, on account of never having met with a "housemaid's knee" so large, so quickly formed, and so free from inflammation; as the treatment (well adapted to ganglion) would have probably been tried by any of your readers.—Yours truly,

Lamberhurst, Kent. JOHN J. MARSHALL, L.R.C.S.I., etc.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. Ernest Lane, London; Dr. Herman, London; Professor W. H. Flower, London; Dr. Murphy, Sunderland; Mr. T. M. Stone, London; Professor Corfield, London; Dr. McBride, Edinburgh; Dr. C. E. Glascott, Manchester; Dr. Arthur H. Benson, Dublin; M.K.Q.C.P.I.; Mr. Alfred Thomas, St. Helen's; Mr. Shirley F. Murphy, London; Dr. Hare, London; Messrs. Grindlay and Co., London; Mr. De Vere Hunt, Bolton; Dr. J. W. Langmore, London; Mr. J. F. Herring, Builth; Mr. E. Hudson, London; Mr. J. Fletcher, London; Dr. A. Emrys-Jones, Manchester; Mr. W. W. Reeves, London; Mr. B. E. Case, London; Mr. R. M. Boodle, Cirencester; Dr. G. H. Savage, London; Mr. A. Lofthouse, Hemel Hempstead; Mr. E. R Robson, London; Dr. R. W. Batten, Gloucester; Mr. R. Clifton Bell, East Molesey; Mr. J. Dawson, Worthing; Mr. Watson Cheyne, London; F. W. P. J.; Mr. J. Furley, London; Mr. Dalby, London; Mr. Edward Pocknell, London; Mr. S. H. Lindeman, Lynn; Dr. A. Hill, Birmingham; Mr. H. B. Runnalls, Saltash; Mr. F. J. Hart, Much Wenlock; Dr. C. R. Bree, Long Melford, Suffolk; Mr. J. Hardie, Manchester; Mr. E. Hollbrook, Hendon; Mr. J. Howard Mummery, London; The Secretary of the Odontological Society; Mr. Henry Waite, Leeds; Mr. J. D. McCaw, Portglenone; Dr. G. H. Hume, Newcastle-on-Tyne; The Honorary Secretaries of the Epidemiological Society; Dr. D. Adams, London; Mr. A. H. Gordon, Liverpool; Dr. Bond, Gloucester; Mr. I. Vesey Fitzgerald, London; Mr. G. F. Price Pizey, Clevedon; Mr. G. E. Williamson, Newcastle-on-Tyne; Mr. John Clare, Hanley; Mr. F. B. J. Baldwin, Rotherham; Dr. Wilson, London; Mr. H. Davis, Tuam; Dr. W. Newman, Stamford; Mr. J. W. Taylor, Birmingham; Dr. Sieveking, London; Mr. Harold Hendley, London; Dr. Vickeys, Liège; The Rev. Samuel Haughton, Dublin; "Justice"; Dr. Murrell, London; Mr. J. Bovell Johnson, London; Mr. George Rigden, Canterbury; Dr. C. R. Francis, London; Dr. Henry O. Marcy, Boston; Mr. Clark Bell, New York; Mr. John Gabb, Bewdley; Dr. Sawyer, Birmingham; Mr. S. L. Macartney, Worthing; Dr. Thomas Oliver, Newcastle-on-Tyne; Mr. J. W. Holckmann, London; Dr. Whitla, Belfast; Mr. A. Johnston, Ambleside; Mr. H. E. Spencer, York; Mr. R. H. Johnston, Bungay; Mr. A. L. Barrow, Manchester; Mr. E. B. Gray, Oxford; Mr. Wheelhouse, Leeds; Dr. J. W. Langmore, London; Dr. Dabbs, Shanklin; Mr. A. G. Bateman, London; Mr. J. B. Liddell, Durmere, Ross-shire; Mr. T. M. Wills, Bootle, Liverpool; The Secretary of the British Guiana Branch; "N."; Mr. G. A. D. MacRay, Greenock; Mr. F. A. Eaton, London; Dr. C. Theodore Williams, Milan; Dr. Collie, Homerton; Mr. F. K. Pigott, Shrewsbury; Dr. Rowlass, Paris; Mr. William Donovan, Whitwick, Leicester; Messrs. Cassell, Petter, and Co., London; Mr. C. Vincent Cotterell, London; Mr. Pietro Michelli, London; Mr. George Pick, Cambridge; Mr. Alfred A. Hayes, Benmahin, co. Waterford; Dr. Bampton, Plymouth; Dr. Broadbent, London; Dr. Sutherland, London; Mr. G. C. Jackson, London; Mr. James Startin, London; Mr. C. H. Welch, Brighton; Mr. George Harrison, Chester; Dr. Barnes, London; Our Dublin Correspondent; The Secretary of the Hospital Association; Mr. Wickham Barnes, London; Dr. Norman Kerr, London; Mr. H. Chester Nance, Manchester; Mr. R. Holyoake, London; Dr. Goldie, Leeds; Dr. Sidney Coupland, London; Mr. William Legge, Derby; Dr. G. C. Kingsbury, Blackpool; Mr. George Scudamore, London; Esprit de Corps; Dr. J. Campbell Maclean, Swindon; Mr. J. Hodgkins, Radcliffe; Dr. Fairlie Clarke, Southborough; Sir John Bennett, London; Dr. Robertson, Kimberley; Mrs. A. McCaw, Surbiton Hill Park; Mr. G. Houlton Bishop, London; The Honorary Secretary of the Ophthalmological Society; Dr. Hare, London, etc.

BOOKS, ETC., RECEIVED.

The Physiological Factor in Diagnosis; a Work for young Practitioners. By J. Milner Fothergill, M.D. London: Baillière, Tindall and Cox. 1883.

The Field of Disease: A Book of Preventive Medicine. By B. W. Richardson, M.D., LL.D., F.R.S. London: Macmillan and Co. 1883.

Wiesen as a Health Resort in Early Phthisis; With Directions for Clothing, Diet, and Exercise in the Swiss Alps During Winter. By A. T. W. Wise, M.D. London: Baillière, Tindall, and Cox. 1883.

Plant Analysis, Qualitative and Quantitative. By G. Dragendorff, M.D. Translated from the German. By Henry C. Greenish, F.I.C. London: Baillière, Tindall and Cox. 1883.

A Pocket-Book of Physical Diagnosis of the Heart and the Lungs for the Student and the Physician. By Edward T. Bruen. Second edition revised, with additional illustrations. Philadelphia: P. Blakiston, Son and Co. 1883.

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CLINICAL LECTURE
ON
A CASE OF PHTHISIS TREATED BY ANTISEPTIC INHALATIONS.

By I. BURNEY YEO, M.D., F.R.C.P.,
Physician to King's College Hospital.

THERE is a little patient of mine in the Twining ward, who is about to leave the hospital, and there are some interesting points in her case to which I wish to call your attention before she goes. Her case will also serve as a text for some further observations on the antiseptic treatment of phthisis, which I am glad to have an opportunity of putting before you.

During the past year, several patients with phthisis have been received into the wards of this hospital, and several have been treated as out-patients, in whose cases the more or less continuous use of antiseptic inhalations has formed a principal part of the treatment. Most of these cases, as some of you have been able to observe for yourselves, have derived great benefit from this mode of treatment, and many of them have mended in quite a remarkable manner. A month or six weeks ago I could have shown you several cases where this disease had been arrested in its course, and the patients restored to comparative health; but when this occurs amongst persons of the class from which hospital-patients come, they naturally desire to return to their several occupations, and so we often lose sight of them.[1]

But it so happens that we have been able to keep this little girl almost constantly under observation in the hospital for nearly a year, and we have watched the lung-disease both through its development as well as its arrest and decline. This patient, who is now thirteen years of age, first appeared as an out-patient about a year ago (June, 1882).

She then complained chiefly of diarrhœa and abdominal pain—two symptoms from which she has continued to suffer, more or less, ever since; much less, however, latterly. She was also said, at that time, to have a slight cough, to have lost her appetite, and to be suffering from langour, sleepiness, and frequent perspirations. The persistence of the diarrhœa and the abdominal pain induced Mr. St. Clair Thompson, who had been seeing her, to call my attention to the case. I pointed out, at the time, the well marked phthisical type this girl presented; red hair in profusion, large grey eyes with long lashes, a bright clear complexion readily flushing, with somewhat clubbed fingers and incurved nails.

The tongue was clean, and there was no sign of primary digestive disturbance, no history of improper feeding; but their was almost constant pain in the centre of the abdomen, with three or four loose stools daily. The pulse was quickened, and the temperature in the axilla 100.6°. There were no signs whatever at that time of disease within the chest, which was very carefully examined by Mr. St. Clair Thompson, with whose skill as a clinical observer you are well acquainted, and by myself. I observed to Mr. Thompson at the time, that it appeared very like a case of chronic intestinal tuberculosis (there was some tenderness on pressure over the umbilical region), and that, judging from the girl's personal appearance, I thought it extremely likely that she would develop lung-mischief later on. This was at the end of June, 1882.

I did not see her again till after the vacation—viz., in October—when Mr. Thompson again called my attention to the case, and reminded me of what I had predicted in June, which had now actually taken place. She was still complaining of diarrhœa and abdominal pain. She had a pulse of 124, and a temperature of 101°. On examining the chest, we now found well-marked evidences of infiltration of the apex of the right lung. There were slight flattening and diminished movement in the infraclavicular region on the right side; the percussion-note was decidedly dull from the clavicle to the upper border of the second rib; the respiration and voice were bronchial, and moist crackling *râles* were heard at the end of inspiration; and vocal fremitus was increased. We admitted her into the hospital, as I thought the case an interesting one to watch—to observe the course of the intestinal and pulmonary lesions.

In a young girl of her age—the age of rapid growth—with a peculiarly florid complexion and red hair, with combined intestinal and pulmonary disease, we had most of the conditions which point to a probable rapid development of tubercular mischief.

We obtained from her mother the following family history. She stated that, when she was about the same age as our patient, she was threatened with consumption, and was treated with iodine and cod-liver oil, and recovered. Three brothers and sisters were living and healthy. Her father was living, but was intemperate. Three children were dead—one of "congestion of the lungs;" and two, in infancy, of hydrocephalus. Two cousins died of consumption.

For a great part of the time she was first in the hospital, her complaint of intestinal pain was almost constant, as was the diarrhœa, in spite of various remedies that were administered for their relief. For the first fortnight, we found the bowels acting sometimes four times, three times, twice, once a day; then, the next fortnight, three times, four, and even five times a day—loose greenish motions. Occasionally they would go twenty-four or thirty-six hours without any action. Bismuth, kino, hæmatoxylon, opium, creasote, perchloride of iron, etc., had little or no effect on the diarrhœa. Towards the end of her first stay in hospital, a few doses of sulphate of copper and opium certainly diminished the frequency of the action of the bowels; and quite recently we have succeeded in controlling it completely by small doses of nitrate of silver and opium, continued for about a fortnight.

The temperature during her first stay in the hospital was characteristic of tubercular disease; wide daily oscillations, commonly of over three degrees, often four, and sometimes five and six degrees. For example, on November 16th we find the morning temperature 97.4°, and the evening temperature 101.6°; the morning temperature the next day 97.6°. Then on November 20th we have, morning temperature 97.4°; evening temperature 101.6.° On the 25th of the same month we find, morning temperature, 96.8°, and evening temperature 103°! At this moment there was some acute swelling of a gland at the angle of the jaw. The next three days the temperature was subnormal. Then we observe the daily oscillation beginning again, and on December 4th the morning temperature was 97.8°, and the evening temperature 100.8°; and on December 7th, the morning temperature was 97.6°, and the evening temperature 102.3°. On the 18th we find a morning temperature of 98°, and an evening temperature of 102°; and this kind of daily oscillation went on, not always to the same extent, till the first week in January, when the temperature fell below normal, and remained so for the rest of her first stay in the hospital. Occasionally during this period, she would have profuse night-sweats.

During a greater part of this period she was using antiseptic inhalations, by means of the little inhalation-respirator, with which you are now familiar, and which I devised last year.[2]

We were soon gratified to observe that, notwithstanding the continuance of the intestinal pains and diarrhœa, and the maintenance of this sub-hectic temperature, the lung-mischief made no advance, and we soon were able to satisfy ourselves that its progress was arrested.

She was discharged on January 10th, 1882, with the "physical signs of lung-mischief much improved." There was some dulness over the right apex in front, with bronchial voice and breath-sounds; but the faint crepitant *râles* had disappeared; the area of dulness was diminished. The intestinal pains continued, but the relaxation of the bowels had greatly diminished. She continued the inhalations for several weeks as an out-patient, and improved considerably. She went to Dover for a few weeks, continuing the inhalations; and on her return was readmitted, on April 6th, for the purpose of still keeping her under observation, and maintaining the treatment.

Mr. St. Clair Thompson made the following note of her condition on readmission, and I am glad to have this opportunity of thanking him for the great interest, care, and skill, with which he has carried out this mode of treatment in many cases in the hospital during the past year.

"Has gained considerably in weight; looks well nourished, florid, clear skin; feels very well, and complains only of slight, dry cough and stomach-ache; has spat up a little blood occasionally. Chest-expansion good, no apparent flattening; slightly diminished expansion, dulness and tubular respiration under right clavicle: no moist sound on coughing. Cough very slight; never any expectoration; no night-sweats; fair appetite."

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[1] One of these patients, who presented signs of a considerable diffused infiltration in the right lung, with subcrepitant *râles* nearly all over the back on that side, and bacilli in the sputa, has reappeared this afternoon after a few weeks spent in a convalescent home, to say that he is about to return to his occupation as a "'bus conductor." He had been treated with antiseptic inhalations in the hospital for three or four months with great benefit.

[2] These are made by Messrs. Coxeter, for [illegible] [illegible] Churchill.

Since she has been in the hospital this second time she has had no return of fever; her temperature has been normal; once only the diarrhœa and abdominal pains became troublesome, and the diarrhœa was arrested, as I have already said, by small doses of nitrate of silver and opium.

She is now to all appearance well. The lung-mishief is arrested for the time, though the physical signs of injury to lung-tissue at the right apex are obvious enough—*i. e.*, dulness, very slight retraction of the upper part of the subclavicular region, and blowing breath-sounds. The diarrhœa is no longer troublesome; but she has never been entirely free from some abdominal discomfort, though she makes no complaint of this unless questioned. There is, however, some tenderness on pressure in the umbilical region.

There is one feature in this case to which I wish to call your special attention. This patient has had *little or no cough, and never any expectoration*. She has occasionally spat a little blood, but never any mucous expectoration. We have, therefore, never been able to search for bacilli. Now, I have seen reason to believe that this is not a very unusual circumstance—viz., that tubercular infiltration begins and goes on in the apex of a lung without the development of any catarrhal symptoms; and that is one reason why the earliest stage of pulmonary phthisis is so frequently overlooked and neglected. This patient did not come to the hospital complaining of chest-symptoms, but of abdominal pain and diarrhœa. Cases such as these—which, I repeat, are not very rare—offer a striking reproof to that pathological doctrine which has referred cases of localised apical disease to the creeping on of a catarrhal inflammation from the air-passages into the air-cells. I have always felt that this "catarrhal" doctrine was inconsistent with the phenomena of the earliest stage of pulmonary phthisis, and I fear it has had much to do with preventing us from apprehending aright the true nature of this malady I have again and again been struck with the number of cases that come before us in which, on careful inquiry, we find that loss of health has long preceded any evidences of pulmonary catarrh; and I have again and again found considerable infiltrations of the upper parts of the lung without any catarrhal symptoms. I have often seen phthisis develop in a catarrhal lung, and I have seen catarrhal symptoms arise necessarily as a consequence of phthisical infiltration and injury to lung-tissue; but I have also often seen phthisical infiltration commence and advance to a certain extent without the appearance of any sign of catarrh of the air-passages, as in the case before us. In this case, which you have been able to watch for yourselves, which has been in the hospital since October last, there has never at any time been any catarrh of the air-passages, though the evidence of lung-infiltration has been obvious to all who have seen the case; and, as the little patient is now before you, you can satisfy yourselves of that fact.

Now this is a case in which we have had the advantage of being able to deal with the pulmonary lesion almost from the moment of its onset, and the result is before you. But it is not only in the early stage of phthisis that the value of antiseptic inhalations is so striking; they will be found of use in every stage of that disease, and as palliatives, most remarkably so in advanced cases. Let me call your attention to a case of this advanced kind which was under my care in this hospital at the same time as the patient of whom I have just been speaking. In this case, antiseptic treatment modified the course of the disease in a most striking manner, and produced a state of well-being and comfort in the patient, which was in great contrast with the vast amount of lung-mischief that existed.

This patient, a girl, fifteen years of age, was admitted into the hospital on the 5th of last October. Her personal appearance was that of what I have been accustomed to call the "refined" type of phthisis, in contradistinction to a more common type, the "coarse" type. I have again and again pointed out to you the frequency of the latter type; enormous projecting ears, coarse large features, abundant coarse hair, and not very shapely limbs, large hands and feet. This girl was of slight build, delicate refined features, small ears, large dark grey eyes, long eyelashes, small hands with rather long tapering fingers and filbert nails. Her family history was significant; she had lost her father at thirty-two years of age of phthisis, and she had lost three brothers and one sister of the same disease. She had been complaining of a cough for two years, and had been losing flesh for a year. On her admission she was very ill, and complained of constant cough, dyspnœa, emaciation, loss of appetite, and night-sweats. Evening temperature 102°; morning, 99°. Rapid pulse and respirations; tongue coated. She was suffering also from diarrhœa. Physical examination revealed the existence of extensive infiltration and disorganisation of both lungs.

On the right side, there was dulness in front to the lower border of the third rib, with moist clicks at the end of inspiration, and tubular respiration over the whole of the upper lobe behind.

On the left side, the disease was much more advanced. There was dulness all over the upper lobe in front, with cavernous respiration, and moist gurgling *râles*. Behind, there were cavernous breathing and gurgling above the spine of the scapula, and blowing respiration and crepitant *râles* all over the lower part of the lung.

Her treatment consisted in the almost continuous use of an inhalation, at first, of eucalyptol and spirits of chloroform, subsequently of creasote and spirits of chloroform. She also had a mixture containing two minims of creasote, and two grains of quinine, with glycerine and mucilage three times a day. After about three weeks in the hospital, the improvement in her symptoms and general condition was remarkable, while the physical signs remained much the same. The night-sweats had disappeared, the appetite was completely restored, the bowels were quiet, and the cough very much better. After a few more weeks of this treatment, she felt so well, that she begged to be allowed to return to her home, which was a comfortable one. Now, I do not think any one, nurses as well as doctors, who saw this girl when she came into the hospital, thought she would leave it alive. She appeared to be sinking from rapidly advancing disorganisation of the lungs, and attendant constitutional disturbances. The effect of the antiseptic treatment in this case was not to cure the disease, or to restore the destroyed and broken down lung-tissue. To perform what, to our constant experience, seems impossible, is to perform a miracle, and we do not claim miraculous virtues for antiseptic inhalations. But what I claim for them, in this case, is, that they not only prolonged life, but that they quieted, in a remarkable way, the often most distressing advanced stage of this malady. By allaying all the most distressing symptoms, this patient's condition, which at the beginning of the treatment was a very miserable one, became a comfortable one. You might have seen her going about the ward quite cheerful and happy.

Now, this quieting, ameliorating effect of antiseptic inhalations in advanced stages of this malady has been noticed by many observers, and it is largely dwelt upon by Professor Oertel in his recent work on *Respiratory Therapeutics*.

Two objections have been made to the use of antiseptic inhalations, which are in singular opposition one to the other.

The first is, that the vapours given off from the fluid which we drop on the sponge of the respirator are so strong and irritating, that they excite inflammation of the pulmonary tissues, and thus do injury; indeed, I have seen the antiseptic treatment of phthisis referred to in a medical journal as "homicidal."

The other objection does not accuse of homicide, but is content with pointing out that we are very foolish people to imagine that any useful or appreciable amount of our antiseptic substances reaches the lung at all! I do not know which of these objections is least in accordance with experience.

With regard to the first objection, I can state most positively that I have never seen any symptoms of irritation set up by antiseptic inhalations when properly applied. With sensitive persons, it is desirable to begin by at first dropping a very few drops of the inhalent on to the sponge, and slowly increasing the quantity; by that means, you will avoid all risk of irritation.

The second objection scarcely needs answering at all; to some extent, it is a resurrection of the old dispute as to the use of topical remedies (in the form of vapours and sprays) to the respiratory surface, which was agitated fiercely many years ago, and the affirmative view thoroughly established by most elaborate and careful experiments by a number of observers in every country in Europe. The dispute and its results are fully related by Oertel in the work already referred to, and also by Dr. Solis Cohen of Philadelphia, in his work *On Inhalations*.

I thought it had been pretty generally known that, by the combined use of dry inhalations and inhalations of the steam-spray, symptoms of carbolic acid intoxication had been produced.

But there is an irritation in the minds of some with regard to the use of these inhalations, which it is difficult to understand. I hear of patients being "forbidden" to use them! Another curious circumstance is that this "irritation" only refers to their use in phthisis. I have never heard any one dispute their value, their very great value, in cases of putrid bronchitis, bronchorrhœa, and bronchiectatic dilatation. Now, in cases of advanced phthisis, there are many conditions existing in the lungs and air-passages absolutely identical with those that occur in the diseases I have just named, and for the control of which antiseptic inhalations afford the most reliable therapeutic resource.

In conclusion, let me advise you, above all things, to keep your minds free from prejudice in such matters; and, when you hear any method of treatment, which has been tested by experience, assailed by arguments which are absolutely inconsistent with one another, let me, slightly altering the scriptural injunction, say, "Go thou and do *otherwise*."*

MALIGNANT TUMOURS AND PARASITISM.

By HENRY T. BUTLIN, F.R.C.S.,
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AT a meeting of the Pathological Society, I expressed the opinion that, not improbably, many of the malignant tumours are due to the presence of micro-organisms; in other words, that malignant tumours are of parasitic origin. The theory of parasitism, applied to tumours, has during centuries been more or less popular with surgeons; for in no other way can some of the most complicated processes of malignant tumours be so well explained, as by assuming that the tumours or their elements are parasitic. But of late years the parasitic theory has been discredited by the discovery that the elements of even the most malignant tumours are derived more or less directly from the natural tissues of the body, and that they differ only in degree, and, perhaps, in certain properties which they have acquired from the natural elements. It is quite clear, therefore, that the view, formerly maintained, that malignant tumours are actually parasites is incorrect. But the recent discoveries of micro-organisms, and of the part they play in relation to certain diseases, have led me to consider whether the theory of parasitism may not again be applied to malignant tumours, with this difference, that the tumours are no longer now conceived to be the parasites, but to contain them. I am perfectly aware that all the evidence which can at present be adduced is only indirect or circumstantial; for, so far as I am aware, no parasites have yet been proved to exist in the malignant tumours of the human subject. But there are two, if not three, directions in which circumstantial evidence may be employed.

First, there is the resemblance of the processes of malignant tumours to those of certain diseases which are due, or are reputed to be due, to micro-organisms.

Thus, the group of infection-tumours,[1] which have lately been attributed to the action of micro-organisms, contains examples of growth which resemble in their processes many of the malignant tumours. Of these diseases, tubercle is so closely allied, in some of its important properties, to sarcoma and carcinoma, that it is difficult to discover any essential difference between many cases of tubercle and many cases of sarcoma and carcinoma originating in the same part of the body. Virchow, in a masterly summary of the characters of tubercle,[2] has admitted this similarity, and has expressed the opinion that tuberculosis is a malignant tumour-disease. Infiltration of surrounding parts, affection of the neighbouring lymphatic glands, dissemination in other organs and tissues, are the characters which are common to malignant tumours and tubercle. Certainly, the small size of tuberculous tumours, the frequency with which they are associated with inflammation, and their tendency to caseation, distinguish most cases of tubercle from most cases of malignant tumour. But large tuberculous tumours, with which neither inflammation nor caseation is associated, are not by any means unknown. During the past few years, actinomycosis,[3] which was formerly regarded as a sarcomatous disease, has been added to the number of the infection-tumours, chiefly, if not solely, on account of the discovery in the large tumour-masses of what appears to be a micro-organism. Until this discovery, actinomycosis appeared to be a sarcomatous disease, as surely as any other well recognised sarcoma of the lower animals.

Second, in order to explain the glandular affection and dissemination of malignant tumours, the presence of an infective agent has been assumed by many pathologists. This agent has been supposed to be cells, or nuclei of cells, derived from the primary growth. It has been thought to be a fluid; and more than once, of late years, the term seminium has been employed to denote this unknown infective agent. Many reasons render it improbable that the infective agent, or seminium, is, in all instances at least cellular: the large size of the cells in some carcinomata, for example; and the fact that neither cells nor nuclei, both of which are easily recognisable, are discovered in the blood or lymph. Reasons equally strong may be adduced against the theory that the infective agent is a cancerous fluid; among them are the large dilution to which such a fluid would be subjected, and the probability that general dissemination would be produced by a cancerous fluid quite as often and as early as glandular affection.

Evidence has of late been forthcoming which leads to the belief that the infective agent or seminium is, perhaps, molecular or granular. Clauzel[4] has shown that blackish and brown granules occur in the blood, the urine, and the vomit, of persons who are suffering from disseminated melanotic cancer. These granules are found in the colourless corpuscles and serum of the blood, and in epithelial cells in the vomit.

Chlorosis, or green cancer, a round-celled sarcoma, characterised by its green colour and rapid dissemination, is said to contain, either in or between the round cells of which the growths consist, large numbers of minute and highly refractile molecules.[5]

Gussenbauer,[6] in an excellent paper on glandular affection, attributes the infection of the tissues of the lymphatic glands to the presence of vast numbers of molecules derived from the primary disease. These molecules, according to the author, are easily distinguishable from the fatty molecules contained in cancer-cells. They are very small, rounded, and pale, and do not take up the staining fluid well. They are found in the lymph-paths, in the reticulum, in the lymph-cells, in endothelioid cells and muscle-cells. In glands secondarily affected by melanotic sarcoma, the molecules are, for the most part, of the typical melanotic colour. To Gussenbauer, these molecules are the fructifying germs (*befruchtende Keime*), the seminium of the carcinoma or sarcoma.

The molecules described by Clauzel, Hubert, and Gussenbauer may, of course, be merely products of degeneration of cells of the individual tumours, or of the tissues in which they grow. They appear, however, to differ in certain respects from the degeneration-products, as has been shown. Their abundance; their appearance, not only in cells, but in other structures; their occurrence in the fluids during the dissemination of melanosis, render it not improbable that they are in some way connected with the dissemination, or are, indeed, the means by which the disease is disseminated through the body. The size and shape of the molecules induce one to advance one step further, and to wonder whether they are the individuals, or, perhaps, the spores, of a tumour-micro-organism. The manner in which they penetrate into the interior of cells and other solid structures favours this view. And the colour of the tumours in chlorosis and melanosis may be, perhaps, explained on this hypothesis better than on any other, for the colour-producing properties of certain of the micro-organisms are now well-known.

Third, certain circumstances relating to the localities in which malignant disease is prevalent, may perhaps have some bearing on this question.

Mr. Haviland[7] has shown that the mortality from cancer is highest in those districts which are high and dry, and geologically composed of non-retentive soils.

In his *Statistische Mittheilungen* [illegible] (Breslau, 1879), Dr. Arthur Henry, speaking of the endemic and telluric conditions which appear to influence the occurrence of cancer of the breast in the region around Breslau, says that it is a striking circumstance that in the Upper Silesian mountain-works the disease is exceedingly rare.

A still more singular circumstance has lately been noted by Dr Hesse, who relates that the men who work in the cobalt-mines of Schneeberg are subject to lympho-sarcoma affecting primarily the lungs. The disease attacks men who have been working in the pits for a certain number of years, and few escape when the term of years has been reached. The persons, on the other hand, who reside in the neighbourhood of the pits, but are not employed in them, are not more liable to primary malignant disease of the lungs than are persons in mountain-districts generally. Dr. Hesse has described some cases of this disease, with details of the microscopical and other characters of the tumours. If, as I have assumed, malignant tumours depend on the presence and development of micro-organisms, the low, damp, close, and warm localities are those in which such organisms might fairly be expected to thrive, while the high, dry, and open situations are just as little favourable to their development. The cobalt-pits of Schneeberg, perhaps, contain a tumour-organism which enters the body with the air, but requires for its development and complete action frequent and long contact with the lung-tissue, with such favourable conditions as those afforded by advancing age, etc.

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* [illegible]

[1] [illegible]

[2] [illegible]

[3] [illegible]

[4] [illegible] 1874 [illegible]

[5] [illegible]

[6] [illegible] Band xxx, p. [illegible], Band xxxi [illegible]

[7] [illegible]

There are, of course, several important objections to the acceptance of the parasitic theory; and since the subject should be regarded in a thoroughly impartial manner, it is only fair to state the chief of those which have occurred to me. Some of them may be easily met, but others are exceedingly difficult to explain away.

In the first place, although scrapings and sections of tumours have been examined during half a century, no tumour-organism has yet been discovered, or at least recognised. To this the answer is, that all our knowledge of the relations of micro-organisms to disease is only a few years old, and that the micro-organisms of the infection-tumours have quite recently been discovered. Because tumour-organisms have not yet been discovered, it by no means follows that they do not exist.

Again, the growths produced by organisms at present known, exhibit for the most part a simple round celled or adenoid structure; and I am not aware of any micro-organism which produces new growths of epithelial structures, or new growths of so singular and complex a structure as that found in many specimens of malignant tumour. If these tumours be produced by the action of micro-organisms, the organisms must act not only upon tissues of many different kinds, but with an influence weakened by being shared with that exercised by the mother-tissue. To explain the resemblance of the secondary tumours to the primary growth, this same influence of the mother-tissue must be again invoked; the micro-organism excites the growth of a tumour, but becomes itself so far infected by the influence of the mother-tissue that, whatever tissues it afterwards affects, it is compelled to transform into a structure resembling that of the primary disease.

Malignant tumours are not, so far as we know, contagious or inoculable. But, in truth, all our experiments—and they are very few and incomplete, are far from conclusive on this point. The inoculability of tubercle has only lately and with difficulty been established; its power of infection or contagion has not yet been clearly proved. Nevertheless, we are gradually coming to believe that tubercle is due to the presence of a micro-organism. It is probable, if tumours be inoculable or contagious, they are so only under very peculiar and favourable circumstances.

The inheritance of malignant tumours can scarcely be explained on the assumption that they are due to parasites. The inheritance of malignant tumours is supported by evidence which, at first sight, seems incontrovertible, and by men of the first rank as thinkers in our profession. Certain doubts have, however, of late arisen regarding the influence of inheritance; and, if we exclude those cases in which cancer has attacked a large number of individuals of the same family, the general statistics of inheritance will not bear a minute scrutiny. On this subject, Mr. Haviland deserves attention.[9] He suggests that, if whole families were to migrate from the low-lying grounds in the proximity of rivers to high dry sites, we should not hear so much of the hereditary character of cancer. "We never," he says, "hear of ague being hereditary. Father, son, and grandson have ague one generation after another whilst living in an ill-drained fever-district; but send them to the hills, and their plague disappears; so may it be with the mother, daughter, and granddaughter afflicted in their lives with cancer, whilst living from generation to generation under the same climatic conditions, on the same geological site, and on the banks of the same seasonally flooded river."

Again, it may be objected that malignant tumours occur primarily in organs and tissues which are distant from any surface directly connected with the exterior; that, for instance, they grow deep down in the substance of the muscles, in the intermuscular septa, and in or upon the bones. There need, however, be no difficulty in comprehending that organisms, minute and active as the bacilli and bacteria, may be conveyed by the blood to any vascular tissue, and even traverse the structures between the vessels.

Among the facts most difficult or impossible to explain on the theory of parasitism, are the relations of malignant tumours to age. There are, of course, many reasons why certain organs and tissues should be more subject to disease during adult life than during childhood: the organs of generation, for example. But there is no conceivable reason why the epithelium of all parts should be almost exempt from cancerous disease in persons under twenty-seven or thirty years of age, and no reason why the connective tissue of the testis should be more subject to sarcoma in children under ten and in adults over thirty-five than at any other period of life. Neither parasitism, nor any other commonly accepted theory of malignant disease, offers an explanation of these and similar strange features in the life-history of malignant tumours.

ON THE PRINCIPLES OF THE CONSTRUCTION OF CHAMBERS FOR INHALATION IN DISEASES OF THE LUNGS.

By ARTHUR HILL HASSALL, M.D.Lond.,
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THE comparative inefficiency in diseases of the lungs of the methods of inhalation now in use, by means of oral and oro-nasal inhalers, by the vapour of hot water and by steam and air sprays, renders it very desirable that other and better means of inhalation should be devised and employed.

It appears to me that the most effective and natural method of inhalation which can be adopted is by a chamber, the air of which is charged with the antiseptic or other medicament which it is desired to employ. So far as I am aware, no such chambers have yet been devised and constructed; the reason, no doubt, being the apparently insuperable difficulties which have hitherto been presumed to stand in the way. Attached to some few of our hospitals there are, indeed, what are called "inhalation-chambers," but these can scarcely be said to deserve the name; they are, for the most part, simply chambers supplied with steam, in which a number of persons are enabled to inhale medicated steam-sprays at the same time and in the same apartment.

The following are the conditions and principles of the construction of a true inhalation-chamber. First, the dimensions of the chamber should be moderate, and in some cases even small; and this because of the difficulty there would be in charging with medicaments a very large space, and also on account of the great quantity of the drugs which would be required for the purpose. Secondly, the fireplace to the chamber should be closed, and the inlets and outlets to it should be only those of ordinary and moderately well-fitting doors and windows; and this because, if the air of the room were rapidly changed, of the difficulty in keeping the air charged to any given extent, and of the great waste of material which would take place. It will be well, however, that every chamber should be provided with one or two small outlets, to enable those inhaling to get rid of the used or foul air emitted during expiration; the air of the chamber itself being thereby maintained in a state of greater purity. For this purpose, nothing more would be necessary than a piece of elastic tubing furnished with a covering for the nose and mouth. Thirdly, the temperature of the room should be kept at about 19° Centigrade = 66° Fahrenheit; this regulation of the temperature is requisite, in order that the volatilisation of the substances used should proceed at one fairly uniform rate. Fourthly, the air of the room should be somewhat humid, the degree of humidity being ascertained by means of wet and dry bulb thermometers; a moderate but not too great an amount of moisture in the room is desirable, since it promotes evaporation.

I now come to consider the means whereby the air of the chamber is to be charged with suitable medicaments; this hitherto has been the one great difficulty, the solution of which, beyond the employment of large steam or air sprays, so far as I know, has not yet been rationally attempted; at all events, it has not been successfully carried out.

It occurred to me that, if any substance possessing even a feeble volatility at ordinary temperatures were dissolved and spread over a very large surface, the amount of the substance which would become volatilised would be in proportion to the quantity taken, the extent of the surface exposed, the temperature of the chamber, and the amount of the moisture therein contained.

To test this point, 50 grammes of carbolic acid (= 771 grains) were dissolved in water, two Turkish towels being saturated with the solution and exposed to the air of a room at a temperature of

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[9] Loc. cit.

22° C., equal to 72° F., the room also containing rather much aqueous vapour.

At the end of two hours, a portion of the air of the room was, by means of a large syringe, drawn through a solution of alcohol, a few drops of which, on evaporation, gave with bromine water decided evidences of the presence of carbolic acid; 13 cubic centimètres of the vapour or moisture which had settled on the windows (= 200 grains) were collected, and were found to contain 0.029 gramme of the acid, equal to 0.447, or nearly half a grain.

After the lapse of forty-eight hours, the towels had become quite dry, and I was not a little surprised, on examining them, to find that they did not possess the slightest smell or taste of the carbolic acid. One of the towels was then tested, and found to contain only 0.07 gramme of the acid, equal to 1.08 grain; that is to say, the whole of the carbolic acid employed, namely, 771 grains, had disappeared, with the exception of the small quantity above referred to.

This result appeared to me so surprising, although I was prepared for a considerable reduction in the amount of the acid taken, that I thought the towels must have been inadvertently washed. I, therefore, repeated the experiment in a more precise manner. I took one of the Turkish towels only. It measured 48 by 18 inches, thus presenting a surface of 1,728 square inches, and it was saturated with an aqueous solution, containing 25 grammes, or 385 grains, of carbolic acid. This experiment was commenced at 10 A.M., the towel being moistened, in the course of the day, once or twice with a little water. At 10 A.M. the next day the towel was still somewhat wet, but at 4 P.M. it was only just damp. It was then tested for the acid, 0.09 gramme only being obtained, equal to 1.39 grain. Thus, in the space of thirty hours, the whole of the acid used, 385 grains, had practically disappeared.

This result is of the highest importance, as it places in our hands the means of charging inhalation-chambers, to almost any desired extent, with all those medicinal substances which possess even a feeble volatility at the ordinary temperature of the air.

The following experiments were also made with carbolic acid. Turkish towels were cut into pieces, measuring eighteen and a half inches in one direction, and nine and a half inches in the other. Each of these was charged with 5 grammes (77 grains) of carbolic acid, dissolved in about 100 cubic centimètres of water, each piece being tested at intervals of four hours.

There were recovered out of the five grammes, or 77 grains, taken:

After	4	hours	2.77	grammes		12.66	grains
,,	8	,,	1.82	,,	=	28.03	,,
,,	12	,,		,,	=		,,
,,	16	,,	0.49	,,	=	7.55	,,
,,	20	,,	0.20	,,	=	3.08	,,

To show that the principle holds good in other cases, I will now state the results of a few further experiments.

Portions of Turkish towels were taken, 9½ by 4½ inches, and were each charged with 1.25 gramme of creasote, equal to 19 grains; in one case, the creasote was placed on the cloth without any addition; in another, water was used; and in a third case, the creasote was dissolved in alcohol. After four hours, the cloths were examined. From that with creasote only, 0.91 gramme was recovered; from that with creasote and water, 0.41; and from that with the alcohol, 0.39 gramme: amounts which correspond with 14.01, 6.31, and 6.01 grains respectively. It will thus be seen, taking equal areas of the Turkish towels, that the loss of creasote at the end of the four hours was even greater than that of carbolic acid, both having been treated with water; the proportion recovered, in the one case, being 2.77 grammes, and in the other, 1.65 gramme, equal to 42.7 and 25.4 grains. The experiments also showed that the loss, as might have been anticipated, is much less when the creasote is simply sprinkled on the cloth, because in this case it is less diffused and covers a smaller surface. When alcohol is employed, the loss appears to be about the same as when water is used; although, of course, the towels, when moistened with alcohol, become dry in a much shorter time than with water.

In other corresponding experiments, in which the time allowed was twenty-four hours in place of four, the amounts of creasote recovered approximated to the quantities obtained after four hours; and this would appear to show that the loss is proportionately greater during the first few hours of its exposure; and that this should be so, will be readily understood when it is stated that creasote, unlike carbolic acid, is not a definite substance, but is made up of different compounds having different degrees of volatility.

The last experiments made were with thymol. Thymol possesses only very slight volatility at ordinary temperatures, and is nearly insoluble in water; so that, in the case of this antiseptic, it is necessary to use a solvent. This, in the experiments about to be described, was alcohol: 5 grammes of thymol, equal to 77 grains, dissolved in 80 cubic centimètres of spirits of wine, were spread over a piece of Turkish towel, 18½ by 9½ inches; and, after four hours, 3.44 grammes, equal to 52 grains of the thymol, were recovered. From another portion of Turkish towel of the same size, and containing the same amount of thymol, 1.70 gramme, equal to 26.27 grains, was obtained at the end of fifty hours.

These experiments show that the loss of thymol, so little volatile at ordinary temperatures, is very considerable; although the proportionate loss is much less than in the case of carbolic acid and creasote, still it is sufficiently great for practical purposes.

It is thus seen that the idea or principle upon which the foregoing experiments were founded was correctly conceived; but there is another principle which may be brought to bear on the subject of inhalation, and which, combined with the principle of evaporation over a large surface, is capable of furnishing results equally striking with those already narrated; and that is the principle of increasing the volatility of but little volatile substances by means of heat; that is to say, by a regulated temperature varying according to the volatility and properties of the substances employed.

The best and most practical method of applying this increased temperature is by means of hot water spread over a comparatively large surface. Owing, however, to the increase of volatility obtained by the augmentation of temperature, the extent of surface required will be very many times less than that which is necessary when Turkish towels or other suitable fabrics are used, while the time occupied will be proportionately reduced—two great advantages.

The effect of the combination of a somewhat large surface with increase of temperature is well illustrated by what takes place in the case of thymol. Forty grammes of thymol, equal to 616 grains, were melted in hot water in a dish having a superficies of 64 inches, the temperature being maintained at 72° C., equal to 161.6° Fahr. At the end of twelve hours, it was found that the whole of the thymol had disappeared—a substance which, as already remarked, possesses but little volatility at ordinary temperatures, and which, even when spread over the large surface of a Turkish towel, is far less volatile than carbolic acid, creasote, and a variety of other substances.

I have thus shown that, by the methods pointed out, the air of a chamber may be quickly charged with the most powerful antiseptic substances, and, indeed, with a great variety of other medicinal substances which possess even a very low degree of volatility at ordinary temperatures, and this to any extent required.

Such, then, are the general principles on which inhalation-chambers may be constructed. The practical details require to be further studied and worked out, and with this part of the subject I am still occupied. Very shortly I shall have completed, at San Remo, an inhalation-chamber on the principles here set forth.

I would point out, in conclusion, that the results recorded in the present communication are important, not only in their application to inhalation, but also to disinfection.

A DUTCH POISONER.—A married woman, called Van der Linden aged 45, mother of three children, is in custody at Leyden on a charge of having murdered sixteen persons within the past few years. Nearly all the victims were members of her family, whose lives she had insured in burial and life insurance companies, without their consent, with the intention of poisoning them, and receiving the money at their deaths. The crimes became known under the following circumstances. A family named Frankhuyzen, at Leyden, lost on one day the mother and a child of eight months. The father was also taken ill, and removed to a hospital. In each case there were symptoms of poisoning, and the examination of the bodies proved this to be the fact. It was ascertained that Mrs. Van der Linden came into the house of her relatives, and put poison in milk which was being made hot on the fire. After the death of the woman and her child, it was remembered that, during the last two or three years, a number of the members of the family had died under the same circumstances, and the bodies of two other children which had been exhumed showed traces of poison. A cousin of Mrs. Van der Linden, a soldier, whom she tried to poison fifteen months ago, is very ill, and Frankhuyzen is in great danger. The accused has confessed her guilt. Her husband is innocent. The prisoner has herself lost five children, and it is presumed that they have also been poisoned.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

PROCEEDINGS OF SECTIONS.

A CLASSIFICATION OF THE NEW GROWTHS OF THE URINARY SYSTEM (BLADDER, PROSTATE, AND KIDNEY).

Being an Introduction to a discussion in the Section of Pathology.

By F. T. PAUL, F.R.C.S.,
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THE amount of material bearing upon the varieties of new growths that has been investigated during recent years is enormous; and if we had an uniform nomenclature, and if investigators were not so liable to differ in their estimate of the material, there would be no difficulty in classifying the growths of any region of the body. But, as the nomenclature is of all things the most complicated, and as, even at the Pathological Society, it is found necessary to refer the description of at all an unusual tumour to the Morbid Growths Committee, it must be quite apparent that there is still plenty of work to be done in compiling a satisfactory classification of the tumours of any region. It occurred to me that, in furtherance of this object, we might draw upon the widespread fellowship of the British Medical Association, something after the manner adopted by the Collective Investigation Committee; and that, by collecting together all the material upon one subject that was to be found amongst us, I should be able to work it up into a representative report, having a special value, as in some sense directly emanating from the practical work of the Association.

The investigation of the new growths of the urinary system was selected, because they have recently attracted special interest, and because it was a subject that was particularly in need of a classification. To facilitate the work, a committee was appointed, consisting of Mr. Reginald Harrison, Mr. Rushton Parker, Dr. Alexander, and myself. We issued a circular, no doubt familiar to you all, asking for specimens of these growths. Our circular was very kindly responded to, and specimens sent by Drs. and Messrs. Sidney Coupland, Abercrombie, Bowlby, Eve, W. H. Day, Roger Williams, F. C. Turner, Stanley Boyd, Shattock, Horsley, Dawson Williams, and Goodhart, of London; Mr. Mayo Robson, of Leeds; Mr. Jordan Lloyd and Dr. Windle, of Birmingham; Messrs. A. H. Young and Pollard, of Manchester; Drs. Craigmile and Braidwood, of Liverpool; and Dr. William Osler, of Montreal. From these gentlemen, we received over a hundred specimens; but, as the classification must be based upon microscopical examination, we only accepted cases in which we could examine the sections ourselves, which reduced the number to 50. To these, there were added five cases furnished by Mr. Rushton Parker, and 20 cases by myself. We wish to express our indebtedness to these gentlemen in the fullest possible manner, as, without their help, the report would have fallen to the ground; and we have to specially thank Mr. Stanley Boyd for a large number of microscopical sections, and Mr. Horsley for the very valuable collection of specimens, which, through the courtesy of the authorities, he was enabled to bring from the museum of University College Hospital. The total number of 75 cases, although enough to form a basis upon which to found a classification, are by no means sufficient to bear final conclusions; and we can only regard this as a preliminary investigation, some parts of which are naturally much weaker than others; and, by continuing to work on the same lines, we hope to be able to test these weaker parts, and to bring the inquiry to a satisfactory issue in the course of another year.

The transition from a clinical to a pathological nomenclature for new growths is evidently a very difficult matter to be accomplished. Chemists passed from the old to the new notation with comparative facility, but they allowed no compromise. We, on the other hand, although usually avoiding recurrent fibroids and fibrocellulars, still freely admit scirrhus and encephaloid into our discussions; and speak of scirrhus of the breast, scirrhus of the pylorus, and scirrhus of the bladder, as though cancer of the breast, stomach, and bladder, had something more in common than the organs have themselves: whereas everything tends to show that each new growth has its own specific structure, dependent upon the part in which it originates; usually homologous with that part, but occasionally, through some developmental error, heterologous.

I have arranged a table, showing what I believe to be a fair statement of the classification of the new growths of the urinary system by our most respected writers. It only pretends to be approximately correct, for no two are fully agreed. The result is this:

Tumours of the Bladder. Fibrous and mucous polypi; sarcoma; villous tumour; scirrhous, encephaloid, and epithelial cancer.

Tumours of the Prostate. Hypertrophy; sarcoma; encephaloid, and scirrhous cancer.

Tumours of the Kidney. Cavernous tumours; cysts; sarcoma; encephaloid cancer.

On the other table is the classification adopted in our report.

Tumours of the Bladder.

Myoma	Intramural. Polypoid.
Fibroma	Intramural. Polypoid.
Myxoma	Intramural. Polypoid.
Sarcoma	Round-celled. Other varieties?
Papilloma (Villous tumour).	
Carcinoma	Epithelioma, with variable evolution of squamous cells. Colloid.
Cysts (Accidental).	

Tumours of the Prostate.

Myoma.	
Adenoma (Hypertrophy).	
Sarcoma	Round-celled. Spindle-celled. Lympho-sarcoma.
Carcinoma	Acinous. Tubular. Colloid.

Tumours of the Kidney.

Of Congenital Origin.		
Sarcoma	Round-celled. Fibro-sarcoma. Striped myo-sarcoma. Adeno-sarcoma.	
Dermoid tumours.		
Of Adult Origin.		
Cysts.		
Cavernous tumours.		
Sarcoma	(Round-celled). Other varieties?	
Adenoma	Cystic. Tubular.	
Carcinoma	(*a*) Pelvic-like bladder.	
	(*b*) Glandular	Cystic. Tubular.

Tubercular and syphilitic deposits are excluded, as not being new growths in the sense intended here.

Bladder. Myoma of the bladder is no doubt a very rare growth. We have not been sufficiently fortunate to meet with a specimen of it, although in a villous tumour we found the stalk to be largely composed of unstriped muscle-cells, their presence in such a position probably being sufficiently common, and corresponding to the muscularis mucosæ. We have only met with two specimens of myoma in similar parts elsewhere—one in the œsophagus, and one in the stomach. They were both discovered *post mortem* accidentally; and as it is probable that a similar growth in the bladder would be, like them, intramural, and give no sign of its presence, it might, even when it did occur, be passed over without notice.

Fibroma and myxoma are, in our experience, polypoid, though one may fairly assume that this need not always be the case. They are the recognised polypi of the bladder. Polypus is again a clinical term, which, when one intends to convey the nature of the growth, can only be used to indicate situation. It is difficult to draw the line between polypi and papillomata. The former may be regarded as a growth of the subepithelial connective tissue (except when adenoid); the latter as a villous growth, essentially epithelial. The one becoming malignant would be a sarcoma, the other an epithelioma. In the skin, polypi have their counterpart in the little pendulous fibro-fatty tumours, the fibro-vascular tumours of the labia, etc.; papillomata in warts. But varying somewhat between the two, we have condylomata, anatomically entirely of the wart-type, but in general appearance often polypoid. A true papilloma should involve only that portion of the subepithelial connective tissue, which is essential to the vitality of the epithelium, and which in a papillary surface is contained within the limits of the papillæ; while a polypus originates deeper down, and only distends these structures over its surface, or involves them in a secondary degree. A case of multiple growths in the bladder and vagina of a child, much of the nature of condylomata, was reported by Mr. Howard Marsh at the Pathological Society, with a histological account by Mr. Marcus Beck; and a somewhat similar case is exhibited by Mr. Horsley in the museum; but, apart from such unusual cases, the line cannot be too distinctly drawn between polypus, or, as we prefer to put it, polypoid-fibroma or myxoma, and papilloma. Only three specimens have been sent to us of these simple growths, for which we have to thank Messrs. Boyd and R. Williams. We do not positively accept more than two of these, as the base of the third is of too doubtful a character to pass for a perfectly simple growth. Both of them are chiefly composed of fully formed fibrous tissue; in the one delicate, like the normal submucous tissue of the bladder; in the other, more dense and nuclear, that is, more cicatricial in character. Both are highly vascular, and contain large tortuous arteries.

Sarcoma of the bladder is undoubtedly a very rare growth. Six specimens have been sent to us as such, but on the most careful examination we find great difficulty in accepting more than one. Two are without doubt simply unusually dense villous tumours, a condition which may be more easily mistaken for sarcoma than is generally supposed, especially if the section happen to be rather thick, and only the nuclei are brought out distinctly. Three others, showing marked similarity, were much more difficult to decide upon. They were all round-celled in character, with very free extravasation of blood. There appeared to be a slight homogeneous stroma between the cells, which were very irregular in size, some of the larger containing gigantic nuclei. In a corner of one of these sections was a distinct spot of bladder-epithelioma, not showing decided squamous evolution, but undoubted epithelial cells; and this, together with the marked epithelial character of the large scattered cells, leads us to believe that the sections from these three cases were taken from parts of soft rapidly growing epitheliomata, where the admixture of extravasated blood, and numerous embryonic cells, masked the true character of the growth. The remaining case, sent by Mr. Roger Williams, originated in a diverticulum; and, although unfortunately its minute structure is far from being decided, owing to the sections having been taken from a museum specimen, yet the general arrangement of the elements is so sarcoma-like, that we consider its designation as such to be correct. Sarcomata of the bladder are probably to be met with about as frequently as those of the alimentary canal.

The next variety of bladder-growth is papilloma; that is, the ordinary villous tumour. No one hesitates nowadays to regard villous tumour as a warty growth, luxuriant, as other warty growths are luxuriant on a moist surface, and occurring, as Mr. Shattock acutely observes, like other warty growths, round the orifices. But no one, unfortunately, appears to agree with us in strictly limiting the term papilloma to this. Generic terms always cause confusion; and a term which may be used indiscriminately to designate a fibrous polypus or a villous tumour, is a term that we are better without, unless it can be limited to one or the other. In skin-growths it generally is limited to hypertrophic growths of the papillæ, and is not applied to the common pedunculated growths. Why not let it have the same signification in the bladder? A papilloma may still be polypoid, as a condyloma often is; but whatever condition it attains, it has originated from a specific area, or usually specific areas, of epithelium, with its or their substratum of connective tissue. In its ultimate development, a papilloma may show a marked growth on the part of its stalk of connective-tissue, which, usually consisting of a highly vascular delicate connective tissue, may sometimes show a large development of non-striated muscular fibres, and the more the stalk is developed, the more villous is the tumour. On the other hand, its epithelium, always in numerous layers of the nature of normal bladder-epithelium, sometimes becomes very dense, giving the whole tumour a fleshy consistence, and obscuring its villous character. It is such tumours that are sometimes mistaken for sarcoma. In a case which I had with Dr. Alexander, we noticed that the villous growths, which were at first highly branched, became, after each removal, more fleshy in character, and when, after more than ten years of hospital-treatment, the patient died of uræmia, the papilloma, as papillomata will do in other parts, had undergone a malignant change, and was found to be infiltrating the bladder as a carcinoma. The growth, at the part I examined, showed no evolution of squamous cells, but that is not a constant condition in carcinoma of the bladder, nor, indeed, even in the skin. At the same time, this evolution of more or less squamous cells is probably constant in papilloma of the bladder, though, as the superficial stratum, they are very likely to be lost.

The only remaining growth of which we have any example is carcinoma. The remarkable analogy between the growths of the skin and those of the bladder is nowhere more striking than in carcinoma, and yet I believe that Gross was the first to point out, quite recently, that epithelioma was the usual variety of carcinoma of the bladder. We consider that it must be regarded as the only variety, but one that is subject to great variation, depending upon the extent to which squamous evolution is present. Following Continental writers, carcinoma without squamous evolution would probably be designated tubular bladder-epithelioma; following English writers, scirrhous carcinoma. To the latter term, however, we object, while admitting the fancied resemblance between some cancers of the bladder and some cancers of the breast. Of the six cases which we are able to submit to the meeting, three are from Mr. Boyd, one from Mr. Bowlby, one from Mr. Jordan Lloyd, and one from myself. Only four show squamous evolution, and only three well-marked "nest-cells," that is, of course, at the parts examined. In typical bladder-epithelioma, the growth is very characteristic, reproducing the large bladder-epithelium in an irregular manner that is very striking and beautiful. The "nest-cells," too, may attain a large size. These features are best shown in the sections from my own case.

Prostate.—In considering the tumours of the prostate, it has not been unusual to regard it as an organ allied to the uterus, and to point to the similar development of "fibroids" in each. As a matter of fact, however, this hypothetical analogy falls to the ground at once, for these common tumours of the prostate belong to a different period in the functional life of the organ, and have a different structure from those met with in the uterus. The prostate is essentially a secreting gland, and its new growths are allied to those of other secreting glands, perhaps particularly to those of the breast; for the structure of the prostate is extremely like that of the breast in its quiescent condition, except that the fibrous stroma of the latter in it is largely replaced by muscular tissue. But, while the common adeno-fibroma of the breast appear before functional activity, the adeno-myomata of the prostate belong entirely to later life. Hence, it is a mistake to suppose there can be any entire analogy between the new growths of two different organs.

Of growths of a simple tissue, myoma is the only one we have met with in the prostate; and for the only example present we are indebted to Mr. Spanton. In his case, he removed a mass, of the size of a large fist, from between the rectum and bladder. The patient subsequently died, and another mass of equal size was found in front of the bladder. It all grew from the prostate, was lobulated and encapsuled, and under the microscope was found to consist entirely of muscular fibres.[1]

Pure myomata may be more common than here appears, but we believe them to be rare. Adeno-myoma is the common prostatic growth. Since commencing the work, we have only examined seven cases, all from my own collection, and in each one a large amount of prostatic glandular tissue was present. These seven include all the ordinary forms of hypertrophy, some involving the whole organ equally, and some forming easily enucleated tumours, usually of the middle lobe. The latter are more glandular than the former, and answer more correctly to the designation of adenoma; while the former, if a line of distinction is to be drawn, must, as at present allowed, be regarded as prostatic hypertrophy. The extremely interesting question of the essential tissue in this compound growth requires a much more extended investigation for its solution. We are inclined to think that in all cases it is the gland-tissue and not the stroma, though it may prove to be the gland-tissue in the case of the encapsuled adenoid tumours, and the stroma in the general hypertrophy.

Sarcoma of the prostate is, probably, the most frequent form of malignant growth to which it is subject. It occurs both early and late in life, mostly the former. We have to acknowledge four cases —two from Dr. S. Coupland, one from Mr. Boyd, and one from myself. We class them as two round-celled sarcomata, one lympho-sarcoma, and one large celled spindle-celled sarcoma. One of the cases of round-celled sarcoma was sent to us as a medullary cancer by Dr. S. Coupland; and it is only after careful consideration, and on what we believe to be very just grounds, that we have undertaken to offer a different opinion from one so well qualified to judge correctly; but we are encouraged to adhere to our opinion, especially by the difficulty, which Dr. Coupland freely admits, in arriving at a conclusion. The growth was very rapid, very large, and occurred in a youth aged 19—certainly points in favour of sarcoma. Microscopically, it consists of rather small irregularly round cells, contained loosely in a wide trabecular framework of connective tissue, the trabeculæ being divided up by capillary vessels, here and there, passing across them; and the cells, adhering to these capillaries, and falling out in the spaces between them, give a false alveolar appearance to the growth, which allows of this difference of opinion. Dr. Coupland's sketch in the *Pathological Transactions* is perfectly honest, but we interpret its value differently. Mr. Boyd's case is also one of small round-celled sarcoma. Then comes Dr. Coupland's second case of lymphoma, or, as we call it, lympho-sarcoma. It seems pedantic to be so particular about terms; but, if a classification is to be of any good, there must not be two meanings for any designation used. Lymphoma removes the growth, strictly speaking, into a class of its own; while we only consider it as a variety of sarcoma, not more removed from the round-celled variety than is a spindle-celled growth. We quite go with Dr. Coupland in classing together all round-celled growths having a retiform stroma; but we class them as a variety of sarcoma; and some of the specimens in my own collection, which would ill bear the term of lymphoma, from the size and character of their cells, may yet be very reasonably classed as lympho-sarcoma, in the wider meaning of the term. Since examining this specimen, I have looked over my sections of normal prostate, without being able to find lymphoid tissue in man or monkey; but it is freely present in the prostate of the dog, which is a highly glandular organ, and contains but very little muscular tissue. It is very probable that careful section, in young subjects, will show lymphoid tissue to be normally present in the human prostate. Dr. Coupland has given a very truthful representation of this specimen also in the *Transactions* of the Pathological Society for 1877. The fourth case is one of my own, and has considerable interest, both on account of the rarity of large celled spindle-celled sarcomata, and also because it occurred in a man 58 years of age, and gave rise to secondary deposits in the glands and lungs. The growth was extremely soft, and malignant in appearance. Under the microscope, the cells were found to be very large and long, and to contain one or two large nuclei, in which the reticulum was particularly plain. The primary and secondary growths had all the same structure.

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[1] This interesting case is reported in the [illegible] vol. [illegible], 1882, p. [illegible]. The specimen has been presented by Mr. Spanton to the Museum of the Liverpool School of Medicine.

From such a wide difference in the variety of sarcoma met with in four cases, we should not be at all disposed to exclude any form as being even improbable.

Passing on to the carcinomata of the prostate, we think that they may be pretty distinctly classified as acinous, tubular, and colloid, accordingly as they assume, as in the breast, acinous, duct-like, or colloid characters. We must give up the terms scirrhous and encephaloid. They inevitably bring confusion with them; and, from the histological point of view, if they have any significance whatever, it is frequently a wrong one. Of acinous carcinoma, we have four cases: two from Mr. Rushton Parker, one from Dr. Craigmile, and one from my collection. They are all like acinous cancer of the breast—the so-called scirrhus mammæ—and, like it, differ considerably from each other in the size of the cells, and of the groups in which they are arranged. The alveolar stroma also varies in the same way, and is liable to the special distinction of muscular tissue, derived from the original prostatic stroma.

Of tubular cancer, Mr. Parker sent us one specimen. We do not wish this to be regarded as an absolute variety; for, wherever one draws this distinction, as in cancer of the breast, skin, bladder, liver, etc., a careful examination of different parts of the tumour usually shows the higher evolution at some part. Still, when this is absent, the duct-like columns of cells have a sufficiently striking appearance to claim for the growth a position by itself.

Of colloid cancer of the prostate, we have three cases: one from Mr. Boyd, one from Mr. R. Williams,[2] and one from Dr. F. C. Turner. They are all well marked examples. Colloid degeneration of cancer depends upon the collection within the cells of the colloid matter. I have now met with a number of cases of colloid cancer. It is far more common than is supposed, and is often passed over by the naked eye when the degeneration is not advanced. In all my cases, the primary growth has been in a mucus-secreting epithelium, and I believe that the colloid change bears a distinct relation to this fact. The prostate, as a mucus-secreting gland, therefore, invites this form of growth.

Kidney.—In passing on to the renal growths, I am sensible of hurriedly scamping the work, and yet of having occupied my allowance of time. Our report on these growths is, however, necessarily short, on account of the very incomplete amount of material in hand, and the very inefficient manner in which the ground has been previously covered. We feel compelled at the outset to make a different subdivision from those before employed, and to class these growths, first of all, as congenital and adult. In doing so, we wish to avoid all theories as to the origin of cancer as far as possible, but we do not think it correct to class a sarcoma, distinctly the result of a developmental error, with one which, arising late in life, may very well have a different source. Further research may place them all in the same category, but, until something more is known upon the subject, the practically useful plan is to class them differently. The congenital sarcomata of the kidney are fatal during the first few years of life. They are essentially encapsuled growths, though often becoming of an infiltrating nature as they increase; and are sometimes described, when small, as subcapsular or extrarenal growths. We divide them into round-celled, fibro-, myo-, and adeno-sarcoma; though this is not to be regarded as a fixed arrangement, and is only intended to answer temporarily, until we decide how far it is the tendency of all these congenital growths to attempt a higher evolution, and in what direction the evolution may tend. Cohnheim's suggestion that they are due to a faulty segmentation of the protovertebral somites, whereby some of the cells become included with those of the primitive kidney, is probably correct. And bearing in mind the compound structure of the somites, we should be prepared to expect such tumours to take on the characters of various forms of connective tissue, muscle, and skin; certainly, most commonly, simple connective tissue or muscle, on account of the contiguity of the muscular plate; and more rarely dermoid tumours, or tumours containing cartilage, bone, fat, etc., as well as muscle. In speaking of these tumours as sarcomata, a correct term is used so far as the thirteen specimens we have examined are concerned; for whether simply round celled, or containing muscular fibres, etc., the growths are embryonic. In the round-celled class we have eight specimens. Four are from Dr. Abercrombie, and have been shown by him at the Pathological Society as extrarenal growths. We only positively accept two of these, as the sections of the other two cases do not include a portion of the pelvic growth, and the cortical infiltration is of a nature difficult to distinguish from inflammatory cells. The other two are round celled sarcomata, beneath the pelvic membrane, and neither infiltrating it nor the renal tissue. One of my cases, also, as far as the only section I have of it goes, is also a purely round-celled growth.

Then there is a case of subcapsular sarcoma of mixed, round, and spindle cells from Dr. Day, and a large tumour with secondary growths from Dr. Windle, in which there are elongated cells, and, in a part which I have just been able to examine, a higher development of connective tissue. There is yet another case from my own collection, which we consider to be one of unusual interest. The specimen was sent to me two years ago by Dr. Haxworth of Rock Ferry, and consists of two kidneys, weighing twelve ounces, from a seven months' fœtus. Externally they appeared quite normal, and when the capsules were stripped, the surface was kidney-coloured and minutely lobulated. On section, the medullary portion of each was made up of lobules of white new growth, and the cortex was mottled by the same; but there remained, at least, twenty to thirty times the normal amount of renal tissue. Under the microscope, this renal tissue is more embryonic in character than that of a fœtus of full time, but I am not prepared to say whether or not it is the correct equivalent for a seven months' fœtus. The lobules of white growth consist mostly of round cells, but in many parts they arrange themselves as though attempting some higher evolution. It is, perhaps, too speculative to assume that they might develop into renal tissue; and at any rate, until some further evidence of such a condition comes to light, we preferred simply to call it a round-celled sarcoma.

At the last moment, further evidence has come to light. Dr. Osler of Montreal has sent us a slide from a similar case, an eight months' fœtus, in which the kidneys were equally enlarged. He says: "On microscopical examination of the cortex, the tubuli uriniferi and Malpighian bodies were easily distinguished, but separated by much interlobular tissue, composed largely of spindle-cells. Towards the pelvis, the entire substance was made up of these spindle-cells closely compressed together, and amongst them coils of epithelial cells, some resembling dilated tubuli, others irregularly shaped Malpighian capsules. The sections show many irregular small and large spaces (cysts) through the entire substance." Dr. Osler asks, What is it? and suggests that it should be classed as an adeno-sarcoma. With this suggestion we fully coincide, including, of course, with it our own case.

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[2] Mr. Williams's section and drawing refer to Mr. Boyd's case from University College Hospital Museum.

In the group of myosarcomata we have five cases—two from Mr. Eve, one from Dr. Dawson Williams, one from Dr. Osler, and one from my collection. Two were bilateral, and three unilateral. Probably all were distinct from the kidney primarily, though some, at least, subsequently became infiltrating. My specimen will serve best for a description, as we have sections from several parts of it. The tumour weighed twelve pounds. It had displaced the kidney, and subsequently infiltrated it, though with round cells only. The great mass of the tumour was a round celled growth, but the outer parts had a dense and fibrous appearance. The round cells of the more central part could be traced gradually developing into striated muscular fibres, of which the fibrous part consisted. The muscular fibres in all the specimens were very embryonic in character, and not generally more advanced than in the third month of intra-uterine life. No doubt the whole of the tumour is susceptible of this higher development, if time and circumstances permitted; and we think it probable that many cases of myosarcoma have been passed over, owing to the softer portions of the growth having been taken for examination. Indeed, my own case has been reported as a round celled sarcoma by a well known histologist; and thus it is probable that, of the congenital sarcomata of the kidney, the muscular variety has a larger proportion than is generally supposed. The sections of Dr. Williams's tumour show, as he described at the Pathological Society, epithelial tubes. These he regards as renal tubules, and as evidence of the infiltrating character of the growth. In appearance, they are decidedly embryonic, and in form very irregular and branched. In the light of the two cases of adeno-sarcoma, it becomes a question whether this embryonic-looking tubular gland-tissue is to be regarded as a part of the original kidney-structure, or as part of the new growth. We incline to the latter opinion.

Of dermoid tumours we have not met with any examples.

Round celled sarcomata of the adult kidney are not of very frequent occurrence. We have five cases—two from Mr. Boyd, one from Dr. F. C. Turner, one from Mr. Knowsley Thornton, and one from myself. They are of the small round-celled variety, and present no special points of interest.

Mr. Horsley has added some cases of oval-celled sarcoma, which he has placed in the museum.

Adenoma of the kidney is scarcely recognised as a variety of new growth; and, although we have only three cases from my own collection to bring forward, we do not regard it as extremely rare, since, owing to the small size and inoffensive character of the growths, they are liable to be passed over without notice. It is well known that small white nodules frequently occur in the kidney, having much the appearance of tubercle. Sometimes they prove to be fibrous, or fibro-calcareous, or they may be contracted cysts with inspissated contents; sometimes, however, on microscopical examination, they merit the designation of adenoma. So far, we recognise two varieties, which, like similar growths in the breast, show a tendency to merge into each other. The one is a tubular, the other an intracystic, growth. The intracystic growth has a villous appearance, the stalks being clothed with a single layer of cubical epithelium. The tubular consists of tubes much like the convoluted renal tubes, but larger, and containing far more epithelial cells. The sections and drawings of these specimens are so distinct, that there is not the least room to doubt their character. In two of the cases the growths were multiple, and were met with in each kidney. The largest was of the size of a horse-bean, but none of the others were of the size of a pea. As appears to be common in adenomata of the liver, they have no investing capsule. The fact that these growths are multiple, and that they occur in the two organs at the same time, removes the probability that might otherwise be entertained, that they were accidentally discovered early carcinomata.

In describing carcinoma of the kidney, we are not disposed to proceed far beyond a plain subdivision into carcinomata of the pelvis, which will resemble those of the bladder, and carcinomata of the renal tissue, which, we believe, will be found to resemble the adenomas, and to be divisible into tubular and cystic; but we have not yet sufficiently distinct examples upon which to base an opinion. Of carcinomata of the pelvis, Dr. Windle has sent us a specimen of an epithelioma, showing some squamous evolution, and slight "bird's nest" formations; but this is, at present, the only one we have met with.

In the museum, there is an example of colloid cancer of the kidney brought by Dr. Goodhart; it is an old Guy's specimen. We think that it must be regarded as a primary growth of the pelvic mucous membrane.

Of carcinoma of the kidney proper we have four cases; two from Dr. F. C. Turner, one from Mr. Boyd, and one of my own. One of Dr. Turner's specimens we consider distinctly a tubular carcinoma, showing strong renal identity; the others we are not prepared to classify until the opportunity is afforded us of a further experience.

We have been content to place before you a rough sketch of our work as far as we have proceeded, before it was possible to present a finished report; for it soon became apparent to us that the field was too large to be covered by a few months' work, notwithstanding the generous support we received on all sides. And since we can only effectively continue the investigation by continuing to receive the active support of our fellow-workers in the domain of practical pathology, we have ventured to come forward and report progress, to obtain, if possible, the countenance and assistance of the Association in making a further appeal, that fresh material should be submitted to us, until we are satisfied that a reliable classification of the morbid growths of the urinary organs has been arrived at.

Dr. GOODHART (London) said that, if any communication deserved the term excellent, he was sure those present would say this was such an one, and was so by reason not only of the very lucid statement put before them by Mr. Paul, but also, perhaps even more so, by the uniformly exquisite microscopical preparations which were exhibited in the adjoining room. Dr. Goodhart had heard a gentleman—himself a most distinguished microscopist—say, that morning, that he had never seen better preparations; and he quite endorsed that high encomium. As regards the matter of the paper, there were many most interesting points touched upon; he would only select one or two. Mr. Paul described adenoma of the kidney in such terms as to lead Dr. Goodhart to think that what had hitherto uniformly been described as small fibromata were probably, sometimes at any rate, adenomata; and then, as regards the structure of adenomata, the drawings exhibited by Mr. Paul had strikingly recalled to him the sections of a case of cystic disease of the kidney which he had examined some time ago, one of the cases being cystic disease of liver and kidney combined. In that case, Dr. Goodhart, from appearances very similar to those figured by Mr. Paul, had come to the conclusion that it was of adenomatous nature, and formed on the principle of many ovarian cysts; and he ventured to suggest to Mr. Paul, as a branch of future work, that these cystic kidneys should be examined in this light. Some of them were, of course, congenital, but perhaps that would tend to corroborate the view.

Dr. G. SIMS WOODHEAD (Edinburgh) thought that it would be exceedingly difficult to draw a hard and fast line between papillomatous and fibrous growths, as it was found that here, as in all other positions, there was great interdependence between the growth and nutrition of the epithelial and connective tissues. He also considered that it was as yet impossible to do away with the terms encephaloid and scirrhus, until there was a more definite microscopic or histological classification. Colloid should be looked upon simply as a degeneration taking place in the epithelial elements of most cancerous tumours at some stage and in some parts. He also mentioned cases of spindle-celled sarcoma in the kidney of a horse, occurring as a primary growth, and of lympho-sarcoma in the kidneys of children, where the naked-eye and microscopic appearances were those of small round celled sarcoma, but where, on pencilling, a delicate stroma could be distinguished.

Mr. SYMONDS (London) asked where Mr. Paul would put the striped myomata in his classification. He was able to some extent to support Mr. Paul's observation, that the renal nodule hitherto called fibroma might be adenoma: he had examined one such case lately.

It was agreed unanimously that the Committee be requested to continue their labours for another year, and that the Scientific Grants Committee be asked to make a grant of £10 to provide for the expenses of the same.

SOME FORMS OF OSTEITIS IN HEREDITARY SYPHILIS.

Read in the Section of Pathology.

By C. MANSELL-MOULLIN, F.R.C.S.,
Assistant Surgeon to the London Hospital.

It is not a little singular that, while attention has been largely attracted of late to the lesions of the osseous system in connection with hereditary syphilis which occur in infants, others that make their first appearance during childhood and early adult life, no less distinctive in their character, should have almost entirely escaped observation. So far as I have been able to ascertain, the pathological changes affecting the bones described by Waldeyer and Köbner, Wegner and Parrot, are restricted almost entirely to the first few months of life; for, though it is true the last named mentions in his paper that one of the varieties of osteitis described may occur at all ages, the context leads almost inevitably to the inference that the earlier years only are meant; while the brief account of the later phenomena of hereditary syphilis, given by other writers, with the exception of Mr. Hutchinson, scarcely alludes to them, and even he gives no detailed description, but confines himself to a statement of their common occurrence, and of the great frequency with which they are mistaken for rickets.

The cases that have fallen under my notice may, roughly speaking, be divided into three classes, fairly distinct from each other, and of which the two I shall mention last (with which I am principally concerned) are unquestionably the result of hereditary disease. The first, and, so far as my experience has gone, by far the most rare, consists of those peculiar cases of stunted or arrested growth which are more commonly met with in infirmaries than in hospitals, and which may or may not be associated with defective mental development. In the majority of these that I have seen, there has been other undoubted evidence of hereditary syphilis, and the inference is only too easily drawn that the real condition with which one has to deal is, if not identical with, at least closely similar to, that form of chondrosteitis at the epiphysal line, leading to premature ossification, such as has been described both in syphilis and in rickets; but the examples which I have met have been too few, and have remained under my observation too short a time to allow me, either by tracing their own life-history, or by investigating the condition of other members of their family, to arrive at the definite conclusion that the only possible cause underlying this pathological condition was inherited syphilis, or, even if it were, that the actual outbreak took place after the age of infancy, and so could properly be said to belong to the later manifestations.

Gummata, on the other hand, in no essential respect, either of appearance or of consequences, differing from the gummata in connection with bone so frequently met with in tertiary acquired syphilis, are common enough, and bear with them the unmistakable stamp of their origin. They may affect any of the bones, though perhaps, as Mr. Hutchinson has pointed out, they are more often met with, relatively speaking, on the bones of the upper extremity, when due to hereditary, than when caused by acquired disease; and as in this form may have their first commencement in the neighbourhood of the bone on which they may encroach later, or may begin in the periosteum, or the substance of the bone itself. Not unfrequently, as was first observed by the same authority, there is a complete absence of the more ordinary signs of inherited syphilis, but even then the evidence of their nature, as shown by the course they pursue and the effect of treatment on them, is sufficient to remove all doubt, even if, as happened in a remarkable case under my own observation, in which there was to all appearance no other sign, a longer observation of the case does not at length bring to light some of the more commonly recognised symptoms.

It is the third class of cases to which I would particularly desire to call attention, not merely from the fact that they are so common that within the last few months I have accumulated notes of upwards of thirty, but because I believe the appearance which they present, and which is most characteristic, is as clear evidence of hereditary syphilis as notched teeth or interstitial keratitis. The change consists essentially in a form of osteitis, generally very chronic, affecting the tibiæ and, rarely, some other of the long bones, but never, so far as I have seen, without the tibiæ being involved, causing a deformity so peculiar in shape as to be quite unmistakable. Usually one part only of the bone is affected, either the upper or the lower third, or the shaft by itself, without the line of separation between the epiphysis and the shaft being in the least concerned, and the enlargement takes place in all directions, a portion of the tibia projecting with a smooth even curve forwards, bulging out on either side, so that the crest no longer stands out sharply and encroaching on the muscles behind, as if it had grown in all dimensions, and from being unable to accommodate itself had been forced out on all sides, but especially towards the anterior surface where resistance is least. Occasionally, especially when the lower end is involved, and there is still a growing line between the shaft and the epiphysis, actual increase in length does take place, causing some distortion of the foot and proportionate inconvenience. This form of hyperostosis may commence when the patient is eight years old, but is much more common a few years later, and may make its first appearance as late as two and twenty. When it occurs early, it generally affects both legs, and is often put down to accidental causes; when it commences later, usually only one; and there is this further difference between them, that while in the former case the change appears to be limited almost entirely to the bones, and to occasion no greater inconvenience than chronic bone-pain, worse at night, and constant sensation of weight, in the latter the skin and the subcutaneous tissue become affected after a time, a number apparently of small imperfectly circumscribed gummata forming all over the affected limb, leaving behind them either depressed cicatrices or ulcers with often the bone exposed, hard and dense, at their bases. In one peculiarly severe case that I saw, where the mischief first broke out when the boy was eighteen years old, suddenly, at the age of twenty-two, when the upper part of the tibia had become fairly sound though much distorted, a large gumma, apparently involving the whole of the lower end, made its appearance, rapidly eating through the skin, and threatening the integrity of the ankle-joint, which, as very commonly happens when this or any other inflammation occurs in the neighbourhood, was already full of fluid.

Every case which I recorded showed other and unmistakable signs of inherited syphilis: often the teeth presented the characteristic notch, but, in a singularly large proportion, they were of the very small, ill-formed, and widely separated type. One boy had never cut his permanent upper incisors at all, the germs, to all appearance, having been destroyed in infancy, and all his others were exceedingly stunted; both his tibiæ were deformed; he suffered from very severe interstitial keratitis; and, whether arising from early chondrosteitis or not, he was exceedingly short and ill-developed. Where it was possible, the family-history was noted; but it was taken for granted, in its absence, that the presence of gummata, healing rapidly on the ordinary treatment, or of interstitial keratitis, or of the characteristic teeth, was sufficiently conclusive evidence as to the taint.

With regard to the treatment of these cases, there is very little to be said. The gummata seem to yield to ordinary antisyphilitic remedies, as easily in the hereditary as in the acquired form; this peculiar form of hyperostosis is, however, far more intractable. If seen in its earliest stage, in one of the younger subjects, large and long-continued doses of iodide of potassium seemed to hold it in check, and even to cause some improvement; but there appears to be a very strong tendency, especially in the asymmetrical forms, to relapses or to fresh attacks, so that at last the leg becomes distorted and deformed, like an old tree-trunk. Local applications of all kinds were tried, but without any conspicuous success, the only possible exception being in favour of a very strong iodide of potassium ointment. Iodine itself, either internally or externally, seemed to have no influence at all; and the two cases that were treated with cod-liver oil and tonics alone were the most conspicuous in their tendency to relapse.

SMALL-POX AND VACCINATION STATISTICS: INJURIES TO HEALTH, AND DEATHS, ATTRIBUTED TO VACCINATION.

Read in the Section of Public Medicine.

By MONTAGUE D. MAKUNA, M.R.C.S., L.R.C.P.Lond.

The object of this paper is not so much to make a display of facts and figures, but to ask for more general support of the medical profession in conducting an inquiry into vaccination in which I am engaged. The *Transactions of the Vaccination Inquiry*, Part I, now before you, will give you an idea of its scope; and a perusal will at once convince an inquiring and impartial mind that such collective investigations into the subject are of vital importance, inasmuch as the facts observed by members of the profession form a complete record for reference on the subject; the abuses and failures in its practice are exposed, criticised, and avoided: and the public could have access to the accumulated experience of the medical profession to guide them in legislation, and judge of its merits. It is needless for me here to enter into any plea of justification of such an inquiry, knowing well that those in authority consider vaccination a necessity, and enforce it by law; and that they admit that the present system has many faults in its working, as is evinced in the evidence given before the Royal Commission on Infectious Disease Hospitals, and their report. During the last debate in the House of Commons on the motion of Mr. P. Taylor, the amendment of Sir Joseph Pease for the abolition of accumulation of penalties for non-vaccination, which had passed the House in the form of a Bill two years ago, was countenanced by the Ministers and both sides of the House; and it is acknowledged in the amendment of Sir Lyon Playfair, that passed the House, that the law required such modifications as experience might suggest. I beg to observe that Parliament could not have access to the experience of the profession but only through such a systematic inquiry as I am conducting. With the increasing popular prejudice against vaccination, there is a growing tendency in the medical press to lose sight of the principles of vaccination, and to defend and explain away the shortcomings and abuses of the present system and its practice. Under these circumstances, the public look upon vaccination with increasing distrust, and the number of the unvaccinated class is annually increasing.

It would be a fruitless task for me to talk about the protective power of vaccination in individual cases, and its power for the prevention of epidemics, aided by isolation and other sanitary measures, before a representative assembly of the British medical profession, such as I am now addressing; but I do wish to draw their attention to the fact that the national statistics of small-pox and vaccination are much neglected; and the authorities should be asked to adopt some measure to render them complete. We are now on the close of the year 1883, and we have been favoured with vaccination-returns for the year 1879. I think these returns should be made to appear with the returns of the Registrar-General, so that we might have an opportunity of judging of the vaccination from year to year in districts throughout the country. In some districts, the vaccinators and the vaccination-officers are more scrupulous in returning these certificates than others; consequently, these figures do not always represent facts. Such a state of affairs is rendered more deplorable when it exists among the poorer classes and in crowded districts. Again, the vaccinated population has not yet been ascertained, by census or other means, in counties, throughout the country. Under these circumstances, I am of opinion that the system of vaccination-statistics requires a thorough reorganisation to render them trustworthy and useful.

The statistics of small-pox cases and mortality are still more unsatisfactory. We hope that the day may come, which must be far distant, when all the cases of infectious diseases in the districts will be known to the health departments, and from which we would be able to know the severity of the epidemics. At present our knowledge is principally derived from the returns of mortality, and such cases as are admitted to the hospitals and revealed to officers of health. I regret to observe that in the metropolis the statistics of the small-pox hospitals in connection with the Metropolitan Asylums Board are deplorably bad, giving us no knowledge of the quantity and quality of vaccination, separately or collectively, of the metropolis among the admissions. Before the year 1879, the statistics were arranged in tables, drawn up by the several medical superintendents as they liked. In my Report of the Fulham Small-pox Hospital for the year 1878, I strongly urged upon the authorities the uniform classification of the varieties of variola and of the standard and degrees of vaccination, so that such classified information arranged in tables would enable others to judge of the immunity from and prevalence of small-pox among the vaccinised, vaccinated, and unvaccinated classes. But the Asylums Board, constituted as it is of the managing guardians of the metropolis, do not think it necessary to do more than [illegible] these institutions.

The medical superintendents, as a rule inexperienced at the commencement of their career, are left without scientific and skilful guidance in their responsible professional work, and the medical department of the Local Government Board think it no business of theirs to interfere. The consequence has been that the tables framed by their clerks are handed over to them to be filled up, which give only a rough idea of the admissions, deaths, and discharges, adding little more to the knowledge than that derived from the stewards' and gate-porters' books. I have abundance of evidence to prove that these statistics lack much of necessary care and exactness. They have constituted a class of cases "doubtfully vaccinated," increasing with the cry of the antivaccinators, which bids a hearty welcome to their assertions that the severe cases are put down to the unvaccinated and the mild to the vaccination, and that the new creation is a sort of compromise. It also leads the public to think that the previous medical superintendents and other observers were influenced by some motive not to recognise the difficulty of expressing their doubts. I speak from a somewhat large personal experience, that this difficulty is not so much of finding out the marks, as to judge of the truth of the patients' statements, as it is due to the carelessness of the observers and reliance of irresponsible persons. I hope these institutions will soon become the centres of scientific inquiries, and cease to be charities managed by the Asylums Board according to their convenience, bestowing patronage on their friends and dependants.

Lastly, I come to the important and vital question of injuries to health and deaths attributed to vaccination, which is at present agitating the public. My inquiry has not yet been complete so as to make any definite observations on the subject, but the *Transactions* of the Vaccination Inquiry, Part I, partially represent them. The scientific advisers of the Grocers' Company, three of the four of whom have had considerable experience in the administration of vaccination, seem to recognise the gravity of the question in offering the investigation prize for the discovery of a nonorganic medium for the propagation of vaccine-virus, which in itself has never been definitely ascertained and cultivated.

It is unfortunate that they fail to recognise the importance of the investigations I am conducting by not favouring me with a research scholarship, on a promise to make a tour to all the important vaccination-stations in Europe and America, and gather the experience of all the civilised nations. I hope the medical profession will fearlessly speak out the truths of their experience in vaccination, and give the vaccination-inquiry their deserving support. It is by the expression of their experience collected in a record, the exposures and criticisms of the shortcomings, that we shall be able to understand its principles, better improve its practice, judge of the necessary reforms, and guide future legislation on vaccination.

A CASE OF EXTRA-UTERINE FŒTATION.

Read in the Section of Obstetric Medicine

BY W. DUNNETT SPANTON, F.R.C.S.Ed.,

Surgeon to the North Staffordshire Infirmary.

I FEEL some diffidence in bringing before the Obstetric Section a single case of this kind; but the records of such are so scanty, the views concerning treatment so vaguely expressed in most writings on the subject, that it may, perhaps, serve some useful purpose if, by relating one successful case, we can elicit the opinions of those who have had a larger experience as to the best modes of dealing with extra-uterine pregnancy.

Mrs. W., aged 26, living in the country, was sent to me by Dr. E. Tylecote, of Great Haywood, in February 1883. She had always been an active woman, but never very strong. Catamenia continued regularly up to June 1881, six months after her marriage, when she believed herself to be pregnant. Morning sickness was followed by abdominal enlargement, and about the following Christmas, something like movements were felt. Her medical attendant was never able to hear any fœtal sounds. The abdominal enlargement continued up to the end of March, when she was of the size of a woman at the full term. She remained about the same until the beginning of May 1882, when she was seized with abdominal pains and sickness. The pain did not last long, and returned only once. There was a free watery discharge, sudden and profuse, which was supposed to come from the uterus, and she was thought to be in labour. Dr. Tylecote says: "On making an examination per vaginam, I was surprised to find the os small and undilated, with an elongated cervix." She was confined to her room for two months after this, with what appears to have been a low form of peritonitis, which left her very weak. From this time, the abdominal tumour gradually diminished, and, in November, she was nearly of her usual size, with "a hard rounded tumour, larger than a fœtal head, [illegible] rather to the right of the mesial line." Menstruation was re-established in August 1882, and has continued fairly regularly since.

In December, the abdominal tumour began to increase in size, and became more or less painful, so that she was quite unable to attend to any household duties. The enlargement was most marked towards the left side, and steadily increased until the time I saw her.

She had then the appearance of a woman in the sixth month of pregnancy, with a rounded, firm, elastic, but indistinctly fluctuating tumour, occupying the hypogastric region, and extending as high as the umbilicus. The cervix and os uteri were normal; the uterine cavity measured three inches. The uterus was somewhat fixed, especially on the right side, where there was a greater sense of resistance than on the left, but no decided tumour could be made out. The flanks were clear on percussion. There was an entire absence of any sympathetic signs of pregnancy. It appeared to me that we had to deal with an extra-uterine pregnancy almost certainly; but the question then arose: What else was there? What had caused the recent increase in size? The possibility of normal pregnancy at first caused me to hesitate about passing a sound, and this was done only because it was essential to confirm the diagnosis. At the worst, only a miscarriage would occur. Then an adherent ovarian tumour seemed probable, or a fibro-cystic enlargement of the uterus, or perhaps suppuration occurring in a mass of pelvic cellulitis, or in the interior of the sac of an extra-uterine fœtus. It was clearly one of those cases in which an abdominal section was the proper course. This was done on May 14th, 1883, under ether.

An incision, about four inches in length, into the peritoneal cavity, exposed what seemed to be a universally adherent omentum, covering a large tumour occupying the uterine region. The adhesion to the abdominal wall on the whole of the right side was so intimate, that the hand could not be passed at all in that direction. The slightest attempt to do so caused free bleeding. On the left side a dark, purplish, smooth portion of tumour could be seen and felt, firm, tense, and apparently semi-solid, and continuous with the uterus. On handling this carefully I felt some crepitus, which decided its character. The cyst was opened, and found to contain a large quantity of fœtid, dark, purulent fluid, and a macerated fœtus. The bones show that it was almost, if not quite, mature. The contents were carefully removed, care being taken to prevent any escape into the peritoneal cavity, and the edges of the cyst were secured to the centre of the abdominal wound by silk sutures. The cyst-wall was thick, and muscular; it was firmly adherent over the whole of the right side and posteriorly for some inches to the colon, at which point it had thinned, and was very soft and friable. An India-rubber drainage-tube was left in the cavity, and a glass one in the pelvis, through the lower portion of the wound. Gauze dressings were used. Slight sickness followed the operation, and the next day she appeared little the worse for it. Temperature 100.4° Fahr.

Progress continued satisfactory up to May 24th (ten days after the operation). The abdominal drainage-tube was removed on the fourth day, and the wound was closed. The cyst drainage-tube was exchanged for a smaller one, as the cyst appeared to be contracting rapidly, and the discharge was diminishing, and, instead of a dirty-brown colour, was assuming the character of healthy pus. It was syringed out daily with sanitas fluid. The sutures had all been removed.

On the 24th, the temperature rose to 103°. There was a free mucous discharge from the bowel, and floating in it numerous flakes similar to the fluid in the cyst. A careful examination of the wound showed that the cyst had greatly contracted, and a probe would pass only a short distance. Discharge was very slight. Two days afterwards, the temperature fell to 99°, and a purulent discharge took place from the lower wound, which had reopened. A drainage-tube was reinserted, but it did not seem to communicate with the cyst.

From this time, she continued to improve again, having considerable pain, however, at times, relieved by full doses of opium. The discharge continued free for some time from the cyst and the wound.

On June 10th, she was allowed to sit up, but at night the temperature rose to 102°, and remained high (101° to 104°) until the 17th, when it again subsided.

On July 1st, a small bone came away, and as the temperature kept fluctuating, and the discharge continued, I had ether administered, and explored the wound thoroughly with the finger. The cyst had contracted into a sort of hour-glass shape, from the lower portion of which I removed three or four fragments of bone, which were almost embedded in the cyst-wall. I was unable to feel the cyst, with my fingers in it, through the vagina with the other hand, but it appeared to be near the fundus of the uterus, pressure within it depressing the uterus, and *vice versâ*. From this time, the patient steadily improved. The wound has closed, and she is now well.

REMARKS.—The primary difficulty in this, as in all such cases, lay in the diagnosis. There was, it is true, an obscure history of extra-uterine pregnancy to begin with; but the rapid subsidence of the original enlargement, and the subsequent steady increase eighteen months afterwards, tended to complicate it and render it more difficult. It certainly looked like normal pregnancy following an extra-uterine one; but the absence of most of the usual signs of pregnancy precluded this conclusion. The passage of a sound decided it. The probability then was that it was an ovarian cyst, adherent to the uterus, with or without abnormal pregnancy, perhaps suppurating, or a fibro-cystic tumour of the uterus, a supposition which the increased length of the uterine cavity appeared to favour. The tumour, whatever its nature, was clearly connected with the upper part of the uterus, and moved, as far as its attachment would permit, with it. It was probably, therefore, of the interstitial form, if extra-uterine pregnancy were present. This view would accord with the supposition that the gush of fluid said to have taken place when labour was expected, may have been amniotic; and this may also explain how putrefaction may have been initiated; although it is possible this might have occurred through a minute perforation in the adherent colon, too small to be detected in the operation. The central position of the tumour, the inability to feel it with any distinctness on either side of the uterus *per vaginam*, and its firm elastic feel on palpation, pointed further in the direction of this view. There is nothing easier, as Dr. Thomas points out, than to describe these varieties of conditions in the lecture-room—especially after the event—but few things more difficult than to decide upon them at the bedside of the patient. This was clearly one of those cases in which an exploratory incision was urgently demanded, as the only means of determining the precise nature of the case on the one hand, and the first step necessary for its cure under any circumstances. The wisdom of this course was justified by the result; and I feel convinced that, if this fœtid putrid mass had not been removed, it would, ere long, have burst into the peritoneum, and have inevitably caused the death of the patient. If the sac and its contents had remained in the shrunk condition which was observed about three months after delivery was expected to have taken place, possibly no harm would have ever resulted. But this instance shows very plainly, I think, the danger incurred by assuming that such a mass will remain in a quiet state, and will not do as this one did—begin to suppurate rapidly, bringing the patient slowly but surely into a condition of the gravest danger.

NOTE ON A HITHERTO UNDESCRIBED APPEARANCE OF THE RETINA, OR "SHOT-SILK" RETINA.

Read in the Section of Ophthalmology.

BY W. SPENCER WATSON, F.R.C.S.

OUR mental conception of the living and healthy retina is derived from the absence of any visual perception of its essential elements. We can, it is true, see its larger vessels, and can even trace the position of the fovea centralis, but, for the rest, the less we see of the retina, when examining the fundus oculi by means of the ophthalmoscope, the more satisfied we feel that it is sound. This is, of course, equally true of all the transparent tissues within the eye, but I think it right, at the outset of my remarks, to insist on the almost perfect transparency of the retina, (1) because it is apt to be overlooked, and (2) because, as seen by the anatomist, the retina is not transparent.

Considering that the ophthalmoscope has only been in general use about twenty, or perhaps twenty-five, years, it is only to be expected that appearances, difficult to interpret, should now and then present themselves. That this is so, the following anecdote may serve as an illustration. A country practitioner, affected with serious impairment of vision, consulted a well known London oculist. He was naturally anxious to obtain from the latter some definite opinion as to the cause of his malady. The oculist, however, observed something hitherto undescribed, and found it convenient to shelter himself under negative statements. "It was not a cataract." "It was not glaucoma." "It was not intraocular hæmorrhage." "It was not this, nor that, nor the other." At last, our country friend's patience becoming exhausted, he bluntly exclaimed—"Is it a tenpenny nail?" "No," replied the oculist gravely; "it is not a tenpenny nail." With this oracular statement the sufferer had to be content.

I can quite sympathise with the oculist in this case. There is often much difficulty in naming intra-ocular appearances if previously undescribed. We can then only describe them in negative terms to those who expect definite and technical descriptions, but who may be perhaps but scantily informed as to the normal appearances. In these notes I shall endeavour to give a definiteness to a vague and (as I believe) hitherto undescribed appearance. For convenience, I shall call it "shot-silk" retina.

I have noticed this in a number of instances (about a dozen). It has occurred chiefly in the eyes of children affected with strabismus, and is associated with more or less hebetudo visûs and defective refraction. It is not associated with any acute mischief, and is quite distinct from the cloudy swelling of inflammation. The appearance in question takes the form of a whitish flickering line, or lines, of light along the course of the vessels for the most part, but sometimes moving across the direction of the vessels, and assuming various forms and shapes when the eye is moved, or the observer views the fundus under a different angle. "Shot-silk" retina must not be confounded with the congenital opaque white prominences seen in certain eyes. These permanent radiating patches, extending from the margin of the optic disc into the surrounding retina,[1] have none of the flickering mobile character of the appearances in "shot-silk retina."

I regard the "shot-silk retina" as due to a slight opalescence of the retinal elements analogous to that of the lens, and perhaps also of the vitreous body in advanced chronic eyeball-tension—to the condition of the dioptric media, which has given rise to the term "glaucoma." Most of us have noticed the lens in advanced chronic glaucoma apparently opaque when viewed by reflected light, but perfectly transparent when examined ophthalmoscopically, *i.e.*, by transmitted light.

It is, I think, possible that some similar change in the retina is the cause of the "shot-silk" appearance. Whether this is a degenerative change, or (as I am at present more inclined to think) a persistent fœtal condition, I would not venture, at present, to give an opinion. Any reflected light sent to the observer's eye from the retinal elements must be the result of opacity or opalescence of those elements. The latter seems to me to be the condition present in the "shot-silk" retina; its change of position with the varying movements of the eye being analogous to that observed in some kinds of opalescent glass.

Data are wanting to enable us to decide as to the exact pathological significance of this opalescence of the retina (if such it be), but from its frequency in young children, in whom it is associated with strabismus and hebetudo visûs, I am inclined to regard it as a congenital defect. I have seen it, however, in one case without any great amount of defective vision. The refraction in all the cases I have seen is hypermetropic.

As an alternative explanation, it is possible that the opalescence has its seat in the hyaloid membrane, and there is certainly one point in favour of this supposition. The persistent hyaline canal (a very rare condition) has a somewhat similar opalescent look; but, in this case, I think that the flickering and changing aspect of the opacity is due rather to its being viewed successively at different depths in the vitreous chamber—a condition which would not obtain in regard to the "shot-silk" flickering lines on the retinal surface.

It is possible, as a third alternative explanation, that similar appearances might result from the suspension in the vitreous of delicate filaments or membranes, more or less parallel with the plane of the retina, and reflecting the light variously, as the angle, under which the fundus was viewed, varied.

Of these three explanations, I prefer the one first stated—viz., that the retina is opalescent, and that this is a persistent fœtal condition.

I do not remember to have seen appearances similar to those described in adults; but this may be due to the fact that I have more frequently examined children ophthalmoscopically, when testing them previously to operating for strabismus. I suspect, however, that had I more frequently examined adults, affected with high degrees of hypermetropia, similar appearances would have presented themselves.

The following are some of the cases in which I have noted "shot-silk" retina.

CASE I.—Dora ——, aged 11, of stunted growth, had occasional divergent strabismus and a want of symmetry in the orbits and eyes, the right eyeball being smaller than the left, and the right palpebral aperture being also the smaller of the two. The squint was so slight that I declined to operate. The sight was fairly good in both eyes; and, though there was slight hypermetropia, the child saw and read easily without glasses. The "shot-silk" appearance was more striking in the left than in the right (or dwarfed) eye. The "flickering" light passed sometimes across the line of the blood-vessels.

I note in this case a congenital asymmetry, but little or no defect in the acuity of vision.

CASE II.—A. C., aged 12, had a convergent squint of $3\frac{1}{2}'''$, and hypermetropia. In the left eye, which was the one habitually inverted, I found streaks of white light along the lines of the vessels, which streaks disappeared when seen at certain angles, and reappeared when viewed at a different angle. The squint was operated on successfully. After the operation the same "glimmer" of the retina was observed, and it was also noticed that the light sometimes seemed to pass across the line of the vessels.

A sister of this boy had also convergent squint. In this case, therefore, I note the "shot-silk" retina associated with a congenital ocular defect.

CASE III.—A. S., aged 7, had convergent squint of $3'''$, and $H = \frac{1}{8}$. The squint was operated on successfully, and spectacles worn with much benefit. The same appearances were noted in both retinæ as in the two preceding cases. Here also congenital defects (viz., a high degree of hypermetropia and squint) were associated with "shot-silk" retina.

CASE IV.—L. A., aged 11, had convergent squint of $1\frac{1}{2}''$ and a high degree of hypermetropia ($H = \frac{1}{9}$) and astigmatism, with probably some amount of hebetudo visûs. The same "shot-silk" lines were noted as in the previous cases. Here also we have congenital defects associated with the retinal appearances.

CASE V.—S. H., aged 12, had slight convergent squint, with hypermetropia. Pearly white wavy lines ran parallel to the retinal vessels, and disappeared when the eye moved, or, if not disappearing, altered their position relative to the course of the vessels. "Shot-silk" wavy lines formed a shifting boundary to the yellow spot, which was very large and distinct in this case.

The above five cases are those noted since January 1881. I believe I have seen altogether about a dozen of a similar kind. I believe that, before a perfectly satisfactory theory can be formed, we want more detailed observations, and the concurrent testimony of a number of independent observers.

SURGICAL MEMORANDA.

COMPOUND FRACTURE OF THE SKULL.

THE following account of a case of compound fracture of the skull may perhaps be of interest as an example of the value of the antiseptic method of treatment in such cases. A boy, aged 9, received one evening a kick from a horse, which inflicted a contused lacerated wound on his right temple, extending from an inch above the middle of the upper margin of the orbit, outwards for an inch and a half. When seen an hour after the accident he was gradually regaining consciousness, a piece of the outer table of the skull, about the size of a sixpenny-piece, was lying loose in the wound, and also about a cubic centimètre of brain-substance. The boy had also lost a considerable quantity of blood, including some from the nose. The pupils were equal, and responded to light, though not readily; the pulse was irregular and intermittent, and was beating about 88 per minute. The wound was dressed antiseptically, any further interference being postponed till daylight. During the night he vomited twice, and had some slight twitching of the limbs. In the morning he was quite conscious, and his pulse was firmer and no longer intermittent, and, chloroform having been administered, the wound was enlarged, and a partly detached splinter of the inner table of the skull, an inch long and a quarter of an inch broad, was removed. It was found that the blow had made an opening in the skull an inch and a half long, and three quarters of an inch broad, depressing fragments of the skull to a third of an inch below the level of the surrounding bone, and tearing the dura mater away from the bone for some little distance round the opening. These fragments were still attached to the dura mater, and could not be moved without trephining, so they were left *in situ*, and a piece of drainage-tube having been inserted in the wound, it was closed, strict antiseptic precautions having been observed throughout. In the evening the boy's pulse was 96 and his temperature 99.4°, but the following morning both pulse and temperature were normal; there had been no more twitching or vomiting, and he had slept well; the discharge from the wound had come through the dressings, which were accordingly changed. When dressed again, four days afterwards, the wound had united, except where the tube interfered, and the blood-clot in it had become organised. No bad symptoms had occurred, and he continued to do well. The dressings were changed twice more, and when finally removed, three weeks after the accident, a linear scar and a slight depression at the situation of the wound were the only evident results of the injury. CECIL W. CUNNINGTON.

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[1] I allude to an appearance which Virchow showed to depend on [illegible] nerve fibres [illegible] the lamina [illegible] a short distance beyond the [illegible] nerve margin, and not of the surrounding retina.

Devizes, November 16th.

OBSTETRIC MEMORANDA.

DOUBLE OS UTERI AND VAGINA.

ON the evening of October 6th, 1883, I was called to a case of labour. The patient had been married five years; this was her first confinement. The pains were strong and expulsive. On examination, I found the cervix long and undulated, the external os only just admitting the tip of the finger; the internal os and uterine cavity could not be reached. The head of the fœtus could be plainly felt in front of the cervix, apparently pushing its way with every pain directly through the vaginal roof.

Extreme antiflexion of the gravid uterus and extra-uterine pregnancy appeared to me to be the only causes which could produce any thing similar to this; but the former was negatived by the size and shape of the abdomen, and the latter idea it was, of course, impossible to entertain. Finding myself altogether unable to understand the case, I drove on to the house of my friend, Mr. Lawson Tait, to see if I could obtain some light on the subject. He evidently considered it (most likely in consequence of being engaged, and of my description being imperfect) as probably a case of lingering labour in a primipara, and gave counsel accordingly. On my return, I found the patient in the same condition as before; the pains violent, the cervix undilated, and the head of the fœtus apparently crushing through the vaginal roof, the structures between the examining finger and the head of the fœtus being so thinned by pressure, as to give the impression of being on the very point of bursting. On closer examination of the soft parts, however, I found the explanation of the phenomena. There were two vaginæ, two cervices uteri, and possibly (but of this I could not be sure) two uteri. The patient was lying on her left side, in the usual obstetric position; my finger had always passed into the left vagina, which was empty, and the fœtus was coming through the right cervix and right vagina. I delivered the patient with forceps about 4 A.M.; unfortunately, the child was dead. A little laceration of the septum between the two vaginæ occurred in the delivery, but this was not to any great extent; and the patient has made a good recovery. JOHN W. TAYLOR, F.R.C.S.

Birmingham, December 1883.

VINEGAR IN POST PARTUM HÆMORRHAGE.

ABOUT ten years since, I attended a patient who had most violent *post partum* hæmorrhage, so severe, indeed, that I began to despair of arresting it. I had no ergot with me, and ice was not procurable. I directed the attendant to give a wineglassful of pure brandy. The uterus, which was before flaccid, contracted instantaneously under my hand, and the bleeding ceased. On proceeding to give some more brandy, I discovered that the patient had been given vinegar instead of brandy. The effect was so marked, that I inquired of the old midwife who was with me, whether she had ever heard of vinegar being used before; she informed me that in her part of the country it was considered an excellent remedy, but that she had rarely, if ever, used it. When lecturing to a class of pupil-midwives shortly afterwards, I mentioned the case, and advised them most strongly to give the vinegar a trial in case of need. It seems to have escaped my memory until, about two years ago, the midwife at Queen Charlotte's Lying-in Hospital reminded me of my recommendation, and told me she had given vinegar repeated trials, and preferred it to ergot on account of its certain and instantaneous action. She was such a reliable and clever midwife, that I felt her testimony might be taken. Since then I have carefully questioned all my pupil-midwives as to its action, for until recently it was never used in the hospital. They all agree that, in their cases of hæmorrhage in the out-patient department, where they were allowed to use vinegar, hæmorrhage was arrested much more quickly than in the hospital with ergot. It was not until recently that I had a good test-case; the patient belonged to a family of "flooders;" her mother and two of her near relations had bled to death. As soon as the child was born, she began to flood. I expelled the placenta, and gave a wineglassful of vinegar. The uterus, which was very flaccid, and constantly dilating, at once contracted firmly under my hand; it did not again relax, although the hæmorrhage continued to a moderate extent. At the end of fifteen minutes I gave a second dose, about two-thirds of a wineglassful. In both instances it was given pure, without any water. This soon arrested the hæmorrhage, and the patient did well. I used no other means beyond holding the uterus, as I was perfectly satisfied with the result. I feel certain that I should not have obtained such favourable results with ergot. The action of vinegar is so rapid, that I refrain from using it or permitting its use before the placenta is expelled, for fear of causing a retention of that body and making its removal difficult. From my own experience, and from the reports obtained from my midwives, pupil-midwives, and house-surgeons, I can confidently recommend the use of vinegar in *post partum* hæmorrhage. It is a remedy, if not always at hand, at any moment procurable, simple and harmless, not open to the objections against ergot, which in the hands of midwives is very liable to be used to hasten delivery, nor to the serious disadvantage and dangers of intra-uterine injections. If further trials, on a more extended scale, confirm my experience, I have no hesitation in saying that vinegar will have to be regarded almost as the specific for *post partum* hæmorrhage.

W. C. GRIGG, M.D., Physician to Queen Charlotte's Hospital.

CASE OF PROLONGED GESTATION.

I HAVE just attended a girl, aged 16½ years, the duration of whose pregnancy was 306 days, or 44 weeks with the exception of two days. I have been very careful to guard myself from error with regard to this case, and I believe it may be accepted with every confidence as a reliable contribution to the statistics on this subject. The pregnancy was the result of a single intercourse. The labour was short and easy for a primipara, and the child quite within the average as to size. CHARLES BALLARD.

Oxford, January 7th, 1884.

THERAPEUTIC MEMORANDA.

ANTIGALACTAGOGUES.

I AM reminded by Mr. Verrall's experience of the action of iodide of potassium in connection with an excessive secretion of milk, as detailed in the last issue of the JOURNAL, of various experiences I have had when treating such cases. Even when the flow is rather copious in the latter months of suckling, one finds that a brisk purge or two, and the application of belladonna-ointment or extract to the turgid breasts, with or without strapping, are quite sufficient to dispel the secretion; and, in point of fact, in nine cases out of ten among working-class mothers, this is managed without any recourse being had to a medical man's advice; common diachylon plaster is the favourite strapping, and appears effective enough even when the milk-supply is somewhat in excess.

On one occasion, I was consulted by a mother about a month after the birth of her first child, for an excessive secretion of milk. So great was the flow and drain upon her system, that in that short time she had become markedly anæmic, and suffered from anorexia and insomnia, with great constipation. Even if I had bethought me of the well known action of the potassic iodide, I am not very sure that its use would have been judicious in view of the probable effects on the child. Mere purgation was of no use; but directly I combined tincture of belladonna, in doses increasing from five to ten minims, with haust. niger, the excessive milk-secretion lessened till it reached a normal standard of quantity; while the other symptoms, dependent, doubtless, on this abnormal condition, quickly disappeared without special attention. I may add that the child showed few signs of being affected by its mother's treatment.

J. FARQUHAR, M.D., Harrogate.

TOXICOLOGICAL MEMORANDA.

POISONING BY RED PRECIPITATE.

IN the text-books accessible to me, there are but two instances cited of poisoning by red precipitate, and scarcely anything stated as to treatment. It would appear then, that this agent is rarely chosen by the suicide or homicide; hence it may be worth while to place on record a case recently occurring in my practice. A woman of middle age swallowed twopennyworth (about two drachms) of red precipitate. On my arrival she was vomiting, salt and water having been administered by her husband. I administered an emetic of sulphate of zinc: afterwards raw eggs, magnesia in milk; the diet to consist of egg in milk, bread and milk, etc. The symptoms complained of were, epigastric pain of a burning character, and an indefinite feeling of pain diffused over the abdomen. The next day there was hæmatemesis, and passage of florid blood *per anum*. After this the discomfort gradually subsided, and in five days the patient was convalescent.

E. KENNEDY, Gorton.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. MARY ABBOTTS INFIRMARY, KENSINGTON.

A CASE OF TUMOUR OF THE ANTERIOR PART OF THE BRAIN WITH EXOPHTHALMOS.

(Under the care of Mr. H. P. POTTER, F.R.C.S., and Mr. J. M. ATKINSON.)

ELIZABETH HAWKES, a domestic servant, aged 29, was admitted on November 10th, 1883. Her family history was good: her father and mother were living, but her mother had been stone deaf for thirty years; this she attributed to ill-treatment on the part of her husband. One sister had died of bronchitis, the others were alive and well. The patient herself had enjoyed very good health up to three years before admission, when her menses ceased. She thought this had been caused by a chill she received when bathing; she had not menstruated since. She had something the matter with her right eye when 12 years old; this was evidently a corneal ulcer, which had left behind it a distinct leucomatous opacity in the centre of the cornea; for this she had undergone one or two iridectomies at various hospitals. She had been unable to do any work for eighteen months before admission, on account of feeling generally unwell, and suffering from incessant headache; her friends stated that she had become lately very irritable. For six months, her eyeballs had been gradually becoming more prominent.

On admission, after careful examination, no symptoms of any visceral or other disease could be detected, with the exception of constant headache, chiefly confined to the top of the head and forehead; further, as she expressed it, "such a languid feeling had come over her lately." She was well nourished, of a phlegmatic temperament, and there was evident a want of tone in the whole system. There was no history of syphilis, convulsions, or vomiting, and no paresis.

On November 27th, she complained of dimness of vision in the left eye. Examination with the ophthalmoscope showed that there was slight blurring of the optic disc, the vessels being very tortuous as they arose out of the disc. The operation was done with great difficulty, as the patient was constantly moving.

She "kept about" until December 3rd, when she was suddenly taken worse. Mr. Potter was called to see her, and found her collapsed, and complaining of great pain in the head (vertex); this seemed to come on in paroxysms. Her temperature was 97° Fahr., and probably fell even lower, as her extremities soon became ice-cold.

On December 4th she was much weaker, and very drowsy, but there was no paralysis, and there had been no convulsive attack; she became gradually insensible, and died comatose on December 5th.

Post Mortem Examination.—The brain alone was examined. Some difficulty was experienced in removing the brain, as a tumour completely filled, and was adherent to, the dura mater lining the sella Turcica. On examination of the base of the brain, a large soft distinctly lobulated tumour was found encroaching upon the under surface of the right anterior cerebral hemisphere; although it caused a distinct depression, it yet did not involve the brain-substance. The optic commissure was involved in the growth, as also the right optic nerve, which was traced through the growth as far as the corpora quadragemina; the left optic nerve was not affected in the part of its course posterior to the commissure; no trace of the pituitary body could be found. On removing the tumour it shelled out, as it were, from the depression which had been produced by its pressure in the anterior cerebral lobe. This depression was lined by the pia mater and arachnoid. The convolutions and sulci in this region were completely obliterated. The dimensions of the tumour were as follows: length, 2¼ inches; width, 1¾ inches; depth, 1⅜ inches. It weighed eight drachms. The microscopical structure of the growth was found to be that of a soft glioma; it consisted of a neuroglia-like framework, filled with small round cells, and was very vascular.

REMARKS.—The tumour was situated on the right side of the brain, and any pressure exerted must have been limited to the right cerebral hemisphere, almost if not completely; yet the symptoms, such as they were, gave no hint as to this fact of unilateral disposition of the growth. The absence of marked optic neuritis, though it does not stand alone, is an interesting fact; but of far more interest is the curious fact that the commencing neuritis was observed in the left eye, and that there was dimness of vision in that eye; the former, as is well known, does not necessarily presuppose the latter. It will be noticed that it was the right optic tract behind the commissure that was involved in the growth, though it was so far from being destroyed that it could be traced through the growth as far as the corpora quadrigemina. If the right optic disc were entirely free from disease, then the case would be strong evidence in favour of the view that the optic neuritis of intracranial tumour is produced by direct extension; but the case cannot bear the weight of this conclusion. The absence of localised paralyses of cranial nerves is noteworthy, and must be accounted for by the fact that the tumour was situated so far forward as to allow all nerves except the first and second to escape. The absence of paralysis of a hemiplegic kind was not remarkable, and the slight degree of mental obfuscation was just what might be anticipated as the result of a considerable degree of pressure on the præfrontal or antero-frontal lobe, gradually set up. The amount of displacement of brain by effusion or new growths which can be endured without marked symptoms, so long as the displacement is brought about gradually, is very well known, but does not fail to strike us as remarkable as each new case is witnessed. However, the only alterations to be expected in this case were mental, and these to a slight degree were present. The most unusual symptom noticed was the exophthalmos, and this was marked. Remembering that the tumour completely filled the sella Turcica, and was adherent there, two possible explanations of this protrusion of the eyeballs suggest themselves, and both, it may well be believed, had some part in bringing it about. In the first place, the tumour may have excited a considerable amount of pressure on the cavernous sinuses, situated one on each side of the body of the sphenoid bone, which receive the ophthalmic veins at their fore part, and communicate posteriorly with the petrosal sinuses; in the second place, the growth of the tumour may have interfered with the functions of the cavernous plexus of the sympathetic nerve which is situated "in the sinus." The protrusion of the eyeballs in exophthalmic goitre has been attributed to dilatation of the vessels in the orbit brought about by disease of the sympathetic system. Such a case as this here recorded, though in itself by no means sufficient to solve such a problem as that here referred to, is yet worthy of note as a contribution towards a solution in the future.

HOSPITAL OF H.M.S. CONVICT PRISON, PORTLAND.

ACUTE INTESTINAL OBSTRUCTION BY PERSISTENT VITELLINE DUCT.

(By G. Herbert Lilley, M.D., M.R.C.P.E., Medical Officer to the Prison.)

A NOTICE in the BRITISH MEDICAL JOURNAL of February 10th, 1883, that Mr. Barwell exhibited at the meeting of the Pathological Society of London, on February 6th, a specimen of the "rare condition" which forms the subject of these notes, had induced me to give a short account of a case which has been under my treatment. It, however, differs from that described by Mr. Barwell, in that it was more rapidly fatal, and no operation was performed.

P. J., aged 21, a prisoner, was admitted to the hospital of this prison early on the morning of February 5th. He said that he had been in pain in the abdomen during the night, and had been retching without being able to vomit anything. He asked for an emetic or purgative, saying that he was not in such pain that he could not work, if only he could "clear" his stomach. The pain was paroxysmal, and the [illegible]. He said the pain appeared first to come on while [illegible]. At [illegible] A.M. he vomited a small quantity of green, watery [illegible]. At noon the pain became more [illegible], and the [illegible] shorter; retching was more constant, and the [illegible]. The [illegible], and thirty minims of [illegible].

At 3 P.M. he appeared flushed, had an anxious expression, and suffered more pain. I ordered him an enema of soap and castor-oil, turpentine stupes to the abdomen, and a pill of extract of opium 1 grain, extract of belladonna ¼ grain, and extract of conium 3 grains, every three hours; a diet of milk, champagne, brandy and lime-water, and small quantities of beef-tea was ordered, and I injected, hypodermically, half a grain of acetate of morphia, with one-sixtieth of a grain of sulphate of atropia. In the evening he appeared much worse. I ordered him opium fomentations to the abdomen, and repeated the enema, but without result. On February 6th, at 4 A.M., the retching was most distressing, and the vomiting of bile-stained fluid persistent. Up to this time the vomit had never been stercoraceous. I gave him another enema, with 30 minims of tincture of opium in it, and at the same time administered 30 minims of liquor opii sedativus by the mouth, in brandy and water. He had hot water-tins to the sides and feet, to relieve the sense of cold he complained of. Still the bowels had not acted, nor had he passed any flatus. He complained of a feeling of tension over the pubes, and inability to pass urine. I carefully introduced a No. 6 silver catheter into the bladder, which only contained about half an ounce of high coloured urine. His pulse was feeble, and surface cold. At 12 o'clock noon, on February 6th, when seen by me he appeared to be sinking, his pulse was barely perceptible, face ashy, expression anxious, but he was perfectly conscious, and only two minutes before his death, which took place at 12.10, he begged me to give him pills to relieve his bowels. Immediately after death the stomach ejected about two pints of stercoraceous vomit, the first fæcal matter vomited during his illness.

The necropsy was held on February 8th. The body was well nourished. Upon opening the abdomen, the surface of the intestines, mesentery, and omentum, appeared much discoloured, and a blush was present upon the parietal peritoneum in contact with the discoloration. In the right iliac and umbilical regions the alteration in colour was especially marked, and the ileum, at its lower third, was almost black. Further examination revealed that, at about eighteen inches from the cæcal end of the colon, a diverticulum was given off from the main tube of the ileum. This prolongation, about two and a half inches in length, terminated in a *cul-de-sac*, and was tense with dark fluid and fæcal contents. This proved to be the remains of the vitello-intestinal duct, originally uniting the small bowel with the umbilical vesicle. This distended prolongation was twisted upon itself, and thrown across the ileum, thus compressing and displacing the intestine, and paralysing its action. The lower third of the ileum was filled with dark fluid offensive matter, but no solids, and this length of bowel was intensely congested, and, near the obstruction, almost gangrenous. The remainder of the intestines were apparently quite healthy, and, for the most part, empty. All the organs were healthy. The rarity of this condition, and the extreme suddenness of the fatal termination (for the entire illness lasted but thirty-six hours) in so young and healthy a subject, prompted me to report the case as one of interest.

JOINT COUNTIES ASYLUM, ABERGAVENNY.

CASE OF ROTATORY CONVULSIONS.

(By J. INNES DUNLOP, M.B., Assistant Medical Officer.)

THE patient, Evan W., was admitted into the Joint Counties Asylum, Abergavenny, three years ago, as epileptic and insane, but his mental condition presents no extraordinary features. The peculiarity of the case lies in the fact of the patient being seized with a series of violent convulsions, in which his body rotates round a centre, previously to an ordinary epileptic seizure. This condition has been observed for over four years.

The patient has become so demented by continued fits, that not the faintest information, as regards an aura, can be gained from him. Immediately previous to the convulsion, he will run for a short distance along the room, uttering a loud and prolonged cry, when he becomes insensible, and falls always on the back of his head. The convulsion which then ensues may be roughly classified as of two varieties. In the more uncommon of those, with his buttocks as centre, and one of his feet as motive power, he forms a series of horizontal circles round the ward with great rapidity, revolving like a child's spinning-top. In the more usual form, he forms a series of somersaults, his head, trunk, and lower limbs being powerfully flexed, his feet almost touching his head, and his arms clasped behind his back, and, in this attitude, very much resembling a revolving cartwheel, he rotates round the ward, often passing round an area of more than thirty feet in circumference. As the violence of the fit diminishes, instead of turning round a complete circle, he sways to and fro like a pendulum, each gyration becoming smaller and smaller, till the convulsion ceases, when he presents the congested face and stertorous breathing of the ordinary epileptic. These varieties of the convulsion are often combined in the same fit, the patient revolving the one way one moment, and another the next. Sometimes his hands clasp his feet (instead of being round his back), so that his body forms a complete circle. Such a convulsion lasts, on an average, from forty seconds to a little over a minute. After a few moments of stillness, and while still unconscious, instead of recovering, he has an epileptic seizure, in no way differing in any detail from the ordinary type of epilepsy. These convulsions have gone on continually for the last four years, averaging about seven in twenty-four hours.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 8TH, 1884.

JOHN MARSHALL, F.R.S., President, in the Chair.

Xeroderma Pigmentosum.—Dr. H. RADCLIFFE CROCKER showed three cases of the very rare condition known as xeroderma pigmentosum (Kaposi), in whom several phases of the disease were evident. The pigment-spots were only seen on the parts exposed to the sun, and chiefly on the extensor surfaces of the arms. In the most advanced case (age 12) the vernicose projections and sores had been the starting point of large fungating epitheliomata. The discussion of this disease was unavoidably postponed to the next meeting, for want of time.

On the Direct Treatment of Spinal Caries by Operation. By FREDERICK TREVES, F.R.C.S.—The author said that the gravity of spinal caries depended not so much upon any single pathological feature in the process as upon the depth at which the disease was situated, and its inaccessibility to the usual operative procedures applied to caries elsewhere. Diseased bone could not be removed from the vertebral bodies, and the morbid products, having to travel a great distance in order to be evacuated, were apt to induce immense purulent collections. These collections were usually opened at a point remote from the original seat of the disease. In the operation proposed by the author, the anterior surfaces of the bodies of all the lumbar vertebræ, and—with some reservation—of the last dorsal vertebra, could be reached from the loin. A vertical incision was made near the outer edge of the erector spinæ; the sheath of that muscle and the quadratus lumborum were cut through; the psoas muscle was incised, and the vertebræ reached by continuing the operation along the deep aspect of that structure. The details of the procedure were fully described. By means of this operation the vertebræ could be readily examined, carious or necrosed bone could be removed, and a ready and direct exit could be given to all morbid products; an abscess situated in the psoas muscle or in the lumbar region could be evacuated while it was yet small, and before it had led to a huge abscess-cavity. If a large psoas or lumbar abscess existed, it could be evacuated at its point of origin, and at a spot that, in the recumbent posture, corresponded to its most dependent part. If Hueter's statement were true, that the two vertebræ most frequently attacked by caries were the last dorsal and first lumbar, the operation should be capable of frequent application. The author detailed three cases in which he performed this operation. All the patients made a good recovery. In one of the instances he evacuated at its point of origin a psoas abscess containing forty ounces of pus, and removed from the body of the first lumbar vertebra a large sequestrum measuring one inch by half an inch. The immediate improvement in this patient's condition was very marked. In another case, the psoas abscess had been opened in the thigh some months previously. By this operation a counter-opening was made at the point of origin of the abscess from the lumbar spine, and the entire abscess-cavity was drained by a tube passing from the origin of the psoas muscle to its insertion.—The PRESIDENT congratulated Mr. Treves on his paper, as showing the results of enterprise and skill. He also called attention to the large number of specimens of spinal disease which had been collected on the table before him. Mr. Treves had brought some in which there were seen after death sequestra, which, he thought, might have been removed during life. Ten others had been sent from University College Hospital, through the kindness of Mr. Berkeley Hill, and many others from the College of Surgeons, which had been selected by Mr. Eve.—Mr. TREVES desired, before a general discussion was entered upon, to add a word as to the last case he had treated, which was, at the time of writing the paper, still under treatment. A very large drainage-tube had been passed through the psoas with decided local relief; but the tubercular disease of the lungs gained ground rapidly, and the boy finally died with large cavities in the lungs and lardaceous liver and spleen. But the *post mortem* evidence was sufficient to justify the operation, for the abscess-cavity, which was once very large, had shrunk to a mere tube, big enough for one finger only.—Mr. **BARWELL** remarked on the difficulty of diagnosis, before treatment at all events, as to the presence or absence of a sequestrum. If there were a large psoas abscess, distinct good must be considered gained if its pus were evacuated by the shortest and most convenient route, which was possibly often in the loin. In Mr. Treves' first case there had been a history of local injury, and when Mr. Treves had operated, he had been lucky enough to come on a sequestrum, by the removal of which he had done great good; but it was much commoner to find widespread caries starting from portions of the bones which could not be removed without great danger of opening the spinal canal and causing rapid death. Caries of the vertebra differed from other instances of caries, in being more widespread, and consequently more difficult to remove.—Mr. **BRYANT** congratulated Mr. Treves very warmly for introducing into this part of surgery the good principles of opening an abscess early, and early removal of sequestra. Still, it could hardly be said fairly that more than a small proportion of the cases of psoas abscesses would be wisely treated as Mr. Treves had suggested. There were some to which it would be particularly applicable, viz., those abscesses which originated in the psoas muscle without any connection with the spine—arising from a strain, or sprain, or rupture—and which spread up sometimes so as to affect the spinal column secondarily, so that it became superficially diseased by contact with pus. If free and convenient exit for the pus were afforded, such cases might heal by granulation. The drainage-tube which Mr. Treves had used, and which was about half an inch in internal diameter, seemed to him probably unnecessarily large; such a matter, however, could only be determined by experience. Treatment of this sort was not entirely new; he had himself treated five or six cases by drainage above the ileum; in two, he had taken away small portions of bone from the ileum, which had become diseased, probably from contact with pus, and he had long been looking for cases where such treatment might be more freely used.—Mr. C. **KEETLEY** related two cases of large lumbar abscesses which he had treated with erosion and iodoform after German methods. The first case in which the transverse group of the second lumbar vertebra could be plainly felt, had healed up completely after some application of a mixture of iodoform and ether. In the second case there were three different openings, probably leading to different origins of disease, and only one, on the sacrum, received much benefit from scraping and iodoform.—Mr. **NOBLE SMITH** agreed with Mr. Furneaux Jordan that no operation should be performed except when there was no improvement for a long time and some source of irritation, and he consequently could not endorse Mr. Treves' opinion, that incision should be made early. The chief cause of death in these cases of psoas abscess arising from spinal caries was, he thought, the imperfection of the attempts made to fix the spine. The use of plaster-of-Paris had been blindly followed, to such an extent as to lead many to forget that it was very far from effecting complete fixation of the spine. He had himself effected complete mechanical fixation of the spine in twenty-five cases, and in all those cases there had been cure or progressive recovery. The details of fifteen of them had been published, and he hoped to publish the rest.—Mr. **MACNAMARA** remarked that, whilst Mr. Smith advocated rest as the *sine qua non*, the first surgeon who wrote of this disease, Mr. Pott, said, in his admirable treatise, that in his large experience in St. Bartholomew's Hospital, all the cures were effected by counter-irritation, the use of setons, and blisters, etc. That Mr. Pott's observations were perfectly correct he could have no doubt, and he was quite unable to explain why such treatment had now been completely abandoned. Modern pathology offered some explanation of the process of recovery by showing the limited area of diseased bone surrounded by healthy tissue ready to produce sufficient bone to replace it. Pott's treatment was not of early cases, but of those advanced states of disease which were grouped together under the vague heading of paralysis. His successor, Sir John Earle, disagreed so far from his master as to think some mechanical support desirable. Pott had considered the disease the outcome of a constitutional state best treated by movement, fresh air, and counter-irritation. There were certainly many hopeless cases presented to a surgeon when counter-irritation and everything else had been tried without good result, and in such cases he had to thank Mr. Treves for the suggestion of a method of treatment he should certainly follow out if an opportunity occurred.—Mr. R. W. **PARKER** gave a summary of the cases of spinal caries that had come under his notice. Out of 183 he classed 9 as cervical, 82 as dorsal, 21 as dorso-lumbar, 37 as lumbo-sacral; in 42 cases the position of the caries had not been noticed. The point that he wished to bring out clearly was that, in the dorsal cases, in about 8 per cent. suppuration occurred, whilst it was found in 30 per cent. of the dorso-lumbar cases, and in 70 per cent. of the lumbo-sacral cases. The cases had all been in children, and it might readily be objected to any operations in such cases that there was too little room to work in for examination of the spine. That was very true, but did not apply to the operation in adults. He preferred himself to open psoas abscesses above Poupart's ligament, as was often done in the practice of Sir Joseph Lister.—Mr. **HULKE** rose for a moment to inquire how Mr. Parker was using the word "suppuration," and how he was able to ascertain that it was absent in 92 per cent. of his cases of dorsal caries.—Mr. **PARKER** explained that he had only meant to say that he could find no abscess in these cases, and that his *post mortem* examinations had led him to think that many cases of spinal caries escaped without an abscess.—Mr. **HOWARD MARSH**, though feeling very much indebted to Mr. Treves for his paper, felt sure there might be improvement in its title—viz., *On the Direct Treatment of Spinal Caries by Operation;* the paper was not on the direct treatment of caries, but on the treatment of abscesses resulting from caries, or, in part, of spinal necrosis; caries itself was not amenable to treatment until it had led to the formation of abscesses.—Mr. **SAVORY** said that he wished first to express the great respect which he felt was due to Mr. Treves's authority, and then to go on to note the difficulties which seemed to attach to his suggestions. He would first object that by no reasonable operation could a sufficient area be exposed for the removal of bone. Still, he had no practical experience of Mr. Treves's operation, and could only adduce a kindred operation which he had seen performed for the replacement of the parts of a fractured spine. In that case, the danger of the operation had impressed him very strongly; the risk from hæmorrhage or injury to the spinal cord was very great. It might justly be objected that the tissues of a chronic invalid were very different from those of a healthy man after a sudden accident; but still he was inclined to regard Mr. Treves's method of treatment as almost entirely impracticable. If comparison were made with a very much easier set of cases—diseases of the tarsus—it would be universally recognised that even there it was not easy to say in an operation what was being removed; and how thankful the operator was for the use of an Esmarch's bandage, which made exploration comparatively easy! But in any operation on the bodies of spinal vertebræ—where the hæmorrhage was likely to be profuse, and where touch probably was the only guide—he could hardly help thinking the conditions rendered it unjustifiable. And the second objection he felt strongly also—viz., that unless these operations were done at the right time, they would do more harm than good. Caries was not a disease in itself; it was the result of a previous inflammation, the area of which extended far beyond the caries. Operations whilst the disease was advancing were likely to extend the inflammation and to extend the caries, its sequela. If we could hit on the time, as Mr. Treves had done in his first case, when there was a sequestrum, the operation would be of the greatest profit, for it would be a possible way of getting rid of a hopeless obstacle that could not be got rid of in any other way. But, unfortunately, there were no means that he knew of for the diagnosis of sequestra. It might be answered, then we should explore. But should we be justified in using such severe measures for what might very possibly indeed be a case that might be cured by many natural causes? To act after such a plan would suggest an operative mania. What was most important of all to a right appreciation of this question was a clear idea of the pathology of caries, and on that subject he would beg Mr. Treves to throw a little light. Were some cases of caries tubercular? Were all the same? And, if they were of different origins, how should that affect the treatment? Those were all questions of great interest. Mr. Bryant had made a most important statement that some psoas abscesses originated in the muscle, and had no connection at first with the spinal column, though they might afterwards have spread up to it and damaged it. If Mr. Bryant could go on to tell them anything of the pathology of such, and in what manner they had been caused, as he had suggested, by sprains and strains and ruptures, he would be doing a great service to pathology; and it was not to be supposed that, because a separate Pathological Society had been set on foot, pathology was for a moment to be considered excluded from the Royal Medical and Chirurgical Society.—Mr. EVE explained the specimens he had brought, and added that, after examining the museums of the College of Surgeons and of St. Bartholomew's, he found half the specimens were of the lower dorsal and upper lumbar regions; in nearly all the last dorsal vertebræ was affected, in few the first lumbar vertrebræ. But he admitted that the number of museum-cases was a very unsatisfactory clue to the members in ordinary practice.—Mr. BRYANT, in replying to Mr. Savory, said that in making his original observations he based them on four cases in which he had treated acute suppuration of the psoas muscle following a strain, and which all got well; and that he had several times, though not very often, traced abscesses of the psoas and iliacus muscles which had no connection with the spine; and, finally, that at a time when he never made any *post mortem* examination without cutting into the psoas muscle, he had sometimes found dried-up psoas abscesses.—THE PRESIDENT related a case of a gouty man, who had fallen from his horse when riding across Hampstead Heath. He ruptured the psoas muscle; a large hæmatoma resulted, which suppurated, and he died in ten days from pyæmia, resulting from this psoas abscess. The point of greatest mobility in the spine was, as a rule, between the last dorsal and first lumbar vertebræ, and that might possibly have something to do with the determination of the most frequent position of caries. He believed that none of his colleagues at University College Hospital had gone so far in operative measures as Mr. Treves—though exploration of a sinus by the finger had often been made—but he thought it likely that in the future some such might be tried.—Mr. SAVORY begged to be allowed a moment to explain that the abscesses of whose pathology he was anxious to hear more were the large chronic so-called psoas abscesses, not, of course, exactly such as those of which the President had spoken.—Mr. TREVES, in replying, expressed his entire agreement with Mr. Howard Marsh that his title was ill-chosen and delusive, and offered to alter it. The object of his paper had been mainly anatomical, viz., to show the best route by which to reach the spine and to open a psoas abscess. The sequestrum which he had met with in his first case had not been diagnosed beforehand, and was a rare accident. To attempt to scoop out carious bone he agreed was out of the question. He was inclined to agree with Mr. Bryant, insomuch as he thought he had found the bone bared by the neighbourhood of previous pus. The evacuation of the pus was then much to be desired. The very large drainage-tube he had only adopted after trials of smaller ones, and he had found it answer well. Against the method of mechanically fixing the spine, as advocated by Mr. Furneaux Jordan and Mr. Noble Smith, he felt bound to protest strongly, for it led to the most unfortunate results in lay opinion. If the spine were said to be affected it was very commonly the first idea that "an apparatus" must be got, and there all attempt at treatment was apt to end. He did not agree with Mr. Parker that it was better to open the abscess above Poupart's ligament than below, for he had found it more difficult and less effective as a drain. He quite agreed with Mr. Savory that in healthy subjects no room for operation could be obtained, but in the diseased cases the vertebræ had been largely exposed by the abscess, otherwise the operation would be nothing less than barbarous.

PATHOLOGICAL SOCIETY OF LONDON.

ANNUAL GENERAL MEETING, TUESDAY, JANUARY 4TH, 1883.

J. WHITAKER HULKE, F.R.C.S., F.R.S., President, in the Chair.

The President's Address.—The PRESIDENT opened the meeting by delivering a short address, in which he traced the career of the Society since its foundation in February 1846. At the end of its first year, it had, he said, already become so popular, that its members numbered 130. Of the 98 "original members," only 19 had survived to the present time, but among these was the first President of the Society, Dr. C. J. B. Williams. In its first decade, the Society encouraged the study of morbid anatomy rather than that of morbid processes; and that this was intentional, was apparent from one of the laws in the original code, which ran thus: "That in the remarks made in reference to specimens exhibited, all discussions on abstract points shall be, as far as possible, avoided." The circumstances of the times influenced the direction in which the Society worked; great discoveries in general anatomy had been made through the use of improved microscopes, and the employment of better methods for obtaining fine and differentially stained specimens of tissues. The founders of the Society, men engaged in the active practice of their calling, were naturally anxious to extend the use of these methods to the investigation of morbid anatomy, and they had the wisdom to see that the accumulation of facts ought to be their first care. Yet it was not always possible to avoid drawing impressions from the facts observed; they forced themselves upon observers, and out of them theories would sometimes arise. To take an example, it was early discovered that those tumours, the minute structure of which differed least from that of normal tissue, had the least lethal influence; some even were led to imagine that the cellular elements of malignant tumours differed objectively so completely from those of the normal tissues, that, by mere inspection of the cells, without reference to the tissues around them, a decision as to the nature, and particularly as to the malignancy of a tumour, could be arrived at. At the commencement of the second decade of the Society, a distinct direction was given to pathological thought by the publication of Virchow's *Cellular Pathology*, wherein the importance of the "cell" as the centre and starting-point of pathological processes, the universal distribution of the connective tissue-corpuscle, and the important part it played in the evolution of the lymph-corpuscles, or pus-corpuscles, of inflammation, and in the origin of the cell-constituents of tumours, were first demonstrated with thoroughness and distinctness. The impression made by this great work was deepened by the publication, in 1863, of the work in which the same author dealt with the whole subject of new growths and tumours; and in time almost all pathologists adopted his classification as the basis of structure and genus, a classification which had held its own down to the present day. The object of the Committee of the Society on "Morbid Growths and Processes," appointed in 1867, was to ascertain what relation, if any, existed between anatomical structures and those clinical features ordinarily regarded as malignant; subsequently, its scope was extended, and it became a standing committee of reference on morbid structure, and in that capacity it had not ceased to be of the greatest value to the Society. The President then proceeded to observe that Virchow's doctrine had, after several years of unquestioned supremacy, found a formidable rival in the doctrine of diapedesis; this latter doctrine, if held to the exclusion of all others, was, however, surrounded by serious difficulties. One difficulty he felt was the inconceivable numbers and rapidity with which the white blood-corpuscles must be formed in cases of extensive inflammation; for instance, in erysipelas the whole subcutaneous areolar tissue of a limb became, in a few hours, stuffed with leucocytes, for the enumeration of which billions would not suffice. It was difficult to conceive how the formation of leucocytes could have been so augmented and accelerated as to have supplied these countless swarms in addition to the physiological requirements. A second difficulty encountered was the great obstacles which, it was assumed, the leucocytes must overcome in some of their wanderings; as instance, he quoted the circumstances observed in suppuration of the eyeball in pyæmia consecutive to embolism and thrombosis, with associated collateral fluxion in the choroid. Here the persistent embryonic connective tissue-corpuscles of the hyaloid dissepiments were found enlarged, and enclosing not the usual single large nucleus, but several lesser ones, not optically distinguishable from leucocytes. If these were not the offspring of the cells through fissiparous multiplication of the nucleus, but leucocytes, then these leucocytes must have travelled from the choroidal vessels, and, in this course, must have traversed the "elastic lamina" of the choroid (a stout structureless membrane), the entire thickness of the retina, piercing its *membrana limitans interna* (another structureless continuous hyaline sheet), have perforated the hyaloid capsule of the vitreous humour, and lastly, have entered the connective tissue-corpuscle. The two doctrines, however, were not irreconcilable; and he was ready to accept as true that the formed products of inflammation originated in part through diapedesis, and, in part, by proliferation of connective tissue-corpuscles, but also that leucocytes, or pus-corpuscles, possessed the power of multiplication. How it was that the white blood-corpuscle, in becoming a pus-corpuscle, lost its positive innocence and acquired so virulent a nature, was a difficulty not met by either doctrine, but might, he thought, find some explanation in the observation of Hueter, that the corpuscles of septic pus contained within them schizomycetes. During the existence of the Society, no theory, he thought, had arisen which, in its practical bearings, was of greater importance than that which taught that the inception and maintenance of the inflammatory process was due to the influence of those living agents which appeared to be inseparably connected with the process of putrefaction, a doctrine ably expounded by Sir Joseph Lister and embodied by the late Professor Hueter, whose early death was so deplored, in the aphorism, "without schizomycetes, no sepsis; without sepsis, no inflammation." With regard to the specific distinctness of the several forms of vegetable life discovered in the fluids of the human body in health and in disease, the weight of botanical opinion appeared to be in favour of referring them all to the order Schizomycetes. A convenient term to include all forms was the word microbe. These microbes would appear, if all that had been recently said were true, to take an active causative part in nearly all the ills to which flesh and blood are heir; for instance, forms were described as occurring in osteomyelitis, hospital-gangrene, diphtheria, rapid spreading traumatic gangrene, carbuncle, erysipelas, septicæmia, and pyæmia, typhoid, relapsing and yellow fever, cholera, tetanus, hydrophobia, tubercle, lupus, scrofula, syphilis, and gonorrhœa. The members of the Pathological Society had not been behindhand in the study of this subject, as was witnessed by the debate on the Germ-Theory of Disease, by the report of the subcommittee on the Morbid Anatomy and Pathology of Pyæmia and Septicæmia, and by the able communication of Mr. Watson Cheyne on the organisms occurring in wounds. One word of caution the President thought necessary, and that was that the presence of microbes did not necessarily mean their criminality. The *Transactions* of this Society contained, he believed, such a wealth of carefully observed and well reported facts as no archives in any language could show, and no similar work enjoyed a higher reputation. The first volume issued consisted of but 156 pages, and contained not one illustration. Gradually the annual volume had grown until it became a stout, profusely illustrated book, such as had for several years been issued. The President concluded by referring to the discussions which had been held during the past ten years. Their chief value appeared to him to consist less in instant additions to pathological knowledge accruing from them, than in the suggestions and incentives to further research which arose out of them, and in respect to which it was impossible to measure their importance.

Vote of Thanks.—Dr. **DUFFIN** moved, and Mr. G. **LAWSON** seconded, a vote of thanks to the President for his address. The motion was carried by acclamation, and the **PRESIDENT** briefly responded.

Actinomycosis.—Mr. **FREDERICK TREVES** showed a patient, a man living in a rural part of Essex, who presented a series of peculiar ulcerations and growths, extending from the neck and jaw obliquely across the chest. The uppermost growth was traversed by a sinus leading down to the lower jaw; in the posterior triangle of the neck was a deep excavation, filled with a cheesy-looking material. The growths below this point projected from the surface. The case had been sent up to him by his brother, Mr. Treves of Margate, and they had been led to make the diagnosis of actinomycosis partly on the principle of exclusion, but chiefly because the case agreed in every point and feature with those described by Ponfick (see BRITISH MEDICAL JOURNAL, 1882, vol. i, p. 545). The disease in this case already had spread from spot to spot, so that there were now thirty or forty centres of growth. If the diagnosis were correct, a point only to be determined by observation of the peculiar fungus under the microscope, then the case would be the first ever recognised in this country.

Three Cases of Calculus of the Pancreas. Dr. **NORMAN MOORE** exhibited three specimens of calculus in the pancreatic duct. 1. A pancreas with a dilated duct, containing numerous irregular calculi of carbonate of lime. The duct was most dilated near the head. There were stones in all parts of it, but it was nowhere completely closed. The patient was a man, aged 40, who died of diabetes. The bile-duct was pervious, and there was never any jaundice. 2. A pancreas, with its main duct slightly dilated, and containing a calculus of irregular shape, around which was a large abscess in the head. This abscess pressed upon the orifice of the bile-duct sufficiently to produce great distension of the gall-bladder. The patient was a man, aged 43, who died in St. Bartholomew's Hospital of an attack of pleurisy following gouty symptoms. 3. A pancreas, with great dilatation of the duct throughout its length. Near the orifice, the duct was blocked by a small calculus of irregular shape. The whole gland was very hard, and, to the naked eye, showed a great increase of connective tissue. The papilla in the duodenum was enlarged, and the hardened tissue of the pancreas had constricted the bile-duct, so as to cause complete obstruction. The liver was of a deep green colour, intensely hard, and with general dilatation of its ducts, which everywhere contained watery bile and bile-gravel. The glands in the hilum of the liver showed no new growth, and a careful search showed none anywhere in the body. Microscopic sections of the pancreas showed an extensive increase of connective tissue. Many bands of old growth traversed the gland, and there were patches of nuclei of a more recent connective tissue-growth. Some normal acini were visible, but in most, the gland-cells were more or less atrophied. No cells like those of the acini were to be found beyond their proper limits, nor were there any other signs of carcinomatous growth. The morbid change was of the same kind as that found in the liver of cirrhosis. Dr. Wickham Legg had shown that dilatation of the hepatic ducts would produce a connective tissue-increase throughout the liver. In this pancreas a gradual dilatation of its ducts, due to the occlusion of the main duct by the calculus, was probably the cause of the new connective tissue-growth throughout the gland. Cirrhosis of the pancreas, as a result of calculus, had not, he believed, been described before. The patient was a man, aged 64, who was admitted into St. Bartholomew's Hospital in July 1883, and died in October. He had been ill for a month, and jaundiced for three days on admission. His liver was not then enlarged, but on August 13th was distinctly increased in size. During his illness, he had many attacks of vomiting, but no colic. Dr. Moore had exhibited two specimens of abscess of the pancreas due to calculus, at this Society in 1882, and this was the only one which had occurred since in the *post mortem* room at St. Bartholomew's. In the three cases of pancreatic calculus now shown, there was jaundice in only the last and colic in none, but, in all three, attacks of vomiting were noticeable clinical features.—Dr. **WILKS** asked Dr. Moore whether he associated the disease of the pancreas with the diabetes present in the first case. In opening the debate on diabetes, he had alluded to this point; and M. Lancereaux had recently sent him a pamphlet in which several cases of wasting and fatty degeneration of the pancreas were recorded.—Dr. **BURNEY YEO** inquired whether the diagnosis had been made during life.—Mr. **HENRY MORRIS** inquired whether any calculi were found elsewhere in the abdomen. He was led to put the question by the perusal of a paper by Dr. Johnson in the *American Journal of the Medical Sciences*, where pancreatic calculi were found at a considerable distance from the gland in connection with a mesenteric abscess.—Dr. W. B. **HADDEN** had quite recently, at St. Thomas's Hospital, seen a calculus in the pancreatic duct in a case of diabetes.—Dr. **MAHOMED** had twice met with a fatty degeneration of the pancreas in diabetes; in the first case, the patient died from diabetic coma, the blood contained free fat, and the pancreas seemed as if smeared with atheromatous-looking material; the second case was also one of diabetic coma, and the pancreas presented the same appearance, though to a less degree.—Dr. **GOODHART** also had seen one case of fatty degeneration of the pancreas in diabetes.—Dr. **HALE WHITE** said that, in three or four cases out of twenty-four of diabetes, wasting and fatty degeneration of the pancreas had been noted. The **PRESIDENT** observed that the Society appeared in reality to have obtained more positive facts in the short observations just made, than in the whole discussion on diabetes in the previous spring.—Dr. **NORMAN MOORE** said, in reply, that, with a view to taking part in that discussion, he had carefully examined the pancreas from a number of cases of diabetes, but the results were not constant or very definite, and no satisfactory conclusion could be drawn. Even in cases where the pancreas was to the naked eye shrunken and small, the microscopical structure was not altered. The diagnosis was not made in these cases, but he thought that in severe vomiting with jaundice the possibility of pancreatic cirrhosis ought to be considered.

Vacuolation of the Liver.—Dr. **HALE WHITE** read a paper, written conjointly by Dr. Savage and himself, on cystic degeneration of the liver. The authors had last year shown to the Society specimens of the various forms of holes in the brain; there was one variety in which the change in the brain was part of a general formation of small cavities in the different organs of the body. It was urged at the time, in opposition to this view, that the holes were due to *post mortem* decomposition, for in the liver a spongy condition from this cause was well known. Since the publication of that paper, the authors had had brought under their notice the case of a woman suffering from acute mania, in whom a similar condition of liver to that described in the paper on vacuolation of the brain was present; and also a case in which the vacuolation was clearly *post mortem*. The differences to the naked eye were, that in the liver affected by decomposition the holes were [illegible] and contained gas, which formed bubbles under the capsule, while in the genuine cystic degeneration the holes were [illegible] and contained no bubbles. Under the microscope, the difference was [illegible]; for, in the latter case, there was extreme vacuolation of the hepatic cells, one or more minute vacuoles appearing in the cell, gradually enlarging and pushing aside the protoplasm; soon, the cell bursting, adjacent vacuoles coalesced, and a large hole was formed. In the case of *post mortem* vacuolation, no such appearance was present. Under the microscope, the vacuolated liver here described was undistinguishable from those in the case exhibited last year, and in which all the other viscera were affected; therefore, it was concluded that in those cases also the universal formation of small cavities was, as the authors then maintained, *ante*, and not *post*, *mortem*. They, therefore, came to the conclusion that this universal cystic degeneration, as a result of vacuolation, was a genuine, but hitherto unrecognised, condition which most commonly affected the liver, frequently only the liver and kidney, and, in rare cases, most of the viscera in the body.

Medullary Sarcoma of Skull.—Mr. JESSETT related the case of an infant who died of sarcoma of the skull, and exhibited specimens also of another case. The patient was a child nineteen months old, and the tumour first appeared as a small mass, of the size of a pea, on the right temple; no cerebral or other symptoms were present at that time. The father presented an extraordinary example of multiple lipomata, and his sister had also a large number of lipomata; the grandmother on the father's side died of a large tumour at the back of the head. In the case of the infant, the tumour rapidly enlarged, extending forwards to the orbits, down to the malar bone, and upwards to the temporal ridge. It then gave a sensation of fluctuation. Still, no fits or other symptoms of brain-disease occurred, even when, later, a small tumour appeared behind the ear, and the other tumour, rapidly enlarging, displaced the eyeball. At the *post mortem* examination, the eyeball was found to be entirely extruded; the growth invaded the antrum, and involved the dura mater, causing a cup-shaped depression in the brain; it had extended through the roof of the orbit. Mr. Jessett commented on the rapidity of the growth of the tumour, and the absence of brain-symptoms. He referred to somewhat similar cases recorded by Mr. Lawson, Sir James Paget, and one quoted by Mr. Butlin; he also exhibited a portion of the cranium from a case of sarcoma of the skull in the adult.—The PRESIDENT thought the case one of considerable surgical importance, and for that reason he adopted the view that many of these tumours began really in the pia mater, and pierced the dura mater and the bone; finally developing with great rapidity when the external surface was reached. The absence of cerebral symptoms was not at all uncommon, particularly when the tumour grew from the vault of the skull. Cerebral symptoms were with extreme frequency absent.—Mr. TREVES thought the case was far more likely to be an instance of sarcoma starting from the pia mater; for, where the growth commenced in bone, it generally spread outwards. —Mr. LAWSON referred to a case recorded by Mr. Tweedy, in which the removal of what appeared to be merely an orbital tumour was followed by acute meningitis and death; the portion spreading into the brain was found incomparably greater than that visible during life.

Two Cases of Pulmonary Aneurysm. Dr. SAMUEL WEST described two cases of large aneurysm of the pulmonary artery, with profuse recurrent hæmoptysis, lasting for twelve and forty-five days respectively. The first patient, a male, aged 40, had been subject to winter-cough for twenty years, but spat blood for the first time seven months before his admission into the hospital for hæmoptysis. He lived twelve days from the time of his admission, and brought up every day some blood, averaging each day nearly half a pint, and died finally of exhaustion. The necropsy showed that the right lung was emphysematous and "hypertrophied," with a few old cicatricial patches, but no recent disease. The left lung was adherent over the upper lobe, and was occupied by a large trabeculated cavity. At the apex of the upper lobe was a similar cavity, of the size of a Tangerine orange, which was almost filled by an oval aneurysm measuring $1\frac{3}{4}$ inch by 1 inch. The rent was triangular, and nearly one inch long. The aneurysm was about one-third filled with laminated clot. The second patient, a male, aged 21, was also admitted for hæmoptysis, from which he had suffered slightly before. Cough had troubled him for nearly twelve months. There were signs of advanced phthisis at the right apex, and there was ulceration of both vocal cords. The patient lived forty-five days, and brought up varying quantities of blood nearly every day, averaging, at the last, nearly half a pint. During the forty-five days, he lost in this way close on twenty pints of blood. The temperature throughout was of the ordinary hectic type, with wide oscillations, reaching occasionally nearly 104°. On *post mortem* examination, the left lung was found to be slightly emphysematous, adherent at the apex, with some chronic patches of caseous change, and a small cavity in the upper part of the lower lobe near to the root. The right lung was universally adherent, except that the lower portion of the pleural cavity was occupied by an empyema containing about one pint of pus. In the midlateral region of the lower lobe was an irregular cavity about two inches in diameter, filled with old laminated as well as recent clot; and in the upper part was found an oval aneurysm, an inch and a quarter by three-quarters of an inch. The rent was a small linear slit about one-eighth of an inch long. Dr. West, after observing that cases of fatal hæmoptysis fell into two groups, according as the source of hæmorrhage was in the bronchi or trachea, or in the lungs, stated his belief that the cause of fatal pulmonary hæmoptysis was always to be found in the rupture of a pulmonary aneurysm or of an ulcerated pulmonary vessel. Out of about twenty cases which he had examined, he had only failed once to find such a source. These aneurysms were small in size, rarely larger than a small cherry, rarely multiple, arising usually from one of the larger branches of the pulmonary artery, and due to two causes—first, to a want of support on one side of the vessel; secondly, to changes set up by contiguity in the walls of the vessels. Aneurysms never occurred except in a chronic cavity; but any chronic cavity, no matter what its size or cause, might be the seat of aneurysm. There was no favourite site for their occurrence. The two cases exhibited illustrated many of the points, but were peculiar in the large size of the aneurysm, in the presence of laminated clot, in the extensive adhesions which had formed with the walls of the cavities, and in the coexistence of empyema in one of the cases, and, lastly, in the frequent profuse hæmoptysis.

Election of Officers.—The PRESIDENT read the report of the scrutineers, Dr. Hadden and Dr. Burnett, which showed that the officers proposed by the Council, a complete list of whom was published in the BRITISH MEDICAL JOURNAL, January 5th, page 22, had been duly elected.

Secretary's Report.—Mr. HENRY MORRIS read the annual report, which stated that the funds of the Society were in a satisfactory condition, and that the number of members was now 669. The report then referred to the losses which the Society had sustained by deaths during the year, and expression was given to the general sense of the great loss which the Society had suffered in the death of Dr. Hilton Fagge. Dr. Wilks had become a trustee in place of the late Dr. Peacock. A just tribute was paid to the courtesy and ready assistance of Mr. Wheatley, the resident librarian of the Royal Medical and Chirurgical Society, in whose rooms the meetings of the Pathological Society have been held for years. Some new regulations had been promulgated with a view to facilitating the management of the ever increasing number of specimens. The adoption of the report was moved by Dr. SAVAGE, seconded by Mr. BARKER, and carried unanimously.

Votes of Thanks to Retiring Officers.—A vote of thanks to the retiring Vice-Presidents and members of Council was moved by Dr. BURNEY YEO, seconded by Mr. F. DURHAM, and carried unanimously. It was responded to by Mr. R. W. PARKER. Dr. S. COUPLAND moved, and Mr. TREVES seconded, a vote of thanks to Dr. George Johnson, who retired from the position of Treasurer, and to Mr. Henry Morris, the retiring Secretary. The PRESIDENT endorsed the encomiums passed by both mover and seconder on the courteous, zealous, and able manner in which Mr. Morris had discharged the duties of Secretary. The motion was carried by acclamation, and Mr. Morris briefly expressed his acknowledgments.

Living Specimen.—Mr. CHRISTOPHER HEATH showed a case of Recurrent Parotid Tumour of large dimensions in an old man.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, DECEMBER 3RD, 1883.

JOSEPH WALKER, M.D., President, in the Chair.

Absorption of Hard Palate from Pressure. Mr. J. B. SUTTON showed a remarkable case of absorption of the hard palate, etc., the result of long-continued pressure. The patient had suffered from perforation of the hard palate, of syphilitic origin; and, for many years before his death, he had been in the habit of closing the aperture with rags, increasing the size of the plug as the opening became larger, until the following state of things resulted. The anterior three-fourths of the hard palate, with the whole of the alveolar arch and teeth, had entirely disappeared; the antra, nasal fossæ, and mouth, formed one large cavity, bounded laterally by the thin outer shell of the superior maxilla, and above by the orbital plates of the maxilla, the superior and middle turbinate bones, and the cribriform plate. The nasal septum was almost completely destroyed, and the left lacrymal bone had disappeared.

Dental Caries and Diseases of the Eye.—The discussion of Mr. **Henry Power**'s paper on the relations between dental lesions and diseases of the eye, read at the previous meeting, was resumed.—Mr. **Macnamara** spoke highly of the value of the paper, which he believed to be the most complete collection of facts bearing upon this important subject which had yet appeared in the English language. Cases were not unfrequently met with in which atrophy of the optic nerve occurred without any apparent cause; no local inflammation, and no evidence of any central lesion. These cases were very puzzling to ophthalmic surgeons. In future, he should always carefully examine the teeth; if it should be found possible to arrest these cases of amaurosis by extracting a few teeth, it would be a most important discovery; and he thanked the author of the paper for calling his attention to this possible cause.—Mr. S. C. **Gibbons**, of Brighton, mentioned the case of a young lady, who, after suffering for eighteen months from greatly impaired vision, said to be due to amaurosis, applied to him, and had a number of dead and decayed teeth extracted. Improvement in the sight took place at once, and, in the course of a few weeks, it was almost as good as ever; one eye, however, remaining a little weak.—Mr. J. S. **Turner** thought the subject of the paper concerned the ophthalmic rather than the dental surgeon. The latter might assist the oculist by pointing out sources of irritation which might escape the notice of his colleague, and would, of course, have the chief share in carrying out the treatment thus indicated; but, as the diagnosis and treatment of diseases of the eye required special knowledge and experience, it was evident that such cases as those referred to in the paper must be dealt with mainly by the oculist.—Mr. **Savory** remarked that Mr. Power's paper called attention to a most important principle, which was constantly in action in all parts of the body, both in health and disease—viz., that intimate connection between different, and even distant, organs which was commonly referred to under the name of "sympathy." The fact that the cause of disease might be in one part of the body, and the signs of it in another, was one which should be constantly kept in mind, though it was, unfortunately, constantly forgotten.—Mr. **Charles Tomes** said it had generally been thought that remote nervous disturbance was most likely to occur when the living tooth-pulp was irritated. But he found that, in most of Mr. Power's cases, the teeth were dead; consequently, the source of irritation was external to them, and must have acted directly on the trunk of the dental nerve, which lay in close proximity to the roots of the teeth, and not upon its terminal filaments. He thought this was an important point, and worthy of attention.—The discussion was continued by Messrs. Hunt, S. J. Hutchinson, Storer Bennett, and others; after which Mr. Power replied.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

November 13th, 1883.

George Buchanan, M.D., Vice-President, in the Chair.

Extroversion of the Bladder.—Dr. **Joseph Coats** showed the parts obtained from a case of extroversion of the bladder. Dr. Joseph Coats, Dr. McEwen, and Mr. Clarke, were appointed a committee to investigate and report upon the case.

Excision of Rectum.—Dr. **Beatson** presented a patient from whom a portion of the rectum had been removed. The man was 33 years of age, and had suffered from rectal symptoms for seven or eight years, which, however, were not so severe as to necessitate his seeking medical advice till March of the present year. On examining the rectum, a deep fissure was found in the anus, and, a short distance above the orifice, the bowel was much contracted all round from the presence of a hard indurated mass, with an irregular surface, which bled on being touched. The finger could be got beyond the disease, both anteriorly and posteriorly. On July 3rd, about three inches of the rectum was removed in two lateral halves by the *écraseur*, a preliminary cut having been made through the mucous membrane anteriorly and posteriorly. The patient had recovered well, his only trouble being a tendency to contraction, which was being obviated by the use of bougies. The mass removed, according to Dr. Joseph Coats's account, presented the usual appearances of colloid cancer.

Aneurysm of Innominate Artery: Ligature of Right Subclavian and Carotid.—Dr. **Cameron** showed a patient in whom the right carotid and subclavian arteries were tied for aneurysm of the innominate artery, and whose case was reported in vol. xv of the *Transactions* of the Clinical Society of London. At present, the patient remained very well, and in much the same state as regards the aneurysm as after the operation twenty months ago.

Radical Cure of Hernia.—Dr. **Cameron** also showed a case in which Mr. Spanton's operation had been performed for the radical cure of inguinal hernia. The patient was four years old, and had a very large congenital inguinal hernia of the left side, so large as to equally distend the whole scrotum. The recovery was good, and there was no re-descent of the hernia.

Undescended Testicle in a Hernial Sac.—Professor **George Buchanan** showed an undescended testicle taken from the sac of a strangulated congenital hernia. The patient had suffered for twenty-six years from a reducible hernia, which he was always able to reduce, till the 25th of September last, when it became strangulated. The testicle was absent from that side of the scrotum, and, in operating for the relief of the hernia, it was found lying in the canal. It was removed, and Dr. Buchanan performed an operation for the radical cure of hernia.

Tumour of Testicle.—Professor **Buchanan** also showed a tumour of the testicle, with secondary tumours extending into the inguinal canal. Upon examination, the growth proved virtually to be a gummatous (syphilitic) inflammation of the parts concerned.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

December 20th, 1883.

H. F. Banham, M.D., President, in the Chair.

Abscess of Anterior Mediastinum following Pleurisy, with effusion: Recovery.—Mr. B. **Walker** related this case. R. W., aged 17, was received in the Rotherham Hospital on October 9th, 1882. Whilst at work, he was struck on the chest by a red-hot bar of metal coming from the rolls. He complained of severe pain in the back and chest. His breathing was quick and shallow (restricted probably by the pain.) The auscultatory sounds were normal; resonance was good in both lungs. There was a contused wound, round, three-quarters of an inch in diameter, and half an inch deep, with charred edges, at the junction of the sternum and ensiform cartilage; also another superficial burn (of the third degree) about eight inches square, over the front of the right chest, and several smaller ones. On the twelfth day, slough came away, and air could be heard entering and leaving through the wound with each expiration and inspiration. Moist sounds could be heard all over both lungs. On the twenty-sixth day there was dulness over the right base; this extended the day following. Next month, the wound discharged freely. On March 9th, 1883, he left the hospital cured.

Malignant Disease (?) of Lung.—Mr. E. **Skinner** showed this specimen. The left lung was one solid mass, and adherent to the chest-walls. The right lung appeared healthy. The liver was enlarged. When the patient was first seen in the middle of March, there was consolidation of the left apex. She subsequently became a patient at the infirmary. In July, she suffered from hæmoptysis. On November 1st the voice was very husky, the dulness had much increased, and she complained of great pain in the left shoulder; she was spitting blood. Subsequently, the left arm became œdematous, and later on the other. The specimen was referred to the Pathological Committee for report.

Bell's Palsy with Contraction of Muscles.—Dr. **Banham** gave notes of a case of Bell's paralysis, which was either of the rheumatic form, or due to syphilitic neuritis, and which was followed, after some months, by contracture of the facial muscles, impaired movements of the soft palate, and distortion of the uvula. It was pointed out that a neuritis of the facial nerve, external to the Fallopian tube, was less likely to produce a destructive compression of the nerve, and subsequent degeneration and contracture of muscle, than the same amount of inflammation taking place within the unyielding bony canal. There was evidence in this case that the inflammation had extended up to the geniculate ganglion. Attention was drawn to the fact that the muscles were not spasmodically contracted, but had undergone atrophic contracture, and any efforts to extend them gave rise to acute pain.

Progressive Unilateral Atrophy of Face.—Dr **Banham** gave particulars of a case of progressive unilateral atrophy of the face. The patient was a strong and otherwise healthy girl, aged 15. Her father and one of her sisters had suffered from neuralgia, but the family did not, with this exception, show any tendency to any disorders of the nervous system. Four years ago she had had a gumboil, connected with a carious bicuspid of the right side of the lower jaw. In a day or two, the face meanwhile being considerably swollen, the gumboil burst and freely discharged. The tooth was subsequently extracted. With the exception of the diseases of childhood, she had always enjoyed perfect health.

Shortly after the gumboil-trouble, she began to experience tenderness about the right side of the neck and face, and especially also about the ear. This condition had continued nearly to the present time. Two years ago the parents noticed some wasting of the face which, it occurred to them, might be connected in some way with the old gumboil. There was also some little discoloration about the skin of the right side of the neck. At the present time, there was marked wasting of the right side of the face. Below and in front of the ear was a considerable depression, apparently giving the idea that the parotid gland and the upper part of the masseter muscle were greatly wasted. On the right side of the neck, and over the sterno-mastoid muscle, the skin was dry, and had apparently lost its subcutaneous fat. It could be readily raised from the subcutaneous tissue, and imparted to the fingers the feeling very much of thin flannel. It had a discoloured, dirty appearance. Sensation, masticatory power, and blood-vessels were normal. The possible connection of the gumboil with the present symptoms from an ascending neuritis was alluded to. Attention was also drawn to the fact that, in this case, the wasting was probably entirely of fat and connective tissue.

Rest as a Therapeutic Agent.—Dr. **Dyson** read a paper on some difficulties connected with the employment of rest as a therapeutic agent in medical cases. The form of rest chiefly dealt with was that which was obtained by keeping the patient in bed. The first difficulty referred to was to know how long a patient should be kept in bed after an acute febrile illness. Some cases of rheumatic fever and pleuro-pneumonia were cited, in which the general progress of the case was in every respect satisfactory; temperature, pulse, appetite, secretions and excretions normal, and local conditions quiescent, or almost gone; and yet, when the patient was allowed to get up, severe relapses, general and local, occurred. The importance of keeping albuminuric patients in bed was referred to, and also the extreme difficulty Dr. Dyson had met with in enforcing rest and appropriate diet. The difficulty and importance of keeping children in bed when suffering from subacute febrile disorders was mentioned, notably those slight manifestations of rheumatism, which often ended very disastrously in future cardiac trouble. Old people, too, presented much difficulty. He cited several cases over eighty years old, one after successful operation for cataract by Mr. Snell, and others after slight chest-affections, in which there was shown great tendency to adynamic symptoms, such as dry tongue, staggering pulse, lethargy, wandering, deficient excretion, slight hypostatic lung-congestion. These he thought consistent with the patient's malady, and, exercising all care to prevent exposure, were best treated by free stimulation, and getting the patient in the upright position as soon as practicable.—In the discussion which followed, Mr. Walker, Mr. Browning, Dr. Porter, Dr. Martin, Dr. Law, Dr. Dyson, Dr. Thomas, and the President, took part.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

Friday, November 30th, 1883.

A. H. Corley, F.R.C.S.I., President, in the Chair.

Pseudo-glioma.—Mr. **John B. Story** exhibited an eyeball removed from a boy, aged eight months, for puroplastic inflammation in the interior of the globe. Numerous microscopic preparations were shown, demonstrating the pathological distinctions between this disease and glioma retinæ.—Mr. **Swanzy** said that the case seemed to be one of spontaneous formation of pus in the interior of the eyeball, starting probably from the choroid. The specimen was rather rare; for such an occurrence was generally connected with septic disease, the direct result of a wound or injury, or with septic blood-disease.—Mr. **Arthur Benson** said that, before the eyeball was extracted, there was so much inflammation that he was of opinion it was not true glioma. On enucleating the eyeball, it was found that the inflammation had extended to the orbit, and that there was further disease all round.—Mr. **Story**, in reply, said that the occurrence of spontaneous suppurative hyalitis or choroiditis was very rare; but he did not see why it should be impossible for pus to originate in the eye any more than elsewhere. Spontaneous suppuration had occurred in other places in the same child, and there were spots on the skin. The occurrence of spontaneous suppurative hyalitis was not a thing unknown; Mr. Nettleship had recorded several cases of pseudo-glioma, and Dr. Brailey the occurrence of spontaneous suppurative hyalitis and spontaneous diffuse morbid changes of the eyeball.

Pervious Urachus with Remarkable Disease of Bladder.—Dr. C. B. **Ball** exhibited specimens taken from a patient aged 10. Twenty months previously to his death, the boy was admitted into Sir Patrick Dun's Hospital suffering from incontinence of urine. He had frequent attacks of hæmaturia. The urine was alkaline, and contained considerable quantities of pus. Sounding gave negative results. These symptoms subsided under treatment, and he was discharged, but was readmitted on January 13th, 1883, with urine flowing from the umbilicus, none coming by the urethra. Attempts to pass any instrument by the urethra into the bladder having failed, a laminaria-tent was placed in the umbilical opening. This was followed in three hours by dribbling of urine from the urethra, the first that had passed naturally for seven weeks. A catheter could now be passed without difficulty, but not retained in the bladder. Cauterisation of the umbilical cicatrix, with a subcutaneous ligature passed round the umbilicus when granulation was established, closed the opening for ten days; but, fresh suppuration supervening, the fistula reopened. A further and more extended cauterisation was again followed by closure. The bladder now, to a certain extent, regained its power; on one occasion, he retained his urine for two hours. Three weeks subsequently, the umbilical orifice reopened, urine now flowing by both channels. A plastic operation was performed, and cicatrisation, with progressive occlusion of the abdominal opening, took place. This continued intermittently for two months, and he was discharged on October 15th. On November 18th, he was seized with peritonitis, and died the same day. At the *post mortem* examination, upon opening the abdomen, a small quantity of fluid was found in the peritoneal cavity, with abundance of recent lymph. The omentum was adherent to the abdominal wall. The bladder was much contracted, and the walls increased in thickness. Springing from the fundus was an elongated tongue-shaped cavity, reaching up to a level with the umbilicus, measuring two inches and a half by an inch and a half. Upon opening the bladder, a number of new growths were found, resembling in appearance the columnæ carneæ of the heart. Some were attached by one extremity only; others, by both ends. These growths were composed of fibrous tissue covered with mucous membrane. The obstruction to the urethra was caused by a septum attached posteriorly immediately below the openings of the ureters, and stretching to the front wall. The cavity before mentioned communicated with the bladder by a large opening, and its walls were exceedingly thin and smooth. In the front of this, two openings communicated with the peritoneal cavity. The wall of this cavity was lined with mucous membrane; it was a case of dilated urachus. The ureters and kidneys presented appearances of long-standing disorder.—The **President**, who had seen the case, did not quite agree in the opinion that the urachus was completely obliterated.—Dr. **Benson** said that a man in the City of Dublin Hospital, who came on account of a chest-affection, directed attention to a small lump about an inch below the umbilicus. The man died of chest-disease and kidney-disease; an abscess, originating in the apex of the wall of the bladder, was traced backwards into the cavity of the abdomen. He searched for the urachus, but found no trace of it.—Dr. **Bennett** observed that the difficulty of diagnosis in such cases was extreme. The great freedom with which a probe passed, in the first instance, suggested the possibility of a pervious urachus.—Mr. **Story** thought Dr. Ball had laid too much stress on the supposed existence of a membranous diaphragm in the bladder.—Dr. **Ball** replied.

Cysto-sarcoma of the Breast.—Dr. **Bennett** exhibited and described a cysto-sarcoma of the breast, and showed the drawing of a similar tumour taken from a patient of the late Dr. Rawson of Carlow, which exactly represented the original condition of the specimen under notice. In Dr. Rawson's case, the tumour weighed thirteen pounds; the present specimen weighed fourteen pounds. As far as he could ascertain, the patient suffered from it about six years. Her age was between 43 and 44. She had never suffered the slightest distress from it, save by reason of its weight. It first appeared as an irregular lump on the breast, and afterwards grew irregularly. The pectoral muscle was so intimately adherent to, and absorbed by, the tumour, that it was impossible, in removing the tumour, to save the muscle. The skin, although it exhibited large bosses, was in many parts extremely thin, and was everywhere entirely separable from the substance of the tumour. Over the surface were large veins; but it was only necessary to ligature two small vessels in the lower part. Dr. Purser had made a microscopic examination of the solid masses of the tumour, which proved that they were typical spindle-celled sarcoma.—Dr. **Robert McDonnell** some years ago exhibited to the Pathological Society a tumour similar to this, which he removed from a lady in the neighbourhood of Dublin; it weighed fourteen pounds, and its history was very similar to that of Dr. Bennett's specimen.—Dr. BENNETT said the tumour abounded in mucin. The patient ceased to be under his observation a month after the operation, and he had heard nothing but favourable reports since.

Tumour removed from the Dura Mater.—Dr. WALLACE BEATTY showed a tumour growing from the dura mater covering the upper surface of the right hemisphere, and involving a considerable portion of that hemisphere. The specimen was taken from a patient under the care of Dr. Head in the Adelaide Hospital. Microscopic examination made by Dr. J. H. Scott showed it to be a spindle-celled sarcoma, the cells in part forming nests. The chief points of interest about the tumour were, (1) the fact that there was a depression of bone inwards, causing a depression of the dura mater, and, with it, the centre of the upper surface of the tumour; (2) the fact that, many years before, the patient received a very severe blow from a bottle on the right side of his head, opposite the seat of the tumour, causing temporary unconsciousness. The connection, however, of the growth of the tumour with this injury was not clear.—The PRESIDENT thought the original injury had nothing to do with the growth of the tumour.—Dr. SWANZY had examined the patient's eyes, and only found in one eye a slight tendency to optic neuritis.—Dr BENNETT believed the appearances on the inner table of the bone to be such as to exclude the idea of injury.—Dr. BARTON believed there were evidences that the injury was the cause of the tumour. —Dr. STORY said that a good number of sarcomatous growths in the eyeball were traceable to injuries; but persons having anything wrong with their eyesight had a tendency to attribute it to some external cause.—Dr. HENRY KENNEDY had seen disease of the bone, exactly similar to this, which was traced to syphilitic poisoning. He had seen tumours of the kind develop in the cerebrum, but with a vast deal more suffering than occurred in the present case.—Dr. BEATTY, in reply, said he got no syphilitic history in the case. He had no opportunity of examining the spinal cord, but the rest of the cerebrum seemed quite normal.

REVIEWS AND NOTICES.

SELECTIONS FROM THE CLINICAL WORKS OF DR. DUCHENNE (de Boulogne). Translated, Edited, and Condensed by G. V. POORE, M.D.Lond., F.R.C.P., Physician to University College Hospital, etc. London: The New Sydenham Society. 1883.

THE reputation in which Duchenne de Boulogne is held in this country, considerable though it be, bears no true relation, we believe, to the importance and the originality of the clinical and physiological researches which he carried out through a period of over thirty years. To most people his work is only known at second-hand, and the man himself is little more than *magna nominis umbra*. The cause of this is not far to seek: he was a man of untiring industry, who spent the greater part of his working life in the wards of the Paris hospitals, examining and noting unceasingly, never satisfied with anything short of absolute accuracy, until he trained himself to be one of the most exact clinical observers that even France has ever produced. The conclusions at which he arrived were clear and definite; but his mode of expounding his ideas, and of explaining his premisses, was prolix and involved to an extraordinary degree. There can, we think, be no doubt that his fame has suffered through the very fulness and elaboration with which he has recorded his observations. Such being the case, it would appear that Dr. POORE has acted with judgment in adopting the rather unusual course which he has followed in the volume before us. His commission from the New Sydenham Society was, he tells us, accompanied by the intimation that the selections must be comprised within the compass of a single volume of moderate dimensions. It was felt that the publication of a few entire monographs would give an inadequate idea of the real indebtedness of medicine to a great observer. "I was especially anxious," Dr. Poore remarks in his preface, "to put the English reader in possession, if possible, of all the clinical *facts* which we owe to Duchenne; and, in order to do so within the compass of this volume, it became necessary to deal rather ruthlessly with mere words. My editing has therefore been, as it were, interstitial. I have weighed the value of every sentence and every paragraph, with the result that I have omitted much and compressed a great deal." One consequence of this mode of editing has been to render the style of the book somewhat various: as one passes from the prolix, but oftentimes graphic, narrative of Duchenne to the condensed style of the editor, it is generally not difficult to detect the point of transition, even when the brackets—which, it is said in the preface, are always used, but which nevertheless seem to have sometimes fallen out—are not placed to guide the reader. The work of condensation and selection seems to have been admirably performed; nearly all the material is drawn from Duchenne's great work, which bears the somewhat misleading title of *L'Electrisation Localisée*. The earlier part of the volume is occupied by an account, chiefly directly translated, of Duchenne's views with regard to locomotor ataxy, progressive muscular atrophy, acute anterior spinal paralysis, glosso-labio-laryngeal paralysis, pseudo-hypertrophic paralysis, lead-palsy, and paralysis following injuries of mixed nerves; these subjects occupy rather more than half the book, and are enriched by four excellent "Notes" by the editor. The first of these notes deals with locomotor ataxy, and Dr. Poore justly remarks that the description of the disease given by Duchenne must still be received as almost complete; it is, as Charcot says, "un veritable chef-d'œuvre." In this connection, however, we cannot help regretting that the advance in our knowledge of its pathological anatomy, which, since Duchenne wrote, has become much more definite, has not been thought worthy of record by the editor. Duchenne says that the lesion is confined to the wedge-shaped columns of Goll, the tracts on each side of which lie in immediate relation with the median fissure; whereas, to quote the words of Charcot, "the symptoms observed in cases of isolated systematic lesions of the fasciculi of Goll are not those of progressive locomotor ataxy." (*Leçon s. l. Localisations des Maladies du Cerveau et de la Moelle Epinière*, page 259.) On the other hand, there has now been frequently observed, in well-marked cases of this disease, the degeneration of the so-called fasciculi of Burdach, the fasciculi (or column) of Goll escaping entirely. The posterior column of the cord is divisible into two areas, as Duchenne implies; that nearest the median fissure is the column of Goll, that nearest the posterior nerve-roots is the above-mentioned "fasciculi of Burdach," or posterior root-bundles. Duchenne states that "sometimes the lesion is exactly limited to the course of the.........internal root-bundles;" but that the usual seat of the degeneration "in the posterior columns is confined to the posterior fissure, to the points called the wedge-shaped columns of Goll." It is true that these columns are commonly seen affected in necropsies in cases of locomotor ataxy; but, to again quote the words of Charcot (*loc. cit.*, page 260), "the fundamental lesion has its origin in the root-bundles in the whole length of the dorso-lumbar region; but.........it extends in every direction, step by step, following the direction of the nervous fibres, following also the tracts of connective tissue, and thus reaches on the one side the posterior cornua, and on the other the bundles of Goll. The consequence of this propagation is that, the bundles of Goll being involved in the lower part of their course, degenerate from below upwards." We have gone somewhat fully into this point of anatomy, because we agree with Dr. Poore in believing that "the only satisfactory form of nomenclature is that which designates the disease-process and its seat." It must not be supposed, however, that Dr. Poore has neglected to discuss the newly observed clinical features of the disease; he has some excellent remarks on the condition of the "reflexes" (so-called), and especially on the causation of the "knee-jerk;" as well as on the medico-legal aspects of the loss of virile power, which commonly occurs pretty early in the course of locomotor ataxy; the question was raised in the case of Bagot *v.* Bagot, which attracted a good deal of attention some years ago, and is likely to arise not unfrequently in the future. With reference to the period at which the loss of virility occurs—a point upon which the statements of patients cannot always be trusted—we may remark that the condition of the "superficial reflexes of the groin and lower part of the abdomen may be a guide; if these reflexes have disappeared, it seems probable that the man is no longer potent. The point is worthy of attention, and might, conceivably, be of great value. With the editor's criticism of the theory of the syphilitic causation of locomotor ataxy, it is probable that most sound clinicians will agree; he argues that it is not always easy to be sure that a "history of syphilis" is really so, especially after a lapse of some time; that those who have had "venereal" troubles are often people who have in other ways taxed the powers of their nervous system; that the disease is rare in women, and does not occur frequently among syphilitic prostitutes; and that mercury and iodide of potassium have no curative effect. [illegible] opposed to the syphilitic theory, and seems to [illegible] the two most essential factors in the causation of the [illegible] nervous organisation (*i.e.*, the inherited tendency seen in certain families towards various forms of nervous disease and mental disturbances. "In a great number of patients," he says, "this disease has appeared some months or a year after the death of some dearly loved friend, or after money-losses, or after a social or political revolution. Those who have just suffered (1871) so cruelly in our unhappy country afford me every day numerous and fresh proofs of this."

The editor's note to the next four chapters—to those, namely, which deal with Progressive Muscular Atrophy, Acute Anterior Polio-myelitis, and Glosso-labio-laryngeal Paralysis—will by many be considered to be his most valuable contribution to the book. His discussion of the pathological relations of the two first-mentioned diseases—a point upon which he evidently holds strong opinions—is well worthy of perusal, and is so closely argued that we shall not attempt to reproduce it here, but rather refer inquirers to the book itself. We may note, however, that in glosso-labio-laryngeal paralysis Dr. Poore strongly recommends the use of electricity (galvanic or faradic, according as the muscles respond best to the one or to the other) for the relief of the distressing dribbling of saliva which is the consequence of the loss of tone of the orbicularis oris, and that for this purpose he has found an ordinary silver teaspoon the best rheophore. The other subjects dealt with in the chapters selected for translation and condensation are paralysis from cold, various local palsies, "contractures," hysterical and diphtherial paralysis, a very interesting discussion of the symptoms of cerebellar disease, and a chapter on the Reflex Effects of Electrisation, which contains notes of some curious cases of asphyxia treated with more or less success by faradisation of the precordial region. The volume concludes with a chapter on Muscular Prothesis, which lays down the principles on which apparatus, designed to supply the individual voluntary power of palsied muscles by re-establishing natural movements, or to prevent or overcome deformities of joints, by equalising the tonic forces which naturally control the relations of the articular surfaces, ought to be constructed.

The frontispiece of this volume is a portrait of Duchenne in the act of faradising the frontal muscle of an old man; it is reproduced from a photograph in the *Album de Photographies Pathologiques* (1862), and has all the qualities which impress the observer with the idea that it must be a faithful portrait of the original, of whom it is said that his mind, his character, and his features all marked his Boulognese descent. He was a short thickset man, active in movement, but slow of speech. It is a curious fact, and worthy of record, that this man, who was the first to open up a new field of clinical investigation, never held any official hospital-appointment, he had no beds, and no out-patients of his own. Later in life, it is true, he had a considerable private practice; but, in the earlier years, when his great reputation was made, he was merely a visitor in the hospitals. Every morning he would visit one or two hospitals, selecting for study those cases which most suited his purpose; at first, of course, he met with some opposition and some jealousy from those who were officially connected with the hospitals; but gradually the man's earnestness and singleness of purpose began to be recognised, and the students and physicians alike became glad to avail themselves of the help afforded by his well-stored mind and great technical experience, which he placed readily at the disposal of all. Indeed, the personality of the man is fascinating, and few careers have more useful lessons to teach the rising generation of English students.

A TREATISE ON FRACTURES. By LEWIS A. STIMSON, B.A., M.D., Professor of Surgical Pathology in the Medical Faculty of the University of New York. Pp. 593. London: J. and A. Churchill. 1883.

THIS is a treatise of nearly six hundred pages, dealing exclusively with the subject of fractures. The author, whose chief aim evidently has been the collection from all available sources of much that is now known concerning the pathology and treatment of these lesions, has, in many respects, done his work well. The book is lucidly written, profusely illustrated, and contains many references to the latest contributions to this branch of practical surgery. One cannot imagine, however, that there is likely to be any great demand for such a work as this on either side of the Atlantic; and it is difficult to make out what sort of place it is intended to occupy in surgical literature. It is surely too bulky for the student, and, as a book of reference, cannot be expected to take the place of the well-known work of Hamilton, or of those of Gurlt and Malgaigne. Besides, it is not a complete treatise, even on so restricted a subject; and, whilst some sections are full and exhaustive, others, especially those on fractures of the hand and of the foot, and on fractures of the cartilages of the larynx and trachea, do not give more information than may be found in any text-book of general surgery.

Almost all the first two hundred pages of the work are devoted to general subjects, such as the varieties of fractures, their etiology and repair, and the principles of treatment. In the chapter on the complications of fracture, Dr. STIMSON devotes three pages to the subject of fat-embolism. Several cases are given in which this condition was supposed to have been the cause of death, all these instances having been collected from foreign sources. The author does not enter very fully into the disputed question whether fat-emboli have any influence in producing secondary effects; but he states that it is probable that "the condition of fat-embolism occurs to a greater or less extent in all fractures, as its occurrence seems to require only the bruising of the marrow, the laceration of small vessels, and the existence of a certain amount of pressure, to force the liberated fat into the open capillaries or veins."

In the section on the antiseptic treatment of compound fractures, Dr. Stimson gives no decided opinion on the results of this method based on his own experience or that of other American surgeons, but simply gives the rules laid down by Sir William Mac Cormac and M. Lucas-Championnière, and indicates the various modifications employed by others.

The ninth chapter consists in a good summary of our present knowledge of the interesting subjects of pseudarthrosis and delayed union. The reader will find here an useful analysis of the tables of Norris and Gurlt, and of the more extensive tables published by Agnew in 1878. The different statistics and tables that have been published concerning the frequency of failure of union as compared with the total number of fractures, though varying within wide limits, all agree in making it small. The conclusion that Dr. Stimson draws is, that pseudarthrosis is exceptionally rare under proper treatment, and that, when it occurs under such circumstances, it is generally due to a definite recognisable cause independent of the treatment. In discussing the operative treatment of this condition, he gives it as his opinion that "resection may be stripped of most of its danger by strict antiseptic precautions, and, in cases of real pseudarthrosis with disease of the fragments, is the only method of treatment that holds out much prospect of success."

In his chapter on the general principles of treatment, Dr. Stimson does not enter into the question of the comparative merits of the long-established system of dealing with fracture of the lower extremity by prolonged confinement in bed and the use of splints, and of the more modern practice, much in vogue on the Continent, and warmly advocated in this country by Mr. Sampson Gamgee, of allowing the patient to get up in the course of a very few days, with the injured limb inclosed in a so-called immovable apparatus. A full and critical discussion of the latter method might fairly be expected in a work of the size and pretensions of this. A brief allusion is made to Mr. Erichsen's plan of treating fracture of the shaft of the femur by plaster-of-Paris bandages, without confinement of the patient to bed for more than three or four days. Dr. Stimson evidently has had but little experience of this method. He has not seen a recent fracture of the thigh thus treated in his own hospital-practice for several years, and he states that its use is much restricted or abandoned in other hospitals of New York. He thinks that "the claims made for the method have been somewhat exaggerated." With regard to fracture of the leg, however, the general practice in the hospitals in New York is to place the limb in a fracture-box for a few days, and then, after the swelling has subsided, to put on an immovable dressing of plaster-of-Paris, and to let the patient get up.

The much-disputed point of the possibility of repair by osseous union after intracapsular fracture of the neck of the femur, is discussed very fully and ably. Dr. Stimson, in considering the evidence brought for and against such possibility, by nearly fifty specimens described by various authors, points out that certain questions have to be considered in dealing with each. The condition, supposed to be the result of a fracture, may be the result merely of absorption of the neck of the femur; if the bone have really been broken, the fracture may not have been a pure intracapsular one; lastly, it is very difficult, in certain instances, to prove whether the union be osseous or fibrous. The conclusion is arrived at that osseous union is possible, but not very probable. The possibility of such union might, Dr. Stimson thinks, be admitted "because of the demonstrated fact that the head preserves its vitality, and has shown its ability to produce granulations and bone." On the other hand, the conversion of the fibrous connection into an osseous one is rendered very improbable in consequence of the great difficulty in maintaining the fragments at rest and in good position. "The reason of the habitual failure," Dr. Stimson holds, "to get bony union is to be found in the inability of the surgeon to meet the two principal indications of treatment, coaptation and immobilisation, not in any inability of the tissues themselves to do the work required of them." The question, after all, is really not one of much practical importance, as a close fibrous union would serve as well as one of true callus, and, in many cases of fracture of the neck of the femur, the surgeon finds it impossible in his treatment to aim at union of any kind.

In the chapter on fracture of the patella, the only mention of the practice of exposing the fragments and bringing them together by wire sutures, consists in a brief abstract of cases reported to the Medical Society of London in 1879 by Mr. Bell and Mr. Rose, and in an allusion to some cases that were collected and published by Schneider in 1881.

NOTES ON BOOKS.

The Extra Pharmacopœia of Unofficial Drugs and Chemical and Pharmaceutical Preparations. By WM. MARTINDALE, F.C.S., Late Teacher of Pharmacy and Demonstrator of Materia Medica at University College. With References to their Use, and a Therapeutic Index of Diseases and Symptoms, by W. WYNN WESTCOTT, M.B. Second edition. London: H. K. Lewis. 1884.—We have much pleasure in recording the appearance of a second edition of this useful work, the first having been for some time out of print. The present issue, we are told, contains over twenty new drugs or chemical preparations. A therapeutical index has been introduced, which will be a boon to prescribers. The work, we are glad to find, has not been materially enlarged, only seventeen pages being added. The alterations in the text are not numerous, but several references which were incorrectly given in the first edition have been amended. The mechanical execution of the book is excellent.

Notes on Diphtheria: and Particularly on this Disease as it has occurred in Norfolk. By **PETER EADE**, M.D.Lond., F.R.C.P., Senior Physician to the Norfolk and Norwich Hospital, etc.—This is the first *fasciculus* of a series of medical notes and essays which the author intends re-publishing from a collection of papers on diverse professional subjects, contributed during past years to the various medical journals. The present essay embraces a short history of diphtheria as it has occurred in Norfolk, and is a summary of the author's own experience of the disease, extending over many years. He has further rendered it more complete by directly quoting the views of some of his medical friends who have, like him, had a large experience of diphtheria in this district.

The Hygienic Management of the Catarrhally Predisposed. By **EDWARD WOAKES**, M.D.London, Senior Aural Surgeon to the London Hospital, etc. Pp. 14. London: H. K. Lewis. 1883.—The author announces that this pamphlet is a chapter from his forthcoming work on "Catarrh." Dr. Woakes gives a summary of well known hygienic details concerning bathing, clothing, diet, and exercise. For catarrhal subjects, he condemns the excessive use of sugar, teaching that catarrhs and many other of our bodily troubles probably owe their frequency and prevalence, in some degree, to this favourite aliment. The pamphlet concludes with some trite directions as to the care of the ears.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A VAPORISER FOR THE SICK-ROOM.

IN the treatment of diseases of the respiratory system, it is sometimes desirable to fill the patient's room with the vapour of some volatile drug without that of water.

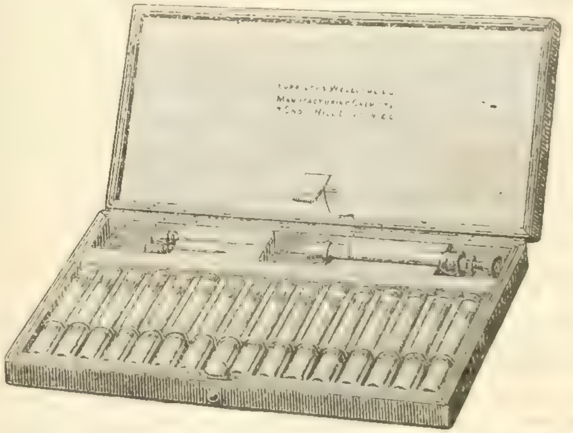
For this purpose I have found the following apparatus useful. A vessel is made with a double bottom, and double perpendicular sides. The interspace is filled with some good non-conductor, as sawdust or felt, to prevent, as far as possible, the loss of heat. On the top and upper part inside is accurately fitted a tray of thin metal, forming a cover for the vessel, and preventing escape of steam. When in use, the vessel is about half-filled with hot water, the tray fitted on the top, and the volatile drug sprinkled on the tray. Eucalyptol can, in this manner, be very rapidly volatilised, and, on the other hand, by regulating the heat and the supply, a slow discharge of vapour can be kept up for a long time.

An apparatus such as I have described, made of tin, is at present doing well with eucalyptol for a patient of mine.

DUNCAN J. MACKENZIE, M.D., Glossop, near Manchester.

MESSRS. BURROUGHS AND WELLCOME'S HYPODERMIC CASE.

THE appearance of Bourneville's *Manuel des Injections Souscutanées*, almost simultaneously with the fourth edition of Bartholow's *Hypodermatic Medication*, has undoubtedly given an impetus to this special mode of eliminating remedies; and Messrs. Burroughs and Wellcome have done well to issue a pocket-case containing a selection of Wyeth's compressed hypodermic tablets. These tablets are so well known that it is hardly necessary to describe them; each contains a dose of some alkaloid or active principle, with just enough sulphate of soda to give it the requisite consistence. When required for use, the tablet is placed in a spoon with a few drops of water, crushed with the top of the hypodermic syringe, and then injected. It is sometimes said that warm water should be used, or that the spoon should be heated over a candle; but we do not find this necessary, for the sulphate of soda dissolves very quickly, and the whole operation, injection, and all, need not occupy more than half a minute. We have employed most of the tablets in cases requiring treatment, and find they are perfectly active. For example, to a woman suffering acute pain, the result of rheumatoid arthritis, we gave an injection of one of the tablets containing the third-of-a-grain of sulphate of morphia, and almost immediately she experienced relief, and fell asleep. In another case, a third of a grain of pilocarpine produced profuse sweating and salivation, the symptoms being subsequently arrested by one of the atropia tablets. The apomorphia tablets are excellent, a tenth of a grain injected under the skin of the arm in a patient in whom it was necessary to administer a prompt emetic, causing copious vomiting in four and a half minutes. In severe cases of obstinate neuralgia, the aconitia tablets, given night and morning, afforded marked relief. The case itself is neat, and is conveniently arranged. It is made to hold sixteen tubes, each containing from twelve to twenty tablets. Almost any drug can be obtained in this convenient form, the selection being varied according to the requirements of the purchaser.



A PARASITE IN HARES.—*Nature* reports that Professor Heiberg of Christiania has demonstrated the presence in the air-passages and pulmonary substance of hares of a form of strongylus, both eaten and charged with ova, which would appear to be the cause of an otherwise unexplained mortality among these animals in the autumn of last year in the district of Eidsvold in Norway.

THE Medical Officer of Health for the City of London states in his last report that at the public mortuary 101 articles of clothing had been disinfected and returned to the owners, and 11 bodies had been kept in decent custody till burial. This would appear to show that public prejudice, which has to a certain extent interfered with the full utilisation of public mortuaries, is abating. Its complete disappearance will be a great sanitary gain.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 12th, 1884.

MEDICAL LEGISLATION.

THE period is fast approaching when the intentions of the Government in respect of medical legislation will necessarily be made known, and there is no reason to doubt that a Medical Bill must again be found amongst the important measures to be submitted to the consideration of Parliament.

The difficulties which beset the most earnest and most powerful governments in legislating, even for the public good, and on matters in favour of which there is a general agreement of opinion on both sides of the House, were never more strikingly exemplified than in the compulsory withdrawal of the Government Medical Bill of last session, when apparently on the eve of success. The Government had a large majority at their back, the support of the leaders of the Opposition had been obtained, several of them only regretting that the Bill had not emanated from their own party; and yet the half-past twelve rule, according to which no Bill can be brought on for second reading after that time against which any member may have subscribed his name, precluded all possibility of debate on its merits in the House of Commons.

The measure was the outcome of enormous labour and consideration; and the persistent and frequently renewed support of its main principles by the British Medical Association, expressed at the last great annual meeting at Liverpool, as well as at every preceding anniversary during the last fifteen years, leaves no room for doubting that it clearly embodied the views advocated by the vast majority of the profession, inasmuch as the Association at present numbers more than ten thousand members. The *Lancet* and the *Medical Press and Circular* also, equally with the BRITISH MEDICAL JOURNAL, supported the measure.

The necessity for rectifying the anomalies existing in the composition of the General Medical Council, formed by most unequal representation of the very bodies it was created to control, the necessity for rendering more efficient and complete the preliminary and professional education and examination of the candidates for the medical profession, and the future exclusion of half-qualified men from the *Medical Register*, were important points which could not be gainsaid. Government after Government attempted remedial legislation; numerous private Bills were also introduced with the same object; but invariably several of the corporations opposed each and all of these measures, as trenching on their own special privileges. At last, a Select Committee was suggested for the investigation of the conflicting demands, so as to settle all differences; and, under the late Government, such a Select Committee was appointed, and took evidence during the last two sessions of the late Parliament, but with no definite result. When the present Government came into office, a Royal Commission was appointed, with most extensive powers. That Commission, after taking much fresh evidence, laid its Report before Parliament, and the Government undertook legislation on the basis of the Report of the Royal Commission.

The preparation and promotion of the Bill was naturally entrusted to the Privy Council department, and the Lord President, Lord Carlingford, and the Vice-President, Mr. Mundella, were untiring in their efforts to master the complicated subject in all its bearings and relations. Lord Carlingford carried the Bill successfully through the House of Lords, after a full and interesting debate, in which Lord Camperdown, the Chairman of the Royal Commission, and many leading peers on both sides, took an active part. It is believed that Lord Carlingford and Mr. Mundella received more than twenty-five deputations, and certainly no previous Government has bestowed so much labour on the subject.

That the Government were fully in earnest in their attempt at legislation is certain. The Prime Minister, the Lord President and Vice-President of the Privy Council, repeatedly declared their sense of the importance of the measure, and their determination to submit it to debate in the House of Commons. At the last moment, when the Bill was hopelessly blocked by the half-past twelve rule, the Premier gave free expression to his regret that a measure which had received such ample consideration should have been excluded from discussion. Through what potent influence did it happen that, in a House of upwards of 650 members, such an important Bill—a Government measure—with respect to the main features of which the leaders on both sides of the House were agreed, was shut out from all discussion?

There were in all six blocking notices, all, with one exception, in the interest of Irish and Scottish corporations. If the members in whose name these notices stood could have been induced to withdraw them, the Bill would have been read a second time, and the points with respect to which they took exception would have been considered in Committee, and the Medical Act Amendment Bill would have become law. It is reported that a majority of these six members expressed a willingness to give way, and, therefore, the astounding and humiliating fact seems clear, that two or three members at this critical moment sufficed to wreck for a time a Bill of great professional and public importance.

The support of the Association and of the profession was loyally given to the Government during last session, and the last vote of the Association on this subject proves that the same unfaltering advocacy will be continued to the main principles of the Government measure when reintroduced.

In anticipation of impending legislation, as on former occasions, the Irish Colleges have again attempted the establishment of the binary scheme, so amusingly described by Dr. Haughton in his evidence before the Select Committee of the House of Commons. Such scheme, to which an active minority in the Irish College of Surgeons is strenuously opposed, even if established, may at any future time be rescinded. The same observation equally applies to any similar attempt on the part of the three Scottish corporations. Any such voluntary arrangements can never be considered permanent, and do not in any way lessen the necessity for legislation by which compulsory conjunction will be enforced.

THE TREATMENT OF FLOATING KIDNEY BY FIXATION OR NEPHRORAPHY.

THE progress of pathology and surgery has caused much light to b thrown on the clinical aspects of displaced kidney, its anatomica peculiarities and its treatment. In 1876 the Pathological Society published a report of a committee "specially appointed to inquire into the matter of displaced, movable, and floating kidneys." Two varieties of this morbid condition were recognised. In the first form, the organ may be moved to some extent beneath the peritoneum; this has been observed in a considerable number of subjects, but the amount of movement possible is seldom greater than an inch upwards and downwards. In a few cases, however, a much greater flaccidity of the peritoneum is found, so as to allow the kidney to move under the peritoneum over a space described, in one of the cases collected by the committee, as a circle having a diameter of eight or nine inches. In the second variety, the peritoneum passes over the posterior surface of the kidney, forming a kind of mesonephron. The committee laid stress on the fact that a kidney under the first condition, that is, under a flaccid peritoneum but without a mesonephron, may give rise to all the clinical phenomena observed in cases where the second variety exists. Hence the terms "movable" and "floating" should be used as implying respectively a slight and a considerable degree of mobility, and not as a distinction between a movable kidney with and one without a complete peritoneal investment.

Since the Pathological Society issued the above report, with an instructive series of cases, Dr. Landau has published his valuable work on this condition as occurring in women. This author dwelt much on its relation to hernia, and to displacements more or less allied to hernia. Senator of Berlin, and Harris of Philadelphia, have also collected statistics of cases of floating kidney and operations for its relief. In August 1883, an interesting graduation-thesis by Dr. David Newman, on this subject, appeared in the pages of a Scotch contemporary. We had occasion to review this publication in the last number of the JOURNAL issued during the past year. Dr. Newman condemned nephrectomy, and spoke in favour of stitching the kidney to the abdominal wall. This operation is termed nephroraphy.

It is not for us, at present, to make any comments on the advisability of the employment of very similar names for essentially different operations, such as nephrotomy, nephrectomy, and nephroraphy. It is with the third that we have to do at present. In a recent clinical lecture delivered at the New York Hospital, Dr. Robert F. Weir has spoken strongly in favour of this proceeding, to which he gives the term "fixation of the movable kidney." His lecture is published in the New York *Medical Gazette*. Dr. Weir has little belief in the treatment of displaced kidney by bandage or elastic support. He brings forward certain objections to removal of the kidney, or "nephrectomy." In a recent and valuable series of statistics published by Dr. Harris of Philadelphia, it is shown that nine out of eighteen cases of this operation have proved fatal, not through the primary effects of the operation, but from serious disease of the remaining kidney, that one gland having to perform the work of two; the urine is apt to be crowded with phosphates, and calculi form in the renal pelvis and ureter, a complication which very often proves fatal. Then, when removing the floating kidney, the surgeon cannot be sure that the patient has another kidney, for cases occur in which there is but a single kidney. There are several methods of ascertaining the existence of both kidneys, the best, under the circumstances, being a search with the hand; for this purpose, it is clear that the abdomen must be opened by a median, and not by a lumbar, incision. Still, the liability of the remaining kidney to disease must ever remain a serious objection to the removal of a floating kidney.

The third method of treatment is of German origin. Hahn of Berlin reported three cases of fixation of the kidney, or nephroraphy, to the last congress of German surgeons. His first operation, we are informed, was a perfect success; in the other two, the patients were greatly benefited, and made comfortable. Esmarch has undertaken fixation of the floating kidney, with the best results. The operation is performed in the following manner. The patient is placed on the operating table with the affected loin uppermost, and an incision is made about three inches from the spines of the vertebræ, extending from the last rib to the crest of the ilium, close along the outer border of the quadratus lumborum. An assistant then presses on the abdomen anteriorly, until the kidney appears, protruding into the opening in the loin. The circumrenal cellular tissue is next stitched to the margins of the wound, which is left to close by granulation, and the inflammatory processes which accompany this repair cause the adhesion of the kidney to the wall of the abdomen. Drainage-tubes should be inserted into the abdomen, at the conclusion of the operation.

Dr. Weir performed this operation with success, on November 18th, 1882, on a woman aged 33; the kidney could be readily detected on palpation. Pain was constant and severe; handling of the affected kidney often caused hæmaturia and bleeding from the womb. Two months after operation, the patient was doing well; there had been "a certain amount of inflammation, which even extended into the pelvis and behind; but there was no abscess, the parts being merely tender." Dr. Weir recommends that the kidney should be fixed as low down as possible, so that gravitation will not be able to drag it down. The deliberate excitation of inflammation in the subserous connective tissue of the lumbar region, after an operation in itself somewhat difficult of performance, is a serious question for consideration, but, owing to the risks attending removal of a floating kidney, it is certain that many surgeons will attempt this new operation of fixation or nephroraphy.

In any case, whether removal or fixation be contemplated, the observations of Mr. Clement Lucas, in his contribution on surgical diseases of the kidney, published in the JOURNAL last September, and read in abstract at the last annual meeting of the Association, must not be forgotten. Mr. Lucas pointed out that a simple exploration, with replacement of the kidney in its natural position, might be alone sufficient, in many cases, to effect a cure. In almost every instance where such an incision had been made for painful conditions other than floating kidneys, some relief had followed the operation. This phenomenon might be due to division of lumbar or sympathetic nerves. Dr. J. W. Anderson, of Barrow-in-Furness, has recorded a case of complete relief after an exploratory operation for floating kidney, which was published in the JOURNAL of November 10th. Mr. Lucas not only believed that such an operation would probably cure the greater number of movable kidneys, but also took care to assert that fixation involved additional risk. This is self-evident; but, where the risk has been run and the patient has recovered, it cannot be made certain that the good results have been entirely due to fixation, and not to the incisions and handling which, for some unknown reason, have in other cases alone effected a cure.

KAIRIN: A NEW ANTIPYRETIC.

KAIRIN was discovered last year by Fischer of Munich, and a few months ago was introduced into this country as a substitute for quinine. The word itself has been coined, and is used only for the sake of brevity and commercial purposes, the real name of the drug being oxychinoline-methyl hydride. Two other similar compounds, chinoline-methyl hydride, or kairoline, and chinolin-ethyl hydride, possess similar properties; but they are more difficult to prepare and very little is known about them. The hydrochlorate of kairin is a crystalline powder, of a greyish-yellow colour, freely soluble in water, and having a saline, bitter, disagreeable taste. The dose usually recommended is from a third to half a gramme, at intervals of not more than an hour or an hour and a half; but the difficulty is to induce patients to take it. In the case of old people or weakly persons, the dose should not exceed one grain every alternate hour as it is apt to produce cyanosis and collapse.

Its physiological action has been investigated by Filehne of Erlangen, who considers that it is likely to form a valuable medicine. It has been given with much success in most febrile diseases. Its action is noticed in about half an hour after the dose is taken, the fall in temperature being often very marked. There is free perspiration, which continues only whilst the temperature is falling; for, as soon as the lowest point has been reached, which occurs after from two to four doses, diaphoresis ceases, and the temperature remains constant. During the sweating, it is said that patients are much relieved, especially if suffering from acute pneumonia. In this disease, not only is the temperature reduced, but the pulse is strengthened, and the pleuritic pains disappear. As soon as the treatment is discontinued, the symptoms return as before, the temperature rising to its original height. The following scheme for using kairin has been worked out by Dr. Filehne, but whether anyone will feel disposed to follow his directions is doubtful. In the first instance, kairin is administered in separate doses, of a quarter of a gramme each, taken on wafers, plenty of water being drunk with them. It is advisable to commence with doses of half a gramme an hour on the first day, and to give these four times successively, but not after the temperature has fallen below 100° Fahr. The temperature must be taken every two hours for the first day, and it would be still better to take it every hour. When the temperature has fallen to about 100° Fahr., only a quarter of a gramme is given hourly, and this is continued until the temperature rises perceptibly, when the former dose of half a gramme should once more be administered. A dose of half a gramme should be given at once should the patient experience the slightest chilliness. Should the half-gramme doses not have the desired effect in four hours, gramme doses should be given two, three, or four times, at intervals of an hour. When the half-gramme doses have an effect after four hours, though not a sufficiently decided effect, three-quarters of a gramme should be given about four times, at intervals of an hour. The dose of three-quarters of a gramme, or one gramme per hour, is to be stopped when a temperature of 100° Fahr. is reached, keeping a reserve dose in readiness, which is to be taken when the patient feels chilly. When the temperature again rises the treatment must be recommenced. We are told that, as the system neither gets accustomed to the medicine, nor shows any evidence of cumulative action, a careful day's experimentation in the way indicated will suffice, and the dosing thus standardised on the first day may be subsequently adhered to. These directions are undoubtedly very precise, but they are more than that—they are puerile.

Dr. Hallopeau, in a paper recently read before the Paris Hospital Medical Society, confirmed many of the above statements; and expressed an opinion that kairin, in non-poisonous doses, is, in its action, more certain, powerful, and rapid than any other known antipyretic. Dr. Sassetski found it of much value in typhus; and he remarks that the pulse falls with the temperature, and that the excretion of nitrogenous and phosphatic substances is lessened. The urine assumes a green colour, which, however, soon disappears when the administration of the drug is discontinued. Gerat, of Paris, finds that it is useful in all febrile diseases, including typhoid fever, acute rheumatism, septicæmia, tuberculosis, and pneumonia.

Professor Riegel is unable to confirm the statements of Filehne and other observers. He disputes the assertion that half-gramme doses will, in every case, reduce the temperature to normal in four hours; and he failed to obtain the desired result with even much larger doses. In no case was any favourable influence on the general symptoms noticed. On the contrary—as has been shown by Seifert—it had sometimes a most injurious effect, collapse setting in suddenly, so that stimulants had to be administered freely. He was of opinion that it could be given with safety only to the more robust, since it had a very depressing action on the heart. Paul Guttman finds that kairin, like other antithermic agents, is incapable of shortening the duration of the disease, or ameliorating the symptoms. Compared with quinine, its action is more rapid, but far less persistent. Its high price, he thinks, must prevent it from coming generally into use.

Such is the present state of the question. It must be admitted that the prospects of kairin are anything but promising. It has been tried in this country, but has as yet found but little favour. It will probably have its day, and then die out, as many remedies of the same class have already done.

Her Majesty the Queen has sent a donation of £25 to the treasurer of the Aberdeen Hospital for Incurables. This hospital is being rebuilt on a magnificent scale on a fine site at the west end of Aberdeen.

Dr. M. Handfield-Jones has been elected Assistant-Physician to the Chelsea Hospital for Women.

A **new** edition of the late Dr. Murchison's standard work on *Diseases of the Liver*, edited by Dr. Lauder Brunton, is in the press.

The Swedish Government intend to establish a botanico-physiological station in the north of Sweden, for the study of the flora and the diseases of the crops in that part of the country.

We understand that a meeting of the Executive Committee of the General Medical Council will be held on Thursday, the 17th instant, but that the programme of business has not yet been issued.

Surgeon-General Hunter's paper on "The Recent Epidemic of Cholera in Egypt," which was announced to be read at the Epidemiological Society on January 14th, is postponed to March 3rd.

We regret to have to report the death of Mr. B. R. Wheatley, Resident Librarian to the Royal Medical and Chirurgical Society, which took place on Wednesday afternoon, after only a few days' illness. On account of the pressure of business entailed by the lamented decease of the librarian, it is advisable that Fellows should avoid, as far as possible, the exchange or borrowing of books belonging to the library, during the next few days.

The annual general meeting of the Royal Meteorological Society will be held in the rooms of the Institution of Civil Engineers, at 25, Great George Street, Westminster, on Wednesday, the 16th instant, at 7 P.M., when the President will deliver his address.

The next quarterly meetings of the Medico-Psychological Association will be held at Bethlem Hospital, on Tuesday, February 5th, and May 6th. The Association prize-dissertations for the present year must be sent to the President, Dr. Orange, Broadmoor, near Wokingham, on or before June 30th, 1884. For conditions of award see page 664 of the *Journal of Mental Science* for January 1883.

It is satisfactory to learn from Alexandria that, on January 8th, cholera had disappeared from Alexandria since the 26th ult. There has not been a single case of the disease throughout Egypt since the 19th ult. It is announced that quarantine will be imposed on arrivals from Bombay until the expiration of a clear fourteen days from the vessel's date of departure. A telegram from Suez, dated January 8th, states that twenty-four hours' quarantine has been established there on arrivals from Bombay.

Under the title of *The Destitution of the Poor in London*, Mr. Hugh MacCallan has published a pamphlet, which aims at considering the housing of the poor "not so much from the sanitary aspect as from the geographical side of the case." Mr. MacCallan apparently desires that the houses of the rich and the poor shall be, as it were, intermingled, in order that the misery of the latter may quicken the sympathy of the former. In this view, we entirely concur.

INFANT MORTALITY AT YORK.

The death-rate at York, during the third quarter of last year, amongst infants under one year of age, was very high, being equal to 256.9 per 1,000 births. This was only exceeded by one of the seventy-eight towns quoted by the Registrar-General in his quarterly report —viz., Leicester, where it was at the rate of 264 to 1,000 births. This persistently high death-rate amongst infants is ascribed by the health-officers, "without doubt, to the existence of a feeble population, and of sanitary defects not yet removed."

THE VALUE OF AN ARM.

A CASE has recently come before the Derby magistrates, when a labourer named Wright sued his employers, under the Employers' Liability Act, for three years' wages as damages for the loss of an arm, viz., £163 6s. A verdict for this amount was given.

LEPER-SETTLEMENT IN THE SANDWICH ISLANDS.

MR. ROSS RAYMOND, who has been sent as the *Daily News* correspondent to China, has inspected the leper-settlements in the Sandwich Islands, by the way, and has sent a series of letters describing them to the *Sydney Evening News*. He says that about sixty lepers are consigned every month to Molokai, where they remain till death releases them. The course of the disease in the Sandwich Islands is usually about seven years; but women who have borne children, or are advanced in life beyond a certain period, live longer than others, and suffer more pain. Boys succumb earlier than girls, and people of mixed blood fall soonest.

THE MICRO-ORGANISM OF GANGRENOUS SEPTICÆMIA.

MESSRS. Arloing and Chauveau communicated, in July last, to the Société des Sciences Médicales de Lyon, the results of their researches on gangrenous septicæmia. They are of opinion that the disease is caused by a special bacillus, which they have found around the wounds and on the phlyctenæ. The bacillus has the form of a short rod, provided with one or two spores, and can be inoculated by injection. Tissues deprived of their vitality or disorganised by hæmorrhage, are most favourable to its action and reproduction. When fresh, the bacillus can be destroyed by a temperature of 90° to 100° C.; but, after desiccation, a temperature of 120° C. is necessary. Sulphurous acid and a warm solution of carbolic acid (5 per cent.) are, after heat, the best means of destroying this micro-organism.

NEW NAMES FOR FRENCH HOSPITALS.

THERE is at present a disposition, on the part of the Municipal Council of Paris, to effect a change in the names of the Paris hospitals. Many of the lycées have long since borne the names of persons connected with the Republic, and ceased to retain the names of their founders. A proposal has already been made to deal with the hospitals in a similar way, and to go so far as to suppress even such unpolitical titles as "Pity" and "Charity," and to substitute for them "Solidarity" and the "Rights of Man." The "Hôtel Dieu" will henceforth be "Ambroise Paré;" "St. Louis" and "St. Antoine" are to bear the names of "Boerhaave" and "Velpeau" respectively. Its proposer, Dr. Fiaux, is the author of *The Commune and the Civil War*, and a member of the Municipal Council. The press are loud in their protests against this sweeping change of nomenclature, the *Voltaire* not excepted.

ST. BARTHOLOMEW'S HOSPITAL.

WE are informed that both Mr. Macready and Mr. F. S. Eve have resigned their appointments as surgical registrars to this hospital. It is the intention of the authorities that henceforth only one appointment of the kind shall exist. The division of labour which has previously been the result of the two appointments has not proved satisfactory. Two different registrars are certain to work in a different manner; one having the power, the will, or the ability, to work longer than his colleague; one being either a sharper or a more precise observer than the other; and both are ever found to differ as to what are the most important matters to record in the ward-books. In collecting the annual statistical tables, still greater sources of fallacy were entailed by the appointment of two registrars; and we believe that increased work of this kind will in future be less irksome to a single registrar than the annoyance and divided responsibilities, with the difficulties attending the correction of discrepancies, which were ever associated with the office of surgical registrar under the arrangement which is about to be altered. Mr. A. Bowlby, the present curator of the museum of the hospital, is, we understand, a candidate for the new appointment.

ST. JOHN AMBULANCE ASSOCIATION.

A PUBLIC meeting to inaugurate the formation of a St. John Ambulance Association centre in Hamilton, Bermuda, was held on December 6th, 1883. His Excellency the Governor presided, and after some opening remarks, introduced the speakers, Dr. Hudson, Sir Thomas Brassey, and Lady Brassey, who addressed the meeting, explaining the object in view. Chief Justice Rees moved a resolution recommending the formation of a centre; this was seconded by Vice-Admiral Sir J. E. Commerell, V.C., K.C.B., and the Hon. W. H. Gosling then proposed, as the local committee, three members of the Legislative Council, three members of the House of Assembly. The Rev. Mark James, Dr. P. B. Tucker, Brigade-Surgeon Kidd, P.M.O., Attorney-General Gray, having also advocated the movement, the usual votes of thanks were tendered to Sir Thomas and Lady Brassey, Dr. Hudson, and his Excellency the Governor. A meeting for a like purpose was also held, attended by Sir Thomas and Lady Brassey, Dr. Hudson, and the chief Government officials, at Port of Spain, Trinidad, a short time previously, with a similar result.

PLAYGROUNDS FOR SCHOOL-CHILDREN.

IT is satisfactory to note that the important Government department over which Mr. Mundella presides, as Vice-President of the Council of Education, is alive to the sanitary necessity of providing playgrounds for the children attending public elementary schools. In reply to a memorial sent by the Manchester and Salford Sanitary Association in favour of the provision of suitable playgrounds for school-children, the Education Department states that it has long been the policy of the department to require a playground to be attached to a school, especially to an infant-school, and that in every case in which loans are made to school-boards for the purpose of providing schools, the department always requires that a playground shall adjoin each school, although, in very crowded town-districts, the cost of obtaining land for the purpose is often very serious. The reply further states that, if there be any schoolhouses now under the jurisdiction of school-boards which are without playgrounds, the department will be glad to give assistance to school-boards in supplying them.

GASTROTOMY AND DILATATION OF THE ŒSOPHAGUS AND PYLORUS.

ON October 24th last, Professor Loreta performed, in the surgical clinic of Bologna, a new and important operation—dilatation of the œsophagus from the stomach. The patient was suffering from stricture at the lower third of the œsophagus, produced by extensive cicatrisation, the consequence of swallowing caustic potash. The site, nature, and degree of the stricture were such as to render useless any operation undertaken by the mouth. The patient was reduced to an extreme degree of emaciation, from the impossibility of taking sufficient nourishment. Gastrotomy was performed, and a passage secured for the introduction of the dilator into the stomach. It was then pushed up the œsophagus, and the stricture thoroughly dilated. The operation only lasted half an hour, and was most successful; on the first day, the patient was able to swallow food easily. The incisions united by first intention; there were no signs of peritonitis; and, on the fourteenth day, the patient was well. The sound passed without difficulty, and, probably, its periodical employment will render the cure permanent. On November 4th, Professor Loreta also successfully performed dilatation of the pylorus, in a young woman aged 26.

A SCHOOLBOY GRIEVANCE.

AN assistant-master in the Harrow Board School was recently charged with assaulting and beating a little boy, aged 11 years, by striking him on the hands, and giving a "cut on the back of his head, which raised a large bump." It appeared that the boy "was suffering from an affliction which rendered it necessary that he should leave the schoolroom more frequently than other scholars." On one occasion the assistant-master refused to let him "go out"; but the boy did go out, and on his return the assault complained of took place. The magistrates found the charge proved, and, evidently considering it an aggravated case, inflicted a fine of twenty shillings, the costs amounting to £2 16s. 6d. We refer to this case because it seems to point a serious moral. Anybody who has, as sometimes happens to most of us, been compelled to witness the turn-out of some, at least, of the board and denominational schools, will have had evidence before his eyes that a large number of the boys must have passed the previous hour or so in a considerable degree of discomfort, even though not "suffering from an affliction." No doubt schoolboys are frequently lazy, and glad of any excuse to leave the schoolroom; but the masters ought to exercise a good deal of discretion, and to remember that a little boy cannot, even if perfectly healthy, contain his urine for long periods without an amount of strain that is injurious to his physical welfare, and an amount of discomfort that must seriously diminish his power of devoting his mind to his lessons. The task before the teachers of the primary schools of the country is a vast and important one, and it becomes daily more evident that a body of men to whom such important interests are entrusted, should receive some judicious teaching from competent persons in the laws of health, and in the biological principles which govern the ordinary physiological processes of the body, then we should hear no more of schoolmasters hitting little boys on the head with the cane, or boxing their ears (and sometimes making them deaf for life), and much less of the "obstinacy" of other little boys who are compelled, by some youthful infirmity, to seek frequent relief.

NEW GROWTHS IN THE URINARY TRACT.

ON another page we publish a report on the varieties of new growths met with in the urinary tract, which was brought forward in the Pathological Section at the annual meeting of the Association by Mr. Paul. The specimens and cases upon which the report was based were obtained by means of a circular addressed to all the chief hospitals in London and the provinces, which seems to have been very fairly responded to, especially by some of our best known working pathologists. The object of the investigation was to collect and examine the largest amount of available material, in order that a definite classification of the tumours of these parts might be arranged on a histological basis, an achievement which, in the present transitional state of the nomenclature of morbid growths, would prove a great convenience. The wet specimens and the microscopical sections which were contributed were all displayed in the Pathological Museum, and subjected to the observation and criticism of the members present. They formed a very extensive collection, and added considerably to the interest and value of this department. We are not, however, surprised to observe that the undertaking was found to be too great to complete satisfactorily in one year, and that parts of the report need considerable addition. With a committee of reference, consisting of Mr. Reginald Harrison, Mr. Rushton Parker, and Dr. Alexander, we feel that the work is in reliable hands, and have much pleasure in seconding the request made at the meeting, that Mr. Paul should continue to collect specimens of these growths, until the committee were satisfied that they could present a finished report. It needs, of course, a public-spirited generosity on the part of those who meet with such cases, that they should give the committee an opportunity of making use of them; but it is very rarely more than inconvenient to preserve from a case what would suffice for a microscopical examination; and we feel sure that pathologists and house-surgeons, who have abundant opportunity, will not be unwilling to lend their assistance.

UNINFLAMMABLE DRESS-MATERIALS.

AT this season of the year we are accustomed to hear of sad fatalities arising from the accidental ignition of the highly inflammable materials which usually compose the "dresses" of females. Although many practical suggestions have been made from time to time with the view of popularising uninflammable-dress materials, the use of such incombustible articles of apparel does not appear to have found favour with the fair sex. Tungstate of soda has been the material most frequently employed to render light fabrics uninflammable; it fulfils the purpose admirably, but its high cost has been an objection to its use. Patera's formulæ have stood successfully frequent trials of their efficacy. One of these preparations is made by dissolving three parts by weight of biborate of soda, and two and a quarter parts of sulphate of magnesia, in twenty parts of water. Fabrics soaked in this solution become coated with a borate of magnesia, which is insoluble in hot or cold water, and is a good resistant of fire. The other preparation is a mixture of sulphate of ammonia with sulphate of lime, or gypsum, in proportions of one part of sulphate of ammonia with two parts of gypsum. The gypsum is said to form with the ammonia a double sulphate which has not the disagreeable properties of the ammonia-salt. The action of this preparation seems to be twofold—first, in coating the fibres of the material to be protected, and also in the production, when the material is brought to a red heat, of volatile ammonia, which tends to smother flame.

THE MICROSCOPE IN BIOLOGY.

ON accepting the office of honorary Vice-President of the Carlisle Microscopical Society, Dr. W. B. Carpenter wrote a letter, giving valuable hints for work. Speaking of the value of devotion to some particular branch of microscopical work, he said: "It was thus that my late friend and early pupil, G. H. K. Thwaites, who had taken up the study of living diatoms at my suggestion—now forty years ago—was enabled to discover the cardinal fact of their conjugation and production of a zygospore. And if one tenth of the time that has been since bestowed on the markings of their valves, had been given to the study of their life-history, our scientific knowledge of the group would have been greatly advanced, instead of remaining almost stationary. The continuous study of the life-history of the monads by Messrs. Dallinger and Drysdale, which has given results of first-rate importance to biological science, is a recent example of what may be done by a combination of two (or more) qualified observers. And I need scarcely point out to a body including many medical men, what a wide field there now is in the study of disease-germs. As a qualification for that study, I should suggest the determination of the life-history of the yeast-plant. For there is a strong reason to believe that what we know under this form is only an aberrant stage in the life of an ordinary mucor; its cell-germs developing themselves in a very different mode, in a saccharo-albuminous liquid, from that in which they vegetate on an ordinary mould-producing surface. And while, on the one hand, it was long since observed by Mr. Berkeley that a mucor may develop itself in a confervoid form in ordinary water, it is still an open question whether, if growing in an organic fluid, the same mucor may not become the 'vinegar-plant.' I have always, myself, been a believer in the great polymorphism of the 'saprophytic' fungi; and I recently read, at Southport, a paper on 'Disease-Germs from the Natural History point of View,' in which I argued that the extension of the same idea to disease-germs will account for many clinical facts observed by able practitioners of medicine, which have hitherto received (in my opinion) far too little attention,—I mean, the occurrence of what have been called hybrid varieties of exanthemata, or of forms of fever intermediate between typhus and typhoid, or the conversion of an endemic malarious remittent into a contagious fever. It is because the miscroscope thus gives most important aid in the working out of some of the fundamental questions of pathology, that I am most anxious to see medical men training themselves to the right use of it."

THE MEDICAL STUDENT IN THE DISSECTING ROOM.

Dr. Oliver Wendell Holmes, at the recent centenary celebration of Harvard University, said, in the course of an address:

"During the long period in which I have been a professor of anatomy in this medical school, I have had abundant opportunities of knowing the zeal, the industry, the intelligence, the good order and propriety, with which this practical department has been carried on. The labours superintended by the demonstrator and his assistants are in their nature repulsive, and not free from risk of disease, though in both these respects modern chemistry has introduced great ameliorations. The student is breathing an air which unused senses would find insufferable. He has tasks to perform which the chambermaid and the stable-boy would shrink from undertaking. We cannot wonder that the sensitive Rousseau could not endure the atmosphere of the room in which he had begun a course of anatomical study. But we know that the great painters, Michael Angelo, Leonardo, Raphael, must have witnessed many careful dissections; and what they endured for art, our students can endure for science and humanity.

"Among the large number of students who have worked in the department of which I am speaking during my long term of service —nearly 2,000 are on the catalogue as graduates—there must have been some who were thoughtless, careless, unmindful of the proprieties. Something must be pardoned to the hardening effect of habit. Something must be forgiven to the light-heartedness of youth, which shows itself in scenes that would sadden and solemnise the unseasoned visitor. Even youthful womanhood has been known to forget itself in the midst of solemn surroundings. I well remember the complaint of Willis, a lover of the gentle sex, and not likely to have told a lie against a charming young person —I quote from my rusty memory, but I believe correctly—

'She trifled! aye, that angel-maid,
She trifled where the dead was laid.'

"Nor are older persons always so thoughtful and serious in the presence of mortality as it might be supposed they would show themselves. Some of us have encountered Congressional committees attending the remains of distinguished functionaries to their distant place of burial. They generally bore up well under their bereavement. One might have expected to find them gathered in silent groups in the parlours of the Continental Hotel or the Brevoort House; to meet the grief-stricken members of the party smileless and sobbing, as they sadly paced the corridors of Parker's, before they set off in a mournful and weeping procession. It was not so; Candour would have to confess that it was far otherwise; Charity would suggest that Curiosity should withdraw her eye from the key-hole; Humanity would try to excuse what she could not help witnessing; and a tear would fall from the blind eye of Oblivion, and blot out their hotel-bills for ever.

"You need not be surprised then, if, among this large number of young men, there should have been, now and then, something to find fault with. Twice in the course of thirty-five years I have had occasion to rebuke the acts of individual students, once in the presence of the whole class, on the humane and manly sympathy of which I could always safely rely. I have been in the habit of considering myself at liberty to visit the department I am speaking of, though it had its own officers; I took a part in drawing up the original regulations which governed the methods of work. I have often found fault with individuals or small classes for a want of method and neatness which is too common in all such places. But in the face of all peccadilloes and of the idle and baseless stories which have been circulated, I will say, as if from the chair which I no longer occupy, that the management of the difficult, delicate, and all-important branch committed to the care of a succession of laborious and conscientious demonstrators, as I have known it through more than the third of a century, has been discreet, humane, faithful, and that the record of that department is most honourable to them and to the classes they have instructed."

AN HERBALIST'S MIXTURE.

Last week, we made some comments upon the sale of quack medicines, and the necessity of a restriction upon their sale. Our remarks had more especial reference to patent medicines; this week a case is reported where, as is asserted, a loss of life has occurred through the ignorant administration of lobelia by an herbalist. A charwoman, a widow, had been ill for some months with bronchitis and lung-disease, and was for some time attended by a medical man at a dispensary. She then ceased her attendance, and sent a young man to obtain a bottle of medicine from a Mr. Wallis, an herbalist, carrying on business near the City Road, Finsbury. For half-a-crown he obtained a two-ounce mixture, a plaster, and a box of pills. The directions on the mixture were to take from a teaspoonful to a tablespoonful for a dose, accompanied by a verbal statement that the whole of the mixture might be taken at one dose without danger. The woman took half the mixture in one dose, became collapsed, and died before Mr. Lloyd Whitmarsh could reach her, forty minutes after swallowing the stuff, up to the time of taking which she had been merely in her usual state of chronic ill health. Dr. Thomas Stevenson, having made the necessary analysis, by direction of the Home Secretary, gave evidence at the inquest that the medicine was a mixture of powdered lobelia and dilute acetic acid. The half bottle of medicine submitted to him contained twenty-eight grains of the herb. The stomach contained lobelia also; and from half the contents of that organ he obtained six grains of the drug. As the woman survived the administration of the medicine forty minutes, and was profusely purged, the twelve grains in the stomach would not be the whole of the lobelia swallowed. The safety of a patient taking such a large dose of this potent and dangerous remedy, would lie in speedy vomiting; but the deceased had not vomited. He was of opinion that a dangerous dose of the drug had been administered, and one which had accelerated the death of a debilitated woman. The pills were compounded of capsicum and soap. The herbalist who sold the medicine was in attendance, and said he kept no poison, and that lobelia was harmless. He thought it a pity that the medical profession did not recognise its usefulness. Dr. Stevenson said that lobelia was an officinal medicine, but in much smaller dose than was here given. The jury returned a verdict of "manslaughter" against James Wallis, and the coroner, Dr. Diplock, said he should commit him for trial, but would take bail. Wallis was subsequently charged at the Westminster Police-court with the criminal offence, and was remanded on bail. When apprehended, he said: "I sent the woman lobelia, but it is a lie to say that it killed her, or that it is a poison. My wife has taken double the quantity she took. That fool of a doctor (Stevenson) who gave evidence yesterday knows nothing about it. The medical science of this country is a fraud. She died of her ailments. God made the world, and supplied it with herbs for every complaint, but those fools of doctors do not know how to use them, and they are enemies of mine because I do. Lobelia is not a poison, and it was struck off the list of poisons before a Committee of the House of Lords in 1857."

WESTON'S WALK.

All last week, Weston continued walking at Aston Rink, Birmingham. On the Wednesday, the fresh blisters, developed when the asphalted floor was as yet uncovered by rough felt, were troublesome; but he walked well, though interrupted by a slight stomach disorder soon after eating a hearty dinner. This attack weakened Weston, and compelled him to walk very steadily. While on the unprotected asphalt, Weston's right knee, from the extra strain, had given him some anxiety. This, with the blistered feet, gradually improved during the remainder of the week. On the Thursday, he was eight hours on the track without a halt. On the Saturday evening, at half-past eight o'clock, amid considerable enthusiasm, Weston completed 2,000 miles, in excellent health and spirits, and with such undiminished vigour that his subsequent lecture, under the presidency of Canon Bowlby, was highly appreciated. On being weighed, it was found that he had made up 3½ lbs. of the 15½ lbs. he had lost at the end of the 1075th mile. His weight now is 9 stone 8 lbs. He is in much better condition than when he started from Westminster Bridge, except that his right knee is occasionally troublesome, and his injured heel progresses slowly, though steadily, to recovery. It will be observed that, at Birmingham, he started much later than before, generally about half-past five; and in consequence, except on one day, successfully overcame the drowsiness which had so frequently overpowered him at daybreak. To show how regularly Weston has walked, every day last week he covered 30 miles without a break between breakfast and dinner; and, after a rest then of about two hours, he did the remaining 20 miles without leaving the track—no ordinary test of endurance after seven weeks of 50 miles a day. On Monday last, Weston was delayed by illness till ten minutes past 7 A.M. After a few minutes rest for coffee, at the end of two miles, he walked straight ahead to Stafford, 29 miles, in a downpour of rain. The remaining 21 miles were completed at the Market Hall. On Tuesday, on very heavy roads, Weston left for Derby at twenty minutes to 6 A.M. At the close of 6½ miles, he slept for an hour and a half. In pouring rain, he walked the 33 miles to Derby by a few minutes past 4 P.M. After two hours' rest, he covered the other 17 miles at the Corn Exchange, where he remained over Wednesday, with a total record of 2,150 miles.

THE HEALTH OF NICE.

IN view of the statements of an alarming character which have appeared in the daily press with regard to the health of Nice, and which have undoubtedly had the effect of keeping people away who would otherwise have visited it, attention should be directed to the fact that, though cases of typhoid fever were prevalent in the early autumn in certain bad quarters of the town, these have vastly diminished, and the British Vice-Consulate has been authoritatively assured that no single new case had been admitted to the General Hospital for several weeks. He adds, from his own experience, that he has not heard of one single instance of a British subject having been attacked by fever, either typhoid or remittent, in spite of all the inquiries made on the subject, and that the staff of English nurses established there three or four years ago can find no work this season where they had plenty to do last year.

A NEW DISEASE.

SOME little time ago, a man who lived in a secluded country district, consulted Mr. Treves, of Margate, on account of a number of sores, which had made their appearance on the side of the neck, and on the chest. The first sore had "come of itself," about two years ago, on the left side of the neck just above the clavicle; subsequently the others appeared, one after the other, to the number of four, in an oblique line across the chest. The largest of these, the one nearest the primary sore, was the first to appear, and the others appeared, as they were arranged, in series; there was also over the left side of the jaw, near the primary sore, another, pierced by a sinus leading down to the bone. The circumstances evidently suggested some infective process; the first sore was an excavated ulcer, with an irregular caseous looking base, but the sores below this projected from the surface as much as half an inch in their centre, had a semi-gelatinous look, and an excoriated surface. Altogether, these latter sores rather resembled the small growths seen in some cases of sarcoma of the skin: but the case, taken as a whole, was evidently not one of sarcoma, and after due consideration Mr. Frederick Treves, of the London Hospital, to whose care the patient had been transferred, exhibited the patient at the Pathological Society, as probably a case of actino-mycosis. Of this disease, which had been long known as occurring in cattle, we gave a full account in a leading article, published on April 15th, 1882, soon after the publication by Professor Ponfick, of Breslau, of his monograph entitled "Human Actino-mycosis, a New Infectious Disease." The disease has been known to veterinary surgeons as maxillary sarcoma, and the whitish tumour-substance produced was the simple embryonic structure seen not only in some sarcomata, but also in the infective new growths. Bollinger had shown that the tumours contained in cavities in their interior little yellow bodies, which consisted of matted masses of mycelium. This fungus, from the peculiar radiate appearance presented by it in sections of the growth, he named actino-myces. Israel, of Berlin, first described the disease in man, and attributed it to a new form of fungus, but without apparently identifying it with the disease of cattle, as Ponfick did later. However this may be, there will, we imagine, be little question that this case now brought before the profession by Messrs. Treves is the first which has been recognised in this country, that is if the diagnosis which is at present made tentatively prove to be correct. On this point the only positively conclusive evidence is the discovery of the fungus; and on Saturday last, at the London Hospital, Mr. Treves examined the growths, which were distinctly pedunculated; and Mr. Watson Cheyne, who holds one of the Research Scholarships of the British Medical Association, will, we understand, make a complete examination.

FASCINATION.

M. BRÉMOND has made, on sailors, soldiers, and officers, from fourteen to twenty-six years of age, a large number of experiments showing that lethargy, catalepsy, and somnambulism can be produced in healthy non-hysterical people, and that these phenomena are preceded by a peculiar state of fascination. The period of fascination is characterised by a sudden increase in the frequency of the pulse. One-third of the young men experimented upon manifested one or more of the above-mentioned symptoms.

DENTAL HYGIENE AT SCHOOL.

ACCORDING to M. Galippe, dental caries is frequent in boys and girls preparing for examination, and may be ascribed to the excessive efflux of blood to the head. Others suppose that the brain makes use of the phosphates which ought to be employed in the formation and growth of the teeth. M. Harlan is of opinion that dental caries is most frequent in young people who work hard, and are very successful in their examinations.

FEVER IN THE INNER TEMPLE.

THE occurrence of a case of fever in one of the piles of buildings in the Inner Temple suggests some disagreeable reflections. The sanitary appliances of many of the sets of chambers are very primitive, and although the Benchers are paying more heed to matters of ventilation, drainage, and the like, in the new buildings which they are erecting, there is reason to fear that the circumstances of many of the older chambers are such as to favour the spread of infectious disease once introduced therein. In the house where the case of fever recently discovered was lying, the window of the closet of each set of chambers opened on the common staircase, and the same cistern in each set supplied drinking water and flushed the water-closet. Abundant experience, and especially that of the outbreak of fever at Caius College, Cambridge—on which Dr. Buchanan reported—teaches us that in conditions such as these are all the makings of a serious epidemic. Even in health the tenant of one set of chambers knows particularly little of the affairs of the tenants above or beneath him, and it is, therefore, not surprising that the existence of the case of fever in question should have been unsuspected by the other occupants. It might be well for the Benchers to consider whether they could not make it a condition of tenancy, that every case of recognised infectious disease should be promptly reported to the office, in order that due notice might be given to the sanitary officials, and the requisite remedial measures adopted. The Medical Officer of Health for the City of London had not heard of the recent case of fever until his attention was privately directed to it; and it is more than likely that similar cases occur from time to time without anybody, and least of all the proper officials, being any the wiser. The conditions of life in the Temple are so exceptional that, what might be deemed unworkable or unduly stringent in the case of ordinary houses, could be enforced there without difficulty, and as a matter of mere office-routine. The Benchers would certainly do well to consider, first of all, whether they are doing all they can to ensure a reasonable freedom from risks of disease to the occupants of their chambers; and, secondly, whether they could not enforce a rule which would protect the great body of occupants from the consequences of the ignorance or carelessness of one individual.

NATIONAL FRUIT-SUPPLY.

Mr. Gladstone, in his speech to the farmers at Hawarden on Wednesday last, touched upon a point of no small importance to the public health. The consumption of fruit, raw and preserved, in this country is increasing with great rapidity; this may be attributed in part to the wide spread of "luxury," but in still larger part, as we believe, to the fact that people have begun to discover that the stuff sold as butter is neither palatable nor cheap, and that whereas butter (so-called) costs from 15d. to 20d. a pound, good sound jam can be had for from 7d. to 9d., and we have even tasted very fair raspberry jam, retailed in London at 6d. a pound. The demand for fruit and jam, however, has increased altogether beyond the present capabilities of the home market. Mr. Gladstone dwelt especially upon the financial advantages to the farmers which would follow a more extended attempt on their part to meet the demand of the home market, and with this part of the subject it is not our province to deal; but we wish to point out that it is most desirable on other grounds that the fruit we consume should be grown as near the consumer as possible. Fruit—that is to say, those fruits especially which are called in market-phraseology "soft fruit"—is a very delicate crop, and does not bear carriage well; the various fruits lose, we are told, "a percentage of their freshness by the length of the journey they have to endure." It is well if the change in the fruit be confined to a loss of freshness; too often the deterioration goes beyond this, and the fruit, when retailed in this country, is tainted, is beginning to decompose, and ferment, and can, therefore, only be retailed at a low price; it is bought by the poor, and eagerly devoured raw by their children. It cannot be too dogmatically said that it is not the consumption of good sound ripe fruit, any more than of sound fruit which is a little less than ripe, that causes the severe diarrhœa often seen during the fruit-season; this evil is due to the consumption of tainted fruit—of cherries and pears, for instance—that are bruised and brown in parts; the eater may discriminate so far as to reject the part that is obviously bad, but the whole fruit is tainted and contaminated by the agents of decomposition. With regard to raspberries, strawberries, and such-like small and very soft fruits, the process of decomposition spreads with astonishing rapidity through great masses of fruit. Dr. Ballard, who is carrying out the investigation into summer diarrhœa for the Local Government Board, doubts whether bad fruit has much to do with its causation in infants, but we may be permitted to believe, knowing how easily the infant at the breast is affected by changes in its mother's health, that there is some literal truth in the words of the prophet, "The fathers have eaten a sour grape, and the children's teeth are set on edge." It cannot be doubted that it would be a very great advantage to the people at large if good sound fruit could be regularly and cheaply obtained during the summer, and it is therefore greatly to be desired that the practice of fruit-farming on a large scale should spread, especially in neighbourhoods within easy reach of large towns. Fruit-farming, it appears, ought to be exceedingly profitable; the average profit derived from ground laid out in strawberry-beds is, we are told, about £24 an acre. One fruit-farm of 500 acres, started by Lord Sudeley in Gloucestershire a few years ago, has answered expectations so well, that it is to be extended by the addition of 200 acres. Here, and in Scotland also, the business of fruit-farming has been combined with jam-making, and the jam thus produced must, no doubt, be better and more wholesome than that made from fruit which has undergone a long journey; but, if there is to be an extension of fruit-farming, we hope to see our home supply directed especially to meet the demand for fresh fruit. The large importation of fruit from abroad is sometimes accounted for by saying that our climate is not suitable; this, however, appears to be a mistake, for in the first place, we are told that foreign fruit is not worth so much as home-grown fruit, because "it lacks the fine sharp flavour of our English fruit," and in the second place, as Mr. Gladstone pointed out, some of the best fruit which reaches the London market, strawberries especially, is grown in Scotland, and a considerable portion comes from the county of Aberdeen, "which," says the Prime Minister, "has one of the most ungenial climates in the whole of this isle." Cherries, greengages, and damsons are grown in Kent, currants are raised in large quantities near Cambridge, and near the Upper Thames Valley are large apple-orchards; but the amount of land near London under fruit-cultivation is very small. Mr. Gladstone said that this amount might largely be extended with benefit to the farmer's pocket; "the capacity," he said, "of the human stomach is enormous," and we are quite clear that it is to the advantage of this capacious organ to be supplied with sound fruit, which has not been knocked about throughout a long journey across the length of France, or in a trading steamer across the Bay of Biscay.

SCOTLAND.

The medical classes in the University of Aberdeen were resumed on January 3rd.

The extremely mild days at the close of the year have now been followed by much colder weather, and, on the 3rd instant, snow fell over a wide area of Scotland for several hours.

Mr. Lowell has retired from the Lord Rectorship of St. Andrew's University, as his retention of the office would, it appears, have involved the discharge of functions within the University and as a member of its Court, which are incompatible with his position as ambassador from a foreign power, and accordingly only temporarily resident in this country.

HOSPITAL SUNDAY IN ABERDEEN.

The annual Sunday collection for the funds of the Royal Infirmary took place on the first Sunday of the year. The total sum collected was £770, as compared with £690 on the corresponding day of last year.

THE EDINBURGH DESTITUTE SICK SOCIETY.

This Society, which continues to do much for the sick-poor in Edinburgh, and which is highly valuable as an auxiliary of dispensary relief, held its annual meeting last week. The Chairman, Mr. Broun Douglas, stated that the Society had maintained its efforts for nearly one hundred years. Great care was taken in every case to inculcate thrift, as well as give relief. The Society has twenty-seven voluntary visitors, and these visited 11,500 during the year. The ordinary income for the year amounted to £1,428, and the expenditure to £2,210, showing a deficit of £782. Legacies, however, had been received to the extent of £1,413, which left a balance of £631 to be carried forward. The relief to the destitute sick consisted in coals, meat, money, etc., and amounted to £1,948. Several members of the profession spoke at the meeting.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

THE Council of the Faculty, from a considerable list of names submitted to them, have appointed Professor Hamilton of Aberdeen, to give the Faculty Lectures for the year. The subject of the course will be "The Structure and Functions of the Brain in Relation to Disease."

TYPHOID FEVER FROM MILK.

SEVERAL cases of typhoid fever have broken out in families in the west-end of Aberdeen, and the outbreak is attributed, with some plausibility, to the milk-supply. It is high time that something was done in connection with the supply of so necessary an article as milk. Every dairy ought to hold a licence, and be inspected several times a year; otherwise there is no security, and such epidemics will continue to recur, and, in almost every instance now, the milk, often no doubt unjustly, is suspected.

EPIDEMIC OF MEASLES AT DALKEITH.

MEASLES has assumed quite an epidemic form at Dalkeith. At a meeting of the School Board, the clerk stated that the Government examination had to be postponed on account of the number absent, owing to the epidemic. Another school, however, in the same district, is said to be very little affected by the epidemic, and the attendance roll, 320 out of 412, was considered very fair after the holidays.

COFFEE AS A BEVERAGE.

AT a recent meeting of the Glasgow Philosophical Society, Dr. Wallace read a paper on "The Decline in the Use of Coffee in this Country," in which he drew attention to some interesting facts as to the amount of the annual consumption of this substance. From the figures quoted, it is clear that there has been a very great decrease in the amount used; and, in Dr. Wallace's opinion, the people of this country are losing their taste for coffee, because they cannot get it pure. In support of this view, a long list of the adulterations practised are detailed, and they certainly present a very formidable array. The remedy suggested for this state of matters is that Government should absolutely forbid the sale of coffee mixed with any other ingredient, when it would immediately regain the high reputation it had previously enjoyed. In the discussion that followed, the members of the society took much the same view of the matter as Dr. Wallace. We are inclined to think that coffee itself being somewhat more expensive as a beverage than tea or cocoa has a good deal to do with the matter, for under the Adulteration Act there should be no trouble in procuring fair and unadulterated supplies of the substance.

VOICE-TRAINING BY CHEMICAL MEANS.

HOW to enrich the tone and extend the range of the human voice by calling in the aid of chemical science, was the subject of an interesting lecture recently given in Glasgow by Dr. Carter Moffat, who was formerly Professor of Chemistry in the Glasgow Veterinary College, and who is an Italian Gold Medallist for many successful industrial investigations and discoveries. Dr. Moffat claims for the peroxide of hydrogen the power of greatly improving the quality and *timbre* of the human voice; and he was led to advocate its employment by public singers and others, on the ground that it is a marked constituent in the air and dew of Italy, and that from its presence arises the beauty of Italian vocal tone. After a full and clear statement of his views upon the subject, a series of illustrations were given, several of the audience being brought forward and given to inhale a chemical compound made to represent Italian air. The results obtained were held to be very satisfactory by those present, a full, clear, rich, mellow tone being produced with a single application. Dr. Moffat's illustrations on his own voice were especially remarkable, he being able by these chemical means to change it from a voice of power and resonance, but destitute of intonation, to a tenor of considerable range. The lecture, which dwelt on quite a new subject, was very well received by a large audience, chiefly composed of professional men and musical critics, and we understand that arrangements have been made for its re-delivery.

THE SCOTTISH EDUCATIONAL CONGRESS.

THE annual congress under the auspices of the Educational Institute of Scotland, has recently held its sittings in Galashiels, under the presidency of Mr. Boyd, who opened the proceedings with an able address, which dwelt on such topics as the condition of education in Scotland, the present status of the teachers, and the questions of over pressure and school chastisement But the paper which gave rise to most discussion on the opening day of the congress was one by Dr. Somerville of Galashiels, in which he discussed, from a medical point of view, the proper age for commencing school-life. On this point he is quite at variance with the Education Act, which fixes the period at five years. Dr. Somerville would make it seven, as he thinks that before that time the confinement of school-life acts unfavourably on children of tender years. Considerable discussion followed the reading of the paper, and some, while concurring with its spirit, doubted its application in large cities where the home-influences were bad, and thought that children of five years of age were better, intellectually, morally, and physically, at a properly conducted infant-school, than in their own homes.

WESTERN DISPENSARY, EDINBURGH.

AT the annual meeting of the supporters of the Western Dispensary, held some time ago, the report submitted by the medical secretary showed that, during the year, nearly 6,000 patients had received treatment at the dispensary, and of these a large number had been visited at their homes. The vaccinations effected exceeded very considerably those of any previous year, while the throat and ear department also showed satisfactory progress. Financially, the dispensary, although exhibiting a slight deficit, was in a satisfactory state; the fee of 1d. on each prescription dispensed (a practice introduced at and by this dispensary) produced nearly £40 during the year. At a recent meeting of the medical committee, a letter was read from Dr. Halliday Croom, resigning his appointment as physician for diseases of women. The secretary was instructed to write to Dr. Croom acknowledging his past services, and wishing him success in the new appointment he has received in the Infirmary, and which has led to his resignation. Dr. R. Milne Murray was unanimously elected to the appointment vacated by Dr. Croom. Dr. Barbour was unanimously appointed obstetric physician; Dr. Buist, medical officer for vaccination; and Mr. J. Macdonald Brown, surgeon to the dispensary. It was stated that the number of students at the dispensary continued to increase, and their attention to their duties was favourably remarked.

DR. J. B. RUSSELL ON THE HOMES OF THE POOR.

THE accomplished Health Officer of Glasgow is always well worth listening to, and some remarks of his at a recent gathering of the Sanitary Department of the city are so interesting and valuable, as a contribution to the discussion on the homes of the poor that is now exercising the public mind, that they merit special attention. Glasgow possesses quite one of the most complete and efficient sanitary organisations in the kingdom, and the action of its health-department is at once speedy and thorough. Dr. Russell gave, in his address, a long catalogue of improvements effected in the city during the past year, the number of which may be gauged from the fact that more than 300,000 house-to-house visitations were made for searching out nuisances or cases of infectious disease; and that 16,800 nuisances were removed. Dr. Russell fully admits the dirty and destructive habits of the poor: but he pertinently observes that, as used by the landlord to the sanitary inspector, "the habits of the people" are really advanced as a reason why the landlord should be permitted not to do something which it is his duty to do. At least 12,000 of the 16,800 nuisances removed concerned matters for which the landlord was responsible. "In short," said Dr. Russell, "where the 'habits of the poor' are most heard of, the habits of the landlord are these—to ignore entirely his moral responsibility, and to regard his legal responsibility as created only by the official notice of the sanitary inspector. He looks for no nuisance; he does not do it as a landlord, even when it is before his bodily eyes when he is collecting his rents; he does not acknowledge it when his tenants point it out to him; he waits until he is officially notified that it is there, and in many cases he parleys and fences with the sanitary inspector until he gets on the threshold of the court of law, and then at last, with the worst possible grace, he does his duty." Dr. Russell, fairly enough, argued that some means ought to be adopted to teach landlords that conditions in the structure of their property which the law constitutes nuisances, ought to be detected and removed by themselves, and that, where detected by a public department, not only ought they to be summarily removed, but the cost of that department ought, proportionately, to be borne by them. And he concluded a most able speech by the very true remark, that "neither religion, nor education, nor total abstinence, nor Public Health Acts, nor manhood suffrage, nor commissions, nor State subvention, nor the revision of the Land Laws, nor any other agency will, singly or in combination, furnish the lever which will, with a wrench, raise the poor into better houses, and a life more worth living." It is not to revolutionary projects, but to the persistent application on old and well-tried lines of existing legal and voluntary philanthropic means, that statesmen must look for the solution of these problems.

IRELAND.

THE LISTOWEL GUARDIANS AND THE IRISH LOCAL GOVERNMENT BOARD.

A singular dispute is reported to have arisen between the Guardians of the Listowel Union and the Local Government Board. The guardians recently appointed Dr. Dillon to be medical officer, but the Vice-chairman objected to the appointment on several grounds, but especially because, as he alleged, Dr. Dillon had given a sum of money to his predecessor to create a vacancy by resigning. The Local Government Board, after receiving Dr. Dillon's explanation, expressed their strong disapproval of all such transactions, and refused to sanction the appointment. The guardians were required to proceed with a new election; and, after advertising for candidates, the election was held, and Dr. Dillon was again elected by a large majority, some of the guardians who supported him observing that they felt sure the Local Government Board would sanction the appointment this time. The ultimate action of the Local Government Board is awaited with considerable interest, as the practice is understood to be frequently resorted to, not only in the Poor-law medical relief, but in other public departments.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A QUARTERLY meeting of the Council of the College was held on Thursday, the 10th instant. The minutes of the last ordinary Council, held on December 13th last, were read and confirmed. Reports were received from the several annual committees, as well as the second from the committee on the mode of election to the Council and other matters relating to the charters and by-laws of the College, which reads as follows:

Report of the Committee on the Mode of Election to the Council, and on other Matters relating to the Charters and By-laws of the College.—Members of the Committee: Sir James Paget, Bart., *Chairman;* Dr. G. M. Humphry, Mr. J. E. Erichsen, Sir T. Spencer Wells, Bart., Mr. T. Holmes, Mr. E. Lund, Mr. W. Cadge, the President, and the Vice-Presidents.—The Committee, having in their First Report confined their attention to the consideration of Section 15 of the Charter of the 7th Victoria, relating to the mode of election to the Council, have since fully considered the several Charters of the College, and have adopted the following recommendations thereon to the Council, namely:—1. That, although certain Sections in the several Charters have become either obsolete or inoperative, it is inexpedient that any alterations should be made as to those sections. 2. That no alterations are necessary in the Charter of George III. 3. That the Sections of the Charter of George IV, page xxxi of the *Calendar*, which restricts the yearly value of property in lands or rents to be held by the College to £2,000, be altered so as to provide that such amount be increased to £10,000. 4. That Section 5 of the Charter of the 7th Victoria, page xxxv of the *Calendar*, be altered so as to provide that the conditions of admission to the Fellowship by examination and the arrangements for the examinations for the same, be in future determined by resolutions of the Council, and not by By-laws as required by such Section. 5. That in Section 7 of the Charter of the 7th Victoria, page xxxvi of the *Calendar*, the amount of the fee payable for the Fellowship by Examination be omitted, leaving such amount to be provided for by By-law. 6. That Sections 15 and 16 of the Charter of the 7th Victoria, page xxxix of the Calendar, be altered so as to provide that the mode of election to the Council may be by voting-papers as well as in person, the quorum of Fellows required to be present at the meeting for election being omitted from such Sections, it being desirable that, in future, such quorum be determined by by-law instead of by charter. 7. That in Section 5 of the Charter of the 15th Victoria, pages xlvi and xlvii of the *Calendar*, the words beginning "and the Fee," etc., to the end of the Section, be struck out, it being undesirable that any fee should be paid by Members of twenty years' standing on election to the Fellowship. 8. That Section 17 of the Charter of the 15th Victoria, pages l and li of the *Calendar*, be abrogated, it being inexpedient to continue the examinations for the Licence in Midwifery of the College. 9. And that Sections 1 and 2 of the Charter of the 23rd Victoria, page liii of the *Calendar*, be altered, so as to provide that the number of members of the Board of Examiners in Dental Surgery may, if thought desirable by the Council, be increased beyond six, the present number, and that the Section of the Board consisting of persons skilled in Dental Surgery be restricted to Dental Practitioners duly registered under the Dentists' Act of 1878. The Committee reserve to a subsequent report their further recommendations on the alterations in the By-laws and Regulations of the College, which will be consequent on the approval by the proper authorities of the proposed changes in the Charters, and also any other recommendations relating to the said By-laws and Regulations which the Committee may consider necessary. (Signed) JAMES PAGET, Chairman. December 27th, 1883.

The report was approved, and ordered to be entered on the minutes; but it was referred to the committee to consider and report to the Council whether or not it be advisable to retain the provisions of clause 11, on page 38 of the *Calendar*, which provides that, whenever any vacancy occurs on the Council in any other way than by members going out of office by rotation, the member elected as a substitute shall go out of office at the time that the member whose place he fills would have retired, but shall be eligible for renomination and re-election. As regards the charter of George III, Mr. Timothy Holmes moved, as an amendment, that the President be elected biennially; but the motion was not carried. The President, Mr. John Marshall, was appointed Hunterian Orator for 1885. It was announced that two essays had been received in competition for the Jacksonian Prize. Mr. Arthur Colling Brownless, Vice-Chancellor of the University of Melbourne, was elected a Fellow.

INTERNATIONAL HEALTH EXHIBITION, LONDON, 1884.

THE following memoranda indicate the scope of the proposed illustrative exhibits in each of the departments. Other similar memoranda are in preparation from each subcommittee.

Memorandum from "The Workshop" Subcommittee. It is desired to illustrate, in as practical a manner as possible, the relation of industrial conditions and processes to health, and to the subcommittee charged with advising on this department of the Exhibition, the name of "The Workshop" Subcommittee has been given. The plan of production of all articles used by man is for the present purpose spoken of as The Workshop. In this department the following classes of the Exhibition are comprised: Class 41. Designs and models for improvements in the arrangements and construction of workshops, especially those in which dangerous or unwholesome processes are conducted. Class 42. Apparatus and fittings for preventing or minimising the danger to health or life from carrying on certain trades. Guards, screens, fans, air-jets, preservative solutions, washes, etc. Class 43. Objects for personal use. Mouth-pieces, spectacles, dresses, hoods, etc., for use in certain unhealthy and poisonous trades. Class 44. Illustrations of diseases and deformities caused by unwholesome trades and professions; methods of combating these diseases; preservative measures, etc. Class 45. Sanitary construction and inspection of workshops, factories, and mines. (*a*) New inventions or improvements for ameliorating the condition of life of those engaged in unhealthy occupations; (*b*) means of economising human labour in various industrial operations. Class 46. Literature, statistics, diagrams, etc., relating to Group 5. The following heads show the principal subjects which the subcommittee are anxious should be illustrated in the several classes of this department, the illustrations being expected to include alike the conditions of injury to health, and the means proposed for improvement. Besides apparatus used, or proposed for use, with a view to minimise danger to life and health, the exhibits may comprise models, drawings, specimens both of harmful products and improved products, etc., and the committee will be specially glad to receive collections of specimens, models, diagrams, photographs, etc., showing existing evils or noxious conditions which have been modified by recent improvements. (*a*) *Ventilation of the Workshop:* By simple discharge of internal air; by destroying offensive or injurious quality of discharged air. (*b*) *Effluvium-Nuisances:* By condensing and utilising vapours; by consuming vapours; by other means, as in gas-works. (*c*) *Dust-Nuisances, e.g.:* In needle grinding, mother of pearl working, in weaving sheds. (*d*) *Danger from Mineral Poisons, e.g.:* In arsenic-works, white-lead-works, playing-card making, card-bronzing; phosphorus and match manufacture. (*e*) *Danger from Animal Poisons, e.g.:* In wool-sorting, rag-picking. (*f*) *Prevention of Accidents in the Workshop, e.g.:* Protection against heat, injury to eyes; against explosions in the mine and elsewhere. Communications relating to the above to be addressed to The Secretary, "International Health Exhibition," South Kensington, London, and marked on the envelope for "Workshops" Subcommittee.

Memorandum from the Subcommittee on School and Education.—Groups 4 and 6.—The following is the classification of these two groups. *Group 4. The School.*—Class 34. Designs and models of improved buildings for elementary schools, infant schools, and *crèches.* Class 35. Apparatus and fittings for warming, ventilating, and lighting schools, school latrines, closets, etc. Class 36. Special school fittings for storing and drying clothing. Class 37. School kitchens and arrangements for school canteens; methods of warming children's meals, etc. Class 38. Precaution in schools for preventing the spread of infectious diseases, school sanitoria, infirmaries, etc. Class 39. Special apparatus for physical training in schools, gymnasia, apparatus for exercise, drill, etc. Class 40. Literature, statistics, diagrams, etc., relating to Group 4. *Group 6.—Educational Works and Appliances.*—Class 47. *Crèches* and infant schools. (*a*) Apparatus and fittings for *crèches* and infant schools; (*b*) games, toys, and kindergarten amusements; (*c*) models and appliances for teaching; (*d*) examples of school-work. Class 48. Primary schools. (*a*) Apparatus and fittings; (*b*) models and appliances for teaching; text-books, diagrams, and examples; (*c*) specimens of work done in elementary schools. Class 49. Domestic economy in schools for girls. (*a*) Models and apparatus for the teaching of cookery, housework, washing and ironing, needlework and embroidery, dressmaking, artificial flower-making, painting on silk, pottery, etc.; (*b*) specimens of school-work. Class 50. Handicraft teaching in schools for boys. (*a*) Apparatus and fittings for elementary trade teaching in schools; (*b*) specimens of school-work. Class 51. Science teaching. (*a*) Apparatus and models for elementary science instruction in schools; apparatus for chemistry, physics, mechanics, etc.; (*b*) diagrams, copies, text-books, etc.; (*c*) specimens of school work in these subjects. Class 52. Art teaching. (*a*) Apparatus, models, and fittings, for elementary art instruction in schools; (*b*) diagrams, copies, text-books, etc.; (*c*) specimens of art work, modelling, etc., in schools. Class 53. Technical and apprenticeship schools. (*a*) Apparatus and examples used in primary and secondary schools for teaching handicrafts; (*b*) models, plans, and designs for the fitting up of workshop and industrial schools; (*c*) results of industrial work done in such schools. Class 54. Schools for the blind and for the deaf and dumb. (*a*) Apparatus and examples for teaching; (*b*) specimens of school work. Class 55. Literature, statistics, and diagrams, relating to Group 6 and to the effects of "cramming" and overwork on the young, etc. Class 56. Collective displays of school work and appliances. It will be seen that in Group 4 are comprised all the exhibits relating to school-construction, to the improvement of the sanitary condition of school-buildings, and to means for promoting the health of the scholars by physical exercises and otherwise. The classification sufficiently shows the character of the exhibits the Committee would wish to see provided. They would, however, lay special stress on those included in Class 39, and relating to physical education. They would be glad to see included as many models as may be convenient of typical elementary schools, and they would appeal for this purpose to school authorities and managers in this and other countries, and to architects who have given special attention to school-construction, for the loan of such models, as well as of plans and diagrams. The admission of the latter, however, must be to a certain extent limited by considerations of space. As regards Class 40 of this group—and the same remark will apply to Class 55 in Group 6—the Committee are anxious that this class should be limited, with a view to preventing the Exhibition being overburdened with literature. Books stowed away in glazed cases, the backs only being visible, as is the usual custom in exhibitions, are of little practical value or interest; and if available for examination a constant watch is necessary. Group 6, which forms the second division of the Exhibition within the province of this Committee, relates entirely to educational works and appliances, these being restricted to such, in the first instance, as attach to primary schools, and, secondly, to scientific, artistic, and technical education in secondary and higher grade schools, it being understood that Class 49 comprises what may be considered as technical education for women. Regarding this group it will be noted that in every class where they can come in examples or specimens of school-work are included. In the case of primary and infant schools, the Committee would be glad to see this part of the Exhibition strictly limited to what is important or characteristic, and the same remark to a great extent applies to Class 49. The Committee would wish to arrange for as large a display of maps and diagrams as the wall-space available will permit. Of the specimens of work of a handicraft or technical character, the Committee would be glad to see as full a collection as possible, especially of the higher class of work done in certain foreign schools. The Committee do not consider it at all necessary that extensive collections of apparatus and fittings for infant and elementary schools in use in this country should be shown, especially when it is remembered that the educational collection of the South Kensington Museum is in the close neighbourhood of the Exhibition. Among other points, on the importance of which the Committee would lay stress, may be mentioned the artistic decoration of schoolrooms, the exhibition of works of art suitable for use in schools, and the exhibition of objects suitable for school-museums, or possibly of a typical school-museum. As regards the instruction of the blind and of the deaf and dumb—as in all other departments—the Committee would like the various systems to be fully represented, and it should be understood that no preference would be given to one system above another on account of any individual views which members of the Committee might entertain. It will be noticed that in Class 55 are included the effects of cramming and overwork on the young. The Committee understand that this subject is mentioned in the classification merely in order that it might be included amongst the subjects for conferences, and they do not understand that any exhibits intended to illustrate it will be sought for. As regards collective displays (Class 56), the Committee will endeavour to organise displays of this character, which are likely to have a higher educational value than the exhibition of separate articles.

Memorandum from the Subcommittee on Heating, Lighting, Ventilating, and Smoke Abatement. The portion of Group 3, the dwelling, with which this Committee proposes to deal is that comprised within Classes 24, 25, and 26, the following being the official classification: Class 24. Grates, stoves, kitcheners, ranges, boilers, etc., for domestic use. Apparatus for heating and warming, smoke-abatement, etc. Class 25. Ventilators, air-inlets and outlets, cubic space of rooms, cowls, air straining and cleansing. Class 26. Lighting apparatus: (*a*) electrical apparatus for illumination and domestic use, secondary batteries, electroliers, accumulators, etc.; (*b*) apparatus for lighting by gas, gas-producers, gas-meters, gas-fittings, chandeliers, etc.; (*c*) oil and other lamps, and stoves; mineral oil, wax and other candles, vegetable and animal oils. In Class 24 will be included methods of warming: (1) by open and closed grates and stoves; (2) by water, air, steam, and gas apparatus, designed to heat only; (3) by similar appliances, but combining provision for ventilation and the heating of more than one apartment; (4) by similar appliances for domestic use specially designed for the economical consumption of fuel, and intended to minimise the production of smoke or other noxious products of combustion. Domestic kitcheners will be included in this class, but appliances for cookery on a large scale will more properly be arranged under Class 6 (cookery, etc.). Furnaces and steam-boilers for manufacturing operations are not considered to be within the scope of the present exhibition. In Class 25 will be included special appliances for ventilation, other than those which may be considered more suitable for Class 24. These will include means for cooling the air supplied to rooms; means for improving the condition of the air in rooms; methods for testing air; the results of experimental researches into the state of air vitiated by combustion or by respiration; results of experiments on ventilation, and any other means of effecting improvement in matters relating to this class, or of diffusing knowledge about them. The official classification sufficiently indicates the class of exhibits which are desired for Class 26. It may be added that electric lighting is to be limited to illustrations of its application to domestic lighting. Its use on a large scale will be practically illustrated by the arrangements made for lighting the Exhibition itself. In the same way, the commercial manufacture of gas is not included, though its production on a small scale for private use is. Exhibits showing the progress of domestic lighting, and affording means of comparison between old and new systems are specially desired. Photometric and other tests for illuminating materials may be added to the list contained in the classification, and it is desirable that methods of gas-lighting should be shown, which either assist, or do not interfere with, the ventilation.

THE BOWER AND KEATES CASE.

THE secretaries desire to remind the members of the profession that the list of subscriptions to the Indemnity Fund was closed on January 5th. They also wish to state that the secretarial work will be greatly facilitated if those intending to sign the memorial will do so and return it to the College of Physicians before Saturday, the 19th instant.

In reply to many letters, it seems necessary to point out that the acknowledgments of subscriptions in the journals cannot be brought up to date of publication, owing to the large number of letters received and the pressure of space.

It may be of interest to state that copies of the statement were sent out by the Committee to members of the profession residing in the United Kingdom whose addresses appeared in Messrs. Churchill's *Directory* for 1883, their number being about 18,500, and in reply to these 1,662 letters were received up to Friday, January 4th (the date to which this week's list is brought), enclosing subscriptions, also 253 letters enclosing signatures to the memorial; 451 were returned through the dead-letter office; of these 320 were stated to have gone away and left no address, 71 were deceased, and 60 declined to receive the letters; these, however, were all re-directed envelopes.

The following contributions (fifth list) were received up to Friday, January 4th, the remainder will be acknowledged as soon as possible.

A. E. Durham, F.R.C.S., £10 10s.; Sir W. Bowman, [illegible]; G. T. Gream, M.D., [illegible]; H. Richards, M.D., [illegible]; G. O. Rees, M.D., F.R.S., [illegible]; F. T. Roberts, M.D., £3 3s.

The following have sent Two Guineas each:—H. M. [illegible], F.R.C.S.; J. [illegible]well, Esq.; R. B. Carter, F.R.C.S.; T. A. [illegible], M.A.; Charles Coates, M.D.; W. H. Freeman, Esq.; W. C. Gregg, M.D.; W. J. Harris, Esq.; Herefordshire Medical Association; Graily Hewitt, M.D.; Charles Higgins, F.R.C.S.; Messrs. Kellock and Reynolds; J. P. [illegible], F.R.C.S.; G. [illegible], M.D.; G. Lichtenberg, M.D.; H. Osborne, Esq.; G. A. [illegible], M.D.; P. H. Pye-Smith, M.D.; R. H. Semple, M.D.; F. H. [illegible], M.D.; S. J. Sharkey, M.D.; Pugin Thornton, Esq.; M. H. H. Vernon, Esq.; F. Weber, M.D.; A. Willett, F.R.C.S.; E. J. Winterbottom, Esq.

Messrs. Taylor and Dunbar, £1 10s.; M. Brownfield, Esq., £1 5s.

The following have sent One Guinea each:—W. A. Adams, F.R.C.S.; J. F. Anderson, M.D.; F. Argles, Esq.; Messrs. Ashurst, Tucker, and Smith; C. E. Baker, Esq.; A. E. Barker, F.R.C.S.; F. Barnes, M.D.; R. Barwell, F.R.C.S.; H. C. Bastian, M.D.; Adam Bealey, M.D.; Marcus Beck, M.B.; C. T. Blackman, Esq.; J. R. Bosworth, Esq.; Percy Boulton, M.D.; Essex Bowen, M.D.; Henry Bott, Esq.; Thos. Bridgwater, M.B.; J. S. Bristowe, M.D.; Messrs. Brookes Bros.; C. T. Brookhouse, M.D.; R. Brown, Esq.; R. Brown, F.R.C.S.; F. G. Broxholme, M.D.; C. Budd, M.B.; J. E. B. Burroughs, Esq.; G. R. Burtt, Esq.; T. C. Cade, Esq.; C. C. Carter, M.D.; W. Cayley, M.D.; E. Chaffers, F.R.C.S.; F. H. Champneys, M.A.; J. D. Chepmell, M.D.; E. F. Chinery, F.R.C.S.; R. H. Clay, M.D.; W. F. Cleveland, M.D.; E. M. Cooke, M.B.; J. Couldrey, Esq.; E. H. Cree, M.D.; J. Croft, F.R.C.S.; M. Davis, M.D.; W. H. Day, M.D.; W. H. Dickenson, M.D.; W. A. Dingle, Esq.; A. R. Dodd, Esq.; H. B. Donkin, M.B.; C. H. Drake, Esq.; T. Eastes, M.D.; J. Fairbank, Esq.; Wm. Fairbank, Esq.; E. A. Fardon, Esq.; Sir J. Fayrer, M.D.; J. R. Fielding, Esq.; C. E. Fitzgerald, M.D.; A. Freer, Esq.; C. C. Fuller, F.R.C.S.; R. Fyson, Esq.; F. J. Gant, F.R.C.S.; F. H. Gervis, Esq.; J. R. Gibson, F.R.C.S.; C. Godson, M.D.; F. W. W. Goodsall, M.D.; W. Goodson, Esq.; F. C. G. Griffin, M.B.; F. de H. Hall, M.D.; J. Hardie, M.D.; H. Harrison, Esq.; T. W. Haslehurst, Esq.; R. Heath, M.D.; F. H. Hodges, F.R.C.S.; C. Holding, F.R.C.S.; T. F. Hopgood, Esq.; T. A. J. Howell, Esq.; W. R. Huggard, M.D.; H. S. Hughes, Esq.; J. R. Humphreys, F.R.C.S.; G. M. Humphry, M.D.; H. J. Hunt, Esq.; Evan Jones, Esq.; J. Jones, Esq.; J. B. Kennedy, Esq.; G. R. Lake, Esq.; Chas. Lewis, Esq.; H. R. C. Litchfield, Esq.; R. Clement Lucas, F.R.C.S.; A. V. Macan, M.B.; W. McCheane, F.R.C.S.; M. M. McHardy, F.R.C.S.; F. B. Mallet, M.D.; F. Manser, Esq.; W. O. Markham, M.D.; C. H. Marriott, M.D.; C. H. Martin, M.D.; R. Martin, M.D.; H. H. Massey, Esq.; J. A. D. Miller, Esq.; F. D. Miller, Esq.; A. B. R. Myers, Esq.; Messrs. Newman and Newman; W. O'Donnell, Esq.; E. Owles, F.R.C.S.; G. Pearce, M.D.; T. S. Palmer, M.D.; F. Peirce, M.D.; A. Perigal, M.D.; O. Pemberton, F.R.C.S.; Sir H. A. Pitman, M.D.; G. B. Powell, Esq.; L. L. Powell, Esq.; J. S. Ranking, M.D.; T. Rayner, M.D.; J. C. Roberts, Esq.; W. B. Robertson, M.D.; E. T. Roe, M.D.; A. Roper, Esq.; J. Harris Ross, M.D.; B. Roth, F.R.C.S.; Jas. Riley, Esq.; Geo. Roper, M.D.; J. K. Sampson, Esq.; A. E. Sansom, M.D.; L. W. Sedgwick, M.D.; H. Sewell, Esq.; J. Shaw, M.D.; D. Shier, M.D.; T. Wood Shortridge, Esq.; F. H. Simpson, F.R.C.S.; E. H. Slakeney, F.R.C.S.; Messrs. Smart and Moore; Alder Smith, F.R.C.S.; W. H. Smith, Esq.; E. Snell, Esq.; R. Southey, M.D.; E. J. Spitta, Esq.; Messrs. W. S. W. and J. E. Square; J. S. Stocker, M.D.; J. M. Stothard, Esq.; H. G. Sutton, M.D.; J. Sykes, M.D.; Chas. Taylor, M.D.; Frederick Taylor, M.D.; Herbert Taylor, M.B.; John Taylor, Esq.; Thos. Taylor, F.R.C.S.; W. B. Taylor, M.R.C.S.; E. Tegart, Esq.; M. Thomas, Esq.; Disney L. Thorp, M.D.; M. Tonge, M.D.; W. C. Toulmin, Esq.; J. Tweedy, F.R.C.S.; C. E. Underhill, M.B.; J. Waggett, M.D.; A. D. Walker, M.D.; W. D. Wathen, Esq.; W. Weir, M.B.; — Wallace, Esq.; C. A. West, M.D.; T. Whipham, M.B.; W. H. White, M.A.; D. M. Williams, Esq.; E. Woakes, M.D.; R. H. Woodhouse, Esq.; J. C. Worthington, Esq.; E. Percival Wright, M.A.; W. T. Wyatt, M.A.; E. Williams, Esq.; W. B. Young, Esq.

The following have sent One Pound each:—George Burn, M.D.; W. G. Church, F.R.C.S.; F. D. Dyster, M.D.; Messrs. A. and W. Eddowes; W. M. Harmer, Esq.; A. C. E. Harris, M.B.; F. W. Humphreys, F.R.C.S.; Hermann J. Jones, M.D.; W. H. K. Kane, M.D.; D. Kennard, Esq.; R. McDonnell, M.D.; J. E. Tuxford, Esq.; J. F. Walker, Esq.; G. M. Whitehead, Esq.; C. T. Wickham, Esq.

W. L. Mackesy, Esq., Fifteen Shillings.

The following have sent Half-a-Guinea each:—J. Ackery, Esq.; E. Cresswell Baber, M.B.; M. Balding, M.D.; M. Benoly, M.D.; J. Bevan, M.B.; C. Y. Biss, M.B.; T. Bowling, Esq.; C. J. Bracy, M.B.; H. M. Brewer, Esq.; J. Braithwaite, M.D.; H. Briggs, Esq.; J. Bunny, M.D., J. B. Bunny, Esq.; R. E. Carrington, M.D.; E. Child, Esq.; R. M. Chisholm, Esq.; G. Coates, M.A.; W. S. Colby, Esq.; J. B. Caskie, Esq.; J. G. Creasy, Esq.; R. Creamer, Esq.; John Crew, Esq.; G. C. Dale, M.D.; W. J. Daniel, Esq., R. Davidson, M.B.; G. F. De la Cour, M.D.; F. Dawtrey Drewitt, M.D.; J. E. Ellerton, Esq.; J. J. Emerson, Esq.; Chas. Firth, M.D.; J. C. Fish, M.D.; John Forrest, M.D.; Geo. C. Franklin, F.R.C.S.; R. L. Freer, Esq.; J. C. Galton, M.A.; R. E. Gaye, Esq.; W. Kitto Giddings, M.D.; R. W. Goldie, Esq.; T. Stokes Guppy, M.D.; A. H. B. Hallowes, Esq.; A. Harvey, M.D.; R. W. Henderson, Esq.; G. Jackson, F.R.C.S.; Osborne Johnson, Esq.; F. W. Jordan, Esq.; J. S. Kane, B.A.; Norman Kerr, M.D.; R. B. Kidd, Esq.; G. Lamb, Esq.; J. W. Lane, M.D.; J. Leigh, F.R.C.S.; C. Lovegrove, Esq.; Luke Newry, Esq.; H. S. Leverton, Esq.; F. F. Lloyd, Esq.; J. McClelland, M.D.; J. Macfee, M.D.; A. Matcham, Esq.; G. A. Meaden, Esq.; J. Miller, M.D.; J. R. Milsome, M.D.; G. B. Morgan, Esq.; R. Paramore, Esq.; T. D. Patmore, Esq.; — Perkins, Esq.; F. S. Pilkington, Esq.; H. F. M. Pope, Esq.; Rees Powell, Esq.; B. L. Powne, Esq.; D. G. Prothero, M.D.; C. Puzey, Esq.; John Rae, Esq.; J. M. Randle, Esq.; T. Richardson, Esq.; W. E. Robbs, M.B.; W. R. Rogers, M.D.; G. Philip Rugg, M.D.; A. Shipton, Esq.; W. P. Shipton, Esq.; Simeon Snell, Esq.; A. Storrs, M.D.; D. T. Thomas, Esq.; W. A. Thomson, F.R.C.S.; W. Walker, F.R.C.S.; S. Warren, M.D.; W. D. Wilkes, Esq.; F. Whitwell, Esq.; G. G. Whitwell, M.B.; R. H. Williams, Esq.; M. A. Wood, F.R.C.S.; A. W. Wordley, Esq.; T. A. Wotherspoon, M.D.; C. St. John Wright, M.B.

The following have sent Ten Shillings each:—J. A. [illegible], Esq.; W. H. A[illegible]chin, M.B.; J. W. Anningson, Esq.; A. Ballantyne, M.D.; G. R. Barnes, M.D.; F. A. Best, Esq.; R. A. Biliald, Esq.; W. E. Baylie, Esq.; G. Birt, M.B.; F. Blackman, Esq.; R. Blaikie, Esq.; A. R. H. Bland, M.D.; W. H. Booth, Esq.; F. A. Bond, M.B.; R. E. W. Brewer, Esq.; O. B. Brown, M.B.; R. Buswell, Esq.; J. Brown, Esq.; J. Browne, J.P.; T. J. Burroughs, M.D.; H. Buss, M.D.; W. Carter, M.D.; L. Clapham, Esq.; T. Clark, Esq.; B. Clarke, F.R.C.S.; G. B. Collet, Esq.; J. Cook, M.D.; C. W. Cooper, M.B.; A. Cooper, Esq.; R. Corbet, Esq.; M. A. B. Corbin, F.R.C.S.; G. G. Corbould, Esq.; D. Cowie, M.D.; G. H. Coveney, Esq.; F. Cox, Esq.; C. P. [illegible], Esq.; W. H. [illegible], Esq.; G. H. Daly, M.D.; C. Davidson, F.R.C.S.; G. H. [illegible], Esq.; A. D. [illegible]; J. Dearden, M.D.; R. B. Dunlop, Esq.; B. Edwards, Esq.; W. England, M.D.; W. Evans, Esq.; A. Evans, Esq.; H. [illegible], Esq.; J. R. [illegible]; J. S. [illegible], M.B.; R. W. Garnham, Esq.; J. H. Gordon, Esq.; J. H. Gornall, Esq.; T. A. Gray, Esq.; A. C. Grieve, Esq.; E. Halford, F.R.C.S.; R. S. Hanbury, M.D.; A. [illegible], Esq.; A. D. Harris, M.D.; [illegible]; W. H. [illegible]; R. Heslop, Esq.; G. C. Hope, M.D.; W. R. [illegible]; [illegible]; J. P. [illegible], M.D.; C. W. Izod, Esq.; J. Jackson, Esq.; J. F. Jackson, Esq.; C. Jewell, Esq.; F. E. Jones, M.D.; F. J. [illegible], Esq.; [illegible], Esq.; H. W. Kiallmark, Esq.; C.

King, Esq.; J. Kirkman, M.D.; H. J. Knight, Esq.; H. M. Langdale, Esq.; H. Lapton, Esq.; J. Lampton, F.R.C.S.; E. J. Leverton, Esq.; M. Lloyd, Esq.; J. Loane, Esq.; S. Lockie, M.D.; S. P. Lowdell, Esq.; J. G. Longstaff, M.D.; W. C. Luffman, Esq.; A. Maclean, F.R.C.S.; R. C. Maclagan, M.D.; S. W. Mc Dowall, M.D.; E. McCraith, Esq.; G. Mackay, M.D.; S. R. Manby, Esq.; G. May, M.B.; T. H. Meikee, M.D.; R. H. Meade, F.R.C.S.; G. Mickley, M.A.; H. Moore, Esq.; J. E. Morris, Esq.; A. Morison, M.D.; T. Morton, M.D.; W. W. Morgan, M.D.; W. Mott, Esq.; A. W. Nankivell, F.R.C.S.; T. Nash, Esq.; W. Neal, Esq.; C. Nind, Esq.; F. Nicholl, M.D.; L. J. O'Neill, F.R.C.S.; C. Orton, M.D.; J. A. Owles, M.D.; J. M. Owen, Esq.; J. Page, Esq.; G. C. Parnell, Esq.; E. H. Pettifer, Esq.; E. B. Pellew, Esq.; H. Piers, Esq.; T. H. Redwood, M.A.; C. J. Renshaw, M.D.; R. L. Roberts, M.D.; J. W. Roughton, Esq.; D. Russell, M.D.; J. W. Roe, M.D.; C. K. Rudge, Esq.; A. Samelson, M.D.; W. J. Scofield, Esq.; W. B. Sealy, Esq.; W. Shaw, Esq.; M. Shirley, Esq.; F. D. A. Skae, M.D.; H. J. Skelding, Esq.; W. A. Smith, M.A.; J. F. Stafford, Esq.; S. H. Steel, M.B.; M. Steele, M.D.; G. H. Symes, M.D.; J. Thompson, Esq.; T. W. Thursfield, M.D.; F. Trevan, Esq.; W. M. Trousdale, F.R.C.S.; G. St. G. Tyner, F.R.C.S.; C. S. Vachell, M.D.; C. Walter, Esq.; J. Watson, M.D.; G. T. B. Watters, M.D.; S. H. Webb, F.R.C.S.; A. M. Wedderburn, M.D.; G. F. Wellingliston, M.D.; W. F. West, Esq.; A. Wheeler, Esq.; H. Williams, Esq.; W. Wood, F.R.C.S.; J. L. Worship, Esq.; R. Wotton, Esq.; J. K. Wynne, M.D.

The following have sent Seven Shillings and Sixpence each:—H. Malins, M.B.; T. D. Paradise, Esq.; W. Sankey, M.D.

The following have sent Five Shillings each:—H. Adcock, Esq.; F. R. T. Allen, M.D.; H. E. Armstrong, Esq.; H. A. Auchineek, F.R.C.S.; E. G. Bartlam, F.R.C.S.; M. S. Barton, Esq.; E. W. Bawtree, M.D.; C. W. Beresford, Esq.; H. Bingham, M.D.; A. A. Blakiston, Esq.; G. F. Blake, Esq.; O. Bowen, Esq.; J. Boyton, Esq.; W. A. Brailey, M.D.; —Brooks, —; J. S. Bootiman, Esq.; A. Boswell, M.D.; A. H. Buck, Esq.; T. A. Buck, M.B.; E. G. Bull, Esq.; C. G. Bunn, Esq.; W. M. Burman, Esq.; P. B. Burroughs, Esq.; J. S. Berry, M.D.; J. Carnegie, M.A.; T. Cary, Esq.; E. Casey, M.D.; T. Cassan, Esq.; H. N. Chilcote, Esq.; J. Clare, Esq.; A. C. Clarke, M.D.; R. T. Cobbold, Esq.; F. Coley, M.D.; F. E. Cockell, Esq.; E. Cook, Esq.; J. W. Craig, M.D.; J. Crerar, Esq.; G. Crichton, M.D.; A. Crighton, M.D.; J. R. Crease, F.R.C.S.; A. Croker, Esq.; T. P. Daniel, Esq.; W. E. Dickinson, Esq.; R. Douglas, M.B.; W. N. Drury, M.D.; W. Duncan, M.D.; S. Edwards, Esq.; M. J. Egarr, Esq.; G. H. Elliott, Esq.; G. Foote, Esq.; J. Ford, Esq.; J. Fraser, M.D.; J. W. Fry, Esq.; W. F. Fryer, M.D.; L. Fuller, Esq.; J. E. Games, M.D.; A. N. G. Gibbs, Esq.; J. Gibson, M.B.; B. F. Giles, M.D.; T. C. Gilmore, M.D.; J. H. Gilmour, Esq.; W. T. Girdlestone, Esq.; R. V. Gorham, Esq.; W. Grislock, M.D.; T. Griffin, Esq.; A. W. Green, Esq.; G. Handcock, Esq.; J. W. Haward, Esq.; E. Harle, Esq.; J. Hamilton, M.D.; G. Harrison, Esq.; H. Hemsted, Esq.; F. A. Heygate, Esq.; J. C. Heaven, Esq.; R. Hickman, Esq.; A. P. Hills, Esq.; J. Horne, M.D.; W. H. Hubert, Esq.; J. Hudson, Esq.; T. J. Hughes, M.D.; W. L. Hunter, M.D.; H. F. Hurst, Esq.; Hugh Ivers, Esq.; J. R. James, Esq.; H. James, F.R.C.S.; C. W. Jenner, F.R.C.S.; G. S. Joliffe, Esq.; J. Johnson, Esq.; T. E. Jones, Esq.; L. Joyce, Esq.; H. Kay, Esq.; H. Kennedy, A.B.; L. Kerigan, Esq.; H. Le Cronier, Esq.; E. G. T. Llewellyn, Esq.; R. Lord, M.D.; T. B. Luscombe, Esq.; W. E. Luscombe, Esq.; M. Macnamara, Esq.; H. MacNicol, Esq.; S. M. Malcolmson, Esq.; G. H. Malim, Esq.; R. Maples, Esq.; E. F. Martin, M.B.; H. A. Martin, M.D.; R. S. Martin, Esq.; W. N. Mason, Esq.; W. May, Esq.; W. H. Meadows, Esq.; J. W. Meek, M.D.; R. Meikle, F.R.C.S.; J. Morley, Esq.; T. S. Morley, M.D.; W. H. Murray, M.D.; E. J. Murtagh, Esq.; W. B. Mushet, M.B.; W. H. C. Newnham, M.A.; A. J. Newman, Esq.; J. Oakley, Esq.; H. O'Neill, M.D.; J. Oliver, Esq.; J. A. Osborne, M.D.; S. Partridge, Esq.; J. Peake, Esq.; A. B. Pollock, Esq.; W. Pollock, M.B.; P. Purves, M.D.; J. P. Purves, Esq.; J. S. L. Place, Esq.; H. Rainbird, Esq.; R. Reynolds, Esq.; R. T. Risk, F.R.C.S.; J. D. Robertson, M.D.; J. B. Ronaldson, Esq.; J. M. A. Ross, Esq.; W. Row, Esq.; J. W. Rowland, Esq.; W. A. S. Royds, Esq.; G. M. A. Rudkin, Esq.; T. J. Saunders, Esq.; A. Sheen, M.D.; A. S. Shout, Esq.; J. Shaw, M.D.; E. W. Shephard, Esq.; A. R. Sincock, Esq.; W. H. Sissons, Esq.; C. W. Smith, Esq.; R. S. Smith, M.D.; G. S. Stansfield, Esq.; E. A. Starling, Esq.; J. A. Storey, Esq.; J. D. Styrap, Esq.; B. C. Sykes, M.D.; R. Sykes, Esq.; J. M. Taylor, Esq.; A. Tattey, Esq.; A. Thorn, jun., M.D.; E. Treves, Esq.; A. H. Twining, Esq.; J. Tily, M.D.; J. Todd, Esq.; A. Upton, Esq.; T. S. Upton, Esq.; T. G. Wales, Esq.; T. R. Walker, M.D.; E. G. Wake, M.D.; W. Warrener, M.D.; E. T. Watkins, M.D.; R. W. Watkins, F.R.C.S.; T. H. Watson, M.B.; A. Williams, M.D.; J. L. Williams, M.B.; H. Willson, Esq.; J. G. W. West, Esq.; J. Wigmore, M.D.; A. K. Willis, Esq.; T. Wilson, Esq.; G. Willis, M.D.; W. Willis, M.D.; E. A. Wood, Esq.; W. R. Woodman, M.D.; C. J. Workman, M.D.; H. Wright, Esq.; W. Wylie, Esq.

E. G. Gilbert, M.D., 3s. 6d.

The following have sent Two-and-Sixpence each:—M. Britton, M.D.; W. A. Caskie, M.A.; G. Chapman, Esq.; H. Davis, Esq.; E. English, Esq.; J. Farrar, Esq.; J. Frain, M.D.; J. Holt, Esq.; A. Kelso, Esq.; H. E. Maberley, M.A.; G. Macdonald, Esq.; R. T. Manson, Esq.; W. J. Meharry, Esq.; H. P. Olivey, Esq.; T. S. Parry, M.B.; J. B. Pike, Esq.; W. Mortimer, M.D.; J. B. Norris-Cave, Esq.; J. K. Poole, Esq.; W. C. Reed, M.D.; M. Shurlock, Esq.; J. Simpson, F.R.C.S.; A. L. Smith, Esq.; F. C. Spackman, Esq.; J. J. Stack, Esq.; C. E. Steele, Esq.; H. B. Stoney, M.B.; J. H. Thomas, Esq.; R. Worrall, M.D.; M. Tuke, Esq.

Other smaller sums have been received from:—A. Macaulay, M.B.; J. Walton, M.B.; A. Pearse, M.D.

F. A. Mahomed, } Honorary Secretaries.
R. W. Burnet, }

In the list published last week, the name "T. John Griffith" (page 30, col. 2, line 13 from bottom) should be "John T. Griffith."

Dr. Sedgwick Saunders, in his last report to the City Commission of Sewers, stated that among the places which had come under condemnation as violating the principles of smoke abatement, and had thereby caused a nuisance, were the General Post Office and the Bank of England. Anybody whose avocations bring him often into the neighbourhood of Westminster, will know that these two public offices are not the only offenders. Thick volumes of smoke may frequently be seen rolling out of the summit of certain pinnacled towers of the Palace of Westminster.

Medical Magistrate.—Dr. Thomas Dalton, of Llandudno, has been placed on the Commission of the Peace for Carnarvonshire.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

Meetings of the Council will be held on Wednesday, January 16th, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 20th, June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

COUNCIL.

NOTICE OF MEETING.

A **meeting** of the Council will be held in the Council Room of Exeter Hall, Strand, London, on Wednesday, the 16th day of January next, at 2 o'clock in the afternoon.

Subcommittees will meet as follows. At 161A, Strand, W.C.—Tuesday, January 15th, 1884: Office and Printing Subcommittee, 4 P.M. Wednesday, January 16th, 1884: Arrangement Committee, 10.30 A.M.: Journal and Finance Subcommittee, 12 noon. At Exeter Hall, Council, 2 P.M.

Francis Fowke, *General Secretary.*

161A, Strand, January 1st, 1884.

COLLECTIVE INVESTIGATION OF DISEASE.

Cards for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
V. Syphilis, acquired.
Va. „ inherited.
VI. Acute Gout.

Urgent. *The Committee propose to publish a final report on Acute Pneumonia as soon as possible. Cases are therefore urgently needed. Cards will be received until further notice.*

Notice.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

Applications should be addressed to
The Secretary of the Collective Investigation Committee,
September, 1883. 161A, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

North of Ireland Branch.—A meeting of this Branch will be held in the Bar Room of the County Court-house, Omagh, on Thursday, January 24th, at 1 P.M.—Alexander Dempsey, M.D., Honorary Secretary, 26, Clifton Street Belfast.

The North-Western Provinces and Oudh Branch.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons Shirley Deakin and W. A. Morris, 8, City Road, Allahabad.

Dublin Branch.—The seventh annual general meeting of the Dublin Branch will, by kind permission of the President and Fellows, be held on Thursday, January 31st, at 4 P.M., in the Hall of the King and Queen's College of Physicians, Kildare Street. The officers and council for the ensuing year will be elected by ballot, and any other necessary business transacted. Mr. Edward Hamilton, President-elect, will deliver the annual address. The following addition to By-law VII will be proposed: "All interim vacancies may be filled up by the council." The annual dinner of the Branch will be in the College Hall, at 7 P.M. on the day of the meeting. Dinner tickets for members who purchase their tickets on or before Tuesday, the 29th inst., 17s. 6d.; for members purchasing their tickets after that date, and for guests, £1.—George F. Duffey, M.D., Honorary Secretary and Treasurer, 30, Fitzwilliam Place, Dublin.—January 2nd, 1884.

Metropolitan Counties Branch: East London and South Essex District.—The next meeting of the above District will be held on Thursday evening, January 17th, at the Hackney Town Hall. The chair will be taken at half-past eight o'clock. Mr. Frederick Treves will read a paper on the Treatment of Psoas Abscess.—Frederick Wallace, Honorary Secretary, [illegible], Cazenove Road.—January 7th, 1884.

CORRESPONDENCE.

BRITISH MEDICAL BENEVOLENT FUND.

Sir,—I have to acknowledge, with most sincere thanks, the following subscriptions and donations to the Medical Benevolent Fund, sent in answer to my appeal. I beg also to thank many old subscribers who have taken my letter as a reminder and have sent their subscriptions, sometimes with an extra donation.—I remain, your obedient servant, **W. H. Broadbent.**

34, Seymour Street, Portman Square, W., January 8th, 1884.

A. O. A., £100; Warrington Haward, Esq. (in addition to subscription), £1 1s.; Dr. Connel, 10s. 6d.; Dr. Kinglake (in addition to subscription), £5; A. T. Pollard, Esq., £5; Brigade-Surgeon Clarke, £1; Dr. B. Bramwell, £1 1s.; Dr. Bright (collected), £4 14s.; Dr. Collier, £1 1s.; Mr. Green, £1 1s.; A. Lattey, Esq., £1 1s.; W. A. T., 10s. 6d.; J. B. L., 10s.; C. A. Aikin, Esq., £5 5s.; Thank Offering, £2 2s.; J. Cooper Forster, Esq., £20; R. Roxburgh, Esq., £1 1s.; Surgeon, R.N., £1 1s.; Dr. J. C. Ross, £1 1s.; Dr. Rasen, £1 1s.; W. P. L., £1 1s.; Thomas Smith, Esq., £10 10s.; J. Fosse Harding, F.R.C.S., £5 5s.

THE CASE OF DR. C. R. BROWN.

Sir,—Some few months since you kindly published, at my request, an appeal on behalf of my friend, Dr. Brown, of Eastbourne, who was then suffering from paralysis, and whose condition was thought likely to last some time. He somewhat improved, until he was seized with convulsion on November 9th, and died on the following day, never having regained consciousness.

I saw him ten days before he died, when he was exceedingly anxious to write to you to thank the many kind friends who subscribed to the fund. I advised him to defer this, as he was too weak to bear any excitement. I enclose you a subscription-list of the whole fund, by which you will see that over £1,000 was raised locally, which is sufficient evidence of the esteem in which he was held. The whole amount subscribed was £1,298, which, after deducting the necessary expenses, has left a very handsome balance to be invested on behalf of the widow and five children.—I remain, yours faithfully, **Frederick Wallace.**

96, Cazenove Road, Upper Clapton, January 5th, 1884.

P.S.—Any subscriber can have, by writing to me or the Rev. E. Crake, Eastbourne, a complete list of the subscriptions.

ALCOHOLIC OR NON-ALCOHOLIC TREATMENT OF TYPHOID FEVER.

Sir,—Comparisons drawn from the following facts may be interesting to many of your readers on a question of vital importance.

In a Christmas appeal for aid, the Committee of the Temperance Hospital say: "A serious outbreak of typhoid fever occurred in the neighbourhood of the hospital. Twenty persons suffering from this dangerous complaint were placed under the care of our staff; and while we, with sincere regret, report that, in three instances, the patients died, it is a cause for thankfulness that so large a proportion as seventeen have been discharged as cured.

In juxtaposition to this, I have to record that, at the St. Pancras Female Orphanage, No. 108, Hampstead Road, a few doors from the Temperance Hospital, we also had an outbreak of typhoid fever; and, after anxious consultation with Mr. Adams, the honorary medical officer, I decided on despatching nine severe cases to the London Fever Hospital, where, of course, the treatment was not fettered by the "non-alcoholic principle;" indeed, I am prepared to state, from personal observation of our poor little sufferers there, that alcohol formed an important factor in the treatment, resulting in the entire restoration of all; and I am happy to say that their subsequent location in convalescent homes has revived the roses on the sufferers' cheeks. The expense thereby inflicted on our funds has been very great, and I am justified in appealing for help to an institution where discretion has been exercised with such marked success, when a neighbouring one scores a mortality of 15 per cent., against our 0 per cent.

I am aware that the mortality from typhoid fever has been usually 15 or 16 per cent. in hospitals, and therefore I feel that the comparisons to be drawn from the hard facts I have related are deserving of serious consideration.

In conclusion, I have to assure you that I have not brought the subject under notice from any feeling of antagonism to the Temperance Hospital, as I have been a subscriber thereto almost from its commencement, feeling that there was ample room for another institution for the alleviation of human suffering, counting among its promoters some of my most esteemed friends.—I am, sir, your obedient servant, **Charles Worrell,**

Honorary Secretary of the St. Pancras Female Orphanage.

No. 108, Hampstead Road, N.W.

MEDIASTINAL EMPHYSEMA AND PNEUMOTHORAX IN CONNECTION WITH TRACHEOTOMY.

Sir,—I see that your reporter has failed to understand my reply to the remarks on my paper on the above subject at the Royal Medical and Chirurgical Society, read December 11th. (See British Medical Journal, Dec. 15th, p. 1193.) I am there reported thus: "Dr. F. H. Champneys, in reply, stated that, as to the case of emphysema without tracheotomy to which Dr. Fowler had called attention, he must observe that his paper had expressly referred only to cases of tracheotomy *where the emphysema was due to inspiration.*" (The italics are mine.)

This seems to entirely concede the point as the source of the air in all but selected cases, especially in the absence of punctuation. What I said was to the effect that, in my paper, I had only referred to emphysema occurring after tracheotomy; and that I had not left to conjecture the route followed by the air, but had demonstrated it by the experiments detailed in the paper. My point was that, when emphysema occurs after tracheotomy, it follows the route, and is due to the conditions, I have described. Where tracheotomy has not been performed, the case is different. In cases of tracheotomy, impediment to *inspiration* has called for the operation, and the root behind the deep cervical fascia has been opened. For the rest, I must refer to my paper.—I am, sir, yours faithfully, **F. H. Champneys.**

Great Cumberland Place, Hyde Park.

SPECIAL CORRESPONDENCE.

PARIS.

From our Special Correspondent.

European Governments and the Importation of American Pork.—Direct Pulmonary Therapeutics.—[illegible]—The Copper Cure.

The *Journal Officiel* publishes the decree which prohibits the importation of American meat into France. After January 20th it is absolutely prohibited; until then, all engagements made may be completed, on the condition that the goods are received at Marseilles, Havre, or Bordeaux, also that they are of the order known in business as "fully cured." All expenses of examination by experts will be defrayed by the importers. M. Paul Bert, during the debate in the Assembly which resulted in this law being passed, urged his audience to remember that epidemics of trichinosis are like no other epidemics; they are much more terrible, and signify that an animal as dangerous as the phylloxera has gained a footing in the county. He quoted Germany as a proof; in that country 18,000 inspectors are occupied in examining the meat offered for sale. It may almost be said that an inspector with a microscope pursues every trichina, and if he let it escape and enter meat offered for sale, he is punished by imprisonment. Nevertheless, in Germany, where these 18,000 experts are always at work, there are annually 200 deaths from trichinosis. It was recently proposed in the German Parliament to prohibit the importation of pork from France, because the French Government still permitted the importation of pork from America. Italy and Austria have already prohibited the importation of American pork and ham. Spain, after the epidemic at Malaga, followed in the same steps. In England and Switzerland only, American meats find a market, but in those countries cases of trichinosis are observed. M. Paul Bert further observed that the question of cheapness ought not to be considered, as it was not [illegible] to present trichinosis to the poor in France, and according to his own experience neither salting, curing, nor prolonged cooking were absolute guarantees.

At a recent meeting of the Académie de Médecine, M. [illegible] objected to treating bronchitis, laryngitis, and colds, by entrusting therapeutic agents to the stomach and intestinal canal. The drug thus administered is absorbed, passes into the circulation, and reaches the organs needing treatment only after a very roundabout journey, even if it do not lose its way there. M. Sandras recommends that the laryngeal and pulmonary mucous membranes be acted upon by direct inhalation of the vapour of turpentine and tar. The necessary apparatus consists of a bottle with a cork presenting two orifices. An India-rubber tube is passed through one of the orifices, with its end at a little distance above the level of the fluid in the bottle. Another tube is passed through the second orifice; this is in communication with the air, and is passed into the fluid. The bottle is half-filled with a mixture of chloroform, ether, and turpentine, or with 100 grammes of turpentine poured on to twenty grammes of Norwegian tar. The inhalations should take place three times a day, and be kept up for five minutes, at the rate of fifteen to twenty inspirations a minute. M. Sandras asserts that this treatment rarely fails to cure coughs, and all the unpleasant complications attending colds and bronchitis.

At a recent meeting of the Académie des Sciences, M. Bouley presented a note from M. Boucheron, in which he stated that what was termed, in former times, gutta serena, is caused by detachment of the retina. M. Boucheron produced this lesion artificially, by injecting an acrid fluid between the sclerotic and the choroid of a rabbit, the spontaneous detachment of the retina is due to an abnormal exudation.

M. Vulpian, at a recent meeting of the Académie des Sciences, again criticised and negatived M. Burq's assertions concerning the prophylactic properties of copper. He terminated his remarks by adding that he would never in his practice prescribe copper, as he considers it useless and dangerous. It will be most unfortunate, in M. Vulpian's opinion, if the publicity given to M. Burq's assertions by appearing in the *Comptes Rendus* of the academy should spread a belief in them.

ROME.

The Bacillus Malariæ.—New Researches on the Blood in Malarial Fevers.

ANOTHER autumn has passed, and no progress has been made, at the Pathological Institute here, in confirming the former researches of Klebs, Tommasi-Crudeli, and Marchiafava, on the existence of a specific bacillus malariæ. The reason given for this apparent want of energy is, that there have been very few opportunities for continuing the investigations in true pernicious cases, and it is not thought worth while to do so in ordinary agues. Only three *post mortem* examinations could be made, this autumn, at the Santo Spirito, on those dying of genuine pernicious ague. Specimens of the blood were taken in these cases, and cultivation-experiments are now being made with them; but, so far, without any result which can be published. It is quite true that, for the last two years, the number of cases of malarial fever has notably diminished. This is, at least, the common impression, though it rests on no more satisfactory basis than the statement of physicians in practice in Rome, and on the smaller returns of quinine, given gratuitously by the municipality, or sold at the pharmacies. Malarial fevers are not included in the list of diseases whose compulsory notification at the Capitol is supposed to be enforced on the medical men of the city. The real number of cases, therefore, occurring annually, cannot be known. The mortality-returns confirm the prevailing idea to a certain extent, as, in 1882, all forms of malarial fever—pernicious, subcontinued, and remittent—caused 298 deaths; and, this year, up to the end of October, 320; both figures being less than the average for a long series of years, if we bear the increase of population in mind. Still, there would seem to be plenty of material to work on; but the pathologists hint that the causes of death, thus entered in the municipal returns, are not to be relied on. The malaria is the *bête noire* of the physicians, as well as of the citizens and visitors to Rome; and hence it is believed that many deaths are attributed to it as an easy way out of a difficulty in diagnosis. This is the explanation very commonly advanced, at least, for the occurrence of such certificates in the winter months, when deaths from acute malarial infection within the city are held to be almost unknown. Probably this is true of the well-to-do classes; and experience of practice among visitors confirms such a view, as no death from pernicious ague among these, during the season, has been registered for many years. Dr. Celli, of the Pathological Institute, lately stated that four, out of six, *post mortem* examinations made, this autumn, in cases certified as from pernicious ague, showed that a mistake in diagnosis had been committed. Two of these four deaths were really due to epidemic cerebro-spinal meningitis, one to typhoid fever, and one to septicæmia. If anything like the same proportion of error existed in all the deaths entered under the heading of malarial fevers at Rome, the plea of insufficient material might more readily be accepted; but it is to be feared that the news is too good to be true. That a sensible diminution has been noticed in the number of cases occurring within the last two years is, as mentioned, the common impression. Favourable weather-conditions will probably account for some part of the improvement; but mainly, no doubt, it is due to the disappearance of uncultivated ground within the walls, to the drainage of the soil, and to the extension of streets and villas over formerly uninhabited quarters. No other class of diseases, indeed, can possibly be so much influenced as the malarial by the building operations going on in all directions; and the danger of such attacks being contracted becomes less each year, as the space unbuilt on within the walls diminishes.

While working with the blood of patients with malarial affections, Professor Marchiafava and Dr. Celli made a discovery which, they think, will be of much use in clearing up the diagnosis in obscure cases. When some blood is taken from such patients, especially in the hot stages, dried on a covering glass, and stained with methylene-blue, changes are noticed in the red blood-corpuscles, which they thus describe. Whilst the normal red cells remain uncoloured or become only faintly tinged, there is always a greater or smaller number of the red blood-discs, which present in their interior blue-stained particles, usually of a round form, and about the diameter of a medium-sized micrococcus. With those, there are other red cells, in which are visible larger round, oval, or irregularly shaped blue-coloured masses, usually with granules of black pigment entangled in them. Sometimes, indeed, the whole cell seems converted into a slightly blue-coloured ring, entirely filled with black pigment-granules. If the hæmoglobine be removed from the red corpuscles, by the addition of a drop of distilled water to a drop of blood just taken from a fever-patient, and if the preparation be then dried and coloured with methylene-blue, there will be seen between the normal red cells, whose contours are scarcely visible, others which contain the same intensely blue-coloured sharply defined masses as have been described. With other colouring reagents, they may be seen, also, stained light-red with eosine, for instance, and brownish-red with vesuvine. If no reagent be added to the blood, it is difficult to make out any but the largest of these masses, which then appear as colourless spots within some of the red cells. These colourless spots mostly contain pigment-granules, and gradually increase in size until the whole red cell may be said to consist of a mass of pigment. Drs. Marchiafava and Celli incline to the belief that the small round blue-coloured particles, first mentioned, are really parasitic elements, which have penetrated into some of the red blood-cells, and which act there in converting the hæmoglobine into melanine. The pigment-particles resulting from the dissolution of the red corpuscles are taken up by the leucocytes, and conveyed to the various organs, spleen, medullary cavities of bones, brain, etc., in which they are deposited as the melanine, or black pigment which Italian pathologists hold to be pathognomonic of the malarial infection. It is obvious that the idea intended to be conveyed is that the small round blue-coloured particles are micrococci, which penetrate into some of the red cells, and that the larger irregularly-shaped masses, coloured blue by methylene, and usually containing pigment, are formed by the fusion of several of the micrococci in the interior of the blood-discs; while the pigment arises from the conversion of the hæmoglobine into melanine, caused by the presence of these micrococci. The whole process would thus be a necrosis of some of the red cells, initiated by what they hold to be parasitic elements. In a second note on the subject, the authors point out that, in two cases of pernicious ague, one algide, the other comatose, only a few of the red corpuscles could be seen to present these changes, if examined without any treatment; whereas almost all of them, after drying and colouring with methylene-blue, exhibited the characteristics described. Their microscopic examinations of the blood of patients, when watched throughout a malarial fever, enable them to say that the number of red corpuscles, changed in the way described, and of the leucocytes which become pigmented, augments with the rise of the fever, and diminishes as it disappears. The observations, if confirmed, would be important as aids to diagnosis in obscure cases; and all the more so, if as many mistakes really are made in the diagnosis of the severer forms of malarial fever, as is asserted.

DR. ETESON, Secretary to the Surgeon-General of Her Majesty's Forces, who has returned to Calcutta from furlough, will shortly be promoted to the rank of Deputy Surgeon-General, and posted to the Eastern Frontier District.

MANCHESTER.

Ear Institution.—Bequests.—Prevention of Blindness.

DURING the past year 957 new cases have been attended to in the Ear Institution. The total expenditure has only been £162 8s. The present accommodation in Byrom Street is miserably inadequate, and the committee have at last resolved to obtain new premises, in order to provide an additional waiting-room and a house-surgeon's room. Hitherto there has been no house-surgeon, but the increasing amount of work renders it imperative to appoint one at an early date.

Mrs. Holmes of Fallowfield, has given a donation of £100 to the Royal Infirmary; and a further sum of £4,500 from the estate of the late John Pendlebury, has been paid. It is estimated that the amount of this bequest will amount altogether to £29,000.

The following charitable bequests have been made by the late H. J. Leppoc, Esq., £100 each to the Salford Royal Hospital, Royal Infirmary, Royal Eye Hospital, Clinical Hospital, St. Mary's, and the Throat Hospital.

A circular, based upon the directions of the Society for the Prevention of Blindness, has been issued by the Committee of the Sanitary Association. A "special warning" is added in reference to the disastrous effects of poultices on the eye. The circular has been sent for insertion to all the newspapers of the adjoining counties, and to ministers of religion, medical men, teachers, boards of guardians, relieving officers, etc., and to eye-hospitals and ophthalmic departments of general hospitals. This energetic action in spreading such valuable information is most commendable.

INDIA AND THE COLONIES.

INDIA.

A SET of rules regulating the mode in which medical instruction is to be imparted to women in the local colleges, and setting forth the terms upon which females are to be admitted to medical degrees, has been published under the authority of the Bombay Government.

HOSPITALS IN THE PUNJAB.—The Lieutenant-Governor of the Punjab, in reviewing a report on dispensaries in the province, has expressed his great regret to learn that the subscriptions to medical institutions, received from natives of the Punjab, were, last year, discreditably small. Excepting a liberal donation of 5,000 rupees, given by the Maharajah of Kashmere to the Mayo Hospital at Lahore, and the contributions of the native chiefs to the Ripon Hospital at Simla, the total receipts, in the shape of native subscriptions, amounted to the insignificant sum of 4,988 rupees. In a country, says the official resolution, where charity for the relief of paupers is proverbial, it seems astonishing that such niggardly contributions are made towards the support of institutions, the value of which is increasingly felt by all classes of the community. Government officials are enjoined to exercise their influence in this most legitimate direction. The Lieutenant-Governor notices the excellent work done at the Mayo Hospital, where the large number of successful operations "reflects credit on the Professor of Surgery, Surgeon E. Lawrie, M.B." Listerism was carried out whenever possible, and the very small mortality from septic causes sufficiently shows the efficacy of the system, and the skilfulness with which it was applied.

MEDICAL OFFICERS OF VOLUNTEER CORPS IN INDIA. The Government of India do not consider it necessary to lay down any rules for the examination of medical officers of volunteer corps, as they hold only honorary positions in their corps, and are not enrolled, and consequently they are ineligible for the capitation-grant. The Government appear to have been misinformed on the point, as many honorary surgeons are enrolled members of volunteer corps in India, but possibly the decision may have reference to the special, not ordinary, capitation-grant.

SOUTH AFRICA.

SMALL-POX.—An outbreak of what appears to be small-pox, at Dutoitspan and Baltfontein, near Kimberley, has given rise to some diversity of opinion among the medical men resident there, as to the exact nature of the disease. While Drs. Robertson, Grimmer, Smith, and Sauer believe it to be small-pox, Drs. Crook, Matthews, and Jameson pronounce it to be chicken-pox. The mortality is stated to be one in three, a death-rate which never is reached in chicken-pox. Reports from Dr. Smith and Dr. Sauer appear in the *Diamond-Fields Advertiser* for November 20th and 23rd, which show, we think, plainly enough that the disease is small-pox, and we should have thought that any doubt Drs. Crook and Jameson had regarding the nature of the disease, would have been dispelled when they read those. Not so, however, for, at a meeting held at Dutoitspan on December 5th, a report was read from these gentlemen in which they maintained that the disease was not small-pox, and that at the hospital at Felstead's Farm, containing 74 patients, the majority were suffering from chicken-pox, but not one from small-pox. Among these was a man named Roode, or Rowtt. They also visited his wife and family (six children); these where not in hospital. They found "two children suffering from mild chicken-pox, and the mother and three children sickening for the same disease." They affirm that there is not any resemblance to small-pox in any of the cases (in hospital), and that the disease is not small-pox, but a very severe form of chicken-pox.

We have been favoured with a report from Drs. Grimmer, Sauer, and Robertson, giving in detail the history of the illness of Mrs. Rowtt and her children.

On December 2nd, about three weeks after the appearance of the eruption on the father, one of the children, aged 7, was taken ill with vomiting, convulsions, back-ache, and high fever. The eruption appeared on December 4th on the forehead, scalp, and face. On December 6th, the temperature was 102°; on the 7th, 101.4°. The eruption was not extensive. On December 8th (fifth day of eruption) the eruption was markedly vesicular, slightly umbilicated, and discrete; temperature, 100.6°.

On December 3rd, Mrs. Rowtt, aged 27, was taken ill, and the eruption appeared on December 6th, on the forehead and face. Temperature, 105°. On December 7th, temperature 104.8°. The patient was profoundly prostrated. The eruption evidently was becoming confluent: it was still papular and shotty, as yet sparse on the body. On December 8th the eruption was out over the body and limbs, scarcely vesicular; it was confluent on the face, which was slightly swollen. The eyes were sore and watery. Temperature, 102°.

The history of the remaining children, up to December 8th, is given in the report, but we do not think it necessary to reproduce it. From the notes of the two cases given above, it is quite evident that the patients were suffering from small-pox. The premonitory symptoms, the appearance of the eruption on the third or fourth day of illness, its site, first in the face and head, its character, and the fall of temperature when the eruption had come fully out, indicate the disease to be unquestionably small-pox. In chicken-pox there are few, if any, premonitory symptoms, and the eruption appears first and is most copious on the trunk, becoming vesicular a few hours after the appearance of the papules.

Drs. Sauer, Grimmer, and Robertson, have also sent us specimens of skin from a patient (the overseer of a mine) who died, and who was pronounced by Dr. Jameson to be suffering from chicken-pox. The patient from whom the specimens of skin submitted to us were taken, most certainly had an attack of small-pox. It is very unfortunate that there should be such diversity of opinion as to the nature of the disease prevalent in the neighbourhood of Kimberley, but we are glad to see that the Board of Health are alive to their responsibilities in the matter, by providing means of isolation in hospitals for the sick, and affording protection to the healthy by vaccination, and it is to be hoped that their efforts will limit the spread of the disease in this flourishing mining district.

TYPHOID FEVER, so called, has broken out in Ngubu's Kraal, Matatiele. As in the famous Kloten epidemic, the outbreak is attributed to the eating of the carcase of a diseased ox.

FURTHER confirmation has been received of the occurrence of cases of confluent small-pox at Imgogo. The Free State Government has prohibited trade and intercourse with Basutoland on account of the small-pox, but notwithstanding this prohibition, the Boers and other traders continue to cross the Caledon River. Official intimation was received to the effect that the Imperial Government had resolved upon resuming the administration of Basutoland. All sections of the press declare their entire satisfaction at this announcement.

AUSTRALIA

MEDICAL ADVERTISING.—Our brethren in the colonies are happily as anxious to maintain the honour of the profession, and as alive to the derogation of dignity involved in advertisements in the public prints, as we are in the parent country. We have received from a correspondent in Sydney, New South Wales, some cuttings from newspapers published in that colony, accompanied by an indignant protest against the manner in which certain members of English colleges, and graduates of Scotch universities, think fit to advertise themselves. It would appear that the *Sydney Morning Herald* published a column of advertisements headed "Business Cards," and here, among notices of "carefully selected family mourning," "gas-stoves," and "iron bedsteads," we meet the cards of a "Dr.," who advertises himself as "late of University College, London;" of another "Dr.," who appends a dozen letters after his name; and a gentleman who advertises himself as M.R.C.S.Eng. Yet another "Dr." may be consulted either at his residence, the address of which is given in full, or at a "Medical Hall," where, we learn from another advertisement in a weekly paper that, having been compelled by ill-health "to relinquish active practice," he has purchased the business of a chemist and druggist. This "Dr." is a licentiate of the Royal College of Physicians, London, and a "Member of the Royal College of Surgeons, England," yet he keeps "Patent medicines and druggists' sundries always in stock," and hopes, "with civility, care, and strict attention to business, combined with moderate charges, to obtain a fair share of the patronage of the residents in such and such districts, as a chemist and druggist;" of course, if people wish to consult him on medical matters too, *he is willing.* Happily, we know little of this style of advertisements as yet in this country, and we really feel it necessary to say that the words quoted in inverted commas are literally transcribed. We fear it is hopeless to imagine that either the College of Physicians or the College of Surgeons will attempt to regain any of that control over their licentiates and members which they have now so largely lost, through the laxity of their regulations and the supineness of their governing bodies. What wonder that the cry for reform among the medical corporations grows throughout the profession in England and the colonies stronger every day, when we learn by bitter experience that those bodies which ought to be first to defend the profession from those who would drag it down to the level of a trade, appear to imagine that their ethical duties to their licentiates are over when they have passed a man through a slight examination and pocketed his fees.

MEDICO-LEGAL AND MEDICO-ETHICAL.

INCOME-TAX.

SIR,—I shall feel much obliged if you will kindly advise me on the following subject. I commenced practice here about nine months ago, and to-day I have received a notice from the income-tax office demanding payment of taxes for the current year. As I had only been in practice for six months when I got the schedule-form to fill, I had to calculate my income from the first six months, but I now find that my income for the second six months will be considerably less than my income for the first six months. Is it fair that I should have to pay taxes for a whole year, seeing that I have only been nine months in practice?

Since I filled up the schedule, I have been obliged to purchase a pony. Can I have the price of the pony deducted from my earnings?

An early answer would much oblige yours sincerely,

A YOUNG PRACTITIONER.

*** Income-tax on professional incomes is payable on an average of the profits of the last three years. If the profession has not been carried on for three years, the average cannot be calculated, and the actual profits are the basis on which the tax is payable. If you are charged for profits which have not been made, the commissioners will no doubt reduce the amount claimed, unless you have let the time for appealing to them go by. They are particular about appeals being made at the proper time; and if you are too late to appeal, you will probably be obliged to pay.

THE LAW ON DISSECTING IN PRIVATE HOUSES.

A CORRESPONDENT writes: I am desirous of obtaining a body for the purpose of dissecting, partly for my own advantage, as I am working for an examination, and partly for the good of my pupils. How can I get one? If I can procure a body, is it necessary to obtain the permission of any authority before doing so?

*** By the act for regulating schools of anatomy, the Secretary of State is empowered to grant a licence to practise anatomy to any person lawfully qualified to practise medicine in the United Kingdom, to any professor or teacher of anatomy, medicine, or surgery, or to any student attending any school of anatomy, on application from any such party for such purpose, countersigned by two justices of the peace acting for the county or town wherein such party resides, certifying that, to their knowledge or belief, such party so applying is about to carry on the practice of anatomy. Any party holding the licence from the Secretary of State may receive, possess, or examine anatomically, the body of any person deceased, if permitted or directed so to do by a party in lawful possession of the body, who has power, in pursuance of the provisions of the Act, to permit or cause the body to be so examined, provided that a necessary certificate be delivered by such a party together with the body.

At least one week before the first receipt or possession of a body for such purpose, notice must be given to the Secretary of State of the place where it is intended to practise anatomical examination of that body. The party receiving the body must demand and receive with it the certificate from the sender of the body, and transmit that certificate within twenty-four hours to the inspector of the district, and also a return stating at what day and hour, and from whom, the body was received, the date and place of death, the sex, and, as far as is known at the time, the Christian and surname, age, and last place of abode of such person. A copy of the certificate must be kept in a special book, to be produced, when so required, by the inspector.

The body may not be removed from the place of death without twenty-four hours' notice to the inspector, nor without a certificate of death signed by a person legally qualified to grant such a certificate. This must be delivered, with the body, to the party receiving the same for anatomical dissection. A certificate of the decent and lawful interment of the body must be transmitted to the inspector of the district within six weeks after the day on which the body was received. In 1871, an Act was passed extending the time within which certificates of interment are required to six months, if allowed in any particular case by the inspector.

The inspector for the metropolis is Mr. Charles Hawkins; for the provinces in England and Wales, Mr. John Birkett; for Scotland, Dr. J. A. Russell; and for Ireland, Dr. Daniel F. Brady

Any person offending against the above provisions of the Act is liable to a fine not exceeding £50, or three months' imprisonment.

MEDICAL ETHICS.

WE have received a correspondence from Dr. Luce, and submitted it to an eminent authority, who sends the following opinion.

The following extract from the *Code of Medical Ethics*, ch. ii, sec. v. rule 9, page 36, is strictly applicable to the case stated by Dr. J. J. Luce, and should have been acted upon by his professional neighbour, Dr. ——.

"When a practitioner is called in to, or consulted by, a patient who has recently been, or still may be, under the care of another for the same illness, he should on no account interfere in the case—except in an emergency—but request a consultation with the gentleman in previous attendance. If, however, the latter decline this, or has relinquished the case, or if the patient insist on dispensing with his services, and a communication to that effect be made to him, the practitioner last consulted will be justified in taking charge of the case."

Dr. ——'s contention that, inasmuch as the patient was only a club-patient, and he himself having long been Mr. D.'s family doctor, there was no reason why he should not, under the circumstances, take charge of the case, without previously communicating, either in person or by note, with the attending practitioner, in accordance with the general rule (14, page 37), is subversive of the rules and courtesies of professional life, which cannot be too carefully observed in all cases alike, and without the slightest distinction of class.

Dr. ——'s allegation that he had instructed the family to inform the patient's club-doctor that his professional services were no longer needed, would not in any degree justify him in assuming charge of the patient, unless he had previously satisfied himself that his instructing message had been duly delivered; which, however, from the correspondence submitted to us, does not appear to have been the case.

OBITUARY.

SAMUEL D. LEES, M.D., Ashton-under-Lyne.

THE news of the death of Dr S. D. Lees, of Ashton, will be received with regret by the large circle of friends whose esteem he had won in his long professional and public career. Dr. Lees received his professional training at the University of Edinburgh, and in the year 1837 commenced practice in the borough of Ashton-under-Lyne. He was a Conservative in politics, and for a long time was identified with the public institutions of the town. He was a magistrate and a member of the corporation for a long series of years. Dr. Lees was as well and widely known for his gratuitous services to the poor who sought medical aid and advice at his hands, as he was for his activity and impartiality in the discharge of the duties of his public offices. He died at the age of seventy, and was in many respects a typical Ashtonian, his family connection with this borough dating back to the year 1422.

NEW YEAR'S FESTIVITY AT THE LONDON HOSPITAL.—For the amusement of the children in the London Hospital, two trees were provided in the Queen Victoria Ward; over 100 children received presents, and were entertained by the performance of some marionettes, and by the time-honoured drama of Punch and Judy.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.—In the twenty-eight large English towns, including London, for which the Registrar-General publishes weekly mortality statistics, which have an estimated population of 8,762,354 persons, 6,113 births and 3,731 deaths were registered during the week ending the 5th instant. The annual rate of mortality per 1,000 persons living in these towns, which had been 22.6, 21.9, and 20.6 in the last three weeks of 1883, rose to 22.2 during the first week of this year. The rates in the several towns, ranged in order from the lowest, were as follow:—Norwich, 12.1; Portsmouth, 17.3; Bradford, 17.7; Bristol, 19.1; Nottingham, 19.1; Oldham, 19.1; Newcastle-upon-Tyne, 19.3; Hull, 19.6; Leicester, 20.0; Bolton, 20.1; Huddersfield, 21.2; Plymouth, 21.4; London, 21.6; Birmingham, 21.9; Derby, 22.0; Wolverhampton, 22.0; Sunderland, 22.4; Halifax, 22.5; Brighton, 23.6; Sheffield, 23.8; Liverpool, 23.9; Birkenhead, 24.1; Blackburn, 25.5; Leeds, 26.5; Salford, 27.0; Manchester, 29.1; Preston, 29.9; and Cardiff, 31.3. While the death-rate last week in London, as before stated, did not exceed 21.6 per 1,000, it averaged 22.8 in the twenty-seven provincial towns. The 3,731 deaths from all causes registered last week in the twenty-eight towns included 447 which were referred to the principal zymotic diseases, against 473 and 413 in the two preceding weeks; of these, 112 resulted from scarlet fever, 103 from whooping-cough, 100 from measles, 51 from "fever" (principally enteric), 30 from diphtheria, 28 from small-pox, and 23 from diarrhœa. These 447 deaths were equal to nearly 12 per cent. of the total deaths, and to an annual rate of 2.7 per 1,000. This zymotic death-rate last week was equal to 2.5 in London, and averaged 2.8 in the twenty-seven provincial towns, ranging from 0.4 in Portsmouth and in Oldham, and 0.6 in Norwich, to 5.0 in Cardiff, 6.0 in Derby, and 6.1 in Leeds. The fatal cases of scarlet fever in the twenty-eight large towns, which had been 129 and 104 in the two previous weeks, were 112 last week: this disease caused the highest proportional fatality in Leeds, Salford, Sheffield, and Newcastle-upon-Tyne. The deaths referred to whooping-cough showed a considerable increase upon those returned in recent weeks; the highest rates of mortality from this disease were recorded in Huddersfield and Sheffield. The fatal cases of measles, which had been 126 and 109 in the two preceding weeks, further declined to 100 last week, though they caused excessive death-rates in Derby, Birkenhead, and Manchester. The 51 deaths referred to different forms of fever also showed a further decline from recent weekly numbers, and were lower than those returned in any week since August last; the fever-rate was, however, equal to 2.8 in Blackburn, 1.4 in Halifax, and 1.1 in Cardiff. The 30 fatal cases of diphtheria recorded in the twenty-eight towns last week included 16 in London and 4 in Cardiff. Small-pox caused 28 deaths in these towns, a higher number than has been returned in any week since the early part of 1882; 7 occurred in London, 8 in Birmingham, 7 in Sunderland, 6 in Liverpool, and 1 in Manchester. The death-rate from diseases of the respiratory organs, judged by the metropolitan returns, was considerably below the average: the 387 deaths referred to these diseases in London last week were as many as 158 below the corrected average weekly number, and equal to an annual rate of 5.0 per 1,000. The causes of 106, or 2.8 per cent. of the 3,731 deaths registered last week, were not certified either by medical practitioners or by coroners. In London the proportion of such deaths did not exceed 1.4 per cent.; whereas in the twenty-seven provincial towns it averaged [illegible], and showed the largest excess in Oldham, Wolverhampton, Newcastle-upon-Tyne, and Hull.

HEALTH OF SCOTCH TOWNS.—In eight of the principal Scotch towns, having an estimated aggregate population of 1,254,607 persons, [illegible] births and 614 deaths were registered during the week ending the 5th instant. The annual rate of mortality was equal to 25.4 per 1,000 persons living, against 21.1 and 22.1 in the two preceding weeks, and exceeded by 3.2 the average rate for the same period in the twenty-eight large English towns. Among these eight Scotch towns, the death-rate last week was equal to 15.[illegible] in Perth, 19.3 in Greenock, 19.4 in Dundee, 21.7 in Edinburgh, 21.9 in Leith, 28.9 in Glasgow, [illegible] in Aberdeen, and 35.7 in Paisley. The deaths registered last week in these towns included 18 which were referred to whooping-cough, 13 to measles, 13 to diphtheria, 12 to scarlet fever, 9 to "fever," 9 to diarrhœal diseases, and not one to small-pox; in all, 74, or 12 per cent. of the total deaths, resulted from these diseases, equal to an annual rate of 3.1 per 1,000, which slightly exceeded that recorded during last week in the large English towns. No deaths from zymotic disease were registered in Perth; while they caused a rate of 3.4 in Glasgow, 3.6 in Paisley, and 4.2 in Edinburgh. Scarlet fever caused the largest proportional fatality in Edinburgh, whooping-cough and fever in Glasgow, and measles in Edinburgh. Of the 13 fatal cases of diphtheria recorded in the Scotch towns last week, 7 occurred in Glasgow. The rate of mortality from diseases of the respiratory organs, though below that recorded in the corresponding period of last year, showed a marked increase, and was equal to 6.0 per 1,000. Of the 614 deaths registered last week in these towns, no less than 107, or more than 17 per cent., were uncertified.

HEALTH OF FOREIGN CITIES.—It appears, from statistics published in the Registrar-General's return for the week ending the 29th ultimo, that the annual death-rate in the three principal Indian cities recently averaged 29.6 per 1000; it was equal to 23.4 in Bombay, 26.0 in Calcutta, and 43.2 in Madras. Small-pox caused 51 deaths in Madras, cholera 25 in Calcutta, while the death-rate from "fever" did not materially vary in the three cities. According to the most recently received weekly returns, the mean annual death-rate in twenty large European cities was 25.9 per 1,000, which was 5.3 above the mean rate in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 29.1 per 1,000 (almost identical with the rate in the previous week), and the 529 deaths included 16 fatal cases of diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate did not average more than 21.1, the highest rate being 22.1 in Stockholm. Diphtheria and croup caused 5 deaths in Stockholm; whooping-cough 5 in Copenhagen; and scarlet fever 3 in Christiania. The death-rate in Paris was equal to 24.7, 43 deaths resulting from diphtheria and croup, and 29 from typhoid fever. In Brussels, the rate was 23.1; small-pox caused 4 deaths, showing a further decline from recent weekly numbers. The usual return from Geneva does not appear to have come to hand. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 26.5; the rate in Amsterdam being equal to 29.2, no fewer than 30 of the 197 deaths in that city being referred to diphtheria and croup. Five of the 78 deaths in Rotterdam resulted from scarlet fever. The Registrar-General's table includes seven German and Austrian cities, in which the death-rate averaged 26.9, and ranged from 24.1 both in Hamburg and Vienna, to 29.2 in Munich, and 39.3 in Prague. No fewer than 42 of the 202 deaths in Prague resulted from small-pox, showing a further increase upon the fatal cases in previous weeks. Diphtheria showed excessive fatality in Berlin, Dresden, and Munich. In three large Italian cities, the mean death-rate was 27.2, the highest rate being 32.2 in Venice. Six deaths were referred to malarial fever in Rome; and the 128 deaths in Turin included 8 from measles, and 3 from small-pox. The 122 deaths in Lisbon, of which 4 resulted from scarlet fever and 4 from diphtheria, were equal to a rate of 30.2. The mean death-rate in four large American cities was equal to 21.7, the several rates ranging from 19.7 in Philadelphia to 23.3 in New York. Diphtheria showed more or less fatal prevalence in each of these American cities. Typhoid fever caused 9 deaths in Philadelphia.—From the weekly return of the 5th instant, it appears that the death-rate recently averaged 28.3 per 1000 in the three principal Indian cities; it was 24.2 in Bombay, 25.6 in Calcutta, and 36.6 in Madras. Small-pox caused 38 deaths in Madras, and cholera 19 in Calcutta, 7 in Madras, and 2 in Bombay; "fever" showed the largest proportional fatality in Madras. According to the most recent weekly returns, the average annual death-rate per 1000 persons, estimated to be living in twenty-two of the largest European cities, was 26.1, and 3.9 above the mean rate during last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 31.7, and somewhat higher than the rates in previous weeks; the 564 deaths included 23 from "fever" and 14 from scarlet fever. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged only 21.9, the highest rate being [illegible] in Stockholm; scarlet fever caused [illegible] deaths in Christiania, and [illegible] in Stockholm. In Paris, the death-rate was equal to [illegible], showing an excess of 3.0 upon the rate in London; the deaths included [illegible] from diphtheria, 34 from typhoid fever, and 26 from measles. The [illegible] deaths in Brussels, including 9 fatal cases of small-pox, were equal to a rate of 22.2. In Geneva, the death-rate was [illegible] fatality being noted. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 29.5; the rates ranging from 28.9 in the Hague to 30.1 in Amsterdam. The 203 deaths in the latter city included 7 fatal cases of diphtheria, in addition to 25 deaths attributed to croup; scarlet fever caused 5 deaths in Rotterdam and 3 in the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 25.9, and ranged from 22.7 and 24.3 in Berlin and Vienna, to 34.5 in Prague and 36.2 in Trieste. Small-pox caused 36 deaths in Prague and 4 in Buda-Pesth, and diphtheria showed fatal prevalence in Berlin, Dresden, and Hamburg. The death-rate was equal to 25.6 in Rome and 27.9 in Venice; 7 deaths were referred to malarial fever in Rome. The 131 deaths in Lisbon, including 4 fatal cases of diphtheria, were equal to a rate of 33.6. In four of the largest American cities, the rate averaged 20.9, and ranged from 18.3 in Baltimore and Brooklyn to 23.0 in New York. Typhoid fever caused 7 deaths in Philadelphia, and diphtheria was fatally prevalent in the same city; the deaths from diphtheria were also proportionally numerous both in New York and Baltimore.

GREEN-CHRISTMAS MORTALITY.

The inexorable logic of the Registrar-General's figures again supplies a conclusive refutation of the old-fashioned proverb, "a green Christmas makes a fat churchyard." The mean temperature of the last two weeks of 1883, at Greenwich, was equal to 40.5°, and the lowest recorded night-temperature, during the fortnight, was 31.5°; there was, therefore, only half a degree of frost recorded once in the fourteen days, which occurred on December 21st. Seldom have we had more thoroughly unseasonable Christmas weather, and yet this absence of frost has been accompanied by mortality-statistics which constitute a most favourable and exceptional health-bulletin for the season. The annual rate of mortality during the last two weeks of December, was so low as 21.3 per 1,000 in the 28 large English towns dealt with in the Registrar-General's weekly return, having an estimated aggregate population of more than eight and a half millions of persons. Now the annual rate of mortality in the largest English towns during the last two weeks of the year averaged 25.9 per 1,000 in the seven years 1876-82. The rate of mortality during the fortnight just ended was, therefore, 4.6 per 1,000 below the average of seven Christmas seasons, an exceptional proportion of which were of that "green" character said to fatten churchyards. If comparison be made with a season when frost and snow combined to make old-fashioned and seasonable Christmas weather, the favourable effect of mild winter weather upon the public health is more strikingly exemplified. Christmas was celebrated in frosty weather in 1878 and 1879, and the death-rate in the last two weeks of those years was 31.3 and 28.3 per 1,000 respectively. Thus the rate of mortality, during the mild Christmas just past, was no less than 8.5 per 1,000 lower than at the two frosty Christmas seasons of 1878 and 1879. A paragraph in the Registrar-General's last weekly return throws considerable light upon the way in which mild winter weather favourably affects the public health. We are told that in London, during the week ending last Saturday, the deaths referred to "diseases of the respiratory organs, which had been 471 and 391 in the two preceding weeks, further declined to 355 last week, and were no fewer than 239 (or 40 per cent.) below the corrected average weekly number in the corresponding weeks of the two years 1873-82.

THE CENSUS OF 1881.

The general report on the census of 1881 has been issued by the Registrar-General, Mr. W. Clode, and Dr. W. Ogle. The report opens with an interesting epitome of the history of census-taking in England, explaining that the first proposal to have a systematic census of the population was made in the House of Commons in 1753 by Mr. T. Potter, member for St. Germans, who introduced a Bill on the subject. That Bill was passed by the House of Commons by large majorities, but it was opposed in the House of Lords, and rejected there on the second reading. No further action appears to have been taken to obtain a census until 1800, when Mr. Abbot, the member for Helston, introduced the Population Bill, which passed through Parliament without opposition. The first census was therefore taken in 1801, and a census has been taken in the first year of each successive decennium since that time, although the present efficient and comprehensive system of carrying out the important work was not introduced until 1841. After giving a large number of figures and many details showing the aggregate population of England and Wales in 1881 (25,974,439), the rate of increase in the last decade—namely, 14.36 per cent., which was higher than in any decennium since 1831-41, and the causes of this high rate of increase, the report goes on to state that in the course of the last half century the population of England and Wales has increased 86.9 per cent., and that, were a similar rate of increase maintained, the population just mentioned would be doubled by the year 1936. "What will be the population in 1891?" is asked by the report. "If we assume," it proceeds, "that the rate of growth in the decade preceding the census of 1891 will be the same as it was in the decade preceding the census of 1881, the population in 1891 will be 29,705,155. But the rate of increase has been rising in each decade since 1861, though in diminishing proportion. If we suppose, therefore, that the series will be continued regularly in the decade ending in 1891, the population at the date of the next census will be 29,988,993." The "natural increment" growth in the two years that have already elapsed since the census of 1881 has been, according to the reports of the Registrar-General, 2.942, and if this rate be maintained the population at the time of the next census, as determined by "natural increment" alone, will be 30,026,290; but taking the mean of results, after accounting for loss by emigration, the report gives a probable population of 29,843,898 at that time. The number of municipal boroughs in England and Wales in 1881 was 243, with an aggregate population of 8,412,121, showing that 32.4 per cent. of the total inhabitants were in the enjoyment of the advantages of municipal government. The population of the 20 large English towns (including London) given in the weekly return of the Registrar-General, was 7,580,319, while the population of London alone was 3,816,483, which exceeded that of all the 19 other towns put together. The rate of increase in these 19 great towns since 1871 had been 16.5 per cent., and in London 17.3 per cent., no fewer than 562,223 persons having been added to the metropolis in the last ten years. In fact, London has almost doubled itself in 41 years, whereas the population of the rest of England and Wales has taken 57 years to multiply in an equal degree. Under the head of "occupation" the report states that the total number of males returned as engaged in some definite occupation was 7,783,646, or 71.5 per cent. of all the enumerated males aged five years and upwards, and of females 3,403,918, or only 29.4 per cent., between the ages indicated. The Civil Service employed 50,245 persons, and the police 32,508. The number of soldiers in England and Wales at the date of the census (including Yeomanry and Militia) was 87,168, and of men in the Royal Navy (excluding 8,910 pensioners) 20,732. The number in the clerical profession was about 35,823, including nearly 24,000 clergy of the Established Church; in the legal profession, 17,386; the medical profession, 22,936; engaged in educational work, 72 per cent. of whom were women, 171,831; actors and actresses, 4,565; while the number of photographers had increased from 4,715 in 1871 to 6,661 in 1881.

RELIEF TO THE SICK POOR.

From the report in the *Birmingham Daily Mail*, it would seem that there is some room for improvement in the regulations for providing relief to the sick poor. It appears that Mr. V. A. Jones, who is medical officer for one of the districts of the Birmingham Union, prescribed certain medicines for a patient, but that these could not be obtained until after a long delay, the parish offices being, as we gather, closed from 1 to 7.30 P.M. Mr. Prosser, being called in, found the patient in a dying condition, and, after death had occurred, communicated with the coroner, who held an inquest. At the inquest, Mr. Jones is represented to have given it in evidence as his opinion that the patient's chance of life would have been notably increased had he received, in time, the medicines prescribed. It is quite clear that arrangements which can allow such an event to occur must be faulty, and we have no doubt that they will be altered now that the attention of the parish authorities has been called to them. It is hardly to be wondered at that Mr. Jones thought himself somewhat aggrieved by the course taken by Mr Prosser, who communicated with the coroner without first informing Mr. Jones of the circumstances, or of his intention; and the case excited so much angry feeling, that it was only settled after an application to the bench of magistrates.

WATERFORD UNION.

At a meeting of the Guardians of this Union, held recently, Dr. Burkitt, the senior visiting medical officer, upon his retirement, after a very lengthened period of service, was generously voted a pension of £66 13s. 4d., being two-thirds of his salary (the maximum retiring allowance); and a complimentary resolution, in acknowledgment of his long and faithful services, was passed. It was proposed to appoint in his stead a resident medical officer, at a salary of £150 a-year, with residence and rations; it was further proposed that the salary should be £250, with residence, etc.; but both these propositions were negatived. Notice of motion was then given to rescind previous resolution to appoint a resident medical officer, and that, instead, a visiting one be elected as successor to Dr. Burkitt. During the discussion, it was suggested that a resident medical officer's salary should be but £80; and Captain Gyles is reported to have quoted from the BRITISH MEDICAL JOURNAL, by way of showing that a competent medical officer could be secured at that salary, with residence! There are from 500 to 600 patients, and, it appears, no dispenser. The question was also mooted as to whether the resident doctor should be allowed to practise outside, and, if so, to what extent; but surely his whole time would be occupied in so large an institution, and, if so, £250 salary, with residence and rations, would be moderate remuneration for a competent man. The guardians will probably appoint a successor to the late visiting medical officer at the same salary of £100, and it is to be hoped they will also appoint a resident apothecary.

POWERS OF MEDICAL OFFICERS OF HEALTH AS TO BAKEHOUSES.

SIR,—Will you oblige me by giving information on the following points? *(a)* What powers has a medical officer of health with regard to bakehouses (extra-metropolitan)? *(b)* What statute confers the powers?—Yours truly,

DUBITANS.

*** Section 17 (1) of the Factory and Workshops Act of 1883 gives to the medical officer of health of a local authority, as regards bakehouses, all "such powers of entry, inspection, taking legal proceedings, and otherwise, as a factory-inspector under the Factory and Workshops Act, 1878." Under this section, a medical officer of health may enter, inspect, or examine a retail bakehouse at any reasonable hour of the day or by night, and may take legal proceedings in cases where the law has been broken.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 3rd, 1883.

Bowling, George Augustus Lovelace, Sewardstone Road, E.
Hatchett, Frederick William, Upper Cheyne Row, Chelsea, S.W.
Murray, William, Wray Crescent, Tollington Park, N.
Vogan, James Norman, St. Bartholomew's Hospital, E.C.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 7th instant, and, when eligible, will be admitted to the pass-examination, viz.:

Messrs. W. G. Anglin and G. H. Denike, students of Kingston, Canada; W. F. Miller, of the Melbourne School; R. Stopford, of the Liverpool School; W. H. Yeld, of the Manchester School; W. Biggam, of the Newcastle School; H. G. Hughes, of the Dublin School; E. M. Hewish, of the Toronto School; W. E. Facey, W. H. Corsens, G. W. Roll, and A. S. Percival, of the Cambridge School; and J. Whitaker, of the Edinburgh School.

Nine candidates were referred for three months, and one for six months.

The following gentlemen passed on the 8th instant, viz.:

Messrs. M. Eleyatamby, of the Ceylon School; E. L. Fox, Cambridge; R. B. Robson, F. Morton, and H. Renny, Newcastle; A. L. Williams, Liverpool; C. Mortlock, St. George's Hospital; W. E. Morgan, St. Bartholomew's Hospital; J. Good, Charing Cross Hospital; J. B. Webb and H. A. Spencer, of the Bristol School; J. W. Barrett, Melbourne; W. S. Cox and A. O. Balshaw, Manchester; F. W. Gordon, Dublin; and A. R. Macmillan, Edinburgh.

Eight candidates were referred to their studies for three months.

The following gentlemen passed on the 9th instant, viz.:

Messrs. J. P. Baly, Birmingham School of Medicine; H. Anderson, Belfast School of Medicine; A. W. Riddell and F. L. Davis, Bristol School of Medicine; F. C. Servaes and E. N. Nason, University of Cambridge; C. Nicholson and F. Jubb, Leeds School of Medicine; H. Massey, Dublin School of Medicine; F. S. P. Lely, C. E. Dodd, and W. B. Caley, Liverpool School of Medicine; S. Hawarden, Manchester School of Medicine; H. C. Coe, Harvard University; A. King, Charing Cross Hospital; C. J. Devis, Middlesex Hospital; W. B. Colquhoun, Guy's Hospital.

Six candidates were referred for three months, and one for six months.

The first primary examination for the present year for the diploma of membership of the Royal College of Surgeons was commenced on the 4th instant, when the large number of 211 candidates presented themselves, against 190 at the corresponding period last year.

MEDICAL VACANCIES.

The following vacancies are announced:

ALNWICK AND DISTRICT PROVIDENT DISPENSARY.—Qualified Practitioner. Applications to W. Wright, 1, West Parade, Alnwick, by January 15th.

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon. Salary, £150 per annum. Applications by January 15th.

BIRSAY, HARRAY, AND SANDWICK MEDICAL AID ASSOCIATION.—Medical Officer. Salary, £70 per annum. Applications to Mr. Moar, Quoyloo by Stromness.

CITY OF DUBLIN HOSPITAL.—House-Surgeon. Salary, £100 per annum. Applications by January 12th.

COTON HILL LUNATIC HOSPITAL, Stafford.—Assistant Medical Officer. Salary, £100 per annum. Applications by January 14th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Assistant Dental Surgeon. Applications by January 14th.

DERBYSHIRE GENERAL INFIRMARY.—House-Surgeon. Salary, £100 per annum. Applications by January 26th.

GOVERNMENT OF MADRAS FOR EMPLOYMENT IN THE NILGIRI CINCHONA PLANTATIONS.—Quinologist. Salary, Rs. 550 rising to Rs. [illegible] per mensem. Applications to the Revenue Secretary, India Office, Westminster.

HAYDOCK LODGE ASYLUM, Ashton, near Newton-le-Willows, Lancashire.—Medical Superintendent. Salary, £200 per annum. Applications to E. H. Beaman, Medical Proprietor.

HYDRO-THERAPEUTIC ESTABLISHMENT.—Resident Physician. Salary, £300 per annum. Applications to the Manager, The Hall, Bushey, near Watford.

KIDDERMINSTER INFIRMARY.—House-Surgeon. Salary, £120 per annum. Applications by January 17th.

METROPOLITAN ASYLUMS BOARD.—Assistant Medical Officer. Salary, £120 per annum. Applications by January 14th.

RADCLIFFE INFIRMARY, Oxford.—Honorary Physician. Applications by February 6th.

ST. PANCRAS, MIDDLESEX.—Dispenser for the Infirmary at Dartmouth Park Hill. Salary, £100 per annum. Applications by January 14th.

SUSSEX COUNTY HOSPITAL.—Physician. Applications by February 6th.

SUSSEX COUNTY HOSPITAL.—Assistant-Physician. Applications by February 6th.

TAUNTON UNION.—Medical Officer. Salary, £60 per annum. Applications by the 14th instant.

UNIVERSITY OF EDINBURGH.—Additional Examiner in Medicine in the Department of Medical Jurisprudence. Applications to J. Christison, by January 14th.

WEST HERTS INFIRMARY.—House Surgeon and Dispenser. Salary, £100 per annum. Applications by February 6th.

MEDICAL APPOINTMENTS.

BUTLER, Gilbert E., M.R.C.S.E., appointed Senior House-Physician and Chloroformist to the Westminster Hospital.

EVE, F. S., F.R.C.S., appointed Surgical Registrar to the London Hospital, *vice* E. H. Fenwick, F.R.C.S., resigned.

RYGATE, D. J., M.R.C.S., appointed Medical Officer to the Cambridge Union, *vice* E. Knowles, M.R.C.S., resigned.

HUGHES, T. L., M.P.S., appointed Dispenser to the Fulham Union.

KEMPE, Arthur, M.R.C.P., appointed Medical Officer of Health to Budleigh Salterton Local Board.

KENDALL, Theo. M., B.A., L.R.C.S.E., L.R.C.P.E., L.M., appointed Resident Medical Officer, Sydney Hospital, *vice* P. E. Muskett, resigned.

KING, A., M.B., appointed District Medical Officer and Public Vaccinator for the Aspley Guise District to the Woburn Union, *vice* G. A. D. Mahon, M.R.C.S., resigned.

LUCAS, A., M.R.C.S., appointed Medical Officer to the Woburn Union Workhouse, *vice* G. A. D. Mahon, M.R.C.S., resigned.

MERCES, J., L.R.C.P., appointed Resident Medical Officer to the Bath General Hospital, *vice* A. R. Busby, M.R.C.S., resigned.

MONEY, A., M.D., appointed Physician to the City of London Hospital for Diseases of the Chest, Victoria Park, *vice* E. L. Birkett, M.B., resigned.

MUMBY, Langton P., M.R.C.S.E., L.S.A., appointed Junior House-Physician to the Westminster Hospital.

PHILPOT, H. J., L.R.C.P., appointed Assistant Physician to the Victoria Hospital for Children, *vice* W. C. Grigg, M.D., resigned.

POLLOCK, W. R., M.R.C.S., appointed Resident House-Surgeon to the Addenbrooke's Hospital, Cambridge, *vice* A. M. Sheild, F.R.C.S., resigned.

PRICE, J. D., M.R.C.S., appointed Medical Officer to the [illegible] of the Dudley Union, *vice* J. Bellingham, M.R.C.S., resigned.

PRITCHARD, R., M.D., appointed House-Surgeon to the Maternity Hospital, Glasgow.

PARKS, S. T., M.B., appointed House-Surgeon to the Cheltenham General Hospital.

PULLING, Herbert J., M.R.C.S.E., appointed House-Surgeon to the Westminster Hospital.

SHAW, L. E., M.B., appointed House-Surgeon to the Victoria Hospital for Children, *vice* J. A. Shaw, M.R.C.S., resigned.

SWAIN, James, M.R.C.S.E., appointed Resident Obstetric Assistant to the Westminster Hospital.

SYKES, A. H., M.R.C.S., appointed Assistant House-Surgeon and Dispenser to the Kent and Canterbury Hospital, *vice* F. Sturges, M.R.C.S., resigned.

THOMAS, Alfred, L.R.C.P., L.R.C.S.Ed., appointed Assistant Medical Officer to Walton Workhouse, Liverpool, *vice* Rowland Owen, L.R.C.S., L.R.C.P.Ed., resigned.

TURNELL, A. P., M.R.C.S., appointed Medical Officer to the Cambridge Union.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopaedic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY..........St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopaedic, 10 A.M.

THURSDAY........St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY.............King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY........St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W. 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu., F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu., F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. Pick: Amputation at the Knee-joint by means of Lateral Flaps. Professor Alexander Ogston (of Aberdeen): New Operation for Flat Foot. Dr. Day will show a case (in the Library) of Pulmonary Stenosis in a Child.—Odontological Society of Great Britain, 8 P.M.

TUESDAY.—Pathological Society, 8.30 P.M. Dr. Norman Moore: Two Cases of Mediastinal Growth. Mr. Lane: Mollities Ossium and Rheumatic Arthritis. Mr. Cripps: Sections of Galls. Mr. Bowlby: Sporadic Cretinism. Dr. Heneage Gibbes: Entozoon in the Lungs of Animals. Dr. White: Fibroid Heart. Mr. Butlin for Mr. Benton: Carcinoma of the Œsophagus. Mr. Walsham: Unusual sized Calculus in a Child (card).

THURSDAY.—Harveian Society of London, 8.30 P.M. Annual meeting; Election of officers; President's address; *Conversazione*.—Abernethian Society, St. Bartholomew's Hospital, 8 P.M. Dr. Howe: Locomotor Ataxia.—Parkes Museum, Margaret Street, 8 P.M. Lecture, by Mr. Pridgin Teale of Leeds, on Economy of Coal in Private Houses. The chair will be taken by Professor G. M. Humphry, M.D., F.R.S.

FRIDAY.—Medical Society of Charing Cross Hospital, 8 P.M. Mr. C. U. Heaton will give a lecture on Some Points in Urine-Analysis. Mr. E. Bellamy will take the chair.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE HIND FUND.

THE following additional subscriptions have been received and paid to the account of the "Hind Fund" at Messrs. Coutts' Bank:

	£	s.	d.		£	s.	d.
Cross, H. R. O., Esq., A.M.D.	1	1	0	Hoffmeister, Dr. W. C.	1	1	0
Cross, Dr. Robert	1	1	0	[illegible], Dr. Wm. J. H.	1	1	0
From India (per T. d'O. Partridge, Esq.)	5	5	10	Metcalfe, G. C. G., Esq. ..	1	1	0
				Swanwick, Eustace M., Esq.	2	2	0

Subscriptions may be paid to Dr. Richardson, F.R.S. (chairman), 25, Manchester Square; John Tweedy, Esq., F.R.C.S., 24, Harley Street (honorary treasurer); A. J. Pepper, Esq., F.R.C.S., 122, Gower Street; and T. Wakley, jun., Esq., L.R.C.P., 96, Redcliffe Gardens (honorary secretaries), or to Messrs. Coutts and Co., Strand.

COTTAGE HOSPITALS.

SIR,—Will any member who has had any experience in the forming of cottage-hospitals kindly communicate with me, as I am endeavouring to get some information on the subject for a gentleman who is desirous to build and start one. Yours truly, CHARLES W. THORP.

Dobroyd, Todmorden, January 9th, 1884.

MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

PRELIMINARY EXPENSES FUND.

	s.	d.
Mr. Wm. H. Hardwicke	10	0

THE CASE OF MESSRS. BOWER AND KEATES.

SIR,—The vexatious prosecutions of Messrs. Bower and Keates, together with the statements made at the meeting at Sir William Jenner's, should rouse the whole profession to a sense of the dangers which threaten every individual member of it, and should impel us to adopt such "collective" action as will make us as a body responsible for the defence, not only of similar cases, but of all cases in which important professional interests are involved.

Any one who has read the public and professional journals during the last few years, will have no difficulty in remembering cases in which important legal points have cropped up, especially in the inferior courts, and have been decided against us, often with no argument at all, in consequence of the unwillingness or inability of individuals to incur expenses in the defence or establishment of principles which should be jealously guarded by the profession as a whole. In this way, our legal rights are infringed and trampled on with impunity, and we are governed by the case law of Bumbledom and its allies. Certainly, no profession at the present day is in such a disgracefully defenceless state as our own. Even the Church, with its high and noble aims, does not hesitate to employ all the machinery of the law in aid of its legal interests; and why should we not follow its example?

Reverting to the prosecutions of Messrs. Bower and Keates, the course adopted by the Colleges of petitioning the Home Secretary is no doubt a good one; but it should be remembered that the great majority of the cases I have referred to do not come under the notice of the Public Prosecutor at all, and it is in these cases that our "collective" action is imperatively demanded. For such action, the British Medical Association, with its ramifications in all parts of the kingdom, is peculiarly fitted; and I would venture to suggest that the Association should reserve some small portion of its surplus, or raise a special fund for the defence, when necessary, in the courts of law, of the honour and interests of the profession, and for the preservation of the few rights that still remain to us.—Yours obediently, APPELLANT.

London, December 18th, 1883.

SIR,—At a meeting of the West London Medico-Chirurgical Society, held last week, it was announced that no further subscriptions were wanted for the Bower and Keates Fund. This is somewhat to be wondered at, because it was proposed that any surplus should be held to form a fund to meet similar cases; nor is it an act of justice towards many who subscribed liberally, not only out of sympathy, but with a view to protecting themselves should they at any future time be similarly prosecuted.—Yours truly, A MEMBER.

*** We believe that the great difficulties and responsibilities attaching to the administration of any permanent fund, and the serious liability to abuse, have influenced the leaders of this subscription against forming any fund of the kind.

MORNING DIARRHŒA.

IN reply to the third query of M.K.Q.C.P.I., in the JOURNAL of January 5th, Mr. F. R. Crosslé, of Newry, suggests the use of the "persesquinitrate of iron," as recommended by Dr. Graves (*A System of Clinical Medicine, Dublin*, 1843, p. 672). He has found this remedy of great value in cases similar to that described, and he has usually combined it with infusion of columba, in doses of thirty minims, twice or thrice daily. In order to ensure its efficacy, care should be taken, as pointed out by Graves, that the remedy be used when recently prepared, as it will become inactive if kept for any length of time.

Iodide of Potassium as an Antigalactagogue.

SIR,—I can thoroughly corroborate Mr. Verrall's statement as to the value of the above drug to check and stop the secretion of milk when the gland is left unused.

In cases in which it is desired to stop the secretion to wean a child, *i.e.*, after the breasts have been for some time in use, I have had but little experience, and I have been desiring an opportunity of making the experiment; but for some years I have relied on it entirely, to the exclusion of all other remedies, in cases of still-birth, and I have never known it fail, and have also found that its action is very rapid, nor does it often cause any unpleasant symptoms.

My plan is to order twenty grains in an ounce of water, direct half to be taken, and, if there be not marked relief in twelve hours, the other half is to be taken. As a rule, one dose is sufficient. The previously turgid breasts are found flaccid and nearly free from pain. I advise that the breasts be supported by a handkerchief round the neck passed underneath them, and that they on no account be rubbed—a frequent practice among nurses—nor drawn, unless the pain be very great, and then only in just sufficient quantity to afford some relief.

This drug beats all others in such cases, in my opinion, in its little discomfort, and in its rapidity and certainty of action. H. B. BLACKBURN.

Roche's Embrocation for Whooping-Cough.

SIR,—With reference to Dr. Davies' query, in your last week's issue, I write to say that I found a very good substitute for the above embrocation in the following formula, which I almost invariably prescribe, and most of my patients speak in high terms of its assuaging the painful paroxysms of the cough: ℞ Olei Succini, ʒ iv., Olei Camphoræ, ad. ℥ iss. M. ft. embrocatio. To be well rubbed on the back and front of the chest three or four times a day.

With regard to internal remedies, most of which seem almost futile, I should like to know if any of my professional brethren have ever heard of, or tried, the following "old woman's" remedy, viz., a grain of alum with a grain of powdered sugar, to be taken in the dry state every four hours; an occasional dose of magnesia, or sweet essence of senna, to be given if the child's bowels get constipated.—Yours faithfully

Buckingham, January 7th, 1884. W. L'HEUREUX BLENKARNE, F.R.C.S.

Pasteur's and Koch's Researches.

SIR—I observe that one of your correspondents, in the JOURNAL of January 5th, asks for published information as to Pasteur and Koch's researches. Will you kindly inform him that the New Sydenham Society has published Koch's work on micro-organisms in relation to traumatic infective diseases, and that he can obtain it by subscribing for 1880. It does not, of course, include the more recent researches as to tubercle and cholera, but I think your correspondent will find in it much of what he wants. We have under consideration another work on the same subject.—Yours truly,

J. HUTCHINSON, Hon. Secretary, New Sydenham Society.
15, Cavendish Square, W., January 8th, 1884.

Inhalation (especially Antiseptic) in Pulmonary Affections.

SIR,—Lest Mr. Brindley James (see JOURNAL, December 8th, page 1166) should consider me wanting in courtesy if I did not take notice of his letter, I trouble you with the following brief communication.

Mr. James states that he has employed inhalation with marked success. This I am glad to learn; but several letters which I have received give expression to the disappointment which has been experienced in trials of the same method of treatment. This disappointment may not be due to any want of efficacy in the method itself, but rather to the imperfect means which have hitherto been at our command for its practical application.

Mr. James does not describe the nature of the inhaler employed by him, but I gather that it was one of the ordinary construction, and with the usual small receiver. Now, I have demonstrated that, except for exceedingly volatile substances—such as ether, spirits of wine, fir-wood oil, turpentine, eucalyptol, etc.—these inhalers are very inefficient, about four-fifths of the substances usually employed—such as carbolic acid, creasote, and thymol—being recoverable from the inhaler at the end of the inhalation.

Mr. James gives the case of a lady who was no doubt suffering from pulmonary mischief, and who, he states, was greatly benefited by the inhalation, night and morning, of twenty drops of a mixture containing one fourth part of carbolic acid, an equal quantity of the ethereal tincture of iodine, and an eighth part of oil of thyme made up to an ounce with spirits of wine. Mr. James appeals to me to "explain away these so favourable results of this system of treatment, and demonstrate some other cause for these fortunate results." I would say, in reply, that, knowing what I do, I am very sceptical as to the beneficial results in the case recorded being due to the inhalation, and I would rather attribute them to the "nourishing diet, tonics, and cod-liver oil," which Mr. James expressly states that he prescribed. Of the efficacy of the latter method of treatment in cases such as the one narrated by Mr. James, no one entertains any doubt.

Mr. James concludes his letter with "the suggestion that the efficacy of inhalation should not be thus summarily disposed of without further and deeper research." In this I quite agree; but I do not know any one who would advocate that the subject should be thus summarily disposed of. I, for one, think it so important, that I continue to devote the time I am able to spare from my practice in San Remo to its investigation, with a view, more particularly, to the devising of more efficient forms of apparatus, and to placing the whole subject of inhalation on a firmer and more scientific basis. No doubt, there are many disorders and diseases of the organs of respiration which admit of being greatly benefited, and some even cured, by the efficient application of right methods of inhalation.—I remain, yours very faithfully,

San Remo, December, 1883. ARTHUR HILL HASSALL, M.D. Lond.

H. LAMB.—Dr. Mortimer Graville's percuteur for neuralgia is to be obtained of Weiss, 62, Strand, W.C.

Antiseptics in Whooping-Cough.

SIR,—It may be of interest to your readers to learn or to recall to mind that, in some parts of Lancashire, it was customary for mothers to send their children who suffered from whooping-cough to inhale the fumes of tar. This the man in charge allowed them to do when he "stirred it up." Three or four inhalations are said to have effected a remedy. This I learnt after having tried an antiseptic inhalation. Is this a relic of an old treatment, or a relic of the coal tar mania which at one time existed?—I am, etc.,

Rochdale. JOHN REID, M.B.

On Excessive Sneezing, connected with Nasal Polypi.

SIR,—Dr. C. M. Maxwell's letter in the BRITISH MEDICAL JOURNAL of December 8th, p. 1166, was brought under my notice by a friend and patient, who, on reading the letter, at once noticed its similarity to his own case. This patient, aged 52, much engaged in public speaking, had for ten years been troubled every morning and after dinner by attacks of sneezing, lasting from half an hour to three or four hours. The sneezing was always accompanied—sometimes preceded, but always followed—by a profuse watery discharge from the nares, and a great deal of frothy discharge from the mouth. Gradually the sense of smell was lost, but taste was not affected. For six or seven years, great oppression of breathing at night was experienced, and respiration had to be carried on by the mouth. The only source of temporary relief was vapour-inhalation by the nostrils.

On November 13th last, the existence of polypi having been ascertained, he was sent to me for galvano-cautery operative treatment. He was very exsanguined and feeble, his voice was thick, tongue sodden, and pharynx full of frothy mucus, which was easily seen to be pouring down from the posterior nares. Attached to the posterior pillars of the fauces was a thickened fleshy mass of three lines in width. At the anterior extremity of each inferior turbinated bone hung a pendulous mass of hypertrophied mucous membrane, the size and shape of a large bean; behind this, on the right side, masses of mucous polypi were seen, connected with the middle turbinated bone. On the left side, the septum nasi so impinged on the turbinated bones that vision was quite precluded, and the presence of polypi was only inferred from the impossibility of respiration through this nostril.

On November 15th, with the galvano-cautery wire snare, Brunsch's instruments—Mickel's nasal speculum, powerful reflected light, and a large three-celled zinc and carbon with bichromate of potash solution battery—I removed the pendulous masses of mucous membrane. I then found that the mucous membrane of every part of each nostril was immensely hypertrophied. For this state, a warm douche, containing a little bicarbonate of soda, was used night and morning for ten minutes. On the 19th, I removed five polypi from the right middle turbinated bone, varying in size from a big bean to a pea, without any hæmorrhage and with trivial pain. On the 21st, the douching had so told on the mucous membrane that the edge of a polypus was plainly visible in the left nostril, which I snared and removed without a drop of blood. I could now see into the naso-pharynx, through the right inferior meatus, and detected masses of small sessile polypi and polypoidal mucous membrane, which I removed in many sittings; in this proceeding, I experienced the value of the oxy-hydrogen lime-light, which perfectly illuminated every crevice. I have up to now removed from the right nostril twenty-two separate polypi and ten masses of polypoidal mucous membrane (one in the inferior turbinated bone), and from the left nostril three polypi and nine masses of mucous membrane. My patient now breathes freely by the nares day and night, and his attacks of sneezing are things of the past. Posterior rhinoscopy reveals some polypoidal mucous elevations at the posterior nares, which I intend to remove by the galvano-cautery snare when the anterior parts are a little healed. Without a doubt, the old-fashioned method of tearing away nasal polypi ought to be relegated to obscurity.

The case I have cited lost not a wineglassful of blood in all, though between forty and fifty removals were easily effected with great precision. This is a matter of importance in an exsanguine patient.

In Dr. Maxwell's case, a careful examination with suitable reflected light would, I venture to think, now reveal more than an "irritable condition" of the mucous membrane. Some hypertrophic condition, I expect, exists, which can best be remedied by operative procedures similar to what I have narrated. The douche would, at any rate, give relief if there be hypertrophy only, and no polypi present.—I am, etc., W. T. P. WOLSTON, M.D.

Edinburgh.

Royal College of Surgeons of England.

THE following were the questions in anatomy and physiology submitted to the candidates at the primary examination for the membership on January 4th. A. *Anatomy* (four questions to be answered).—1. Describe the ligaments which connect the atlas and axis together, and also those which connect these bones with the occiput. 2. Describe the dissection required to expose the pronator quadratus muscle. 3. Describe the first rib. 4. Describe the position and relations of the liver, mentioning especially the extent to which it is covered by peritoneum, and the manner of its connection with the walls of the abdomen and surrounding viscera. 5. Mention, in their relative position, the various structures which are exposed by removing the gastrocnemius and soleus muscles. Give the attachments of any muscles you may mention. 6. Describe the ophthalmic artery and its branches. B. *Physiology* (four questions to be answered).—1. Give a classification of food-stuffs. State the changes which the proteids undergo during gastric and duodenal digestion. 2. What is meant by arterial blood-pressure? How is it modified locally and generally? 3. What are the sources of animal heat? Explain the mode in which a constant temperature is maintained in warm-blooded animals. 4. What is the structure and distribution of non-striated muscle? How does it differ in its mode of action from striated muscle? 5. Describe the microscopic appearances of a transverse section of the spinal cord. What are the functions of the parts you name? 6. Describe the normal rhythm of the respiratory movements. Explain the nervous mechanism by which it is regulated.

Gulping Food.

SIR,—The subject was a kitten, aged about 3 months. It was [illegible] with an older kitten for some weeks, and, in consequence, ate very quickly. After two or three days of abstinence from food and of *malaise*, it died on August 23rd, 1883. The lungs were found to be œdematous, there was fluid blood in the right ventricle, and general venous congestion. The œsophagus, for over three inches of its length, was dilated to about twice its natural size; its walls were thinned, while the lesser curvature of the stomach and that part of the œsophagus which adjoined the dilated part were [illegible]. The stomach was empty; the dilated œsophagus contained a mixture of [illegible] bile, and the ileum was acutely inflamed for over one foot of its length. Peyer's glands and the peritoneum were healthy. The [illegible] was [illegible] food, and temporarily dilated. The points of interest are the [illegible] and the regurgitated bile, as if the bile went [illegible].—I am, etc., JOHN REID, M.B.

Rochdale.

*** The dilatation of the œsophagus might have been congenital; the other symptoms were due to irritation of the alimentary tract by unwholesome diet.

COFFEE IN DYSPEPSIA AND TORPID LIVER.

SIR,—In the JOURNAL of January 5th, a "Bilious Physician" asks for some information as to the influence of coffee in flatulent dyspepsia and torpid liver.

Having suffered from torpid, and also from congested liver, at intervals during the last eight years, and seen much of these affections in others, my experience leads me to the conclusion that coffee is generally as beneficial in one as it is injurious in the other. To this rule, however, there are many exceptions. For many years past, unless when congestion was present, I have found coffee infinitely more useful than any other beverage, in relieving depression of spirits, constipation, and flatulence. In such cases tea is invariably injurious, owing to the nausea, muscular relaxation and palpitation which it causes. This drug (for coffee and tea should be looked upon as medicinal agents) is followed by symptoms somewhat analogous to those set up in many people by the use of tobacco. Nor, indeed, is coffee to be taken indiscriminately, too concentrated, or in excess, for then palpitation, frequency and irregularity of pulse, singing in the ears, sleeplessness, confusion of the senses, and even delirium will result. In one case that came under my notice, the use of coffee was followed by neuralgic pains in the liver, which were both distressing and prolonged, and it has been known to cause toothache and migraine.

There can, I think, be no doubt that amongst the effects of coffee are increased activity of the organs of digestion and secretion. As a vasculo-nervine stimulant, it increases the appetite which its rival, tea, so often destroys. It also excites the functions of the kidney, liver, and intestines. In active hepatic congestion and perihepatitis, so common in the tropics, and even amongst those who return therefrom, owing to this vascular excitement which it causes, coffee should be given with a sparing hand, or not at all. Here, in my opinion, cocoa is the beverage *par excellence*, at once nourishing, calmative, and refreshing.—Your obedient servant,

27, Welbeck Street, W., January 4th, 1884. D. H. CULLIMORE, M.D., etc.

A DEFENCE OF DOCKING HORSES.

SIR,—I have for years been a member of the Society for the Prevention of Cruelty to Animals of this district, and have always been greatly attached to animals, especially horses, never being without one or two in my stable; nevertheless, I fail to see that your correspondent grasps fairly the subject of "docking," on which he writes, as all know that Providence has mercifully given a horse a long tail to prevent insects from biting him; he has also power over his skin quite sufficient to disturb his small enemies. His long tail is all very well when he is not in work, but it is extremely dangerous when he is. When once the dock is over the reins, no manual power will prevent a fearful accident; the animal becomes infuriated and bolts, leaving the rest to be imagined better than described.

I had a long docked horse once, and it will be the last, nearly having been killed in the way mentioned. I consider docking as essential as castration. Your correspondent may say: Raise your splash-rail; but if you do, you will have no control over your horse unless you drive from a coach-box.

Another argument in favour of docking is cleanliness. I deny that the operation can be performed for the sake of beauty, for nature is beauty; but, supposing it is, any horse would gladly lose his tail to be admitted into good society.

Children are vaccinated to prevent them from getting and spreading a certain disease, so in docking the small amount of necessary suffering prevents them from injuring themselves and breaking their drivers' necks.—I am, etc., WALTER BUCHANAN.

ERRATUM.—In the JOURNAL of January 5th, page 31, column i, line 11 from bottom, *for* "Mr. Smith, of Bromsgrove," *read* "Mr. Smith-Batten, of Bromsgrove."

MALFORMATIONS.

SIR,—In 1861, when in practice at Clapton, I delivered a woman of a fœtus precisely similar to the one reported in the JOURNAL of December 8th by Mr. Graham. The mother, at a very early period of her pregnancy, was struck between the eyes with a small eel, just caught by her boy in the Lea, which accidentally slipped from a piece of thread while the boy was slinging it round to show her, and to this she attributed the malformation. The specimen is now in the museum at Lincoln's Inn, and was of the feminine sex.

Shortly after this case, I attended a woman in the same neighbourhood with a monstrosity having two heads and three legs, and which case was published by the late Dr. Phillips in *Guy's Hospital Reports*. The mother attributed this abnormal birth to an impression made upon her some seven months previously when seeing the Siamese twins.

In the following year, I also delivered a woman of a full-time male child, *minus* the left forearm. She had, some few months previously, left an hospital in which an amputation of the forearm had taken place, and had seen the case dressed.

These cases are, I think, some evidence of the effects of maternal impression.—I am, C. H. WELCH, F.R.C.S., etc.

Rock Gardens, Brighton.

ANALYTICAL CHEMISTRY.

SIR,—Can any of your subscribers kindly suggest what course of study a gentleman should pursue who is anxious to be an analytical chemist?—Yours faithfully, J. C. M.

DIPSOMANIA.

SIR,—I should feel very much obliged if you, or some of your readers, would kindly give me some suggestions as to the treatment of a mild case of dipsomania.

The patient is resident with me, and, in addition to the necessary supervision, I am at present giving him a mixture containing sulphate of iron and tincture of capsicum in clove-water, to be taken when there is any craving. As a drink at meals, he is taking a mixture of compound tincture of cinchona, tincture of capsicum, and syrup of oranges, with potash-water.

Is there any medicinal cure? We hear of many; and is there anything to be given when the periodical attacks of craving (to satisfy which he does his utmost, and often, I fear, successfully) occur? The patient himself is very anxious to be cured, but being one of those unfortunates who cannot easily say "no," his control over himself is very small. Whisky seems to be the desired beverage.—I am, sir, yours truly, X.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. C. W. Thorp, Todmorden; Mr. Arthur Kempe, Exeter; Mr. R. Fitzroy Benham, London; Dr. Norman Kerr, London; Dr. Robertson, Kimberley; The Secretary of the Devonshire Hospital and Buxton Bath Charity; Sir William Smart, K.C.B., London; Mr. Thomas Richards, Sydney; Dr. C. J. Hare, London; Mr. John Read, Rochdale; Mr. C. E. Parker, Rhodes; Mr. George Eastes, London; Mr. Stone, London; Dr. G. Thomson, Oldham; Dr. K. Gidding, Culverly; Mr, Ralph Holyoake, London; Mr. Josiah Williams, Sheffield; Sir E. A. H. Lechmere, London; Dr. R. S. Wise, Banbury; Mr. Charles Maas, Edgbaston, Birmingham; Messrs. Hootton and Yates, London; Dr. J. Martin, Belfast; Mr. Charles Ballard, Oxford; Mr. T. W. Thomas, Sheffield; Mr. F. C. Crosslé, Newry; A Perplexed Aunt; Mr. James M. McKee, Belfast; Mr. F. Wallace, London; Dr. MacCombie, London; Mr. W. W. Hardwicke, Rotherham; Dr. H. G. Moore, Ipswich; Mr. H. B. Runnalls, Saltash; Dr. Thin, London; Mr. T. G. Vawdrey, Handsworth; Mr. G. F. Hentsch, London; Mr. C. A. Daly, Hanley; Dr. T. M. Dolan, Halifax; Mr. W. L. Blenkarne, Buckingham; Our Aberdeen Correspondent; Dr. E. Haughton, London; Mr. Wheelhouse, Leeds; Mr. R. W. Parker, London; Dr. W. E. Woodman, Croydon; Mr. De Vere Hunt, Bolton; Mr. James Hardie, Manchester; Mr. H. B. Blackburn, London; Mr. Alfred Teevan, London; Mr. H. A. Cleaver, Croydon; The Secretary of the Medical Society; Mr. R. Skidmore Wrack, London; Dr. J. T. Griffith, London; Dr. Julius Althaus, London; Dr. Sutherland, London; Dr. Broadbent, London; The Secretary of the Parkes Museum; Mr. J. Hutchinson, London; Dr. Murrell, London; Mr. E. Kennedy, Gorton; Dr. Charles Richet, Paris; Dr. Joseph Rogers, London; Dr. Styrap, Shrewsbury; Dr. Collins, Nottingham; Mr. T. W. Duggleby, Driffield; Dr. J. Farquhar, Harrogate; Mr. H. Lamb, Carlisle; Dr. Benson, Dublin; Mr. H. W. Thompson, Omagh; Dr. Mackenzie, Glossop; Mr. T. H. Ravenhill, Birmingham; Dr. A. T. Myers, London; Mr. J. Reid, Rochdale; Messrs. Burgoyne, Burbidges, Cyriax and Co., London; Mr. W. Smith Batten, Bromsgrove; Mr. A. Lofthouse, Hemel Hempstead; Dr. Power, Portsea; Mr. J. Vesey Fitzgerald, London; Mr. A. Wynter Blyth, London; Dr. D. H. Cullimore, London; Mr. Hugh Orr, Filey; Mr. A. B. Bethune, Winnipeg, Canada; Mr. A. Simpson, Perth; Mr. H. A. Lediard, Carlisle; Dr. Sawyer, Birmingham; Mr. F. Barnes, London; Our Edinburgh Correspondent; Mr. W. Berry, Wigan; Mr. R. F. Rand, Liverpool; Mr. M. R. J. Behrendt, Burringham; Mr. E. W. Wallis, London; Mr. H. J. Pickering, London; The Honorary Secretaries of the Harveian Society; Messrs. Spottiswoode and Co., London; Messrs. H. and J. Cooper, London; Mr. J. W. Reynolds, Douglas, Isle of Man; Rev. Dr. Haughton, Dublin; Mr. T. J. Browne, Limerick; Mr. A. G. Knight, London; Mr. A. Stewart Brown, London; Mr. F. A. Southam, Manchester; Mr. E. H. Lipscomb, St. Alban's, Herts; Mr. T. F. Ordish, London; Mr. H. R. Ruckley, High Wycombe; Mr. J. Bain Sincock, Bridgwater; Mr. R. Thomas Jones, Harlech; Mr. Allen Fielding, Canterbury; The Honorary Secretaries of the Odontological Society; Mr. Leopold Hoff, Hamburg; Dr. Murphy, Sunderland; The Secretary of the Faculty of Physicians and Surgeons of Glasgow; Our Glasgow Correspondent, etc.

BOOKS, ETC., RECEIVED.

Legal Medicine. Part I. By Meymott Tidy, M.B. London: Smith, Elder and Co. 1883.

How to Use our Eyes, and How to Preserve them by Aid of Spectacles. By John Browning. London: Chatto and Windus. 1883.

Practical Pathology; A Manual for Students and Practitioners. By G. Sims Woodhead, M.D. Edinburgh: Y. J. Pentland. 1883.

Good Remedies out of Fashion. By C. J. Hare, M.D. London: J. and A. Churchill. 1883.

Clinical Notes on Cancer, Its Etiology and Treatment. By H. L. Snow, M.D. London: J. and A. Churchill. 1883.

Essays on Diet. By F. W. Newman. London: Kegan, Paul, Trench and Co. 1883.

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REMARKS
ON THE
EPIDEMIC OF CHOLERA IN EGYPT.

Read before the Epidemiological Society.

By W. G. HUNTER, M.D.,
Retired Surgeon-General Indian Army.

MR. PRESIDENT, AND GENTLEMEN,—When, sir, you did me the honour to invite me to read a paper having for its subject the late cholera-epidemic in Egypt, I had some diffidence in responding to your request, as I felt that, after my report had been presented to Her Majesty's Government, anything that I might have to say would be robbed of much of its interest. On reconsideration, however, of the matter, there appeared to me one particular point in that report of such paramount importance that it could scarcely fail to prove of interest to this Society, even if much of the old ground were travelled over again.

Having received, too, since the report was written, further corroborative testimony of my views on the origin of the epidemic in Egypt, I thought I might venture to place the matter before you. While this paper, therefore, has no pretensions to being a comprehensive one on the cholera-outbreak of 1883 in Egypt, but will be strictly limited to an endeavour to explain the origin of the outbreak, yet it will not, I trust, fail in creating an interest among the the members of the Society. If it does this, it will have served the purpose for which it was written.

Egypt is a very extensive country. It extends from the Mediterranean Sea to the Equator. It is not, however, this vast country which has been the scene of the recent epidemic of cholera, but rather Egypt proper, which includes the Delta and Upper Egypt as high as Assuan on the first Cataract. Its area of cultivated land is not larger than Belgium. Its population, however, according to the most recent census (1882), amounts to 6,798,280; and is, consequently, about one and a quarter millions in excess of that of Belgium. The soil, which is very fertile, is an alluvium, "the gift of the Nile," and is rich in decomposing organic matter. The people are essentially agriculturists, and lead an out-door life. Manufactories, though increasing, are comparatively few. It is almost a rainless country. At Alexandria, it is true, the average annual rainfall for the last four years has been about eight inches; but in the interior, of which Cairo may be taken as representative, the rain is limited to a few showers, which fall during the cold months of the year—viz., in November, December, and January. The sky is generally cloudless, the air dry, and the dews very heavy. The prevailing winds are northerly, a southerly wind being quite exceptional. On looking over the meteorological reports, issued from the Khedivial Laboratory, one is struck by the almost tedious monotony with which the northerly winds blow throughout the year.

The rainfall being so scanty, the country is consequently dependent on the Nile for its water-supply. The river is subject to periodical inundations, owing to the heavy rains in the equatorial region. The rise of the river at Cairo begins about the end of June, and is at its highest about the middle of September, when it gradually falls until it again attains its minimum level in June. There being practically no rain, the subsoil water-levels must necessarily follow the Nile level; that is to say, be at their lowest in June, and at their highest in September.

The larger majority of the people drink the water unfiltered, and generally before it has been allowed time to deposit. It is said that they prefer it in this condition. In Cairo the quality of the water-supply is indifferent. At the waterworks there is but one settling tank, and, as it is in constant use, it can never be cleaned.

The large amount of mineral matter contained in Nile water, while settling, carries down with it no inconsiderable quantity of the organic substances held in suspension in the water, and must lead to rapid fouling of the tank. Filtration is effected by gravel and sand. In the Ismailia quarter, that is, the fashionable part of the city, and in the Boulac quarter also, no attempt is made to filter the water, but it is supplied as obtained from the Nile. Close to the intakes of the Cairo waterworks, where some slight efforts, it is presumed, would be made to prevent pollution of the water, I have seen human, and other animal excreta, fresh and stale, lying about in various directions, and men and women bathing, and washing their soiled clothes in the river. This was by no means an uncommon sight.

[1203.]

The water supplied to Alexandria is, on the contrary, of very good quality. The system, though much the same as in use at Cairo, is carried out in a much more efficient and thorough manner. Alexandria is the only town in Egypt which possesses a wholesome supply of water.

The river and the soil have been polluted through countless generations, and the alluvium is almost as absorbent as a sponge. Wherever there is water, it is scarcely too much to say, you may feel assured it has been fouled by man. The river is, I may say, polluted and fouled almost from its source. It is the means by which filth, garbage, and dead animals of every description, are disposed of. Every town and every village situated on its banks add their quota to the fouling of the stream, until at length, when it has reached its lowest level in June, it is found, as at Cairo and at Damietta, to be undergoing putrefactive changes; to present under the microscope the character of pond-water rather than of a running stream, and to contain bacterioid organisms in considerable quantities.

For a detailed description, chemical and microscopic, of the character of the water at Cairo and Damietta, in June 1883, I would beg to refer the members of the Society to my second and third reports to Her Majesty's Government on the recent epidemic in Egypt. Mr. Ismalum, Director of the Khedivial Laboratory at Cairo, and Dr. Sonsino, in their report state that, after July 20th, bacterioid bodies were no longer found in the water.

As a specimen of the quality of the water used by the villages in Egypt, I would, in passing, call attention to a report made to me by Mr. Honman, one of the twelve medical gentlemen sent to Egypt by Her Majesty's Government for service during the epidemic. This gentleman was in charge of Mehallet-el-Kibir, a town of about 28,000 inhabitants, situated to the north of Tanta, midway between the Rosetta and Damietta branches of the river. Mr. Honman states in his letter, dated August 30th, 1883: "The town has three mosques; the drain from one running through the town, quite open and with three feet of filth at the bottom. This discharges itself into a pool of water at the back of the town, which is used by the people for domestic purposes, and as drinking water for their cattle. The other two mosques drain in a like manner into pools outside the town, and they also are used by cattle and for domestic purposes. The stench from these drains can be smelt all over the town."

During the past year, the water-ways were more than ordinarily polluted by carcases of cattle which had died of typhus being thrown into them, in order to evade a tax of five francs per head for their burial, which the poverty-stricken fellaheen were quite unequal to pay. It is notorious that many of the fellaheen were reduced to such straits as to be forced to feed on the carcases of cattle which had died in this way. The number of carcases and portions of carcases in a far advanced state of decomposition removed from the Damietta branch of the river amounted to upwards of 1,500, a number considerable in itself, but insignificant as compared with the thousands which must have been thrown into the river. The losses in cattle occasioned by the "epizootic" weighed heavily on the fellaheen, and reduced them to strange and curious expedients to till the soil.

The villages are collections of mud-hovels, in which, with the human family, reside all their domestic animals, as pigeons, fowls, asses, goats, and perhaps a camel. In no towns, so far as I know, are there public latrines, except those belonging to the mosques, which are quite inadequate to meet the wants of the people, who are driven to the streets, gullies, and open spaces for natural purposes. This remark applies equally to cities like Cairo and Alexandria.

I must here for a moment interrupt my narrative in order to pay a passing tribute to the valuable sanitary work effected by the Executive Commissions which the exigencies of the times called into existence at Cairo and Alexandria. Shortly after the epidemic ceased in the Delta, these commissions were dissolved, with a result that might have been foreseen; grossly unsanitary conditions again became rife, and have justly called forth from Mr. Clifford Lloyd the severest reflections on the Health-Inspector of Alexandria, and the Conseil de Santé at Cairo.

In Cairo, the cess-pit system exists, and is carried out in a very inefficient manner. Many of the pits are holes dug in the sand, which have never been emptied or cleaned. More recently, in the better class of houses, the pits have been better constructed, but their being emptied depends much on "the caprice of the landlord, not of the tenant." The wooden carts employed for removal of the sewage are of the most primitive description, and numerically are quite insufficient for the purpose. Consequent on there being no break of connection, the house-pipe and the cess-pits are in direct communication one with another.

In Alexandria, an attempt has been made to establish a sewerage system, but, as in most things Egyptian, a very defective one. In the first place, it is but partial; in the second, it possesses radical defects of construction, and the outlets, some twelve or more in number, pour their contents on to the beach directly to windward of the city. The sewers are, moreover, unventilated, such ventilators as existed having been sealed up about five years previous to my visit in August last. The privies of the houses are in direct communication with the sewers.

I might point to numerous other unsanitary conditions, not in Alexandria and Cairo only, but in the country generally, but refrain from doing so for fear of wearying the members of the Society. It will be sufficient to say that grossly unsanitary conditions abound everywhere, and there can be little doubt that, from their Sanitary Department, the Egyptian Government have received but scant service. It is, to me, a source of much satisfaction to know that the Conseil de Santé has been abolished, to be, I trust, replaced by an executive which will not be neglectful of its duties to the country and the people. Under such conditions as I have above faintly endeavoured to describe, it is hardly matter of surprise that bowel-disorders should be very common and very fatal, and zymotic diseases very prevalent. Visit what hospital or village one may, one is struck by reports of the prevalence and fatality of diarrhœa, enteric fever, and other intestinal disorders. And that, under the head of diarrhœa, numerous deaths from cholera lie hidden, I shall proceed to show further on, from evidence supplied to me by others, as competent as myself to form an opinion on the subject. Registration of disease is notoriously defective in the smaller towns and villages in Egypt. It is generally not until after death, when it may perhaps be necessary to obtain a permit for burial, that any attempt is made to ascertain the cause of death, and even then, as a rule, it is as often guessed at as not. Although the system be highly defective, yet it must not be lost sight of that all the returns and reports agree on the prevalence and fatality of disorders of the bowels. Samanood and Shibin-el-Koom were two towns among others which I visited while in Egypt. At the former, from the 1st to the 30th June, 1883, out of 40 deaths from all causes, 26 were from diarrhœa. At the latter, out of a total of 174 deaths in May, June, and July, 1882, 93 were from diarrhœa; in May and June, 1883, out of a total of 110, no fewer than 57 were from diarrhœa. In Cairo, where registration, though far from perfect, is more reliable than in the smaller towns and villages, the mortuary-returns show a very high death-rate resulting from bowel-disorders. The members will observe, from the mortuary-tables of that city for 1881 and 1882 which are placed before them, that in the former year, out of a total death-rate of 14,579, or 39.67 *per mille*, there were 1,097 deaths from gastric and typhoid fever, or 7.5 per cent.; 1,889 from dysentery, or 12.9 per cent.; 1,902 from gastric catarrh, or 13⅓ per cent.; that in the latter year (1882), out of a total death-rate of 17,290, or 46.98 *per mille*, the death-rate from the same causes was 10 per cent., 13⅔ per cent., and 15 per cent. respectively—a startling mortality as compared with a city like Bombay, for example, where the death-rate from all causes for 1881 amounted to 27.87 *per mille*, and from bowel-complaints a rate of 2.59 per 1,000.

Typhus fever is far from being uncommon, and in 1883, I have reason to believe, prevailed to some extent in the towns and villages of the Delta. In the returns for Cairo for the years 1881 and 1882, previously referred to, thirty-five and forty-six deaths respectively are registered from this cause. Little aid need be looked for from examination of the hospital-registers of the smaller towns and villages, as, in the majority of instances, the medical officers are incapable of differentiating between the typhus and typhoid types of fever; and, under the latter heading, many examples of the former would not unlikely be found.

The recent war, too, not improbably exercised a certain influence in the general insalubrity of the country. Relatively, however, to other existing conditions, this influence could not have been considerable. The campaign was a very short one; its main operations were conducted in the desert—between Ismalieih and the Delta—outside, as it were, of the country. The men composing the "Indian Division of the Egypt Expeditionary Force" were a picked body; and Deputy Surgeon-General Colvin Smith, C.B., principal medical officer with the force, in his report of the expedition, states that the fighting men and followers were "remarkably healthy;" that it was not until they had been resident in Cairo, that their health began to suffer from diseases common to the country, as diarrhœa and enteric fever, both of which diseases he seems to regard as endemic in that city. From diarrhœa, he states, almost every officer suffered while at Cairo, and some very severely.

There have been in Egypt, since 1831, no fewer than five epidemics of cholera, exclusive of that of 1883. The first broke out in July, 1831; the second on June 24th, 1848; the third on July 25th, 1850; the fourth on June 24th, 1855; the fifth on June 11th, 1865. The last, according to official reports, claimed 61,192 victims—a number, I imagine, much understated, unless registration was more efficient then than it was during last year.

I am, I regret to say, unable to give the loss in population caused by the recent epidemic, as the returns have not yet been made up. The authorities are waiting until the disease has, I presume, ceased to exist. Now, however, that public attention has been directed to the matter, I fear some considerable time must elapse ere the report be published. The disease clings to the country—"hæret lateri letalis arundo"—even as in years gone by; but its presence now is recognised and acknowledged—a marked advance in sanitary politics in Egypt, and it is to be hoped of good augury for the future. Better far an open enemy, whose attacks can be met, than a hidden foe, who, invisible, deals his death-blows with an unsparing hand, and creates a wail through the length and breadth of the land.

Having thus, gentlemen, however imperfectly, and in as concise a manner as possible, endeavoured to lay before you the chief physical features of the country, its grossly unsanitary conditions, and its more prevalent diseases, I think it will be admitted that never was a country more ripe for an outbreak of epidemic disease, such as cholera, than Egypt; and yet Egypt itself was apparently astounded when it was announced that cholera, or plague, had broken out at Damietta on June 22nd, 1883. Immediately the report reached Cairo, a Commission was deputed to investigate the matter. The Commission arrived at Damietta on June 24th, and reported that the disease was cholera, but found it impossible to come to any conclusion as to its genesis. "La Commission se trouve dans l'impossibilité d'etablir la genèse du cholera-epidémique de Damiette."

Dr. Flood, Physician to the Hospital at Port Said, believed (Drs. Chaffey Bey and Ferrari state in their report, to be referred to presently) that he had found the key to the enigma, and reported on July 5th to Salim Pacha, the President of the Conseil de Santé, that the disease had been imported by Mohamed Halifa, a stoker belonging to the *Timor*. This statement of Dr. Flood's has justly come to be looked on as incorrect, and, shortly after it was put forward, was effectually disposed of in a telegram from Sir E. Malet to Her Majesty's Government, dated Cairo, July 11th, 1883, which was as follows.

"Mohamed Halifa, for some years inhabitant of Port Said, shipped as fireman on board steamer *Timor*. Made voyage to Bombay, returning 18th ultimo; all on board in perfect health. Obtained discharge at Port Said, and commenced course of drunkenness and excess. This continued four days, when he was imprisoned by governor of Port Said, and finally expelled by that official on 23rd ultimo, and arrived at Damietta on 24th, when he recommenced same course of excess on 25th. He is now at liberty, and apparently in perfect health. This disposes of theory, as epidemic broke out at Damietta on 22nd."

The next inquiry into the origin of the epidemic was carried out, under the instructions of the Quarantine Board, by Dr. Ahmet Chaffey Bey and Dr. Salvatore Ferrari; they are both medical officers of experience and of high standing in their profession. Their report is dated Damietta, July 24th, 1883, and will be found, *in extenso*, in my second report to Her Majesty's Government. These two gentlemen, firmly convinced of the importation of the disease, expected to obtain a confirmation of their views. Instead of this, after careful and patient investigation, they were forced to the conclusion that the disease had not been imported, and that there existed, in the deplorable unsanitary condition of Damietta itself, sufficient cause, in their opinion, for the origin and development of the disease.

Its importation into the country has also, I believe, been assigned to the Indian contingent during the war. I have, however, never yet seen this hypothesis formulated. This absurd opinion would seem to have had its origin in the representation made by M. Fauvel, Inspector-General of Sanitary Services under the French Government, of the danger which he conceived would arise to the French troops, which it was then expected would be sent to Egypt, from their association with the troops coming from India. As the contingency happily never occurred, it is not possible to say whether M. Fauvel's doleful foreboding would have been realised or not. Whether this opinion of M. Fauvel's had been twisted to serve the purposes of those who believe in the importation of the disease into Egypt, I am scarcely prepared to say. Be that as it may, the subject has been allowed to drop.

The last importation theory which has been advanced, is one by Dr. Mahé, delegate of the French Government, viz., that it has been introduced by coal-trimmers and stokers employed on board steamers running between Bombay and Port Said. The ingenuity and vagueness of this allegation will be at once apparent. The subject is being investigated by Her Majesty's Government. The inquiry is likely to be a protracted one; but that Dr. Mahé's views will share the fate of those which have preceded them, I, for one, cannot for a moment doubt. The necessity for any investigation seems to me doubtful, considering that conditions already existed in abundance in the country itself to account for the origin and diffusion of the epidemic, not in the Delta alone, but also in towns and villages in Upper Egypt, far removed from the line of traffic between Egypt and India. Dr. Couvidon, a French physician resident at Port Said, in a report addressed to the French consul, dated August 1st, 1883, says it is not easy to determine the precise motives, either individual or general, which attribute the epidemic to importation. Be that as it may, the fact remains that nameless Bombay merchants and phantom-ships full of merchandise, have been conjured up, and are said to have brought the cholera from India to Damietta direct, without leaving any trace behind them at Suez and Zagazig: "I affirm and I prove that the present epidemic cannot have been imported." In the preface to his report, Dr. Couvidon says he bases his opinion on numerous thoughtful observations made during eighteen years' residence at Port Said.

A writer in the BRITISH MEDICAL JOURNAL of August 11th, 1883, states:

"Moreover, cholera has never been shown to have been imported from the Indies to Egypt, or to Europe. It is not, of course, denied that cholera occurs on board ship; but the tendency is to its spontaneous disappearance during a voyage. As the Sanitary Commissioner with the Government of India has remarked that, since 1865, Egypt has not suffered once until now; Aden, which is still nearer to India, has never suffered to any extent. Only twice since 1865 has there been a slight outbreak there.

"But cholera has prevailed in different parts of Europe in ten different years since 1865. It is endemic in parts of the Russian empire, yet no alarm is expressed by other countries.

"The English sailing-vessels, the *Persia* and the *North Wind*, are often loosely quoted as having introduced cholera from the Indies into Jeddah in 1865. They sailed from Singapore with Javanese pilgrims, touching at Alepe on the Malabar coast, and at Makallah on the southern coast of Arabia, and arrived at Jeddah. The voyage in one case was about fifty days, and in the other about eighty. There was no cholera among the pilgrims until the vessels were anchored at Makallah, where new passengers were shipped. Cholera was prevalent during the early part of the year in various towns on the Hadramaut coast, and it is reasonable to suppose that Jeddah became infected by the cholera creeping along the land. But in no case can the disease be proved to have been imported from India; and, in every alleged instance of such importation, the allegation has failed to bear examination."

Further, on examination of the returns of cholera for Bombay, it is shown that during 1882 a total of 192 deaths occurred, as against 529 in 1881; and that 120 deaths were registered during the first six months of the present year. Consequently, Bombay, against which complaint has been chiefly made, had been, during the eighteen months preceding the epidemic in Egypt, more free from cholera than usual.

Being of those who do not believe in the contagiousness of cholera, and who, therefore, do not look for a specific entity or germ, and its importation into a country to account for the development and spread of the disease, I turned my attention to the country itself in search for a cause of the epidemic outbreak, and, after careful and cautious inquiry, come to the conclusion that the epidemic of 1883 was the outcome of the disease which existed endemically in the country. The evidence in support of this statement I shall now proceed to lay before the members of this Society. Previously to going on a tour of inspection into the Delta, it was intimated to me that cases of cholera had occurred in a Greek school at Damietta before the outbreak on June 22nd. On arrival at Damietta I tested the truth of this statement, and came across the following cases.

1. Two Coptic priests (named Sadarros Yusuf and Gergis Hanna), after being carefully interrogated, informed me that a Coptic boy, named Hanna Gergis, aged 5 years, belonging to their school, had died of all the symptoms of cholera on June 17th.

2. A Greek priest, Michael Herodiades, whose statement was corroborated by the deacon at the Greek school, said that last May one of their scholars, Anton Nicolaïdes, aged 8 years, was attacked at Damietta with excessive vomiting and prostration, but had no purging. The priest could give no details as to the suppression of urine. The lad was taken by his mother to Mansourah, where he died in twenty-four hours.

At Shirbeen I accidentally met with Dr. Dutrieux, a medical practitioner of Alexandria, who was employed by His Excellency Shereef Pasha in making inquiries into the cause and origin of the epidemic, and, on discussing the question, I discovered that his investigations had led him to conclusions similar to my own.

Shortly after my return to Cairo, I received the following telegram from him, dated the 13th instant: "I have been to Feraskor to get serious information as to date of cholera at Damietta; returned to Damietta expressly to verify. Have received declarations in five cases. Two Greek children died April 27th; one day's illness, cyanosis, aphony, algid state, no vomiting, no diarrhœa. Another Greek child, ill about six months; vomit, cramps, aphony, algid state, without diarrhœa; death after six days. Arab barber, ill two or three days, towards end of April, died after vomit and diarrhœa. Arab shopkeeper, dead after twenty-four hours' vomit and diarrhœa. These facts are positive.—DUTRIEUX."

On my return to Cairo from tour of inspection, Dr. Sonsino informed me that he had received a letter from Dr. Ambron, who was then absent in Italy, in which he drew attention to a case of cholera which had come under his observation in Cairo. Dr. Ambron stated, "I am not quite sure of the year, but I believe it was in 1867 that I saw a case in the person of Dr. Giovanni Martini, who, being called out at night to an accouchement, wrapped himself up in a woollen scarf, which he said he had used only during the epidemic of 1865. A few hours later he was seized with fainting, then with vomiting and diarrhœa, and had all the phenomena of cholera with the algid state and aphony, but recovered."

Dr. Sonsino supplied me with the following instances which he had met with in his practice in Cairo. "Tomaso Bonassi, of Leghorn, lapidary, was seized with cholerine on May 13th, 1873, and suffered from diarrhœa, vomit, algid state, and sunkenness of the eye-cavities. He recovered after twenty hours. In November 1874, the same man, while an invalid from an abscess in the abdominal wall, was again attacked with cholerine, much more severely than the first time, but recovered, and is now in good health."

Dr. Rabitsch, in a memorandum dated Cairo, September 19th, 1883, states that "on a summer afternoon in the year 1878 or 1879, he was called hastily to a patient in the Hotel du Mercure, and found there a man whom he pronounced to be suffering from cholera; there being no epidemic in the country, he stated that there was no fear either for the patient or for the persons present; the patient recovered."

Dr. Fouquet, in a letter addressed to Mr. Albert Ismalun, Director of the Meteorological Khedivial Laboratory at Cairo, states that "he had under his observation in September 1881, a very grave case of cholera nostras, which closely resembled Asiatic cholera; the patient recovered."

Dr. Sierra, a medical officer of the European Hospital at Alexandria, in a letter to Dr. Sonsino dated Alexandria, July 31st, 1883, says: "I have no written notes wherefrom to answer your question; I must trust to my memory; but I am sure that what I remember and shall tell you, I remember well. After the small epidemic of 1866, I sometimes saw cases of cholerine in Alexandria. I do not remember having attended to such cases all through the year, but I certainly saw some during the summer. During summer, and especially in the season of water-melons and fruit, it is common enough to have cases of gastric disorder; pains in the stomach, diarrhœa, and vomiting have always been very frequent in that season, and especially among the lower orders; but I do not call this cholerine. By cholerine, I mean a copious vomiting and diarrhœa, accompanied by a marked fall in the pulse, agitation, sinking of the eyes. Without, however, being able to fix the exact date, I remember having seen a Jewess with these symptoms where they lasted more than eighteen hours, and where the reaction was very difficult to bring about. I also remember that when I had such a case in [illegible] and mentioned it to a colleague, I was told that similar cases had occurred in the town; but never more than two or three cases in a year. I never saw any cases of sporadic cholera—cholera nostras. I have lately questioned some doctors of the town, and have been told that a few congeneric cases have been noted [illegible]. In the European hospital, two cases were admitted in May, which the sisters told me showed choleraic symptoms. One of these died, the other was cured; he is now in the hospital with other ailments. These are the facts which have come under my observation."

When visiting the European Hospital, at Alexandria, I had the satisfaction of meeting Dr. Sierra, and he very kindly placed me in the way of obtaining the required information, and subsequently furnished me with the details of the cases.

One case was admitted, under Professor Fougeron, on June 5th, 1882, and recovered; the other case, under the care of Professor Courtier, on April 17th, 1883, and ended fatally.

These cases are designated as "chloleriform." Dr. Mackie has, however, to my thinking, more correctly described them as two typical cases of cholera. Dr. Mackie, at my suggestion, kindly made further inquiries, and obtained from several medical gentlemen, practising in Alexandria, statements of cases which had come under their personal observation. To Dr. Mackie, himself, I am indebted for notes of four cases which fell under his own observation. Two in the summer of 1881; another in the summer of 1872, which ended fatally; a fourth in the summer of 1872 or 1873, in one of the sisters of the Deaconesses' Hospital.

Dr. Kartulis furnishes a suspicious case as having occurred in September 1881.

Dr. Mamlouk, in his letter dated August 27th, 1883, mentions two cases—one of a suspicious character, which had occurred about eight years previously; another, a typical case of cholera, about four years previously.

Dr. De Castro, in his letter to Dr. Mackie, dated September 5th, states that in 1866 he observed several cases of cholera, which he considered as a residue of the epidemic of the previous year, and he observed that new comers were more susceptible than the residents. Six or seven years ago he saw a case which recovered. About three years previously a case came under his observation and recovered. This patient had had a former attack in 1865. The second attack resembled the first, and presented all the phenomena of cholera.

Another case he had under his care two years previously, in a woman who had arrived the preceding day from Naples. It ended fatally.

Another case occurred in September 1882, in the captain of a ship recently arrived from Italy.

Dr. De Castro considers these to be cases of sporadic cholera, of which similar examples may be seen in the large towns of Europe; that they resemble cases of Indian cholera, but differ from them in being less grave, less fatal, and by their non-tendency to propagate themselves even in the absence of all sanitary precautions.

Dr. Demech states in his letter, dated Alexandria, September 3rd, 1883, that there had been an outbreak of cholera in Upper Egypt, which came from the Soudan, through Dongola and Wady Halfa, reaching Korosko in November, 1872. He states that, since 1865, not a summer passed without his seeing one or two cases, more or less severe, of cholera nostras, but in 1866 he had two fatal cases in Europeans in Mansourah.

This concludes the information I obtained on this highly important subject from medical practitioners in Alexandria.

On my return to Cairo, and since my arrival in England, I have received further evidence bearing on this matter.

Dr. Fouquet, in a letter addressed to Mr. Albert Ismalun, Director of the Meteorological Observatory at Cairo, which letter the latter gentleman has kindly forwarded me, states that he had under his observation, in September, 1881, a very grave case of cholera nostras, which closely resembled Asiatic cholera. The patient recovered.

Dr. Haddad, in a highly interesting communication, dated Assiout, September 5th, 1883, which he has favoured me with, shows that diarrhœa has been a frequent disease for many years past. He adds that Dr. Mazurakis, in December, 1882, had a patient who died with symptoms of vomiting, purging, cramps, and collapse, after ten or twelve hours. He states that diarrhœa has been a very frequent disease every summer, and that the Government registers show the mortality from this disease to be very great, being as much as one-third of the mortality from all other diseases combined.

At Assiout, Dr. Haddad states that a man who arrived from Cairo on July 28th, when the epidemic was at its height, and who died of cholera the following day, was entered in the Government registers under the head of "Choleriform." The inhabitants of Assiout "laughed" at this being considered the first case of cholera which had occurred there.

The presence of cholera in Assiout is not recognised in the Government register until July 31st, when two cases are recorded.

Further, Dr. Haddad gives it as his opinion that cholera was not imported from Lower Egypt, even supposing importation ever occurred. He concludes by saying: "How many years it has existed here I cannot say, as I have neither the means nor the time to institute proper inquiries."

I had arranged with Dr. Haddad to investigate this matter, but, as I was leaving the country, I deemed it unadvisable to allow him to do so. Dr. Haddad, being an able man, and a cautious and careful observer, and possessing a thorough knowledge of Arabic, was eminently qualified for such work.

If the report of Dr. Haddad be considered side by side with the letter from Dr. Demech, and the statement of M. Chevalier to Surgeon-Major McNally—"that cholera had existed in the Fayoum (Upper Egypt) six years ago"—I think it will be admitted that there are some grounds for the belief that cholera has existed in Upper Egypt since 1872.

I have next to draw attention to a letter from Dr. Patterson, Her Majesty's Consular Surgeon, Constantinople, dated Constantinople, September 24th, 1883, in which he states that he practised for thirteen years in Egypt, from 1855 to 1868, both in Cairo and Alexandria. Dr. Patterson states that he was well-acquainted with the large districts between Kafr and Zayat and Suez, and also the districts of Mansourah, Zagazig, and other places where cholera has recently prevailed. He affirms that he cannot recall a year during that time without several well marked cases of cholera having come under his notice, and which were conveniently classed under the head of "Cholera Nostras."

Further on, he says that no one acquainted with the disease could doubt that cholera—by whatever name it might be designated—was endemic in Egypt.

Again, he says: "Every year, at that time, there was a cholera-panic, and not without reason; and we seemed yearly to be on the eve of a cholera-epidemic; yet no one thought of attributing it to an Asiatic or Indian origin, and there was no proof that the disease was infectious."

I requested the staff of medical officers employed in Egypt to institute inquiries as to the existence of diarrhœa and cholera in the districts where they were stationed, antecedent to the officially declared outbreak on June 22nd at Damietta, and to report the results to me. Owing to the rapid decline of the epidemic, the Egyptian Government no longer found it necessary to retain the services of these gentlemen, and consequently but little time was given them to make the necessary inquiries.

I have, however, received from some of them valuable information, more especially from Surgeon-Major McNally, Madras Medical Service, in charge of Zagazig and district; and from Mr. Honman, in charge of Mahallet-el-Kebeer and district.

In a letter addressed to me, dated Cairo, September 1st, 1883, Surgeon-Major McNally shows that, in the villages in the neighbourhood of Zagazig, diarrhœa with vomiting had existed since the previous January, and had proved fatal to two hundred persons; that great mortality had taken place from cholera at Chibin-el-Kom prior to the report of its occurrence at Damietta; that, in certain villages in the neighbourhood of Benha, cholera had appeared before the reported outbreak at Damietta, and in one village the deaths were said to have numbered more than fifteen a day; and, finally, that M. Chevalier, an engineer, had informed him that he had known cholera to exist at Fayoum (Upper Egypt) six years ago, and also in other parts of Egypt during past years.

The existence of cholera was not officially recognised in Mahallet-el-Kebeer until July 16th, when three deaths were reported; and yet Mr. Honman, in his letter, dated Mahallet Kebera, August 30th, states that numerous cases of cholera had occurred in Mahallet before that date; that diarrhœa was a common complaint in the town, and that for a month before the outbreak the cases had been most severe and intractable; that at Miniett-el-Samanoud and other villages there had been an epidemic in the month of May, as many as four a day dying out of a population of 4,000; that the deaths had been registered under the head of "Diarrhœa," and had been so numerous at Miniett that the Cadi of the town had forbidden the use of the drum at funerals, in order not to draw attention to the number of deaths; and that, although on one day there were twenty-nine deaths, the fear of a *cordon* caused the fact to be suppressed.

It will be observed that all the facts above noted were communicated by medical men as a result of their personal experience and observation, and all being men of position and standing in their profession.

Mr. McCullough, an Inspector in the Department of the Minister of the Interior, while engaged at Menzaleh, near Damietta, in investigating a judicial case, states that he was convinced by overwhelming evidence that cholera had been raging in the island of Matariah, on Lake Menzaleh, a month before it broke out at Damietta.

The next and last piece of evidence which I have to bring forward in support of the above is that obtained from an official enjoying a high position under the Egyptian Government, who told Sir Evelyn Baring, "We all know that cholera has been constant here, and generally follows the cattle-plague; but we are told to say nothing about it."

The documents from which the above abstracts are taken will be found in my second and third reports to Her Majesty's Government. A careful consideration of the facts satisfactorily proves that cholera has existed in Egypt in an endemic form since the epidemic of 1865, and probably anterior to that period, as shown by Dr. Patterson. The epidemic of 1883 was consequently the outcome of the disease which existed endemically in the country.

Dr. Dutrieux's conclusion that cholera-centres existed long before June 22nd (date of outbreak at Damietta), in several places in Lower Egypt, is confirmed by the data furnished by Surgeon-Major McNally and by Mr. Honman.

The evidence, considerable as it is, was collected in a few weeks. Had longer time been at my disposal, I believe it might have been materially added to. There is one significant feature as to the sources of my information. It was all, or rather nearly all, obtained from medical men not in the employ of the Egyptian Government. The inference consequently is, that either the Government medical officers had failed to recognise the disease, or else that they maintained a strict silence on the matter. This inference may be considered a harsh one. The time has arrived, however, when it is essential that all that bears on the origin of the late epidemic should be put plainly. It has been shrouded so long by collateral and incidental considerations, that I feel I should ill represent what I believe to be the facts by obscurity of language.

Cholera is recognised by a certain group of symptoms; and it is merely begging the question to say that a particular case coming under observation, though presenting all the phenomena of cholera, cannot be cholera, because there is no evidence of importation, and that it "does not propagate itself in the absence of all hygienic precautions." (See Dr. De Castro's letter.)

Dr. De Castro, the Delegate of the Italian Government, is an able and experienced officer, and is, moreover, a representative man. I have a great respect for his opinion, but I regret that I am unable to accept his conclusions. I presume Dr. De Castro would not refuse to accept the evidence afforded by certain symptoms, which indicated that he had before him a case of pneumonia, and no other disease, because he could not trace its cause, and then proceed to designate it by some other name; nor would he, after witnessing inoculation by small-pox virus, proceed to pronounce the resulting phenomena not those of small-pox, because the disease did not propagate itself.

Inoculation was formerly practised to a large extent in Lower Bengal and other parts of India, but is now happily being rapidly displaced by vaccination. Frequently years would elapse without the disease spreading among the community. Would it be fair to argue from this that the phenomena resulting from the inoculation-process were not those of small-pox, because they did not propagate themselves? A terrible awakening would probably await those who held such opinions, in the shape of an epidemic outbreak that would decimate the population. Here I am speaking of a disease the contagion of which is recognised as being perhaps the most virulent known; whereas cholera, in my opinion and in that of many others, is a non-contagious disease, and consequently not likely to spread from individual to individual, as Dr. De Castro evidently expects it to do.

The cause of the spread of cholera and diseases of the zymotic type depends on certain epidemiological laws not yet well understood, but which I shall have occasion to refer to further on.

In the nomenclature of disease in India, the term "cholera" is only permitted to be used when speaking of the existence of a certain group of symptoms; when these are recognised, the official return is "cholera." Choleraic diarrhœa has, for good and sufficient reasons, for some years past been struck out of the returns. Were the same rule applied to Egypt in the registration of disease, much confusion would be avoided, and such terms as "cholerine," "cholera nostras," "choleriform," etc., applied to modified forms of cholera, cease to exist.

If the cases communicated in many of the attached documents be not cases of true cholera, but rather of cholerine and cholera nostras, then Bombay ought no longer to be regarded as the seat of endemic cholera, for the majority of the cases I have seen there, during intervals of epidemic activity, were cases of so-called "cholerine," "cholera nostras," etc., and they did not propagate themselves.

These several forms of the disease differ in no essential particular, either clinically or pathologically, from one another, and therefore ought to be registered as cholera.

Dr. De Castro also states, in his letter, that if the cases which had come under his observation were cases of cholera, then cholera existed in many of the large cities of Europe. Here I agree with him, for I feel little doubt that examples of cholera are of not unfrequent occurrence in many of the cities and towns of Europe, not excluding the British Isles. In certain parts of the Russian empire, cholera is affirmed to be endemic.

I shall next consider certain meteorological states which existed during the outbreak and preceded it. Before doing so, however, it will be interesting to refer to like phenomena which have been frequently observed, not in India only, but also in Europe, in connection with cholera.

Mr. Glaisher, in his Report on the Meteorology of London during the three cholera-epidemics of 1853-54, of 1832, and of 1848-49, says: "The three epidemics were attended with a particular state of atmosphere, characterised by a prevalent mist, thin in high places, dense in low. During the height of the epidemic, in all cases the reading of the barometer was remarkably high and the atmosphere thick. In 1849 and 1854 the temperature was above its average, and a stillness of air, amounting almost to calm, accompanied the progress on each occasion. In places near the river the night-temperatures were high, with small diurnal range, a dense torpid mist, and air charged with many impurities, a deficiency of electricity, and, as shown in 1854, a total absence of oxone, most probably destroyed by the decomposition of the organic matter with which the air, in these situations, is strongly charged."

Without entering into details, I may say that, in India, outbreaks of cholera are usually found associated with high temperature and a moist, stagnant atmosphere, inducing much langour and depression and a stifled feeling; and the Punjab, with its dry climate and sparse rainfall, affords no exception to this rule.

Dr. Roche, in writing of the outbreak of cholera at Kotree, Scinde, in September, 1862, which, as regards climate, is, perhaps, even drier than that of the Punjab, states the atmosphere to have been, during the month, unusually sultry, still, and moist, with a high temperature.

Mr. R. Borg, Her Majesty's Vice-Consul in Cairo, who has devoted much of his time to sanitary matters, informed me that "when cholera was at its height in 1865 in the capital, the sky was lead coloured, the atmosphere oppressive, so as to render breathing rather difficult at times; and the town of Cairo, as seen from the Mokattan Hills, seemed to be enveloped in a spherical cloud of thick mist during three consecutive days." He also observed that the sparrows deserted the town, and did not return until the epidemic was on the decline. These observations have been verified by others.

Brigade-Surgeon McDowell, A.M.D., Sanitary Officer of the Cairo district, reports that when the epidemic was at its height on July 23rd, a very peculiar condition of the atmosphere was observed; a yellowness of the air, somewhat of the nature of a fog, and it was quite calm. The sparrows, it was noticed, had deserted the place, and did not return till July 26th. On the night of July 23rd the cholera first attacked the British garrison at Kasr-en-Nil, Abassieh, and the Citadel.

It is curious to note that the Arabic phrase for cholera is "the yellow air" (el-hawa-el-asfar), and that the fact of birds deserting a place at such periods has also been remarked by the natives.

Surgeon Prendergast, A.M.D., informs [illegible] the outbreak of cholera among the British troops at Ramleh (August 3rd), there was a high temperature, the air approached saturation-point, the wind, which, for many weeks before, had blown as usual from the north, slowly dropped, the heat became intense, attended with a feeling of oppression. The ripple [illegible] it as glassy as a [illegible] pool. The sky, [illegible] was cloudless. Now and then a faint [illegible] from the south-east, and as suddenly [illegible] served in India remarked that there was cholera in the air, and at 10.30 A.M. the first case was reported.

Another pertinent illustration is given by Dr. Kirker, R.N., of H.M.S. [illegible], in his report of the [illegible]

This village, of 2,000 inhabitants, [illegible] andria but a quarter of a mile, and in constant communication with it, had been free from the disease up to October 15th or 16th. It sanitary condition was extremely bad. It is situated in a hollow, but is open to the north and the influx of the sea-breeze. "On September 19th, the prevalence of the north-westerly winds was broken. Then followed a period of variable winds, the easterly and southerly ones being the most frequent. The rain on October 9th and 10th may be taken as marking the termination of this period and the starting-point of another. In the second, from the night of the 10th to the night of the 15th October, the wind, which was always nearly light, varied from east to west only round by south." Frequently at night there was no wind at all, and the temperature rose from a maximum of 70° on the 10th to 84° on the 15th. "Now, I believe," continues Dr. Kirker, "that the stagnancy of the air over Chatby, owing much to its low and sheltered position, especially during the period from October 10th to 15th, forced the disease into existence, and that the influence of the motionless atmosphere was assisted by the rise in temperature and by the moisture of the ground following the rain on the 9th and 10th."...... "Again, the fact that the disease reappeared in Alexandria at or near the time it more violently struck Chatby, points to a common exciting condition, such as the weather, and discredits the theories of mere local causation."

Dr. Kirker has, at my request, been good enough to forward me some instructive meteorological data made by him during last June and July, at Port Saïd, Alexandria, and Damietta. The chart for the month of June is the more important, as it was at that time that the epidemic broke out. His views are more definitely expressed in a letter addressed to the editor of the *Egyptian Gazette*, dated Port Saïd, July 28th, 1883, and published in that journal on August 1st. He states that the meteorological phenomena antecedent to, and during, the outbreak at Damietta, may be divided into two periods; during the former period (May 28th to June 23rd), the winds were variable, many of the nights were almost or quite still and cloudless; the humidity of the air being excessive, at one time, on June 12th, 13th, 14th, and 17th, being at saturation-point (100), the average varying from 91 to 92; and there was no rain. In the latter period, from June 23rd to July 6th, the relative humidity was only 78 and 82, at 9.30 A.M. and 11 P.M. On June 24th, the sea-breeze was established, the wind blew during the day from the north-west, veering round towards the south-west during the night and early morning, and there were no calms.

I am further indebted to Dr. Kirker for some very valuable and highly interesting meteorological summaries for the month of June from 1870 to 1883 inclusive, which I have the pleasure to place before the members of the Society. As the letter which accompanied the summaries would only lose in force by anything I might have to say, I shall allow Dr. Kirker to speak for himself. His letter, dated *Iris*, at Malta, December 6th, 1883, is as follows.

"Sir,—I have the honour to inclose you a copy of the meteorological summaries for the month of June, from 1870 to 1883 inclusive, which, by the kind permission of M. A. Pirona, I have made from the meteorological register of the Observatoire et Station Météorologique de l'Impérial et Royal Institut Central de Vienne, at Alexandria.

"1. My object in sending the inclosure is to furnish you with the means of comparing, as regards weather, last June—the month when the cholera became epidemic in Egypt—with the Junes of the previous thirteen years.

"It is seen that in 1883 the mean barometric pressure (758.2 millimètres = 29.851 inches) was below the mean (758.7 millimètres = 29.871 inches) of the fourteen years; and that the extreme variation (5.1 millimètres = 0.200 inches) for the one year was less than the mean of the extremes (7.6 millimètres = 0.300 inches) for the period.

"The mean temperature (24.4° C. = 75.9° F.) in 1883 was only a little above the mean temperature (24.0° C. = 75.2° F.) of the fourteen years.

"The mean relative humidity (71) in 1883 was less than the mean (73) for the fourteen years. The maximum relative humidity for the month is not shown in the summaries, but the tables of daily registration, which will be more particularly referred to afterwards, show that in 1883 it reached 96—the highest recorded in any month whatsoever since January 1876.

"The mean relative amount of ozone (6.4) in 1883 is 13.5 per cent. less than the mean (7.4) for the fourteen years. On examination of the summaries of the ten months, January to October, it is seen that the mean relative amount of ozone for that period in 1883 is less by 17.0 per cent. than the mean for the same period in the seven years 1875 to 1881. The ozone-observations do not extend further back than 1875, and the record for 1882 is incomplete.

"The mean wind-force for June 1883 is less than for any previous June for thirteen years. Again, the summaries of the ten months, January to October, show that the mean wind-force for that period, in 1883, is 36.8 per cent. less than the mean for the same period in the twelve years 1870 to 1881. Only in 1877 has this period as low a mean wind-force as in 1883.

"2. In one of my former communications, I pointed out that the nine days from the 12th to the 20th June last, was a period of excessive relative humidity, with occasional stagnancy of the air, especially at night.* Now, M. Pirona has the monthly tables of daily registrations since 1876, and these show that the above period, as regards the combination of great moisture of the air and low wind-force, is unique in the meteorological history, not only of the month of June, but of the entire years since 1876. There are only about two periods of equal length in which the mean wind-force was so low—one in January 1877, and another in December 1878; but in these periods the mean relative humidity and temperature were also low. There are several periods of greater mean relative humidity, though one of the highest maximums recorded occurs in the June 1883 period; but all of these had a much higher mean wind-force.

"3. In a report which I wrote on the outbreak of cholera at Chatby, Alexandria, I said: 'Now, I believe that the stagnancy of the air over Chatby, owing much to its low and sheltered position, especially during the period from the 10th to the 15th October, forced the disease into existence; and that the influence of the motionless atmosphere was probably assisted by the rise of temperature and by the moisture of the ground following the rain on the 9th and 10th.'

"In connection with the time here referred to, M. Pirona's summaries show nothing particular for October 1883. The daily registrations, however, show that then (10th to 15th October) a fall in the force of the wind, and a change in direction from northerly to southerly took place. The only other October since 1876 in which a similar period occurred was that of 1877.

"In conclusion, I think it may be safely said, that M. Pirona's observations give weight to the opinion that this year meteorological conditions had a strong influence in the generation of the cholera-epidemic; for they show that the year 1883, particularly in the month of June, has differed even from its comparatively remote predecessors in the directions most favourable to disease."

The frequency with which atmospheric phenomena have been observed in connection with outbreaks of cholera leads to the conclusion that they stand in close relation one to the other. Whether that be as cause and effect, is perhaps hard to say. It is probable that it is to a combination of certain conditions of a cosmo-telluric character, of air, soil, and water (filth, as in Egypt, being a powerful factor), that the development of an epidemic is due. Given, as in Egypt, endemic centres, the peculiar atmospheric state noticed would probably act as an exciting cause in the immediate production of the epidemic outbreak.

THE BRAIN AND ITS INFLUENCE ON THE MENTAL FACULTIES.—A recent discussion on the weight of Turgenieff's brain has called attention to the subject of human brains, and a scientist, M. Nikiforoff has published in the *Novosti* an article, in which he states that the weight of the brain has no influence whatever on the mental faculties. The average weight of a man's brain is, according to Luschka, 1,424 grammes, of a woman's 1,272 grammes; Krause gives the averages as 1,570 and 1,350 respectively. The maximum weight is said to be 1,600 grammes, and the minimum 800 grammes. The brain of the celebrated mineralogist Hausmann weighed 1,206 grammes. It ought to be remembered that the significance of the weight of the brain should depend upon the proportion it bears to the dimensions of the whole body, and to the age of the individual. Byron died at the age of thirty-six, the great geometrician Gauss at seventy-eight years of age; the brains of the two should, therefore, not be compared. It is equally important to know what was the cause of death, for long disease or old age exhaust the brain. To define the real degree of development of the brain, it is, therefore, necessary to have a knowledge of the condition of the whole body, and as this is usually lacking, the mere record of weight possesses little significance.

MEDICAL MAGISTRATE.—Dr. J. Holmes Joy, of Tamworth, has been placed on the commission of the peace for Staffordshire. In June of last year, Dr. Joy was made a magistrate for the county of Warwick

NOTE ON SOME EXPERIMENTS WITH ERGOTINE.

By SYDNEY RINGER, M.D., F.R.C.P.,
Professor of Medicine in University College, London;
AND
HARRINGTON SAINSBURY, M.D., M.R.C.P.,
Assistant-Physician to the North-West London Hospital.

IT is needless to discuss the evidence of the clinical value of ergotine; its use as an ecbolic and as a hæmostatic is on most hands admitted. But the question in this, as in many other cases, is: How does the drug act? Do the contractions of the uterine fibres indicate a peripheral, *i.e.*, local, action; or do they represent a reflex act? Similarly—admitting that vascular spasm results from the action of ergot—is this spasm the result of direct action on the plain muscular fibres of the arterioles; or is it produced mediately through the nervous system?

As to the physiological data on the subject of the action of ergot Hermann (*Lehrbuch der Toxicologie*, 1874, pp. 384 *et seq.*) speaks very doubtfully. According to him, the action on the vessels is uncertain—*i.e.*, as to whether they do or do not contract. Similarly, as to the action on the heart, and the effect on blood-pressure, the results, according to Hermann, are both doubtful and contradictory. Wood, in his *Treatise on Therapeutics* (1881), discusses the subject at some length; and we must refer to this treatise for more detailed consideration of the question; suffice it here to say that the balance of evidence is in favour of the following two propositions:

1. Ergot causes spasm of the arterioles.
2. It produces very decided rise in blood-pressure.

As to the action on the heart, it appears that ergot, in full doses, causes unquestionably a fall in the frequency of the contractions. Eberty ascribes this to stimulation of the vagi; but on this point, as Hermann shows (*op. cit.*, p. 387), his statements are somewhat contradictory. Rossbach (quoted by Hermann) describes a curious inco-ordinate action of the heart, in particular of the ventricle. At times, this latter showed peristaltic waves proceeding from base to apex. These experiments were made on the frog with Wenzell's ecbolin. This description by Rossbach recalls the action of digitalis on the heart; but it is certain that a systolic heart, if it occur, is a rare event after the administration of ergot; whilst, on the other hand, diastolic arrest has been in many cases recorded. It appears, further, that a primary fall in the blood-pressure is in many cases witnessed after the direct introduction of ergot into a vein. This primary fall is explained by Wood as a result of a weakening of the cardiac muscle from the direct action of the drug upon it. Thus, then, ergot would resemble the digitalis-group in its action on blood-pressure and on the arterioles; but it would contrast with the digitalis-group in its action on the heart. We must, however, not forget that digitalis, the most characteristic member of the group named after it, does occasionally arrest the heart in diastole. Boehm has explained this exceptional result as due to reflex inhibition, having found that, after section of the vagi, diastolic arrest was never witnessed in frogs (Wood, p. 137). It is clear that the same explanation may be advanced in the case of ergot; and this is the explanation actually given by Eberty (Wood, p. 543), according to whom it is impossible to effect cardiac arrest by ergot after section of the vagi.

Leaving the question of the cardiac action of ergotine, let us return to a consideration of the action on the arterioles. In a recent series of experiments on the digitalis-group, the results of which have been given in a paper recently read before the Royal Medical and Chirurgical Society,[1] we endeavoured to establish for the members of this group a direct action on the arterial walls. Amongst others, we also made some experiments with ergotine, the results of which we will now shortly give.

The preparation used was ergotine (Bonjean's extract). Of this, we employed in our first experiment a 1 per cent. solution; in our subsequent ones, a 10 per cent.

Our method of experimentation was the same as that adopted for the members of the digitalis-group; it was as follows. The brain and spinal cord of a tortoise were destroyed, the shell of the animal then sawn transversely in half, and the soft parts divided. Into the abdominal aorta of the hinder half of the body a cannula was then tied. This cannula was fed by simple siphon-action, with saline solution, 0.6 per cent., made with tap-water. The course of the circulation was, accordingly, into the tissues through the abdominal aorta, and out by the cut veins. The escaping fluid drained from a glass plate into a suitable vessel and was accurately measured. The quantity of fluid which flowed through the vessels during each interval of five minutes was then recorded.

The head of pressure varied in the different experiments, but during each was maintained constant within about 0.5 centimètre, by constant additions to the supply-vessel, which was chosen of large capacity, so as to retard changes in level.

Experiment.—July 11. The temperature of room, 19.5° C. (67.1 Fahr.) Head of pressure, 31 centimètres.

	Outflow per 5 Minutes.
Saline solution[2] 0.6 per cent., supplied.	70 c.c.
	66 ,,
	64 ,,
	64 ,,
0.5 c.c. ergotine (1 per cent. solution of Bonjean's extract) to each 100 c.c. of saline.	64 ,,
	60 ,,
	62 ,,
	60 ,,
	68 ,,
	64 ,,
2 c.c. ergotine in 100 c.c. saline.	60 ,,
	64 ,,
	65 ,,
	65 ,,
	67 ,,

	Outflow per 5 Minutes.
8 c.c. ergotine in 100 c.c. saline.	63 c.c.
	61 ,,
	63 ,,
	60 ,,
	60 ,,
	56 ,,
	50 ,,
Digitaline 1 c.c. (1 per cent. solution) in 100 c.c. saline.	46 ,,
	24 ,,
	8 ,,
	3 ,,

In this experiment it may be observed that, till the strongest solution of poisoned saline (8 c.c. of ergotine solution in 100 c.c. saline) was employed, no diminution in the rate of flow was observed. Under this strongest solution a slight fall obtained, viz., from 67 c.c. to 50 c.c.

Our stock of ergotine being exhausted, we substituted a saline solution poisoned with digitaline (1 c.c. of 1 per cent. to 100 c.c. saline solution). The sudden fall in the rate of flow, from 50 c.c. to 3 c.c., contrasts well the powerful effect of digitaline in constricting the vessels, with the comparatively feeble action of ergotine in the strengths employed.

In our next experiment a much stronger solution of ergotine was used, viz., a 10 per cent. solution of Bonjean's extract.

September 7th. Temperature of room, 15° C. (59° Fahr.) Head of pressure, 31.5 centimètres.

	Rate of Flow per 5 Minutes.
Saline solution only.	40 c.c.
	30 ,,
	34 ,,
	35 ,,
	29 ,,

	Rate of Flow per 5 Minutes.
Ergotine 4 c.c. (10 per cent. solution) in 100 c.c. saline.	39 c.c.
	56 ,,
	50 ,,
	40 ,,
	40 ,,
	30 ,,
	24 ,,
	20 ,,
	16 ,,
	15 ,,
	13 ,,
	13 ,,

In this experiment, a very decided fall occurred during the circulation of the ergotised saline; but there are one or two points which require notice: the first is, that the immediate effect of the ergotised solution was to cause a rise in the rate of flow—from 29 c.c. to 56 c.c.—an increase of rate amounting to almost twice the rate at the moment of the addition of the ergot. The next point for notice is, that the solution of ergotine (Bonjean's) was strongly acid. Acid solutions have been shown by Dr. Gaskell (*Journal of Physiology*, vol. iii, No. 1, August 1880) to cause dilatation of the arterioles, and it is possible that the immediate increase in rate may be thus explained. It may be mentioned that, early during the first interval of five minutes following the substitution of the ergotised solution for the simple saline, very energetic movements of the leg-muscles occurred, but that these [illegible] afterwards, and that thereupon the legs became quite flaccid, and the pelvic muscles did not respond by contraction to a strong pinch. It appeared as though the ergotised solution had killed them.

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[1] November 27th, 1883, "Investigations into the Action of the Digitalis-Group." See *Lancet*, December 1st, 1883.

[2] We may remark that the saline solution employed throughout was made with tap-water and not distilled water.

Our next experiment was made with a 10 per cent. solution of ergotine (Bonjean's extract), which had been carefully neutralised with carbonate of soda.

September 10th. Temperature of room, 15.5° Cent. (59.9 Fahr.) Head of pressure, 31 centimètres.

	Rate of Flow per 5 minutes.
Saline solution 0.6 per cent.	18 c.c. 18 ,, 19 ,, 24 ,, 25 ,,
Ergotised saline (4 c.c. ergotine to 100 c.c. saline).	30 ,, 34 ,, 23 ,, 23 ,, 14 ,, 13 ,, 13 ,,
Saline solution replaced .	14 ,, 18 ,, 24 ,, 25 ,, 28 ,,
Ergotised solution replaced.	29 c.c. 19 ,, 13 ,, 13 ,, 11 ,,
Saline solution replaced .	10 ,, 15 ,, 19 ,, 22 ,, 25 ,,
Ergotised solution replaced.	20 ,, 13 ,, 12 ,,

This experiment confirms very definitely the previous two experiments. We here note that, on three separate occasions, the rate of flow falls subsequently to the addition of ergotine, to again rise on resubstitution of the ergotised solution by unpoisoned saline. The fall in each case is very decided, viz.: in the first case, from 25 c.c. to 13 c.c.; in the second, from 28 c.c. to 11 c.c.; in the third, from 25 c.c. to 12 c.c. The movements of the hind limbs of the tortoise[3] became more active almost immediately after the first addition of the ergotine, then declined, and were speedily lost; but, in spite of this, the persistence of vitality of the arterioles is proved by the dilatation which in each case followed replacement of the ergotised solution by saline solution. In this experiment, acidity as a disturbing cause was eliminated, yet the first addition of ergotine was followed by a primary rise in the rate of flow; this rise, however, was but slight, and was much more transitory than was observed in the preceding experiment.

These experiments do not admit of much criticism; and, in concluding this brief contribution towards the pharmacology of ergot, we would restate in a few words the argument, the steps in which are:

1. The selection of the tortoise as an animal, the vitality of whose tissues is remarkably persistent, and therefore well adapted for lengthened experimentation;
2. The establishment of an artificial circulation through vessels removed from central nervous control;
3. The alternate addition to and subtraction from the circulation of the drug under experiment, viz., ergotine.

In how far we are justified in our conclusion that ergotine does act directly on the vessels, or, more strictly stated, does act independently of the central nervous system, we must leave to be decided by means of the experiments themselves.

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[3] These movements persist in the tortoise long after the spinal cord has been destroyed, as completely as this is possible by means of a wire.

THE LONDON FEVER HOSPITAL.—A private inspection of a new pavilion, containing two small wards and isolated rooms, in connection with the above institution, recently took place, when a large number of medical men were present. The hospital, although essentially a charitable institution, is limited to the reception of those classes who are able to make some contribution towards the heavy expenses incurred in their treatment. In consequence of the increase in the number of infectious diseases now admitted, the committee have found it necessary to extend the building. The new blocks stands upon an open-arched half-sunk basement story, six feet high, thus ensuring a constant movement of air beneath, which provides a ventilation which is sweet and fresh. Adjoining the two wards, which contains five beds, are a nurse's room, kitchen, and bath rooms. The material selected for facing the walls is glazed brick, which is capable of being frequently cleansed and disinfected. The floors are fire-proof, whilst more than ordinary attention has been paid to the arrangements of the windows, which not only present a cheerful aspect to the patients, but afford plenty of air without draught. At the conclusion of the inspection, general satisfaction was expressed with the care which had been taken to provide for the comfort of the patients.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

PROCEEDINGS OF SECTIONS.

AMPUTATION BY OBLIQUE CIRCULAR INCISION.

Read in the Section of Surgery.

By JAMES HARDIE, M.D.Ed., F.R.C.S.Eng.,
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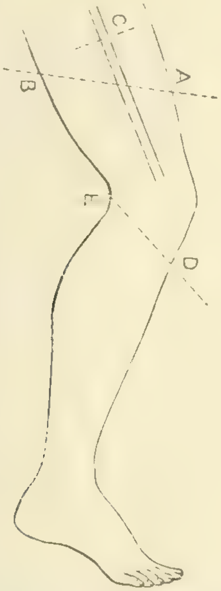
THE object I have in view in this short communication is to bring under your notice a method of amputating, by which the operation may be rendered as simple and expeditious as appears possible, and the correct principles of guidance be, at the same time, fully observed.

I will take it for granted that these principles include the following. 1. Due regard to the preservation of the length of the limb. 2. Ample cutaneous covering of the bone. 3. The location of the cicatrix out of the line of pressure. 4. Due regard to the nutritive supply of the stump, and the proper coaptation of the cut surfaces.

These conditions are, to some extent, antagonistic. For example: length of limb would be best secured by two equal sized flaps of skin only. But this would place the cicatrix directly under the end of the bone. Again, the nutrition of the stump would be best secured by including a large proportion of muscle, as in the ordinary flap-operation. But this would entail a higher division of the bone than skin-flaps, and difficulty would be experienced in accommodating the fleshy mass. To give all considerations their due weight, it would appear that a long flap of skin, with a quantity of muscle sloping from its base to a little distance from its free border, on one aspect, and a short flap of skin only, on the opposite aspect, would be the best method which could be devised. For obvious reasons, the long flap would generally be on the anterior aspect, and the short on the posterior. This is, practically, the operation Mr. Lister recommended, in his essay in Holmes's *Surgery*, for the thigh and leg. It is, of course, in these situations that full attention to the method of operating is chiefly demanded; and, though the principles are applicable to the upper extremity also, my present remarks have reference especially to the lower.

While fully agreeing, then, with Mr. Lister in the soundness of the principles which he advocates, I have yet constantly found, both in my own practice and that of others, that a certain degree of inconvenience is attached to this method of operating. In forming the posterior flap, the limb must be elevated considerably, and the surgeon has to work somewhat awkwardly underneath it. In addition to this, considerable care has to be taken that the flaps bear a certain proportion to each other, in order that they may come together accurately. A certain amount of difficulty thus attends the operation, and it takes a somewhat longer time than one likes. Possibly, in consequence of these disadvantages, it does not appear to find that amount of favour which it otherwise merits; and certainly, judging from the number of stumps, both of the thigh and leg, which one meets with, showing a total disregard for the position of the cicatrix, and therefore for the future comfort of the patient, one would imagine that a ready method, by which this most important detail may be secured, is still a desideratum.

These considerations have led me to introduce into my own practice a different method of carrying out the objects which I have indicated. Bearing in mind the favour which the circular operation generally receives at the hands of operators, on account of the ease and rapidity with which it may be executed, it appeared to me that it might be so modified as to attain these objects in a very complete manner. I have, therefore, been accustomed to hold the knife obliquely to the axis of the limb, in making the sweep around it, instead of transversely, as in the ordinary operation. To take the middle of the thigh as an example, I place the heel of the knife at A, draw it round the limb obliquely, upwards and backwards, at an angle of about 55° to its axis, to B, where the direction changes, as it passes round the posterior aspect, to a direction obliquely downwards and forwards back again to A. Both at A and B, the line of incision is slightly rounded, so that A is convex and B concave. This incision goes at once down to the muscular aponeurosis; although it is convenient, for the subsequent insertion of the stitches, to have the skin free from fat midway between the upper and lower limits of the incision, on both the outer and inner side of the limb, as the flap has here to be folded on itself. The skin and its attached fat is next dissected back for a couple of inches at A, and taken in hand by an assistant, who pulls it upwards, so as to enable the surgeon similarly to separate it to a less extent all round the limb. This being done, the knife is then sunk obliquely into the anterior muscular mass, as was done by Alanson, until it reaches the bone; and the whole being well retracted, the remaining mass of muscles is totally divided in the ordinary manner by two principal strokes of the knife, the direction of which is still slightly oblique towards B. The bone being cleared, it is sawn at C, which is about an inch or an inch and a half above B.



As a result of this method of operating, the anterior portion of the soft parts falls well over the face of the stump and end of the bone, the convex anterior flap fitting nicely into the concave posterior, and, when healing is completed, the scar is entirely behind the bone, and in no danger of pressure. All the advantages of the method by long anterior and short posterior flaps are also preserved, and I believe it will be found that greater facility and expedition in operating are secured.

[A patient was exhibited in whom the operation was performed at the junction of the middle and lower thirds two years previously, and who was able to walk perfectly with the weight of his body resting principally on the end of the femur.]

Amputation through the knee-joint, with preservation of the patella by this method, I find to be a most excellent operation; excellent in the ease with which it is performed, and in the stump which results. In this situation, owing to the distance to which the integuments of the ham retract after their division, it is advisable to draw the incision less obliquely than in the thigh, and my rule is to begin an inch and a half below the tubercle of the tibia, and to draw the knife round to a point about an inch below the cutaneous fold of the ham, D E. The skin and subcutaneous cellular tissue having been dissected up until the lower border of the patella is visible, an operation which is facilitated by flexing the knee, the ligamentum patellæ is divided, and the head of the tibia, with the semilunar cartilages, then separated by division of the other ligamentous structures. The assistant having then carefully drawn the posterior border of the incision out of harm's way, the whole of the structures behind the joint are next divided by a single stroke of the knife, from the surface inwards. With the exception of Syme's ankle-joint amputation, I know of no operation which gives a better stump than this amputation through the knee; and I may remark, parenthetically, that I believe we should consult the prospects of recovery, and the future comfort of our patients, were we oftener to select amputation in this situation rather than in the upper third of the leg. [Two patients were exhibited showing this amputation.]

In the leg, the incision may be drawn from before backwards and upwards, as in the thigh, special care being taken to slope the knife well upwards when dividing the sural muscles. Occasionally, on account of the tendency which the skin covering the inner surface of the tibia has to slough, I have taken the covering from the outside, retaining as much as possible of the muscular tissue attached to the fibula, and dividing the bones almost at the level of the incision on the inner aspect. The former method gives the better stump should no accident befal it, but the liability to sloughing is undoubted.

Although it is to amputation in the lower limb that I look upon this operation as specially applicable, yet I have also had recourse to it in the upper. Here, probably, the covering is best taken from the posterior aspect; and, in one case of amputation through the elbow-joint, I obtained an exceptionally good result in this manner.

I have practised this operation now for over ten years, under the name of "oblique circular" amputation, as a term best describing its main feature. I am bound to confess, however, what I have not long since discovered, that an operation in all essentials the same has for long been described by French writers, as invented by Soupart of Liège. Though I cannot, therefore, introduce it to you as a new operation, yet I can cordially recommend it as an old one. I should have been glad, had I been able, to bring before you a greater number of persons on whom I have practised it; but, although I have only succeeded in tracing three whom I could bring to this meeting, I can frankly state that their stumps are not better than those which may generally be obtained.

ON INTERMITTENT FEVER AMONG CHILDREN IN LOW-LYING DISTRICTS: ITS FREQUENCY, AND THE IMPORTANCE OF RECOGNISING IT, OWING TO ITS CURABILITY.

Read in the Section of Diseases of Children.

By W. R. THOMAS, M.D., M.R.C.P.,
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During the last few years I have been rather astonished at the frequency with which I have met with cases, more especially in hospital-practice, among children presenting symptoms of which the following is a somewhat general description, and at the magic effect of quinine when prescribed in such cases.

The child for a few days appears to be cross and irritable, disinclined for fun or amusement, and seems to be languid and excessively weak; the appetite is poor, and whenever moved the child cries, as if any movement gave rise to pain. After a time the patient seems to be cold; the face looks pale and pinched; the hands are shrunken and pale; the skin generally is dry and rough; the appetite is poor; the respiration is frequent, and the pulse is frequent and small.

After a time, which is extremely irregular, ranging from half an hour to two or three hours, the skin begins to be hot and dry, the pulse, which before was frequent and small, becomes now full and yet frequent; the respirations become more frequent; there is want of appetite, great thirst, costive bowels, the urine is scanty and high, and occasionally there is slight delirium. This stage continues for from two to six hours.

Then comes the sweating stage; the whole skin becomes bathed in perspiration, and all the symptoms abate; respiration becomes more natural; the pulse full, and less frequent; the appetite improves; the thirst goes; and a deep sleep comes on, from which the patient awakens apparently refreshed, but very languid.

Such is a description of these cases when seen by the medical man daily; but generally speaking, in the out-patients' department in hospital-practice, it is difficult or impossible to obtain a concise account of the case from the parent. This is the sort of case we are apt to see. A patient, aged eighteen months, is said by the parent to have been becoming weaker day by day for the last two months. The lips and face are pale; the pulse frequent and weak; the appetite is poor; thirst is great; bowels costive; urine high; there is no lung or heart mischief; no abdominal signs of importance.

In such a case it is often difficult to make a proper diagnosis, and when we see a patient daily becoming weaker, and more especially if we get a history of the heats and sweats, we are apt to look out for tuberculosis. I have many times been quite at a loss when trying to ascertain the cause. I have looked out for phthisis, pulmonary, or abdominal; and, thinking that the profuse perspirations in the head and all over, the throwing off of the bed-clothes, the constant crying, as I presumed, from aches and pains, might be symptomatic of rickets, I have looked out for other corroborative symptoms, but have failed to meet with them.

Whenever I meet with cases presenting such symptoms now, I always make particular inquiries as to where the patient is living, and almost invariably find that the house is in a low-lying region of the town, that it has been, in fact, exposed to malaria, but not in the concentrated form which produces ague.

Now, we are not positive as to what malaria is. We do know that heat is required for its development, together with moisture and decaying vegetable matter; and we are apt to consider those patients who have lived in India for a prolonged period, or who have lived in very marshy districts, as being almost the only patients liable to suffer from ague, because ague in its severe form is only met with generally in such patients. I believe that we frequently have cases of this disease to treat which we never recognise at all; patients who suffer from slight chills, heats, and sweats, and who grow thinner, weaker, and paler every day; patients who are supposed to suffer from other complaints, and who perhaps do, but who mainly suffer from mild intermittent fever with its consequences. The malaria to which they have been exposed has been but mild, and the attack of fever is consequently mild. These cases are also most frequently met with in those parts where great alterations are being made, where the soil is turned up in large quantities, and exposed to the air. Many of our best authorities point out the fact that attacks of ague are frequently met with in places where excavations for building or other purposes have been made; and I feel satisfied that I have seen scores of cases of mild intermittent fever in patients who have been exposed to malaria from excavations, and in those who live in houses but recently built. The spleen in these cases is generally more or less enlarged, oftentimes enormously increased in size.

I saw a case a short time ago, in consultation with a medical friend of mine, which drew my attention more particularly to the fact of the frequency of this disease, owing to the weak state to which the patient was reduced, and the difficulty we found in forming a proper diagnosis.

This little boy had been ailing for about two months. He seemed to become paler, thinner, weaker, less inclined for exertion or amusement, every day, and yet nothing tangible could be found to account for all this. The medical man had looked carefully for phthisis, pulmonary or abdominal, for rickets, and other diseases, and could not find anything to account for the gradually increasing weakness. The mother and the child now went away to visit some friends, thinking that the change would do the patient good. In a few days after its arrival, the child was taken suddenly ill, and was in danger, suffering from bronchitis, under the care of the medical man for about three weeks. Towards the end of this time this medical gentleman found that the spleen was enormously enlarged. After a stay of one month, the mother and child returned home. The family medical attendant was now sent for, and was surprised to find the spleen enormously enlarged, extending down as far as the crest of the ilium. When I saw this child I found the spleen enlarged as above stated, firm to the feel, and tense; the edge could be distinctly felt and grasped. The patient was very anæmic, thin, and flabby; quite unable to stand. Loud anæmic murmurs could be heard, but there was not any valvular disease of the heart; no lung-mischief; no tabes mesenterica; no rickets. The medical man said that cases of ague were rarely seen in the neighbourhood, and he was inclined to think that the enlargement was due to some other cause; but, as the town was almost on a level with the river, as certain fields around and in the town were occasionally submerged in winter, as the small country town visited by the mother and child was also built on land on the same level almost as the river, and as upon inquiry we found a distinct history of pallor, followed by heat and perspiration, daily, we decided to give small doses of quinine with the tincture of iron, to be gradually increased if found suitable. The child rapidly improved under that treatment, and is now fat, lively, and eats well.

In all these cases, as might have been expected, I have found quinine act like a charm. Children, and grown-up persons, too, who had been ailing for weeks, and in some cases months, have, under its influence, rapidly improved, when other remedies did not seem to have the slightest effect.

As these patients invariably are extremely susceptible to the malaria, I have always recommended removal to higher and healthier parts.

In bringing this subject before the members of this Section, I have had two objects in view: first, to lay stress on the fact that, during the last three years since I have been in the habit of looking for such cases, I have found them, and frequently successfully treated them; secondly, to point out that cases which would otherwise appear very serious, and which would no doubt become serious in due course, if the proper remedy were not prescribed, or removal recommended, become easy of cure, as soon as the cause has been ascertained.

THE PROGNOSIS OF CHRONIC NON-SUPPURATIVE INFLAMMATION OF THE MIDDLE EAR.

Read in the Section of Otology.

By P. McBRIDE, M.D., F.R.S.E.,
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WHILE this paper, from the nature of the subject, can contain little that is novel to the experienced otologist, it may yet serve a good purpose by eliciting in discussion the views held by British aurists upon a question of immense importance. Before attempting to form a prognosis in any given case, it is absolutely essential to have in the mind's eye a clear view of the pathological conditions which may be present in chronic non-suppurative inflammation of the middle ear. Let us then glance at the possible factors of deafness (accompanied or not by tinnitus or vertigo). I think that most of those present will agree with me when I say that in every case of the disease under consideration, one or more of the following conditions are present. 1. Obstruction of the Eustachian tube; 2. Swelling of the tympanic mucous membrane, due to infiltration of lymphoid cells; 3. Accompanying the last-named condition there must, of necessity, be present more or less free exudation. As a result of disease or abuse of treatment, the tympanic membrane may have become flaccid, so that from loss of tension it is unable to fulfil its function. These factors of deafness are all susceptible of treatment. We must now, however, turn to the consideration of two other pathological conditions which are by no means so amenable to remedies, namely: 4. Thickening of the parts within the tympanum, and the formations of adhesions where their existence is detrimental to hearing; 5. Secondary disease of the labyrinth.

Starting from these premisses, let us glance separately at the various data which influence our prognosis. In calling attention to the different points, it must be understood that it is not alleged that a definite conclusion can be arrived at without welding together the information gleaned from various methods of examination. At the same time it is necessary, in a paper like this, to consider the results of each method separately. Having given this explanation, to guard against misapprehension, I shall proceed on the lines I have sketched.

Hereditary tendency to chronic non-suppurative tympanic disease, a syphilitic or an arthritic taint, are all of more or less unfavourable significance. Hereditary deafness is often of that form known as proliferous catarrh, and the same may be said of that produced by syphilis. A gouty or rheumatic tendency I have often found to exist in those who are afflicted with symptoms pointing to a like pathological condition of the tympanum. In the latter case it is probable, judging by analogy, that the joints of the ossicles are the parts most affected.

Tinnitus, slight at first, but gradually increasing in amount and duration, until it is well-nigh constantly a source of extreme annoyance, and paracusis Willisii (hearing better in a noise), are most unpromising symptoms. Both point to the presence of what Roosa has termed proliferous inflammation, a term which embraces many various pathological conditions, all of which are, however, characterised by the presence of adventitious fibrous tissue or even bone, the result of chronic inflammatory changes. The latter symptom we are, in all probability, justified in ascribing to impaction or ankylosis of the stapes.

After obtaining the history of a case, it is my custom to apply the tuning-fork test. Even if the result point to affection of the sound-perceiving apparatus, I do not consider myself justified in abandoning the case on this account alone, if a subsequent examination reveal chronic middle ear-disease. In the first place, it is probable that a change of tension in the labyrinthine fluid, resulting from physical and remediable changes in the middle ear, may cause a temporary loss of function in the auditory nerve. Again, if, in a case of chronic otitis media, we have pathological changes in the internal ear dependent upon tympanic disease, and, provided deafness be not absolute, it follows that treatment directed to the latter may prevent aggravation of the former, and, by improving the sound-conducting apparatus, enable sonorous vibrations more easily to reach the defective, but not impotent, auditory nerve.

Our next step is ocular inspection of the drum-membrane. It is only in rare cases that changes in the substance of the membrane, sufficient to account for marked impairment in hearing, are met with. Sometimes, it is true, we can see it to be so thickened and altered that good hearing-power is out of the question. Again, it may be atrophied and flaccid, moving with every respiration, or perfectly transparent. Patches of opacity may exist as the remnants of an acute process in years gone by, which has left perfect hearing-power. The irregularity of the malleus, described by von Troeltsch as common in dry catarrh, is by no means always absent in health. The bright spot may be altered in a variety of ways without causing any symptoms, and I believe that its significance is much overrated. There is, however, an appearance which is often met with, and which, I do not doubt, is familiar to all present, although I have not seen it exactly described in works on otology. I allude to a streaky—one might almost say stringy—opacity in a membrane little altered in transparency except where these opaque fibrous-looking lines occur. This condition is common in those insidious cases in which the hearing goes from bad to worse, or at best remains bad.

What, then, are we to consider as distinguishable conditions of the membrane which render the prognosis favourable? So far as my little experience goes, I should say that in cases in which the drumhead is distinctly indrawn, but not fixed in this position by adhesions, we may have fair hopes of effecting improvement, although, of course, a positive prognosis can only be given after using further methods of examination. Again, the appearance of fluid behind the drum-membrane renders the prognosis very hopeful; for exudation can be removed, and its very presence shows that the mucous membrane lining the cavity has not altogether passed from the stage of cellular infiltration to interstitial thickening.

To sum up; the knowledge we gain by inspection of the drum-membrane is in a large proportion of cases only to be utilised in conjunction with other methods of examination. Thus, if it be opaque in certain parts from interstitial thickening, and if there be deafness, we assume that the opacity is a visible sign of thickening in other parts essential for the act of hearing; while, if it be opaque without the presence of deafness, we make no such assumption.

Turning next to the examination of the naso-pharynx, I need hardly allude to adenoid vegetations and nasal polypi, both of which conditions are often causes of curable deafness. Chronic naso-pharyngeal inflammation, however, requires some further remarks. It is universally admitted that, in a large proportion of cases, tympanic disease is the result of extension of a catarrhal process along the Eustachian tubes. In such cases we may, I believe—other things being equal—consider that the condition of the pharyngeal mucous membrane may be taken as approximately representing that of the tympanum. If, then, that be a pharyngitis characterised by unorganised moist swelling and excessive secretion, we may, *a priori*, assume a corresponding condition of the middle ear as part factor of deafness; while, if we find an inflammation of the naso-pharynx which has gone on to the deposit of fibrous tissue, then we are justified in suspecting the existence of thickening or adhesions within the tympanic cavity. The absence of all sign of pharyngeal mischief in a case of chronic non-suppurative middle ear-disease is also an unfavourable prognostic sign.

I shall next call your attention to what I believe to be the most important aid, alike to diagnosis, prognosis, and treatment. I allude, of course, to the air-douche. Auscultation during this process will enable us to decide whether the air passes through a wide or narrow tube, and also whether the latter contains any free exudation. The absence of secretion, as denoted by a dry sound, naturally leads one to fear that the pathological condition has passed from the stage of swelling and excessive secretion to that characterised by the deposit of fibrous tissue. Inspection of the membrane while compressed air is driven through the Eustachian tubes may also furnish valuable information as to the presence of adhesions. The same knowledge may, of course, also be gained by using the pneumatic speculum.

It is of great importance to note accurately the effect of the air-douche upon the hearing-power of the patient. The factors of deafness which are liable to be influenced by its agency are:

1. Obstruction of the Eustachian tube; so much of the deafness as is due to this cause alone being at once completely, though temporarily, banished.

2. Excessive secretion, causing the presence of exudation within the tympanum. The action of the air-douche will probably scatter the secretion, thus relieving the clogging of the ossicles and membrane. We must remember, however, that this process of excessive secretion must necessarily—except, perhaps, in cases of hydrops *ex vacuo*—be associated with swelling of the mucous membrane, due to hyperæmia and infiltration of lymphoid cells—a condition amenable to treatment.

3. Adhesions delicate enough to be influenced by the current of air, and so situated as to be stretched or ruptured by its action.

4. Perhaps I should here mention another possible factor of deafness, which is only, however, a secondary result of disease or abuse of treatment, namely, a flaccid condition of the drum-membrane. In such cases, temporary improvement—which may sometimes, by suitable treatment, be maintained—is produced by the use of the air-bag.

If inflation of the middle ear produce improvement, however temporary, we are entitled to hold out hope to our patient, because we have a curable lesion to deal with—always remembering that the prospect of benefit is directly proportionate to the duration of such temporary improvement. If, on the other hand, there be, after several injections of air, no change, then we must suspect the existence of an incurable factor of deafness, viz., the presence of adhesions or thickening in situations where they cannot be acted on by the therapeutic means at present recognised as safe and efficient. In arriving at this conclusion, however, we must take into consideration the various other points to which I have alluded, more especially the condition of the naso-pharyngeal mucous membrane, and the phenomena yielded by the Eustachian catheter and auscultating tube. In calling this factor of deafness incurable, I am aware that the way to criticism is opened, for cases of interstitial thickening are just those for which fluid-injections *per tubam* are advocated. While not prepared to deny altogether the efficacy of this plan of treatment, I cannot help thinking that it has been much overrated. How we can hope to cause disappearance of organised tissue by such highly diluted solutions as alone it is safe to inject into the middle ear, I fail to understand. A solution of iodide of potassium, of the strength of ten grains to the ounce, would not be expected, even by the most sanguine believer in its deobstruent action, to cause the disappearance of an urethral stricture. Why, then, should it remove a similar pathological condition from the tympanum? If those who obtain good results from tympanic injections would record a few cases in which repeated injections of air altogether failed to relieve deafness, but in which tympanic injections succeeded, then I think there would be fewer sceptics as to their therapeutic value, while their *modus operandi* would still remain a mystery.

In this paper, inspissated mucus has not been mentioned as a factor of deafness in chronic non-suppurative inflammation of the middle ear, because most of the recorded cases seem to me to have been more or less subacute. It is difficult to conceive, in the first place, why this tendency to drying up should exist in a part whose air-supply must first pass through a portion of the respiratory tract; and, in the second place, how inspissated mucus can tend to remain long in a cavity where all the physical conditions seem in favour of absorption.

I have endeavoured to allude shortly to the various points to be considered in forming a prognosis. It will, however, be understood that the various factors of deafness which have been discussed are often associated, and the different points of value in prognosis can only be utilised in combination.

CASE OF ACUTE BILIARY CIRRHOSIS.

CLINICALLY SIMULATING ACUTE YELLOW ATROPHY OF LIVER: FATAL IN TWENTY-FOUR DAYS.

Read in the Section of Pathology.

BY R. SHINGLETON SMITH, M.D.Lond., B.Sc., M.R.C.P.,
Physician to the Bristol Royal Infirmary.

JAMES P., aged 33, shoemaker, living in Clifton, married, having two children, was admitted to the Bristol Royal Infirmary on March 20th, 1883, with jaundice.

He stated that he had been quite well up to thirteen days previously. He was attacked in the night with diarrhœa, which was followed by pain across the epigastric, and right and left hypochondriac regions. The pain was severe, but it did not give rise to vomiting. He was not able to go to work on the day after, as the pain still continued; but two days afterwards the pain abated.

although he still felt some uneasiness in the region of the liver. The next day, he became jaundiced; he then remained in bed, and obtained medical advice. He admitted that he had been a hard drinker; but there was no definite history of syphilis.

For two weeks before admission, the patient thought he had a cold, and expectorated some phlegm, occasionally streaked with blood. There had also been some diarrhœa, and a difficulty in taking food, because of a constant feeling of sickness.

On admission, March 20th, the patient was seen to be very deeply jaundiced everywhere, and he complained of weakness. The heart-sounds were good; pulse 80, small. The lung-sounds were normal. There was no increase of splenic dulness. The liver-dulness was slightly increased; there was marked tenderness over the region of the liver, but not much complaint of pain otherwise. The gall-bladder could not be felt through the abdominal wall, but there appeared to be an increase of dulness under the right rectus muscle, as if from distension of the gall-bladder. The urine was of specific gravity 1030, acid, no albumen; bile was abundant. The patient's temperature was normal. The tongue moist, slightly coated.

March 26th. The skin was rather less yellow. There was no complaint of pain, but there had been slight epistaxis three times.

March 27th. There was more epistaxis, about eighteen ounces; and the anterior nares were plugged. The fæcal evacuation was darker, possibly from intermixture with swallowed blood. Pulse 100, small and weak. The tongue was notched and coated. The liver-dulness was normal.

March 28th. He had more epistaxis, to about twenty ounces, which was only stopped by plugging. He was delirious all the night, jumping out of bed, and making a noise. A hypodermic injection of a fourth of a grain of morphia was given at 4 A.M. At noon he was found to be comatose, with pupils contracted. Pulse 88, regular, compressible, but moderately full; respiration slow, deep, and laboured. The temperature was normal; the tongue dry. There was slight œdema of the legs. There was no marked blanching of the lips, nor any other result of hæmorrhage. The urine was drawn off with the catheter.

March 29th. The patient had slept almost continuously, but could be roused, and would sometimes speak. Pulse 96; respiration 12. The pupils were of medium size, equal. The urine was drawn off; it was of specific gravity 1013, acid, and contained no albumen, but much bile. There had been no more epistaxis. A soft systolic murmur was heard, of greatest intensity at the third left cartilage, and conducted along the vessels, inaudible at the apex. The œdema of the legs was increasing. There were no petechial spots. The patient took milk and soda-water abundantly; he had also six ounces of brandy.

March 31st. A colocynth enema brought away a light coloured stool. Pulse 92; respiration 20. The patient was more comatose, and could not be roused. The pupils were dilated, but sensitive. The liver-dulness was less than before; three inches vertically in nipple-line. The œdema of the legs was increasing. The murmur at the base was as before. Death took place on the same day.

At the necropsy it was found that the liver weighed forty-nine ounces. The gall-bladder contained a thin yellow fluid, but it was not distended; there were no calculi within it. A catheter was passed along the duct into the duodenum, but no obstruction or stricture could be found. The substance of the liver was hard and tough; it was of a dark yellow copper-colour, mottled with lighter parts between; there was no roughness of surface, and no abnormal flattening of the organ. In section, all the lobules were distinctly visible, the individual lobules being isolated from each other by a grey intervening substance; the lobules were of a dark yellow colour, affording a marked contrast to the grey substance between. There was no dilatation of the larger bile-ducts within the liver, and no bile-staining of the sections of the ducts in the portal canals. The stomach contained some altered blood. The duodenum presented no appearance of inflammation or ulceration. The urine drawn from the bladder contained much epithelium of various kinds, spermatozoa, mucus-corpuscles, etc., but on evaporation it did not yield crystals of either leucine or tyrosine. Uric acid and cubes of chloride of sodium were seen, but no globes or needles. No renal casts or renal cells were observed.

On microscopic examination, the individual lobules of the liver were found to be separated by a connective-tissue growth giving the sections the well known appearance of the normal liver of the pig: and were of a bright yellow colour, the intervening substance colourless. They had not diminished in size; the cells were quite distinct and well defined. No distinct crystals of hæmatoidin or of tyrosine could be discovered in any of the sections. On staining with gentian-violet, the fibrous new growth became deeply stained, numerous small nuclei now becoming visible, and the nuclei of the cells in the lobules could be seen through the surrounding pigment and fatty granules. Minute dark-coloured spots like micrococci were visible, but could not be distinguished from the multitudinous pigment-granules of the liver cells. The sections of the liver showed numerous branches of the hepatic ducts running through the new tissue between the lobules; in some parts they were so numerous as to form quite a plexus of tubes, all containing a cubical-celled epithelium with large nuclei.

REMARKS.—This case, from the clinical aspect, presented considerable difficulty as regards diagnosis. It was at first thought the cause of the jaundice must be catarrhal obstruction; and this view was borne out by the completeness or intensity of the jaundice, by the presence of diarrhœa, the suddenness of the attack, and the presence of some little pain. The pain was not of sufficient intensity to justify the diagnosis of gall-stone impacted in the duct, and there was no decided evidence of distension of the gall-bladder. The disease was too acute in character for chronic atrophy; the jaundice was much deeper than is usually found in the ordinary forms of cirrhosis; and this hypothesis appeared to be untenable, in consequence of the absence of ascites and of enlargement of the abdominal veins. The symptoms were more in accord with the clinical features of acute yellow atrophy than with any other recognised pathological condition; the early occurrence of head-symptoms, the profuse epistaxis, and speedy death from gradually increasing coma, were, at least, suggestive of acute yellow atrophy; but, on the other hand the liver dulness was not less than normal, and was not observed to diminish from day to day, there were no petechial spots or bruises; no leucine or tyrosine could be obtained from the urine, and the jaundice was deeper than is commonly observed.

It was only at the *post mortem* examination that a definite opinion as to the pathology of the case could be given; and even then, although it was at once evident that a condition of cirrhosis was present, the appearances differed markedly from those commonly observed in the usual forms of chronic interstitial inflammation of the liver.

Cases of jaundice appear to be not uncommon, which cannot be classified under the ordinary typical forms of liver-disease, and these "residual phenomena" are variously explained and described by different observers. These are the cases described by Goodeve (Reynolds's *System of Medicine*) as "malignant jaundice." Thierfelder (Ziemssen's *Cyclopædia*) describes them as rarer forms of interstitial inflammation, and alludes to three varieties, the unilobular, or insular, cirrhosis, as distinguished from the multilobular, or ordinary, cirrhosis; interstitial hepatitis arising from affections of the gall-ducts; and the hypertrophic cirrhosis of Olivier, Hayem, and others.

This last class is the one which most nearly adapts itself to the clinical and pathological condition of the case now reported. The characteristic feature of this class is that the diminution in volume of the organ, resulting from the shrivelling of the newly formed connective tissue, such as characterises the later stage of ordinary cirrhosis, does not supervene. Decided icterus makes its appearance early, and persists, with fluctuations, during the entire course. No obstruction of secretion or inflammation can be demonstrated in the larger bile-ducts, but the interlobular canals become dilated and ramify into finer ducts, forming, immediately in front of the margin of the lobule, a network, from which still finer branches proceed, to disappear between the hepatic cells. All these canals are lined with cubical epithelium, and, in the ultimate divisions, the calibre often appears to be plugged with this epithelium. These tubes appear to be none other than the network of bile-capillaries, which, in some unexplained way, have acquired an epithelial lining.

The first symptoms are usually those of derangement of the digestive function; pain, icterus, and hepatic swelling follow. Progressive emaciation, cachexia, hæmorrhages, and death after severe cerebral symptoms, occur. Ascites is not usually present; it may be absent even in patients already very far reduced; more frequently it appears as a concomitant of general dropsy, induced by cachexia. There is usually enlargement of the spleen. The duration of the disease seldom amounts to less than a year; generally two years and over; in individual cases, it is stated to be five and seven years.

The case differs from the above description in some important respects; its acute onset, the absence of decided enlargement of the liver or of the spleen, and its speedily fatal termination; but *post mortem* examination disclosed the existence of a chronic interstitial hepatitis, in spite of the absence of symptoms till twenty-four days before death, and also proved that the conditions present in acute yellow atrophy and various other well known pathological conditions were absent. The acuteness of the attack, and the speedy death of the patient, therefore stamp the case as one of cirrhosis of an almost unique character, and suggests a caution as regards the prognosis in other cases of apparent catarrhal jaundice.

Dr. Saundby (*Pathological Transactions*, vol. xxx, 1879) has endeavoured to show that the new formation of canaliculi is by no means essential or pathognomonic of the cases in which the three clinical features—*a*, jaundice; *b*, enlargement of liver; and *c*, absence of ascites—are associated. He shows that there may be very little alteration of ducts in cases of this type; and that, on the other hand, in cases of undoubted alcoholic cirrhosis, there may be a multiplication of biliary canaliculi; as also in the cirrhotic livers of tubercular patients, and in some forms of atrophic nutmeg-liver.

On the other hand, Bamberger reports a case of biliary cirrhosis of the liver, as follows (*Allgemeine Wiener Med. Zeit.*, No. 49, 1882). The patient had jaundice two years, with general wasting, but no pain. The urine was deeply coloured; the stools were always light, and at times colourless. Distinct enlargement of the liver could be felt; and, at one point, distinct puckering of the right lobe. The spleen was also enlarged. There was no ascites whatever. The occasional appearance of bile in the motions proved that the obstruction was not complete. In regard to the diagnosis of this case, he considers that a form of cirrhosis exists which is unaccompanied by ascites, viz., biliary cirrhosis—a form which has its origin in the biliary passages alone. It may be induced by catarrh, followed by concretions, but consists essentially of an overgrowth of connective tissue about the ducts. Hence the important and indicative symptom is the jaundice, ascites being only a secondary phenomenon. (*London Med. Record*, June 15th, 1883.)

The case I have described quite supports the view adopted by Thierfelder, Bamberger, and others, that a form of cirrhosis exists in which atrophy of liver-tissue is not present; jaundice occurs early and is very intense, as if from complete obstruction of the main duct; and ascites does not occur. The most prominent pathological condition is the presence of a great development of new bile-ducts along the interlobular passages, around which there is an overgrowth of connective tissue, resulting in a general unilobular cirrhosis. The term "biliary cirrhosis" indicates the distinguishing feature, and points to the bile-ducts as the starting-point of the lesion; this term may well be retained to distinguish the disease from the ordinary multilobular cirrhosis, in which the growth of connective tissue may be much greater, but the development of new bile-ducts is not a striking feature.

CLINICAL MEMORANDA.

PICRIC ACID AS A TEST FOR ALBUMEN.

IN the JOURNAL of January 5th (p. 10) there appeared a brief abstract from the *Maryland Medical Journal*, to the effect that Drs. Cook and Watkins had found that the urine of patients taking cinchonidia "gives the same reaction, with picric acid, as if they had albuminuria." If this is really the conclusion at which these observers have arrived, they must be unaware of the facts mentioned in my lecture, published in the JOURNAL, December 8th, 1883 (p. 1106), that "most of the vegetable alkaloids, such as morphia, atropine, etc., are precipitated by picric acid, and by the potassio-mercuric iodide; but quinine is the only one which is likely to be taken in sufficient quantity to render the urine opalescent with either of these tests, and then the complete clearance by heat at once distinguishes it from an albuminous precipitate." One of my pupils, a healthy young man, volunteered to swallow ten grains of sulphate of cinchonidia in water. The urine passed two hours afterwards was rendered opaque and milky by picric acid, but the transparency was completely restored by boiling, which is the exact converse of what happens when albuminous urine, which has been rendered opaque by picric acid, is exposed to heat. I repeat here a statement which I made in the lecture before referred to: "There is no known substance occurring in either normal or abnormal urine, except albumen, which gives a precipitate with picric acid insoluble by the subsequent application of heat."

The statement of the American observers that "the urine of patients taking cinchonidia gives the same reaction with picric acid as if they had albuminuria," is not less misleading and [illegible] would be the assertion that "the urine of patients taking [illegible] or the alkaline salts with vegetable acids, *e.g.*, citrate or [illegible] potash, gives the same reaction with heat as if they had albuminuria," such an assertion implying ignorance of the fact that the turbidity produced by boiling neutral, or alkaline urine, is due to a deposit of phosphates, which is distinguished from one of albumen by its ready solubility on the addition of a minute quantity of acid, whether vegetable or mineral.

GEORGE JOHNSON, M.D., F.R.S.

PERSISTENT HICCOUGH, TREATED BY CHLORAL.

ON July 4th, 1883, I was called to see Mr. W. H., aged 50. Two days previously, whilst walking in the street, he suddenly became giddy, reeled, and had to cling to a railing for support. With assistance, he got into a cab and was brought home. During the night he began to hiccough, at first only occasionally, but soon very frequently.

When first seen, it was about forty-eight hours after his attack in the street, and about forty hours since the hiccough began. He had tried all sorts of remedies, suggested by his wife and friends, also some medicine supplied by a neighbouring druggist; he had purged himself, produced vomiting, and blistered his abdomen, but was in no way relieved.

Bromide of potassium, belladonna, camphor, acetic acid, spirits of chloroform, hydrocyanic acid, fœtid spirits of ammonia, morphia, pressure on the phrenic nerve, and over the epigastrium, were all given a trial. None of these had any effect, even large doses of morphia, hypodermically, only producing sleep, during which the hiccough continued as before.

At last, after twelve days' incessant suffering, thirty grains of chloral-hydrate induced sound and undisturbed sleep for six hours, and the patient awakened, free from his tormentor.

I have since had several opportunities of trying chloral, under similar, though less aggravated circumstances, and have always found that a liberal administration of this drug produced prompt relief.

Leavitt recommended chloral for hiccough in the *Medical and Chirurgical Review* of 1871.

GEO. C. KINGSBURY, M.A., M.D., Blackpool.

OBSTETRIC MEMORANDA.

INJECTION OF HOT WATER IN *POST PARTUM* HÆMORRHAGE.

AS every case bearing upon the treatment of *post partum* hæmorrhage is of consequence, I venture to record the following. On January 1st (this year), I was summoned to a young lady, a primipara, who had been six hours in labour; everything appeared to have gone on satisfactorily, the head (first position) being, at my arrival, almost on the perinæum; the latter, however, was somewhat rigid. After upwards of two hours had elapsed, during which time I dilated the perinæum, as little or no progress had been made, and the pains were gradually diminishing in frequency and force, I administered chloroform (a little had previously been given), and applied the forceps; before extracting, however, I gave a subcutaneous injection of ergotine to guard against the occurrence of *post partum* hæmorrhage. The extraction occupied about ten minutes, and was followed by the customary amount of discharge; the nurse, by my direction, carefully following up the child during the birth, and afterwards maintaining firm pressure on the abdomen. As the child did not breathe, I was some four or five minutes in exciting respiration; just as this had been satisfactorily accomplished, I was alarmed by the sound of a tremendous gush of fluid in the bed. Hurrying to the patient, I took the nurse's place, and made firm pressure on the uterus, which was quite relaxed, and at once removed the placenta; this was followed by another torrent of blood. I immediately introduced my hand into the uterus, and cleared it of clots, making counter-pressure outside; and, although there was a feeble attempt at contraction, the hæmorrhage continued. Fortunately, I had my Higginson's syringe at hand, and a long uterine tube ready attached; there was also a can of very hot water in the room; so, without a moment's loss of time, I introduced the tube, and injected some of the water (the hand could just be borne in it), with the effect of producing almost immediate contraction and cessation of hæmorrhage. At the same time, I administered some beef-tea, as hot as the patient could drink it, along with brandy and champagne. Although there was no further hæmorrhage, I gave a second injection of ergotine, and also kept up firm [illegible], with the [illegible] Under the influence of nourishment and stimulants, the patient's pulse, which had been exceedingly feeble and rapid, improved notably; and, two hours later, I could leave her without anxiety. She has since progressed favourably. The hot injection is evidently a potent means of arresting *post partum* hæmorrhage, and is, I imagine, superior to cold applications; the latter, if continuously applied, have certainly a depressing effect, and may produce the very condition one wishes to avoid.

I have almost invariably noticed that the cases of hæmorrhage which have produced anxiety have been those in which I have had difficulty in bringing about respiration in the child, and, consequently, have been compelled to give up the control of the uterus to the nurse. Very few nurses have an intelligent appreciation of how to accomplish this effectually; they usually allow the uterus to ride up under the hand, and then pressure does more harm than good. I would modestly submit the following points, which, if followed, will reduce to a minimum cases of the kind: first, the administration of plenty of nourishment during labour; secondly, in a suspicious case, a dose of reliable ergot just before the child is born, or the hypodermic injection of ergotine, especially applicable if the patient be under chloroform; even in a primiparous case this is admissible, if the forceps be applied; thirdly, care not to push the chloroform too far, remembering the tendency to profound unconsciousness and relaxation after the child is born; fourthly, when the head is born, naturally or instrumentally, leave the rest of the body to be expelled naturally, making firm pressure upon the abdomen, and carefully following up the breech; never remove the hand from the abdomen, but leave the tying of the cord to the nurse; fifthly, do not hurry to extract the placenta, but allow the patient to rally, and rather squeeze it out by pressure with the left hand than pull too much on the cord; lastly, give a dose of ergot when the placenta has come away, and, in every case where there is doubtful contraction, keep up pressure for a considerable period, giving the patient meantime some nourishment, and stimulant, if necessary. I believe, if these simple rules be followed, hæmorrhage will be a rare event.

W. L. PAGET, M.D., M.R.C.P., Great Crosby.

THERAPEUTIC MEMORANDA.

VAPORISABILITY OF CARBOLIC ACID IN CONTINUOUS INHALATION.

IN answer to inquiries, I should like to be allowed to state that I have ascertained, by experiment, that in an inhalation-respirator, such as I am in the habit of using, and which I have described in my lectures, when worn, 2.5 grains of carbolic acid (mixed with twice its weight of spirits of chloroform) can be vaporised per hour; so that, if worn twelve hours out of the twenty-four, and many patients wear them all night, 30 grains of carbolic acid will be diffused into the air respired.

It must be remembered the inspiratory current and the warmed expiratory current (often considerably better than in health) are constantly passing through the porous material, which is saturated with the material to be inhaled, and evaporation is thus promoted to a much greater extent than when the fluid to be inhaled is exposed, for a given time, to still cold air.

It is easy enough, by various methods, to charge the air inspired with a larger quantity of carbolic acid, but for continuous inhalation many patients cannot tolerate a higher proportion.

When the inhalation-respirator is not worn at night, a ready method of developing vapour of carbolic acid around the patient is to pour the acid on an ordinary hot water-plate that has been filled with boiling water, and place it by the bed-side.

In cases of whooping-cough, I have had the atmosphere of the bed-rooms charged very thoroughly by combined dry and moist diffusion; the former by dropping the acid in a heated metal plate, an ordinary kitchen shovel does as well, and the latter by means of a large Siegle, or the admirable modification of Siegle, devised by Oertel and made by Metzeler and Co., of Munich; some of these have been imported by Messrs. Squire, Oxford Street, at my suggestion.

I. BURNEY YEO, M.D.

THE will of Dr. John O'Reilly, formerly of Ware, but latterly of Brunswick Road, Brighton, has been proved, and duty paid on £17,000, personalty.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

CONSULTATIONS, JANUARY 10TH, 1884.

Sarcoma of Biceps.—Mr. BUTLIN showed, for Mr. T. SMITH, a man aged 41, who had been admitted two days earlier, on account of a large tumour in the upper part of the left arm. The patient was by trade a blacksmith, a tall, well built man, but with a pale, slightly puffy face, suggesting chronic renal disease. He stated that he had always had good health, and came of a very healthy family; that his mother was still alive, aged 75; that his father died aged 83; that his parents had had eight children, of whom only one had died (of phthisis); and that he himself had had five children, who were all alive and well, with the exception of one who died of "gastric fever." He stated that, in February 1883, he was carrying, on his left shoulder, a very heavy weight, which seemed to strain the left arm; he persevered, however, but, when he put it down, he had a sensation which he described as cramp in or about the biceps, and noticed, at the same time, in that situation, a lump the size of a duck's egg. This lump gradually increased, in spite of various treatment, but he was able to go on working until November. He was in the Bath Hospital, and a comparison of the measurements made there and after his admission to St. Bartholomew's showed that the circumference of the arm, measured over the tumour, had increased one inch and a quarter in sixteen days. When seen at the consultation, there was, on the flexor aspect of the left arm, a large firm tumour, evidently connected with the biceps; it was freely movable, and clearly not connected with the bone; the skin over it was tense and glazed, and, at its most prominent part, the growth was soft, and gave a sensation of fluctuation. The axillary glands were not enlarged. The thoracic and abdominal organs appeared to be free from disease; the urine did not contain any albumen, and did not differ from the normal, either in quantity or specific gravity. Mr. Butlin said there could be little doubt but that the case was one of malignant disease, probably commencing in the biceps muscle as a consequence of the injury suffered about eleven months earlier; he thought that the only treatment which could be adopted with any prospect of success was amputation at the shoulder-joint, and, in performing that operation, he thought it would be proper to take the flap from the back, and thus avoid, as far as possible, the diseased tissues; mere excision of the growth could not be expected to do any real good. He mentioned, as a curious coincidence, that a very closely similar case had been in the hospital a short time earlier under his care; this patient, a woman, had declined to submit to amputation, and had left the hospital. All the surgeons present concurred with Mr. Butlin's diagnosis as to the propriety of amputation; and Mr. Harrison Cripps remarked that the case seemed to be a good instance of what was called traumatic malignancy.

Scirrhous Tumour: Eczema of Nipple.—Mr. HARRISON CRIPPS brought forward the case of a woman who presented a large fungating cancerous mass in the middle line of the chest; four years earlier, the left breast had been removed in Charing Cross Hospital, on account of scirrhous disease; a year and a half later, she consulted Mr. A. Bowlby, on account of a condition of the nipple of the opposite breast, which he considered to be "eczema of the nipple." Sir James Paget, who saw the patient, confirmed the diagnosis, and the diseased part was freely excised. The new tumour, which now occupied the middle line of the thorax, had appeared first in that situation, and the breast from which the eczematous disease had been removed remained unaffected.

NEWCASTLE-UPON-TYNE INFIRMARY.

LARGE VASCULAR SARCOMA OF THE SCIATIC NERVE: AMPUTATION: RECOVERY.

(Under the care of Mr. FREDERICK PAGE.)

MICHAEL C. a tall, well developed, healthy looking Irish labourer, aged 36, was admitted in August, 1883, in consequence of a large tumour situated at the back of the left thigh. Four years earlier, after a hard day's work digging clay, he felt a stinging pain at the back of his left thigh. A similar pain often troubled him during the next three months, and then he first noticed "a small lump." The lump increased in size slowly for two years, causing him but little inconvenience. Latterly it grew rapidly.

On admission, a tense, smooth tumour was found occupying the back of the thigh. Its outline was well defined above and below, but not so distinctly laterally, and, owing to the broadness of the base, its deep connection could not be ascertained. It measured 11 inches in length, the thigh being 23 inches in circumference at its thickest part. The skin was freely movable over the growth, was natural in appearance, and no veins were visible. From under the gluteal muscle a thick cord, which seemed to be the great sciatic nerve, could be traced to the upper margin of the tumour, where it was lost. There was no pulsation nor thrill to be detected in the swelling, no loss of sensation in the limb, and the tibials pulsated in both limbs alike.

The patient desired to have the tumour removed, partly on account of pain, but mainly because of its rapidly increasing size. He had never suffered from syphilis, nor received any injury that he was aware of. An ordinary hydrocele-trocar was introduced. A sensation of resistance was at first experienced, and then a cavity seemed to be entered, where the point of the instrument could be moved in any direction. On withdrawing the stilet, a stream of arterial blood rushed through the canula to a considerable distance, and coagulated on the table. Six or eight ounces escaped in this way in a very few seconds, without any apparent diminution in the size of the swelling. The next day the tumour could be seen and felt to pulsate, and a distinct *bruit* could be detected in nearly every part of it. Pressure over the femoral artery caused the tumour visibly to shrink in size, and when the pressure was removed immediate distension followed, and the pulsation and *bruit*, absent while the femoral circulation was controlled, returned. It was explained that operative interference might result in amputation of the thigh, a risk to which the patient was not willing to subject himself, and he left the hospital. In five weeks he returned. He had lost condition. The growth had increased two inches in length and one inch in circumference. It still pulsated, though not so freely, and it was more painful.

On October 17th, the limb having been emptied of blood, a free incision was made in the long axis of the tumour, exposing a firm white sac, which, when cut into, was found to contain brain-like material of the consistence of porridge. Enough of this to nearly half fill a washhand-basin, was easily scooped out with the hand. The capsule was readily cleared laterally from the muscles; but above the great sciatic and below the popliteal nerves were found to be so closely incorporated with it that they could not be dissected out. The nature of the disease being now apparent, the limb was amputated. The patient made a good recovery.

Upon dissection, the growth was found to be situated in the substance of the great sciatic nerve, the sheath of the nerve expanded and thickened, forming a well marked capsule. It was unconnected with bone or periosteum, but the femoral artery adhered so intimately as to be separated with difficulty. Four arteries, somewhat larger than the radial, entered the tumour upon its deep surface. The material in the capsule, consisting of spindle-shaped cells, was arranged in lobular masses, loosely held together by connective tissue, and blood-sinuses of considerable size permeated the growth.

REMARKS BY MR. FREDERICK PAGE.—Malignant tumours, pulsating so as closely to resemble aneurysmal swellings, are not uncommon, but the substance of a nerve is, I think, a very unusual situation for them. That a sarcoma should grow in the sheath of the great sciatic nerve, over a period of four years, to the large size of this tumour, and cause so little functional derangement, is a point of great clinical interest. The marked pulsation and *bruit*, following puncture and somewhat free manipulation, appeared to be due to vascular excitement set up in the tumour. The intimate connection of the tumour with the femoral artery intensified both pulsation and *bruit*, and led me to believe that a direct communication existed, but this was found, upon dissection, not to be the case.

CHRISTMAS FESTIVITIES.—On Thursday evening, January 3rd, an amateur representation of Sheridan's "Critic" was held at St. Bartholomew's Hospital. The actors were students of that institution, and the performance was highly satisfactory.—An amateur performance of "Box and Cox", at the Dorset House Branch of the Samaritan Free Hospital, on New Year's Day, was also a decided success.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, JANUARY 15TH, 1884.

J. WHITAKER HULKE, F.R.S., F.R.C.S., President, in the Chair

Death of Mr. Wheatley.—The PRESIDENT said that the Council, conscious of the great loss which the Society had suffered in the death of Mr. R. B. Wheatley, the resident librarian of the Royal Medical and Chirurgical Society, had passed a resolution giving suitable expression to this feeling, and expressing condolence with Mr. Wheatley's family.

Two Examples of Mediastinal Growth.—Dr. NORMAN MOORE showed microscopic sections, with drawings, of an endothelioma of the pericardium, and of secondary new growths from the lung, clavicle, and suprarenal capsule. The growth consisted of abundant large, flattened nucleated cells, of an epithelioid type, contained in well marked alveoli. In all the places in which it was found, the new growth was of an absolutely uniform structure. The specimens were obtained from the body of a man aged 37. His illness began with shortness of breath and hæmoptysis, and lasted about five months. On admission, he complained of severe pain about the sternum. The breath-sounds were natural, and the heart-sounds clear; the cardiac impulse was feeble. His breathing became more and more rapid and laboured, and he had paroxysms of urgent dyspnœa. On September 24th, a firm swelling was noticed on his left clavicle. On October 3rd, his chest gave the following signs: absolute dulness behind, from the spine of the scapula downwards. Over no part of the dull regions were vocal vibrations quite absent, and at the extreme base some sound, as of air entering the lung, was audible. A subcrepitant *râle* was to be heard just below the root of the left lung, and exactly over the root of the left lung faint bronchial breathing was to be heard. In front there was a peculiar super-resonant note just below the left clavicle, and elsewhere on the left side absolute dulness. The right side was normal, and so were the heart-sounds. Three days later, dulness had increased upwards on the left side. Paracentesis was performed, and twenty-seven ounces of clear serum were drawn off with an aspirator. After this, a loud rough sound was heard over the lower part of the left back. His dyspnœa, which had been very urgent, was relieved, but became urgent again in two days; and on October 10th he died. His evening temperature had been raised throughout, usually to above 100°, and often to above 101°. At the *post mortem* examination, the pericardium was seen to be much distended, and to contain blood-stained fluid. At the base of the heart, and for one-third downwards upon its surface in front, and two-thirds downwards behind, the visceral layer of the pericardium was infiltrated with a whitened firm new growth; and this extended to a somewhat less extent on the parietal surface. The muscular substance of the heart was nowhere penetrated. At the root of the left lung, the new growth had penetrated the main bronchus for half an inch, and actually formed its wall; it extended a little way only into the lung. Both in front and behind, the mass of new growth was in contact with the chest-wall, thus explaining why, in spite of a large pericardial effusion, the heart-sounds were distinctly audible; and why, in spite of the pleural effusion, neither vocal vibration nor air-sounds were quite absent over the region of dulness. The lump on the clavicle was associated with some wasting of the bone, and was firmly attached to the bone as well as to the periosteum. The bronchial glands were involved. Below the diaphragm, the new growth was only to be found in the suprarenal bodies, both of which were infiltrated and enlarged. There was no pigmentation of the skin. He thought that the clinical features as well as the naked-eye appearances pointed to the conclusion that the new growth began in the pericardium, and that its microscopic structure pointed to its having originated in the epithelioid lining of the pericardium. Dr. Moore also showed microscopic sections with drawing of a new growth which occurred in the mediastinum of a man aged 18, who died in St. Bartholomew's Hospital under the care of Dr. Gee. The growth was a round celled sarcoma, with a meshwork and spaces resembling those of a lymphatic gland. It was of a type often found in the mediastinum. The patient was ill about two months. There was pleurisy of the right side, from which fifty ounces of seropurulent fluid were drawn off. The evening temperature was, for a fortnight, above 100°; and for the last month, during which the pleuritic physical signs became more distinct, was above 101°. At the necropsy a new growth was found upon the upper and outer part of the pericardium. It pressed upon the trachea and the aorta, and occupied precisely the position of the thymus gland in a child. The new growth extended above the clavicle, involving the lower cervical lymphatics. The right lung was adherent to it, and, at the adhesion, only infiltrated. No other organs were infiltrated. In the last four years he had examined *post mortem* six other cases of a new growth in the mediastinum. In all, recent pleurisy was present, as it was in two he then showed. This observation, and the fact that two tumours of such different histological appearance were both associated with rise of temperature, pointed to the conclusion that rise of temperature in cases of mediastinal new growth was due to the attendant pleurisy, and not to the nature of the new growth.—Mr. BUTLIN believed that endothelioma was a more common disease than was generally believed. Two varieties had been described. In one the structure resembled epithelioma, in the other hard or soft carcinoma. The case shown appeared to fall into the second group.—Mr. B. JESSETT made some remarks on a case of mediastinal tumour.—Mr. CROFT commented on the occurrence of a hectic temperature in cases of malignant tumour.—Dr. GOODHART observed that the absence of a rise of temperature in tumours had been to him a matter of surprise. Perhaps a more careful examination of cases would show that it occurred more frequently than was now supposed.—Mr. MORRANT BAKER referred to a case of variable temperature in tumours of the thigh, which had caused much difficulty in diagnosis. The temperature was distinctly of the hectic type, so that the presence of pyrexia was not an infallible means of diagnosis between malignant disease and inflammation.—Dr. NORMAN MOORE quoted a paper by Dr. Church in the *St. Bartholomew's Hospital Reports*, in which an account was given of a series of cases of lymphosarcoma, in which there was distinct hectic temperature; however, since in all the cases of malignant diseases of the mediastinum with pyrexia, which he had examined, he had found signs of pleurisy, it seemed that the rise of temperature was due to the intercurrent serous inflammation.—Dr. DUCKWORTH had been led to associate sudden variations of temperature with the rapid growth of malignant tumours.

Mollities Ossium, Rheumatoid Arthritis, and Charcot's Disease.—Mr. ARBUTHNOT LANE showed the bones from a case of mollities ossium. Of the bones of the skull, the occipital, temporal and sphenoid, were alone affected, and more extensively on the left side than on the right, and the inner table more than the outer. The progressing line of softening was very apparent. It did not extend across the sutures to the adjacent bones. The softened bone showed a decalcified zone, with what appeared to be the deposition of decalcified lamellæ of new bone on it. The sutures were loose, allowing of free movement. The ribs, pelvis, and scapula, presented what appeared to be ununited fractures with fibrous union. These, however, proved to be due to a very rapid decalcification of the bone at the point of greatest strain, accompanied with periosteal and endosteal deposit of decalcified bone, causing the thickenings observed. The articular cartilage of the left knee-joint was extensively ulcerated, and there was a good deal of bony growth on the margin of the condyles and the patella. The right knee, the elbows and shoulder-joint, presented the same ulceration and bony outgrowths, but in a less degree. The temporo-maxillary articulations presented the appearance of Charcot's disease, destruction being more extensive on the left than on the right side. Mr. Lane also showed bones from a case of rheumatic arthritis, which presented symmetrical affection of the temporo-maxillary, elbow- and hip-joints. The elbow could not be extended beyond an angle of 130°. The heads of the femora were enlarged, and presented in the centre of the convex articular surface a loose convex disc of bone and articular cartilage, the subjacent bone having undergone fibroid change. From these cases Mr. Lane argued that Charcot's disease was merely rheumatic arthritis, affecting a patient with a feeble osseous system, and that, under the influence of the irritant peculiar to rheumatic arthritis, vigorous bone threw out new material, while an osseous system of feeble vitality underwent a degeneration into fibrous tissue, and that both conditions might be present in the same case. He found that the amount of eburnation and boning in rheumatic arthritis was proportional directly to the condition of the bones affected. The bones of cases of Charcot's disease were extremely light, porous and fragile, yet the process in them was not always solely destructive. The wasted bones of a feeble patient, as in an old ataxic, or in the temporo-maxillary articulation of the case of mollities exhibited, underwent rapid retrocession to the fibrous condition, under the stimulation of rheumatic arthritis.—Mr. CROFT inquired the grounds upon which Mr. Lane classed this case as one of rheumatoid arthritis, since there were no symptoms of rheumatism.—The PRESIDENT presumed that Mr. Lane had used the term to express the anatomical condition generally recognised by its use.—Mr. EVE thought there were great differences between rheumatoid arthritis and Charcot's disease. In the latter the articular surfaces of the bone were worn away to a much greater extent than in rheumatoid arthritis, where the bone was always eburnated.—Dr. DUCKWORTH thought that Charcot's disease and rheumatoid arthritis were distinctly different diseases, owing to the great difference in their clinical history. Effusion into the joint was a prominent symptom in the former and not in the latter.—Dr. NORMAN MOORE questioned whether there were sufficient grounds for calling the case mollities ossium.—Dr. GOODHART thought that the distinct identity of Charcot's disease must still remain open to question. It was a very rare disease, very few cases had yet been described, and he himself had only met with one. In morbus coxæ senilis did not changes of a very analogous kind take place?—Mr. F. EVE desired to be allowed to explain that in his remarks he had referred to the anatomical peculiarities of Charcot's disease, and not to its etiology; he was quite prepared to believe that it might be, etiologically considered, rheumatoid arthritis occurring in the subject of nervous disease.—Dr. HALE WHITE had seen three cases within the last few weeks of so-called Charcot's disease, with distinct enlargement of the bone; the absence of enlargement of bone had been much relied on by Charcot as a characteristic of his disease.—Dr. ORMEROD said that Charcot's disease was described as being ushered in by extensive effusion into and about the joint, without fever.—Dr. ANGEL MONEY considered that no hard and fast line could be drawn between rheumatic arthritis and Charcot's disease; atraumatic peripheral neuritis existed in the latter, and it was probable that similar changes would be found in some cases of the former.—Mr. ANTHONY BOWLBY observed that just as there was an ordinary painful whitlow and a painless whitlow due to nervous lesion, so it was reasonable enough to suppose that there might be an ordinary painful arthritis and a painless destructive arthritis due to nervous lesion.—The PRESIDENT confessed that he could not satisfy himself of the distinctness of rheumatoid arthritis and Charcot's disease; certainly some of the cases exhibited before the Society, at various times, as Charcot's disease, had appeared to him to be instances of rheumatoid arthritis.

Galls.—Some microscopical sections of galls from oak-leaves, roses, and from the maple, were shown by Mr. HARRISON CRIPPS Referring to the mode of production of the gall, he stated that was due primarily to a hymenopterous insect (*Cynips quercus folii* and *Cynips Rosæ* in the oak and rose respectively). As the insect increased in size, not only did the cavity it was contained in enlarge, but also the whole mass of the gall; the peripheral enlargement must be due, he thought, to growth from the covering epithelium.—Dr. COBBOLD referred to Mr. Fitch's monograph on the galls, as giving the completest extant account of them.—Mr. SHATTOCK believed that the galls were formed by involution of the leaf, and criticised in detail the terminology employed by Mr. Cripps.—Mr. EVE made a few remarks on the relation between irritation and tumour-formations.

Nematode Worms in the Antelope.—In connection with the investigation being made with Mr. J. B. Sutton into tuberculosis in birds, Dr. HENEAGE GIBBES had examined a number of animals with morbid changes in their lungs and other organs. In the first paper, read by Mr. Sutton before the Society in November last, they had shown that most of a certain class of birds had become tuberculous, and animals fed on these birds had also become tuberculous. This portion of the inquiry they were still busily working at, and they had obtained some important facts, which they intended to bring before the Society in a short time. The first case brought forward by Dr. Gibbes was that of a Koodoo antelope, the fresh lungs of which appeared to be studded with tubercles. These, however, disappeared on hardening the organ. On making sections, they were found to consist of small emphysematous areas, caused by minute emboli, which had blocked up the vessels and cut off the blood-supply from these areas. This had probably occurred some time before, death having been caused by pneumonia. The second case was one of nematode worms in the lungs of a Beatrix antelope. There were nodules under the pleura, not visible to the eye, but which could be felt in passing a knife over the surface. On section these were found to contain the parent nematode worm, and ova in every stage of development up to the larval form. The parent-worm was not coiled up, but twisted through the lung-substance. Dr. Gibbes had not been able to dissect out the whole length of the parent-worm from want of time. A section of the parent-worm showed a number of ova in the abdominal cavity, which corresponded exactly with those found in the lungs. The ova showed the various stages of development until the larval form was reached. No intermediate forms between this and the parent-worm were found. Dr. Gibbes considered that at this stage the embryo sought some other host, as he found numbers in the bronchial secretion. In January, 1882, the Koodoo antelope was found to be suffering from a copious discharge from the nose and mouth. In a few days, all the animals in the antelope-house were similarly affected. The Koodoo died, but the Beatrix recovered. About two months afterwards she was again found to be ill, and, from that time, gradually wasted away and died. Being a very valuable animal, every possible care was taken of her. Dr. Gibbes did not bring this case before the Society as anything new, but because he had not been able, in the short time he could devote to the subject, to find an exactly similar case recorded. Drawings and microscopical specimens were shown.—Dr. **COBBOLD** commented on the frequency of parasitic bronchitis as a fatal disease of animals. The most widely spread of the parasites were the *Strongylus filariæ*, which infested the sheep, the *S. micrurus*, which infested cattle, and the *S. rufescens*. The strongyli produced a very large mortality in this country. He believed that the entozoa shown by Dr. Gibbes were examples of *Strongylus rufescens*, which had, a few years earlier, been described by Dr. Crisp as the Gordian worm. He had succeeded in rearing *Strongylus micrurus* through all its stages to the penultimate stage; the intermediate host, in this case, appeared to be the earth-worm.

Card Specimen. Mr. **WALSHAM** showed a large calculus which he had removed from the bladder of a boy, aged 3 years. It measured $2\frac{3}{8}$ by $\frac{7}{8}$ inches, and weighed half an ounce.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 11TH, 1884.

Sir **ANDREW CLARK**, Bart., M.D., LL.D., F.R.C.P., President, in the Chair.

Subcutaneous Nodules occurring in an Adult not the subject of Rheumatism.—Dr. J. **KINGSTON FOWLER** read notes of this case. The patient was a man, aged 35, a railway-porter, who came as an out-patient to the Middlesex Hospital, on October 26th, 1883, complaining of loss of appetite, pain in the epigastrium after taking food, and emaciation. There was no history in the family of syphilis, gout, or rheumatism. He had been fifteen years in the 2nd Life Guards, without being in hospital a day. When 25, he had gonorrhœa, and a sore on the glans penis, the latter was probably not specific. Three years ago, he first noticed a lump beneath the right patella, it was then small and slightly tender. This gradually increased in size, the tenderness soon disappearing. About one month later a similar swelling appeared beneath the left patella, and gradually increased in size. Nodules appeared beneath the elbows shortly after. These remained, but no fresh ones appeared until four months ago, when he discovered a small one near the right trochanter major; it was then tender, and was so still, to a slight degree. This disappeared in a few weeks, but reappeared after an interval of one month, and had since grown steadily. Shortly after this second appearance a similar nodule was noticed near the left trochanter major. Similar growths had since appeared over the buttocks. On close examination as to any history of rheumatism, the only fact bearing upon it elicited was that, for the last two years, he had had occasional pain about the knees after working hard and then resting; the pain would occur perhaps two or three times a week. For the last six weeks he had complained of almost complete loss of appetite, with pain after food, and constipation. He had lost a stone and a half in weight. The nodules were arranged with almost perfect symmetry, and presented the following general characters. They were subcutaneous, nearly all were separable from the skin and from the subjacent structures, and were freely movable. The skin overlying and around them was normal. They occurred singly, and also in large clusters, some of the large masses consisting of congeries of smaller ones. The single nodules were hard and shot-like to the touch, the larger masses were lobulated, and not so firm. They were not painful, but one, near the right trochanter major, was slightly tender. The distribution of these growths was as follows. *Right Arm:* On the posterior surface of the ulna, three nodules were situated about two inches from the olecranon, one as large as an olive, the others the size of peas. *Left Arm:* Two nodules were in like position, and of about the same size. *Ischial Tuberosities:* Beneath the skin, which, in the sitting position, overlies the ischial tuberosities, there were on the right side six nodules forming a single mass of the size of a Tangerine orange; a rather smaller nodule was present on the corresponding spot on the opposite side. *Great Trochanters:* Two inches below and a little behind the right trochanter major, there were two collections of nodules forming a ridge about equal in size to a walnut; on the left side there were two smaller masses. Below each patella there was a nodule of the size of a walnut. A small nodule was present below the internal condyle of the right femur, and another over the anterior surface of the right tibia. Reference was made to the original communication of Drs. Barlow and Warner, describing the occurrence of subcutaneous nodules, similar in many respects to those found in this case, in children and adolescents the subjects of rheumatism, and also to the cases of two adults related by Dr. Stephen Mackenzie and Dr. Dyce Duckworth in the last volume of the Society's *Transactions*. It was pointed out that in their situation, symmetrical arrangement, free mobility, absence of pain or infiltration of overlying integument, these growths were similar to those found in association with rheumatism, and also that the situation of the growths had probably been determined by the irritant effects of pressure.—Dr. **DYCE DUCKWORTH** remarked on the resemblance of the case narrated to one he had described during the last session. He had seen cases of subcutaneous nodules before the paper of Drs. Barlow and Warner was communicated to the International Medical Congress, and occurring in rheumatic subjects. His experience led him to think there were several kinds of such cases of nodules, the growths varying in position, and in size and consistence. In adults, they presented a firmer feel than in children, and were persistent, while in the latter they showed a tendency to disappear, so that removal of the structures in grown persons by any other means than incision could not be hoped for. In adults, also, the rheumatic history was of the vaguest kind, while the cardiac affections observed in children did not accompany the presence of nodules on their bodies.—Dr. **BARLOW** said he would no longer assert dogmatically the rheumatic nature of the nodules. Gouty nodules resembled them very much, but were found to contain urate of soda when examined. He narrated the case of a young man, aged 25, of rheumatic tendency, on whom nodules were found, and who presented no cardiac lesion. Salicylate of soda was administered in gradually increasing doses, and at first the nodules slightly increased in size, a cardiac murmur meanwhile slowly developing, and after six or eight months the nodules had completely disappeared. He had lately observed that small nodules were amenable to treatment by blistering.—Dr. **MAHOMED** gave a brief history of a woman, aged 35, the subject of well marked nodules. She had no cardiac murmur. Twenty grains of salicylate were given three times daily, and in a fortnight the nodules entirely disappeared. He wished to know in what proportion of rheumatic patients the nodules occurred. He had seen but two cases in as many years.—Dr. **GLOVER** stated that he had seen a case in which nodules developed in a young man slowly recovering from rheumatic fever. The growths ultimately disappeared.—Mr. **PARKER** wished to know in what situation the gouty nodules mentioned by Dr. Barlow had been found. He had himself seen cases of subacute rheumatism in which the nodules occurred quite superficially in front of fasciæ.—Dr. R. J. **LEE** instanced the case of a child afflicted with chorea, the movements being almost confined to the right side of the body, which also was alone the seat of a number of subcutaneous nodules. Subsequently, however, after two or three months, they were found on the left side also.—Mr. **CLEMENT LUCAS** observed that it was of great interest to know how far the nodules were characteristic of rheumatism. In the case of a woman under his own care, nodules developed on the knees and elbows, and interfered with the power of kneeling. They underwent no absorption when treated, and were excised, and found to consist of fibrous tissue. No history, family or personal, of rheumatism was obtainable. About the same time a student of Guy's Hospital, who was lying with rheumatism, became the subject of subcutaneous nodules.—Dr. **GILBART SMITH** had seen two examples of undoubted nodules in women; and he regarded the mortality among children in whom they occurred as less than was thought to be the case.—Dr. **ANGEL MONEY** thought from his experience, gained at the Children's Hospital, that 50 per cent. of rheumatic children became subject to nodules. In one case, which presented a multitude of growths, they would appear and disappear within a few days, and in different parts of the body. He had found serious heart-disease in two of the cases examined *post mortem*. Dr. **FOWLER** explained that, in his patient, the nodules occurred on points which were subjected to pressure, and were therefore probably due to irritation.

Cortical Tumour, with Great Variety and Frequency of Epileptiform Seizures.—Dr. COXWELL read notes of this case. Ten years ago, G. R., a young man, then aged 20, began to suffer from fits, which always had as their starting point the right hand, and never had a greater range than the right arm and right side of the face. Five years later, he came under the care of Dr. Gowers at the National Hospital for the Paralysed and Epileptic. He was admitted as an in-patient for the last time in February 1882, under Dr. Radcliffe, who kindly permitted the publication of the case. He then had optic neuritis in the left eye, but not in the right. There was some paralysis of the right arm and right leg, but none of the face. The deep reflexes were all in excess on the right side, with right foot-clonus. Dr. Coxwell, during eleven months, was enabled to make careful observation of the mode of onset of many of his epileptiform seizures. When the fits were frequent, an hour spent at his bedside was rewarded by a view of several fits. As the time was summer, he could lie without danger with his limbs uncovered, and if they were placed in a position of semi-flexion or semi-abduction, as the case might require, the slightest initial movement could not fail to attract attention. In the numerous cases of cortical tumour which have been recorded, the fits had nearly invariably been described as beginning in the same place. In this case, however, during the last year of the patient's life, there was great variety in the starting place and range of the fits. The patient died in January 1883. A large number of Dr. Hughlings Jackson's statements with regard to epileptiform seizures were exemplified in this case. Mention, for instance, was made of temporary paralysis of the right side of the face, or of the right arm, caused by fits affecting those parts; of the connection between the occurrence of aphasia and fits affecting the right side of the face; of the fact that when spasm spread from the first affected side to the other, it passed to the leg of the second side, and not to the arm or face. The patient had every variety of fit, including some of the ordinary epileptic type, characterised by sudden loss of consciousness and general convulsion. It had been stated that these fits did not occur in such cases; perhaps the greater and widely spread instability which this kind of fit implied was the result of the extraordinary frequency of the fits, and the great duration of the case (ten years). There was a tendency at different times for some special type of fit to occur, sometimes the face alone being affected, sometimes chiefly the right arm, sometimes the whole of the right side, and so on. Perhaps the explanation was that the tumour created instability in cortical areas adjacent to that in which there were pathological changes, and that when the instability reached a certain degree of intensity, explosive discharges occurred in them, causing spasm in corresponding sets of muscles. The spasm having attacked the arm, nearly invariably proceeded upwards—extremely seldom downwards. One never saw a twitch at one joint—say the elbow—then a twitch at the knee, and then at the mouth. In each case, on the contrary, there was a definite line of march of the spasm, either up or down a limb. These facts seemed well explained by the localisation-theory. The tumour was found at the necropsy to be a glioma affecting the posterior parts of the first and second frontal convolutions, and the extreme summits of the ascending frontal and parietal convolutions on the left side. Its position therefore corresponded very fairly with what one would have expected, from the fact that during the first nine years of his illness the spasm always commenced in the right hand. This man often had 200 or 300 fits a day. In the last year of his life 21,800 fits were counted.—Dr. BEEVOR said that, while he was resident medical officer at the National Hospital for Paralysed and Epileptic, this patient had been several times in the hospital; this was previous to 1882. He was, therefore, able to corroborate Dr. Coxwell's statements. The fits began with flexor of the right wrist and elbow, and adduction of the shoulder-joint; the head then turned to the right, the mouth was drawn to the right, and this was followed by clonic spasms in the right arm and right side of the face. There was no loss of consciousness. On percussing the patient's skull, he complained of pain on the left side, and especially at a point situated in a line drawn vertically upwards from the left external auditory meatus, and ten centimètres from this aperture. Dr. Beevor had since measured off this point on a skull, on which the position of the cerebral convolutions was marked, and which he had obtained from Professor Charcot, and he found that this point corresponded to the posterior part of the left second frontal convolution; he had heard this evening, for the first time, that the tumour was actually situated in this part of the convolutions. With regard to the reflexes, besides the plantar reflex, he found that the abdominal epigastric and cremasteric reflexes were much less marked on the right side than on the left; there was no ankle-clonus, but the right knee-jerk (patellar tendon-reflex) was better obtained than the left. He thought that these Jacksonian epileptiform fits should be considered as intermediate between the ordinary bilateral epilepsy and cases of permanent hemiplegia, with an epileptic onset. He had shown in a paper in *Brain*, in seventy epileptic fits personally observed, that in the majority of these cases, increased knee-jerk and ankle-clonus were observed immediately, and for three or four minutes, after a fit, and were most marked on the side to which the patient's head was turned by the initial tonic spasm, while the plantar reflex was absent during this period. He stated that ankle-clonus, increased knee-jerk, and diminished skin-reflexes occurred on the side of the body affected with epileptiform attacks, and also in hemiplegia. There was also paralysis following the convulsive stage in all these three cases; in hemiplegia it lasted for weeks or months; in epileptiform fits for hours or days; while in ordinary bilateral epilepsy he had observed that conjugate deviation of the eyes, which was a well known symptom of paralysis directly after hemiplegic attacks, also occurred for one to three minutes after an epileptic fit, so that if the eyes were drawn to the right in the commencing tonic stage, the subsequent conjugate deviation would be to the left, *i.e.*, to the same side as the lesion. He considered that these three affections might be grouped together, and that they were all due to disease of the cortex cerebri.—Dr. GLOVER asked if the patient injured himself during any of the fits he had experienced.—Dr. COXWELL replied to Dr. Glover's question in the negative, giving as reasons the fact that the patient preserved consciousness during the fits at first and subsequently, when they grew worse in character, he was carefully guarded in hospital. He had himself detected the tender point referred to by Dr. Beevor.

Annual Meeting.—The rest of the evening was occupied with the usual business of the annual meeting (election of officers, etc.), a notice of which will be found at page 122 of this week's BRITISH MEDICAL JOURNAL.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, JANUARY 10TH, 1884.

JONATHAN HUTCHINSON, F.R.S., F.R.C.S., President, in the Chair.

Congenital Absence of Lacrymation in one Side.—Mr. STANFORD MORTON showed a child in whom the secretion of tears had never been noticed on the right side.

Hæmorrhage into the Sheath of the Optic Nerve.—Mr. A. Q. SILCOCK showed preparations from a case of hæmorrhage into the sheath of the optic nerve. The patient was a man who died in St. Mary's Hospital eight days after fracture of the skull. Whilst in the hospital he was delirious, and no ophthalmological examination was made. At the necropsy, a fissured fracture was found traversing the posterior inferior angle of the right parietal bone, and the right half of the occipital, extending from a point two inches above and four inches behind the right external auditory meatus, to the jugular foramen of the same side; the middle and anterior fossæ were intact. There was much extravasated blood in the cavity of the arachnoid, especially over the base of the brain. The sheath of the left optic nerve was much distended and discoloured near the eyeball from extravasation of blood into it; the sanguineous clot occupied the subdural space. The sheath of the right nerve also contained blood, but to a less degree. Mr. Silcock observed that in Gräfe and Saemisch's *Handbook*, it was laid down that such extravasation only occurred in fracture of the base of the skull, or through the optic foramen, but in the present case there was no fracture in these situations.

Symmetrical Disease in the Region of the Yellow Spot.—Mr. WAREN TAY said that he had previously exhibited to the Society two cases of a peculiar disease of the yellow spot. The present patient was the third child of the same parents, and all the three children of the family had presented the same peculiar changes in the region of the yellow spot. The third child, when six weeks old, was brought to the London Hospital suffering from well marked optic neuritis, without any change in the region of the yellow spot. It was again brought when six months old, when it presented degenerative changes in the yellow spot, and optic atrophy, precisely as in the elder members of the family; the changes in the eyes were quite symmetrical. The child, when shown to the Society, was weak and wasting. Mr. Tay could advance no theory to account for the disease, and did not think that the idea that it might be due to embolism was tenable (*vide* BRITISH MEDICAL JOURNAL, vol. i, 1881, p. 645). In reply to the President, Mr. Tay said that the three patients were the only members of the family, and were all males.—The **PRESIDENT** observed that the fact that the changes were quite symmetrical militated very much against the theory that the condition was due to embolism. The cases were remarkable, and were probably instances of that peculiar class, not congenital indeed, but due to some congenital delicacy of organisation; the delicacy being so great that the affected organ—the optic nerve in these cases, the skin in Kaposi's disease (xeroderma pigmentosum)—could not endure the ordinary wear and tear of life.

Mucopurulent Conjunctivitis of Sympathetic Origin.—Dr. W. A. **BRAILEY** showed a patient, a man aged 66, whose right eye had been injured about sixteen months earlier. It was excised on November 29th. The left eye began to discharge soon after the accident to the right, and there was still a considerable gummy discharge. It was no better after excision of the right eye, but rather worse.—Dr. **STORY** (Dublin) thought that it was rather stretching the use of a term to apply the word sympathetic to the conjunctivitis in this case. It was more easy to believe that the occurrence of the conjunctivitis was a coincidence. He thought it most undesirable to add a new diseased condition to the already long list of sympathetic affections.—Mr. **ADAMS FROST** also failed to understand the grounds upon which Dr. Brailey thought the case sympathetic. Was it especially obstinate to treatment? Did he consider the fact that the conjunctival affection was not improved by nucleation was evidence of its sympathetic character?—Mr. **NETTLESHIP** inquired what treatment had been applied to the eye first affected; if that eye had been treated with atropine, and covered up with a handkerchief, it seemed possible that a chronic conjunctivitis might have been fomented into an acute attack.—Dr. **BRAILEY** said he thought that the conjunctivitis in the second eye was sympathetic, because it became affected very shortly (two weeks) after the affection of the first eye, because it was exceedingly intractable, and because it became decidedly worse after excision. On the other hand, it was true that the patient had a high degree of hypermetropia, but vision was very good with spectacles. It was his impression that conjunctivitis was at least as common as other forms of sympathetic inflammation.

Congenital Malformation of Pupil.—Dr. **BEEVOR** showed a boy, aged 9 years, under treatment for epilepsy, who presented a peculiar condition of the pupil of the left eye. The pupillary aperture was double, both apertures reacting to light and in accommodation. Vision in this eye was deficient. With the normal eye the patient read Snellen 1½, with the left eye Snellen 3.—In reply to the President, who asked whether he attributed the condition to persistent pupillary membrane, Dr. Beevor said that he thought there was no evidence on this point; and, in reply to Mr. Adams Frost, he added that there was no history of syphilis.

Adjourned Discussion on Sympathetic Ophthalmia.—Mr. **SPENCER WATSON**, referring to the value of punctiform keratitis as a symptom of sympathetic ophthalmitis, said that, though he had seen the condition in other affections, where there had been no injury, he had never seen it in sympathetic ophthalmitis. He thought that the definition of the class of cases to be included under the term sympathetic ophthalmitis was not sufficiently precise. It was more probable that, in cases of glaucoma of one eye, where the operation of iridectomy in that eye was followed by the occurrence of glaucoma in the other, the affection of the second eye was due to the same primary cause as determined the disease in the first eye, than to any effect produced by the operation.—Dr. W. A. **BRAILEY** said that dots on the posterior surface of the cornea were far from common in syphilitic iritis, and still more rare in rheumatic affections. In sympathetic ophthalmitis, on the contrary, he had only once failed to find the dots. In this position he was confirmed by Mr. Milles, who, in a large experience at the Moorfields Hospital, had never failed to find them; they were not, however, present throughout the whole course of the cases, and might thus not be observed if a case were only watched for a short time. He believed that there was a sympathetic conjunctivitis, and also a sympathetic neuritis leading to optic atrophy. He thought that the theory of direct transmission of inflammation from the one eye to the other was not tenable, and that the old theory of reflex nervous irritation must come up again. As to conjunctivitis, he remarked that the occurrence of injection of the conjunctiva on the opposite side, after wounds of the eye, was a common and generally recognised occurrence; it did not seem unreasonable to suppose that this injection might run on into inflammation.—Dr. J. B. **STORY** could not accept Dr. Brailey's theory of sympathetic ophthalmitis; he observed that inflammation of a distant area had never been produced by experimental irritation of a nerve. Further, the sympathetic inflammation was peculiar in its distribution; and the irido-choroiditis occurring in sympathetic inflammation was a very peculiar affection, differing from ordinary iritis, or choroiditis; these facts were, he thought, difficult to account for on the theory of reflex nervous irritation. Again, if it were due to that cause, he should have expected that the excision of the irritating eye would have had more effect than it commonly had. It was true that injection of the conjunctiva did occur, but it was not safe to assume that it would run on to inflammation; congestion or hyperæmia due to nervous disturbance was not commonly observed to go on to inflammation.—Mr. **NETTLESHIP** thought that the evidence with regard to the case of conjunctivitis, which Dr. Brailey considered sympathetic, was at present insufficient, and that the doctrine that such a condition as sympathetic conjunctivitis was commonly to be recognised had not been proved. If Dr. Brailey had cases which established the fact of its occurrence, he hoped that they would shortly be published. Mr. Nettleship regarded the inflammation of the disc, such as occurred in an early stage of sympathetic ophthalmitis, as altogether different from ordinary papillitis, and from the neuritis leading to atrophy. The papillitis, in sympathetic affections, was a part of a general inflammation of the eyeball. Again, in this instance also, he thought that if Dr. Brailey had evidence that sympathetic neuritis really occurred independently of general inflammation, it was most desirable that he should put it on record, and the same remark applied to the subject of keratitis. He thought the position of those who denied that inflammation travelled from one eye to another along the nerves was not assured, because the examination of the nerves involved—the ciliary nerves, for instance—was difficult, and could seldom be completely carried out, owing to the very short length of nerve which was removed with the diseased eye when that was enucleated. Then, with regard to optic neuritis in intracranial tumour, it was long a matter of dispute whether the inflammation extended by continuity, though the doctrine was now generally accepted. If so much difficulty had been encountered in obtaining a proof, in the case of a large nerve, like the optic nerve, what wonder that it still remained insurmountable in the case of the ciliary nerves?—Mr. W. **ADAMS FROST** protested against Dr. Brailey's assumption that there was no line of demarcation between hyperæmia of the conjunctiva and a mucopurulent conjunctivitis. In the former case, there was merely excess of normal secretion; in the latter, there was exudation of leucocytes, and the formation of an abnormal secretion. He considered the cases in which sympathetic ophthalmitis came on subsequently to the enucleation of the injured eye as consistent with the theory of a morbid change slowly extending by continuity of tissue from one eye to the other, but incompatible with that of a reflex irritation. He was surprised that Dr. Brailey considered the fact that the conjunctivitis became worse immediately after the enucleation, was evidence of its being sympathetic; to most people it would appear that an immediate amelioration in the condition of the eye would have pointed in this direction, and that the absence of improvement, if of any value at all, was evidence of its not being of sympathetic origin.—Mr. **WAREN TAY** inquired whether any member had seen a case where, punctate deposits within the lens, of which he had seen a few cases, having occurred, the eyesight had recovered. He asked Dr. Brailey whether, in any of the cases on record, sympathetic ophthalmitis occurred when the injured eye was excised a very short time after the injury was inflicted.—Mr. J. B. **LAWFORD** thought that, if sympathetic inflammation spread along the vessels, it was not easy to see why it did not extend further back, so as to involve the centres.—Mr. M. **MCHARDY** referred to a case published by him in the *St. George's Hospital Reports*, where conjunctivitis came on three weeks after removal of the damaged eye; it spread in spite of treatment, and eventually there was typical sympathetic inflammation. The cases of definite typical serous iritis with punctations which he had seen had almost all occurred in women, and either about the climacteric period, or in association with some uterine derangement. The **PRESIDENT** confirmed this observation of Mr. McHardy's. He thought that it might, perhaps, be possible to recognise in the future a class of cases of neurotic ophthalmitis resembling sympathetic ophthalmitis in their symptoms and course, but not dependent on any sympathetic cause; perhaps some forms of the rheumatic inflammation were of this nature.—Dr. **BRAILEY**, in reply to the inquiry as to what was to be included, in his paper, within the term sympathetic ophthalmia, said that if the ordinary liability of a healthy eye to any given disease were one in a thousand, and if in an eye, the fellow of which was affected, it was one in a hundred, then he would regard the occurrence of the disease in the latter case as due to sympathetic action.

Case of Pseudo-glioma in a Child aged Two Years.—Mr. **LEWIS JONES** read a report of the case of an infant who presented an example of pseudo-glioma. On October 4th, the child had a fall, and two days later was convulsed, with fever, squint, vomiting, and retraction of head. Four days later, there was acute iritis in the right eye, and optic neuritis of the left eye. At the end of three weeks, the fever left the patient, but a yellowish-white reflex was seen in the right eye, and the tension of the eye was found to be much diminished.

Cystoid Cicatrix. — Mr. **JOHN B. STORY** (Dublin) read a paper on the treatment of cystoid cicatrix; he advocated the use of nitrate of silver. In one of five millimètres diameter occurring after extraction of a cataract, he cauterised about a dozen times in the course of a month, having previously split open the cyst with a Gräfian knife. The cure was perfect, and so far permanent. Mr. Story corroborated von Gräfe in assigning a very small opening for the communication between the cyst and the anterior chamber, and even suggested that in some cases no such communication existed at all. In the case treated by him, no effect was produced on the anterior chamber by the escape of the fluid. Further, he had found, as von Gräfe stated, that the tension was generally subnormal in these eyeballs; and he had found hernia iridis a frequent forerunner of cystoid cicatrix, but the hernia was not to be regarded as either the cause or the first stage in the growth of the cyst. The eye tolerated the solid nitrate of silver perfectly, vaseline being applied to prevent the effects of the caustic from spreading too far. Mr. Story suggested that the actual cautery might be used with equally good results in these cases.

A Case of Paralysis of Convergence and Accommodation.—Mr. **EALES** read notes of the case of a little girl, aged 13, who came under his care on June 1st last, suffering from complete suppression of all power to converge the eyes, together with paralysis of accommodation and the associated contraction of the iris in each eye, though the pupils reacted well to light. From the history of the case, it appeared that this condition began in March last. The patient had never menstruated, had always had good health, having suffered from no illnesses except the usual complaints of childhood, and a mild attack of typhoid fever, uncomplicated by relapses or sequelæ; these illnesses were not related in point of time to the occurrence of the ocular affection. Her mother died of tubercular phthisis. Her father was subject to gout. There was no evidence or suspicion of syphilis, or of diphtheria, no history of headache or vomiting. The patient was spare, and slight, but apparently a healthy and cheerful child. On examination, the bilateral movements of the eyes in all directions, except convergence, appeared to be normal. The disc and fundus of each eye was healthy. Acuity of vision was good in each eye. The field of vision was normal, and colour-vision good. There was no other evidence of organic nervous disease. The patellar tendon-reflex was normal. There was no evidence of anæmia. Treatment by strychnia and iodide of potassium had no effect on the ocular condition, which persisted to the present time. In the absence of any evidence of coarse intracranial disease, Mr. Eales attributed this condition to a degenerative change in those nuclei of the third nerve which had been shown by Henson and Völckers to preside over the functions lost, and to be situated in the neighbourhood of the aqueduct of Sylvius; but what had caused this degeneration, he did not venture to predict in the absence of any clear indications.

MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 14TH, 1884.

Sir **JOSEPH FAYRER**, M.D., K.C.S.I., F.R.S., President, in the Chair.

Amputation of the Knee-Joint by Lateral Flaps.—A paper on amputation at the knee-joint was read, in the absence of the author, Mr. **T. PICKERING PICK**, by the Secretary (Dr. **ISAMBARD OWEN**). The operation had been performed by Velpeau and Syme, and advocated by Sir William Fergusson, who, however, insisted on the necessity of removing the articular ends of the femur. The operation, first performed by Mr. S. Lane, of amputating at the joint without removing the articular cartilages, was that advocated by Mr. Pick, with certain modifications. The experience at St. George's Hospital had led him to doubt the propriety of making a long anterior flap, owing to the frequency with which sloughing had occurred (16 times in 29 cases). Mr. Pick advocated the use of lateral flaps; the advantages claimed for the operation being (1) efficient drainage, (2) moderate-sized flaps, not liable to slough, and (3) a cicatrix well out of the way of pressure.—Mr. **BRYANT** thought that amputation at the knee-joint had been neglected, and that Mr. Pick's statistics were too unfavourable to represent the results of the operation. As regarded life, he thought it the safest of the major operations, and much safer than amputation through the thick part of the leg. Dr. Stephen Smith's operation by the hooded flap was a very valuable method, and the one he himself invariably adopted, though it was not necessary always to cut so large a flap as was recommended. Mr. Pick's operation was, in fact, Dr. Smith's operation with a vertical incision through the hooded flap. The posterior flap ought to consist entirely of skin, and be cut rather longer, perhaps, than Mr. Pick recommended; retraction of the posterior flap was always extremely marked, and required to be provided for in the operation.—Mr. **DAVY**, who had performed the operation nine times, had met with sloughing once in the first five cases, where he used a long anterior flap; in the nine cases, he had only met with one death, on the third day after the operation.

On Flat-foot, and its Cure by Operation.—Dr. **ALEXANDER OGSTON** (Aberdeen) read a paper, in which, after emphasising the fruitlessness of the ordinary and usual methods of treatment, he entered into a discussion of the causes of flat-foot, and the mechanism of its production. The appearances observed in it were held to be due to a falling down of the inner side of the plantar arch, and this was mainly owing to a yielding of the astragalo-scaphoid joint in the sense of dorsal flexion. The deformity, in his experience, generally occurred in connection with rachitis adolescentium. Of this, evidence was found in rickety knottings of the bones, and other symptoms of rickets; as a rule, there had also been an amount of labour beyond the strength; in one boy, however, who was very fat, the flat-foot appeared at 8, without any other apparent cause. Pes valgus was a misleading term; the valgus was not a necessary part of the deformity. Valgus-ankle also was a different deformity; it was seen in young girls, and caused so much displacement at the ankle-joint that the malleoli struck each other in walking. In true flat-foot, on the other hand, the ankle-joint did not participate, but the arch of the foot became unfolded so as to touch the ground along the whole inner border. Examination of a foot in this condition might show relaxation of all joints, but especially, and in great degree, in the astragalo-scaphoid joint. When deformity existed to only a slight degree, it might disappear at once on lifting the foot from the ground. A slight aching pain was complained of; and in such cases an error of diagnosis was very liable to occur, owing to the condition of flat-foot only being present when the foot was on the ground being overlooked. In process of time, the deformity became permanent, and no longer disappeared when the weight of the body was taken off. Alteration in the shape of the bones finally occurred, so that, even by the use of force, the arch of the foot could not be restored. The relaxation of the astragalo-scaphoid joint and the alteration in the bones were, he considered, the key to the deformity. As a secondary event, deformity of the great toe occurred, and, in extreme cases, the form of the foot was so altered as to become "canoe-shaped," the calcaneum being so displaced, the posterior part being tilted upwards, that the heel could not be brought to the ground. The cure was arrived at by causing ankylosis at the astragalo-scaphoid joint after it had been restored to position. Several methods, having this object in view, had been tried, but the best results had been obtained by the following operation. An incision was made on the inner border of the foot, parallel to the sole and over the joint; the joint was freely opened; the surfaces of the scaphoid and astragalus were denuded of their articular cartilage; the arch of the foot was restored to position, and the joint fixed by ivory pegs passing through the two bones. In some cases the patients had been able to walk in two months, but as bony union occurred slowly in persons liable to flat-foot, he considered three months' rest in stiff bandages necessary to ensure bony ankylosis after the operation. In one patient only a little tenderness remained for some time, and, five months after the operation, one of the ivory pegs was extruded through a small painless sinus. The operation proved successful in seventeen cases performed on ten patients. The plantar was not generally completely cured, but all the patients, with the exception of the man in whom the peg was extruded, considered themselves, when seen at considerable intervals after operation, cured. He observed the strictest antiseptic precautions (Listerian).—Mr. **W. ADAMS** could testify to the accuracy of Dr. Ogston's account of the excellent result of his operation, having seen a number of cases, on one occasion, in Aberdeen.—Mr. **BRYANT** thought that the operation was a valuable one to be applied to suitable, that was, to severe cases. A very similar operation had been performed by Mr. Golding Bird.—Mr. **H. F. BAKER** advocated the division of tendons in severe flat-foot.—Mr. **DAVY** did not feel convinced of the utility of the operation recommended by Professor Ogston. He looked with disfavour on any operation which tended to diminish the elasticity of the inner three-fifths of the foot, and felt sceptical as to the permanent benefit likely to be derived from it.—The **President** thought the operation promised to give great relief in some cases. He inquired whether anything could be done to remedy and prevent the aggravation of flat-foot in young children before the structural changes had taken place.—Dr. **Ogston** said that in none of the cases had contraction of the tendons been a prominent symptom. He had no experience of the operation in very severe aggravated cases, where the deformity amounted to the canoe-shaped foot. With regard to the question as to what became of the ivory pegs, he observed that Reidinger and Trendelenburg had shown that ivory pegs might become eroded and vascularised, but the occurrence had never come under his observation. His operation had been performed on "adolescents" between the ages of 13 and 17, or a little older. He had never, in any of his cases, met with a rise of temperature above 100° Fahr., or any symptoms of fever.

Pulmonary Stenosis. Dr. **Day** showed a case of congenital pulmonary stenosis, without cyanosis, in a boy aged 8.

MIDLAND MEDICAL SOCIETY: ORDINARY MEETING.

DECEMBER 5TH, 1883.

G. F. **Bodington**, M.D., President, in the Chair.

Surgical Treatment of Congenital Abnormalities of the Rectum.—Mr. **Thomas** read a paper on this subject. He was in favour of arranging all such malformations in three divisions—(1) imperforate rectum; (2) abnormal termination; (3) deficiency. In treating the first form, nothing was required but free incision, with occasional dilatation for some time after. In the second, where the rectum terminated in the urethra or vagina, he strongly advised the performance of Rizzoli's operation in preference to incision of the gut and drawing down the mucous membrane, contending that the recto-vaginal or recto-urethral communication very rarely had a tendency to close. In the third division he discussed the propriety of colotomy, and suggested that, in some cases, median abdominal section, for the purpose of ascertaining the position and development of the bowel, might be advisable.—Mr. Lawson Tait, Mr. Ross Jordan, Mr. Jordan Lloyd, and Mr. Hawkins, took part in the discussion which ensued.

Successful Operation for Rectum terminating in Urethra.—Mr. H. **Thomas** showed a patient on whom he had operated successfully for urethral termination of the rectum, by dissecting out the lower end of the rectum, separating it from the membranous part of the urethra, and stretching it in the normal site. The operation had been performed six months, and the child now had perfect control over the sphincter. There was a fistula in front of the anus, but it gave no trouble, all the urine passing by the urethra. The history of the case was given in a paper.

Congenital Absence of Jejunum and Ileum, and Large Part of Colon.—This specimen was also shown by Mr. **Thomas**. The duodenum terminated in a *cul-de-sac* on the left side of the spine; there was no trace of any other part of the small intestine, nor of cæcum, ascending or transverse colon. The descending colon commenced by a blind extremity, which lay on the front of the left kidney, and was continued, as sigmoid flexure and rectum, to terminate in the vagina. The child had lived four days.

Paralysis of the Left Sixth Nerve. Mr. **Eales** showed a man, aged 45, who had come under his care in consequence of paralysis of the left sixth nerve. He was found to be suffering also from arthritis in the metatarso-phalangeal joint of the left great toe; the patellar reflex was almost absent. There was no loss of reflex contraction to light in either pupil, and vision was $\frac{20}{22}$; the field of vision was normal in each eye, and the optic discs were healthy. The patient had syphilis twenty-six years previously, followed by sore-throat and rash; but no other indications of syphilis could be discovered. Ten years ago, he suffered from paralysis of the left facial nerve. He had also for some time suffered from shooting pains down the legs. Mr. Eales considered the case to be one of chronic tabes dorsalis.

Aneurysm of Arch of Aorta. Dr **Saunders** showed a case of aneurysm of the arch of the aorta, in which death occurred from embolism of the pulmonary artery.

Athetosis. Dr. **Suckling** showed a case of athetosis, occurring in a man who had been the subject of hemiplegia since infancy.

Renal Calculus.—Dr. **Suckling** showed a calculus composed of oxalate of lime, with a nucleus of uric acid, weighing one drachm, taken from the left kidney of a woman aged 70 years. Towards the end, intussusception of the large intestine took place, the intussusception beginning at the commencement of the ascending colon.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

DECEMBER 7TH, 1883.

J. L. W. **Thudichum**, M.D., President, in the Chair.

The Hygiene of Water-closets.—Dr. **Dawson Williams** read a short paper on certain hygienic considerations with reference to water-closets. He observed that a badly constructed apparatus might itself give rise to obnoxious smells, and even to disease, although the drains and sewers of the house and town were in good order. He illustrated this by reference to the ordinary old-fashioned pan-closet, and pointed out by means of diagrams the obvious and serious faults in its construction; yet it was a form of closet, not only in common use, but one which was constantly being introduced into new houses. What was wanted in a water-closet was as simple an apparatus as possible, which should provide a water-valve allowing the free, easy, and complete passage through it of all matters; the apparatus ought further to keep itself clean, and ought to be as nearly noiseless as possible. Failure to comply with this last condition prevented to a great degree, he believed, the more extensive use of some of the new valveless hopper-closets with siphon-traps. The pan-closet had displaced the old Bramah valve-closet, and was now in its turn being replaced by valve-closets of various patterns. After remarking on the disadvantages which accompanied the use of the valve-closet, he expressed his belief that they did not overweigh the advantages. The closets without valves, which were really improvements of the old hopper-closets, while very suitable for offices and public institutions, did not seem likely to replace the valve-closets for private houses, owing to the noise made by the great rush of water, and to the small quantity of water left in the basin. The wash-out closets appeared not to be so successful in practice as was at one time hoped. The points requiring attention in the selection of a water-closet were these.—1. The basin should be of a suitable size and shape, a practical point often neglected. 2. The trap should be simple. 3. The water supplied at each delivery should be sufficient in quantity and have sufficient head to clear the trap, a point only to be ascertained by trial. 4. There should be as little metal-work as possible, since metal-work necessitated joints, which were very liable to leak as well as create corners for dirt. After referring to the clumsy construction of the old leaden D-traps, and the manifest advantages of the glazed earthenware siphon-traps, Dr. Dawson Williams gave a short description of a form of latrine, and of certain automatic flushing cisterns, and concluded by observing that all the various patterns of water-closets might be seen in action at the Parkes Museum.—A short discussion followed, during which Dr. **Thudichum** referred to the time when cesspools existed immediately beneath the houses of London.—Dr. **Benham** spoke at some length on the time-cistern, by which arrangement the basin was flushed at regulated intervals, and which was consequently an advisable addition when there were young children in the house.—The following gentlemen also took part: Drs. Alderson and Campbell Pope, and Mr. Gomer Davies.

Cerebral Tumour. This case was described by Mr. J. M. **Atkinson**. A full report was published at page 57 of last week's **Journal**.

Vegetation on the Mitral Valve.—Mr. **Atkinson** showed a specimen of a heart with a very marked vegetation on the mitral valve leading to four large wedge-shaped infarcts in the spleen.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

DECEMBER 6TH, 1883.

H. F. **Banham**, M.D., President, in the Chair.

Stokes's Amputation.—Mr. W. A. **Garrard** exhibited some cases in which Stokes's modification of Gritti's amputation at the knee had been performed. After briefly describing the operation, which had been performed five or six times at the Rotherham Hospital, in all with a very satisfactory result, he endorsed the opinions of Mr Jacobson, given in the *Guy's Hospital Reports* for 1878, that in many cases it was superior to any other; the chief reasons for this opinion being that it obviated the necessity of amputating through the thigh, in some cases of disease of the knee-joint in which the patella was not involved, and in cases of disease or injury where there was not sufficient skin below the knee for Carden's operation. He thought that the stump bore more pressure than the one after amputation through the knee-joint; that there was less liability of sloughing of the anterior flap, from the fact that it was two inches shorter than in the amputation at the joint, and the vessels supplying the skin were cut in their course to the extremity; and that it was less dangerous than amputation through the thigh when the medullary canal was opened; and, finally, instrument-makers were of opinion that an artificial limb could be better fitted than in the amputation at the joint.

Calculus.—MR. GARRARD showed also an oxalate of lime calculus, measuring eight inches in circumference, two inches in diameter, and weighing upwards of two ounces and a half, which he had removed, a few days previously, by lithotomy, from a young man aged 21, who had symptoms of bladder-irritation since he was three years old. Recently he had come to the Rotherham Hospital, complaining of severe pain, with rigors, at each attempt at micturition. On admission the urine was ammoniacal, very purulent, and full of thick mucus, bladder very irritable; by the rectum, a large calculus was easily felt. Mr. Garrard invited discussion as to whether lithotomy was the best practice in this case, he himself thinking it was: first, because the man's bladder was in a bad state; secondly, because he did not think it possible to crush such a large stone at one sitting, and if more than one sitting were submitted to, he thought the mischief to the bladder would be worse than by lithotomy. A week after the operation the man had had little pain, no bleeding, and no rise of temperature, and had not felt so free from pain for months as he did the day after the operation.—Mr. Favell and Mr. Barber made remarks on the foregoing cases of Mr. Garrard's.

Ovarian Cyst.—MR. ARTHUR JACKSON made a few remarks on a case of ovarian tumour, which he had removed. There was nothing special in the operation, but the important point of diagnosis was apparent from the fact that up to within a fortnight of the operation the patient had believed herself to be pregnant, and had actually summoned her medical man, thinking symptoms of labour had come on. The difficulty of distinguishing between pregnancy with over-secretion of the amniotic fluid, and ovarian dropsy, and the mistakes in treatment resulting therefrom, were dwelt upon, as well as the negative results occurring often from the use of the uterine sound.—Dr. Dyson, Mr. Knight, Mr. Walker, and Dr. Martin joined in discussing the case.

Tumour of Neck.—Mr. FAVELL exhibited a tumour he had removed that day from the neck of a young man, aged 20. The growth was about the size of a turkey's egg, and was apparently of seven months' duration. Syphilis as a cause was excluded. It was found to have originated in the sterno-mastoid muscle, and to have sent prolongations deeply into the neck. Under the microscope, it exhibited the characteristics of a spindle-celled sarcoma. Mr. Jackson and Mr. Garrard made remarks on the case.

Exophthalmic Goitre.—Mr. GARRARD introduced a patient, a female, recovering from exophthalmic goitre.—Mr. BALDWIN introduced two male patients, the subjects of exophthalmic goitre. In one case, a man, aged 40, the exophthalmos was particularly marked. A sister had suffered from full neck. Eight years ago a quantity of earth fell on the patient, and he was much frightened; a few weeks later he noticed that his eyes were larger, and his throat became full. Up to five months ago he had followed his occupation as a puddler; since this time the goitre had increased, the eyes became more prominent, and palpitation excessive. Pulse 120 to 140. There was well marked bellows-murmur, mitral systolic and basal systolic of heart. The right optic disc was normal; the left had white atrophy; both retinal arteries pulsated. The lids did not close over the eyes in sleep. Gräfe's symptom was well marked. He then developed pneumonia, from which he recovered well. The treatment consisted in arsenic, digitalis, iron, and lastly, the application of Leiter's tubes over the heart and the goitre; from the latter only was benefit derived; the pulse was now 92. The other patient was aged 38; he had goitre, palpitation, and unilateral exophthalmos (?). The father and mother, one brother and two sisters, were full throated; in one sister, the fulness increased during pregnancy. The heart was normal; there was no *bruit*. One eye was larger than the other; he had equal myopia. He was very irritable, restless, and a bad sleeper; if he got a little beer, all his symptoms were aggravated. Ammonio-citrate of iron with digitalis was prescribed. In this last case, Mr. Baldwin did not think the treatment had any effect, the result being a natural subsidence. He asked if this was a case of simple goitre, with an exciting cause, producing exophthalmos incipiens. Was it probable such might occur? Was treatment by drugs of much avail in exophthalmic goitre?—In the discussion following the reading of these cases, the following joined: Dr. Hardwicke, Mr. Atkin, Dr. Porter, Mr. Cheesewright, Mr. Garrard, Drs. Dyson and Thomas, Mr. Snell, Mr. Jackson, Mr. Knight, Mr. Barber, and the President.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, DECEMBER 21ST, 1883.

T. O. DUDFIELD, M.D., President, in the Chair.

The Artisans' Dwellings Acts.—Dr. J. W. TRIPE read a paper on the Artisans' Dwellings Acts, in which he dwelt chiefly upon those sections of the Acts which he considered defective. In his opinion, to carry out the work effectually, there should be great alterations in the machinery for working the Acts, as well as in the cost. The pecuniary position of the inhabitants of the dwellings must be considered; for those earning less than fifteen shillings a-week could not pay the same rent as those earning twenty-four shillings a-week. Costermongers and others required a special kind of accommodation; and, again, there were those whose habits prevented their being received into the Peabody and similar buildings. Overcrowding was one of the great difficulties with which a medical officer of health had to contend; for the number of persons occupying one room was not easily ascertained, except at night, and this was a matter requiring special attention. Dr. Tripe suggested that a landlord should be able to obtain from the magistrate an order for the eviction of a tenant, if the medical officer of health gave a certificate that the house or room was unfit for human habitation; and then, if the landlord did not take advantage of the powers, he should be made to suffer from the penalties inflicted on him for allowing his tenants to inhabit such houses. There were two classes of uninhabitable dwellings: those structurally or by their surroundings unfit for human habitation, and those which might be made habitable by alterations or ordinary sanitary improvements. Quicker and surer work must be made with houses structurally unfit for habitation than at present obtained. The value of the houses, their present condition being taken into consideration, and without addition for compulsory purchase, should alone be paid; and no house should be allowed to be occupied after it had been legally decided to be unfit for living in, even during an appeal from the decision. The rebuilding, where unhealthy dwellings had been pulled down, was another difficulty; and could only be met, Dr. Tripe believed, by private enterprise, assisted by advances from persons willing to take shares in building such houses, which could not, in the middle of London, pay more than three or three and a half per cent., even when the ground-floors were shops. Such buildings should not be undertaken by the local authority. The houses capable of improvement could be dealt with under the present laws, if increased powers were given to local authorities and their officers. Dr. Tripe proposed that, in dealing with such houses, they should be inspected twice a year, and more often on complaints being made, and notices should be served to owners, under Section 35 of the Sanitary Act, to do all that was necessary for cleansing and repairing the premises. If the owners failed to do the work, they should be liable to penalties; and if, after being summoned for the penalties, the work were still not done, the local authority should have power to close the house or room. No appeal should be allowed, either as to penalties or the carrying out of ordinary sanitary work. The chief alterations in the law which Dr. Tripe suggested as likely to be beneficial, he summed up as follows. There should be a central authority, to whom all reports of houses structurally unfit for human habitation should be referred; and improvements should be made in the cost of, and the procedure for, acquiring these houses and the land upon which they were built, as well as in the regulations under which new buildings were to be erected. Houses which could be rendered fit for habitation without being pulled down, should be dealt with by the local authority. Regulations should be made for the whole of London for enforcing a periodical cleansing and repairing of houses at a less rental than £20 a year, and of all houses let in lodgings; a register should be kept at the office of the local authority for registration of the name of the owner; the local authority should be able to close the whole or part of such house after the owner had been summoned before a magistrate for penalties for neglect, provided that the second notice should be served upon the owner, giving him a reasonable time previously to taking such a step.—Mr. WYNTER BLYTH gave an account of the work done by the parish of Marylebone under the Artisans and Labourers' Dwellings Acts. He stated that these Acts had been applied wherever and whenever it was considered necessary. A representation had been made in only one instance under Mr. Cross's Act of 1875, the first scheme having been submitted to the Board of Works in 1876, and containing four blocks or unhealthy areas. Of these, one alone was taken up by the Board of Works; but two of the remaining three had since been dealt with under Mr. Torrens's Act. The buildings demolished by the Board of Works contained 800 persons, living in 383 tenements; and the rent was about 2s. a week. The death-rate of this area was but 18 per 1,000; but that did not include the many who died in hospitals and workhouses. Two years after the representation was made, a provisional order was obtained, but not until seven years had elapsed since the first representation would there be new buildings erected; and, should those who were displaced desire to be rehoused on the old land, they would, of course, have to pay a higher rent. The total number of people displaced since 1868 by the working of Mr. Torrens's Act amounted to 1,181. Successive reports had to be made in more than one case on the same premises; thus houses reported upon in 1877 were repaired twice before the surveyor considered that they must be demolished. The difficulty arising from the purchase-clause in the Act had only once, and that quite recently, occurred in all the cases with which Mr. Blyth had dealt; but he believed that this was owing to the fact that the greater part of the parish was composed of large estates, and the leases had been within the twenty-one years' term mentioned in the Act. The freeholder had not objected; the leaseholder could be ignored; and in one or two cases where the section might have been applied, probably the owner was ignorant of his power. The case which occurred recently, in which notice was given to the authority to purchase, was still under arbitration, and Mr. Blyth deferred making further mention of it. As to the effect of the improvements on the poor, he stated that, of the 1,000 people displaced in his district, a third were of the criminal class, but the rest were of the very poor, who paid with difficulty the comparatively low rent of their old tenements, and who could not possibly pay the higher rent of the few new houses built on the vacated sites. The fairly paid artisan obtained increased accommodation, but not the class generally denominated as poor; and, if every vestry had worked the Artisans and Labourers' Dwellings Acts thoroughly, an appalling amount of misery, of overcrowding and poverty, would have been the result. The condition of the poor, Mr. Blyth concluded by saying, admitted only one remedy—building, if it were possible as a commercial undertaking, healthy tenements, for which the weekly payments should not exceed a tenth of their weekly wages.—In the discussion which followed, the President, Dr. James Edmunds, Dr. Dixon, Dr. Saunders, Dr. Bate, Mr. Greenwell, and Mr. Jones took part.

ACADEMY OF MEDICINE IN IRELAND: SURGICAL SECTION.

FRIDAY, DECEMBER 7TH, 1883.

W. I. WHEELER, F.R.C.S.I., President, in the Chair.

Living Specimens.—Mr. STOKES: Case of excision of the knee-joint for caries in a patient aged 36.—Mr. A. BENSON: Cases showing appearances of jequirity-ophthalmia.—Mr. BARTON: Case of double tibial osteotomy.—Mr. LAMBERT H. ORMSBY: Case of osteotomy for genu valgum.

Specimens Exhibited by Card.—Messrs. Thornley Stoker, Hayes, Stokes, Lambert H. Ormsby, and M'Ardle exhibited specimens by card.

Removal of Naso-Pharyngeal Tumours. Mr. THORNLEY STOKER read a paper on the removal of naso-pharyngeal tumours. He dealt only with those growths with broad bases of attachment, which are properly called tumours, as distinguished from pedunculated growths or polypi, and the essential character of which is that, while lying in the naso-pharyngeal cavity and invading other situations, they primarily spring from the base of the skull. He detailed two cases in which he had operated successfully—one in 1874, and the other two years ago. In the former case the tumour was fibrous, and was taken away through the anterior nasal opening, access being gained to the fossa by making an incision along the side of the nose and enlarging the bony opening by removing the nasal edge of the superior maxilla with a forceps. In the second case the tumour was a mixture of the cartilaginous sarcomatous and myxomatous forms. It was of large size, had produced "frog face," impaired the function of one eye and ear, and injured the sense of smell. It was also removed by an anterior operation. The nose was divided along its dorsum, its halves turned aside, and the tumour removed by scooping and scraping. It involved the bony roof of the nose and pharynx, and the bodies of the three upper cervical vertebræ, large portions of which had to be taken away. The patient made a most unexpected recovery, and was now in good health. His eyes had approximated to each other, and his hearing was completely, and his sight and smell partly, restored. Mr. Stoker referred to the principal operations which had been performed in the removal of these growths, but stated that his own observation of naso-pharyngeal tumours led him to the belief that, in the great majority of cases, such heroic measures as operations through the palate, by removal of the superior maxilla, or by displacement of it, were unnecessary, and that the disease could generally be attacked and taken away through more limited openings than these operations afford. For coming to this conclusion he had two reasons; first, that the growth of the tumour had by the time operation was demanded, generally separated the superior maxilla to a considerable extent, so that as the surgeon cut away the disease he found his fingers in a cavity, where he had room enough for action and exploration; and secondly, that the rough kind of scooping, gouging, or cutting, which was the most efficient means of attacking these tumours when the surgeon proceeded to remove them, did not require much space for its exercise. —Mr. THOMSON said he had himself under observation a case which had been under the care of Dr. Robert McDonnell a couple of years ago. A boy was suffering from a naso-pharyngeal tumour, and from his description it appeared that Dr. McDonnell had removed the tumour through the mouth with a snare. When the boy came to him in January last, the left side of the nose was filled with a large tumour, which could be felt projecting into the pharynx behind. Having failed to remove it by snaring, he determined on a more severe procedure. He slit up the side of the nose, dividing the nasal bones with a forceps, and he was then able, by passing one finger into the mouth through the pharynx and the other through the nares, to get at the fragment of the tumour. It was attached to the septum of the roof of the nasal cavity; the attachments to the roof of the nose being slight, he was able to break them down, and remove the tumour in one mass. In three weeks afterwards, the boy went away well. Last month, however, he returned, the tumour having recurred, and it presented over the antrum.—Dr. R. MCDONNELL thought that the case detailed by Mr. Thomson was a remarkable one. The boy had come to himself in Steevens's Hospital several years ago, suffering from a large tumour which pressed forward the soft palate. When that was drawn forward, a roundish mass presented itself, which was most inviting for slipping a noose round. He had tried to snare the tumour, but without success, until Dr. Cruise assisted him in producing an instrument with which to slip the noose backwards. The tumour being snared, a large piece came away, and it was obvious that the noose went through the substance of the tumour, instead of around the base. The effect was, however, to lessen the bulk and improve the condition of the patient; so that he went home. After six or eight months he reappeared with a tumour of very large size, which interfered with speech and swallowing, and rendered respiration through either nostril very difficult. His snoring at night was so peculiar that it disturbed all the patients in the ward. The operation was a most formidable one. The blood was gushing from the mouth and nostrils. When the tumour was taken out, the large mass of sponge it took to fill the cavity amazed him. It controlled the hæmorrhage, and the boy made a good recovery; but the tumour recurred, and he then fell into Mr. Thomson's hands. The tumour was identical in structure with that described by Mr. Stoker, and belonged, no doubt, to the group of sarcomata, but was of that class in which the connective tissue elements contained cartilage-cells verging towards the condition called myxoma.—The PRESIDENT had seen several cases of naso-pharyngeal tumour—in one case where the tumour had been removed previously, and he was consulted upon its return. It occupied the floor of the nose, and the antrum. He removed the upper jaw. There had been [illegible] return of the disease.

Case of Gunshot [illegible] Thoracic [illegible]—Mr. STOKES brought under notice the particulars of a case of [illegible] shot injury of the chest, that was under his care in the [illegible] Hospital last September. The patient, aged [illegible], [illegible] received the injury at Cabra, and was able to walk to the [illegible] distance of about a mile, after it occurred. A [illegible] was found over the left scapula, an inch from the [illegible] about two inches and a half from the inferior [illegible] was in a state of great prostration [illegible] suffered from dyspnœa. The [illegible] be increased, and a distinct tumour, [illegible] orange, was found to the right of the [illegible] loud crepitating and gurgling sound [illegible] considerable distance from the patient. There was [illegible] part of the pleural sac. The day following, the left side was found to be absolutely dull, except at a small space, about two inches in diameter, situated a little to the left of the cardiac base, which was distinctly tympanitic. On September 20th, the patient's symptoms were very urgent, the dyspnœa and cardiac distress having much increased. Paracentesis on the left side of the chest was performed, and fifty-six ounces of a dark reddish serous fluid were drawn off. This was followed by great improvement, which lasted some days. Five days subsequently, he suddenly became much worse, a suffocating catarrh of the right lung having set in, which nothing checked. The patient died the following morning. The necropsy showed that the bullet had penetrated the scapula, fractured two ribs (the seventh and eighth), entered the thoracic cavity, penetrated the lung, and finally lodged in the angle between the diaphragm and the sixth intercostal muscle. There was a large pleural effusion, with numerous flakes of lymph in it, as well as on the pleura. On the right side, the lung was congested, emphysematous, and with numerous hæmorrhagic infarctions. There was no pericardiac complication. The special points of interest in the case were the absence of hæmoptysis; the tumefaction over the heart; the loud gurgling bubbling sounds connected with it; the area of tympany observed when the patient was in one position, and disappearing in another; and, lastly, the absence of successive sounds.—Mr. THORNLEY STOKER said Mr. Stokes's most interesting paper was bristling with paradoxes, a great number of which seemed to him incapable of explanation, although he had himself very carefully watched the case. On the evening of the man's admission into the hospital, the bubbling or gurgling sound was a most remarkable phenomenon, the like of which he had not seen approached in any case before, and he could find no better simile than that it resembled the breaking of gigantic bubbles, audible at a distance of upwards of ten feet. The knowledge given by the necropsy bore out his opinion of the cause of the sound. He had attributed it to the rough admixture of air and fluid in the immediate vicinity of the heart, whose impulse imparted the motions; for the pleural sac contained both blood and air. The sounds were synchronous with the action of the heart. He was inclined to believe that the pericardium was wounded; but in that he was wrong. The air was about the pericardium, and the sound was due to the churning together of the blood and air produced by the excited action of the heart.—Dr. BENNETT said he had had the good fortune to see the case during its apparently favourable course, when it was supposed it would recover. The tympany on altering the position of the patient gave him a very clear idea that there was a small quantity of air in the pleura, which rose to the top, ascending as the position was changed. Another point of great interest was, that it was clearly established by the *post mortem* examination that there was an extensive wound of the lung, and yet there was no hæmoptysis. It was recorded by Fraser, in his *Surgery of the Crimean War*, that the presence of hæmoptysis was of great value as an absolute diagnostic sign, but that the opposite was not to be inferred. A very extensive wound of the lung might exist without any hæmoptysis.—The President, Drs. Cox, Beatty, Kennedy, and Lentaigne joined in the discussion; and Mr. Stokes replied.

FINSBURY DISPENSARY.—The biennial festival of this old established dispensary was celebrated on Monday evening at the Holborn Restaurant, under the presidency of the Right Honourable the Lord Mayor, M.P., supported by the sheriffs of London and Middlesex, Mr. Barclay Field, treasurer; Mr. Richard Moreland, honorary secretary; Dr. Domett Stone, one of the physicians to the institution, and upwards of 100 other gentlemen. From the one hundred and fourth annual report, which was circulated during the evening, it appears that the number of new patients in the year 1883, amounted to 13,719, which exceeds by 944 that of the previous year, and is the largest number yet relieved in any one year by this dispensary. The number of attendances was 32,619; the number of visits by the medical officers to patients at their own homes, 3,570; making a total of no less than 36,382 consultations in the year. All this hard professional work was done by the two physicians to the institution, Dr. J. W. Griffith and Dr. W. Domett Stone, assisted by the resident medical officer, Mr. Alfred Phillips. During the evening subscriptions to the amount of £510 were announced.

BEQUESTS.—The late Sir William Siemens, among other charitable legacies, has bequeathed £2,000 to the German Hospital, Dalston, and £1,000 each to the German Society for Benevolence, the Tunbridge Wells Infirmary, and the Scientific Relief Fund of the Royal Society.

REVIEWS AND NOTICES.

ARMY MEDICAL DEPARTMENT REPORT FOR THE YEAR 1881. Vol. xxiii. London. 1883.

[CONCLUDING NOTICE.]

THE two previous notices of the volume of Army Medical Reports, which were published towards the close of the year 1883, were devoted to an analysis of its statistical and sanitary contents. They were descriptive of the health of the army during the year 1881. There remains to be noticed the Appendix to the volume, which occupies about half of its bulk. We have already, at the conclusion of the first notice, enumerated the list of papers contained in this section of the work. Those which refer to the medical service during the Egyptian campaign of 1882 possess the greatest general interest, but especially the first of the series, which comprises a history of the war, from the time when it was first determined that the expedition should take place to what may be regarded as its end, when the decisive action of Tel-el-Kebir had been fought, and the subsequent concentration of the British troops at and around Cairo was successfully accomplished. This report is written by Surgeon General Sir J. A. Hanbury, K.C.B., who was the Principal Medical Officer with the forces in Egypt while the campaign lasted.

The commencement of the paper gives an account of the plan on which the arrangements were made by the Director-General of the Army Medical Department, with a view to adapt the medical and surgical aid to be afforded to the sick and wounded troops to the special circumstances of the country and climate in which the military operations were to be conducted. The ordinary heavy transport vehicles used in Europe would be worthless in the dry sandy deserts of Egypt; and it was therefore determined that the medical transport should be limited to two-wheeled light carts and carriage by pack-animals. The mules or horses for the carts, and the pack-animals for the portable hospital-equipment and sick-conveyances, were undertaken to be supplied by the Transport Department. The canals and railways were to be taken advantage of as far as possible. It was known that the season of the year during which the military operations were about to be carried on would be the hottest and most unhealthy in Egypt; and accordingly, a very liberal provision was made of field and base hospital-accommodation, viz., about 4 per cent. in excess of the authorised proportion to strength of troops laid down in the Army Regulations. In addition to the regular quantities of field-hospital equipment with the troops—that is, the equipment with the regiments, bearer-companies, movable and stationary field-hospitals—very large supplies of medical stores and surgical appliances were sent to be held in reserve at Ismailia and Alexandria. A large amount of articles likely to be of service in meeting special exigencies which the climate of Egypt was likely to give rise to were included among the hospital-stores. Among them were eye-goggles, veils—a pair of goggles and a blue veil being provided for every individual of the army—hospital ophthalmic napkins, wire bed-cradles covered with gauze, mosquito-nets and frames, wire dish-covers to protect the food from flies, ice-making machines, refrigerators for cooling food and drinks, and filters. In addition to the movable and stationary field-hospitals equipped for being with the troops on shore, the steamship *Carthage* was specially fitted up for 220 patients as a base-hospital on the seaboard or Suez canal, and the *Courland* was fitted with 60 beds to act as a tender to the *Carthage;* while a large fleet of transports were arranged to be available for the rapid conveyance of patients to Cyprus, Gozo, Gibraltar, or England. A hospital was established at Cyprus, and furnished with 400 beds, and one at Gozo for 200 beds, with equipment to increase the accommodation to 400 beds if required.

A large staff of medical officers was attached to the expedition—163 of all ranks. Two surgeons were attached to each regiment of the Guards, and one to each regiment of cavalry and infantry, battery of artillery, company of engineers, and commissariat corps. Each field-hospital and bearer-company had its regulated proportion of medical officers. Twenty-nine nursing-sisters were employed during the campaign, either in Egypt, Cyprus, Gozo, or on board the hospital-ship *Carthage*. Of this number, 6 belonged to the Army Nursing Establishment, 6 to the National Aid Society, and 17 were specially engaged for the campaign. The subordinate medical establishment consisted of about 820 men of all ranks of the Army Hospital Corps. The Indian contingent provided its own hospitals, staff, hospital-equipment, and transport, independently of the establishments previously mentioned. The arrangements made by the medical department, before they were adopted, as a matter of course, received the formal approval of the authorities of the War Department and Horse Guards.

Remembering the accusations that were made in numerous quarters toward the close of the campaign, as well as subsequently, that sufficient provision had not been made by the medical department for the wants of the sick and wounded in Egypt, it becomes important to learn what the opinion of Sir John Hanbury was on the subject. As the Principal Medical Officer of the army, the whole of the medical affairs connected with the expeditionary forces were under his direction, subject only to the authority of the General Officer Commanding; and had the necessary professional means for meeting the responsibilities which were entrusted to him not been placed at his disposal by the Director-General, it is only natural to conclude that he would bring the deficiencies to notice. So far, however, from complaining of any deficiencies in the kinds or amount of hospital-stores and equipment, this officer writes in the report under notice: "The arrangements made by the medical department for this campaign, it may be affirmed, were very ample and elaborate, and every point in connection with the equipment of the expedition had been studied with special attention to the exceptional requirements of the campaign."

A careful perusal of the history of the campaign under review, and an examination of the detailed lists of the supplies furnished by the Army Medical Department, which are shown in the appendix to the report of Lord Morley's Committee, fully bear out the statement of Sir John Hanbury, and, indeed, prove that that Committee could not possibly have arrived at any other conclusion than the one which they published in their report, viz., that the medical provision was in their opinion "amply sufficient."

The question then naturally arises, if the medical and surgical supplies, and the organised means of help, forwarded to the seat of war by the medical department, are found, on investigation, to have been in all respects suitable and abundant in quantity, to what cause is to be attributed the loud and persistent outcry about their defective nature and inadequate amount? We think we find, in some degree, a solution of the question in some of the statements which appear in the official history before us. It is obvious that, however appropriate in kind, and however well estimated as to quantity, the hospital and surgical stores and supplies may be, their sufficiency must practically depend on being at the proper time on the particular spot where they are needed. The supplies might as well remain in England, as be anywhere excepting at the place where they are required. It is evident then that quite as essential as the surgical supplies themselves, for an army on active service, are the means of moving them from place to place as the troops move. The two conditions, the provision of suitable supplies and adequate means for their carriage to the point where they are to be brought into use, are so mutually dependent for obtaining the main object in view, that it might well be anticipated that arrangements would be made for them to be inseparable during active service in the field. But though the medical department is held responsible for the hospital-stores, the department has no authority as regards their transport; that depends on other departments. And Sir John Hanbury's history shows how frequently, often on occasions of great urgency, the transport necessary for carrying on the work of the medical department was not forthcoming. We see deficiency of transport referred to at every stage of the history—from the ships to the hospital at Ismailia, and from Ismailia to the different points in front where the troops were operating, up to the ground before Tel-el-Kebir, where the necessary transport for carrying the means of attending to the wounded after the action, and carrying them to the canal and railway for conveyance to the base, was all-important. The following are some extracts on the subject from the Principal Medical Officer's report. The disembarcation of the troops at Ismailia began on August 22nd, and they were at once pushed forward. Sir J. Hanbury writes:—

"On the 24th, a section of No. 3 field-hospital and No. 1 Bearer-Company moved out to join the troops in front; the former by rail, the latter by marching, as there was no animal transport available. The medical officer in charge had the stores and equipment of the hospital placed on carts and dragged to the railway station by his own men. At this time, the horses and mules of No. 15 Company Commissariat and Transport Corps, which had been told off in England to the medical department, were employed on the line of railway" (Report, p. 223). "The men of the Army Hospital Corps, in addition to their legitimate duties of attending to the sick and wounded within the hospital, had to perform all the extraneous duties outside, such as 'fatigues' for conveying equipment and stores from the ships to the hospital, fetching commissariat rations for the patients and establishment, etc." (p. 224). "On August 30th, No. 15 Company Commissariat and Transport Corps, having been relieved from transport-duty on the railway, accompanied the larger portion of No. 2 Bearer-Company, when both were attached to the Cavalry Division. But No. 8 Commissariat and Transport, the other company allotted to the medical department, had not as yet been horsed, and no further animal transport was available. So great was the demand upon every means of transport at this time to provide ammunition, food, and shelter for the troops in front, that it was almost impossible to get anything else pushed forward. Medicines, medical comforts, and surgical appliances, had to be sent up daily in small instalments, in the personal charge of medical officers or orderlies. As an instance of the difficulty in obtaining transport at this time (beginning of September), I may state that the medical officer in charge of No. 2 Bearer-Company spent five fruitless days in endeavouring to procure transport for the equipment of his company" (p. 227).

How, we may ask, could the proper functions of the bearer-company and its equipment be expected to be performed without the means of transporting the equipment to the front, where it was required? The same harassing deficiencies in respect to field-hospital transport are shown before the battle of Tel-el-Kebir. Among the medical arrangements for the expected engagement, the following occurs. The right halves of Nos. 2 and 3 field-hospitals, rendered mobile with the following transport to each, viz., 15 mules and 17 horses, will accompany the fighting force. One half will be attached to the 1st Division, the other half to the 2nd Division." And Sir John Hanbury further on states, in the way of explanation, "By the utmost pressure I was able to render half a field-hospital with each division movable for the battle of Tel-el-Kebir. This explains why only half a field-hospital was detailed for each division" (p. 231). Throughout Sir J. Hanbury's history of the campaign, remarks meet the eye showing a deficiency in the means of transporting the hospital-supplies, and the things with which the bearer-companies were furnished for helping the wounded in the field. The general officer in command, it is alleged, placed dependence on the railway and canal for transport, and calculated on one set battle with the enemy, as fortunately turned out to be the case, finishing the campaign; but events are notoriously uncertain in war, and supposing the enemy after Tel-el-Kebir had taken up a fresh position, or, from any other unforeseen occurrence, the British troops had had to move from the neighbourhood of the canal and adjoining railway, it would have been practically impossible for the medical department to have afforded the aid to the sick and wounded which was expected from it. Notwithstanding the very ample quantities of the means of medical and surgical assistance sent to the seat of war, the animals requiredfor their conveyance would not have been forthcoming. The outcry against the medical department for the failure would have been still louder than it was; for few give heed to the fact that, as regards means of conveyance, the function of the medical department is limited to representing its needs, but is powerless to compel the supply. As it was, a great strain was thrown on Sir J. Hanbury in making the necessary arrangements for aiding the wounded at the action of Tel-el-Kebir, close as the battle was fought to the canal and railway; and had it not been for the large medical transport of the Indian contingent, consisting of 68 dhoolies, 222 Loushai dandies, and 497 native bearers, "a strong, healthy, well-selected body of men," being rendered available to supplement the medical transport of the British troops, from the Indian troops having no wounded of their own, the assistance rendered to the wounded would have been manifestly much less efficient than it was. Sir J. Hanbury describes the help which these men gave after the Tel-el-Kebir engagement as "invaluable, for by them all the seriously wounded men were removed to the hospitals." The important part which these Indian bearers took in the transport of the sick and wounded British troops, and their praiseworthy conduct during the campaign, deserve to be widely known. At page 239 of the history before us there is printed the copy of a letter, addressed by Sir J. Hanbury to the chief of the staff, relative to the hospital-arrangements for the British forces being concentrated at and about Cairo. The following paragraph concludes the letter. "The means of [illegible] to the hospitals, and from the hospitals to the railway-stations, are so limited, and so shockingly bad, that I recommend General Macpherson be at once telegraphed to, to order up to Cairo by rail 200 dhoolies and dandies, with their full number of bearers, for the purpose of doing the sick transport." This recommendation was fully complied with.

It cannot be a matter of wonder to anyone who reads the history of the Egyptian campaign of 1882, as narrated by the principal medical officer of the expedition in the volume before us, that the following passage should occur in his concluding remarks. "One of the most important reforms called for in the present organisation of the army medical department in the field, is that part relating to the land-transport of hospitals and bearer-companies." We see a programme of medical arrangements for the campaign furnished by the head of the medical department in London, comprising all that could be desired; we see full supplies of suitable medical and surgical equipment dispatched to the seat of war; but the usefulness of the whole, in a great measure, thwarted by the failure to supply the necessary means for their carriage, after the theatre of war had been reached. It must be plain to anyone how much more efficient and speedy the medical assistance would have been throughout the campaign, and how much anxiety would have been spared the medical department, if the field-hospitals and bearer-companies had been furnished at starting with the means of transport authorised for the performance of their duties by the standard regulations in which their organisation and equipment are defined. The Committee, however, which was appointed to investigate the medical results of the campaign, and to recommend any improvements in organisation which the experience derived from it might suggest, have declared that they "think the present regulations for the transport of the medical department are on a proper footing, and that it would be a mistake to lock up so much transport and make it unavailable for the general purposes of the army" (*Report*, par. 196). Not to appropriate special transport to the medical department obviously entails less cost in money, and it is certainly more convenient to a commander to be able to employ any transport that may be allotted to the medical department to the use of any other branch of the service which may require it. But under such a system it is manifestly not possible that the duties of the Army Medical Department can be carried out in the same assured manner, and with the same uniform regularity, as duties are conducted in other parts of the army, which are more thoroughly equipped; while occasionally, under it, such untoward results must ensue as will aggravate beyond measure the sufferings of the sick and wounded. Whenever difficulties do arise, which are traceable to deficiency of medical transport, the blame, at any rate, should fall on the system, or rather on those who order it, and not on the Army Medical Department, which would manifestly be only too glad to have the transport necessary for fulfilling its duties if it could get it, instead of being subjected to making reiterated applications for it unsuccessfully, as happened in the Egyptian campaign.

The Principal Medical Officer, in his history of the campaign, remarks also on the necessity for reform in the mode of supplying the furniture and equipment of the military hospitals in time of war. We see in the history evidence also of a necessity for reform in the personal establishments for the service of the field-hospitals. The nursing staff of hospital-corps men are shown to be quite as much employed in the capacity of "hewers of wood and drawers of water," as in their legitimate duties of nursing the sick. We read of these nurses taking the place of mules in drawing carts containing hospital stores and equipment, and engaged in making latrines, and in all the occupations connected with the conservancy arrangments. How can they be fitted for acting as attendants on wounded men after work of the kind referred to? The proportion of men of the hospital-corps supplied for service is calculated on the amount of assistance required to be rendered to the sick and wounded; but a large proportion of them are taken away from the hospitals for laborious occupations, which could be better done by animal labour, or for other kinds of outdoor work in which men who have to wait on patients suffering from wounds should never be employed.

Sir J. Hanbury writes: "In my opinion, an army in the field should always be accompanied by a well organised conservancy corps;" and, he adds, "the want of such a corps as this was grievously felt in Egypt." Sir J. Hanbury is dwelling on the need of a conservancy corps or sanitary police for camps as well as the hospitals; but obviously for the latter the need of a special staff of conservancy-servants, separate from the ward-attendants, is specially needed. As to the plan of equipping and supplying military hospitals in the field, the same officer remarks: "Under the present system, the military hospitals are equipped by the Commissariat in time of peace, and by the Ordnance Department in time of war. The latter department has suddenly imposed on it at a trying period, in addition to its own specific duties, most important ones in connection with the medical department, with which it has had no previous acquaintance in time of peace. It is difficult to imagine any arrangement more unsatisfactory than this; and, so long as it continues, the medical department cannot be held responsible for the equipment of the hospitals." Most certainly not; and it remains a matter of wonder how such a system was ever devised.

The letter of instructions from the Director-General of the Army Medical Department, dated July 28th, 1882, to Dr. Hanbury, before he took his departure from England to enter upon his duties as Principal Medical Officer of the Expedition, is published in the early part of the narrative, together with certain memoranda which accompanied it relative to the country where the troops were about to operate. The letter is concise, but clear, and well calculated to arouse the officer to whom it was addressed to a sense of the responsible duties which would devolve on him in a country like Egypt; while the detailed memoranda enclosed in it show that they must have been compiled with the greatest care and forethought. These memoranda, or instructions for preserving the health of the troops campaigning in Egypt, must have been of the greatest value to the officer on whom the medical charge of the expedition devolved. They comprise a list of the diseases which previous experience had shown might be apprehended, together with a succinct account of the originating or favouring causes to which they had appeared to be attributable; the precautionary measures advisable under six headings, viz., site of camps, water-supply, conservancy arrangements, food, tents and quarters, and personal hygiene of troops; and, lastly, observations on the climate of Upper and Lower Egypt at different seasons of the year. Sir John Hanbury also publishes a copy of the orders which he issued for the conduct of departmental business, as well as his instructions for the preservation of the health of the force. It is not stated when or where they were issued; but presumably they were sent to the principal medical officers of the various divisions of the army at the time they assumed their respective charges. Neither is there anything to show whether they were stamped with the authority of the general officer in chief command, or of his representative, the chief of the staff, or adjutant-general; yet, without such authority, it is difficult to understand how there could have been any security for some of the orders—such, for example, as that "the field-hospitals on the march will follow in the rear of brigades"—being carried into effect. So, also, as regards the orders for the sanitary precautions to be adopted; some of them could only be carried out with the co-operation of the officers commanding regiments; and there is no want of proof, from the evidence given to Lord Morley's Committee, that some commanding officers are not much inclined to carry out the suggestions of medical officers. The weight of a distinct command by superior military authority could alone insure compliance with the instructions contained in some of these medical orders; and, until the work and responsibilities of the medical department are regarded as being more worthy of attention by the higher military powers than they seem to have hitherto attracted, it is apparently futile to expect their active co-operation in such matters, though they may be quite ready to animadvert when any failure occurs, or is said to occur, in the results of medical administration.

The Sanitary Report by Deputy Surgeon-General J. A. Marston, M.D., sanitary officer to the expedition, which follows the medical history of the campaign by the Principal Medical Officer, is very exhaustive, and well worthy of study by all who are concerned in the sanitation of bodies of troops in such a climate as that of Egypt. The sanitary recommendations which were submitted to the Deputy Adjutant-General and Quartermaster-General of the Egyptian expeditionary force are detailed in full, and they exhibit a thorough knowledge of the hygienic measures which were necessary in order to insure, as far as practicable, the maintenance of health in the army. We wish we could see indications of the military power having been equally alive with the medical department to the importance of these sanitary recommendations, and that, at least as regards a considerable proportion of them, they did not stop with the advice as to what should be done, but were carried into practical effect. We have, however, the testimony of Sir John Hanbury that this was not the issue of them. In his account of the campaign, he remarks: "When an army takes the field, a competent medical officer is appointed sanitary officer, for the purpose of advising on all matters likely to affect the health of the troops. Instructions are issued regarding all sanitary precautions for protecting the health of the troops, and, theoretically, every means are taken that are calculated not only to preserve, but to increase, the health of the soldier, and, in so doing, to augment the amount and value of his services to the State. Practically, it is far otherwise.

The sanitary officer submits his opinions, advice, and recommendations, day after day, but with comparatively little result." Surely, if the appointment of a sanitary officer be not little else than a pretext, steps ought to be taken to turn his functions to better practical account than is here represented. In addition to copies of the recommendations made by the sanitary officer, the report includes observations on the various camps, barracks, and hospitals occupied by the troops; on their food and clothing, with allied matters influencing their state of health; and on the causation of some of the diseases from which they suffered. The report concludes with a diary of the occupations of the sanitary officer, and the work done by him, between August 22nd and October 20th. This record will be valuable for reference by any medical officer who may be appointed to a similar office in the future. We regret to observe that Dr. Marston was compelled at the latter date to leave Egypt on account of illness. "On October 9th," he remarks, "the army ceased to be an army in the field, and I ceased to be sanitary officer to the force, but continued to exercise a general sanitary supervision until my health became too much impaired to carry on the work."

Appended to the sanitary report is a short paper on a severe outbreak of enteric fever which occurred among the troops encamped at Ramleh in September 1882, by Surgeon-Major J. Warren, A.M.D. The occurrence of the disease appears to be clearly traced to the soldiers drinking well-water contaminated from neighbouring cesspools. A detachment of the Army Hospital Corps suffered severely. With regard to this corps, the Surgeon-Major remarks: "Many Army Hospital Corps men, I fear, contracted the disease from constantly removing the excreta from the hospitals." The usual precautions of disinfecting the excreta from enteric cases, and burying them in a particular pit for the purpose, are stated to have been taken. Some very striking examples of the occasional overpowering and rapid influence of inhaling effluvia when removing the stools of enteric patients in the propagation of the disease, are mentioned by Inspector-General Dr. Maclean, Professor of Military Medicine in the Army Medical School, in the course of a paper on the cases of enteric fever admitted from Egypt into the medical division of the Royal Victoria Hospital at Netley (see page 312, etc.). Professor Maclean likens the occurrence to what he has several times observed in cases of so-called putrid diarrhœa, rapidly following the inhalation of gases emanating in a concentrated form from drains. We regret that want of space prevents us from noticing at greater length this important paper, which is based on observations of the cases of two officers and eighty-five non-commissioned officers and privates, who were admitted and treated for enteric fever in the hospital at Netley from September 26th, 1882, to the end of the year. We recommend a perusal of the paper itself, which is published in a condensed form, to all who have to deal with this grave malady. The treatment pursued was attended with marked success, as only three deaths resulted from the eighty-seven cases, some of which were attended by severe complications induced by the circumstances of the campaign in which the patients had been engaged.

The same restriction in regard to space prevents us from noticing at any length the report on the cases of wounds and injuries inflicted during the Egyptian campaign on men who were subsequently treated in the hospital at Netley. This report is furnished by Surgeon-General T. Longmore, C.B., Professor of Military Surgery at the Army Medical School. Some very remarkable cases of gunshot-wounds of the head and chest are described in detail, and, with the observations upon them, contain a great amount of matter of a very instructive character in relation to wounds and injuries of the bodily regions mentioned. Altogether, 196 cases of wounds and injuries among non-commissioned officers and privates, and seven among commissioned officers, were admitted into the hospital at Netley. All these cases are tabulated in a classified descriptive return, which exhibits at a glance their leading surgical features and particular complications. Four deaths occurred among the number of patients mentioned, and 18 still remained under treatment at the date the report was furnished, viz., at the end of March last. As Sir John Hanbury mentions in his report that the number of non-commissioned officers and men invalided to the Mediterranean stations and England for wounds received in action was 256, while 196 only were admitted at Netley, 60 wounded patients must have been admitted into other hospitals, and remain to be accounted for.

We do not find any reports from the medical officers in charge of the hospital-ship *Carthage*, and of various transports in which the invalided officers and men of the army were conveyed from Egypt to England. So many remarks were published in the newspapers at the time of the war regarding the defective medical administration on board these vessels, that it would have been of interest to read what the medical officers in charge themselves had to say on the subject.

The several reports incidental to the military operations in Egypt are followed by a series of papers on miscellaneous subjects. Among these, a report "On the Pneumonia of the Punjab Frontier," by Surgeon G. M. Giles, M.D., of the Indian Medical Service, may be specially referred to as very carefully prepared, and exhibiting a large amount of valuable professional investigation. The paper is illustrated by six coloured plates, from drawings by the author, of the appearances presented on microscopic observation of the blood and sputa of some of the patients referred to in the text, together with part of the section of a lung of a rabbit which had been experimentally infected with pneumonia by the subcutaneous injection of sputum from one of the native patients under hospital treatment.

A very interesting case is narrated by Surgeon-Major R. F. Tobin, Assistant-Professor of Military Surgery, among the remarks which accompany a list of the surgical operations performed at the Royal Victoria Hospital, Netley, during the year 1881. It is one in which gastric irritability of an aggravated form, great pain, and general convulsive spasms of a remarkable description, giving rise to apprehensions of a fatal termination, supervened on a gunshot-wound of the lower part of the neck, in which the right clavicle and scapula had been fractured about ten months previously, at the action of Bronkhurst Spruit, in South Africa. The bullet by which the wound was inflicted passed out of sight, and could not be discovered at the early examination of the injury, nor subsequently. For reasons explained in the report of the case, Surgeon-Major Tobin, after failing to find the missile in the operative proceedings instituted for the purpose, determined to excise portions of the suprascapular and spinal accessory nerves. The operation was followed by complete cessation of the gastric symptoms. The patient's head, which had been drawn down toward the wounded side ever since the early period of the injury, resumed its normal position and movements; the general convulsive spasms were lessened in frequency, and improvement in the man's general condition of health followed.

The usual annual abstracts of meteorological observations taken at Netley and certain foreign stations are placed at the end of the volume, which, as our extended notices of it will have sufficiently shown, is one of more than ordinary value.

REPORTS AND ANALYSES

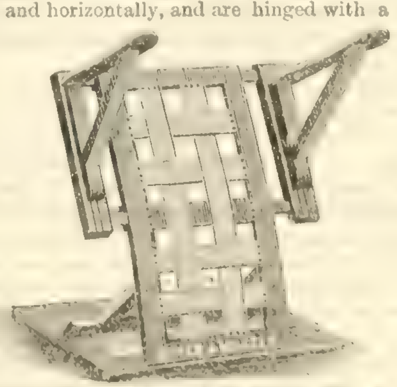
AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

BED-REST WITH SLIDING ARMS.

THIS rest has been designed by Mr. N. H. Nixon for the use of patients sufficiently well to sit up, but requiring support. The arms slide vertically and horizontally, and are hinged with a rack; they



can thus be adjusted at any height or angle. The rest is manufactured by Messrs. Mayer and Meltzer.

A HOSPITAL DESTROYED BY FIRE.—A Reuter's telegram, dated New York, January 11th, says: Advices from Saint Lucia to the 3rd instant, report the destruction by fire of the Colonial Hospital in that island.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 19th, 1884.

MEDICAL SICKNESS, ANNUITY, AND ASSURANCE SOCIETY.

THIS week, and after a great deal of careful preliminary work, definite announcements are made as to the starting and future operations of the above Society. As a first necessity, a temporary Executive Committee has been formed, on whom will rest the responsibility of foundation and other initial duties. The number composing this Committee is necessarily limited; but, on the other hand, all of them are, and for some time have been, deeply interested in the subject and conversant with its details. In addition to this, a larger and General Committee is being formed from a list of over seventy gentlemen in many parts of the kingdom, whose interest in the movement has already been evinced in a practical manner. It must be borne in mind, however, that all these arrangements are merely provisional, and in no way intended to commit the members, as at the first general meeting they will be invited to decide for themselves who shall conduct the affairs of the Society, and, in fact, will from that time exercise a full and constitutional control over all its operations. This meeting is to be held at the same place and during the same week as the forthcoming session of the British Medical Association.

The work now taking practical shape has been called into existence in the most legitimate manner, for, long before any active steps were taken, numerous letters and suggestions were received indicating that the idea of some such plan, and the desire that it should be carried out, were very general. When this was tested by answers being invited to certain queries, over 700 papers were sent in expressing approval of such a society as the one now contemplated, and the desire on the part of the signatories to join, provided the bases on which it was founded were sound. A further examination of the matter, at a meeting held in Liverpool in August last, showed how general and cordial this approval was.

The time since then has not been wasted, occupied as it has been with a close examination of details, the correct management of which often exercises much influence in procuring success or inviting failure. More especially has the fullest attention been bestowed on financial stability, and as a result of this care and the eminent actuarial advice and experience brought to bear in the construction of the rates, &c., humanly speaking, perfect security may be looked for; while, in addition, the plan embraces many improvements in the principles of assurance which are the latest outcome of half a century of the experiences of somewhat similar societies.

The evil to be avoided is the growth of an opinion that the Society is metropolitan, or in any way contracted or centralised. Naturally, at first it must grow from a centre; but it can never fully succeed and certainly will not fulfil the wishes of its founders, unless it receive a broad and general support from the profession in all parts of the kingdom, and become a widespread rather than a sectional medium for good work. Although certain principles of assurance must be kept in view, the Society can never be in any sense a trading organisation, but will be built up on lines of mutual self-help and self-government, not necessarily excluding all eleemosynary elements, and certainly including the exercise of power by the whole of the members in a purely democratic fashion.

Of course, the first test of success must be a numerical one. It has been calculated that a membership of 500 would assure the existence of the Society; while 700 would mean certain permanence. Looking to the promises already received, and their daily augmentation, the latter number should be very rapidly obtained; but something more than bare success is contemplated, and it is hoped and believed that the new organisation will rapidly grow to such a degree as to render it worthy of its principles and of the profession.

TRICHINOSIS.

FROM time to time, the popular mind on this side of the Atlantic has been alarmed by the discovery of trichinæ in American pork, which has been represented as a possible, if not a probable, source of such epidemics of trichinosis as have been observed on the Continent. Such an origin has never been proved, and, with a few insignificant exceptions, poisoning by trichinæ is unknown out of Germany and Scandinavia. Nevertheless, the exclusion of American pork from the market has been voted by the Parliaments of Austria, Italy, and quite recently of France, notwithstanding the representations of M. Brouardel and other eminent authorities, who urged that there was no adequate reason for depriving the populace of a large food-supply, and that the agitation was fermented by interested traders. Indeed, as Dr. Glazier remarks in the Report on Trichinæ and Trichinosis, issued a few years since by the American Government, trichinæ, though most prevalent in Russia and Eastern Germany, have been found in every country where they have been carefully looked for; but trichinosis has never appeared, except where people have eaten the flesh of these animals raw or imperfectly cooked. In the solitary instance of fatal trichinosis in this country, the pig was home-bred and fed, but eaten, as is the practice in some districts of Cheshire and Lancashire, half raw; and Dr. Wortabet has reported a serious outbreak in Syria from the use, in that state, of the flesh of a wild boar.

In Germany, all classes have an inveterate liking for *rohe Schinken*, generally, but not always, smoked; and since it is hopeless to change the habits of the people, the Government have appointed inspectors. Where, as at Berlin and in the larger towns, there are really able microscopists, and the carcase is presented whole, a thoroughly adequate examination can be made in a quarter of an hour; but many of the 18,000 inspectors are more or less incompetent, and such seems to have been the case at Emersleben, in Prussian Saxony, where this official was a barber, though there is no doubt as to his good faith, since he and the butcher partook of the infected meat, and both suffered in consequence.

The circumstances were shortly these. On September 11th last, a butcher at Emersleben went over to the neighbouring village of Nienhagen, and bought a pig bred at that place. He killed it on the 12th, and sold its flesh daily from the 13th to the 19th of the month. Out of a population of 700 persons, 250 were attacked, and 42 died. At Deesdorf he sold only on the 12th, but 42 persons were attacked, and nine died; at Gröningen there were four cases, two fatal, of men who went over to Deesdorf on the 13th, and bought the sausages, and two of children at the convent-school, whose parents at Deesdorf sent them some as a present. They did not eat it for two or three days, and both recovered. The whole of the meat, except some slices which the butcher gave to two of his near neighbours, was chopped up and mixed the same day with that of another animal. Lastly, on the 19th, as it no longer looked saleable, the butcher again worked up what was left with some more freshly killed, and sold it at Nienhagen. Eighty persons suffered, but none died.

The population of the district are very well-to-do, and there was not a single pauper in the place; but pork, very slightly salted, or smoked ham, either made into sausages, or chopped up and eaten between slices of bread, but in no case cooked in any way, constitutes the only flesh-food of the people, and all who were attacked partook of it thus. In one house, the mistress plunged the sausages for just five minutes into the boiling soup: she, her husband, and three children escaped; but the servant, who had previously helped herself to some, which she ate raw, was attacked. Again, of those who consumed it the day after the animal's death, no fewer than thirty-three per cent. died, and forty-four per cent. suffered severely. Each day, the proportions improve, until, of such as did not take it until the 18th, or subsequently, none died, and the great majority suffered only slightly. The 250 victims at Emersleben were attacked—136 (= 54 per cent.) within the first week, 49 (= 36 per cent.) in the second, and 25(= 10 per cent.) in the third week after infection. One man at Emersleben escaped, after eating three-quarters of a pound of the raw meat, washing it down with over a quart of brandy, weaker, however, than ours; owing, no doubt, to the fatal effects of the alcohol on the trichinæ.

The certainty with which even a short exposure to high temperatures kills these parasites was well seen in the case of the family of Mr. Heine, the mayor of the village, though one must remember that the heat would require a much longer time to penetrate a joint. The rapid falling off in the virulence of the effects, or, in other words, in the reproductive power, of the trichinæ was hastily attributed by the French Commissioners, MM. Brouardel and Granché, sent by their Government to investigate the matter, to the effect of incipient putrefaction. This explanation is, however, untenable, for M. Colin of Alfort, in his experiments, long since showed that though they do not retain their vitality in a putrid fluid, their reproductive power is in no way lessened by advanced putrefaction in pieces of flesh exposed to moisture, warmth, and air for a fortnight.

The comparative feebleness of the trichinæ after the first few days was, we should think, due to the gradual saturation of the meat by the salt, which was probably sprinkled or rubbed on the mass just to keep it fresh as long as was required, to which, in the case of the sausages, we must add the action of other condiments.

Thorough curing with brine, and thorough smoking, are probably as effective as cooking, though it is better not to neglect the last precaution, since history shows that trichinosis is the immediate penalty of its neglect, and that those nations who cook their pork and hams must have eaten thousands of trichinous carcases with perfect impunity.

One more question suggests itself, viz., whether cases have occurred among us without being recognised. This seems in the highest degree improbable; first, because these cases, from their very nature and origin, rarely occur singly, and secondly, that the remarkable sequence of the symptoms could not be witnessed in a succession of cases without attracting notice, even if mistaken at first. The attacks begin with violent "choleraic" irritation of stomach and bowels, then follow acute pains in the muscles and prostration, without the characteristic temperature-phenomena of enteric fever, and lastly, extreme cachexia, with œdema of the subcutaneous connective tissue everywhere, and œdema of the lungs causing dyspnœa. Yet albuminuria is generally absent. Each stage might be mistaken, but the order is pathognomic. Lastly, as to treatment. Since the gastro-intestinal irritation is caused by the enormous multiplication of the worms, which, dormant in their previously encysted state, have been liberated by the digestive juices, the plain indication is to evacuate the whole canal as speedily and completely as possible. Whether any one aperient have special vermicide properties we cannot say. The use of strong wines or spirits in large doses, as successfully pursued by the toper of Emersleben and in other cases of which we have heard, would be unsuitable, so long as any trichinæ remained. But when they have entered the circulation and the substance of the muscular tissue, no special treatment is available. The patient's sufferings must be relieved, and his strength supported so far as possible until the encysting of the adult worms renders them once more inactive.

TEMPERANCE AND LIFE-INSURANCE.

THE contract of life-insurance is one which must necessarily be based on a full knowledge by the insuring company of the health and habits of the person insured. When a life is proposed for insurance, the companies are in the habit of putting a series of questions, to be answered by the proposer; and it has long been settled law in this country that any untrue answer to these questions vitiates the policy, and discharges the insuring company from their liability under it. The particular questions asked vary with the different companies, and from time to time, as circumstances arise which lead the directors to think a knowledge of fresh facts important. It is the duty in all cases of the person insuring to disclose to the company all material facts, within his knowledge, relating to the life insured (whether it be his own or that of another person); and any concealment of such facts may void the policy, even though he did not consider them material. But, though material facts must be disclosed, and questions asked must be answered truthfully, it is impossible to lay down any general rule as to what does constitute a sufficient answer. A recent decision, in a Scotch Court, in a case of Weems *v.* the Standard Life Assurance Company, has been thought to be inconsistent with the generally received rules, and to unsettle what was considered to be settled law on the subject. In that case, the insurer was asked: "Are you, and have you been always, strictly temperate?" and the company disputed their liability on the ground that this answer was untrue, and called evidence to prove that he was addicted to drinking. The judge seems to have laid it down that the insurer's idea of what constituted strict temperance must be looked at, in order to ascertain whether or not the question had been truly answered; and this ruling is objected to by the companies, as tending unduly to increase their liability. But the fault lies rather in the wording of the question than in the ruling of the judge. There is no phrase as to the meaning of which opinions differ more than strict temperance; and, if the companies intend a particular version of an ambiguous phrase to be the one which is part of their contract, they should take care to specify it. The above ruling seems analogous to an old case in England, where it was held that the fact that a man died of a particular disease, from which he was suffering at the time when he effected his insurance, but which was not necessarily fatal, was not sufficient to show that he had untruly stated that he was unaware of any disease tending to shorten his life. The law requires material *facts* to be disclosed, and questions asked to be *truly* answered; but, if the questions inquire not about facts, but about matters of opinion, it seems fair to throw on those who seek to show that the answers were untrue, the onus of showing that the answer did not agree with the opinion of the men who made it.

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IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the editor at the office of the JOURNAL, and not to his private house.

SMALL-POX is still spreading in Basutoland, and, in spite of President Brand's proclamation, farmers and traders continue to cross the Caledon.

THE Royal United Service Institution, Whitehall Yard, will be opened this afternoon (Friday), when a paper will be read by Surgeon-Major G. J. Evatt, M.D., on "Army Medical Organisation in War, with Suggestions as to Militia and Volunteer Aid."

Authority has been given by the Prefect of Police, on the recommendation of Dr. Brouardel, to cremate the remains of hospital subjects, provided a satisfactory apparatus be constructed in one of the Paris cemeteries. A Society for the Propagation of Cremation is in existence in Paris, the president being M. Koechlin-Schwartz, the mayor of one of the arrondissements.

Our Paris correspondent informs us that there is absolutely no truth in the report, circulated freely by British opponents of legislation for checking the spread of venereal diseases, that the French Contagious Diseases Acts were to be revoked on January 1st, and that the Hôpital du Midi and the Lourcine at Paris, together with similar institutions in other French towns, were to be closed forthwith.

The Belgian Government has named a committee for the representation of Belgium in the Exhibition of Hygiene at South Kensington. It is composed of Messrs. Couvreur, Member of the Chamber of Representatives, President; Buls, Burgomaster of Brussels; Montéfiore-Lévy, Senator; Beco, Director of the Department of Hygiene at the Ministry of the Interior; Germain, Director-General of Primary Instruction; Dr. Hausen, Professpr at the University of Brussels; Dr. Janssens, Chief Inspector of Hygiene in the town of Brussels; Ronnberg, Director-General of the Departments of Agriculture and Industry; Somerhausen, Director-General of Provincial and Communal Affairs; Van Camp, Director at the Ministry of Public Instruction; Dr. Vleminckx, Secretary of the Superior Council of Public Hygiene; Van Gael, Clerk (*chef de bureau*) in the Ministry of the Interior, Secretary; and Lenders, Belgian Consul in London.

HOSPITAL FOR WOMEN, SOHO SQUARE.

Princess Christian has recently visited the Hospital for Women, Soho Square, for the purpose of personally distributing gifts from three Christmas trees which she had provided for the patients.

THE SANITARY ADMINISTRATION OF EGYPT.

Mr. Clifford Lloyd, at a conference with Nubar Pasha on January 11th, obtained the Premier's sanction to a Municipal Reform Bill and a Sanitary Reform Bill in Alexandria. The sanitary administration at Alexandria will be entirely remodelled, and brought more into harmony with British ideas. Great satisfaction is expressed by the British officials in the Egyptian service at the prompt action of the new Ministry.

THE NERVI NERVORUM.

In the last Bradshawe lecture before the College of Surgeons, Mr. Marshall forcibly supported the theory of sensory nerves in the sheaths of mixed nerves, although their existence had never been demonstrated. We understand that Mr. Victor Horsley, the surgical registrar at University College Hospital, has since ascertained that in the perineurium there are not only sensory nerve-fibres, but also "tactile corpuscles," or "end-bulbs." At the next meeting of the Royal Medical and Chirurgical Society, on Tuesday, January 22nd, Mr. Horsley will demonstrate the specimens illustrating the discovery.

GREAT NORTHERN HOSPITAL.

The scheme for the amalgamation of the Great Northern Hospital with the Central Hospital for North London, is rapidly assuming definite shape. On Saturday, January 19th, at 4 P.M., a meeting will be held at the Highbury Athenæum, under the presidency of His Grace the Duke of Westminster. At this meeting, resolutions amalgamating the two hospitals will be proposed by the Marquis of Salisbury, Lord George Hamilton, Earl Cowper, Mr. McCullagh Torrens, M.P., the Hon. Reginald Capel, and the Lord Mayor.

A PEDESTRIAN'S DIET.

We are indebted to Mr. J. Laurie Gentles, of Derby, for some particulars with regard to the diet of the pedestrian, Weston. While in Derby, his first breakfast consisted of oatmeal-porridge and milk, and his second breakfast of bread and coffee, with fish or eggs; for dinner he had roast mutton, green vegetables and farinaceous puddings; his "drinks" were tea, coffee, or ginger ale. Weston, we are informed, afforded every facility for the recording of facts connected with his personal health, which appears to be excellent; the temperature of the body, so delicate an index of the general condition, was, apparently, not the least affected by his exertions.

HEALTHY VILLAGES.

A resident in the village of East Wickham, which is ten miles from London, wrote to a contemporary to say that although the population of the village was 1,182, there had been, in the year 1883, only eight deaths; this is a low death-rate as it stands, but it is rendered the more remarkable by the fact that the youngest person who died was 60 years old. This village, however, is entirely eclipsed by Peasmarsh, in Sussex, where, in 1882, with a population of 900, no death occurred among the inhabitants from disease, but one child was killed by fire.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

A quarterly Court of the Directors of the Society was held on Wednesday, January 9th, at 5 P.M., in the rooms of the Royal Medical and Chirurgical Society, 53, Berners Street; Mr. Charles Hawkins, vice-president, in the chair. The resignations of two members were accepted; the deaths of two were reported; and two new members were elected. The Treasurer informed the meeting that a Christmas present had been made to the widows and orphans in December last, amounting to £307. Grants to the extent of £1,241 were made to fifty-eight widows, five orphans, and three orphans on the Copeland Fund. The expenses of the quarter were £64. One fresh application was received from a widow, and a grant made.

THE DRAINAGE OF TWICKENHAM.

The Local Government Board have forwarded to the Twickenham Local Board a communication, in which they state that the local board should adopt measures for enlarging their present scheme of sewage-disposal. Further, they say that although works and machinery for treating the sewage by a chemical process have been provided, and are, in fact, all ready for use; no chemicals have ever been employed for the clarification of the sewage, but it is merely passed through filters, and then discharged directly into the River Thames. The Board cannot regard as satisfactory this method of disposing of the sewage, and they request that the local board will forthwith take this matter into their consideration, with the view of deciding what measures they will adopt for effectually purifying the sewage before its discharge into the river.

RECREATION GROUNDS.

The attention of the Commons' Preservation Society should be directed to the threatened encroachments of the rights of the commoners and the public generally over the beautiful Ilkley Moor, near Ben Rhydding. It is alleged that, from time to time during recent years, the interests of the commoners have been disregarded in the matter of turf-cutting, but a more overt act has been committed by the posting of notices that trespassers will be prosecuted. It is true that this prohibition has been disregarded by all who have been in the habit of using the moor for the purposes of health and recreation, but the fact that its integrity is threatened is indisputable, and what has been said of our liberties may be affirmed of our commons —that the price of them is eternal vigilance. Experience in other cases warrants the most jealous care of the public interests as regards Ilkley Moor.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

AT a meeting of the Council of this Association, held at their rooms, 3, Bolt Court, Fleet Street, on Wednesday, the 16th inst., the subjoined resolution was unanimously adopted: "That this Council cordially congratulates its chairman, Dr. Rogers, on the removal of his suspension as surgeon to the Westminster workhouse, but at the same time desires to record its disapproval of the tone of the communication received from the Local Government Board, containing the said order, as facts do not appear to this Council to justify the strictures passed upon that gentleman. The Council further desires to express its opinion, that the action of the Department in writing such a letter is calculated to seriously imperil the necessary independent action of the Poor-Law Medical Officers throughout the country in the performance of their duty." It was also resolved that a copy of the above resolution should be sent to the medical journals.

MANCHESTER MEDICAL SOCIETY.

THE following is a list of office-bearers for 1884, elected at the annual meeting held at the Owens College, January 9th:—*President:* Daniel John Leech, M.D. *Vice-Presidents:* John Augustus Ball, M.B. (Stockport); Julius Dreschfeld, M.D.; James Hardie, M.D.; Thomas Jones, M.B. *Treasurer:* David Little, M.D. *Secretary:* Charles James Cullingworth, M.D. (Manchester). *Other Members of Committee:* Abraham Matthewson Edge, M.D.; Arthur Gamgee, M.D.; Charles Edward Glascott, M.D.; Alfred Godson, M.B. (Cheadle); John Dixon Mann, M.D.; Siegmund Moritz, M.D.; John Parks, Esq. (Bury); Herbert Smith Renshaw, M.D. (Sale); James Ross, M.D.; Frederick Armitage Southam, M.B.; Arthur Edwin Sutcliffe, Esq.; William Yeats, M.D. The above, with the past presidents of the Society, and two representatives of the council of the Owens College, form the committee. *Library Committee:* Abraham Matthewson Edge, M.D.; Abraham Emrys-Jones, M.D.; Siegmund Moritz, M.D.; James Ross, M.D.; William Yeats, M.D. *Auditors:* William Japp Sinclair, M.D.; Graham Steell, M.D.

LIVERPOOL MEDICAL INSTITUTION.

AT the annual meeting held on Thursday, January 10th, the following list of officers and council and microscopical committee was adopted. Those marked (*) did not hold the same office last year. *President:* *Dr. Robert Gee. *Vice-Presidents:* Dr. W. Macfie Campbell, Mr. Rushton Parker, *Dr. J. Wallace, *Dr. J. H. Wilson. *Honorary Treasurer:* Dr. James Barr. *Honorary General Secretary:* Dr. F. Pollard. *Honorary Secretary of Ordinary Meetings:* Mr. Frank T. Paul. *Honorary Librarian:* Dr. Burton. *Council:* Dr. Alexander, Dr. Archer, Dr. Carter, Dr. T. Clarke, Dr. Glynn, *Dr. Grimes, *Dr. Imlach, Mr. McCheane, *Dr. R. F. Owen, *Mr. R. N. Pughe, *Mr. T. Shadford Walker, *Dr. Young. *Microscopical Committee:* Dr. Alexander, Dr. Braidwood, Dr. Briggs, Dr. Glynn, Dr. Grossman, Dr. Hicks, Dr. McClelland, Mr. Newton, Mr. Rushton Parker, Mr. Frank T. Paul, Dr. Rich, Dr. Whitford, and Dr. W. Williams.

SUFFOCATION BY COAL-GAS.

A RECENT lamentable accident to a household near Glossop, resulting in the death of four persons, has again drawn attention to the dangers of suffocation or poisoning by escape of coal-gas. Four persons were found dead in a house, and the necropsies revealed asphyxia as the cause of death in each case. An excavation of the ground in front of the house in which the deaths occurred showed that an old gas-pipe, two inches below the surface, was broken about six feet from the house, it was supposed, by a load of coals having been emptied a day or two before the deaths took place. From the broken pipe the gas gained access to the house by the untrapped slopstone-pipe, or in some other way. The deaths in the Glossop case were perhaps unavoidable; but in many cases persons have been suffocated by coal-gas through sheer carelessness or gross neglect. Gas in a bedroom should always be turned off carefully; and in no case should a tap be employed which has not a proper stop to prevent the tap from being turned too far, or, as it is technically termed, beyond the square. Fortunately, an escape of gas can be detected by the nose, even when present in the atmosphere in very minute quantity.

"A LIVING DEATH."

A STORY has been going the round of the newspapers, which has been supposed to be "a singular instance of the inability of even medical men to distinguish between trance and actual death." As, however, it appears that no medical man was consulted on the point, the train of reasoning by which this conclusion was arrived at is not very evident. The case, however, is one of some interest, and we are enabled to give the following authoritative account of it. The patient was a young girl, aged 14, who first came under treatment two months ago; she was suffering from acute phthisis, complicated at the time by pleurisy and pneumonia; no unusual symptom occurred until about a month later, when she was seized with convulsions of an epileptic character; these yielded to treatment in a few days. On January 8th, the assistant of the gentleman who had been attending her was met at the door by the patient's mother, with the statement that her daughter had suddenly died at about a quarter to four in the afternoon; he was told that she threw up her hands, stretched herself very stiffly, and ceased to breathe; her mother and two other neighbours came to the conclusion that she was dead, having failed to detect any signs of life after watching her breathing and pulse. Two hours after her supposed death, the child was washed all over, bandaged, and carried upstairs (from the cellar-kitchen in which she had lain throughout her illness), and "laid out" on a coffin-board. At about 7 P.M., the mother and friends were startled by the cry "Mother" coming from the upper room, and the girl was found on the top of the stairs. Strangely enough, it would appear that she has not been rendered materially worse by this occurrence. She has since taken very little food, and frequently faints for a few minutes; her pulse is small and very slow (between fifty and sixty.) It is thought that the so-called trance was a prolonged fainting fit, which might have been much shortened had warmth and proper restoratives been applied.

THE HEALTH OF NICE.

WE have received from Dr. Charles West, who now resides in Nice, a communication in which he informs us "that, in consequence of the widely spread rumours concerning the prevalence of typhoid fever in that city, the Société de Médecine of Nice instituted a serious inquiry into the subject at the end of November last. A list of twelve questions was drawn up and addressed to all the medical men of the city. Sixty of the members, or more than five-sixths of those to whom the questions were addressed, returned answer, and, in many cases, the answers entered into full details. From them it appeared that the total cases which had occurred, either in the hospitals or in private houses, were 267 in number, and these yielded a mortality of 29, or 11 per cent. If one assumes that the unreported cases amounted to 33, we then arrive at a total number of 300, with a mortality of 33 during the months of September, October, and November. During the last fortnight of November, only 6 fresh cases were reported; and it is noteworthy that, during the whole prevalence of the epidemic, not only were no visitors attacked, but also no case of typhoid occurred among the persons employed at the custom-house, railroad, post-office, or tobacco-manufactory; and that among a total of some 3,000 of the working-class. The actual population of Nice is between 70,000 and 80,000. The official return, published in the *Bulletin de Statistique de la Ville de Paris* gives two deaths from typhoid fever in the fortnight from the 11th to the 15th of December." These facts are calculated to put to rest all anxiety among intending visitors to Nice with reference to the existence there of any epidemic of typhoid fever.

CRUELTY TO CHILDREN.

EITHER greater publicity is given to these pitiable cases, owing, perhaps, to a healthy growth of opinion amongst the poorer classes, or they are greatly on the increase. We note two cases recently reported in the daily journals, testifying to extraordinary cruelty and callousness on the part of women, who, perhaps from the nature of things, seem to excel men in, so to speak, torturing helpless children. In one case a woman was charged with ill-using her nephew, aged seven years. Persistent cruelty to this poor boy had been noticed by a woman living in the same house, who very properly apprised the police of what was going on. The child was taken to the workhouse, and according to the testimony of the medical officer, Mr. A. Atkinson, weighed only twenty-four pounds, and was in a condition produced by protracted cruelty and starvation. In another case, a woman was charged with deliberately burning the fingers of one of her little daughters, aged 8 years, by pushing her hand on to the bars of the fire-grate while the fire was burning, because the child had been guilty of some petty offences in helping herself to treacle and sugar. The other child showed marks of stripes from a cane. Such a society as that proposed by Lady Burdett Coutts would doubtless be useful in similar cases, if it could be arranged that such a society would undertake the searching out of such cases, and the prosecution of the offenders.

CLINICAL SOCIETY OF LONDON.

THE ordinary meeting of the Clinical Society on Friday last terminated half an hour before the usual time, and the business of the annual meeting was then transacted. Dr. Gilbart Smith and Dr. Hadden were appointed scrutineers of the ballot, and, later in the evening, the President announced that the gentlemen proposed in the house-list (a copy of which was published in the BRITISH MEDICAL JOURNAL of the 5th instant, page 22) had been unanimously elected officers of the Society for the coming year. The report of the council, read by the retiring surgical secretary, Mr. Haward, announced that the Society was still making satisfactory progress. It numbered now 268 resident members, of whom 21 had been elected during the year. The loss by death in 1883 included Mr. Walter Ottley, Dr. A. P. Stewart, Mr. Shuter, and Dr. Hilton Fagge. The new volume of the Society's *Transactions* contained, for the first time, a record of the living specimens exhibited before the Society, and described on the papers formulated for the purpose. Three committees had sent in their reports, viz., those on Mr. Shuter's case of amputation through the hip, on the microscopical appearances of specimens from a leprous patient, and on the testing for albumen in urine. The fourth committee, named for the purpose of reporting on the treatment of spina bifida by injections of iodo-glycerine, was still at work. The treasurer, Mr. Heath, read his report, from which it appeared that the Society had £600 in consols standing to its credit, and that the balance on the current amount carried to the next year's balance-sheet was £160. He alluded feelingly to the great loss which the Society had sustained from the death of Mr. B. R. Wheatley, and said that the council had put on record at their meeting a memento of their opinion of the gap which his death had produced. Mr. Grant moved that the reports of the council and treasurer be received, adopted, and printed in the next volume of *Transactions* of the Society. He thought the general and financial conditions of the Society were equally satisfactory, and that the Society had constantly progressed in the interest which its meetings excited, and in the activity of its members since its first institution. Dr. Glover seconded the proposition, which was carried unanimously. Dr. Cholmeley proposed a vote of thanks to the retiring officers, which was seconded by Dr. Duckworth, and carried unanimously. Mr. Berkeley Hill proposed a vote of thanks to the retiring secretary for his untiring services to the Society. This was seconded by Dr. F. Taylor, and carried with acclamation, Sir Andrew Clark, the President, adding his testimony to the extreme care and assiduity with which Mr. Haward had done his work. Mr. Haward, in returning thanks for the vote, thought that the Society had given him too much credit for doing his simple duty. He had had the best of help from the other officers, and from the members, in carrying out the duties of his post. He also thought the loss which Mr. Wheatley's death had caused was extreme. His ever ready help and kind courtesy were always at the service of any one requiring them, and he was never known to shirk any trouble which the secretaries might have put upon him. Sir Andrew Clark desired to be allowed to re-echo the words which had fallen from Mr. Haward respecting Mr. Wheatley. He had wide intelligence, great sagacity, and sound judgment in all things pertaining to his office in the Royal Medical and Chirurgical Society. He was essentially an upright man, and in all the affairs of life he presented towards them an attitude of calmness and justice which others might try to copy. Later in the evening, Mr. Gould gave demonstrations upon a healthy man and a man suffering from gonorrhœa, of the use of the endoscope illuminated by the electric light.

BABY-FARMING.

AGAIN has the verdict of a coroner's jury justified the framers of the Infant Life Protection Act, in their opinion that every person receiving a child to nurse, apart from its parents or guardians, should be brought under the provisions of the Act, and be subjected to registration and inspection. We beg to call the attention of the Metropolitan Board of Works, whose duty it is to see that the Act is carried out, to the rider to the verdict drawn up by the jury, calling their attention to "the great necessity for an amendment of that Act, so that it should be made compulsory that any person taking a child to nurse for profit should be registered." We would also draw the attention of the Infant Life Protection Society, under whose auspices the original Act was introduced into Parliament, to this case, with a view to their taking up the subject of an amendment of the Act. The child, in this instance, was put out with an old woman to nurse, 7s. 6d. weekly being paid for it. The woman had no other means of earning a livelihood. She paid 3s. 6d. a week for her room, and on the remainder she had to feed herself and the child. Dr. Day states that "in the stomach of the deceased were some tea-leaves and large pieces of hard biscuit, not even soaked, but looking as if they had been pushed down the child's throat." The sanitary officer said that the room was the worst he had ever been in for filth and wretchedness, and there was no bed in the place. The jury returned a verdict of "Death from exhaustion and from tuberculous disease of the stomach and brain, accelerated by improper feeding and the bad sanitary surroundings in which the deceased lived." If two such children living together with one nurse are not allowed by law to be treated in this manner, why should innumerable units, from one end of the country to the other, be subjected to slow starvation and such fatal insanitary conditions as we see in this case, which is but a type of thousands?

WESTON'S WALK.

WHILE Weston was walking on the level at Birmingham, a hard skin had grown over the wound on his heel. On resuming his route on the highway, the heavy road-boots, necessitated by the state of the ground, drove this hard skin into the foot, and set up inflammation, accompanied by considerable pain. With this drawback, on his

43rd day he walked in the Corn Exchange, Derby, the last 45 miles having been covered without a rest. Next morning he left Derby at a quarter past four, reaching Stoke (36 miles) shortly after 2 P.M., where he completed the remaining 14. On the Friday the track was on the Victoria Athletic Ground, work being commenced at half-past 6 A.M., and finished by 9 P.M. There were high biting winds, and heavy rain showers, during the day. The Archdeacon of Stoke, Sir Lovelace Stamer, presided at the usual evening lecture. On the Saturday, Weston was so drowsy that he did not start till 7 A.M., when, in clear, cold weather, he walked through the Potteries to Macclesfield (22 miles), which place he reached at 1.20. During the last few miles he was accompanied by the rector of Gawsworth. The remaining 28 miles were accomplished in the Drill Hall. Last Monday, after the Sunday's rest had greatly improved his heel, though this is still extremely tender, Weston left Macclesfield soon after 4 A.M., in a mild, rainy morning. Warrington (22 miles) was overtaken at 10.20. Without a rest the pedestrian pushed on, arriving at Liverpool about 2.30 P.M. He completed 45 miles before retiring about 4 P.M., and resumed at 10 minutes to 8, when he walked the remaining 5 miles. All the rest of the week he has kept to the Pembroke Place Rink in Liverpool. On Tuesday morning he was so very drowsy, after a restless night, that, though he did not start till half-past 6, he had to rest for an hour and three-quarters at the end of the third mile. It was almost 10 P.M. when he finished the daily tale of 50 miles, having, from lack of time, to take his dinner on the track. On Thursday night, the first half of the whole task was successfully completed, the record standing at 2,500 miles. Weston is in the best of health and spirits.

THE LATE MR. B. R. WHEATLEY.

WE publish in our present number an account of the fatal illness of the late Resident Librarian to the Royal Medical and Chirurgical Society. Benjamin Robert Wheatley was born on September 29th, 1819. He was the eldest son of Mr. B. Wheatley, auctioneer, of Piccadilly. At the date of the death of his father, in 1837, he was thrown upon his own resources, and from that time he devoted himself to the care of the family that were dependent upon him. Mr. Wheatley showed from a very early period of his life a proficiency in the art of indexing and catalogue-making, for which he was distinguished. In 1845, he first undertook the cataloguing of the books in the library of the Royal Medical and Chirurgical Society, to which he was appointed Resident Assistant Librarian in 1855, on the resignation of Mr. Williams. The catalogue of the Society's library is the great work of his life; its merits are well known to our readers. Mr. Wheatley made indexes for the published archives of the same Society, and for those of the Statistical and Clinical Societies; and completed similar useful tables of reference for other institutions. He was one of the original members of the Library Association of the United Kingdom, of which he was a Vice-President. Ever assiduous in his duties, and amiable in his relations to all with whom he was brought into contact, he must also be remembered for the valuable services he has performed in rendering the vast records of modern science accessible to the student.

AN ECCENTRIC CHARACTER.

CONSIDERABLE sensation has been excited this week by the proceedings of Mr. William Price, a surgeon residing at Llantrissant, in Glamorganshire. This gentleman, who has been a member of the Royal College of Surgeons of England and a licentiate of the Apothecaries' Society since 1821, and is eighty-three years of age, holds unusual social notions, giving out that he is a descendant of the ancient Druids, whose doctrines and customs he professes to follow. He dresses in a peculiar garb, consisting of a white tunic and green trousers, and wears on his head a cap made of a fox's skin, with the "brush" as a tassel. Some of our readers will probably remember him as having visited London about twelve years ago, when his green dress and fox-skin cap rendered him a conspicuous object. On Sunday night last, public attention was directed to a large fire in the grounds adjoining his house; and he was found to be in the act of cremating, in a barrel, containing paraffin oil, the body of the illegitimate child of his housekeeper. He was chanting the supposed Druidical incantations over the body; and threatened to shoot any one who interfered with him. A constable, however, seized him from behind, and he was conveyed to the police station at Pontypridd. On Monday, an inquest was held on the child, when Mr. Price's housekeeper, Gwenllian Llewelyn, the reputed mother, refused to give evidence as to maternity, on the ground that she understood criminal proceedings were to be taken against her. As she continued to refuse, the coroner (Dr. Reece) gave her into the custody of the police, and she was locked up. Mr. Price was then called, and he raised the same objection; but, on being threatened with committal, he gave evidence that he was the father of the child. It had not been baptised, as the ancient Druids, of whom he was one, did not make use of that practice. The child was five months old, and had died of convulsions. The mother was afterwards prevailed upon by Mr. Price to corroborate what he had said, and was then released from custody. The medical evidence showed that death resulted from natural causes. A verdict to that effect was returned. The coroner gave Mr. Price, as the father, a certificate of burial, and, in reply to the superintendent of police, said he had no power to order that the body should be decently interred. Mr. Price said he should take his own course. The superintendent thereupon said he should detain the body. An investigation before the magistrates was commenced on Wednesday. The question of the disposal of the body was discussed; and, ultimately, after some hesitation, Mr. Price consented that the body, if given up to him, should be interred in the ordinary way. On this condition, it was restored to him; and he was admitted to bail, on a charge of misdemeanour for the attempted cremation.

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SCOTLAND.

NEPHRECTOMY.

DR. WILLIAM MACEWEN of Glasgow removed the right kidney of a lad, aged 11 years, at the Royal Infirmary, on the 24th ult. The case was one of renal calculi and a large lumbar abscess. The patient has made excellent progress since the operation, and is now practically well.

THE RECTORSHIP OF ST. ANDREW'S UNIVERSITY.

OWING to the United States Minister, Mr. Lowell, resigning the Rectorship of St. Andrew's University, a fresh election was necessitated. The candidates were Lord Reay and Mr. Gibson. The nomination was on Tuesday, and the voting on Wednesday, January 16th. Lord Reay was elected by a majority of eight votes, the numbers for each being—Lord Reay, 95; Mr. Gibson, 87.

THE TAY WHALE.

THE whale which disported itself for several weeks in the Tay, and which was pursued and harpooned by some Tay fishermen, but eventually escaped, was found, a few days ago, by some Gourdon fishermen, dead and floating in the sea off the Aberdeenshire coast. The whale was towed to Stonehaven and put up to auction, realising £226. There was strong competition for the monster between the purchaser, Mr. Hood, of Dundee, and some persons from Aberdeen. The whale was towed to Dundee, and, after a series of mishaps, was placed in a yard for exhibition to the public. Professor Struthers, of Aberdeen, has done everything in his power to obtain the skeleton for the University of Aberdeen. The whale is very rare on these coasts, where it seems to have lost its way as it was migrating southwards from the Arctic regions. It is a specimen of the *Balænoptera longimanas* and is a splendid example of rare "finner" whale. Its length is forty feet, and its weight nearly seventeen tons.

INFECTIOUS DISEASES IN EDINBURGH.

AT the fortnightly meeting of the Public Health Committee of the Edinburgh Town Council, held last week, Dr. Littlejohn, Medical Officer of Health, reported that, at that time, 92 cases of infectious diseases were being treated at the various hospitals in the city—viz., City Hospital, 9; Old Infirmary, 53; Sick Children's Hospital, 30. Of 55 deaths from preventable diseases during last month, 25 were due to measles alone. During the past year, 446 deaths were registered as being due to preventable causes. There had been a marked diminution in the fatal cases of typhoid fever, the mortality amounting to 40, as compared with 71 in 1882. On the other hand, however, there had been an increased mortality from measles—a disease which has been epidemic in the city for some months. The deaths during the year number 138, as compared with 71 in 1882. Regarding the notification of infectious diseases by the profession in Edinburgh (a practice which has existed for some years, and of which notice has been taken at meetings of the Association), there were during the year 5,411 such notifications; and of these, 2,071 came from the New Town, 2,571 from the Old Town, and 769 from the Southern suburbs. Three thousand cases of measles had been intimated; and 1,817 cases of scarlet fever, 214 cases of diphtheria, 346 cases of typhoid fever, and 50 cases of typhus fever were intimated during the year. During December, 1,005 fresh cases of measles and 246 cases of scarlet fever were recorded.

OUTBREAK OF TYPHOID FEVER IN ABERDEEN.

IN our issue of last week we indicated that there had been an outbreak of this disease in the west end of Aberdeen. Dr. Simpson, medical officer of health, has made a thorough investigation of all the circumstances of the outbreak, and he has been led, with the sanction of the Health Committee of the Town Council, to take the most stringent and prohibitory measures. No cause for the outbreak was to be found in the houses of the affected, and hence the natural inquiry as to the source and character of the milk-supply. In all, sixteen persons have been affected, and of these two have died. All the affected were supplied by milk from the same dairy. Before the outbreak there had been complaints regarding the quality of the milk, and some of the consumers are said to have detected a sediment when the milk was allowed to stand for some time. There was illness in the dairyman's family, but of what nature is not known; but it seems that those who attended the sick child, milked the cows, and performed other operations connected with the dairy, without using any disinfecting measures. The utensils for holding the milk were washed in a burn which runs close to the dairy-farm, the burn being quite near to the steading. In whatever way the contagion reached the milk, it is clear that the milk was contaminated, and was the cause of the outbreak of typhoid fever, thus adding to an already too long series of similar preventable occurrences.

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IRELAND.

THE DUBLIN BRANCH.

THE annual meeting of this Branch will be held, as usual, on the last Thursday in this month, January 31st, in the hall of the King and Queen's College of Physicians, which has again been kindly lent for the purpose by the President and Fellows. Mr. Edward Hamilton, ex-President of the Royal College of Surgeons of Ireland, and President-elect of the Branch, will deliver the annual address. The honorary Secretary, Dr. George F. Duffey, who took an active part in the formation of the Branch, seven years ago, has intimated to the Council that, in consequence of the increasing demands upon his time, he does not intend to offer himself for re-election.

KING AND QUEEN'S COLLEGE OF PHYSICIANS.

THE following important addition to the existing rules respecting the admission of candidates for the Licence in Medicine of this College has been adopted, and the necessary amendment of the by-law made accordingly: "Every candidate for the Licence in Medicine of this College, who shall commence his professional studies after September 30th, 1883, shall submit evidence of personal attendance on at least five fever cases; and shall also be required to produce evidence showing that he has discharged the duties of medical clinical clerk during six months, or of having taken notes, to the satisfaction of the physician in charge of the case, and certified under his hand, of at least six separate medical cases—including different varieties of acute and chronic disease—in the wards of a recognised hospital; and shall also produce evidence of having attended, during the whole period of his attendance on hospital practice, demonstrations in the *post mortem* room of a recognised hospital."

SALE OF POISONS IN IRELAND.

THE president (Mr. Brunker), the vice-president (Mr. Draper), and several members of the Pharmaceutical Society of Ireland, waited on Tuesday last on the Chief Secretary at the Castle, to draw attention to some of the defects in the Pharmacy Act of 1875, and to suggest certain amendments. Mr. Brunker said in the greater part of Ireland at present the Sale of Poisons Act was a dead letter. In small country towns and villages poisons were sold by hucksters, stationers, ironmongers, grocers, and others. In England up to the passing of the Act of 1868 there had been absolutely free trade in the sale of poisons and medicines, but when that Act was passed it was provided that persons who at the time were actually carrying on a business in that way should be allowed to continue it, and that they should be registered without any qualification. In Ireland the position of chemists and druggists was different. Until the passing of the Act of 1875 they had the right of retailing poisons, but had not the right to compound medicines. Such chemists and druggists as were in existence at the time were allowed to continue in business. They were obliged to pass examinations, but were not obliged to register. By section 31 of the Act such persons had reserved to them the right to continue to sell poisons without any examination, but no machinery was adopted whereby such persons should be registered. The Pharmaceutical Society had no power to register them, they did not know who they were, and others besides those in business in 1875 were cropping up every day. It would be impossible to institute prosecutions, but for the protection of society it was desirable that there should be a power given to them of registering those persons. The question was whether such a grade of men should be allowed to continue. The Council also recommended that patent medicines containing poison should have that fact, and the amount of the poison, printed on the label or wrapper. They also desired certain words in the Act to be made more specific, to prevent what at present existed—namely, that a qualified man and an unqualified man could carry on business jointly, while, of course, an unqualified man could not carry on business alone. In the course of the discussion which followed, it was stated that the society comprised 140 licentiates, that apprentices must pass a literary examination, and after four years' service a medical one. Since the passing of the Act, 321 had passed the preliminary, and 64 the final, examination. The Irish were not as fond of taking medicine as the English, and as a rule only took it on prescription, hence the sale of patent medicines was much less proportionately than in England. The Chief Secretary promised the earnest consideration of the Government to the suggestions of the deputation, but said there was very little chance of a Bill on the subject passing next session.

THE MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

A MEETING of the Provisional Committee of this Society was held at the offices of the British Medical Association on Thursday, January 10th, to (1) further consider the rules and several suggested amendments; (2) to consider the desirability of forming a provisional committee, and electing temporary officers; (3) to determine the date for starting the Society.

There were present: Mr. J. Brindley James (London), Dr. W. Clibborn (London), Mr. E. Noble Smith (London), Mr. Major Greenwood, jun. (Dalston), Surgeon-Major Evatt, M.D., Dr. J. Pickett (London), Mr. J. C. Radley (London). Mr. Ernest Hart was in the chair.

The minutes of the last meeting (which were published in the BRITISH MEDICAL JOURNAL, page 1149) were taken as read. The Chairman stated that communications had been received from Mr. Noble Smith, suggesting improvements in the wording of the rules; from Messrs. Hardwicke, Vere Hunt, Dolan, Eardley-Wilmot, Neligan, and Glanville, expressing their approval; also from Mr. Ravenhill (Birmingham), expressing approval, and suggesting certain modifications in the working. Mr. F. Davies-Harris was of opinion that means should be taken to make the medical examination very strict. Messrs. Giddings, Stephens, Wise, Newman, Bridger, and Banning, suggested that the age at joining, viz., 49, should be further extended.

Mr. E. Noble Smith's suggested improvements in the wording of the rules met with approval, and it was decided to modify the rules accordingly.

Mr. Ravenhill's suggestions as to the working were entertained and approved.

The subject of limiting the age of entrance to 49, on which several gentlemen had expressed their opinion, was discussed, and it was ultimately decided to instruct Mr. Radley to draw up a supplementary table at proportionately increased rates, and to submit the same to Mr. Neison.

No provision had been made in the rules for payment in advance, and it was agreed to incorporate such a provision.

As to the visiting of sick members, the following office-rule was proposed by the Chairman, and carried: "That any member of the Society will be expected, when called upon, to visit any sick member residing within a radius of two miles.

The Chairman stated that, immediately the Society was formed, they would have to appoint local committees. Secretaries of Branches would be asked to assist in this work. The Local Committees would have power to admit members subject to the same conditions as were laid down by the Central Committee.

Mr. Radley called the attention of the Committee to the fact that, if they allowed members to enter at the age of 55, it would be necessary to extend the periods of payment over a longer period, instead of allowing all payments to cease at 65. It was decided to refer this matter to Mr. Neison for his opinion.

As to the practical commencement of the Society, it was agreed that they should at once commence operations; and that the first quarter should begin on February 29th.

The Chairman said he should like to see a strong body of the leading men in the profession join the Society, with the full enjoyment of all its privileges, as an example to others. The annuity, mortality, and sick-pay funds, it was announced, would be kept apart, but that an excess of funds accruing to either might, with the actuary's sanction, be transferred to the other.

It was decided to dispense with medical certificates until after the annual meeting in August, a personal declaration being all that would be required at present.

Provisional Committee. The CHAIRMAN proposed that the gentlemen who had each subscribed to the preliminary expenses fund should form the first provisional general committee, and be asked to act, and nominated as such.

This proposition was supported by the meeting, and a resolution was carried unanimously to that effect.

Provisional Executive Committee. The CHAIRMAN thought it was not desirable that they should have a large executive Committee, and suggested that the number should not exceed sixteen. He was of opinion that those gentlemen should be asked to become members of the Provisional Executive Committee, who had from the first shown a very active interest in the movement; and it was proposed that this Committee should include Dr. Brierley (Manchester), Mr. Behrendt (Burringham), Dr. Clibborn (Birmingham), Surgeon-Major Evatt (Woolwich), Mr. Major Greenwood (Dalston), Mr. Brindley James (London), Mr. Ravenhill (Birmingham), Mr. Noble Smith (London), Mr. J. Bain Sincock (Bridgwater), Dr. Dolan (Halifax), Mr. Wallace (London), Mr. Hardwicke (Rotherham). A resolution to this effect was passed.

Provisional Chairman.—Mr. Ernest Hart consented to act as Chairman to the Society until August, by which time it would be fairly started.

Provisional Treasurer.—The CHAIRMAN thought they could not have a more efficient Treasurer than Mr. Malcolm Morris, who had from the first taken a warm interest in the movement, and who had had great experience in connection with kindred societies.

Vice-Presidents.—It was resolved that those gentlemen who were foremost in the promotion of the Society, viz., Dr. Brierley (Manchester), Mr. Ravenhill (Birmingham), Dr. Clibborn (London), Mr. J. Bain Sincock (Bridgwater), and Dr. W. Ord, be elected Vice-Presidents.

Secretary.—The Chairman stated that, for this important post, he thought they could not do better that elect Mr. Radley, who had drawn up some early tables and the rules, and who had had a large amount of experience in connection with friendly and other societies, and had furnished them with excellent testimonials speaking of his fitness for the office. It was proposed by Surgeon-Major Evatt, and seconded by Mr. Major Greenwood, that Mr. Radley be appointed temporary Secretary, at a provisional salary. This resolution was carried.

A Quorum.—It was decided that three members should constitute a quorum of the Executive Committee. It was explained that there would be a great amount of preliminary work to be done. They should send out their tables and rules to the secretary of each Branch, and enlist the aid of the Branch Councils. Special meetings should be called in large centres such as Birmingham, Manchester, Leeds, Halifax, etc.; and, if necessary, Mr. Radley should be instructed to go and address them.

It was decided to send out copies of the rules and tables to each of the 700 gentlemen who had expressed themselves favourable to the scheme, and as intending to join such a Society when founded. It was stated that anything like that number would afford a secure basis for the operations of the Society.

It was decided that Mr. Radley should at once proceed with the preparation of the necessary account-books, and various printed forms and documents on the most approved plans.

A vote of thanks to the Chairman brought the meeting to a close.

[Since the meeting, Mr. S. W. Sibley has been invited to join the Executive Committee, and has consented to do so in the capacity of co-treasurer with Mr. Malcolm Morris.]

DRAFT RULES.

Name, Place, and Objects of the Society.

THIS Society shall be called the Medical Sickness, Annuity, and Assurance Society, and consist of an unlimited number of members. The registered office of the Society shall be in London, or such other place as the Executive Committee, the General Committee, or a general meeting may, from time to time determine. Notice of any change in the registered office shall be sent within fourteen days to the Registrar of Friendly Societies, in accordance with the Treasury regulation.

The objects of the Society shall be the payment of a weekly allowance during sickness or disablement, of annuities, of sums on the death of a member, and providing such other benefits as are permitted by the Friendly Societies Acts, and provided for by the rules from time to time.

Qualification of Candidates.

Membership shall be open to every male person who is, and so long as he remains, a registered member of the medical profession, residing in the United Kingdom, and he must comply with the following requirements.

He must be not less than twenty nor more than forty-nine years of age (last birthday). But the Executive Committee shall have power to admit candidates whose age does not exceed 55 by special arrangement and on special and agreed terms.

He must sign a declaration of age and good health, and state when last medically attended.

He must furnish a medical certificate of good health.

He must be a registered medical practitioner, following his profession.

Admission of Members.

Every person desiring to become a member shall forward a declaration of the above facts, fill up a form of application for membership (to be supplied by the Society), furnish the necessary certificate of health, and deposit an entry fee of 10s. 6d., a receipt for which shall be sent by the Secretary within seven days. The proposition shall be submitted to the next ensuing meeting of the Executive Committee, and, if accepted, the membership shall commence from the date of the receipt for the entry-fee. The Secretary shall, upon the admission of every member, enter his name, age, and address upon the Society's books, and supply him with a book of rules containing his name, registered number, and a statement of the amount due from him each quarter. Every communication, receipt, or document from any member to the Society, or any officer thereof, or vice versa, shall state the registered number of such member. In the event of a candidate being rejected, the Secretary shall, within seven days of such rejection, notify the fact to him, returning all certificates and declarations, and the entry fee in full.

CONTRIBUTIONS OF MEMBERS.

Every member on joining shall be at liberty to contribute for sick-pay of not less than £2 2s. nor more than £4 4s. per week full pay, and an annuity at the age of 65 according to the table; but no contribution can be received for any fractional part of one guinea per week. Contributions may be paid for payment of a sum at death not less than £25 or more than £200, according to the rates contained in the tables, but no contribution can be received for any fractional part of £25. Members may also contribute for annuities under the tables, and are at liberty to join for any or all the assurances provided.

Members may at any time reduce the amount contributed for, and have an abatement of contributions according to the tables, by giving three months' notice in writing to the Secretary. And any member desiring to increase his benefits, must give three months' notice, and forward a medical certificate of good health, when the matter will be considered by the Executive Committee, who shall have power to grant the request, contingent on the necessary increase of contributions according to the tables, or to refuse it.

The contributions shall be payable quarterly, and become due on the last day of February, May, August, and November in each year. Notice shall be sent to each member seven clear days before the date of the amount due from him, and a numbered printed receipt shall be forwarded to each member within ten days of his payment being received at the office. Any member being in arrear fourteen days after the date of his payment becoming due shall receive a further notice (for which he shall be charged one shi'ling), and, if payment is not then made within one month from the Society's quarter day, the member shall be suspended from all benefits until such payment is made. Members owing more than six months' subscriptions shall be excluded, and shall only join as new members. Any member desiring to pay for any period in advance shall be permitted to do so.

Any member desiring to extinguish his future contributions by the payment of a single premium, shall be entitled to do so by paying an equitable sum, to be arranged between the member and the Executive Committee.

EXCLUSION.

Any member joining under a misstatement, or improperly receiving any payments from the funds of the Society, shall be liable to exclusion. The General Committee to have power to decide all such cases, subject to the right of any member to appeal to the arbitrators. Any officer misapplying the funds shall repay the same, without prejudice to his liability to prosecution for such misapplication, and shall (if a member) be excluded.

MEMBERS EXCLUDED FROM THE SOCIETY.

Every member excluded from the Society shall thereby cease to be a member, and shall forfeit all moneys which he has paid to the Society, and all benefits and privileges accruing subsequently to the date of his exclusion.

WITHDRAWAL OF MEMBERS.

Should any member be desirous of withdrawing from the Society, he shall give notice in writing to the Secretary of his intention to resign all claim upon the Society, and also clear the books of all arrears, up to the date of such notice, and in default of such notice having been given, and such arrears paid, he shall be responsible for all sums due by him at the time of his exclusion for nonpayment, and shall be proceeded against to recover the same, as the Committee may direct.

The Executive Committee shall have power to consider the application of any member desirous of withdrawing for compensation, and shall have power to award any sum not exceeding 70 per cent. of the ascertained surrender-value of such member's interest in the Society, or to refuse the application.

DECLARATION ON THE FUND.

When any member shall, by sickness or any bodily or mental infirmity, be incapacitated, he shall send, or cause to be sent, to the Secretary, at the Society-house, postage or delivery paid, a declaration in the following form, viz.:

"I (*here insert christian and surname*), a member of the
, No. , residing at (*here give the full address*),
being at the present time afflicted with and thereby incapacitated,
do hereby declare on the fund of the Society; this day of 18 ."

No sickness-pay shall be made for illness of less than a fortnight; but at the close of that period, if the member remain sick, he shall be entitled to claim for the whole term, provided he forward a medical certificate that he has been under treatment at least ten days. He shall then be deemed a sick member, and shall be allowed sick-pay at the rate he has contributed for. No sick-pay shall be allowed under this rule until a medical certificate has been received, nor unless a printed form (to be periodically forwarded to the sick member from the office) is returned signed by the medical attendant. Should the Executive Committee deem it necessary, they may request a sick member to allow himself to be examined by a special physician or surgeon, and any refusal to do so shall be a sufficient cause for the discontinuance of payment of the allowance.

SICK MEMBER'S DUTY.

No sick member shall be allowed to perform any professional duty, or to engage in any work whatever, giving verbal orders or directions alone excepted. He shall not change his residence temporarily for change of air, etc., without first obtaining the consent, in writing, of his medical attendant, and sending it to the Secretary, with three days' notice of his intention. If there be a member residing within two miles of the sick member's residence, he shall be apprised of his illness, and shall visit him at least once in every seven days, between the hours of ten in the morning and seven in the evening; and the sick member shall give him full facilities for judging of his condition.

DECLARATION OFF THE FUND.

When any member has recovered from his illness sufficiently to enable him to resume his duties, he shall, before he be allowed to do any kind of work whatever, send, postage paid, a declaration in the following form, addressed to the Secretary at the registered office: "I, (*here insert christian and surname*), No. , residing at (*here give the full address*), having recovered from my late indisposition, do hereby declare off the sick-fund of the Society this day of , 18 ." This declaration is to be accompanied by a medical signature, proving that the member was ill and unable to follow his occupation within at least seven days of the date of such declaration, and that he has recovered.

PAYMENT OF SICK-CLAIMS.

Every member, on the expiration of six months from the date of joining, shall, in the event of illness, be entitled to sick-pay according to the rate of his payments according to the tables; or, on forwarding the necessary declaration and certificate. Sick-pay shall be computed up to each Thursday night, and shall be paid by crossed cheque posted to the member's address not later than 4 P.M. on the Friday. A printed form of receipt shall be sent with each remittance of sick-pay, which the member shall sign and return within four days; and in no case shall a second week's pay be sent until a receipt has been fowarded for the preceding one.

REDUCTION OF SICK-ALLOWANCE.

When any member has been on the Society's fund twenty-six successive weeks, and his affliction continues, he shall be reduced to half-pay; but, should any member be on the fund, and afterwards declare off, if he again declare on within six calendar months from such declaration off, the time from him so declaring on again shall be added to his former time till the twenty-six weeks' full sick-pay are thereby completed.

VISITATION OF SICK MEMBERS.

Any member receiving notice from the Secretary of the sickness of a member residing within two miles, shall visit him within one week, and take all reasonable means to satisfy himself as to the condition of the sick member; and shall continue to visit him once each week until he receives notice that the illness has terminated, or another visitor has been appointed. The Secretary shall, immediately he receives notice of the fact, apprise the visitor of the member's recovery.

PAYMENT OF ASSURANCES.

Any member may, by writing under his hand, delivered at or sent to the registered office of the Society during his lifetime, nominate any person not being an officer or servant of the Society, unless such officer or servant be the father, son, brother, or nephew of the nominator, to whom any moneys payable by the Society on the death of such member shall be paid, and may from time to time revoke or vary such nomination by a writing under his hand similarly delivered or sent; but this provision shall only apply absolutely to sums under £50, or of £100 governed by the provision of Section 9 of the Provident Nominations and Small Intestacies Act, 1883. If the member shall not have appointed a nominee, the payment of the death-assurance money shall be regulated in manner following, viz.: that, if the deceased leave a widow, she shall have the priority of claim; if no widow, then to his executors; if no executors, then to the person who shall appear entitled by law to receive the same. All assurance-claims to be made within twelve months after the death, or the same to be forfeited. Should any member have failed to appoint a nominee, and leave neither widow nor children, the Society shall pay the amount to the person who shall appear to be entitled by law to receive the same. A registration-fee of one shilling to be paid for every revocation and subsequent nomination.

No assurance shall be paid on account of a member who has been so less than twelve months from the date of entry, after which time the amount contributed for under Table B shall be payable.

Within seven days after the death of a member, notice thereof shall be given to the Secretary by the person claiming the assurance-allowance, or nominee of the deceased, who shall produce (unless in the case of a death at sea) an official certificate from the Registrar of Deaths, or other person having the care of the register of deaths in which such death is, or ought to be, entered. The amount of such assurance shall then be paid as speedily as possible, and within one month. All arrears due to the Society shall be deducted from such amount.

PAYMENT OF ANNUITIES.

All annuities shall be paid quarterly. Members claiming annuities shall produce such proof of age as the Executive Committee may require, and furnish such evidences of identity as may be from time to time deemed necessary.

DIVISION OF FUNDS.

The sick-fund, assurance-fund, annuity-fund, and management-fund accounts shall be kept separate and distinct, and not more than ten per cent. be deducted from the premiums, to form, together with the entry fees, a fund, from which all incidental, management, postage, printing, and other charges shall be met.

If, on valuation, there shall be a surplus in either of the funds, the General Committee shall have power, under the advice of a competent actuary, to appropriate it in reduction or liquidation of a deficiency in any other fund (should such exist).

BRANCHES.

In localities where there is a Branch of the British Medical Association, and not fewer than ten members have joined the Society, they shall form a Branch Committee, and shall have the same power of admitting candidates as the Executive Committee. The Secretaries of such Branch Committees shall also (when requested by the Secretary of the Society) provide for the visitation of any sick member in their locality. All payments shall, however, be made by the members direct to the registered office of the Society. The Secretary of each Branch so formed shall have a right to attend all meetings of the General Committee, of which he shall be a member *ex officio*, with full power to vote.

INVESTMENT OF FUNDS.

So much of the Society's funds as may not be wanted for immediate use, or to meet the accruing liabilities, shall, with the consent of the Executive Committee, be invested by the trustees in such or any of the following ways:—In the Public Funds, or with the Commissioners for the reduction of the National Debt, or upon Government Securities in Great Britain, or upon debentures or securities of any company incorporated by charter or Act of Parliament, and paying dividend, or upon the security of any county, borough, or other rates authorised to be levied and mortgaged by Act of Parliament, or upon mortgages of freehold or leasehold property.

TRUSTEES.

There shall be four trustees, members of the Society, and all property, moneys, goods, chattels, securities for money, or other obligatory instruments and evidences, and all other effects whatsoever, and all rights or claims belonging to or had by this Society (excepting only the Treasurer's balance to meet the current expenses) shall be invested in them for the use and benefit of the members thereof, their respective claims and interests; and upon the death, resignation, or removal of either of the said trustee or trustees, shall vest in succeeding trustees the same estates and interest as the present trustee or trustees have therein. The trustees shall be resident within ten miles of the registered office; shall continue in office during the pleasure of the Society; and in case of a vacancy or vacancies, another or others shall be elected by a majority of members at the next general meeting, due notice of the vacancy being given. The Trustees shall be admitted to all meetings of the Executive Committee, and shall be at liberty to take part in the proceedings thereof, and vote on any question under discussion. A copy of every resolution appointing a trustee or trustees shall be sent to the registrar in manner and form provided by the regulation in that behalf.

TREASURER AND SUB-TREASURER.

The Treasurer shall continue in office during the pleasure of the Society. All moneys not invested in the name of the Trustees, shall be invested in his name as Treasurer of the Society. He shall attend at the office before 2 P.M. on each Friday, and sign and cross all cheques for sick-pay or other disbursements, the necessity for which shall have been shown to his satisfaction. He shall, at the same time, examine the banker's pass-book and the Secretary's cash-book, and generally satisfy himself as to the correctness of all matters pertaining to the finances of the Society. He shall also be *ex officio* a member of the Executive Committee, with full right to vote. The Sub-treasurer shall assist the Treasurer in his duties, and shall be *ex officio* a member of the Executive Committee. He shall, when necessary, sign and examine the cheques for disbursements in the same manner as provided for in the case of the Treasurer.

CHAIRMAN AND VICE-CHAIRMAN.

The Chairman and Vice-Chairman shall be appointed yearly at the annual meeting, and shall be eligible for re-election. The Chairman shall attend at the office before 2 P.M. each Friday, and countersign all cheques for disbursements, duly satisfying himself as to their nature; but he may depute this duty at any time, by notice in writing, to the Vice-Chairman. He shall preside at all committee or general meetings of the Society, and exercise a general supervision and control. The Vice-Chairman shall assist the Chairman in conducting the business at all committee and general meetings, and shall, when authorised in writing to do so by the Chairman, countersign and examine the weekly cheques for disbursements. The Chairman and Vice-Chairman shall be *ex officio* members of the Executive Committee, with full right to vote, the former being also entitled to the casting vote.

EXECUTIVE COMMITTEE.

The Executive Committee shall consist of the Chairman, Vice-Chairman, Treasurer, Sub-treasurer, and Trustees. They shall meet at least once a month, when a report shall be presented to them of the position of the Society, the number of members, amount and disposal of funds, and of such further particulars as they may deem necessary. At each meeting, the Secretary shall produce the banker's pass-book, balanced up to a date not more than three days previous to that of the meeting. The Executive Committee shall have power to deal with any matters connected with the general affairs of the Society, to decide upon the admission of members, and all other matters provided for by these rules. They shall, if they deem it necessary, have power to call a special meeting of the General Committee, giving at least seven days' notice, and stating the object for which such meeting is called.

GENERAL COMMITTEE.

The General Committee shall consist of twelve members and the members of the Executive Committee. The Committee shall meet at least once a quarter, and a report on the affairs of the Society shall then be presented to them. At least once in six months a statement of accounts and balance-sheet shall be presented to the Committee, duly audited and vouched by some firm of professional accountants, to be appointed by the General Committee, and an annual statement shall also be submitted to them (duly audited) of the affairs of the Society, to be subsequently published to the members. The General Committee shall have power, at any time, to call a special meeting of the members, giving at least fourteen days' notice of the time and place of such meeting to every member, and the business to be brought before it. The General Committee shall have power, at any ordinary meeting, to decide that the next, or any future meeting, be held in any of the provincial towns.

SECRETARY.

The Secretary shall conduct the affairs of the Society under the control of the Executive and General Committees. He shall attend at the registered office daily during office-hours, for the purpose of superintending the general business of the Society. He shall attend every meeting of the Society, or any committee thereof. He shall keep a faithful account of all moneys received and expended by him on behalf of the Society; carefully record all minutes of their transactions, and assist them with his advice in all their affairs. He shall enter in the minute-books the proceedings of every committee-meeting within three days after it has taken place. He shall register, or cause to be registered, the admissions, residences, and removals of members, and properly keep the books, and balance the accounts of the Society. He shall, at least once in every six months (as the Executive or General Committee may direct) submit his books, accounts, etc., to be audited, and produce receipts and vouchers for all expenditure. He shall send to the members all necessary written or printed notices or summonses relative to the business of the Society. He shall, before four o'clock on each Friday evening, send, or cause to be sent by post, all moneys due to sick members. He shall enter in the book kept for that purpose, the name of each member that declares on the fund, the nature of his complaint, and the time of his declaring on and off the Society's fund. He shall prepare the various returns required by law, and forward them to the Registrar in due course. The Secretary shall, before taking upon himself the execution of his office, give security in the sum of £200, pursuant to the Friendly Societies Act, 1875.

CHANGE OF RESIDENCE.

When any member changes his residence or has his address altered, he shall give notice thereof, in writing, to the Secretary, postage paid, at the registered office, within seven days after such removal or alteration, in the following form,

I removed from, or my address has been altered from (*here give the old address*) to (*here give the new address*), on the day of , 18 .

Name

Number

or, for neglect thereof, be fined one shilling. If, through the omission to give such information, any letter or notice sent to a member of the Society should be returned, he shall be subject to the same fines as though he had received such letter or notice, and not attended to it.

ANNUAL MEETING.

An annual general meeting of the members shall be held in the same town and during the same week as the annual meeting of the British Medical Association, due notice of which shall be given to every member, and the time and place of which shall also be advertised in the BRITISH MEDICAL JOURNAL. A report of the general position of the Society, and an audited annual statement of accounts, shall be presented to such meeting. The annual general meeting shall elect the Chairman, Vice-Chairman, and General Committee for the ensuing year, fill up any vacancies in the Trusteeships, and appoint five Arbitrators.

SETTLEMENT OF DISPUTES.

Any disputes between a member and any officer or committee of the Society, and any disputes as to payments claimed by a member, or a person claiming through a member, shall be referred to five arbitrators appointed by the annual meeting, whose decision, or that of any number present after they have been duly summoned, shall be final and binding on all persons.

ALTERATION OF RULES.

These rules may from time to time be altered or amended in the following manner. Notice of any proposed alteration may be sent by any member to be laid before the next meeting of the General Committee, and it shall then be considered at the ordinary meeting of the committee next following that at which notice was given. The proposer and seconder shall be at liberty to attend and explain their proposition. The committee shall then consider the question, and if the majority of those present, and entitled to vote, are against it, the proposition shall be rejected; if a majority of the committee are in favour of the proposal, it shall be submitted to the next annual meeting for confirmation, due notice being sent to each member of the terms of the proposed alteration. A majority of the members present at such annual meeting and entitled to vote, shall have power to adopt, amend, or reject such proposals, but no alteration of rules shall have any force or effect until it has been duly registered under the Friendly Societies' Act.

INSPECTION OF THE SOCIETY'S BOOKS.

Every member or person having any interest in the funds of the Society shall be at liberty to inspect the books thereof, at the registered office of the Society, or at any other place where the same are kept, at all reasonable times within the hours of business, and it shall be the duty of the Secretary to produce them for inspection.

COPIES OF RULES.

It shall be the duty of the Executive Committee to provide the Secretary with a sufficient number of copies of the rules to enable him to deliver to any person, on demand, a copy of such rules, on payment of a sum not exceeding sixpence to members, and one shilling to other persons, and of the Secretary to deliver such copies accordingly.

ANNUAL RETURNS.

Every year before June 1st, the Secretary shall send to the Registrar the annual return, in the form prescribed by the Chief Registrar of Friendly Societies, required by the Friendly Societies Act, 1875, of the receipts and expenditure, funds and effects, of the Society, and of the number of members of the same, up to the 31st December then last, inclusively, as audited, showing separately the expenditure in respect of the several objects of the Society, together with a copy of the auditors' report, if any. Such return shall state whether the audit has been conducted by a public auditor appointed under the Friendly Societies Act, 1875, and by whom, and, if such audit has been conducted by any persons other than a public auditor, shall state the name, address, and calling or profession, of each of such persons, and the manner in which, and the authority under which, they were respectively appointed.

QUINQUENNIAL VALUATION.

Within five years from the registration of these rules, and so on again within six months after the expiration of every five years succeeding the date of the first valuation, the assets and liabilities shall be valued by a valuer to be appointed by the Society, and a report, signed by such valuer, shall be sent to the Registrar (and which shall also state his address and calling, or profession) on the condition of the Society, and an abstract to be made by him of the results of his valuation, together with a return containing such information with respect to the benefits assured, and contributions receivable by the Society, and of its funds and effects, debts, and credits, as the Registrar may from time to time require.

BALANCE-SHEET TO BE HUNG UP.

It shall be the duty of the Executive Committee to keep a copy of the last annual balance-sheet of the Society for the time being, together with the report of the auditors, if any, and of the last quinquennial valuation for the time being, always hung up in a conspicuous place at the registered office of the Society.

COPIES OF ANNUAL RETURN.

It shall be the duty of the Executive Committee to provide the Secretary with a sufficient number of copies of the annual return, or of some balance-sheet or other document duly audited, containing the same particulars as to the receipts and expenditure, funds and effects of the Society, for supplying gratuitously every member or person interested in the funds of the Society, on his application, with a copy of the last annual return of the Society, or of such balance-sheet or other document as aforesaid, for the time being; and it shall be the duty of the Secretary to supply such gratuitous copies on application accordingly.

PERMANENCE OF THE SOCIETY.

This Society may be dissolved only by the consent of five-sixths in value of the then existing members of the Society, testified by their signatures to the instrument of dissolution in the form prescribed by the Treasury Regulation, and also by the written consent of every person for the time being receiving, or entitled to receive, any relief or other benefit from the funds of the Society, unless the claim of such person be first duly satisfied, or adequate provision made for satisfying such claim; and for the purpose of ascertaining the value of members for the purposes of this rule, every member shall be entitled to one vote, and an additional vote for every five years he has been a member: provided that no one member shall have more than five votes in the whole, and, in case of such dissolution, the intended appropriation or division of the funds, or other property of the Society, shall be fairly and distinctly stated in the proposed plan of dissolution, prior to such consent being given.

INSPECTION AND INVESTIGATION.

It shall be the right of one-fifth of the total number of members, or, if the number of members shall at any time amount to 1,000, and shall not exceed 10,000, it shall be the right of 100 members, or, if the number shall at any time exceed 10,000, it shall be the right of [illegible] members, [illegible] in writing to the Chief Registrar, signed by them in the form [illegible] provided by the Treasury Regulations in that behalf, to a *a.* For the appointment of one or more inspectors to examine into the affairs of the Society, and to report thereon.

b. For the calling of a special meeting of the Society. Such application shall be supported by such evidence for the purpose of showing that the applicants have good reason for requiring such inspection to be made, or meeting to be called, and that they are not actuated by malicious motives in their application, and such notice thereof shall be given to the Society as the Chief Registrar shall direct.

c. Or, for an investigation into the affairs of the Society with a view to the dissolution thereof. Such application as last aforesaid shall set forth that the funds of the Society are insufficient to meet the existing claims thereon, or, that the rates of contribution fixed in the rules are insufficient to cover the benefits assured, and the grounds upon which such insufficiency is alleged.

THE CASE OF MESSRS. BOWER AND KEATES.

A LARGE meeting of the patients, friends, and neighbours of Dr. E. Bower and Mr. W. C. Keates was held on Tuesday at East Dulwich, for the purpose of presenting them with expressions of sympathy and condolence in connection with the recent proceedings against them. The testimonial was independent of the sum raised in the medical profession to defray the legal expenses in the case. The chair was taken by the Rev. T. A. Warburton, vicar of East Dulwich.

The CHAIRMAN, in opening the proceedings, congratulated Dr. Bower and Mr. Keates that the wrong which had been done them had been completely redressed. The great sting of that wrong was that it was ungenerous and ungrateful; circumstances which ought to have elicited gratitude were turned into grounds of accusation and attack. A child lay ill, and Dr. Bower was sent for. He saw at once that the only chance of life was the performance of a critical and delicate operation. The probability of that operation succeeding was very problematical, and a cold and selfish man would have declined to have anything to do with the case. But Dr. Bower, with the hand of duty strong upon him, determined to perform the operation, leaving his professional character to take care of itself. The operation, unfortunately, did not succeed; but the attempt to save a life so dear to the parents, instead of exciting gratitude, was met with an ungenerous wrong. There was a functionary called the Public Prosecutor, whose duty, as he understood it, was to prevent the miscarriage of justice; but in this case the Public Prosecutor did not take the steps he ought to have taken in ascertaining if there was a *primâ facie* case, and, consequently, Dr. Bower and Mr. Keates had been subjected to much anxiety and suspense, in addition to being made liable for a large amount of costs. But, happily, the case had been taken up by the College of Physicians and the College of Surgeons; and the amount of subscriptions which they had raised showed that the profession felt that it was most unjust that the men who had fought this battle and won it should be mulcted in large expenses. So the great medical profession had charged itself with all the legal liabilities of the case. The professional reputation of Dr. Bower and Mr. Keates, instead of suffering by the vexatious proceedings, had been enhanced; while the confidence which their patients had previously reposed in them, instead of being weakened, had been made stronger than ever. Thus Dr. Bower and Mr. Keates came there that night to receive, not their condolences, but their warmest congratulations. Their names would be long remembered in the medical profession, as having adopted a course which should act as a warning to the Public Prosecutor, in the future, to inquire well into the facts of a case before he exercised his functions.

Mr. L. SCHLESINGER, secretary to the testimonial fund, then presented Dr. Bower and Mr. Keates each with an illuminated address conveying to them the sympathy and esteem of their patients, friends, and neighbours, and expressing unabated confidence in the skilful and conscientious discharge of their profession.

The CHAIRMAN supplemented this compliment by handing to Dr. Bower and Mr. Keates two silver salvers and a joint purse containing 100 guineas.

Dr. BOWER, who was received with loud cheers, said that the subscribers to the testimonial had done good to the medical profession, to the legal authorities, and to the public. They had done good to the public, for if such proceedings as those which had been taken against himself and partner were to be permitted, medical men would never be able to do their duty. They had done good to the legal authorities by teaching them what they ought to do and what they ought not to do. The Public Prosecutor had failed to prosecute in cases which he was asked to prosecute, and he had prosecuted medical men where he ought not to have prosecuted. In the present case, if some of the chief men of the medical profession had been appealed to, the Public Prosecutor would have been told that no prosecution ought to be instituted. One medical man had gone to his grave under this system of persecution—he alluded to the late Mr. Haffenden. In the case which had led to the proceedings against himself he (Dr. Bower) found a poor child suffering from diphtheria, and in such a condition that, if no further steps had been taken, it would have died in twenty minutes or half an hour. In order to give it a chance of life he operated on it. That was an operation which it was the bounden duty of every medical man to perform under the circumstances, and which if it had been his own child he should have requested to be performed. True, he was not able thereby to save the child's life, but he prolonged it for upwards of thirty hours. And for aught he knew at the time the operation might have been successful. If, as the chairman had stated, he had been a callous man, he might have contented himself with looking at the little sufferer and saying that nothing could be done; but with the simple desire to save life he performed an operation which was approved in all modern hospitals, and which in 14 or 15 per cent. of cases was successful.

Mr. KEATES, who was warmly applauded, acknowledged the testimonial to himself in a few sentences.

Dr. GLOVER remarked that, next to the Pope, medical men were supposed to be infallible. Still, he could not deny that sometimes they made mistakes. But the peculiarity of the case against Dr. Bower and Mr. Keates was that no mistake was made, but that a difficult and delicate operation was well performed when it was within the power of Dr. Bower to have declined to perform it. The effect of what had happened, however, would be to show the Public Prosecutor that there was a greater than he—the public. It would show him that if he could not exercise better discretion and sounder judgment, the public would compensate medical men, as was being done by that meeting, for any injury they might suffer in consequence.

Other addresses were delivered, and the Chairman, in acknowledging a vote of thanks, stated that the adviser of the Public Prosecutor had written saying that the operation adopted by Dr. Bower was a proper one, and could not have been better performed.

THE following is the sixth list of contributions, being those received up to the 12th instant.

W. Adams, F.R.C.S., £3 3s.; H. W. Acland, M.D., C.B., F.R.S., £5; C. B Brodie, M.D., £3 3s.; J. Jones, F.R.C.S., £3 3s.

The following have sent Two Guineas each:—W. Bucknill, Esq.; W. O. Chalk, Esq.; A. Cooper, F.R.C.S.; F. B. Courtenay, Esq.; T. H. Forshall, Esq.; J. W. Gooch, Esq.; C. J. Hare, M.D.; T. S. Howell, Esq.; T. W. C. Jones, F.R.C.S.; G. Lawson, F.R.C.S.; C. H. F. Routh, M.D.; Buxton Shillitoe, F.R.C.S.; A. Winkfield, F.R.C.S.

The following have sent One Guinea each:—J. Allen, M.D.; T. R. Armitage, M.D.; A. W. Barclay, Esq.; R. Barlow, Esq.; W. H. Bennett, F.R.C.S.; H. Briggs, M.D.; R. C. Brown, M.B.; J. G. Carruthers, Esq.; R. R. Cheyne, F.R.C.S.; J. Fenn Clark, Esq.; W. M. Coates, F.R.C.S.; Alex. Collie, M.D.; C. E. Collins, Esq.; A. W. Crane, Esq.; R. S. Cross, Esq.; F. R. Cruise, Esq.; W. D. Clucas, Esq.; W. E. Dixon, F.R.C.S.; E. R. Evans, Esq.; D. Everett, F.R.C.S.; D. Ferrier, M.D., F.R.S.; W. Gaudy, Esq.; R. Gilbertson, Esq.; W Gill, Esq.; R. J. Godlee, F.R.C.S.; Stanley Haynes, M.D.; W. A. Hearnden, M.D.; T. Wood Hill, Esq.; J. S. Hosford, M.D.; T. Mark Hovell, F.R.C.S.; W. H. A. Jacobson, M.B.; W. Johnson, M.B.; Bernard Kendall, Esq.; G. Leake, Esq.; Surgeon-Major W. J. H. Lush, M.D.; J. A. McDonagh, F.R.C.S.; A. C. MacLaren, Esq.; T. May, Esq.; H. Monro, M.D.; Gawin Orr, M.D; W. Pollard, F.R.C.S.; W. Rayner, Esq.; H. S. Renshaw, M.D.; J. Reynolds, M.D.; B. Rix, Esq.; F. G. Sadd, Esq.; E. Selous, M.D.; W. Johnson Smith, F.R.C.S.; E. M. Swanwick, Esq.; C. J. Symonds, F.R.C.S.; H. P. Truell, M.B.; F. Vacher, Esq.; C. Welch, Esq.; J. C. Whaley, Esq.

The following have sent One Pound each:—J. Chiene; F.R.C.S.; T. P. P. Marsh, M.D.; G. Waylen, Esq.; W. S. Wyman, M.D.; F. L. Selous, Esq.

The following have sent Ten Shillings and Sixpence each:—Boughton Addy, M.D.; R. Anderson, M.D.; C. T. Aveling, M.D.; —Back, M.D.; M. S. Bennett, Esq.; J. G. Bredin, Esq.; T. M. Butler, Esq.; Isaac Byerley, F.R.C.S.; J. Corrie, Esq.; A. Cunningham, M.B.; T. Chapman, Esq.; E. Diver, M.D.; Woodfield Eagles, Esq.; J. E. Eddison, M.D.; J. Grove, M.D.; D. Holmes, M.B.; C. Hooper, Esq.; A. P. Leak, M.D.; Hector Leak, Esq.; C. F. Lewis, Esq.; C. H. Lister, M.D.; Messrs. Morgan and Williams; J. Morton, M.B.; A. A. Napper, Esq.; Albert Napper, Esq.; H. G. Rawdon, M.D.; J. H. Russell, Esq.; F. R. Russell, M.D.; G. E. Scholefield, M.B.; C. J. Sells, Esq.; J. R. Stedman, M.D.; T. C. Temple, Esq.; T. W. Thompson, Esq.; J. B. White, Esq.; A. Whitehead, Esq.; R. Wilson Wilcox, Esq.; J. C. Wilkinson, Esq.

The following have sent Ten Shillings each:—W. Alexander, M.D.; G. W. Armstrong, Esq.; E. G. Barnes, M.D.; T. W. Coffin, F.R.C.S.; F. Corbett, Esq.; S. D. Darbishire, M.D.; Theodore Davis, Esq.; T. Elliott, M.D.; J. R. Ferguson, M.B.; Adam Fletcher, M.D.; E. Furley, M.D.; G. P. Goldsmith, M.D.; W. Griggs, Esq.; George Harding, Esq.; H. Nelson Hardy, F.R.C.S.; A. Hensman, F.R.C.S.; A. Hepburn, Esq.; T. Joyce, M.D.; R. H. Kinsey, Esq.; C. Lucas, Esq.; H. A. Lawton, Esq.; T. Limbery, Esq.; R. Macartney, Esq.; P. Macpherson, M.D.; W. K. Manfold, Esq.; G. P. May, M.D.; W. W. Miller, M.D.; Ivor Murray, M.D.; H. Muscroft, M.D.; F. Needham, M.D.; F. Payton, Esq.; C. E. Perry, M.D.; F. G. Stevens, Esq.; T. S. Tellet, Esq.; E. Thompson, M.B.; F. Turtle, M.D.; Thos. Watts, Esq.; A. D. Webster, M.D.; G. J. Willan, Esq.; J. Young, Esq.

The following have sent Five Shillings each:—J. A. Aldridge, M.D.; T. G. Allen, Esq.; Samuel Arnott, Esq.; J. H. Bailes, Esq.; R. Bangay, M.D.; W. H. Blake, M.B.; J. Bridger, Esq.; F. Canton, Esq.; R. T. Poole Collyns, Esq.; R. Congreve, Esq.; W. G. Copestake, Esq.; R. Cox, M.D.; R. N. Day, Esq.; R. Debenham, Esq.; T. F. Edgeworth, Esq.; J. P. Edwards, Esq.; G. M. Evans, Esq.; W. Ewart, M.D.; W. Fairbanks, M.D.; A. P. Fiddian, M.B.; J. P. Gaunt, Esq.; S. Lawrence Gill, Esq.; C. B. Granger, Esq.; W. A. Greet, Esq.; A. Hamilton, F.R.C.S.; J. Hammersley, Esq.; T. Harper, Esq.; J. Hartley, Esq.; R. Harvey Hilliard, M.D.; A. A. Hogarth, M.B.; H. F. Holland, M.D.; W. Husband, M.D.; H. Talbot Higginson, M.D.; Charles Irving, Esq.; Edwin Jacques, M.D.; R. Kirkland, M.B.; D. H. Kyle, M.B.; A. Langley, Esq.; H. Marturin, Esq.; Lysander Maybury, M.D.; R. Moir, M.D.; J. B. Neal, Esq.; W. J. Nelson, Esq.; Hill Norris, M.D.; R. Norris, M.D.; A. W. Orwin, M.D.; F. Craddock Palmer, Esq.; T. Pearse, M.D.; James Ray, Esq.; J. Rodley, Esq.; H. P. Rowlands, Esq.; M. T. Sadler, M.D.; T. A. Sellar, M.B.; H. Simpson, M.D.; F. M. Godde Smith, Esq.; J. Snowden Smith, Esq.; G. Spotton, Esq.; N. D. Talpade, M.D.; H. C. Taylor, Esq.; E. B. Tench, Esq.; G. L. Thorne, Esq.; J. Tunley, Esq.; W. E W. Vaughan, Esq.; E. H. Vinen, M.D.; H. Waldo, M.D.; W. Whalley, M.D.; A. Woodforde, Esq.; Anonymous.

The following have sent Two-and-Sixpence each:—G. T. Broatch, Esq.; T. Clarendon, M.B.; George Crawford, M.D.; J. C. Clarke, M.B.; C. E. Hardyman, Esq.; E. Hargreaves, M.B.; A. Hooley, Esq.; J. King Kerr, M.D.; John Morgan, Esq.; W. F. Parmer, M.B.; C. B. Plowright, Esq.; W. J. W. Proffitt, Esq.; J. Reid, M.B.; G. N. Stathers, Esq.; E. Williams, Esq.; G. Halpin, M.D.

Other smaller sums have been received from:—T. A. Alexander, M.B., 2s.; J. H. Comber, M.D., 1s.; A Very Poor Sympathiser, 1s.

Erratum.—"H. T. Philpot," acknowledged last week, should be "H. J. Philpot," and "J. E. Games," should be "J. E. Garner."

It will greatly facilitate the work if all those who still desire to sign the memorial will send in their signatures without further delay.

F. A. Mahomed, } Honorary Secretaries.
R. W. Burnet, }

THE CASE OF MR. WHEATLEY.

We have received the following interesting information concerning the death of the Resident Librarian to the Royal Medical and Chirurgical Society.

Mr. Wheatley had had no serious illness since a prolonged attack of jaundice about ten years ago, during which he passed several gall-stones. For some days before his death, he had been less well than usual. On Thursday, the 3rd instant, he had a shivering attack, for which he took a little brandy-and-water. On Friday, after the annual meeting of the Pathological Society, he complained of the smell from a decomposing specimen, and about 4 P.M. he had a severe pain, with vomiting, due, as he thought, to the passage of a gall-stone. On Saturday, the 5th, he felt drowsy, and, while attending a meeting of the Library Committee, he was suddenly seized with severe diarrhœa and vomiting. On Sunday and Monday, he was unwell, but on Tuesday, the 8th, was better, and did his work as usual, including attendance at the usual evening meeting of the Royal Medical and Chirurgical Society; but, immediately after the meeting, he had rigors, severe pain in the abdomen, vomiting, and diarrhœa.

At 1.30 A.M. on the 9th, his friend, Mr. Watkins, found him in a state of collapse, with rapid feeble pulse and cold extremities. After taking some brandy, there was a slight rally. At 10 A.M., Dr. George Johnson saw him with Mr. Watkins. There was much abdominal pain, tenderness, and great tympanitic distension; respirations, 40; pulse, 120, very small and feeble; temperature, 100°; urine, bile-tinged, with a decided trace of albumen. At 2 P.M., when there was a second consultation, the evidence of rapid failure of strength was still more decided, and soon after 4.30 P.M. he died.

The body was examined twenty-four hours after death by Dr. Norman Dalton, the Pathological Registrar of King's College Hospital, in the presence of Mr. Jonathan Hutchinson and Dr. George Johnson. Death having occurred within eighteen hours after the onset of severe abdominal pain, it seemed not unlikely that perforation, either of the bowel or of the gall-duct, might have happened, but a careful search discovered nothing of the kind. There was no fluid in the abdominal cavity, but there were indications of incipient peritonitis. The peritoneal surface of the stomach and intestines showed here and there patches of pink capillary injection, and, although no definite lymph-exudation was found, the surface of the peritoneum had a decidedly opaque and greasy appearance. The stomach and intestines were greatly distended by gas, and contained a large amount of a yellowish-brown gruel-like liquid. The mucous membrane, on the whole, was pale, with some patches of congestion, and the surface thickly covered with mucus. At the lower part of the ileum it was thought that Peyer's patches and the solitary glands were unusually prominent.

There was much subcutaneous and intra-abdominal fat. The coats of the gall-bladder were much thickened, and its cavity so contracted as barely to admit the finger. It contained no bile, but a gall-stone, about the size of a small pea; and a somewhat larger stone was found in the common duct. Both the cystic and the common duct were so much dilated as readily to admit the tip of the little finger. The gall-stone in the common duct was, therefore, not large enough to cause obstruction. The surface of the kidneys was somewhat granular, with some atrophy of the cortex, and in the right kidney there were two depressed cicatrices, indicative of old fibrinous infarction.

There was a considerable growth of fat over the surface of the heart, especially over the right cavities. The muscular walls of the heart, although encroached upon by the fatty growth, were of good colour and firm consistence. All the valves were normal. The source of the former infarction in the right kidney was not apparent. The lungs presented the usual appearances of passive engorgement.

INTERNATIONAL HEALTH EXHIBITION, LONDON, 1884.

Memorandum from the Subcommittee on Food.—The following is the official classification of Group 1 of the Exhibition, in which are comprised Classes 1 to 12: Class 1. Selected displays of unprepared animal and vegetable substances used as food in various countries. Stuffed specimens of animals, birds, etc. Models, drawings, and illustrations of the same. Class 2. Prepared vegetable substances used as food, including tinned, compressed, and preserved fruits and vegetables. Bread, cakes, and biscuits of all kinds. Class 3. Prepared animal substances used as food in a preserved form; tinned, smoked, salted, compressed, and prepared animal foods of all kinds. Food produced by insects, such as honey, etc. Class 4. Beverages of all kinds—(*a*) alcoholic; (*b*) non-alcoholic; (*c*) infusions (tea, coffee, cocoa, chocolate, etc.). Class 5. New varieties of food, food for infants, food for invalids, new concentrated foods of all kinds. Class 6. Cookery practically demonstrated. Economical cooking, workmen's and other kitchens, cheap restaurants, bakeries, cafés, foreign cookery, etc. Class 7. The chemistry and physiology of food and drink. The detection of adulteration, materials used as adulterants, analyses, food constituents and equivalents, tables, diagrams, etc. Class 8. Diseases due to unwholesome and improper food. Drawings and models of animals and vegetable parasites, etc. Class 9. Practical dietetics. Army and Navy rations, prison and workhouse diet, foreign dietaries, etc. Class 10. Publications and literature, models and diagrams relating to Group 1. Class 11. Apparatus and processes for conserving, storing, conveying and distributing fresh food of all kinds. Class 12. Machinery and appliances for the preparation of articles under Group 1. In the first three classes are included what may be termed the raw materials of food. In Class 1, specimems of the actual foods themselves may, when possible, be exhibited, and when this cannot be done, they should be represented by models. The Exhibition, for instance, of uncooked meat would be neither desirable or practicable, but any exhibits tending to give information as to the various animals used for the food of man, their nature, habits, characteristics, etc., will be welcomed. In the case of cereals, the raw grain and the products from it, may be exhibited. Fruits and vegetables will for the most part be represented by models, but the Executive are also considering the establishment of periodical shows at which the articles themselves can be shown (and sold). Specimens of foreign fruits, etc., will be gladly received for this purpose. Models of the different fruits imported in a dried or preserved state into this country are specially desirable, in order to show their natural forms. The classification sufficiently indicates the class of exhibits desired for Classes 2 and 3. It may be added that, where possible, preserved provisions should be put up in bottles, so that they may be visible, not in tins. In Class 4 are to be included every sort of drink, including milk, as well as those enumerated in the classification. It will take in all exhibits connected with the production of tea, coffee, and other beverages (except those relegated to Class 12), and all illustrating new or little-known beverages, such as Maté or Paragua tea, cocoa, Koumiss, etc. The exhibition in Class 5 will naturally also be capable of being placed in one or other of the previous classes, but this arrangement has been adopted with the view of giving prominence to any novelties. Food for children and invalids will form a special feature in this class. As regards Class 6, the Committee think it well to draw attention to the announcement already made by the Executive, that, as refreshments come within the scope of the Exhibition, all methods of preparing the same, whether by cookery or otherwise, and the display and sale thereof, will be matters of separate arrangement with those wishing to be represented in this section. One principal object to be kept in view in this department of the Exhibition will be the diffusion of information as to the economical cooking of food, and the best way of utilising the sources of food available to the people of this country. Cheap cooking, both at home and by means of public kitchens, should be amply illustrated. For the purposes of comparison there should be illustrations of every class of foreign cookery, not only of the luxurious sort, but of that practised in the homes of the well-to-do, of the middle class, and of the poorer classes in foreign countries. As a matter of interest, and with the object of diffusing information on the manner of life of nations differing yet further from ourselves, the Committee hope that means may be found for exhibiting the practice of Eastern cooks, Chinese, Japanese, Indian (Mohammedan and Hindoo), etc. Bakeries will be included in this class, and the Committee hope that the fittings and appliances of the most modern establishments (both English and foreign) may be fully shown. It is almost equally desirable that deficiencies may be demonstrated, and that there should be large scale models and drawings showing the actual condition of the worst of the London bakehouses. The object of Classes 7 and 8 is to diffuse popular information as to the nature and action of food, its constituents, the way in which the human body is supported by it, the nutritive effects of different classes of food, the effect of adulteration, the way of detecting adulteration, and the like. Exhibits illustrating these and similar points will be welcome. The Committee trust that the Science and Art Department will assist this portion of the Exhibition by lending one of the collections formed by Professor Church. As regards the last item in Class 8, it should be noted that parasites on all products used as food for man are included, provided that they are such as to injure the value of the food, and therefore to become injurious to man. As regards foreign dietaries in Class 9, the Committee consider that this expression must be taken in its widest sense, and as including the food of savage races all over the world. It would therefore comprise specimens of the animal and vegetable substances used as food, beverages, stimulants, etc., by savages or native races of low civilisation, both in the raw and prepared condition, together with appliances and utensils of all kinds used in their manufacture or consumption. Models and drawings illustrative of the subject would also be desirable. As examples, may be mentioned, sago, and its native manufacture, by Malays, natives of New Guinea, etc.; cassava, and its manufacture, in British Guiana and Africa; taro, the Polynesian food, and the manufacture of roi from it; kaava and kaava bowls of Fiji and elsewhere; betel and its numerous interesting accessories. The Committee believe that the materials for a valuable ethnological collection of this sort would be forthcoming from private owners all over England, and that there would be no difficulty in getting them together. The exhibits admissible to Class 10 are clearly indicated in the classification. Classes 11 and 12 are added as separate classes, because it is necessary that all machinery should be placed together in one gallery where the motive power is provided. Among the processes which the Committee hope to see illustrated may be mentioned, methods of cold storage and transport of fresh meat, ice-making, dairy operations, manufacture of butter and cheese, making bread, biscuits, etc., manufacture of confectionery, of condiments, (mustard, etc.), of cocoa and chocolate, the production and bottling of aërated waters.

THE ROGERS TESTIMONIAL.

The following additional subscriptions to the fund for a testimonial to Dr. Joseph Rogers have been received. It should be understood that the subscription to this fund is not confined to Poor-law medical officers. The Treasurer is Mr. J. Wickham Barnes, 3, Bolt Court, Fleet Street, E.C.; and subscriptions are received by the Editor of the British Medical Journal.

Eleventh List.—Dr. Henry Drinkwater, Sunderland, £1 1s.; Dr. Montague Thomas, Nottingham Place, Regent's Park, £1 1s.; C. H. Buncombe, F.R.C.S., £1 1s.; City of London Infirmary, £1 1s.; F. Sadd, Esq., Rugby, £1 1s.; Dr. Milsome Addlestone, 10s. 6d.; Dr. Robert Tiffen, Wigton, 10s. 6d.; E. Snell, Esq., Ketton, Stamford, 10s.; Dr. Turtle, Woodford, 10s.; George Harrison, Esq., Whitefriars, Chester, 5s.; C. Read, Esq., Stradbroke, 5s.; Dr. T. J. Hughes, Woolwich, 5s.; Dr. R. T. Jones, Harlech, 5s.; Dr. E. T. Thompson, Wolston, Coventry, 5s.; W. Arras, Esq., Wetheral, 5s.; Dr. Lush Fyfield, Andover, 10s. 6d.; W. Moore, Esq., Stourport, 10s.; J. Norton, Esq., John Street, Bedford Row, £2 2s.; Dr. Irvine Milne, Shipdham, Norfolk, £1 1s.; Dr. Nicholas, Church Row, Wandsworth, 10s.; H. Horton, Esq., Bromyard, Worcester, 5s.

At the meeting of Council of Parkes Museum of Hygiene, on January 8th, Sir James Paget, Bart., was elected a life member, and Mr. H. A. Darbishire, F.R.I.B.A., an annual member.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

Meetings of the Council will be held on Wednesday, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 20th, June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

North of Ireland Branch.—A meeting of this Branch will be held in the Bar Room of the County Court-house, Omagh, on Thursday, January 24th, at 1 p.m.—Alexander Dempsey, M.D., Honorary Secretary, 26, Clifton Street, Belfast.

The North-Western Provinces and Oudh Branch.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons Shirley Deakin and W. A. Morris, 8, City Road, Allahabad.

Dublin Branch. The seventh annual general meeting of the Dublin Branch will, by kind permission of the President and Fellows, be held on Thursday, January 31st, at 4 p.m., in the Hall of the King and Queen's College of Physicians, Kildare Street. The officers and council for the ensuing year will be elected by ballot, and any other necessary business transacted. Mr. Edward Hamilton, President-elect, will deliver the annual address. The following addition to By-law VII will be proposed: "All interim vacancies may be filled up by the council." The annual dinner of the Branch will be in the College Hall, at 7 p.m. on the day of the meeting. Dinner tickets for members who purchase their tickets on or before Tuesday, the 29th inst., 17s. 6d.; for members purchasing their tickets after that date, and for guests, £1.– George F. Duffey, M.D., Honorary Secretary and Treasurer, 30, Fitzwilliam Place, Dublin.—January 2nd, 1884.

Metropolitan Counties Branch: South London District.—The next meeting will take place in the Governors' Court Room, Guy's Hospital, on Wednesday, January 23rd, at 8 p.m. Dr. C. J. Hare, President of the Metropolitan Counties Branch, in the chair. Dr. P. H. Pye-Smith: A Fatal Case of Chronic Poisoning by Lead. Dr. T. Stevenson: Remarks on the Subject of Lead-poisoning. Dr. W. B. Hadden: Some Clinical and Pathological Points in Cerebellar Disease.—Robert E. Carrington, M.D., Honorary Secretary, 5, St. Thomas's Street, S.E.

Bath and Bristol Branch.—The third ordinary meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday evening, January 24th, as half-past seven o'clock; Edward Crossman, Esq., President. The following communications are expected. 1. An Unusual Complication in a case of Labour: Alexander Waugh, Esq. 2. A Case of Necrosis of the Lower Jaw; Removal of Sequestrum; Artificial Substitute (the patient will be shown): C. Gaine, Esq. 3. A Case of Double Facial Paralysis (the patient will be shown): A. W. Fox, Esq., M.B. 4. A Case of Death from Puncture of the Aorta (the specimen will be shown): T. P. Lowe, Esq.—R. J. H. Scott, E. Markham Skerritt, Honorary Secretaries, Bath, January 1884.

Metropolitan Counties Branch: Northern District.—A meeting will be held on Thursday, January 31st, 1884, at the house of Dr. Cree, St. John's Park, Upper Holloway, N. Dr. George Potter will read a paper on Collective Investigation, and there will be a discussion on the same.—George Henty, M.D., Honorary Secretary.

LIST OF ERRORS, CORRECTIONS, AND OMISSIONS FROM THE LIST OF MEMBERS, BRITISH MEDICAL ASSOCIATION, 1883-4.

JOURNAL AND FINANCE SUBCOMMITTEE.

OMISSION.

Strange, Dr. W., 42, Foregate Street, Worcester.

COLLECTIVE INVESTIGATION COMMITTEE.

OMISSION.

Macnamara, C., Esq., 13, Grosvenor Street, W.

ARRANGEMENT SUBCOMMITTEE.

CORRECTION.

Foster, Dr. B., 16, Temple Row, Birmingham.
McVail, Dr. D. C., 24, Abercorn Street, New City Road, Glasgow.
Miller, Sir William, Knt., Pump Street, Londonderry.
King, Dr. J. Maconchy, Downpatrick, co. Down.
Dill, Professor R. Foster, 3, Fisherwick Place, Belfast.
Moore, Dr. J., 2, Carlisle Terrace, Belfast.
Dempsey, Dr. A., 26, Clifton Street, Belfast.
Byers, Dr. John W., Lower Crescent, Belfast.

BIRMINGHAM AND MIDLAND BRANCH.

REPRESENTATIVES ON THE PARLIAMENTARY BILLS COMMITTEE.

For Dewes, E., M.D., Coventry, read Thursfield, T. W., M.D., Leamington.

MEMBERS: CORRECTION.

For Jackson, T. F., Esq., Smethwick (dead), read Jackson, T. F., Esq., Smethwick.

BORDER COUNTIES BRANCH.

MEMBERS: CORRECTION.

Barkley, G., M.D., Frizington, transferred to Yorkshire Branch (unattached).

MEMBERS UNATTACHED: OMISSION.

Speirs, W. R. Esq., M.B., Haltwhistle.

CAMBRIDGE AND HUNTINGDON BRANCH.

Whitlock, J. E. N., Esq., Linton, transferred to Metropolitan Counties Branch (unattached).

DORSET AND WEST HANTS BRANCH.

MEMBERS: OMISSION.

Montgomery, Samuel, Esq., Kinson, Wimborne.

DUBLIN BRANCH.

MEMBERS UNATTACHED: OMISSIONS.

Duke, Alex., Esq., 12, Lower Fitzwilliam Street, Dublin.
Kerigan, Lawrence, Esq., 35, Greville Street, Mullingar.

EAST ANGLIAN BRANCH.

MEMBERS UNATTACHED: OMISSION.

Bree, C. R., M.D., Long Melford, Suffolk.

CORRECTION.

For Moore, G. H., Esq., Ipswich, read Moore, G. H., M.D., Ipswich.

EAST YORK AND NORTH LINCOLN BRANCH.

MEMBERS: OMISSION.

Mundie, G., Esq., Gibbon Road, Kingston, Surrey.

EDINBURGH BRANCH.

MEMBERS UNATTACHED: OMISSION.

Turnbull, A. R., Esq., Fife and Kinross District Asylum, Cupar.
Wedderburn, A. McL., Esq., Forfar, transferred to Scotland.

GLASGOW AND WEST OF SCOTLAND BRANCH.

For President, George Buchanan, M.D., 193, Bath Street, Glasgow, read President, W. J. Marshall, M.D., Greenock.

For President-elect, W. J. Marshall, M.D., Greenock, read President-elect, J. B. Russell, M.D., Glasgow.

For Vice-President, Bruce Goff, M.D., Bothwell, read Vice-President, G. Buchanan, M.D., Glasgow.

For Hon. Secretary, Joseph Coats, M.D., 7, Elmbank Crescent, Glasgow, read Alex. Napier, M.D., 3, Royal Terrace, Crosshill, Glasgow.

MEMBERS: OMISSIONS.

McLachlan, W. A., Esq., Sevenford Villas, Dumbarton.
Stewart, Archibald Dunlop, Esq., 39, Regent Street, Greenock.

MEMBERS UNATTACHED: OMISSIONS.

Blair, John, M.D., Burnside House, Shotts.
Macdonald, C. R., M.D., Beith, Ayrshire.

LANCASHIRE AND CHESHIRE BRANCH.

MEMBERS: CORRECTIONS.

For Bailey, J. J., M.D., Marple, Cheshire, read Bailey, J. J., M.D., Woodville Cottage, Marple, Cheshire.

For Bradshaw, T. R., Esq., 14, Ampthill Square, N.W., read Bradshaw, J. R., Esq., 14, Ampthill Square, N.W.

For McNicholl, J., Esq., Maghull, Liverpool, read McNicoll, J., M.D., 27, Oxford Street, Liverpool.

For Robinson, J., Esq., Dunscar, near Bolton, read Robinson, J., M.D., Dunscar, near Bolton.

For Wilson, W., Esq., Pendleton, Manchester, read Wilson, W., M.D., Pendleton, Manchester.

MEMBERS UNATTACHED: OMISSION.

Luce, J. J., Esq., 154, Fountain's Road, Kirkdale, Liverpool.

METROPOLITAN COUNTIES BRANCH.

MEMBERS UNATTACHED: CORRECTIONS.

For Allen, Francis J., M.B., 296, Kennington Road, S.E., read Allen, Francis J., M.D., 1, Dock Street, E.

For Thane, G. D., M.D., 15, Montague Street, W.C., read Thane, G. D., Esq., 15, Montague Street, W.C.

For Walters, F. R., M.B., 29, Moorgate Street, E.C., read Walters, F. R., M.D., 29, Moorgate Street, E.C.

For Wright, Albert, Esq., Church End, Finchley, N., read Wright, Alfred, Esq., 22, Old Burlington Street, W.

OMISSIONS.

Burnet, R. W., M.D., 94, Wimpole Street, W.
Case, P. W. F., M.B., Infirmary, Baker's Row, Whitechapel, E.
Dale, G., M.B., Manor Park, E.
Dutton, E. G., Esq., 4, Holly Road, Turnham Green, W.
Gripper, W., Esq., 6, Sumner Place, Onslow Square, S.W.
Jewell, C. C., M.B., 1, Upper Grafton Street, Fitzroy Square, W.
Newholme, A., M.D., 39, High Street, Clapham.
Powell, S. K., M.D., 144, Amhurst Road, Hackney Downs, E.
Sharkey, S. J., M.D., 77, Lambeth Palace Road, S.E.
Swaby-Smith, C., M.D., Wembley, Harrow, N.W.
Taylor, H., M.B., 180, Kennington Park Road, S.E.
Thomson, W. Sinclair, M.D., 40, Ladbroke Grove, W.
Whitlock, J. E. N., Esq., 4, Kensal Place, Kensal Green, W.

MIDLAND BRANCH.

MEMBERS: TRANSFERRED FROM UNATTACHED.

O'Callaghan, M. Q., Esq., Duffield, Derby.
Powell, Evan, Esq., Nottingham.

MEMBERS UNATTACHED: OMISSION.

Gray, J. C., Esq., Tetford, Horncastle.

NORTH OF ENGLAND BRANCH.

MEMBERS UNATTACHED: CORRECTION.

For Drummond, J., M.B., 40, Saville Street, South Shields, read Drummond, J., M.D., 5, Albion Terrace, South Shields.

NORTH OF IRELAND BRANCH.

MEMBERS.

For Graham, J. S., Esq., Ligoniel, Belfast, read Graham, J. S., M.D., Ligoniel, Belfast.

NORTH WALES BRANCH.

MEMBERS: OMISSION.

Jones, R. T., Esq., Clogwyn, Harlech, R.S.O.

SCOTLAND: FORFARSHIRE.

OMISSION.

Wedderburn, A. McL., Esq., 71, East Highet, Forfar.

SHROPSHIRE AND MID WALES BRANCH.

MEMBERS: CORRECTION.

For McCartney, T. L., Esq., Worthen, Salop, read Macartney, T. L., Esq., Worthen, Salop.

MEMBERS UNATTACHED: OMISSION.

Styrap, Jukes de, Esq., M.K.Q.C.P., Shrewsbury.

SOUTH-EASTERN BRANCH.

MEMBER: TRANSFERRED FROM UNATTACHED.

Churchward, A., M.D., Selhurst Road, South Norwood, S.E. (from unattached).

MEMBERS UNATTACHED: CORRECTION.

For Martin, F., M.D., Priory, Sydenham, read Martin, F., M.D., Holmhurst, Southend Road, Beckenham.

For Owen, H. K., M.D., 20, Palace Square, Upper Norwood, read Owen, H. K., M.D., 60, Belvedere Road, Upper Norwood, S.E.

For Stevens, J., M.D., 7, Pavilion Road, Brighton, read Stephens, J., M.D., 7, Pavilion Parade, Brighton.

OMISSION.

Ilott, Herbert J., M.D., Bromley.
Stephens, W. J., Esq., 41, Grand Parade, Brighton.

SOUTH MIDLAND BRANCH.

MEMBERS: TRANSFERRED FROM UNATTACHED.

Thomas, John H., Esq., Wellingboro'.
Thomson W. A. Urquhart, Esq., the "Limes," Ampthill.

MEMBERS UNATTACHED: OMISSION.

Perkins, J. R., Esq., 64, Harpur Street, Bedford.

SOUTH-WESTERN BRANCH.

MEMBERS UNATTACHED: OMISSIONS.

Smith, E. L., Esq., Mayfield, Torquay.
Tucker, J., Esq., Chulmleigh, Devon.

SOUTHERN BRANCH.

MEMBERS: TRANSFERRED FROM UNATTACHED.

Allden, J. H., Esq., Shirley.
Buckell, L. Martin, Esq., Romsey.
Palk, Henry, M.D., 3 Sussex Place, Southampton.

WEST OF IRELAND BRANCH.

MEMBERS: CORRECTION.

Petit, Joseph, Esq., District Asylum, Sligo (transferred from North of Ireland Branch).

THAMES VALLEY BRANCH.

MEMBERS UNATTACHED: OMISSION.

Walker, George, Esq., 12, Lingfield Road, Wimbledon.

WEST SOMERSET BRANCH.

COUNCIL: CORRECTIONS.

For Alford, H. J., M.D., Taunton, read Adams, J. D., M.D., Martock.

For Rigden, G. W., Esq., Taunton, read Todd, W. J., Esq., North Petherton.

YORKSHIRE BRANCH.

MEMBERS: CORRECTION.

For Symos, E. West, Esq., Halifax, read Symes, E. West, M.D., Halifax.

MEMBERS: OMISSION.

Collier, Thomas, Esq., 172, London Road, Highfield, Sheffield.

MEMBERS UNATTACHED: CORRECTIONS.

For Oglesby, R. P., Esq., Park Square, Leeds, read Oglesby, R. P., Esq., Park Square, Leeds (dead).

For Wilson, J. M., M.B., Thorne Road, Doncaster, read Wilson, J. M., M.D., 51, Hall Gate, Doncaster.

Jewell, C. C., Esq., Scarborough, transferred to Metropolitan Counties

MEMBERS UNATTACHED: OMISSIONS.

Buckley, G., M.D., Kiveton Park, Sheffield, transferred from Border Counties Branch.

ARMY AND NAVY.

MEMBERS: CORRECTIONS.

For Anderson, W., Esq., Fleet-Surgeon, Royal Marine Depôt, Walmer, read Anderson, W., Esq., Fleet-Surgeon, Royal Marine Depot, Walmer (dead).

For Barnes, R. W., Esq., Surgeon-Major, read Barnes, R. W., Esq., Surgeon-Major, A.M.D., Staines.

For Barnes, W. G. K., M.D., R.N., H.M.S. "Northumberland," read Barnes, W. G. K., M.D., R.N., H.M.S. "Northampton."

For Boileau, J. P. H., M.D., Staff Surgeon-Major, read Boileau, J. P. H., M.D., Surgeon-Major.

For Brown, W. Esq., Surgeon, R.N., Royal Naval Hospital, Plymouth, read Brown, W., Esq., Surgeon, R.N., H.M.S. "Cruiser."

For Buckley, John, Esq., Staff-Surgeon R.N., H.M.S. "Temeraire," Mediterranean, read Buckley, John, Esq., Staff-Surgeon R.N., Sick Quarters, Portland.

For Burke, John R., M.D., Staff-Surgeon R.N., H.M.S. "Emerald," Australia, read Burke, John R., M.D., Staff-Surgeon R.N., (retired).

For Campbell, James, Esq., Staff-Surg. R.N., Mavis Bank, Park Hill Rise, Croydon, read Campbell, James, Esq., Staff-Surg. R.N., 7, Fairfield Road, Croydon.

For Corrie, A. T., Esq., Surgeon R.N., Hospital, Isle of Ascension (*S. Br.*), read Corrie, A. T., Esq., Surgeon R.N., H.M.S. "Pembroke" (*S. Br.*).

For Cowan, Michael, W., M.D., Fleet-Surgeon R.N., Forton, Gosport, read Cowan, Michael, W., M.D., Deputy Inspector-General R.N.

For Davis, F. W., Esq., Fleet-Surgeon R.N., Royal Marine Infirmary, Walmer, read Davis, F. W., Esq., Deputy Inspector-General, Haslar.

For Drew, G. F. A., Esq., Fleet-Surgeon R.N., Dockyard, Portsmouth (*S. Br.*), read Drew, G. F. A., Esq., R.N. (retired).

For Eames, W. J., Esq., Fleet-Surgeon R.N., 33, Headland Park, Plymouth, read Eames, W. J., Esq., Fleet-Surgeon R.N., Royal Naval Hospital, Lisbon.

For Fisher, John, Esq., Fleet-Surg. R.N., H.M. Dockyard, Devonport, read Fisher, J., Esq., Dep. Insp.-Gen., R.N. Hospital, Plymouth.

For Grant, R., M.B., Staff-Surg. R.N., H.M.S. "Duke of Wellington," read Grant, R., M.B., Staff-Surg. R.N., H.M.S. "Orontes."

For Jackson, Gordon, Esq., Staff-Surg. R.N., 207, Piccadilly, W., read Jackson, Gordon, Esq., Dep. Insp.-Gen., 207, Piccadilly, W.

For Johnson, J. C., Esq., Surg.-Maj. A.M.D., Lockwood, Bedford, read Johnston, J. C., Esq., Brig.-Surg. A.M.D., Lockwood, Bedford.

For Kidd, A., Esq., Surg. R.N., H.M.S. "Dido," N. America, read Kidd, A., Esq., Surg. R.N., H.M.S. "Terror," West Indies.

For Kirker, G., M.D., Surg. R.N., H.M.S. "Iris," Portsmouth, read Kirker, G., M.D., Surg. R.N., H.M.S. "Iris," Mediterranean.

For Langdon, J. A., Esq., R.N., H.M.S. "Firefly," read Langdon, J. A., Esq., R.N. (retired).

For Lawrenson, R. C. P., Esq., Fleet-Surg. R.N., 17, Campbell Terrace Southsea, read Lawrenson, R. C. P., Esq., Fleet-Surg. R.N. (dead).

For Lewis, T. H., Esq., Surg. R.N., H.M.S. "Cormorant," read Lewis, T. H., Esq., Surg. R.N., retired.

For Mair, G., M.D., Staff-Surg. R.N., H.M.S. "Brilliant," Inverness, read Mair, G., M.D., Staff-Surg. R.N., H.M.S "Sultan," Mediterranean.

For Mason, G., M.D., Dep.-Insp.-Gen., Bermuda, read Mason, G., M.D., Insp.-Gen.

For Messer, A. B., M.D., Fleet-Surg. R.N., H.M.S. "Northampton," Halifax, N.S., read Messer, A. B., M.D., Fleet-Surg. R.N., Royal Naval Artillery, Portsmouth.

For Messer, J. C., M.D., Fleet-Surg. R.N., British Naval Hospital, Lisbon, read Messer, J. C., M.D., Fleet-Surg. R.N., Dockyard, Devonport.

For Mortimer, E. T., Esq., Fleet-Surg. R.N., H.M.S. "Euryalus," E. Indies, read Mortimer, E. T., Esq., Fleet-Surg. R.N., R. Mar., Deal.

For Morton, C., Esq., Fleet-Surgeon R.N., H.M.S. "Iron Duke," China, read Morton, C., Esq., Fleet-Surg. R.N., R. Mar., Portsmouth.

For Mowll, R. A., M.D., Staff-Surg. R.N., H.M.S. "Rocket," Vancouver's Island, read Mowll, R. A., M.D., Staff-Surg. R.N., H.M.S. "Inflexible," Mediterranean.

For Mulock, E. R., Esq., Surg. R.N., Keyham Dockyard, Devonport, read Mulock, E. R., Esq., Surg. R.N., H.M.S. "Himalaya."

For Mulvany, John, M.D., Staff-Surg. R.N., H.M. Dockyard, Portsmouth, read Mulvany, John, M.D., Staff-Surg. R.N. (retired).

For Murray, G. B., Esq., Staff-Surg. R.N., H.M.S. "Merlin," Greenock, read Murray, G. B., Esq., Staff-Surg. R.N., H.M.S. "Swift," China.

For Myers, A. B. R., Esq., Surg. A.M.D., Coldstream Guards, read Myers, A. B. R., Esq., Sur.-Maj., A.M.D., Scots Guards, Westfield, Caterham.

For Ninnis, Belgrave, M.D., Fleet-Surg. R,N., c. o. Messrs. Hallett and Co., St. Martin's Place, S.W., read Ninnis, B., M.D., Dep. Insp.-Gen., c. o. Messrs. Hallett and Co., St. Martin's Place, S.W.

For O'Connor, D., Esq., Fleet-Surg., H.M.S. "Superb," Chatham, read O'Connor, D., Esq., Fleet-Surg., H.M.S. "Superb," Mediterranean.

For Powell, W. L., Esq., Staff-Surg. R.E., H.M.S. "Adelaide," Portsmouth, read Powell, W. L. Esq., Fleet-Surg. R.N., H.M.S. "Boadicea," Cape of Good Hope.

For Redmond, W., Esq., Staff-Surg. R.N., H.M.S. "Repulse," Hull, read Redmond, W., Esq., Staff-Surg., R.N. (retired).

For Reid, J, Watt, M.D., Director-General Naval Medical Department, 9, New Street, Spring Gardens, S.W., read Reid, J. Watt, M.D., Director-General Naval Medical Department, 44, Spring Gardens, S.W.

For Robinson, Mark, Esq., Surg. Madras Army, H.M. Dockyard, Portsmouth, read Robinson, Mark, Esq., Surg. Madras Army.

For Rorie, J., Esq., Fleet-Surg. R.N., Royal Victoria Dockyard, read Rorie, J., Esq., Fleet-Surg. R.N., 2, Dunkeld Villas, Ford Park, Mutley, Plymouth.

For Siccama, R. R., Esq., Fleet-Surg. R.N., Stoke, Devonport, read Siccama, R. R. Esq., Fleet-Surg. R.N., Royal Naval Hospital, Haulbowline, Queenstown.

For Sparrow, H. R. S., Esq., H.M.S. "Boscawen," Portland, read Sparrow, H. R. S., Esq., H.M.S. "Diamond," Australia.

For Sweetnam, S., Esq., Staff-Surg. R.N., H.M.S. "Invincible," Mediterranean, read Sweetman, S., Esq., Fleet-Surg. R.N., H.M.S. "Defense," Rockferry.

For Turnbull, A., M,D., Fleet-Surg. R.N., H.M.S. "Bacchante," read Turnbull, A., M.D., Fleet-Surg. R.N., 44, Spring Gardens, S.W.

For Tyndall, J., Esq., Surg. R.N., Royal Naval Hospital, Haulbowline, read Tyndall, J., Esq., Surg. R.N., H.M.S. "Opal;" Cape of Good Hope.

For Vasey, C. Lyon, Esq., Surg. R.N., Naval Medical Etablishment, Hong Kong, read Vasey, C. Lyon, Esq., Surg. R.N., H.M.S. "Sultan," Mediterranean.

For Vasey, J. A., Esq., Surg. R.N., H.M.S. "Forester," West Indies, read Vasey, J. A., Esq., Surg. R.N., H.M.S. "Excellent," Portsmouth.

For Wells. S. S. D., Esq., Dep. Insp.-Gen. R.N., Royal Naval Hospital, Haslar, read Wells, S. S. D., Esq., Dep. Insp.-Gen. R.N. (retired).

For White, R.D., M.B., Surg. R.N., Forton Barracks, Gosport, read White, R. D., M.B., Surg. R.N., H.M.S. "Flora," Cape of Good Hope.

For Woolfryes, John A., M.D., C.B., C.M.G., Surg.-Gen. A.M.D., Portsmouth, read Woolfryes, John A., M.D., C.B., C.M.G., Surg.-Gen., Army and Navy Club, St. James, S.W.

OMISSIONS.

Croly, A. E. J., Esq., Surg, A.M.D., Bellary, Madras.
Chester, M. L., Esq., Surg. A.M.D., Barracks, Cork.
Dobbyn, J. S., M.D., Fleet-Surg. R.N., H.M.S. "Hercules," Portsmouth.
Geoghegan, C. E., Esq., Surg. R.N., H.M.S. "Shannon,", Greenock.
Le Grange, W. J., Esq., Surg. A.M.D., 36, Molesworth Street, Dublin.
Le Mottée, G. H., M.B., Surg. A.M.D., Chatham.
Smith, J., Surg.-Maj. A.M.D., Dumfries.

FOREIGN AND COLONIAL.

For Aitken, L., M.D., 24, Norfolk Street, W., read Aitken, L., M.D., Rome.

OMISSIONS.

Coldstream A. R., M.D., F.R.C.S.E., Florence, Italy.
Hart, W. Hume, M.D., Garrison House, Free Town, Sierra Leone.
Jennings, W. O., M.D., Paris.
Melchers, E., M.D., 182, Jefferson Street, Toledo, Ohio, U.S.A.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR SPECIAL CORRESPONDENT.]

Bert on Anæsthetics—Influence of Alcohol on the Physiological Action of Chloroform—Strychnia as an Antidote to Alcoholism—Obstruction of the Eustachian Tube—The New Medical Faculty at Marseilles—Children Illegally Employed in Factories—Medical Comforts for Tonquin—Household Sanitary Decree—Lectures on Cremation.

AT a recent meeting of the Paris Biological Society, M. Paul Bert made a communication concerning his method of administering chloroform mixed with air, and described in detail several operations successfully achieved under its influence, such as excision of a sarcoma of the neck from an alcoholic patient, aged 63; excision of sarcomata from the left eye and the nasal fossæ from an alcoholic patient, also 63 years of age, etc. M. Dubois, his *chef de laboratoire*, whose experiments on the influence of alcohol on the physiological action of chloroform will be described later on, administered the anæsthetic. M. Bert stated that, as a general rule, a mixture of eight grammes of chloroform mixed with one hundred litres of air, is easily endured, and does not provoke any resistance on the part of the patient, which generally occurs when anæsthetics are inhaled. Owing to the presence of air, the vapour is diluted, and the sensory nerves which innervate the respiratory organs are not stimulated; thus there is absence of cough, spasms, or suffocation. Neither is there spasmodic contraction of the diaphgram and retching at the onset. Two of the patients who had been operated on had previously breakfasted; after the operation, they suffered slightly from nausea, but nothing further. By mixing chloroform with air, anæsthesia is obtained more slowly than by powerful doses, but also more peacefully, and the period of agitation is generally absent. When the inhalations cease, the patient continues to sleep, thus the dressing is painless. On waking, the patient is always calm and frequently very cheerful. M. Bert observed by this method much less chloroform is necessary than is generally used—from 15 to 20 grammes for operations requiring from 15 to 20 minutes.

M. Dubois arrives at the following conclusions concerning chloroform and alcoholism. Anæsthesia is more rapid when the subject is violently intoxicated. The vital resistance is shorter. A smaller volume of the mixture (chloroform and air) produces anæsthesia and death more quickly during a state of intoxication than in a normal state. In animals not submitted to the effect of alcohol, the temperature is lowered in proportion to their powers of resistance. In an acute state of intoxication, alcohol co-operates with chloroform.

M. Dujardin-Beaumetz, at a meeting of the French Temperance Society, made an interesting communication concerning the treatment of alcoholism by strychnia. Dr. Luton of Rheims, a few years since, maintained that strychnia is the antidote for alcoholic intoxication, and that the presence of strychnia in alcoholic drinks ought to be authorised by Government. M. Dujardin-Beaumetz, by means of experimental research and clinical observation, has demonstrated that strychnia combats the symptoms of intoxication or drunkenness, also those of acute delirium; but neither prevents nor modifies the pathological condition of the different organs arising from the influence of alcohol.

M. Menière recommends, for treating obstruction of the Eustachian tube, gradual and intermittent dilatation by means of a gum-bougie very slightly curved. When the bougie comes into contact with the cause of obstruction, it should be withdrawn. This treatment should be repeated every other day; with dexterity and care, it generally succeeds. It is advisable to soak the bougie in a solution which modifies the mucous membrane of the canal.

The Medical Faculty which is being organised at Marseilles is a subject of much interest in the medical and scientific world, and also of some opposition. It will be one of the most distinguished Faculties of Europe, and will reckon among its professors scientists of all nations. Professor Kowalewski resigns his chair of zoology at Odessa to accept the one offered at Marseilles. M. Malassez, the well known pathologist officially connected with the Collège de France, has been offered, and has accepted, the chair of pathological anatomy of that Faculty.

The Paris district commission for preventing children from working in factories, and for the protection of work-girls under age (*filles mineures*), has forwarded its report to the Prefect of the Seine. This document states that 128 children under twelve years of age were discovered by the visiting inspectors employed in different factories, some of which are in the list "non-authorised." The children were, by the order of the inspector, immediately sent back to their families.

A recent sanitary decree issued by the Prefect of the Seine has roused the wrath of three classes of society—landlords, house-porters (*concierges*), and rag-pickers (*chiffoniers*). After January 15th, every landlord will be legally responsible that boxes containing the daily household refuse—such as room-sweepings, broken food, vegetable-peelings, etc.—be placed either on the pavement before the house or in the entrance, where they are easily seen, and whence they are easily removed; each box must represent forty litres in capacity, and be lined with painted galvanised zinc. The tenants are forbidden to deposit household refuse elsewhere than in these boxes; broken glass and china must be put in a box provided for that purpose. Every morning, before the cart goes round, the *concierges* must place the boxes in readiness for removal. In case of non-observance of these rules and regulations, proceedings will be taken against the landlord and house-porter, or the porter and the keeper when it is a question of public institutions.

The Society for the Propagation of Cremation announces a second series of lectures to be given on cremation in the town-halls of five different districts.

The Women's Union Society (Société de l'Union des Femmes) has sent to Tonquin five chests, each chest containing lint, bandages, etc., for sixty wounded; forty cases for field-dressing; and a medicine-chest; besides books, papers, blankets, cigars, and tobacco. The Belfort and Rheims Committees have contributed wine and blankets.

CORRESPONDENCE.

TREATMENT OF SPINAL CARIES BY OPERATION.

SIR,—I have read Mr. Treves' paper on "The direct treatment of spinal caries by operation," brought before the Royal Medical and Chirurgical Society of London, and can endorse his views to a partial extent, as evidenced by my own practice. From my own surgical experience, and from facts observed at the mortuary, I have learnt to view with slight favour the opening of abscesses in connection with vertebral disease, and have taught that, as a rule, any such interference is fraught with inconveniences, both to the patient and surgeon. A man, aged 38, was admitted into the Westminster Hospital in May 1879, suffering from diseased lumbar vertebræ, with deformity, associated with a large psoas abscess, which had burst below Poupart's ligament on the right thigh. I wished to ascertain, by means of a dependent opening in the loin, if good drainage would not assist in promoting a cure.

On May 20th, 1879, having had a silver probe specially made, twenty inches long, I passed it through the abscess, opening in Scarpa's triangle, along the sheath of the psoas muscle towards the right loin with care, and without any difficulty I could feel exposed bone. Having withdrawn the probe, and made a short bend at its point (45°), I re-introduced it along the psoas sheath, until it touched the top of the abscess-wall; directing the point of the probe towards the loin. I then cut down on it, introduced my fore finger through the lumbar wound into the abscess sac; felt the denuded bone; and washed out the detritus with a stream of warm water through the tunnel from the right groin to the loin. The lumbar wound was maintained open by a drainage anchor. The patient was discharged with both wounds healed; but the old abscess opening in the groin, seemed inclined to re-open on his assuming the erect posture. When compulsorily pressed to open a psoas abscess, I have always chosen the loin as the point of selection, being unable to see why a lumbar abscess should have the honour of exemption from ordinary surgical customs, viz., a large dependent opening for the promotion of cleanliness and drainage.—I have the honour to be, sir, your obedient servant,

RICHARD DAVY,
Surgeon to the Westminster Hospital.

January 14th, 1884.

SIR,—An operation very similar to that described by Mr. Treves in your issue of January 12th (Proceedings of Royal Medical and Chirurgical Society), has been already performed on three occasions by Dr. William Macewen in the Royal Infirmary and Sick Children's Hospital of this city. I had the pleasure of assisting Dr. Macewen in each of these cases, and was present at a lecture delivered by him on the subject during the course of last summer session to the students attending his clinical class. In a communication of this kind, it would be out of place to enter into matters of detail, but I may be permitted to state that in two of the patients numerous small sequestra were found, and in the third surgical interference was resorted to in order to prevent the burrowing of pus into the psoas muscle. The results subsequently obtained were excellent, and leave no doubt in the minds of those who have watched the cases during their progress toward recovery, that the course pursued was the right one.—I am, sir, your obedient servant,

JAS. WHITSON, M.D., F.F.P. & S.G.,
Surgeon to the Dispensary of Anderson's College, Glasgow.
13, Somerset Place, Glasgow, W.

THE LATE DR. PARSEY.

SIR,—May I be allowed, through the medium of your columns, to pay a tribute of respect to the memory of the late Dr. W. H. Parsey, who, for upwards of thirty years, had been the Medical Superintendent of the Warwick County Asylum at Hatton?

My testimony, as that of a layman who has been on terms of intimacy with him for the last thirty-three years, who worked with him from 1850 to 1853 at the Devon Asylum, under the direction of Dr. J. C. Bucknill, F.R.S. (still, happily, with us), and who has since had ample opportunities of forming a just estimate of his worth, will not, I trust, be rejected even if the means I adopt may be an unusual feature in your paper.

Medical directories and professional registers record Dr. Parsey's technical qualifications, and point to the good work he has done, but they can say nothing, as I can, of his clear judgment, unwearied industry, enlightened humanity, unswerving integrity, and unselfish life. He had all these qualities to the full, but he was essentially not a "showy" man; his metal was too pure for that.

How often, in the last thirty years or so, when in doubt, have I put the question to myself, "What would Parsey do under like circumstances?" That point once settled I felt safe, nor have I reason to regret my faith, for his aim was ever to act righteously.

He passed away at Hatton, on Wednesday last, the 10th inst., somewhat suddenly, inflammation of the lungs and other complications being the cause. He leaves a widow, a son, and a daughter.

> "To live in hearts we leave behind
> Is not to die."

I am, sir your obedient servant, GEO. H. HAYDON.
Bethlem Royal Hospital, S.E.

THE first annual meeting of the Nurses' Institute, recently established in connection with the Kent and Canterbury Hospital, was held last week, the Dean presiding. From the report presented, it appeared that the institution has been a signal success, the whole of the trained nurses employed being now engaged in various private families; while not so employed, they administer gratuitously in cases of sickness among the poor of the city. A marked absence of probationers was, however, pointed out, at which considerable surprise was expressed.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

INFANT MORTALITY AND FEMALE LABOUR IN FACTORIES.

SOME important statements bearing upon the relation between female labour and infant mortality were recently made by Mr. Coroner Molesworth to the Justices of the Salford Hundred, at the Court of Quarter Sessions, held in Manchester. It appears that the Court had some time ago intimated that statistics of infant mortality in manufacturing districts would be valuable, and that Mr. Molesworth's statements were furnished in consequence of this intimation. His return purported to show the deaths of infants occurring within the coroner's district of Rochdale, presumably from the neglect of their mothers, who, being mill-operatives, return to their employment too soon after childbirth. The Home Office returns include only those deaths concerning which inquests are held, but Mr. Molesworth's special return shows that during last year there were 235 inquiries held without the assistance of a jury, respecting deaths reported by the police. In 62 cases these inquiries related to children aged between one and two months, including 22 cases in which children had been practically deserted by their mothers, in consequence of their having to return to mill-work. In some instances the mother had returned to her employment when the infant was only three weeks old, and in other cases when the child was aged less than six weeks. Mr. Molesworth reports that, in addition to the cases in which inquiries were held, many more deaths took place, presumably from the same cause, but as medical certificates were given no inquiry was held. From this it may be inferred that in the cases inquired into by Mr. Molesworth no medical certificate of the cause of death was forthcoming. It would be interesting to know the nature of the inquiry which appears to have been made last year in 235 cases in which no inquest was held. Mr. Molesworth is a "legal" coroner, and as without an inquest it is improbable that he can have obtained medical evidence, we are inclined to doubt the value of any conclusions that may be drawn as to the true causes of deaths of those infants, although Mr. Molesworth may be, and probably is, right in his assumption that neglect on the part of the mothers was a contributing cause. The subject is one of primary importance, and one which, we think, demands inquiry before a jury with medical evidence, rather than the informal inquiries, the holding of which Mr. Molesworth chronicles. The small proportion of inquests held in Oldham, concurrently with the large proportion of uncertified causes of death, have frequently been commented upon by the Registrar-General, and it can scarcely be doubted that they may, in great measure, be regarded as cause and effect. During last year in Oldham, the proportion of inquests held did not reach 2.3 per cent. of the total deaths, while more than six per cent. of the causes of death were uncertified. In Manchester, however, where the proportion of inquest cases was 8.1 per cent., only 2.1 per cent. of the causes of deaths were uncertified. The Registrar-General's statistics of infant mortality, moreover, clearly point to a close relation between such mortality and the proportion of women engaged in factory labour, or other occupations carried on elsewhere than at home. The deaths of infants under one year of age averaged 156 per 1,000 of the births registered last year in the 28 largest English towns. The infant death-rates in these towns ranged from 133 and 134 in Bristol and Sunderland, to 189 and 210 in Leicester and Preston. Among the nine towns showing the highest rate of infant mortality last year may also be noted Salford, Blackburn, Bolton, Huddersfield, and Manchester, in each of which towns are an undue proportion of females doubtlessly engaged in factory labour. The excess of infant mortality in these towns calls for special investigation.

HEALTH OF ENGLISH TOWNS.—In the twenty-eight large English towns, including London, dealt with by the Registrar-General in his weekly return, which have an estimated population of 8,762,354 persons, 6,242 births and 3,523 deaths were registered during the week ending the 12th instant. The annual rate of mortality per 1,000 persons living in these towns, which had been 20.6 and 22.2 in the two preceding weeks, declined during last week to 21.0. The rates in the several towns, ranged in order from the lowest, were as follow:—Portsmouth, 13.7; Leicester, 13.8; Bristol, 17.2; Derby, 17.3; Wolverhampton, 17.3; Plymouth, 17.3; Preston, 18.4; Huddersfield, 18.8; London, 19.4; Hull, 19.6; Birmingham, 20.2; Blackburn, 20.3; Sunderland, 20.8; Nottingham, 21.1; Birkenhead, 21.2; Bradford, 21.4; Brighton, 22.2; Salford, 22.5; Halifax, 22.5; Newcastle-upon-Tyne, 22.8; Liverpool, 23.7; Cardiff, 24.6; Bolton, 24.9; Sheffield, 25.5; Oldham, 27.6; Manchester, 28.4; Leeds, 28.7; and Norwich, 28.9. While the death-rate in London last week did not exceed 19.4 per 1,000, it averaged 22.3 in the twenty-seven provincial towns. The 3,523 deaths from all causes registered last week in the twenty-eight towns included 456 which were referred to the principal zymotic diseases, against 413 and 447 in the two preceding weeks; of these, 117 resulted from scarlet fever, 116 from measles, 99 from whooping-cough, 51 from "fever" (principally enteric), 32 from diphtheria, 29 from diarrhœa, and 12 from small-pox. These 456 deaths were equal to nearly 16 per cent. of the total deaths, and to an annual rate of 2.7 per 1,000. This zymotic death-rate was equal to 2.5 in London last week, and averaged 2.9 in the twenty-seven provincial towns, ranging from 0.0 and 0.8 in Halifax and Portsmouth, to 3.8 in Nottingham, 4.6 in Manchester, and 7.5 in Leeds. The deaths referred to scarlet fever in the twenty-eight large towns, which in the two preceding weeks had been 104 and 112, further rose last week to 117; the highest rates of mortality from this disease were recorded in Manchester, Sheffield, and Leeds. The fatal cases of measles, which had declined from 126 to 100 in the three previous weeks, rose again to 116 last week, and caused the highest proportional fatality in Nottingham, Oldham, and Salford. The deaths from whooping-cough showed a decline of 4 from those returned in the preceding week, and caused the highest death-rates in Manchester and Nottingham. The fatal cases of fever, which had declined from 73 to 51 in the three preceding weeks, were again 51 last week; this disease caused the highest proportional fatality in Portsmouth and Cardiff. Of the 32 deaths from diphtheria recorded in the twenty-eight towns last week, 15 occurred in London, 6 in Leeds, and 3 in Liverpool. The fatal cases of small-pox in these towns, which had been 8, 11, and 30 in the three previous weeks, declined again to 12 last week, of which 7 were recorded in Birmingham, 2 in London, 2 in Sunderland, and 1 in Liverpool. The fatality of diseases of the respiratory organs, judged by the metropolitan returns, was again considerably below the average; the 379 deaths which resulted from these diseases in London last week were as many as 122 below the average, and equal to an annual rate of 4.9 per 1,000. The causes of 91, or 2.6 per cent. of the 3,523 deaths registered last week in the twenty-eight towns were not certified either by medical practitioners or by coroners. In London the proportion of uncertified deaths did not exceed 1.4 per cent., whereas it averaged 3.4 in the twenty-seven provincial towns, and showed the largest excess in Hull, Preston, Salford, and Halifax.

HEALTH OF SCOTCH TOWNS.—In eight of the principal Scotch towns, having an estimated aggregate population of 1,254,607 persons, 885 births and 534 deaths were registered during the week ending the 12th instant. The annual rate of mortality, which in the three preceding weeks had been 21.1, 22.1, and 25.4 per 1,000, declined again last week to 21.1, which, however, exceeded by 1.1 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these eight Scotch towns, the death-rate was equal to 18.4 in Perth, 18.7 in Aberdeen, 18.8 in Edinburgh, 19.4 in Dundee, 19.5 in Leith, 22.3 in Paisley, 22.9 in Greenock, and 25.7 in Glasgow. Of the 534 deaths from all causes registered in these towns last week, 17 resulted from diphtheria, 13 from whooping-cough, 13 from diarrhœal diseases, 11 from "fever," 11 from measles, 9 from scarlet fever, and not one from small-pox. Thus, 74, or nearly 14 per cent. of the total deaths, were referred to these principal zymotic diseases, corresponding with the number in the previous week; they were equal to an annual rate of 3.1 per 1,000, which slightly exceeded that recorded last week in the large English towns. No deaths from zymotic diseases were recorded in Perth, while they caused a rate of 3.3 in Glasgow, 3.7 in Aberdeen, and 5.4 in Paisley. The 17 deaths referred to diphtheria in the eight towns exceeded by 4 the number in the preceding week, and included 6 in Glasgow, 4 in Dundee, and 4 in Aberdeen. Of the 13 fatal cases of whooping-cough, as many as 11 occurred in Glasgow. Measles caused the largest proportional fatality in Edinburgh and Leith. The deaths referred to "fever" showed a further increase upon those returned in the two preceding weeks, and included 4 in Glasgow, 3 in Edinburgh, and 2 in Aberdeen. The rate of mortality from diseases of the respiratory organs was very considerably below that recorded in the corresponding week of last year, and was equal to 4.4 per 1,000. Of the 534 deaths registered last week in these towns, not less than 73, or nearly 14 per cent., were uncertified.

INDIA AND THE COLONIES.

SOUTH AFRICA.

FURTHER intelligence from Kimberley corroborates the opinion contained in the JOURNAL of January 12th, that the epidemic at Dutoitspan and Bultfontein is small-pox. Dr. Sauer, the medical officer to the Board of Health, has published an elaborate and exhaustive report (*Diamond Fields Advertiser*, December 12th) which we think should convince Drs. Jameson and Crook that the disease is not chicken-pox, although, up to December 7th, at any rate, they stoutly maintained that there were no small-pox cases in the hospitals. Their reasons for maintaining this position are given in a report that appears in the *Diamond Fields Advertiser* for December 10th, but we are compelled to say that we think they fail to prove their case. It is unnecessary here to state, at length, the distinctive features of chicken-pox and small-pox, for we may suppose that the majority of our brethren in South Africa are conversant with the broad and striking characteristics of both diseases. Anyone who has had experience of small-pox can recognise at a glance the difference between the two. Indeed they have little in common, except their contagiousness, and the presence in the skin of an eruption, which is vesicular in both at different stages of the respective diseases. This eruption never becomes pustular in chicken-pox, but invariably does so in small-pox, unless the patient dies before the pustular stage is reached, or the course of the disease be modified by vaccination. Of course the mortality in chicken-pox is nil, or, if death does occur, it is from bronchitis or other complication, and then only in weakly children. Adults are rarely, if ever, attacked with chicken-pox. Dr. Jameson contends that the distinctive feature of the eruption of chicken-pox is that the first induration is in the skin, while in small-pox it is under the skin. This is not a difference worthy of being called diagnostic. The character and course of the eruption, together with the symptoms that accompany it, are the distinguishing features of small-pox and chicken-pox, and in these respects they are quite different.

We have been favoured with further notes of the Rowff family, and it is evident that all the members have had small-pox, some severely, others in a mild form. Dr. Crook acknowledges that one of his family is suffering from a disease which, in England, he could not call chicken-pox, but which, in Kimberley, he calls an irregular form of this disease. Does he mean to say that in England it would be considered small-pox, but that in Kimberley it is chicken-pox? If further corroboration of the identity of the epidemic with small-pox were needed, it is furnished by the fact stated by Dr. Sauer, that three children who were suffering from chicken-pox but sent to hospital and admitted, there contracted small-pox, of which one died. We should hope that before the present copy of this JOURNAL reaches South Africa, Drs. Crook and Jameson will have abandoned the untenable position they have taken up with regard to this matter.

With regard to the mortality, it is to be regretted that no tabulated returns have been published furnishing particulars of deaths among vaccinated and unvaccinated cases, and a table giving particulars as to the number of admissions into hospital of vaccinated and unvaccinated, would also have afforded information of some value.

MEDICO-LEGAL AND MEDICO-ETHICAL.

ALLEGED INFRINGEMENT OF THE LUNACY LAWS.

WILLIAM STRONG, farmer, has been charged at the Newton Abbot petty sessions, under 8 and 9 Vic., cap. 100, with boarding and lodging two or more lunatics, without the necessary licence. Dr. Walter Friend, of Exeter, prosecuted on behalf of the Lunacy Commissioners; Mr. Sparks, of Exeter, defended. The evidence showed that the defendant had, at the Devon Michaelmas Sessions, 1880, applied for a licence to receive six female lunatics at Lake's farmhouse, near Crediton, where he was then residing. The Commissioners in Lunacy were communicated with, and, the place not giving satisfaction, the application was not renewed at the following sessions, to which it was adjourned. Dr. Rees Philipps, resident medical superintendent of the Wonford Asylum, near Exeter, was instructed by the Lord Chancellor, through the Lunacy Commissioners, to report specially on the mental condition of two inmates of the farmhouse and its suitability for their reception. Seven patients were found to come within the meaning of the Act of Parliament. The majority were [illegible] out as they liked, and the house was clean and comfortable. Defendant was committed to take his trial at the next assizes, bail in £500 being accepted, the offence being, however, admitted.

FEES FOR ATTENDANCE AT SESSIONS.

SIR,—I should feel greatly obliged if you could answer me the following question in your next issue.

I was summoned to appear at the Quarter Sessions to give evidence (medical) in three perfectly distinct cases. The three cases all came on in the same day. I was given £1 1s., and was told that was all I could claim. I must mention that they were all "Crown" cases. I, of course, got the usual 10s. 6d. police fee in each case for attendance at the police-court on the three previous occasions. I want to know if I can claim £3 3s. or not?—Yours truly, P. B.

⁂ It is unusual not to allow fees in each case, but one guinea a day is all that can be claimed besides travelling expenses. The best plan is to refuse, for the future, to go to the Court until the money is forthcoming. There is no way of getting more payment for what is past.

MEDICAL ETIQUETTE: AN EXPLANATION.

SIR,—I am informed that the letter on "Medical Etiquette," in the JOURNAL for January 5th, p. 37, refers to me under the designation "C." I am therein charged with "conduct most uncourteous and unprofessional." These are the circumstances. In May 1882 I joined a gentleman in practice here, who, on account of his health, has been much away from home. During these absences, I had no one who could inform me as to who was or was not our patient. Surgeon A., who, as well as B., lives within a stone's throw, was on very intimate terms with my senior, and a constant visitor at the surgery. In December 1882 there was a vacancy on the staff of the infirmary, for which Surgeon A. was a candidate. I also dared to send in an application, taking care to tell Surgeon A. before doing so, in order to avoid a rupture. I am informed, on good authority, that Surgeon A. spoke of my application in a derogatory way, as that of a stranger and an assistant, and therefore having no right to the post. I was unsuccessful. Since this time Surgeon A. has not been in our surgery, and a shyness, unsought on my part, has sprung up. Now for what happened in the case in question. Early in the morning, before I was out of bed, I was sent for to a patient who had taken carbolic acid. Before I had time to leave the surgery a second messenger came for me. I went, taking the stomach-pump with me. On entering the bedroom I saw A. and B. A. met me with the remark that the patient had taken carbolic acid, there was nothing to be done; but that, as he puts it, I could judge. I believe I was not greeted with a "good morning." Certainly there was not the hand-shake which is customary when gentlemen meet. I proceeded to "judge," and for that purpose sat down by the patient. A. and B. went downstairs, and had left the house before I went down. I was led to believe, by the remarks of the patient's husband, that the case was ours, and I consequently did what I considered to be my duty. The medical aspect of the case, which occurred on September 28th, is reported in the issue of November 17th, 1883, p. 971. At the time I felt sore at the want of friendly feeling towards a new-comer shown by A. and B., leaving me so abruptly to the management of such a serious case, and I still think their duty was to have remained in the bedroom until I had completed my examination, when a few friendly words would have prevented my misunderstanding. It is only since reading Surgeon A.'s letter that I have learnt that A. was the family attendant.—I am, etc., JOHN REID, M.B.

Rochdale, January 9th, 1884.

OBITUARY.

WILLIAM HENRY PARSEY, M.D., F.R.C.P., HATTON COUNTY ASYLUM.

WE regret to announce the death, in his sixty-second year, of Dr. William Henry Parsey, which occurred at the Warwickshire County Lunatic Asylum, of which he had long been Chief Medical Superintendent, on Thursday, January 10th. Dr. Parsey received his medical education at King's College, London. He graduated in the University of London as a Bachelor of Arts in 1840, as a Bachelor of Medicine in 1844, and as a Doctor of Medicine in 1848. He was admitted to the Membership of the Royal College of Physicians of London in 1859, and to its Fellowship in 1877. Dr. Parsey had been in charge of the large asylum at Hatton for many years, where his management was marked by signal success. He was extremely popular with all classes. During his term of office, the institution for the insane at Hatton has almost doubled in size, and there is now connected with it a branch establishment for harmless idiots. Dr. Parsey had been in indifferent health for some time past, and wished to resign his public appointment; but he was prevailed upon by the county authorities to remain in office. He was a past President of the Medico-Psychological Association, and he was the author of an essay "On the Better Provision for the Chronic Insane Poor."

DR. BIGGAR, who was recently elected to be [illegible] medical officer of the [illegible] Workhouse, has been found to be [illegible], in consequence of not being 23 years of age, and has been replaced by Dr. Taylor.

INCREASE OF SALARY.—The [illegible] Guardians have increased the salary of Mr. George Hodges, the medical officer for No. 2 district, from [illegible] to [illegible] per annum.

MEDICAL NEWS.

Royal College of Physicians of Edinburgh.—The following is the list of candidates who obtained the licence of the Royal College of Physicians of Edinburgh last month:

T. Buxton, Tapley, Stafford; G. Knapton, Southampton; A. T. Rimell, South Kensington, S.W.; A. Hunter, Castleblayney, county Monaghan; H. Potter, Ilkston, Nottingham; G. Carter, Ilkley, Yorkshire; J. J. Prendergast, Melbourne, Australia; F. M. Godde-Smith, Droxford, Hampshire; E. D. Minter, Plympton, South Devon; G. T. Myles, Bristol.

Royal College of Surgeons of England.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 10th instant, and, when eligible, will be admitted to the pass-examination, viz.:

Messrs. P. E. Barber and W. H. Beaumont, students of the University of Cambridge; P. Rose, W. P. Le Feuvre, and F. W. Turtle, of Guy's Hospital; E. S. Smith, of St. Mary's Hospital; C. F. Green, of St. George's Hospital; E. A. Lubbock, of the London Hospital; J. Cotton, of the Liverpool School of Medicine; G. H. Spencer and H. Gell, of the Manchester School of Medicine; A. Thomas, of the Middlesex Hospital; E. G. Thorpe, F. C. Goodwin, and H. Yeo, of King's College; A. E. Vidler, and A. Wright, of St. Bartholomew's Hospital; and A. L. Castel, of University College.

Six candidates were referred to their studies for three months.

The following gentlemen passed on the 11th instant, viz.:

Messrs. H. E. Harris, of the University of Cambridge; P. T. Adams, S. Bueno de Mesquita, and A. A. Smith, of Guy's Hospital; E. H. Ellison, A. A. McAnally, H. B. Cavell, and J. A. Bratton, of King's College; J. H. Yolland and G. T. Bates, of University College; J. Muriel and E. A. Griffith, of St. Bartholomew's Hospital; and G. Michelmore, of St. George's Hospital.

Nine candidates were referred to their studies for three months, and two for six months.

The following gentlemen passed on the 14th instant, viz.:

Messrs. S. Beauchamp, G. A. Whitaker, and S. W. E. Sharman, of St. Bartholomew's Hospital; T. W. P. Lawrence, H. G. Henderson, and R. R. Pearse, of University College; F. J. P. Smith, G. W. Ord, and H. M. Bullock, of St. Thomas's Hospital; G. E. Fitzgerald, of St. George's Hospital; E. M. Hearnden and W. S. Brown, of Guy's Hospital; W. A. Evelyn, of the University of Cambridge; W. E. Pegge, of King's College; and A. E. Clarke, of the Leeds School.

Seven candidates were referred for three months, and two for six months.

The following gentlemen passed on the 15th instant, viz.:

Messrs. W. W. Grosvenor, F. A. Harger, T. G. Davey, and F. W. Nielsen, of St. Bartholomew's Hospital; E. V. Phillips, of St. Thomas's Hospital; T. H. Williams and P. J. Pugh, of University College; J. J. Oakman, of the Westminster Hospital; G. T. Rawnsley and F. W. Farr, of Guy's Hospital; R. A. Freeman, of the Middlesex Hospital; and W. A. R. Braybrooke, of St. George's Hospital.

Eight candidates were referred for three months, and four for six months.

The following passed on the 16th instant, viz.:

Messrs. W. J. N. Bray, student of Guy's Hospital; A. T. Wooldridge, W. F. Fisher, F. L. P. Sawell, and R. G. Cookson, of St. Bartholomew's Hospital; H. Gurney and J. E. Ker, of St. Thomas's Hospital; F. G. C. Martin, of the London Hospital; J. P. Nassau, E. R. M. C. R. Cousins, A. H. P. Shaw, F. F. L. Penno, and J. M. Jones, of University College; W. T. Wallington, of Charing Cross Hospital; E. A. Burnside and E. G. Lumsdon, of King's College.

Six candidates, having failed to acquit themselves to the satisfaction of the Board, were referred to their anatomical and physiological studies for three months, and two candidates for six months.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 10th.

Evers, Charles Henry, Choppington Street, Newcastle-on-Tyne.
Hunter, George Douglas, Caroline Street, Eaton Square, S.W.
Martin, Henry Joseph Walklate, Twyford House, St. Albans.
Spring, John, Bell Street, Darlaston.
Williamson, Richard Thomas, Cuerden Terrace, Burnley.

The following gentleman also on the same day passed the Primary Professional Examination.

Hopkins, John Walter, Leeds School of Medicine.

At the preliminary Examination in Arts, held at the Hall on the 10th, 11th, and 12th of January, seventy-seven candidates presented themselves, of whom forty-seven were rejected, and the following thirty passed. In the first division, none. In the second division, in alphabetical order, viz.:

William Ashby, Ernest S. T. Badger, John Elford Bailey, William R. M. Berridge, John Beyts, S. R. Blake, *Ernest Burchell, John T. Clapham, *T. F. Clemson, *John James Coulton, R. S. Freeland, R. H. French, P. A. Gore, *Francis Percival Harris, G. S. Owen Howes, *Wm. Edward Jones, *Henry Layng, *J. R. McMahon, Charles Meaden, W. K. Parbury, R. E. F. Pearse, H. Richardson, S. A. Rowley, D. C. S. Simmonds, Cecil Willard Smith, *Henry Smith, *E. R. Streeten, W. D. Wells, *E. T. Whitaker, John Edward Williams. Those to whose names * is prefixed also passed in Elementary Mechanics.

MEDICAL VACANCIES.

The following vacancies are announced:

ARDEE UNION.—Medical Officer, Dunleer Dispensary. Salary, £145 per annum, and fees. Election on February 4th.

BRECON INFIRMARY.—Resident House-Surgeon. Salary, £120 per annum. Applications by January 31st.

DERBY AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Second Assistant Surgeon. Salary, £160 per annum. Applications to Mr. J. Bullivant, 58, Abbey Street, Derby.

DERBYSHIRE GENERAL INFIRMARY.—House-Surgeon. Salary, £100 per annum. Applications by January 26th.

DISPENSARY HOSPITAL, Bury, Lancashire.—Resident Medical Officer. Salary, £100 per annum. Applications to H. Webb, Esq., Irwell Forge, Bury, Lancashire.

DISPENSARY HOSPITAL, Bury, Lancashire.—Assistant Medical Officer. Salary, £60 per annum. Applications to H. Webb, Esq., Irwell Forge, Bury, Lancashire.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Applications by January 31st.

HAYDOCK LODGE ASYLUM, Ashton, near Newton-le-Willows, Lancashire.—Medical Superintendent. Salary, £200 per annum. Applications to E. H. Beaman, Medical Proprietor.

HULL GENERAL INFIRMARY.—Assistant House-Surgeon. Salary, £[illegible] per annum. Applications without delay.

KING'S COLLEGE HOSPITAL.—Sambrooke Medical Registrar. Applications to J. W. Cunningham, Esq., King's College, by January 31st.

LIVERPOOL INFIRMARY FOR CHILDREN, Myrtle Street.—Assistant House-Surgeon. Applications to H. R. Robertson.

RADCLIFFE INFIRMARY, Oxford.—Honorary Physician. Applications by February 6th.

ROYAL SOUTH LONDON DISPENSARY, St. George's Circus, Lambeth Road, S.E.—Honorary District Surgeon. Applications to Mr. Hentsch by January 26th.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Physician. Applications to G. Scudamore, Secretary, Lower Seymour Street, Portman Square, W.

SEAMEN'S HOSPITAL (late Dreadnought), Greenwich.—Resident House-Physician. Salary, £75 per annum. Applications by January 22nd.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Juuior House-Surgeon. Salary, £50 per annum. Applications by January 23rd.

SHILLELAGH UNION.—Medical Officer, Coolkenno and Hackelstown Dispensary. Salary, £115 per annum, and fees. Application to Wm. Murphy, Honorary Secretary, Ballykillane, up to January 22nd.

SUSSEX COUNTY HOSPITAL.—Physician. Applications by February 6th.

SUSSEX COUNTY HOSPITAL.—Assistant-Physician. Applications by February 6th.

THE HOSPITAL FOR SICK CHILDREN, 49, Great Ormond Street, Bloomsbury. Assistant-Surgeon. Applications by February 6th.

WEST HERTS INFIRMARY.—House-Surgeon and Dispenser. Salary, £100 per annum. Applications by February 6th.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—House-Physician. Salary, £100 per annum. Applications by February 8th.

MEDICAL APPOINTMENTS.

Bateman, H. E., L.R.C.P., appointed Resident Medical Officer to the York Dispensary, *vice* E. H. Morgenrood, M.B., resigned.

Blore, J., M.B., appointed Resident Medical Officer to Leeds Fever Hospital.

Carr, J. Allen, L.R.C.S.E., L.R.C.P.E., appointed Medical Officer and Public Vaccinator for the Kippad District of the Tadcaster Union, *vice* J. W. Oglesby, M.R.C.S.E., deceased.

Clouston, J., M.B.. appointed Medical Officer to the Parish of Kilconquhar, Colinburgh, Fife, *vice* J. Kennedy, M.D., deceased.

Cowen, George, M.B., B.Ch., L.M.K. & Q.C.P.I., appointed House-Surgeon to Sir Patrick Dun's Hospital, Dublin, *vice* James Chute, M.B., B.Ch., resigned.

Goddard, C. E., L.R.C.P., appointed Resident Medical Officer and Registrar to the North London Hospital for Consumption and Diseases of the Chest, Mount Vernon, Hampstead.

O'Reilly, M. F., L.R.C.S.I., appointed Medical Officer to the Oldcastle Union Workhouse, *vice* J. Atkin, L.K.Q.C.P.I., resigned.

Roughton, E. W., M.B., appointed House-Physician to the Liverpool Northern Hospital, *vice* T. G. Davy, M.R.C.S., resigned.

Sinclair, H., M.B., appointed Medical Officer to the Parochial Board of Inverary and Glenaray, and Local Authority of the Burgh of Inverary, *vice* T. Greer, M.D., resigned.

Wilson, D., M.D., appointed Medical Officer to the Kington Union, *vice* W. Langston, M.R.C.S., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTH.

Ring.—January 4th, 1884, at 18, Cliftonville, Belfast, the wife of Surgeon J. Ring, Army Medical Department, of a son.

DEATH.

Shearman.—On the 12th instant, at Davos Platz, Switzerland, Percy Edward Shearman, L.R.C.P.Lond., aged 26 years, eldest son of the late Charles James Shearman, M.D.Lond., and grandson of the late Edward James Shearman, M.D., F.R.S., of Rotherham, Yorkshire.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY..........St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY........St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY............King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY........St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W. 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu., F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu., F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Charles L. Roy will demonstrate the Arterial Blood-pressure, and the Mechanisms which regulate it in Health and Disease. Mr. Walter Whitehead of Manchester will show a case of Spina Bifida cured by Operation; and Mr. Victor Horsley will demonstrate the Pressure of the Nerves of the Perineurium.

WEDNESDAY.—Hunterian Society, 8 P.M. Mr. T. Mark Hovell: Laryngeal Web following Syphilitic Ulceration. The President (W. Rivington, Esq.): Two Cases of Large Calculi treated by Lithotomy. Mr. Poland: Case of Ruptured Intestine.

THURSDAY.—Abernethian Society, St. Bartholomew's Hospital, 8 P.M. Dr. J. E. Howe: Locomotor Ataxy.

FRIDAY.—Clinical Society of London, 8.30 P.M. 1. Mr. Rivington: An Unusual Form of Dislocation of the Hip. 2. Mr. Rivington: Wound of External Carotid by a Stab in the Parotid Region, recurrent hæmorrhage, temporary ligature of carotid trunk combined with ligature of the external carotid at the seat of injury. 3. Dr. Donald Hood: Angina Pectoris immediately followed by Pericarditis. 4. Dr. de Havilland Hall: Empyema followed by Abscess of the Brain.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE BOAST FUND.

SIR,—Will you be so good as to allow me to acknowledge for the above fund: Dr. A. C. Turner, St. Neots, 10s. 6d.; and oblige, yours, etc.,

Charlotte Street, E.C. J. D. ALLMAN.

ANTISEPTICS IN WHOOPING-COUGH.

SIR,—The "domestic treatment" of whooping-cough by the inhalation of the fumes of tar "is a relic of an old treatment," which is not confined to Lancashire. In the West of England, it is a well known remedy, but the parents, instead of burning tar, take children to the gas-works. For some time, I have used carbolic acid sprinkled on the floor, and renewed two or three times a day. The result is satisfactory; it lessens the severity and frequency of the paroxysms, and, I believe, shortens the duration of the disease. Some parents rather object to the smell at first, but they soon get accustomed to it. If Dr. Reid and others will give the treatment of whooping-cough by the inhalation of carbolic acid a trial, I believe they will be convinced of its great utility.—I am, etc., JOHN BROWN, L.R.C.P.Lond., etc.

Bacup, January 12th, 1884.

IODIDE OF POTASSIUM AS AN ANTIGALACTAGOGUE.

SIR,—Iodide of potassium is mentioned by Dr. Playfair, in his *Science and Practice of Midwifery*, as having a remarkable effect in arresting the secretion of milk. I took the hint from his book some years ago, and have used it successfully upon many occasions. Quain's *Dictionary of Medicine* mentions belladonna and the iodide of potassium as being the chief remedies employed to reduce the amount of the mammary secretion.—I am, sir, faithfully yours,

MEMBER.

SIR,—For four or five years, I have prescribed iodide of potassium in five-grain doses, with 15 minims of succus belladonnæ in one ounce of water three times a day. The treatment has been all that could be desired—no unpleasant symptoms have followed. Iodide of potassium, if given in a strong solution, as recommended by Dr. Blackburn, is apt to cause severe irritation of stomach and depression. It is a salt which is readily absorbed, and quickly leaves the system. I was led to prescribe it because of its physiological action on glands.—I am, etc., JOHN BROWN, L.R.C.P.Lond., etc.

Bacup.

THE LIGHTING OF DOCTORS' BROUGHAMS.

DR. HUNTER (Linlithgow) inquires whether there be any efficient means of lighting a brougham at a moderate cost? He tried candles to enable him to read, and so turn to good account long country drives in dark evenings, but the result has been neither sanitary nor satisfactory. It has occurred to him to suggest that the electric light is the one especially good for such a purpose; and he wishes to hear of any experience of lighting carriages in this manner.

ARTIFICIAL RESPIRATION.

AMBULANS asks for information with respect to Dr. Richardson's bellows for artificial respiration. Do they possess an advantage over the ordinary method of artificial respiration?

H. L. B.—We regret we do not possess the information desired.

EXPLORATORY PUNCTURE OF KIDNEY.

SIR,—It is occasionally desirable to puncture the kidney for diagnostic purposes. The ordinary fine hollow needle and trocar are unsuitable for this, as they are both rigid and brittle; in consequence, I have seen the needle snap off during the operation, to the annoyance of the operator, necessitating a further exploratory incision for the removal of the fragment. This being due to the well known fact that the kidneys are depressed half an inch in deep inspiration by the diaphragm, it has occurred to me that the cannula might be made on the "lobster tail" or some other flexible principle, the rigid trocar being withdrawn at once after the puncture. The cannula would, of course, have to be inserted, to allow of its bending in the right direction, the "lobster tail" only allowing flexion in two directions, either backwards and forwards, or from side to side.—Yours truly, ACHATES.

REMOVAL OF HAIRS FROM THE UPPER LIP.

SIR,—A few weeks since, there appeared a paragraph in the JOURNAL, "On the Removal of Hairs from the Upper Lip of a Lady." Would the author favour me by stating the mode of procedure?—Yours truly, SIGMA.

BREAD FOR DIABETIC PATIENTS.

SIR,—Can you or any of your readers tell me what kind of mill would serve to grind the prepared bran, as directed in Tanner's *Practice of Medicine*, so that it should be fine enough to pass through a sieve, and thus serve as a bread stuff for diabetics? Is there no cheaper form of gluten bread and similar preparations than those offered by some of the fashionable makers at prices prohibitory to all but the well-to-do? If there is, the information will probably be a boon to more than, yours very truly, THOMAS M. WAIT.

Hovingham, Yorks, January 11th, 1884.

DIPSOMANIA.

SIR,—In reply to your correspondent "X.," I beg to state that my experience in connection with the Home for Inebriate Women in this city supports the exhibition of the bromides to the subjects of dipsomania. In this institution, our aim is to establish a healthy condition of nervous system, by means of good food, fresh air, and cheerful surroundings, avoiding, as far as possible, the use of drugs of any kind. There are cases, however, in which, at times, the "nervous irritability" becomes so intense as to demand special remedies for its immediate relief. In such cases, I am in the habit of prescribing a draught containing from fifteen to sixty grains of bromide of potassium, and from fifteen to sixty minims of aromatic spirit of ammonia, in water, to be given every six or twelve hours, for two or three days, or until the "nervous equilibrium" is restored. It is much better to give large doses at long intervals, than small doses frequently. Under this treatment, I have seen the attacks of drink-craving become less and less frequent, until they have completely disappeared. Of course, there are many cases in which every form of treatment is utterly unavailing. I remember one man, in my private practice, whose attacks were gradually lessened to one *per annum*, but who was never completely cured. This was demonstrated by his giving way to temptation during his annual attack one summer, while I was out of town; although by means of bromide and sal volatile he had been maintained in abstinence for over five years previously.—Yours, etc., J. MUIR HOWIE.

86, Princes Road, Liverpool, January 12th, 1884.

DR. BRAND (Driffield) desires information on the subject of epidemic St. Vitus's dance.

MULLEIN LEAVES.

EXPERIENTIA DOCET desires to ask Dr. Quinlan to inform him where mullein-leaves can be obtained, together with the price of the same; and also about what quantity would be required in order to give it a fair trial in a case of pre-tubercular phthisis?

L.R.C.P. & S.—This question has frequently been answered in the affirmative during the last twelve months.

ELECTROLYSIS IN THE TREATMENT OF DRACUNCULUS.

SIR,—There is nothing new under the sun. What Dr. Faulkner has just found out, I knew about twenty-five years ago, having been informed by a brother officer that he had used a galvanic battery in the extraction of guinea-worms, he having employed it to the worm with startling effect. He also told me that he found the worms that were not extracted died and became calcified.

Prior to obtaining the information from my friend, I had had many opportunities, personally and otherwise, of extracting worms, but it so happened I never met any afterwards. The mode of extraction that Dr. Faulkner gives is not the only one. In Bombay in those days, one or two barbers had quite given up their legitimate occupation, and taken to extracting worms. A barber took five out of my legs very cleverly; most of them were extracted at one sitting, but two (one in each foot) held on with their hooks, and he had to leave them till the next day, when he got them out. His stock of instruments consisted of a needle and a razor; he commenced operations by finding, as near as he could guess, the centre of the worm; then he raised the skin over the centre of the worm on the point of the needle, passed the razor under it, and snipped off a tiny bit of cuticle, making an almost circular cut the size of a large pin's head. By raising almost invisible pieces of skin and tissue, and slicing them away with the razor, he deepened, but did not increase, the area of the whole, till he saw the white worm at the bottom; then passed the eye of the needle (like a tenaculum) under it, and brought up a loop. He pulled on the two sides alternately till he had got one end out, then he dealt with the other. When he found the hook had been made use of, he applied heat and friction to make it yield its hold. If galvanism were applied instead of heat, the worm would not hold on long.

There is another point in Dr. Faulkner's letter to which I wish to allude, that is, the inflammation and suppuration set up when a worm is broken. He evidently is not aware of the cause of the inflammation. If, on the next occasion of taking out a worm, he will open it, and put a drop of the fluid that exudes from its abdomen on a slide, and put it under a microscope of even moderate power, he will no longer be surprised. If he has any preserved in spirits, by cutting one open and putting a drop of fluid from the abdomen under a microscope, he will find the same thing, namely, myriads of very minute worms.

On my return to England in 1862, I gave Dr. G. Harley a number which I had preserved in spirits, and, on examination, he found the young. He afterwards published a paper in the *Lancet* on the subject.

There are various theories as to how the worms get into the human body my opinion is that they enter by the pores of the skin, for I attribute my being infested with them to having walked barefoot over a half-dried stubble paddy-field. They made me aware of their presence about six months afterwards. The water-carriers in Bombay frequently have them in their backs. One European patient of mine had a worm in his scrotum, which he attributed to sitting too long in his bath.

About thirty years ago, Bombay was supplied with water from wells, some of which were more infested with worms than others. Afterwards, the supply came from an artificial reservoir about twelve miles off, so perhaps guinea-worms are not so common as they use to be.—Yours, etc.,

J. W. REYNOLDS, late Port-Surgeon, Bombay.

C.W.—A copy of "The Memorandum on Vaccination," by the Chairman of the Parliamentary Bills Committee, has been forwarded as requested.

PUERPERAL MELANCHOLIA.

SIR,—I have a patient who was safely delivered on June 23rd, 1882. It was her first confinement. She got a fright while out on the 8th July following, a case of drowning having occurred here that day. On July 12th, one of her breasts suppurated, and, shortly afterwards, the other; and the suppuration went on for thirteen weeks; at the same time, puerperal mania set in. Her recovery has been gradual. At present, she seems in good health, and menstruates regularly. She has nocturnal incontinence of urine, which, however, yields to tincture of belladonna. In domestic or other affairs, she has not the least interest. She would lie in bed all day, if permitted to do so. She has no inclination to work. If asked to do anything, she makes an attempt, then seems to forget all about it, and the work remains undone. There is no hereditary taint, as far as I can learn. Would confinement in an asylum be likely to benefit her? Or do you think time will improve her condition?—Yours, etc., M.B.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

Treatment of Wounds as Based on Evolutionary Laws. New York: J. and H. Vail and Co.

Hints in Sickness; Where to Go, and What to Do. By H. C. Burdett. London: Kegan Paul, Trench and Co. 1883.

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ABSTRACT OF THE HARVEIAN LECTURES
ON
PROGNOSIS IN HEART-DISEASE.

Delivered before the Harveian Society of London, November, 1884.

By W. H. BROADBENT, M.D., F.R.C.P.Lond.,
Physician to St. Mary's Hospital.

Lecture I.

Prognosis, foreknowledge of the course and issue of disease, is one of the highest and most important attributes of the medical man. Perhaps, more than any other, it is the mark of the complete physician; it is the combined result of large knowledge, extended experience, close and minute observation, and true insight, and is the test of what may be called the clinical faculty. Its importance to the patient is evident, and to the medical man it is scarcely less so; nothing secures the confidence of patients and friends so firmly as to see the drama of an illness unfold itself according to a course already sketched out, and pursue its march to a known termination. True, this foreknowledge may, like the gift of prophecy, be a burden; we may have to dash to the earth hopes which are the only comfort of a family and friends; but it is far better to have beforehand the pain of seeing what is impending, than to have afterwards the bitter regret that we allowed ourselves and others to be deluded by false hopes, and perhaps that we contributed to overwhelm a family in disaster as well as in grief. But prognosis is the knowledge not only of the end but of the course of disease; it is, in fact, only a branch of diagnosis. These remarks upon the value and importance of prognosis apply with special force to heart-disease. What a difference there is in the presence of a case of disease of the heart, in which the question of the future arises, between the man who knows, and him who can only conjecture! The one must hide his ignorance and defend his credit by vagueness of statement; must, therefore, on recognising the existence of heart-disease, speak of sudden death as amongst the contingencies to be feared; or, having seen that his apprehensions in previous cases had been falsified, he may, on the other hand, lull the sufferer into false security, and not only fail to warn him of inevitable danger, but precipitate the fatal termination. The other, secure in his knowledge, will distinguish the cases in which he must warn from those in which he may hold out encouragement.

That it is, in my opinion, possible to predict with more or less certainty the course of disease of the heart, and to estimate approximately the duration of the patient's life, is evident from the title of these lectures; and I have now to endeavour to make good the promise it implies. The subject is not a new one to this Society or to myself. Seventeen years ago, I read a paper before this Society, on prognosis in valvular disease of the heart, and for the most part the principles I then laid down have been confirmed by subsequent experience; and I shall restate and expand them with the advantage of increased knowledge and confidence.

Sudden Death in Heart-Disease. In the mind of the general public, disease of the heart and sudden death are so closely associated, that the mention of the one immediately suggests the other. It must be understood that the sudden death under consideration is such as is meant by the phrase "dropping down dead" with little or no warning, the individual having been up to the moment in apparent health, or so far well as to be able to go about his duties. Medical men are well aware that this apprehension on the part of the public is greatly exaggerated; but they hardly sufficiently recognise that sudden death is a contingency which may almost be left out of consideration in valvular disease, except in aortic regurgitation. Dr. Sidney Phillips has, at my request, made an abstract of nearly four hundred cases in which, on *post mortem* examination, the heart had undergone marked change. Of these, 151 were cases of valvular disease; among them, eleven were examples of aortic stenosis, without one sudden death, in the sense of the sufferer being overtaken by death while in apparent health; of aortic insufficiency and regurgitation, there were thirty-eight cases; three were brought to the hospital dead, a fourth died suddenly in the hospital; in six more the final symptoms came on abruptly, and were rapidly fatal. Of fifty-three cases of mitral stenosis, only one was brought in dead. The cases of mitral insufficiency or regurgitation were forty-nine in number; of these, two may be said to have died suddenly, but both had serious symptoms, and were under treatment in the hospital at the time, and in both the pericardium was adherent; in three more a sudden attack of dyspnœa set in, and proved rapidly fatal.

Under the head of hypertrophy and dilatation, only two sudden deaths were directly attributable to the state of the heart. When, however, we come to fatty degeneration, the story is very different. In nine out of thirty-eight cases the termination was sudden; it is, in effect, to fatty degeneration that heart-disease owes much of its terror of sudden death. It will, I trust, be sufficiently evident that in valvular disease of the heart, with the exception of aortic insufficiency, we are justified in assuring our patients and their friends that there is practically no danger of sudden death.

General Prognosis of Valvular Diseases.—Diseases of the heart are classified as structural, valvular, and pericardial, according as the morbid change affects the muscular walls, the valves, or the pericardium. We shall consider, first, the prognosis of the valvular affections, which are of most importance, because most numerous, and best understood. We may be called upon to form an opinion as to the probable course, duration, and termination of valvular disease of the heart at different stages, and under various circumstances.

1. The subject of the affection may be in apparent health.
2. Effects of the imperfect propulsion, or of damming back of the blood, may have become manifest in pain, breathlessness, cough, debility, with other concomitant symptoms.
3. The patient may be in some stage of dropsy, or in the crisis of some pulmonary complication, or subject to paroxysms of dyspnœa, or to attacks of syncope.

Many considerations will enter into the inquiry, and the weight attached to each will be very different at different stages of the disease; the elements of prognosis are, therefore, necessarily complex, but not necessarily complicated.

If, now, we ask ourselves what facts we should desire to know, in order that we might prognosticate the course and issue of a given case of valvular disease of the heart, the answer will be as follows.

1. The valve affected, and the relative danger attaching to the particular lesion.
2. The actual condition of the orifice and valve; and the degree of obstruction, or amount of regurgitation, to which the lesion has given rise.
3. The nature and tendency of the morbid change in the valve; whether it is stationary or progressive.
4. The degree of soundness and vigour of the muscular substance of the heart, and of the tissues generally; how far, in fact, compensatory changes can be counted upon.
5. The mode of life of the patient.

When symptoms are habitually present, it is still of vital importance to know what valve is affected, and far more to have an idea of the extent of the lesion; but other considerations now come in; there is failure on the part of the heart to counteract, by increasing vigour, the effects of the valvular disease. Is this due to radical weakness, or to some temporary cause, such as anæmia, exposure to cold, overexertion, or anxiety?

The relative frequency of the several valvular diseases is, according to Dr. Walshe, mitral regurgitation, aortic constriction, aortic regurgitation, mitral constriction, tricuspid regurgitation, pulmonary constriction, pulmonary regurgitation, tricuspid constriction; and, according to the same observer, their order of relative gravity is tricuspid regurgitation, mitral regurgitation, mitral constriction, aortic regurgitation, pulmonary constriction, aortic constriction. According to my experience, aortic constriction should be displaced from its position of relative frequency, and should come after mitral constriction; and I shall leave the valves of the right side of the heart entirely out of the question, since lesions of them are not only relatively rare, but they can scarcely be considered independently of affections of the valves of the left heart or of the lungs. I should then give the following as the order of relative danger: mitral stenosis, aortic regurgitation, mitral regurgitation, aortic stenosis. Aortic regurgitation, however, under certain circumstances, is the most fatal of all valvular affections; this is, when it comes on late in life, at a period when it is progressive in character, and when compensatory hypertrophy is established with difficulty.

The actual condition of the orifice and valve affected must now be considered. Our guide in localising disease in the valves of the heart is chiefly a murmur, produced by obstruction to the current of blood, when one or other orifice is narrowed or roughened, or by regurgitation, where a valve no longer closes perfectly. By means of the murmurs, we learn definitely which valve is affected, and in what way, but they fail altogether to indicate of themselves the amount of damage which a valve has sustained. A loud murmur may be produced by a very slight change, and a murmur which is scarcely audible may be indicative of most extensive destruction.

Murmurs may be compared or contrasted in several respects: in intensity, in duration, in character, and in their relation to the sounds of the heart in point of time.

A loud murmur is, on the whole, of less serious import than one which is weak and soft; it is, at any rate, indicative of force in the heart's action, and weakness of the heart constitutes the greatest of all dangers. It must not be concluded that a soft or weak murmur necessarily signifies either a failing heart or a greatly damaged valve; but a diminution of the intensity of a murmur, gradual or sudden, may confirm unfavourable indications given by symptoms.

A long murmur, except in the case of mitral or aortic stenosis, is usually indicative of early and comparatively slight disease, and of efficient action of the heart. Sometimes, a short murmur is significant of impending danger.

The character of a murmur, its roughness or smoothness, may have diagnostic significance, as will be pointed out later, but does not give any information with regard to the extent of structural change or functional derangements.

An accent at the beginning of a murmur shows that the valves still act as a check on the reflux of blood.

A postsystolic or postdiastolic murmur shows that the valves come together accurately at first, but fail to remain in apposition throughout the whole period of ventricular contraction; it indicates, then, that the amount of leakage can only be slight.

The conclusions drawn from the pulse add materially to the information; in aortic obstruction, the pulse will be long, and the initial "percussion-wave" slight. In aortic regurgitation, we have the well-known collapsing pulse. In mitral stenosis, the artery is small, and full between the beats, but usually regular; while mitral regurgitation, when considerable, is attended with extreme irregularity of the pulse.

But these murmurs, and the character of the pulse, furnish no reliable measure of the degree of obstruction and amount of regurgitation; we possess such an indication, however, first, in the effects on the cavities and walls of the heart: secondly, in the evidence of obstructed circulation in the lungs or in the system.

Hypertrophy and dilatation are looked upon as caused by the valvular lesion, and as affording a measure of its extent; but let me not be understood to assert that, the less the hypertrophy and dilatation, the smaller the valvular damage, although this is usually true. The prognostic meaning of hypertrophy and dilatation is recognised by all writers alike; but the idea, that the structural changes in the walls of the heart are the direct result of valvular disease, though very natural, is frequently set aside as too simple. According to many authors, the symptoms and ultimate fatal termination are due, not to the valvular disease itself, but to the hypertrophy and dilatation with which it is associated; and the difficulty is stated thus by Walshe: "No direct ratio constantly holds between the amount of hypertrophy and of valvular obstruction, showing that there is something beyond the mechanical difficulty, which contributes its quota of causation."

This is, however, capable of explanation by the following considerations. First, different affections of the valves have, inherently and mechanically, different degrees of tendency to the production of structural alterations; secondly, the time of life at which the lesion of the valves takes place is of great significance; a given valvular affection, for example, established in youth, will be survived with great hypertrophy: after middle-age, it will prove fatal before structural change can be accomplished; thirdly, time is an important element in the development of hypertrophy; fourthly, the mode of life will influence the degree of hypertrophy; and, finally, the period, after the occurrence of the valvular change, at which active exercise was undertaken, will have great influence on the condition of the heart-walls and cavities. In the above conditions, we have the quota of causation beyond the mechanical difficulty at the valves, which explains the variations observed.

There are at least three distinct ways of regarding the connection between hypertrophy and dilatation, and subsequent symptoms: A. As the main cause of these symptoms. B. As aiding in their production by aggravating the ill consequences of valvular derangement. C. As tending to neutralise these ill consequences.

The point on which all agree is, that valvular disease accompanied by these structural changes is more serious than when it is not thus accompanied; but this fact is capable of the double interpretation, either that the valvular affection is rendered more serious by their presence, or that they are present because it is more serious.

Which of the two is true will be seen if we consider the effects which the valvular lesions would produce, independently of the changes in the walls and cavities, and the modifications of these effects to which the structural changes will give rise.

First, then, as to aortic constriction. Here there must be either increase in the propulsive power of the heart, or diminished rate of circulation. The increased power is gained by hypertrophy; and a direct aortic murmur, accompanied by hypertrophy, is more serious than one not thus accompanied, because in the latter case the valvular lesion has occasioned a mechanical difficulty sufficiently great to call for hypertrophy.

Again, in aortic insufficiency, a certain amount of blood returns into the ventricle at each systole; mere augmentation of the force of the systole would not remedy this, but an increase in the capacity of the left ventricle brings about the desired result, and thus compensates for the regurgitation. Dilatation, which under all other conditions is injurious, is thus actually a compensatory change in aortic incompetence; it is a totally distinct thing from the dilatation which is sometimes met with as the result of structural weakness, or degeneracy of the muscular walls of the heart. There is also a call for increased exercise of force in the additional quantity of blood to be lifted at each systole; so, in addition to the dilatation, we must have hypertrophy.

In mitral regurgitation, we do not find the same degree of dilatation or hypertrophy in the left ventricle as in aortic regurgitation, and in mitral constriction there may be contraction. In this class of cases, the hypertrophy of the left heart is secondary to that of the right, which is caused by backward pressure through the pulmonary circulation to the right ventricle.

Mitral stenosis, I shall reserve for special consideration.

The conclusions arrived at from these considerations are, first, that the relation between valvular and associated structural alterations is one of cause and effect; secondly, that these changes are distinctly conservative; and, thirdly, that these changes, with due qualifications, are a measure of the valvular disease.

The Stationary or Progressive Character of the Lesion as Influencing Prognosis.—So many differences exist, arising out of the character of the pathological process by which the valve is affected, that it will be necessary at this point to enumerate the principal causes of lesions in the valves and orifices. They are as follows.

1. Congenital malformation of the valves. This is usually accompanied by other results of imperfect development in the chambers of the heart, or in the great vessels. Any such condition would be permanent and stationary.

2. Acute endocarditis. Valvular lesions from this cause are, for the most part, stationary, except when, by adhesion between the flaps of the mitral valve, stenosis of this orifice is produced.

3. Chronic endocarditis and degeneration. This is common in later life, is due to gout or renal disease, and has a progressive tendency.

4. Rupture of a valve. This is a rare occurrence. It is usually the aortic valve which suffers, death almost invariably ensuing rapidly; or one or more of the tendinous cords of the mitral valve may be ruptured.

5. Dilatation of the orifice may derange the functional efficiency of a valve, while the valve itself has not undergone any material change. This is not uncommon in the mitral valve, causing regurgitation, which may occur at any period of life, and under very different conditions. It may be induced by acute disease, such as enteric fever and acute rheumatism, or by a debilitating influence, such as anæmia.

The distinction which it is usually most important to ascertain is between lesions originating in acute endocarditis, which are, therefore, probably stationary, and lesions produced by chronic, inflammatory, or degenerative change, which are inevitably progressive.

Thus far we have been discussing the prognostic indications furnished by the heart itself; we have now to examine into other conditions which influence the future of a case of heart-disease.

Age.—Valvular disease appears to be more serious in early childhood than a few years later. The heart cannot both keep pace with the active growth of this period of life and answer the demand for hypertrophy.

Sex.—It is remarkable that mitral stenosis is much more common in women than in men. Out of 53 cases, 38 were in females, and only 15 in males. On the other hand, aortic insufficiency is more frequently met with in men. Out of 36 cases, 30 were males and only 6 females. When valvular disease has been established in childhood, girls are, according to my experience, more likely to break down at the trying period of puberty than boys, and the compensatory changes are less perfect in the former than in the latter.

Hereditary Tendencies.—In no class of cases is it more necessary to inquire into the family history than in diseases of the heart. It is more particularly in affections of the muscular walls that a family tendency to heart-disease is seen, and antecedent to this and explaining it is peripheral resistance from undue arterial tension.

Anæmia.—A deterioration of the blood is a common and almost inevitable result of heart-disease, when this reaches a point at which it begins to affect the circulation. The impeded and slackened flow of blood prevents those active changes from taking place by means of which the blood is constantly renewed; absorption of food will be hindered by the languid movement of the blood in the gastro-intestinal mucous membrane. Anæmia, therefore, is a serious element in the forecast. It has a serious detrimental effect on the heart affected with valvular disease; again, it is often attended with palpitation of the heart, and will add to this distressing and sometimes dangerous symptom. Anæmia may of itself give rise to œdema, and it will precipitate the occurrence of dropsy when the tendency of the heart-disease is in the direction of this complication.

There still remains for consideration the prognostic influence of the circumstances and mode of life of the patient. The man who must labour with his hands, who is exposed to all weathers, whose food is poor, who breathes impure air, and indulges, perhaps, in drink, who seeks advice only when too ill to continue his avocation, has far smaller chances than the man who seeks advice early, and who has adequate means to follow it out.

Scarcely less important is the degree of tension which exists in his arteries; high pressure, increasing the shock of every closure of the aortic valves, and also of the mitral valves, by rendering necessary more powerful contraction of the ventricle in order to drive on the blood, is necessarily injurious, aggravating mischief already effected.

In order to complete our view of the prognostic indications in valvular disease, the modes of death must be described, together with the symptoms which lead up to a fatal termination. Ultimately, the immediate cause of death from heart-disease is failure or arrest of the circulation. This may occur in two ways: from arterial emptiness, caused by want of propulsive power, seen in aortic obstruction and regurgitation; or from venous obstruction, in mitral obstruction and regurgitation; further, the two conditions mutually generate each the other, and so complicate each other. For example, in aortic incompetence, the blood, flowing back from the aorta under high pressure, anticipates in some degree the entry into the ventricle of blood from the auricle; the auricle does not fully discharge its contents, and the due amount of room is not made for the blood arriving by the pulmonary veins. So long as the capacity of the two ventricles is the same, the right will send more blood into the pulmonary circulation than the left can receive from it. The original tendency, however, predominates, and gives a special character to the fatal termination, and to the final symptoms. In aortic disease, the patient is pale, weak, suffers from shortness of breath, giddiness, faintness, and a sense of oppression; as the disease advances, there is anginoid pain, sleeplessness, gasping dyspnœa, often no dropsy, or this may be absent till a very late period of the disease, and death may occur by sudden syncope, or from exhaustion, or by an acute intercurrent pulmonary attack.

In mitral disease, the early symptoms indicate pulmonary obstruction, and dropsy sooner or later is the rule; as a rule, the face is dusky, though in some cases there is pallor; the extremities are cold and purple; the breath is short; there is cough, and congestion of the lungs is easily induced. Later there is habitual dyspnœa; the dropsy advances; sleep is broken or almost lost, for voluntary respiratory effort is needed to supplement the ordinary reflex movements of respiration.

The exact conditions which determine the effusion of serum into the connective tissue in heart-disease form an interesting study. The condition which is most certainly and conspicuously present is obstruction to the return of venous blood to the heart, but that it is the efficient cause of dropsy is questioned by Dr. Walshe. He says that something beyond the cardiac disease is required in order, as a matter of necessity, to entail the occurrence of dropsy; that this is shown by the facts that there is no direct relationship between the amount of heart-disease and of dropsy, that dropsy comes on suddenly sometimes from extraneous causes, the state of the heart remaining, as far as ascertainable, in precisely its previous condition; and that dropsy diminishes and increases, while the organic changes in the heart remain permanent and unmodified. But this reasoning is valid only on the supposition that the effect on the circulation is exactly the same, when apparently similar conditions of valves, cavities, and heart-walls are present. But such is not the case; the return of blood by the veins may vary greatly when very similar affections of the walls and valves are present. In extensive valvular disease, we have a state of unstable equilibrium in the circulation; in health, the heart responds to calls made upon it by varying conditions, such as temperature, excitement, or emotions, but in disease the adjustments are effected with difficulty, and may fail altogether under slight provocation. It seems to me difficult to imagine more effective agencies in the production of the changes referred to than a delayed circulation; the sluggish stream can neither furnish the digestive secretions in due quantity nor of proper quality, nor take up the nutritive materials with normal rapidity, nor can the assimilating organs, impeded in their functions by chronic congestion, effect perfectly the further changes necessary to the formation of healthy blood. The tissues, also, permeated by a slow current of unhealthy blood, can neither obtain sufficient matter for their renewal, nor get rid of the products of waste, and consequently fall into a state of degeneracy. When a patient, after exertion or exposure, begins at once to suffer from dyspnœa, pulmonary congestion, and dropsy, he having been previously free from these affections, and his valvular disease compensated for by hypertrophy, in such a case we can scarcely say that there has been such a change in the blood or tissues as to determine the effusion; clearly the increased derangement of the circulation has given rise to the serous exudation.

Bringing, in conclusion, some of the chief indications dwelt upon to a focus, we have, let us say, an individual in apparent health in whom a valvular murmur has been discovered; there is, however, no modification of the pulse, and no structural change in the heart. Here the change in the valves is slight, and present danger there is none.

The future of such a patient will depend on the nature of the lesion, whether, that is, it is old and stationary, or recent and progressive. In one case he may reach old age, in the other, may have only two or three years to live.

In another case, while there are no symptoms, there is dilatation and hypertrophy, or both, and a corresponding modification of the pulse. These show that the valvular change is sufficient to have called for compensation, and although this may be sustained under ordinary circumstances, it may break down under strain of any kind. If the lesion is progressive, symptoms will not long be absent.

In yet another patient, embarrassment of the pulmonary or systemic circulation has been set up. Here danger is never far off, though it may be guarded against for years. Symptoms once present, there is, speaking generally, less probability of prolonged life in aortic than in mitral disease. The state of the walls and cavities of the heart will be important, but still more the question whether the symptoms are due to some temporary and remediable cause, or are the direct result of the state of the valves.

The stationary or progressive character of the change loses none of its importance. The only hope lies in the absence of any tendency to aggravation of the valvular lesion, together with soundness of the structures generally, and a good family history.

When we are called to a patient suffering from [illegible] pulmonary complication or from advanced dropsy, the first question will be whether the symptoms [illegible] have been precipitated by exposure, [illegible] other [illegible] cause. If they have supervened [illegible] circumstances, there is little chance [illegible] some powerful disturbance [illegible] of the circulation, this may be [illegible] power, and if the dilatation and hypertrophy [illegible] less extent of valvular [illegible]

VACCINATION.—The Local Government [illegible] Mr. Philip E. Hill, a Public Vaccinator [illegible] the Crickhowell Union, [illegible] This is the fourth time in [illegible] Worthen, has received [illegible] from the Local Government Board for [illegible] Union.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

PROCEEDINGS OF SECTIONS.

PORRO'S OPERATION.

Introduction to a Discussion in the Section of Obstetric Medicine.

By CLEMENT GODSON, M.D.,
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IN placing this subject before you, I have found it necessary to prepare three tables, as follows:

1. True Porro's operations;
2. Utero-ovarian amputations performed during pregnancy, but before the fœtus was viable;
3. Operations for removal of fœtus from abdominal cavity by laparotomy, followed by amputation of ruptured uterus, with ovaries. (For the tables, see pages 148-159.)

My object in making this arrangement has been to classify the several operations under their respective headings, and not to mix them all together under one title, as has been done, causing much confusion, and great variation in the tables which have been prepared by different authors. So much was this felt by Dr. Robert P. Harris of Philadelphia, whose name is well and honourably known in connection with Porro's operation, from his writings thereon, that he felt it necessary to write a special article, entitled "Does the Removal of a Fœtus by Abdominal Section after a Rupture of the Uterus constitute a Cæsarean Operation; and is it proper to classify this Form of Delivery with Gastro-hysterotomy, which has a different Degree of Mortality, both as regards the Mother and Fœtus?" It is at once evident that these inquiries must be replied to in the negative. I would supplement this with another question, applying to Table II: Does the removal of a large abdominal tumour, together with the uterus containing a fœtus which has not reached a viable period, constitute a "Cæsarean operation?" and is it proper to classify this with an operation which is performed for the delivery of a viable fœtus which could not be extracted living, or even be extracted in a state of mutilation, without the greatest possible risk to the life of the mother?

I do not hesitate to say that these are operations widely differing; and that they should not, therefore, be classified together.

What, then, is a *true* Porro's operation? It may be thus described: *Cæsarean section, followed by removal of the uterus, together with its appendages, including the ovaries, leaving only the cervical portion of the uterus.*

This operation has received a variety of names. Professor Porro himself thus designates it: "Utero-ovarian amputation as a mode of completing the Cæsarean section." Other titles are, "Cæsarean ovaro-hysterectomy," "Cæsarean hystero-ovariotomy," and "Cæsarean hystero-oöphorectomy."

History.—The first to arrive at the conclusion that recovery might be expected to follow the removal of the gravid uterus, with its contents, was Dr. Joseph Cavallini, who in 1768 published in Florence a paper entitled "Medico-chirurgical Experiments on the successful Excision of the Uterus in certain Animals," etc. He describes several experiments on dogs and sheep; amongst them, one on a dog in which he removed the uterus containing nine puppies. He ends by saying: "All which things having been duly weighed, I do not doubt that the uterus is not at all necessary to life; but, whether it may be plucked out with impunity from the human body we cannot be certain without a further series of experiments of this kind, which perhaps a more fortunate generation will obtain."

Dr. G. P. Michaëlis of Marburg incidentally suggested the question of amputation in the year 1809. In a foot-note to an account of a case of Cæsarean section published by him in Siebold's *Lucina* in that year, he defends the use of large doses of opium in his treatment, on the ground that the violent reaction is the great danger. He points out that when, in ignorance, the uterus has been cut away, this reaction has been much less; and adds: "It is, indeed, a question whether the Cæsarean section would not be made less dangerous if with it were combined the extirpation of the uterus, an organ which is, after all, under such circumstances (as those, namely, which demand the Cæsarean section), nothing but harmful."

Dr. James Blundell, in his lectures at Guy's Hospital in 1828, says: "In speculative moments, I have sometimes felt inclined to persuade myself that the dangers of the Cæsarean operation might be considerably diminished by the total removal of the uterus. Perhaps this method of operating may prove an eminent and valuable improvement." (*Lancet*, vol. ii, p. 167, London, 1828.) Out of four rabbits on which Dr. Blundell operated, three recovered, whilst the fourth died from the slipping of the ligatures.

Feser, in 1862, after uterine amputation, saved two bitches out of four. These experiments on animals were followed by those of Fogliata[1] of Pisa, Porro of Pavia, and Rein of St. Petersburg. But in 1869 the gravid uterus was for the first time amputated in a living woman; Dr. Horatio Storer of Boston, U.S.A., being forced into the operation as the only means of arresting the severe hæmorrhage occurring, during Cæsarean section, from an uterus with a fibrocystic tumour. The patient had been three days in labour with a putrid fœtus *in utero*. She died sixty-eight hours after the operation. (*Journal of the Gynæcological Society of Boston*, vol. i, No. 4.)

The first premeditated utero-ovarian amputation, in connection with Cæsarean section, was performed by Professor Porro, then of Pavia, now of Milan, on May 21st, 1876. The lives of both mother and child were saved, thus establishing a claim for the serious consideration of this operation as a substitute for the ordinary Cæsarean section. In 1876, Professor Porro published his memoir, *Della Amputazione Utero-Ovarica come Complemento di Taglio Cesareo;* and the operation has from this time been commonly known as "Porro's operation." The proposal was received generally with disfavour; shortly afterwards, however, the operation was undertaken by Inzani of Parma, Hegar of Freiburg, and Previtali of Bergamo. As in each of these cases the patient was, at the time of operation, in an almost hopeless condition, in none of them was the result successful. Nothing daunted by these failures, Professor Späth of Vienna, and his colleagues Professors Carl Braun and Gustav Braun, recognising the value of the procedure, and knowing well the fatality of the old Cæsarean operation in their country, as elsewhere, determined to adopt it. The first opportunity occurred in June 1877, when Professor Späth undertook the operation (June 22nd) in the case of a woman, aged 40, the subject of malacosteon. She had been twenty-four days under preparation in the hospital, and made an excellent recovery. From this time, rarely has more than a month or two elapsed without the operation having been performed in some locality; so that I am enabled now to bring before you a table containing 134 true Porro's operations. A considerable number of these have never been published. I have spared no time or pains to make the table complete. I have sought information from almost every operator, and certainly from every school in which there was a likelihood of the operation having been undertaken. I have derived much assistance from Dr. Peruzzi of Lugo, who very readily undertook to obtain for me all that I needed in respect to the Italian cases; and from Dr. Harris of Philadelphia, who had, at the cost of much labour, published in the *American Journal of Medical Sciences*, 1880, a table of the first thirty-six cases, the arrangement of which I have followed in my tables, simply adding one or two further details which have appeared to me of much importance. Dr. Harris has also by his subsequent publications, and by direct information to me, given me the clue to a large number of the more recent operations. It would be impossible to mention all those who have afforded me information; the references in the tables will, however, point to the majority of these. I now proceed to give the history of my own case.

The subject of my operation, Clara J. S., was 24 years of age. In general formation she is dwarf, her hands and feet not being larger than those of a child eight or nine years of age. She appears to inherit her diminutiveness from her parents. Her mother, though well-formed, has almost equally small hands, and is only 4 feet 8½ inches in height. Her father is also spoken of as a very small man, and one sister as being very short. Clara S. was born on November 9th, 1858. When four years of age she was run over in the streets by a dray, the wheels of which passed over her body. She was immediately conveyed to Guy's Hospital, and was admitted under the care of Mr. Arthur Durham, to whom I am indebted for the following information.

"Clara S., aged 4, admitted to Dorcas Ward March 20th, 1863, run over in the street. The pelvis was found to be smashed, and the child was apparently in the most hopeless condition. However, she rallied; suppuration took place; and I removed the pubic bone of one side, with other fragments, and the tuber ischii and other portions of bone of the other side. She was not expected to live for some days before the operation; but, after it, she recovered without any bad symptom whatever. The exact amount of bone removed I cannot specify, but there was what I have stated, and several fragments. The child was discharged on August 2nd; the wounds were then all healed."

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[1] *Contribuzione allo Studio della Amputazione dell' Utero negli Animali Domestici: Osservazioni Cliniche e Sperimentali fatti nella Scuola Zoojatrica della R. Universita di Pisa.*

The mother of the patient stated that her child remained in Guy's Hospital nearly a year, where sixteen pieces of bone were removed from the privates at three or four operations. She began to walk, when about twelve years old, on crutches, previously having been wheeled about in a perambulator. She now walked without assistance. There was no trace of any rachitic deformity. The spine presented the natural curves, except in the lumbar region, where the anterior curve naturally found in this situation was considerably increased. The sacrum appeared to be displaced backwards at its junction with the last lumbar vertebra, and thus the gluteal region was thrown into a very unnatural prominence. The coccyx was articulated at about a right angle with the sacrum. The gluteal region on the right side was much more prominent than that on the left. On the latter, no tuber ischii could be felt. The left hip-joint was ankylosed, the femur being placed at a little more than a right angle with the trunk. On account of this deformity, the patient could only walk by leaning forwards and resting on the tips of the toes of the left foot, the pelvis being at the time rotated downwards towards the same side. The muscles of the left lower extremity were much less developed than those of the right, but the bones appeared to be of equal length. The lumbar and sacral regions were covered with old scars, some adherent to the subjacent bone, and said to be the result of bed-sores which followed the accident. There was also a large scar over the upper part of the left femur, and a smaller one over the great trochanter on the opposite side, in which situation an opening was said to have discharged until she was nine years of age, when menstruation began. Ever since the accident, there had been a thick yellow discharge from the vagina. The height of the patient was 4 feet 4 inches; her weight (not during pregnancy), 5 stone 4 lbs. The pelvic measurements were as follows:

Between iliac spines	5¾	inches.
Between iliac crests	6¼	,,
External conjugate (D.B.)	4¾	,,
From lower border of symphysis to tip of coccyx	3¼	,,
Bisischiatic.. about	1	,,
Conjugata vera .... ,,	1¼	,,

She was first seen by me on November 20th, 1882, at her own dwelling in Radnor Street, Saint Luke's. She had applied to be seen on account of a labial abscess, which burst while being examined by Mr. Mason, my assistant, who, recognising great pelvic deformity, and knowing that the full term of pregnancy was drawing near, requested my attendance. We ascertained that she last menstruated shortly before March 9th, on which day, and then only, coitus occurred, so that she was absolutely certain as to when she became pregnant. Calculating 275 days from this date, the labour would fall due on December 9th. Having measured the pelvis, I auscultated the abdomen. No uterine *souffle* was audible at any part, but the fœtal heart was plainly heard below and to the right of the umbilicus. On palpation, the head was found to be situated in the right iliac region, but no limbs could be made out. *Per vaginam* the os uteri could not be reached, and no part of the fœtus could be felt. Without any hesitation, I decided to perform Porro's operation as soon as I could make the necessary arrangements. My intention was to remove the patient to the City of London Lying-in-Hospital, adjacent to her home, to which institution I hold the appointment of consulting-physician, and where, oddly enough, she was born. She could not, however, be received there, as repairs to the building were going on. I, therefore, engaged a room for her in the house of one of the midwives to the charity, situate in Islington, the hospital undertaking the nursing, and providing all necessaries. She was removed to this lodging on November 21st.

The chart will show the pulse, temperature, and respirations from that date. The urine was of specific gravity 10[illegible], acid, containing mucus but no albumen. The chest-sounds were natural, except puerile breathing, with intensified expiratory sounds on both sides. The bowels were kept well relieved with castor-oil, and on the morning of the 27th, the day for which the operation had been fixed, an enema of soap and water was administered. No food, except half-an-ounce of beef-essence at 8 A.M., was given. The patient was placed on the operating-table at [illegible] P.M. There were present as spectators Drs. Matthews Duncan, Greenhalgh, and Burchell; Messrs. Alfred Cooper, Walter Griffith, Gripper, Vogan, and Dagg. Nitrous oxide gas and ether were administered by Mr. Mills. Mr. Knowsley Thornton kindly undertook to assist me. Mr. Mason took charge of the instruments, and was prepared to receive the child. The abdomen was first sponged with carbolic acid solution (1 in 40), the carbolic spray turned on, and after passing a catheter, to be sure that the bladder was empty, and to note its exact position in the abdomen, I commenced my incision. It extended from just below the umbilicus to about two inches above the symphysis pubis. A few parietal vessels were secured by Spencer Wells's pressure-forceps. The uterus being exposed, its anterior surface was noticed to be very livid in appearance, suggesting that the placenta was attached to the anterior wall; and therefore I made, as low down as possible—that is, at about the junction of the lower with the middle third—a small incision just large enough to admit the finger; a gush of venous blood occurred, and the membranes were seen. I immediately inserted the tips of each fore-finger, and tore the womb open transversely. There was no resistance. The membranes were not ruptured by this manipulation; therefore, knowing the exact position of the fœtus, I thrust my hand through them into the right iliac region, and, seizing the neck, without difficulty extracted the child. As it did not at once show signs of vitality, I dashed some of the carbolised water, in which the instruments were, over its face and chest, and it almost immediately cried lustily. I then tied the umbilical cord in two places, divided it, and handed the child over to Mr. Mason.

While I was thus engaged, Mr. Thornton had slipped his left hand into the pelvis so as to grasp the neck of the uterus and control hæmorrhage, and then, while holding the uterus with the left hand, applied the wire of Kœberlé's *serre-nœud* with the right, so as to include both ovaries and tubes, as well as the uterus at about the level of the internal os. The wire was then tightened, and the uterus, with the contained placenta, cut away with scissors. There was almost no bleeding; a sponge among the intestines came out unstained, as also another passed into Douglas's pouch. Solid perchloride of iron was then applied to the raw surface of the stump, two guarded pins were passed through it above the wire of the *serre-nœud*, and a strong silk ligature was placed beneath them for greater security. The edges of the lower part of the abdominal wound were drawn tightly round the pedicle, and brought together by a single China-silk suture below it, while eight or nine similar sutures were employed to bring together the peritoneum and abdominal parietes above. Carbolic gauze dressing was applied, and a flannel bandage put on over it. The patient was then placed in bed.

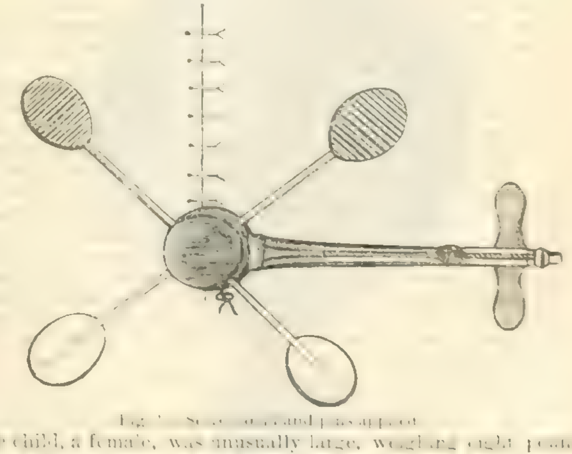


Fig. 1.—Serre-nœud and pins applied.

The child, a female, was unusually large, weighing eight pounds and a half, and measuring twenty inches in length. She was vigorous and well nourished. The time taken in the several steps of the operation was as follows:

Abdominal incision commenced	2.48	P.M.
Child removed and cord tied	2.50	,,
Serre-nœud applied	[illegible]	,,
Stitching of abdominal wound begun.........	3.8	,,
,, ,, ,, ended	[illegible]	,,
Patient placed in bed	[illegible]	,,

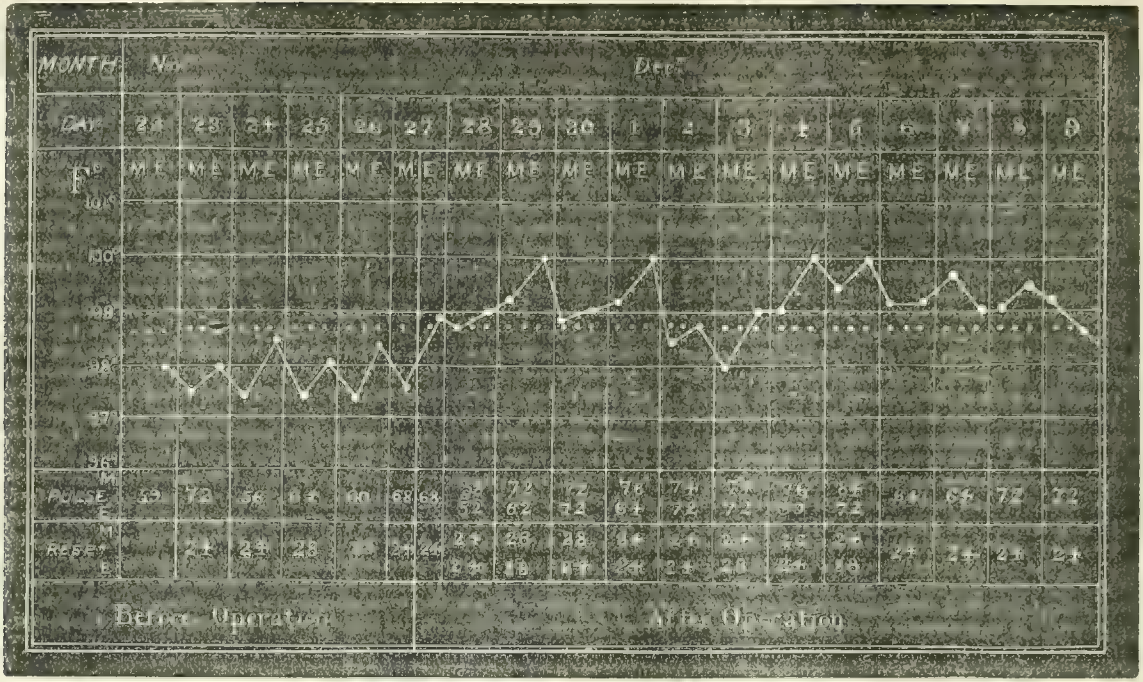


Fig. 2. Daily record of temperature, pulse, and respiration.

In giving a brief outline of my patient's progress, I may say at starting that her temperature at no time exceeded 100 Fahr., nor her pulse 94, as the accompanying chart shows.

Immediately after the operation, 20 minims of tincture of opium were administered by rectum, and this was repeated at 6 P.M. There was no sickness, except a little frothy mucus, while she was recovering from the anæsthetic. She had no pain or discomfort of any kind. The skin was very moist. At 8.30 P.M., a catheter was passed, and six ounces of urine were drawn off.

November 28th, 1.30 A.M. Three ounces of urine were drawn off.

2 A.M. Twenty minims of laudanum were given by the rectum.

9 A.M. She had had a good deal of sleep during the night, and felt comfortable. The draw-sheets and binder were removed, being saturated with urine. She had taken nothing but iced water since the operation, except occasionally a very little iced milk.

2 P.M. The draw-sheets were again found saturated, and were changed. Twenty minims of laudanum were given *per rectum*; after which she slept for three hours.

5 P.M. The wound was dressed under spray. No dressing was changed except that immediately surrounding the pedicle. The wire of the *serre-nœud* was tightened. A small sinus was noticed in the fold between the left labium majus and the thigh, discharging urine. The catheter passed into the bladder only drew off an ounce and a half of urine, the rest having evidently escaped through the fistula. The patient stated that her urine had escaped through this opening more or less during the last four months. It was decided to keep a catheter in the bladder continuously; I therefore inserted one made of celluloid, with an India-rubber tube attached, which communicated with a vessel placed beneath the bed. I ordered the tube of a Higginson's syringe to be passed into the rectum, and to be left there for ten minutes, three or four times a day, to allow flatus to escape.

9 P.M. The patient was placed on a water-bed, as I feared bedsores from dribbling of urine.

11 P.M. An ounce of essence of beef and 15 minims of tincture of opium were administered *per rectum*.

November 29th, 7.30 A.M. The patient suddenly complained that she could not see, and immediately afterwards fell into a state of eclampsia, bit her tongue, and was convulsed in all her limbs.

8.10 A.M. Mr. Mason arrived, and found the abdomen distended: the tube was therefore passed into the rectum. A considerable quantity of flatus escaped. Immediately afterwards, she again complained of loss of vision, and was again convulsed. She bit her tongue so that it bled. She became very livid. The fit lasted about a minute, and was followed by stertorous breathing. The muscles of the abdomen participated in the spasm, and some more flatus was expelled. The rectal tube was removed before she recovered consciousness.

9 A.M. I found her, on my arrival, quite sensible, and very anxious about her blindness. She could not discern my finger placed close to her. The urine gave no trace of albumen.

10 A.M. Essence of beef, with 20 grains of chloral-hydrate and 20 grains of bromide of potassium, was administered *per rectum*. A tablespoonful of milk was ordered to be given every half-hour.

2.30 P.M. Dr. W. H. Collins made an ophthalmoscopic examination, and reported as follows: "Media clear, pupils equal, tension normal. Fundus of each eye very grey and anæmic; outer zone of discs rosy, inner zones abnormally pale. No evidence of embolism whatever; in fact, there is present only the functional condition likely to be found in epileptic amaurosis." It is worthy of note that the patient had never, on any previous occasion, had an epileptic attack.

4.15 P.M. Bread and milk was given, and much enjoyed. Sight was improving. The rectal tube was passed; much flatus escaped.

6 P.M. Beef-essence, with 15 grains each of chloral-hydrate and bromide of potassium, was administered *per rectum*.

November 30th, 5 A.M. The enema was repeated; she slept four hours after it.

10 A.M. The wound was dressed under spray, and the wire of the *serre-nœud* tightened. She could now see quite distinctly. I ordered that the chloral and bromide of potassium should be discontinued, and that 2 minims of liquor atropiæ and 10 minims of liquor morphiæ hydrochloratis be given by the mouth in an ounce of water every four hours.

December 1st. She slept very well during the night. She had taken two quarts of milk, with occasionally some bread in it, and a pint of beef-essence, during the last twenty-four hours.

December 2nd. The mammæ were greatly distended, the left one especially. I ordered belladonna-plasters to be applied to them. During the last twenty-four hours, she had passed sixty-four ounces of urine through the catheter.

5 P.M. She complained of cutting pain in the bladder. The catheter was removed.

December 3rd, 11.30 A.M. The wound was dressed under spray. The whole of the dressings and plaster were removed. The *serre-nœud* was tightened. The abdominal wound was quite healed. There was no redness. The catheter was replaced in the bladder.

December 4th. An enema of soap and water was given. A large solid motion passed.

December 5th. The wound was dressed under spray. All the stitches were removed except the one below, and the one immediately above, the pedicle. The *serre-nœud* was slightly tightened. One of the pins was removed because it pressed uncomfortably on the lower abdomen, and it was thought that a single pin would answer every purpose. Strips of adhesive plaster were placed across the abdominal wound for support. The patient took some fish for dinner.

December 6th. An enema of soap and water was given, and a copious solid evacuation followed. For dinner, she had some pheasant.

December 8th. The wound was dressed under spray. The pedicle was almost detached. The sulcus around it was carefully swabbed out with cotton-wool soaked in carbolic lotion.

December 9th. The bowels were well relieved after an enema.

December 10th. The wound was dressed under spray. The *serre-nœud* was found detached, and was removed. The two remaining sutures were taken out.

December 11th. The catheter was removed, no urine having flowed through the sinus for the last three days.

December 17th. The sulcus had been cleansed daily. Urine had been passed naturally; none through the sinus, which was quite healed. The patient was lifted on to the couch.

December 28th. The abdominal wound measured four inches to below the sulcus. The depth of this was an inch and a half. All discharge had ceased. The patient could walk without discomfort, and to-day left the lodging. She was ordered to wear a belt.

On August 1st of this year (1883), I had an opportunity of seeing her. She appeared in perfect health, and said she had never felt better in her life. She has lost the vaginal discharge. She has not menstruated. The abdomen shows hardly any scar, and no depression where the pedicle was placed.

REMARKS.—The details of this remarkably successful case strongly impress one with the advantages to be gained by Porro's operation; and yet, looking at the table, and taking from it the results, the first idea will probably be not altogether favourable; for, out of the 134 operations, 75 deaths are recorded against 59 recoveries.

In comparing these results with those of the old Cæsarean operation, I would call attention to the following astounding facts. In the Vienna Hospital, for a hundred years, there had not been a recovery after a Cæsarean section; whereas recently, in three cases of Porro's operation performed in one week by Professor Carl Braun, the whole of the patients recovered. In Italy, the old Cæsarean operation was almost always fatal. Professor Chiara, of Milan, writes that, out of 62 cases operated on by Porro, Lazzati, Billi, and himself, only 3 recovered. On the other hand, nearly half (23 out of 53) of the Porro's operations have been successful, notwithstanding that the operation has been performed by as many as thirty-five different surgeons. Again, up to May 20th, 1879, when Professor Tarnier performed his first Porro's operation at the Maternité in Paris, every Cæsarean case had proved fatal there since 1787. The condition of his patient was most unfavourable, nevertheless, she recovered. In our own city, I know that my late colleague, Dr. Greenhalgh, performed Cæsarean section ten times, with only one recovery; while I have myself seen it performed by four different operators, every case proving fatal. In Prague, Professor Breisky has performed Porro's operation four times; in each case the woman has recovered, and the child has been saved.

The advantages claimed for Porro's operation over the old Cæsarean section are these.

1. The uterus being removed, and the stump of it being outside, there is no danger of bleeding within the peritoneum, or of exudation of lochia, as before, through the incised uterine wall. At the time of operation, the risk of hæmorrhage is much less; for, as soon as the cervix is constricted, it ceases, and this may be very promptly done.

2. Should bleeding occur from the pedicle, being outside it is under control—an advantage which is, however, sacrificed by the intraperitoneal method.

3. The uterus and ovaries having been removed, the dangers arising from a subsequent pregnancy are avoided.

I now pass to the several steps of the operation.

1. It is well to pass a catheter, to determine the exact position of the bladder.

2. *Incision through the Abdominal Parietes.* This, in respect to the length of the incision, brings me to speak of what is known as Müller's modification. At his first operation, February 4th, 1878, Müller conceived the idea of bringing the uterus outside the body, and constricting its base with a provisional elastic tube before opening it, so as to avoid any hæmorrhage from the cut surface, and to prevent the escape of liquor amnii into the peritoneal cavity. Should the fœtus be putrid, as in his case, there is no doubt that this method offers advantages; but, otherwise, it appears to me to be unnecessary as far as the risk of hæmorrhage is concerned, which, by skilful manipulation, can be quickly controlled when opening the uterus *in situ*; while, on the other hand, it is certain that the larger the incision, the greater the risk to the patient, and Müller's modification cannot be effected without a long incision extending considerably above the umbilicus. This explains why, as will be seen in the tables, Müller's method was attempted in several cases, but was relinquished.

3. *Incision into the Uterus.* It has been recommended that careful auscultation should be practised beforehand, in order to determine, by the uterine *bruit*, the situation of the placenta. Radford says: "The audibility of the placental *souffle* enables us to investigate the quarter whence the murmurs proceed; and, by attention, we may nearly always assure ourselves in what vicinity of the uterus the placenta is fixed. If this sound be not heard, we have a right to conclude that this organ is not within reach of the knife, if the infant be still alive." Now, I have no hesitation in saying that this is fallacious. On several occasions, not only I, but [illegible] listened in my patient for the uterine *souffle*; it was inaudible, and yet the placenta was attached entirely to the anterior wall, and to no other part. In other cases, where the *souffle* has been heard in front, the placenta has been found attached to the posterior wall. The appearance of the exposed uterus is certainly indicative. I made my incision as low as possible, because of the purple or livid hue that it presented, and I only just escaped the attachment of the placenta. My method of opening the uterus was a novel one, and I see no reason why it should not be always adopted. First, as to its situation and direction; it was just above the internal os and transversely. Here the incision is more likely to gape readily, to be out of the way of the placenta, and to be within immediate access of the neck of the child. Then the tearing is effected very rapidly, and with less likelihood of bleeding than by cutting.

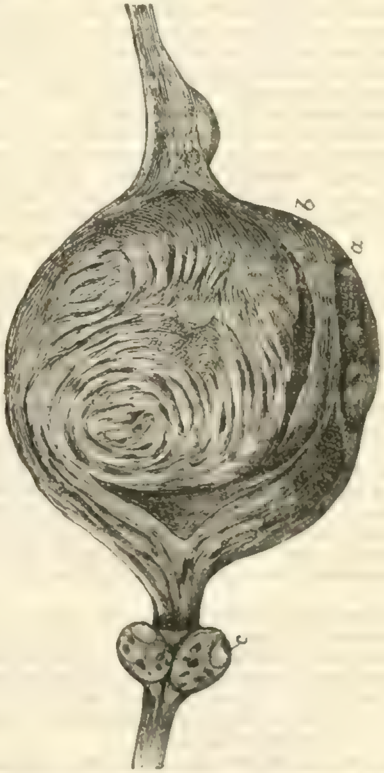


Fig. III. The drawing shows the placenta [illegible] attached [illegible] anterior wall and partly extruded by the contraction of the uterus after delivery; [illegible] on the anterior uterine wall, through which the fœtus was extracted; and the corpus luteum in the right ovary.

4. *Extraction of the Child* by the neck seems to offer advantages over that by the lower extremities, for the uterus has been known to contract round the after-coming head, causing great difficulty in

its extraction. This is, however, not a matter of great moment.

5. *Management of the Placenta.*—In many of the cases tabulated, the placenta was removed before the separation of the uterus. This appears to be not only unnecessary, but to offer great disadvantages, by occasioning loss of time, and by favouring the occurrence of hæmorrhage.

6. *Management of the Pedicle.* This is perhaps the most important step of any in the operation. The first division must be between the extraperitoneal and the intraperitoneal treatment.

We will take the intraperitoneal first, and shortly dismiss it. Professor Isaac Taylor, of New York, adopted it in his operation of April 8th, 1880, believing that hitherto the pedicle had been always kept out. Professor Taylor had not heard of Professor Veit, of Bonn, having, on March 21st (eighteen days previously), dropped the pedicle in, as is shown from his paper in the *American Journal of the Medical Sciences*, July 1880. Both women, however, died, although, in each case, the prospects were favourable before the operation. And, in respect to this mode of treatment, I shall merely say that it will be seen from the table that, out of fourteen patients on whom it was practised, no fewer than eleven died, while one of the remaining three had a protracted convalescence from pleuritic complication, and was seriously ill when last heard of. It is only fair to add that the operator, Dr. Kabierske, jun., attributed this to catching cold, and not to septic causes. However, those who have had large experience in hysterectomy, have found similar unsatisfactory results from dropping in the pedicle. There is no doubt it is the success of this method in regard to ovarian operations, that has incited surgeons to attempt it in uterine amputations. There is a wide difference, however, in the structure and situation of the pedicle, which accounts for the difference in the results.

The methods that have been employed in securing and treating the pedicle outside the abdomen have been very numerous; and undoubtedly the success or failure, recovery or death, has depended, in great measure, upon the plan adopted. It is, therefore, most important to determine, if possible, which is the best. Porro used Cintrat's constrictor, leaving the whole apparatus on under the dressing. This plan has been pretty generally followed in Italy, though some have merely employed the instrument to tighten the wire ligature, removing it directly afterwards. Chiara left it on only in his first operation, and writes to me that it is a very bad plan. Mangiagalli informs me that he shares that opinion. It seems to me that the instrument is unnecessarily large and cumbersome, and that by the little instrument I used—Kœberlé's *serre-nœud*—every desired object is effected. It is easy of application; and, as the pedicle shrinks and becomes loose, it can, from time to time, with the greatest facility, be tightened up. It is too small to be of any inconvenience to the patient.

It will be seen from the table that in Case VIII, notwithstanding that Cintrat's constrictor was left on, the pedicle became torn loose by vomiting. Now, to obviate this, it is well to pass long pins through the pedicle, guarding their ends, as is shown in the engraving illustrating the treatment in my case. (Fig. 1.) Acupressure-pins and others have been used, and it has been suggested that the material used should be ivory; but I think only metal has been employed.

Instead of a wire-loop, in some places, particularly in Vienna, the chain-*écraseur* is in favour. It is applied by means of a Péan's and Billroth's modification of Chassaignac's *écraseur*. The instrument is then removed, except the top screw, which is left with the chain to keep it secure. The objection to this instrument seems to me, that sometimes the chain cuts through the pedicle, causing bleeding from it. The table will show more than one instance of this, necessitating the subsequent employment of some kind of clamp.

It will be seen that, in tightening the wire of Cintrat's constrictor, occasionally it has given way in the loop. Other methods of securing the pedicle are by ligaturing it either with metal or silk, and stitching it to the lower angle of the abdominal wound. Hegar of Freiburg employs an elastic ligature, and is very particular to use separate stitches to keep the peritoneum of the pedicle and that of the abdominal wall together.

Besides the *serre-nœud* and the long pins, a strong silk ligature may be applied, to make it doubly secure, as in my case.

7. *Drainage.*—The table shows that, in many cases, drainage-tubes have been passed through Douglas's pouch into the vagina, as well as tubes passed through the abdominal wound. In Italy particularly, this plan has been adopted; and Dr. Perruzzi lays great stress on the value of this treatment. It appears to me, however, that, at all events, with strict Listerian precautions, it is quite unnecessary, and only adds a complication in the after-treatment. With such a temperature-chart as I show, of what value could drainage-tubes be? It is worth noting, however, that, should septic symptoms arise, the abdomen or Douglas's pouch might be opened subsequently, and drainage-tubes employed, possibly with advantage. (See Cases III and XIX.) The remaining steps in the operation—cleansing the peritoneum and closing the abdominal wound—require no comment; they are precisely the same as in ovariotomy; so with the dressing, except that great care must be taken to thoroughly protect the *serre-nœud* and pins with carbolic gauze, so as to leave no track communicating with the exterior.

I hope that the time is not far distant when Porro's operation may become one of selection, displacing, to a great extent, craniotomy. I see no reason why its results, when performed under favourable circumstances, should not compare well with those of ovariotomy, and with those of hysterectomy for the removal of large uterine fibroids; and see what splendid results we have now arrived at with these operations! The induction of premature labour, where it can be performed with a prospect of the birth of a living child, must, of course, always be selected in preference to Porro's operation; but where the deformity is too great for this, and where, also, it has been left too late for this, the full term of pregnancy being almost reached, or, perhaps, labour having already commenced, the condition of the patient being still satisfactory, I hope, ere long, results will show that this operation should be at once selected, instead of sacrificing the life of the child by craniotomy, and submitting the life of the mother to serious risk in its performance. Before this can be generally recognised, the statistics must show better results. In attaining this object, it is my hope that this paper, and the discussion which will follow, will assist, by showing what appears to be the best method of carrying out the operation in its several details, and by pointing out the reasons of the large proportion of its failures.

It may be argued that, my table showing a total mortality of 55.97 per cent., the operation should only be performed as a *dernier ressort*: my answer is, that herein lies one great reason for such a high mortality. Out of the 134 cases, you will find 70 only in which the patient's condition was "favourable," in which the pedicle was not dropped in, and in which the success of the operation itself was not prejudiced by any avoidable accident. Of these 70 cases, 47 recovered, 23 died, a mortality less than 1 in 3. The question of selection should be based on these figures; not upon a summing up of total results without regard to the circumstances, so far as we can investigate them, which in each case influence the result. It is manifestly unreasonable to include in the same category as cases undertaken under fair conditions, operations performed when the patient was almost moribund from disease, or exhausted from days of labour, during which the soft parts had been bruised, or lacerations had occurred in the attempts to deliver by means of the forceps or cranioclast.

TABLE I. *showing the number of Cases in each Country, with Results.*

Country.	No. of Cases.	Result to Mother. Recovered.	Result to Mother. Died.	Result to Child. Living.	Result to Child. Stillborn.	Mortality per cent. of Mothers
[1]Italy	53	23	30	45	9	56.6
[1]Austria	30	18	12	29	2	40
Germany	21	6	15	15	6	71.43
France	12	5	7	8	4	58.3
Gt. Britain	5	1	4	4	1	80
America	4	1	3	3	1	75
Belgium	4	2	2	4	0	50
Switzerland	2	2	0	1	1	0
Spain	1	0	1	0	1	100
Russia	1	0	1	1	0	100
Holland	1	1	0	1	0	0
	134	59	75	111	25	55.97

[1] Italy and Austria have each a case of twins, born living.

TABLE II, *showing number of Operations in each Year, with Result to Mother.*

	Total.	Recovered.	Died	Mortality per cent. of Mothers.
1876	1	1	0	0
1877	7	1	6	85.7
1878	15	7	8	53.3
1879	17	10	7	41.2
1880	32	12	20	62.5
1881	21	8	13	60
1882	21	10	11	[illegible]
1883 (8 months)	17	10	7	[illegible]
	134	59	75	55.97

TABLE III, *showing Indication for Operation.*

Rickets	88	Fibroid of uterus	5
Malacosteon	25	Cancer of cervix	2
Dwarf pelvis	4	Atresia vaginæ	2
Roberts's pelvis ...	1	Partial rupture of uterus . .	1
Pelvis deformed from accident	1	*In extremis* .	3
Arthritis deformans ...	1		
Osteo-sarcoma of pelvis ..	1	Total .	134

TABLE IV, *showing Causes of Death.*

Septic peritonitis	22	Strangulation of intestine .	1
Septicæmia	9	Embolism (following phlegmasia dolens) .. .	1
Peritonitis	14	Loss of blood and carbolic acid poisoning	1
Shock	16	Retraction of pedicle ..	[illegible]
Tetanus	3	Anæmia	1
Secondary hæmorrhage	2	Cerebral anæmia ...	1
Pneumonia and bronchitis pre-existing)	2		
Hæmorrhage from pedicle (primary)	1	Total . ..	75

TABLE V, *showing number of Cases in which Pedicle was dropped in, and of those in which it was kept out, with Result to Mother.*

	No. of Cases.	Recovered.	Died.
Intraperitoneal	13	3	10
Extraperitoneal	121	[illegible]	[illegible]
	134	61	73

Dr. HEYWOOD SMITH (London) gave the following particulars regarding a case of Porro's operation performed by him (Case 117 in Dr. Godson's table). The patient was E. C., aged 20, single, of strumous cachexia, and very rickety. Labour began on the morning of January 6th, 1883. The "show" began on the morning of the 7th, and the midwife felt the cord presenting. On the 8th, the membranes ruptured at 7 A.M. The medical officer of St. Giles's workhouse, where she was admitted at 9.30 A.M., found the funis cold and perforated. Dr. Heywood Smith arrived at 1.45 P.M., and attempted to deliver with the cephalotribe, and also with craniotomy-forceps, but, finding it impossible, he decided on performing Porro's operation. The operation was commenced at 4.15, and occupied about an hour. The uterus was drawn out of the wound before it was opened; the stump of the cervix was secured with a *serre-nœud*. The operation was performed under carbolic spray. The patient did fairly well, the temperature not rising much till the third day (102.2°), but she succumbed to a low form of peritonitis on the fourth day.

Mr. LAWSON TAIT (Birmingham) congratulated Dr. Godson on being, so far, the only successful performer of the operation in Great Britain. Of course he could not agree with Dr. Godson in his estimate of Listerism. He was in the habit of doing four or five abdominal sections every week, and he had a mortality which was not approached by any user of the Listerian method.

Dr. GRIGG (London) congratulated Dr. Godson on the success which had attended his case. He thought that the difference between Porro's operation and Dr. Godson's was so great, that the latter might almost be called a new operation. Dr. Grigg's experience of Cæsarean section had been so unfavourable, that any operation which gave a fair chance of success should be hailed with gratitude. He had performed Porro's operation once, and a modification of it twice. The latter cases were most unfavourable, and the surroundings of the first were equally bad. Still, from the experience gained in these cases, he felt sure that, with the modifications proposed by Dr. Godson, success might be fairly reckoned on. The mode adopted by Dr. Godson, of tearing the uterus across, he strongly approved, and especially the non-removal of the placenta and the keeping the pedicle externally. Wire was apt to cut through. He regarded Mr. Lawson Tait's modification of Kœberlé's *serre-nœud* as an improvement, and would certainly use it if called on again to perform the operation. The chief danger in Porro's operation was division of the ureters. In his own cases, he had been fortunate enough to avoid this accident. In Dr. Godson's mode of operating, this danger was much reduced, if not entirely removed.

Dr. LLOYD ROBERTS (Manchester) said that all must feel grateful to Dr. Godson for the able manner in which he had brought this subject before the Association. He had almost made this operation his own in this country, his case being the only successful one here to mother and child. Dr. Roberts's experience in cases suitable for this operation had been acquired from cases in which the Cæsarean section had been performed. Very often, the Cæsarean section had been done under the most unfavourable circumstances; still the statistics showed as good results as in Porro's operation. Hitherto, Porro's operation had been mostly performed in large cities with every appliance at hand, and by the best operators; still the patients died of shock, of hæmorrhage, and of septicæmia. No doubt, with a larger experience, the mortality would be reduced. He thought Dr. Godson's suggestion of making the uterine incision in a transverse direction a good one, as by this means there was less danger of wounding the uterine artery. The further suggestion of leaving the placenta attached to the uterus was an important one, as it reduced the risk of blood entering the peritoneal cavity. Dr. Godson seemed to hope much from strict Listerism in these cases; but Dr. Roberts did not attach much importance to this.

Dr. WARD COUSINS (Southsea) referred to the critical moment of the operation—the opening of the uterus—when the danger of hæmorrhage was extreme. Dr. Godson had the skilled assistance of Mr. Knowsley Thornton, who grasped the neck of the uterus during the laceration of the body of the organ, and removal of the child. As all operations could not command the enormous advantage of skilled assistance, he suggested the application of the clamp, at least with partial closure, at this stage of the operation. Its application of course could be greatly helped by lifting up the uterus out of the pelvis. The instrument described by Mr. Lawson Tait appeared admirably adapted for that purpose. There was no fear of this wire cutting through the tissues, and causing hæmorrhage; but Dr. Cousins thought that, even with the smallest wires, hæmorrhage might be avoided by very slowly closing the *écraseur*. He had often taken half an hour during serious operations in tightening the wire.

Dr. WALTER (Manchester) drew attention to the importance of deciding between Porro's operation and Cæsarean section, *plus* removal of the uterine appendages; for he believed that simple Cæsarean section ought not to be performed without recollecting the chance of the occurrence of future pregnancy; and, therefore, in those cases where the deformity for which the operation was undertaken was so great as to prevent a child from being delivered through the natural passages by the induction of premature labour, he thought it the duty of the operator to prevent future pregnancy. Hence it was very essential to decide between the mortality of Porro's operation, and that attending removal of appendages along with Cæsarean section. Dr. Walter alluded to a case of Cæsarean section performed at the North Staffordshire Infirmary by Mr. Alcock, about two years ago. In this case, the woman recovered rapidly, but he heard that she had since died in America, having again undergone Cæsarean section. Had Porro's operation been well known when she was under Mr. Alcock's care, the woman might yet be living.

Dr. OGILVIE GRANT (Inverness) said that, while acting as a clinical assistant under Professor Breisky of Prague, he saw two cases; one case before the operation had been performed, and the other case afterwards. Professor Breisky's remarkable statistics had been mentioned by Dr. Godson; the mother and child recovering in all four cases operated on. One point on which Dr. Breisky insisted was to undertake the operation immediately before labour commenced; he carried out antiseptics to the most minute detail, and did not use drainage.

Dr. GODSON, in reply, said that the wire attached to Kœberlé's *serre-nœud* was not a steel one. It was a very soft thick wire, metallic, like Mr. Tait's, but equally unlikely to cut through the pedicle. He would take care to examine Mr. Tait's instrument; and if he saw advantages in it over Kœberlé's, he would certainly adopt it. The wire employed was a matter of choice with either instrument. He trusted that Mr. Tait's remarks might deter future operators from adopting the intraperitoneal treatment. The value of antiseptics he would not enter upon; he would merely say that the employment of them, at all events, ensured cleanliness, which otherwise would be frequently neglected. It would be impossible to compare the statistics of the old Cæsarean with the Porro's operation. There were scores of Cæsarean operations performed in villages and remote parts which, proving fatal, had never been heard of; while, on the other hand, it was almost certain that his (Dr. Godson's) table contained, with very few, if any, exceptions, all the Porro's operations that had occurred over the whole world. In reply to Dr. Ward Cousins, Dr. Godson said that, having so eminently skilled an assistant, he deputed to him what, under other circumstances, he should have done himself. The operator could equally well grasp the uterine neck to control hæmorrhage while applying the wire of the *serre-nœud* with the other hand, the assistant attending to the child. No vessels were tied; everything was included in the loop of the *serre-nœud*, and all above it was cut off. Amputation of a ruptured uterus was not a [illegible] operation; there was no Cæsarean section in it. The advantages and disadvantages of this operation [illegible]

TABLE I.—*True Porro's Operations.*

No.	Date.	Operator and Locality.	Hospital or Private house	Age.	Number of previous labours	Cause of difficulty.	Available pelvic space.	Height of Woman.	Time in labour before operation.	Condition of woman at time of operation	Result to woman.	Result to child	Cause of death in woman
1	1876 May 21	Prof. E. Porro, Pavia, Italy	Hos.	25	Primipara	Rickety pelvis, osteomalacia	C.V. 1⅝in	4ft. [illegible]	[illegible]	Favourable	Recovery	Living	—
2	1877 [illegible]	Prof. G. Inzani, Parma, Italy	P. ho.	2[illegible]		Osteosarcoma of pelvis		Medium	About 24 hours	Exhausted by malignant disease	Died on 3rd day	..	Septic peritonitis
3	[illegible] 28	Prof. A. Hegar, Freiburg, Germany	Hos.	[illegible]	..	Rickets and kyphosis	Contracted at outlet	[illegible]	[illegible]	Albuminuria, weakness	Died on 5th day	..	..
4	April 25	Dr. G. Previtali, Bergamo, Italy	..		Primipara	Rickets			[illegible]	Exhausted by long labour	Died in [illegible]	Stillborn	Shock
5	June 22	Prof. Josef Späth, Vienna, Austria	..	[illegible]	6, [illegible]	[illegible]	C.V. 2[illegible]	4ft. 5in	[illegible]	Favourable	Recovery	Living	
6	Sept. [illegible]	..	..	29	..	..	C.V. 3⅜in, R. [illegible] cot. 1[illegible]in	4ft. 7in.	[illegible]	Unfavourable	Died on 5th day	Stillborn, putrid	Septicaemia
7	Sept. [illegible]	Prof. Carl von Braun Fernwald, Vienna, Austria	..	[illegible]	7; [illegible], last one turning	..	C.V. 3in, R. [illegible] cot. 1¼in	[illegible]	[illegible]	[illegible]	Died on [illegible]	Living	Septic peritonitis
8	Dec. 1[illegible]	Prof. D. Chiara, Milan, Italy		[illegible]	Primipara	Rickets	C.V. 1¼in	4ft. [illegible]	Not [illegible]	Favourable	Died on 7th day	..	Shock from drawing out of pelvis and protrusion of bowel
9	1878 Feb. 4	Prof. P. Müller, Berne, Switzerland	..	7		[illegible]	C.V. [illegible] pelvis rostrate, contraction of outlet	4ft. [illegible]	[illegible]	[illegible]	[illegible]	Stillborn	
10	April 22	Dr. [illegible], Italy	..		[illegible]	[illegible]	[illegible]	Medium	Not [illegible]	[illegible] bronchial catarrh	Died in [illegible] hours	Twins alive, but died within an hour	[illegible] with anasarca
11	April [illegible]	Prof. A. Wasseige, Liège, Belgium	P. ho.	[illegible]	Primipara	Rickets	C.V. 2in	4ft. [illegible]	[illegible] hours	Favourable	Recovery	Living	—
12	May 1[illegible]	Prof. Carl von Braun, Fernwald, Vienna, Austria	Hos.	2[illegible]	..		..	4ft. 1[illegible]in	[illegible] hours	..	..	..	—
13	May 22	Prof. D. Chiara, Milan, Italy	..	2[illegible]	[illegible]	..	C.V. 2[illegible]in	4ft. [illegible]in	12 hours	..	Died on 4th day	..	Septic Peritonitis
14	May 2[illegible]	Prof. D. Tibone, Turin, Italy	..	27	Primipara	..	C.V. 2[illegible]in	4ft. [illegible]	..	..	Died in [illegible] hours	..	..
15	June [illegible]	Prof. C. C. Th. Litzmann, Kiel, Germany	..	29	[illegible]	General contracted pelvis	C.V. 3½in.	4ft. [illegible]in	3 days	[illegible] occlusion of external os	Died on 6th day	..	.. [illegible] found in [illegible] cervix
16	July [illegible]	Prof. A. Breisky, Prague, Austria	..	[illegible]2	Primipara	Rickets	C.V. 2⅛in	4ft. [illegible]	A [illegible] hours, waters broke	Favourable	Recovery	..	—
17	Aug. [illegible]	Prof. A. Wasseige, Liège, Belgium	..	21	,,	,,	C.V. 1in	3ft. [illegible]in	A few hours. Water not broken	Not very favourable	Died in 16 hours	..	Septic peritonitis
18	Aug. 2[illegible]	Prof. C. [illegible], [illegible], Italy	..	[illegible]	..	.. (pseudo-osteomalacia)	C.V. 2[illegible]in	3ft. 11in	[illegible] hours	Favourable	Recovery	..	—
19	[illegible] 16	Dr. H. Riedinger, Brünn, Austria	..	[illegible]	..	Rickets	C.V. 2[illegible]in	4ft. 7[illegible]in	24 hours	..	..	..	—
20	Oct. 7	Dr. H. Fehling, Stuttgart, Germany	..	[illegible]	..	.. (kyphoscoliosis)	C.V. 1[illegible]in	4ft. 4in.	15 hours	..	..	Died on 7th day	Septicaemia
21	Dec. 1[illegible]	Prof. D. Chiara, Milan, Italy	..	[illegible]	6	Malakosteon	Could not be reached	3ft. 4⅞in	24 hours	..		Living	—
22	Dec. 1[illegible]	Prof. Gustav Braun, Vienna, Austria	..	[illegible]	Primipara	Rickets	C.V. 2[illegible]in	3ft. 10in	..	..	Died on 3rd day	..	Septic peritonitis
23	Dec. 30	Dr. G. Previtali, Bergamo, Italy	..		..	..		—	One day	Prostrate from fear	Died in 30 hours	Stillborn	Shock
24	1879 Jan. 17	Prof. D. Tibone, Turin, Italy	..		..	..	C.V. 2[illegible]	4ft. [illegible]in.	Membranes unruptured	Favourable	Recovery	Living	—
25	Feb. 2	Dr. A. Fochier, Lyons, France	..	[illegible]	..	[illegible]	C.V. 1[illegible]in	4ft. 5in	6 hours	Not very favourable	..	..	—
26	Feb. 11	Dr. P. Coggi, Cremona, Italy	..	[illegible]	..	Rickets	C.V. 2in	4ft. 2[illegible]in	A few hours	Favourable	Died on 5th day	..	Septic peritonitis
27	Feb. 24	Prof. S. Tarnier, Neuilly, France	..	[illegible]		[illegible]	Normal	Average	7 days	Very unfavourable	Died on 3rd day	Stillborn	Septicaemia
28	Mar. 1	Prof. D. Tibone, Turin, Italy	..	[illegible]	..	Rickets	C.V. 1½in	4ft. 1in.	Not commenced	Favourable	Died on [illegible] day	Living	Septic peritonitis

TABLE I. *True Porro's Operations.*

Treatment of pedicle.	Dressing, ordinary or Listerian.	Duration of operation.	Special notes.	Reference.
Kept out with Cintrat's constrictor	Ordinary, drainage through Douglas' pouch and abdominal wound	[illegible] min.	Uterus opened *in situ*; constrictor removed on fifth day	Annali [illegible] Medicina, Milano, 1876, vol. 2[illegible].
Pedicle tied in two parts by metallic suture, and fixed in lower part of abdominal wound	.. .	[illegible] mins	Operation performed at Borgo S. Donnino, 25 miles from Parma; uterus opened *in situ*	Not published. Information from operator through Dr. [illegible]
Double metallic ligature through pedicle, over which écraseur chain, and transfixed by three pins	Listerian dressing, no spray	[illegible] mins	On third day passed a drainage-tube through Douglas' pouch, and much turbid fluid escaped; uterus opened *in situ*	Centralblatt für Gynäkologie, [illegible] Information direct from operator
Kept out with Cintrat's constrictor	Ordinary; drainage through Douglas' pouch and abdominal wound		Brought to hospital almost moribund; uterus opened *in situ*	Pamphlet of Dr. Carlo [illegible] 1879. Communication direct from operator.
Kept out by ligature and écraseur chain	Listerian, with spray; drainage through Douglas' pouch and abdominal wound	1 hour	24 days under preparation in hospital; uterus opened *in situ*	Wiener Med. Wochenschrift, 1878. Communication direct from Dr. Lampe, [illegible]
.. ..	.. ..		Profuse bleeding during operation; placenta detached before uterus was drawn out and écraseur applied	Wiener Med. Wochenschrift, 1878; Centralblatt für Gynäkol., 1878, No. [illegible], p. [illegible] Communication direct from Dr. Lampe, Assistant.
Kept out, stitched in lower part of abdominal wound, and écraseur chain left on	Listerian with spray		Uterus opened *in situ*	Lo Sperimentale, Florence, 1879; Welponer, Wiener Med. Wochenschrift, [illegible], No. [illegible]; Pawlik
Kept out with Cintrat's constrictor	Listerian, with spray; drainage through Douglas' pouch and abdominal wound	45 mins	Pedicle torn loose by vomiting; constrictor left on; uterus opened *in situ*	Annali Universali di Medicina, Milano, 1878. Communication direct from operator.
Kept out with Maisonneuve's constrictor	Listerian, drainage through Douglas' pouch		Müller's modification; drainage tube removed on fifth day	"Der Moderne Kaiserschnitt," von P. Müller, Berlin, Hirschwald, 1882
Kept out with Cintrat's constrictor, and two long pins surrounded by elastic ligature	Listerian, without spray	40 mins	Operation performed not for dystocia, but *in extremis*, towards the end of pregnancy, induction of labour being unsuccessful	Annali Universali di Medicina, Milano, 1878, vol. 2[illegible]; Giornale Veneto delle Scienze Mediche, Feb., 1879.
Kept out by écraseur chain, and long pin	Listerian with spray, drainage through Douglas' pouch	1 hour	Écraseur tightened 9th day, and removed a few days later; uterus opened *in situ*	Ann. Soc. Méd. Chirurg. de Liège, [illegible] xviii; Bulletin Acad. Royale de Médecine de Belgique, [illegible] No. [illegible] Communicated direct from operator
Kept out by écraseur chain, Wells' clamp applied on 2nd day	Listerian, with spray		Müller's modification attempted but relinquished	Lo Sperimentale, Florence, 1879; Welponer, Wiener Med. Wochen., 1879, [illegible]
Kept out with double metallic ligature and long pin	Listerian with spray, drainage through Douglas' pouch and abdominal wound	42 mins	Müller's modification; metallic ligature applied with Cintrat's constrictor, which was then removed	Annali Universali di Medicina, Milano, 1878. Communication direct from operator.
Kept out with Cintrat's constrictor, and two long pins	Listerian, with spray; no drainage	50 mins	Müller's modification; womb got out with great difficulty, and bruising, after the membranes were punctured [illegible]	Annali di Ostetricia, etc., Milano, 1879, p. 124. Communication direct from operator
Ligatured and kept out	.. ..	2 hours	Müller's modification, elastic bandage	Centralblatt für Gynäkol., 187[illegible] [illegible]
Kept out by an acupressure needle between two Cintrat's wire sutures	Listerian; drainage through abdominal incision	1 hour	Müller's modification	Archiv für Gynäkol., xiv, Leipzig, 187[illegible], [illegible] 120. Communicated direct from operator.
Kept out with Cintrat's constrictor	Listerian with spray; drainage through Douglas' pouch	75 mins	Severe hæmorrhage during operation caused by chain of écraseur cutting through pedicle. At necropsy blood clots found in peritoneum; Müller's modification tried, but relinquished	Bull. de l'Académie Royale de Méd. de Belgique, [illegible] No. [illegible] Communicated direct from operator.
Kept out with Cintrat's constrictor and long pin	Ordinary; drainage through Douglas' pouch and abdominal wound	[illegible] mins	Uterus opened *in situ*; constrictor left on, fastened to right thigh, removed on twelfth day	Pamphlet of Dr. Carlo [illegible], Brescia, 1879, tip. F. Apollonio. Communication direct from operator
Kept out. Stiched to lower angle of wound and chain of Péan and Billroth's écraseur left on	Listerian with spray; drainage-tube through abdominal wound	2 hours	Uterus opened *in situ*; abdomen opened [illegible] days after operation on account of septic symptoms, and drainage tubes inserted	Wiener Med. Wochenschrift, [illegible] Communicated direct from operator
Kept out by Spencer Wells' clamp	Listerian with spray	1 h[illegible]	Müller's modification; clamp was substituted for Cintrat's serre-nœud, the wire having cut through the pedicle	Centralblatt für Gynäkol., [illegible] Information [illegible] operator
Kept out with écraseur of Chassaignac, and fixed in lower angle of abdominal wound	.. ..	[illegible] mins	Müller's modification tried, but relinquished	Annali Universali di Medicina, Milano, 1878, vol. 2[illegible]. Communication direct from operator
Kept out. Écraseur chain left on	Drainage tube through abdominal wound		Müller's modification	Wiener Med. Wochenschrift, [illegible]
Kept out with Cintrat's constrictor	Listerian; drainage through Douglas' pouch and abdominal wound		Uterus opened *in situ*	Not published. Communicated direct from operator.
.. ..	Listerian, with spray	[illegible]	.	[illegible] Communication [illegible]
Fixed in lower angle of wound with double metallic ligature	Listerian, with spray, no drainage	[illegible]	..	[illegible] Tocologia [illegible] 875.
Kept out by Cintrat's serre-nœud and long pin	.. .	[illegible]	Müller's modification	Communication direct [illegible]
.. .	.		Müller's modification [illegible]	[illegible] August 1879 [illegible] Communication from Dr. [illegible] Assistant
Kept out with double metallic ligature through centre of pedicle tightened by Cintrat's constrictor, also long pin	.. .	.	[illegible] during operation	[illegible] Dec., 1879 [illegible] March 1880. Communicated direct from operator

TABLE I.—*True Porro's Operations (continued).*

No.	Date.	Operator and Locality.	Hospital or Private house.	Age.	Number of previous labours.	Cause of difficulty.	Available pelvic space.	Height of Woman.	Time in labour before operation.	Condition of woman at time of operation.	Result to woman.	Result to child.	Cause of death in woman.
29	1879 Mar. 20	Dr. G. Peyretti, Turin, Italy	Hos.	32	Primipara	Rickets	C.V. 2¼in	4ft. 7in	24 hours	Favourable	Died on 10th day	Living	Tetanus
30	Mar. 30	Prof. S. Tarnier, Paris, France	,,	36	,,	,,	C.V. 2¼in	4 feet	5 days	Unfavourable	Recovery	Stillborn	—
31	April 1	Prof. Carl von Braun-Fernwald, Vienna, Austria	,,	27	,,	,,	C.V. 2¼in	[illegible]	24 hours	Favourable	,,	Living	
32	May 3	Dr. G. Previtali, Bergamo, Italy	,,		,,	,,			[illegible]	,,	Died in 20 hours	,,	Shock
33	May 16	Prof. G. Berruti, Turin, Italy	P. ho.	31	,,	,,	C.V. 1½in	4ft. 4in.	12 hours	,,	Recovery	,,	
34	May 26	Prof. Carl von Braun-Fernwald, Vienna, Austria	Hos.	[illegible]	,,	,,	C.V. 2in	4 feet	[illegible] hours	,,	Died on 5th day	,,	Peritonitis
35	June 19	Prof. L. Mangiagalli, Milan, Italy	,,	24	,,	,,	C.V. 2¾in	4ft. 5½in	2 days	,,	Recovery	,,	—
36	June 20	Prof. Carl von Braun-Fernwald, Vienna, Austria	,,	[illegible]	,,	,,	C.V. 2in	4ft. 6½in	6 hours	,,	,,	,,	—
37	Aug. 28	Prof. D. Chiara, Milan, Italy	,,	25	1 (after craniotomy)	,,	C.V. 2½in	4ft. 4in.	Not commenced	,,	,,	,,	-
38	Nov. 19	Dr. J. Lucas-Championnière, Paris, France	,,	26	Primipara	,,	C.V. 2¾in	4ft. 1in.	About 8 hrs	,,	,,	,,	
39	Dec. 6	,, ,,	,,	28	,,	,,	C.V. 1¾in	4ft. 2in.	24 hours	,,	Died in 32 hours	,,	Shock, no peritonitis or septicæmia
40	Dec. 30	,, ,,	,,	25	,,	,,	C.V. 1¾in	4ft. 2in.	Upwards of 50 hours	Unfavourable	Recovery	,,	
41	1880 Jan. 2	Dr. Heusner, Barmen, Germany	,,	22	,,	,,	C.V. 2in	4ft. 5½in.	60 hours	Favourable	Died on 3rd day	Stillborn	Septicæmia
42	Jan. 9	Dr. G. Previtali, Bergamo, Italy	,,		,,	,,			One day	,,	Died in 48 hours	Living	Shock
43	Jan. 11	Prof. G. Valtorta, Venice, Italy	,,	26	3 (2 after embryotomy, 1 induction of labour and forceps)	,,	C.V. 2½in	4ft. 8in.	57 hours	Exhausted by previous attempts to deliver	Died in 35½ hours	Stillborn	,,
44	Jan. 17	Dr. J. Lucas-Championnière, Paris, France	,,	[illegible]	Primipara	,,	C.V. 2in	3ft. 8in.	24 hrs	Unfavourable	Died in 30 hours	Living (died 4 dys after)	Shock; no signs of peritonitis or septicemia
45	Feb. 16	Prof. Eugène Hubert, Louvain, Belgium	,,	27	,,	,,	C.V. 2½in	4ft 1n.	11 hours	Favourable	Died in 32 hours	Living	Secondary hemorrhage; incipient peritonitis
46	Feb. 17	Prof. G. Chiarleoni, Milan, Italy	P. ho.	29	3 (2 induced, 1 after cephalotripsy)	,,	C.V. 2½in	4ft. 4in	Not commenced	,,	Died on 3rd day	,,	Secondary hæmorrhage
47	Feb. 25	Prof. L. Mangiagalli, Milan, Italy	Hos.	20	Primipara	,,	C.V. 1¾in	3ft. 1½in.	,,	,,	Recovery	,,	
48	March 7	Prof. A. Cuzzi, Cremona, Italy	,,	[illegible]	,,	Rickets; funnel shaped pelvis	Bis-ischiatic 2in	3ft. 4in.	About 6 hrs	Unfavourable	Died on 4th day	,,	Septic peritonitis
49	March 7	Prof. Gustav Braun, Vienna, Austria	,,	[illegible]	Primipara	Dwarf pelvis	C.V. 2in	3ft. 1in.	15 hours	Favourable	Recovery	,,	
50	Mar. 21	Prof. G. Veit, Bonn, Germany	,,	[illegible]	7 (2 last craniotomy)	Malacosteon			Just commenced	Fair	Died on 7th day	,,	Septic peritonitis
51	April 8	Prof. Isaac E. Taylor, New York, U.S. America	P. ho.	27	1 (cephalotripsy)	Rickets	C.V. 2¼in, 1¾in bis-ischiatic	4ft. 4in.	12 hours	Favourable	Died on 26th day	,,	Embolism, following phlegmasia dolens
52	April 15	Dr. Heusner, Barmen, Germany	Hos.	33	1	Malacosteon	C.V. 2½in R. sacro cot., 1½in	Tall	12 hrs. after water broke	Somewhat exhausted	Died on 4th day	Stillborn	Septic peritonitis
53	April 23	,, ,,	,,	29	Primipara	Rickets	C.V. 2in	Short	About 12 hrs	Very unfavorable from prolonged attempts at delivery & loss of blood; very anæmic	Died on 2nd day	,,	Loss of blood & carbolic acid poisoning; no peritonitis
54	May 3	Prof. T. Halbertsma, Utrecht, Holland	,,	[illegible]	,,	Rickets; [illegible]	C.V. 3in	--	30 hours	Unfavourable	Recovery	,,	—
55	May 28	Prof. Carl von Braun-Fernwald, Vienna, Austria	,,	[illegible]	1	Rickets	C.V. 2¼in			Favourable	,,	Living	—

TABLE I.—*True Porro's Operations (continued).*

Treatment of pedicle.	Dressing, ordinary or Listerian.	Duration of operation.	Special notes.	References.
Kept out with Cintrat's constrictor, and stitched to lower angle of abdominal wound	Listerian, with spray; no drainage	1½ hours	Uterus opened *in situ*; tetanus followed "miliary fever;" constrictor, 8 inches long, fixed to right thigh, removed ninth day	Taglio Cesarea, etc., Torino, 1879. Peyretti. Communication direct from operator
Kept out by long pin between two metallic ligatures applied with Cintrat's constrictor	Listerian, with spray		Uterus opened *in situ;* fœtus putrid	Annales de Gynécologie, August, 1879; Thèse de Maygrier, Paris, 1880. Communication from Dr. Auvard, Assistant.
Kept out; écraseur-chain left on, and a long pin	Thymol spray, drainage-tube through abdominal wound	-	Muller's modification attempted, but relinquished; drainage tubes removed on 11th and 15th days; chain came away on 14th day	Wiener Med. Wochenschrift, 1880, Pawlik; Lo Sperimentale, Florence, 1879, Welponer.
Kept out with Cintrat's constrictor	Listerian; no drainage		Uterus opened *in situ*	Communication direct from operator.
Kept out: Koeberlé's serre-nœud and double ligature of silk	Listerian, with spray	17 mins	On the 20th day the patient was shown at the Medical Society of Turin	L'Indipendente di Torino, 1879; Giornale Internazionale delle Scienze Mediche, Napoli, 1880. Communication direct from operator.
Kept out by constrictor	Thymol spray; drainage through abdominal wound		Écraseur-chain cut the pedicle, and so Vonstadter's constrictor was applied; abdomen reopened on 4th day, and washed out with thymol lotion. Müller's modification attempted, but relinquished	Wiener Med. Wochenschrift, 1880, 10, Pawlik.
Kept out with Cintrat's serre-nœud, and stitched to lower angle of abdominal wound; also long pin, with figure of 8 silk ligature	Listerian, with spray; no drainage	25 mins	Cured on 53rd day; uterus opened *in situ*	Annali di Ostetricia, etc., Milano, 1879, vol. i. Communication direct from operator.
Kept out; écraseur chain left on	Thymol spray	—	Müller's modification attempted but relinquished	Wiener Med. Wochenschrift, 1880, 16, 17, Pawlik.
Kept out with chain of Chassaignac's écraseur and long pin	Listerian, with spray, no drainage	40 mins	Uterus opened *in situ;* cured on 45th day	Annali di Ostetricia, etc., Milano, 1879, vol. i. Communication direct from operator.
Kept out with Cintrat's serre-nœud and two long pins	,, ,,	45 mins	Uterus opened *in situ*	Académie de Medecine, 9 Mars, 1880; Thèse de Maygrier, 1880. Communication direct from operator.
,, ,,	,, ,,	20 mins	Uterus opened *in situ*	,, ,,
,, ,,	,, ,,	1 hour	Uterus opened *in situ*	,, ,,
Kept out by Maisonneuve's constrictor	,, ,,	..	Muller's modification; severe hæmorrhage during operation, owing to breaking of copper wire; silver wire had to be substituted	Centralblatt für Gynäkol., 1880, No. 7. Communication direct from operator.
Kept out by Cintrat's constrictor	,, ,,	-	Uterus opened *in situ*	Communication direct from operator.
,, ,,	,, ,,	1 hour	Uterus opened *in situ;* at own home attempted version and embryotomy	Communication direct from operator.
Kept out with Cintrat's serre-nœud and two long pins	,, ,,		Uterus opened *in situ*; violent hysterical attack four hours after operation	Académie de Medecine, 9 Mars, 1880; Société de Chirurgie, Juin, 1882; Thèse de Maygrier, Paris, 1880. Communication direct from operator.
Kept out by two strong silk ligatures, with long pin through pedicle	Imperfect Listerian	30 mins	Silk ligatures applied to pedicle because wire of Maisonneuve's serre-nœud broke. Fifteen hours after operation hæmorrhage from pedicle	Journal des Sciences Médicales de Louvain, June 15th, 1880. Communication direct from operator.
Kept out by Cintrat's constrictor and long pin, and fixed in lower angle of wound	Listerian, with spray, no drainage	10 mins	Uterus opened *in situ*; the hæmorrhage took place from a laceration in the left broad ligament made by the constrictor	La Pratica Ostetrica nel servizio di S. Corona in Milano, per il Dott Chiarleoni, Milano, 1882. Communication direct from operator.
,, ,,	,, ,,	10 mins	Uterus opened *in situ*	Annali di Ostetrica, etc., Milano, 1880, vol. ii. p. 193. Communication direct from operator.
,, ,,	,, ,,		Uterus opened *in situ*. Suffering from albuminuria; pyonephritis found at autopsy	Annali di Ostetricia, etc., Jan. 1883.
Kept out; écraseur-chain left on	Listerian, with spray, no drainage		Uterus opened *in situ*	Wiener Med. Wochenschrift, 1880, 27. Communicated direct from operator.
Ligatured and dropped in	Listerian, with spray	[illegible] mins	Muller's modification	Zeitschrift für Geburtshülfe und Gynäkologie, 1880, Bd. v., s. 261
Cobbler's suture, and dropped in	,, ,,	1 hour	Uterus opened *in situ*	American Journal of Medical Sciences, July, 1880.
Ligatured and dropped in	Listerian, with spray, no drainage	—	Muller's modification	Not published. Communicated direct by operator
Ligatured with silver wire and dropped in	,, ,,		Decapitation already performed outside hospital, and trunk removed	,,
Kept out with metallic ligatures and fixed in lower angle of abdominal wound	Listerian, with spray	2 hours	Uterus slightly ruptured, with laceration of peritoneum, [illegible]	Centralblatt für Gynäkologie, No. [illegible], 1881. [illegible]
Kept out with écraseur-chain	,, ,,	1 hour		[illegible] Dr. [illegible]

TABLE I. *True Porro's Operations (continued).*

No.	Date.	Operator and Locality.	Hospital or Private house.	Age.	Number of previous labours.	Cause of Difficulty.	Available pelvic space.	Height of woman.	Time in labour before operation.	Condition of woman at time of operation.	Result to woman.	Result to child.	Cause of death in woman.
56	1880 June 1	Dr. V. Omboni, Cremona, Italy	P.ho.	33	Primipara	Rickets	C.V. 1¼in	4 feet	11 hours	Favourable	Died on 7th day	Living	Septic peritonitis
57	June 13	Prof. S. Tarnier, Paris, France	Hos.	20	,,	Malacosteon	Very contracted	--	Just commenced	,,	Died in 30 hours	,,	Shock (no peritonitis)
58	June 24	Dr. D. Peruzzi, Lugo, Italy	,,	37	,,	Rickets	C.V. 2in	3ft. 4in	12 hours	,,	Recovery	,,	—
59	July 3	Dr. C. Ramello, Turin, Italy	P. ho.	19	,,	,,	C.V. less than 1in	3ft. 4½in	9 days	Very unfavourable	,,	Stillborn: putrid	—
60	July 4	Dr. L. Oppenheimer, Wurtzburg, Germany	,,	44	13 (natural)	Malacosteon	Extremely small		10 hours	Favourable	,,	Living	—
61	July 23	Prof. E Pasquali, Rome, Italy	Hos.	37	Primipara	Duck-beaked pelvis	C.V.1⅓in	3ft. 8in	24 hours	Fair	Died on 6th day	,,	Pyæmia
62	July 31	Dr. Zweifel, Erlangen, Germany	,,	37	,,	Fibroid in neck of uterus	1½in. between tumour and symphysis pubis	Average	Several hours	,,	,,	,,	Septicæmia
63	Sept. 18	Prof G. Veit, Bonn, Germany	,,	22	,,	Rickets	C.V. 2½in	—	Not commenced	Favourable	Recovery	,,	—
64	Sept. 22	Dr. Elliott Richardson, Philadelphia (U.S.A.)	P. ho	25	,,	Dwarf pelvis	C.V. 1⅞ in	3ft. 10in.	Not commenced (8½ months pregnant)	,,	,,	,,	—
65	Sept. 24	Professor Herrgott, Nancy, France	Hos.	29	,,	Rickets	C.V. 2½in	4ft. 4in.	24 hours	,,	Died on 4th day	,,	Peritonitis
66	Oct. 21	Dr. Ficki, Warsaw, Russia	P. ho.	27	,,	,,	C.V. 2in	Short	3 days	,,	Died on 5th day	,,	Tetanus; circumscribed purulent peritonitis
67	Oct. 28	Prof. Cataliotti, Palermo, Italy	,,	41	,,	Interstitial fibroid in posterior wall of uterus	Average	5ft. 3in	A few hours	Unfavourable	Recovery	,,	—
68	Dec. 2	Prof. D. Tibone, Turin, Italy	Hos.	38	3	Malacosteon	C.V. 2⅔in	Short	52 hours	Very unfavorable from long labour and partial rupture of uterus	Died on 3rd day	Stillborn	Peritonitis
69	Dec. 7	Dr. J. De Rull, Barcelona, Spain	,,	30	1	Atresia vaginæ following previous labour	Normal	Average	18 hours	Very unfavourable	Died in 4 hours	,,	Shock, and hæmorrhage from wound in pedicle caused by wire of Cintrat's serre-nœud
70	Dec. 7	Prof. A. Hegar, Freiburg, Germany	,,	34	Primipara	Rickets	C.V. 2¼in	3ft. 8½in	Just commenced	Suffering severely from bronchitis	Died on 9th day	Living	Chronic bronchitis; emphysema; catarrhal pneumonia
71	Dec. 15	Prof. Gustav Braun, Vienna, Austria	,,	29	3	Malacosteon	Microchord 1¾in		A few hours	Favourable	Recovery	,,	—
72	1881 Jan 21	Dr. F. Parona, Novara, Italy	P. ho.	27	Primipara	Rickets	C.V. 2⅓in	3ft. 4in	Not commenced	,,	Died on 8th day	,,	Tetanus
73	Jan. 21	Prof. A. Breisky, Prague, Austria	Hos.	28	,,	,,	C.V. 2½in	4ft. 5in	2 days	,,	Recovery	,,	—
74	Jan. 21	Dr. Kreuzmann, Erlangen, Germany	,,	—	,,	,,	C.V. 2¾in	Very short	,,	Fair	Died on 3rd day	Stillborn (prolapse of umbilical cord)	Septic peritonitis
75	Jan. 29	Prof. Carl von Braun Fernwald, Vienna, Austria	,,	21	,,	,,		3ft. 8½in	Just commenced	Favourable	Recovery	Living	—
76	Feb. 19	Prof. P. Müller, Berne, Switzerland	,,	26	,,	,,	C.V. 2¾in	4ft	30 hours	,,	,,	,,	—
77	Feb. 21	Prof. Alex. Simpson, Edinburgh, Scotland	P. ho.	24	4 (3 craniotomies)	,,	C.V. 2¼in	4ft. 8in	Not commenced	,,	Died on 4th day	,,	Peritonitis
78	April 6	Dr. C. Olivieri, Naples, Italy	Hos.	20	Primipara	,,	C.V. 2⅓in	3ft 4in	6 hours	Fair	Died in 30 hours	,,	Shock
79	April 7	Dr. Werth, Kiel, Germany	,,	38	2 (both delivered by Cæsarean section)	,,	C.V. 1½in	4ft. 5in	Not commenced	Anæmic	Recovery	,,	—
80	April 21	Dr. L. Prochownick, Hamburg, Germany	P. hosp.	40	Primipara	Fibromyoma of uterus impacted in pelvis	–	Average	About 24 hrs after discharge of liquor amnii	Unfavourable	Died in 60 hours	Living (only breathed a few mins)	Septicæmia
81	May 4	Dr. H. Fehling, Stuttgart, Germany	Hos.	30	3	Malacosteon	sacro-cot. 1⅝in	4ft. 3in	17 hours	Favourable	Recovery	Living	—

TABLE I.—*True Porro's Operations (continued).*

Treatment of pedicle.	Dressing, ordinary or Listerian	Duration of operation.	Special notes.	References.
Kept out with Cintrat's constrictor and two long pins	Listerian with spray	20 mins	Uterus opened [illegible]	Communication direct from operator. Not published.
Kept out with Cintrat's serre-nœud and long needle above the wire	,, ,,	35 mins	,, ,,	Communicated direct by Dr. [illegible], [illegible] assistant.
Kept out with Cintrat's serre-nœud and two strong pins	Listerian with spray; drainage through Douglas' pouch	15 mins	Cured in 22 days; uterus opened [illegible]	Raccoglitore Medico, Forli, 1880, vol. [illegible], p. 281. Communication direct from operator.
Kept out with Thomas' clamp in lower angle of wound	Listerian, with spray; no drainage	27 min.	Muller's modification	Annali di Ostetricia, etc., Milano, 188[illegible], vol. ii. Communication direct from operator.
Kept out with Spencer Wells' clamp	Listerian, with spray	30 mins	Muller's modification without elastic ligature, manual compression	Aerztliches Intelligenz-Blatt, München, No. 1[illegible], 1882.
Kept out with Cintrat's constrictor and two long pins	,, ,,		Uterus opened *in situ*	Annali di Ostetricia, etc., Milano, 188[illegible], vol. iii. Due Operazioni [illegible], etc., per il Dott. A. Bompiani, Milano, 1881. Communication direct from Dr. Bompiani.
Dropped in with double silk ligature, after removing Kœberle's serre-nœud	,, ,,		Muller's modification, [illegible] pedicle outside	[illegible] Gynäkologie, Band [illegible], Heft [illegible].
Ligatured and dropped in	,, ,,	1½ hour	Muller's modification	Centralblatt für Gynäkologie, 1881, [illegible] Lewis
Kept out with pins; strong silk ligature between them	,,	1¼ hours	Muller's modification; wire écraseur used but removed after applying silk ligature; pedicle came away 11th day; recovery 17th day	American Journal of Medical Sciences, January, 1881.
Fixed in lower angle of abdominal wound with serre-nœud and metallic pin, guarded with caoutchouc	Listerian, with spray; no drainage	[illegible]	Müller's modification	[illegible], 1881. Communication direct from operator.
Kept out with Cintrat's constrictor	Listerian, with spray	[illegible] mins	Did well for 4 days; opisthotonos came on suddenly on 5th day, and death ensued in a few hours	[illegible] Tow. lek. Warszawa, d. 9 Listopada, 1880.
Kept out with wire ligature applied by serre-nœud, and catgut ligature; transfixed between with metallic pin	Listerian, with spray; no drainage	[illegible]	Uterus opened [illegible]	[illegible] Palermo, [illegible]. Communication [illegible] operator.
Kept out with Kaltenbach's needle and elastic ligature	,, ,,			Annali di Ostetricia, etc., Milano, 1881. Communication [illegible] operator.
Kept out with two strong pins and elastic ligature	Listerian, with spray		Uterus opened *in situ*, wire of Cintrat's constrictor broke, so elastic ligature [illegible], vaginal [illegible] without avail	Communication direct from operator.
Kept out; elastic ligature	Listerian, with spray	1 hour	Stump remained entirely aseptic; no trace of peritonitis	Communication direct from operator. Not yet published.
Kept out; stitched to lower angle of abdominal wound, and écraseur chain left on	Listerian, with spray; no drainage		Uterus [illegible]	Anzeiger der k. k. Gesellschaft der Aerzte in Wien, [illegible] Feb., [illegible]. Communicated direct from Dr. Breus, assistant.
Kept out with two Cintrat's wire ligatures and two long pins, and fixed in lower angle of wound	Listerian dressing, no drainage			[illegible], 1881. Communication direct from operator.
Kept out by an acupressure needle between two Cintrat's wire ligatures	Listerian, with thymol spray; no drainage		Muller's modification	Centralblatt für Gynäkologie, [illegible] 325. Information direct from operator.
Stitched to lower angle of wound, Koeberle's serre-nœud and a long pin	Listerian, with spray	[illegible]	[illegible]	Archiv für Gynäkologie, [illegible] Zweifel. Communication direct from operator.
Kept out with écraseur chain and long pins, and stitched to lower angle of wound	Listerian			Communicated direct by Dr. [illegible].
Kept out with Spencer Wells' clamp, two long pins, and stitched to lower angle of wound	Listerian, with spray; drainage tube through abdominal wound	[illegible]	Muller's modification	"De [illegible] Kaiserschnitt," [illegible] Dr. F. Müller, [illegible]. Communicated [illegible].
Ligatured and dropped in	Listerian, with spray	[illegible]	Uterus opened *in situ*. Swabbing out Douglas' pouch displaced ligature from pedicle, and fresh ligature and Paquelin's cautery were applied	British Medical Journal, [illegible]
Kept out with Chassaignac's écraseur and stitched to lower angle of abdominal wound	Listerian, with spray; no drainage	1½ hour	Uterus opened *in situ*, [illegible] thigh	Communication direct from operator. Not published.
Kept out with double elastic ligature applied by Kaltenbach's needle, and stitched to lower angle of wound with catgut sutures	Listerian	[illegible] hour	Muller's modification	Archiv für Gynäkologie, [illegible], Heft [illegible].
Kept out with Péan's constrictor, two long pins, and stitched to lower angle of wound	Listerian without spray; no drainage, drainage tube inserted 10 hrs. after operation on account of septic symptoms	1 hour	A little over seven months' [illegible] pregnancy. Muller's modification	Deutsche Medicinische Wochenschrift, No. [illegible]. Communicated direct by operator.
Kept out with Péan-Billroth's écraseur chain, and long needle above, stitched to lower angle of wound	Listerian, with spray	[illegible] hour	Muller's modification. [illegible] away on [illegible] day	[illegible] Communicated direct by operator.

TABLE I.—*True Porro's Operations* (*continued*).

No.	Date.	Operator and Locality.	Hospital or Private House.	Age.	Number of previous labours.	Cause of difficulty.	Available pelvic space.	Height of woman.	Time in labour before operation	Condition of woman at time of operation.	Result to woman.	Result to child.	Cause of death in woman.
	1881.												
82	May 22	Dr. Ambroise Guichard, Angers, France	Hos.	27	Primipara	Rickets	Bis-ischiatic 1¾in	3ft. 4½in	Not commenced	Favourable	Died on 3rd day	Living	Shock (no peritonitis)
83	June 8	Dr. L. Oppenheimer, Wurzburg, Germany	P. h.	[illegible]	2	Malacosteon		—	14 hours	Unfavourable	Died on 4th day	Stillborn	Peritonitis
84	June 22	Dr. B. Niccolini, Milan, Italy	,,	22	Primipara	Rickets	C.V. 2¾in	3ft. 4in	Not commenced	Favourable	Recovery	Living	—
85	Aug. 30	Prof. Carl von Braun Fernwald, Vienna, Austria	Hos.	38	..	..	C.V. 2¾in R. microchord 2$\frac{1}{10}$	—	..	,,	Died on 5th day	..	Peritonitis
86	Oct. 3	Dr. Heusner, Barmen, Germany	..	[illegible]	1	..	C.V. 2½in	Short	52 hours	Very unfavourable, repeated eclamptic fits	Died on 3rd day	Stillborn	Septic peritonitis
87	Oct. 9	Prof. Paolo Negri, Milan, Italy	..	[illegible]	4	Malacosteon	Bis-ischiatic 1¾in	4ft. 11in	26 hours	Favourable	Recovery	Living	—
88	Oct. 22	Prof. D. Chiara, Milan, Italy	..	2[illegible]	Primipara	Rickets	C.V. 2[illegible]in	4ft. 6in	One day	..	,,	..	—
89	Oct. 22	Prof. G. Calderini, Parma, Italy	P. h.	27	1 (at 7 months)	..	C.V. 2¼in	Short	3 days	Deplorable	Died	Stillborn	Peritonitis
90	Dec. 11	Dr. W. C. Grigg, London, England	Hos	[illegible]	Primipara	..	C.V. 1¾in	4ft 6in	2 hrs. (liquor amnii discharged)	Favourable	Died in 24 hours	Living	Shock and incipient peritonitis
91	Dec. 22	Prof. Herrgott, Nancy, France	,,	[illegible]	..	..	C.V. 1in	3ft 7in	5 days	Deplorable	Died next day	Stillborn	Septic peritonitis
92	Dec. 31	Dr. Ernst Braun, Vienna, Austria	..	[illegible]	[illegible] (craniotomy)	Malacosteon	C.V. [illegible]in, sacro-cot., 1[illegible]in	4ft 8in	8½ hours	Fair	Died 6th day	Living	Peritonitis
	1882												
93	Jan. 3	Prof. O. Morisani, Naples, Italy	..	[illegible]	Primipara	Rickets	C.V. 2[illegible]in	4 feet	[illegible] hours	Favourable	Died in 24 hours	,,	Septic peritonitis
94	Jan. 8	Prof. A. Briesky, Prague, Austria	,,	30	..	..	C.V. 2 in	—	Not commenced	..	Recovery	..	—
95	Mar. 7	Prof. Josef Spath, Vienna, Austria	..	21	..	Roberts' pelvis	C.V. 3[illegible]in, bis-ischiatic, 1in	—	Waters broke previous day	..	..	..	—
96	Mar. 1[illegible]	Dr. G. Dozzi, Mottaci Livenza, Italy	..	2[illegible]	..	Rickets	C.V. [illegible]in bis-ischiatic 2in	3 feet	24 hours	Very unfavourable	Died in 24 hours	Living (only breathed for a few minutes	Shock
97	Mar. 2[illegible]	Dr. H. Fehling, Stuttgart, Germany	..	[illegible]	9	Malacosteon	Sacro-cot. 1¾in	4ft 2in	16 hours	Favourable	Recovery	Living	—
98	April	Prof. Gustav Braun, Vienna, Austria	..	[illegible]	Primipara	Dwarf pelvis	—	—	Not commenced	Unfavourable	Died following day	Living	Anæmia
99	May 5	Prof. Gustav Braun, Vienna, Austria	..	[illegible]	9	Malacosteon	Microchord 2in	—	A few hours after waters broke	,,	Died on 4th day	,,	Peritonitis
100	May 20	Dr. Paul Grossmann, Omaha, U. S. A.	P. ho	2[illegible]	Primipara	Rickets	C.V. 2in	4ft 1in	[illegible] hours	Exhausted from long labour	Died in 14 hours	Stillborn	Shock and exhaustion
101	May 21	Prof. A. Breisky, Prague, Austria	Hos	2[illegible]	..	..	C.V. 2[illegible]in	—	Not commenced	Favourable	Recovery	Living	—
102	May 30	Dr. Giuseppe Carrara, Prescia, Italy	L. A.	[illegible]	Multipara	In extremis	Normal	Average	..	Hopeless	Died in 2 hours	Living (died in a few days	Shock and exhaustion
103	June 14	Prof. v. Saexinger, Tübingen, Germany	Hos	22	Primipara	Rickets	C.V. 2in	4ft 4in	7 hours	Favourable	Died in 36 hours	Living	Peritonitis
104	July 11	Dr. P. Cerri, Borgo, S. Donnino, Italy	..	23	..	..	C.V. 2[illegible]in	3ft 5in	36 hours, 18 hours after waters broke	..	Recovery	..	—
105	Sept. 2	Dr. Leopold [illegible], Liège, Belgium			1	Atresia of vagina following previous labour	Normal	Average	Just commenced	..	..	..	—
106	Sept. 2[illegible]	Dr. I. Tansini, Lodi, Italy	..	[illegible]	2	Malacosteon	Bis-ischiatic 1[illegible]in	3ft 5[illegible]in	1 day	..	..	..	—
107	Sept. 2[illegible]	Prof. von Weber, Prague, Austria	..	23	Primipara	Rickets (pseudo malacosteon)	C.V. 3in	4ft [illegible]in	4 hours	..	Died 3rd day	Living (twins)	Peritonitis
108	Sept. 28	Dr. Pretel, Vienna, Austria	..	[illegible]	2	Carcinoma of cervix	Normal	Average	[illegible] hours	Unfavourable	Died 7th day	Living (lived ¼ hour)	,,
109	Oct. 17	Prof. Carl von Braun-Fernwald, Vienna, Austria	..	3[illegible]	5 (last craniotomy)	Malacosteon	C.V. [illegible]in	4 feet	..	Favourable	Died 5th day	Living	Diffuse peritonitis

TABLE I.—*True Porro's Operations* (*continued*).

Treatment of pedicle	Dressing, ordinary or Listerian.	Duration of operation.	Special notes.	References.
Kept out; fastened in lower angle of abdominal incision; Cintrat's serre-nœud, and two long-pins	Listerian, with spray; no drainage	1 hour	On the 2nd day slight hæmorrhage from pedicle led to elastic ligature being applied	Annales de Gynécologie, May, 1882, p. 321. Communication direct from operator.
Kept out with Spencer Wells' clamp	Listerian, with spray	45 mins	Child dead before operation began. Memb broken. Liq. amnii decomposed. Muller's modification without elastic tube; manual compression	Aerztliches Intelligenz-Blatt, Munchen, No. 19, 1882.
Kept out with Cintrat's serre-nœud, and long pin	,, ,,	40 mins	Uterus opened *in situ*. Cured in a month	Annali Universali di Medicina, Milano, 1881, vol. 257.
Kept out with écraseur chain and long pins	,, ,,	—	Uterus opened *in situ*. At necropsy two small pieces of sponge found in peritoneal cavity	Communicated by Dr. Welponer to Prof. Mangiagalli.
Kept out with two pins; stitched in lower angle of wound	Listerian, with spray; drainage through abdominal wound and vagina	—	Perforation already performed, but extraction impossible	Communication direct from operator. Not published.
Kept out with Cintrat's constrictor, and long pin	Listerian, with spray; no drainage	50 mins	Uterus opened *in situ*. Cured in 18 days	Due Nuovi Casi di Taglio Cesareo, etc., per Dr. P. Negri, Milano, 1881. Information direct from operator.
Kept out with metallic ligatures applied with Cintrat's constrictor, long pin, and stitched to lower angle of abdominal wound. Constrictor itself removed	,, ,,	50 mins	Uterus opened *in situ*. Cured in 20 days	,, ,,
Kept out with "gum-string" ligature and Kaltenbach's needle	Listerian; no spray; no drainage	35 mins	Adhesions of omentum to uterus. Perforation previously performed, but extraction impossible. Uterus opened *in situ*	L'Osservatore, Gazzetta delle Cliniche di Torino, 1882. Communication direct from operator.
Kept out with Koeberle's serre-nœud and two long pins	Imperfect Listerian, with spray; no drainage	1 hour	—	New York Medical Record, April 8, 1882. Information direct from operator.
Fixed in lower angle of abdominal wound with serre-nœud, and metallic pin guarded with caoutchouc	Listerian, with spray	15 mins	Travelled by rail from Remiremont to Nancy (63 miles) after five days in labour, fœtus being putrid, and peritonitis commenced	Communicated direct by operator.
Kept out; Chassaignac's écraseur chain left on	No spray; iodoform dressing		Muller's modification	Centralblatt fur Gynakol., 1882, No. 5
Kept out with double silk ligature, and long pin	Listerian; no spray; no drainage	50 mins	Uterus opened *in situ*	Intorno a quattro laparotomie, relazione dell Dott. v. Lauro. Communicated direct by operator.
Kept out by an acupressure needle between two Cintrat's wire ligatures	Listerian, with thymol spray; no drainage	—	Muller's modification	Prager Med. Wochenschrift, vol. 7, 1882, p. 49. Communicated direct by operator
Kept out with Billroth's écraseur chain	Listerian, with spray until abdomen was opened	1 hour	Müller's modification	Archiv für Gynäkologie, Bd. xx, Heft 1. Communication from Dr. Lumpe, assistant.
Kept out with silk ligature and long pin, and fixed in lower angle of wound	Listerian, with spray; no drainage	20 mins	Patient was "leprous;" prolapse of the umbilical cord before operation. Uterus opened *in situ*	Gazzetta Medica Italiana Prov. Venete, 1882, No 22. Communicated direct by operator
Kept out by Billroth's écraseur chain, and long needle above it	,, ,,	1½ hours	Muller's modification; écraseur came away on 10th day	Archiv fur Gynakologie, Bd. xx, Heft [illegible] Communicated direct by operator.
Ligatured and dropped in	,, ,,		Uterus opened *in situ*	Communicated direct by operator. Fürst, Klinische Mittheilungen uber Geburt und Wochenbett
,, ,,	,, ,,	30 mins	,, ,,	,, ,,
Pedicle and broad ligaments ligatured and dropped in	Carbolised oil dressing; no spray, drainage tube through pedicle into vagina	1½ hours	Version and craniotomy had been attempted before operation was resorted to, uterus opened *in situ*	Information from Dr. R. M. Stone, of Omaha, through Dr. Harris.
Kept out by acupressure needle between two Cintrat's wire ligatures	Listerian, with thymol spray, no drainage	—	Müller's modification	Prager Med. Wochenschrift, 1882, vii, p. 277. Communicated direct by operator
Kept out with écraseur chain, and fixed in lower angle of wound	Listerian, with spray; no drainage	[illegible] mins	Operation performed on a woman dying from typhus pellagrica, with the hope of saving the child. Uterus opened *in situ*	Not yet published. Communicated direct by operator.
,, ,,	,, ,,	75 mins	Muller's modification	Communicated direct by Dr. Kommer, assistant to Prof. v. Säxinger.
Kept out with two silk and two wire ligatures, and long pin	,, ,,	50 mins	Uterus opened *in situ*	L'Indipendente di Torino, Nov. [illegible], 1882, p. 733.
Kept out with Cintrat's serre-nœud and two long pins, and stitched to lower angle of wound	,, ,,	1½ hours	Muller's modification	Archives de Tocologie, April, 1882, p. [illegible]; Bulletin de l'Acad. de Médecine de Belgique, 3 ser., t. xv., No. 11. Communicated direct from operator
Kept out with Péan's serre-nœud, and stitched with silk to lower angle of wound	,, ,,	Short	Uterus opened *in situ*, cured in 23 days	Gazzetta Medica Italiana Lombardia, Milano, 1882, tom. [illegible] Communicated direct from operator
Kept out. Fixed in lower angle of abdominal wound, with wire ligature round it	Listerian		Muller's modification	Allgemeine Wiener Medizinische Zeitung, Jan. [illegible] and [illegible], 1882
Kept out with India rubber tube, écraseur chain, and two long pins	Listerian; no spray during operation; no drainage		,, ,,	Not published. Communicated direct by operator.
Dropped in on account of thinness of pedicle	,, ,,	1½ hours	,, ,,	Not published. Communicated by Dr. [illegible] assistant

TABLE I.—*True Porro's Operation (continued).*

No.	Date.	Operator and Locality.	Hospital or Private house.	Age.	Number of previous labours.	Cause of Difficulty.	Available pelvic space.	Height of Woman.	Time in labour before operation.	Condition of woman at time of operation.	Result to woman.	Result to child.	Cause of death in woman.
110	1882 Nov. 2	Dr. Fochier, Lyons, France	Hosp.	42	13	Fibroid in neck of uterus	½ in. between tum. & symph.	Average	3 days	Unfavourable	Recovery	Stillborn	—
111	Nov. 24	Prof. Dohrn, Marburg, Germany	,,	[illegible]	Primipara	Rickets (pseudo malacosteon)	C.V. 2⅓in.	[illegible]	16 hours	Favourable	Died in [illegible] hours	Living	Septicæmia
112	Nov. 27	Dr. Clement Godson, London, England	P. ho.	24	,,	Deformed pelvis from being crushed in childhood	C.V. 1¾ in	4ft 3in	Not commenced (about 12 days before term)	,,	Recovery	..	—
113	Dec. 2	Prof. R. Novi, Naples, Italy	Hosp.	24	,,	Rickets	C.V. 2in	3ft 6in	Only just commenced	Not Favourable	,,	,,	
114	Dec. 7	Prof. Porro, Milan, Italy	,,	37	1 (craniotomy)	,,	C.V. 2¼in	5 feet	Membranes had ruptured 2 hours	Unfavourable	Died 2nd day	,,	Strangulation of intestine from adhesion of a knuckle to cicatrix of abdominal wound
115	Dec. 8	Dr. Galabin, London, England	,,	35	Multipara	Cancer of cervix and pelvic cellular tissue	Normal	Medium	12 hours: labour induced shortly before term	Unfavourable from disease	Died on 4th day	,,	Septic peritonitis
116	Dec. 14	Prof. Kehrer, Heidelberg, Germany	P. ho.	42	12	Malacosteon	C.V. 2in sacro-cot. 1¾in	4ft 7in	16 hours, [illegible] hours after watersbrke)	Very unfavourable	Recovery		—
117	Dec. 26	Dr. A. Barsotti, Lucca, Italy	Hosp.	38	7	,,	C.V. 2¼ in bis-ischiatic 1 in	Medium	3 hours after waters broke	Unfavourable	Died in 24 hours	Living	Shock
118	1883 Jan. 8	Dr. Heywood Smith, London, England	W. ho.	20	Primipara	Rickets	C.V. 1¾in	Short	48 hours	,,	Died in 4 days	Stillborn	Sloughing of vagina
119	Jan. [illegible]	Dr. [illegible], Breslau, Germany	P. ho.	32	4 (3 craniotomies)	,,	C.V. 2¼in	,,	A few hours	Favourable	Recovery	Living	—
120	Mar. 24	Prof. A. Martin, Berlin, Austria	Privt. hospl.	24	Primipara	Extreme deformity of skeleton. Severe [illegible]	C.V. 2½in.	3ft 10in	Not commenced	Very unfavourable	,,	,,	—
121	Mar. 28	Prof. Porro, Milan, Italy	Hosp.	29	,,	Rickets	C.V. 3in	3ft 9in	,,	Favourable	,,	,,	—
122	April 19	Prof. Gustav Braun, Vienna, Austria	,,	38	3	Malacosteon	C.V. 1½in	—	About 30 hours	Unfavourable	Died on 4th day	,,	Septic peritonitis
123	April 25	Prof. Carl von Braun Fernwald, Vienna, Austria	,,	23	Primipara	Rickets	C.V. 2¼in	4ft 4in	Not commenced	Favourable	Recovery	..	—
124	April 26	,, ,,	,,	32	,,	,,	,,	4ft 1in	..	,,	,,	Stillborn	—
125	May 1	,, ,,	,,	30	1	Malacosteon	Obstruction at outlet	—	,,	..	,,	Living	
126	May 3	Dr. Celso Bonora, Reggio-Emilia, Italy	P. ho.	[illegible]	Primipara	Rickets	C.V. 2in	4 feet	3 days	,,	Died on 3rd day	Stillborn	Septic peritonitis
127	May 6	Dr. G. Previtali, Bergamo, Italy	Hosp.	39	10 (natural)	Malacosteon	Bis-ischiatic, 1½in	4ft 7in	6 hours	,,	Recovery	Stillborn (from prolapse of umbilical cord)	—
128	May 17	Prof. Porro, Milan, Italy	,,	35	Primipara	Rickets	C.V. 2¼in	3ft 3in	Not begun	Feeble	,,	Living	—
129	June 7	Dr. Borsini, Piacenza, Italy	,,	35	1	Arthritis deformans	C.V. 2⅓in	Medium	About 4 days	Very unfavourable	Died in 35 hours	,,	Septic peritonitis
130	June 8	Prof. O. Morisani, Naples, Italy	,,	20	Primipara	Rickets	C.V. $2\frac{1}{10}$in	4ft 1in	Until completion of first stage	Favourable	Died on 4th day	,,	,,
131	June 17	Dr. Franzolini, Udine, Italy	,,	34	,,	,,	C.V. 2½in	4 feet	50 hours; 26 hours after watersbroke.	,,	Recovery	,,	—
132	June 28	Prof. Porro, Milan, Italy	,,	24	,,	..	C.V. 2in	4ft 4in	Not begun	,,	,,	,,	—
133	June 29	Dr. Wm. H. Parish, Philadelphia, U.S.A.	,,	35	,,	Rickets (dwarf pelvis)	C.V. 3in	4ft 3in	Not commenced (8½ months pregnant)	Not favourable (albuminuria)	Died in 38 hours	,,	Shock and exhaustion; nephritis
134	Aug. 24	Dr. Clemente Boni, Castel s. Nicolò, Italy	P. ho.	25	1 (symphyseotomy & forceps)	Rickets	C.V. 2¼in	Short	20 hours	Unfavourable	Died on 20th day	Stillborn	Cerebral anæmia
135	Aug. 29	Prof. A. Martino, Naples, Italy	Hosp.	29	Primipara	..	C.V. 2⅓in	3ft 5in	Not commenced (8½ months pregnant)	Favourable	Recovery	Living	—
136	Sept. 18	Prof. Kehrer, Heidelberg, Germany	,,	38	5	Carcinoma cervix uteri	Pelvis normal c.can. less than 1 inch	4ft 6in	46 hours	Very unfavourable	Died in 64 hours	,,	Septic peritonitis
137	Sept. 30	Prof. M. Frari, Padua, Italy	,,	30	Primipara	Rickets	C.V. 2½ in	4ft 2in	8 hours	Favourable	Died in 7 days	,,	,,

TABLE 1.—*True Porro's Operations (continued).*

Treatment of pedicle.	Dressing, ordinary or Listerian.	Duration of operation.	Special notes.	References.
Kept out; fixed in lower angle of wound	Listerian, with spray	—	Uterus opened *in situ*. Six hours' railway-journey after three days' labour	Lyon Médical, 20th May, 1883. Archives de Tocologie, June 1883.
Kept out; stitched to lower angle of wound, with elastic tube around it	Listerian, with spray; no drainage	—	Muller's modification. Coil of intestine came out before uterus was opened, and was with difficulty returned	Centralblatt für Gynäkol., March 17, 1883. Communicated direct by Dr. Rumpe, assistant.
Kept out with Kœberlé's serre-nœud and two long pins; also China-silk ligature	Listerian, with spray; no drainage	42 mins	Uterus opened *in situ*. Twenty days after operation was on sofa, and left the house on December 28th	BRITISH MEDICAL JOURNAL, January 12, 1884.
Kept out with Cintrat's constrictor, and long pin	Listerian: spray suspended while abdomen was open; no drainage	32 mins	Uterus opened *in situ*. Constrictor removed after application of wire ligature	Giornale Internazionale della Scienze Mediche. Anno V. Communication direct from operator.
,, ,,	Listerian, with spray; no drainage	40 mins	Uterus opened *in situ*. Top portion of constrictor only left on	Gazzetta Medica Italiana Lombardia, serie 8, tom. 4, 1883. Communicated direct by Dr. Truzzi, assistant.
Kept out with Kœberlé's serre-nœud, and two long pins	,, ,,	35 mins	Uterus opened *in situ*	Communicated direct by operator. Not yet published.
Tied in two portions with thread ligature, and stitched to parietal peritoneum	,, ,,	45 mins	Uterus turned forwards and opened behind the fundus. Patient died 76 days after operation of chronic Bright's disease	Casuist. Beitr. Z. Porro' tchen. Meth. d. Kaisersch. Diss. Heidelberg, 1883. Communication direct from operator.
Kept out with wire ligature applied by Cintrat's constrictor, and long needle surrounded by carbolised elastic band in shape of 8	,, ,,	45 mins	Uterus opened *in situ*. No anæsthetic given. Richardson's ether spray instead. Cavity in lung, hypertrophied l. ven. being diagnosed before operation and verified at *p.m*	Imparziale di Firenze, March 30, and April 15, 1883. Communication direct from operator.
Kept out with Kœberlé's serre-nœud, and two long pins	Eucalyptus air, no drainage	1¼ hours	Müller's modification. Cephalotripsy had been performed, and unsuccessful efforts to extract	Communicated direct by operator. Not yet published.
Ligatured and dropped in	Listerian; room sprayed before operation; no drainage	2 hours	Müller's modification. Tedius recovery from pleurisy, attributed by operator to catching cold, not septic	Centralblatt für Gynäkol., May 5 and 12, 1883. Communication direct from operator.
Peritoneum stitched over it, and dropped in	Listerian with spray: drainage through Douglas' pouch	36 mins	Previous to operation patient suffering from alarming orthopnœa due to endocarditis valvularis and pulmonary catarrh. Uterus opened *in situ*. Provisional elastic ligature	Centralblatt für Gynäkol., No. [illegible], 1883. Communication direct from operator.
Kept out by Cintrat's constrictor	Listerian with spray; no drainage	35 mins	Pedicle long time in separating. Uterus opened *in situ*	Communicated direct by Dr. Truzzi, assistant.
Fixed in lower angle of wound, and écraseur and chain left on	Room sprayed before operation; Listerian dressing: no drainage	—	Uterus opened *in situ*	Communicated direct by operator.
Kept out with elastic tube, écraseur & chain, and two long pins	,, ,,	1 hour	Muller's modification	Communicated direct by Dr. [illegible], assistant.
,, ,,	,, ,,	1¼ hours	In hospital 5 weeks before operation; Müller's modification; child asphyxiated	,, ,,
,, ,,	,, ,,	1 hour	Muller's modification	,, ,,
Kept out with Cintrat's constrictor (latest form) and two long pins	Listerian, with spray: no drainage	43 mins	Uterus opened *in situ*. Constrictor removed after application of wire ligature	Communicated direct by operator. Not yet published.
Fastened in lower angle of wound, elastic ligature surrounding it, transfixed by long pins	Listerian; no drainage	45 mins	Uterus opened *in situ*. Left hospital cured in 40 days	Gazzetta Provinciale di Bergamo, May 1[illegible], 1883. Communicated direct by operator.
Kept out with Cintrat's constrictor	Listerian, with spray; no drainage	25 mins	Uterus opened *in situ*	Not yet published. Communicated direct by Dr. Truzzi, assistant.
Kept out with Cintrat's constrictor and long pin	,, ,,	1 hour	Uterus opened *in situ*. Peritonitis before operation	Communicated direct by operator.
,, ,,	,, ,,	[illegible] mins	Uterus opened *in situ*	,, ,,
,, ,,	Room carbolised, no spray while abdomen was open; Listerian dressing	45 mins	Müller's modification. Left hospital on [illegible] day, [illegible]	Gazzetta Medica [illegible] 1883. Communication direct from operator.
,, ,,	Listerian, with spray	35 mins	Uterus opened *in situ*	Communicated direct by Dr. T[illegible]
Ligatured and kept out with pins	Room carbolised, no spray during operation; Listerian dressing	1 hour	Müller's modification, patient in hospital 2 months before operation	Communicated direct by Dr. [illegible], Philadelphia.
Ligatured in two portions with strong silk, and transfixed by long pin	Listerian without spray	[illegible] mins	Uterus opened [illegible]	Communicated direct by Dr. [illegible]
Kept out with Cintrat's constrictor and long pin	,, with spray	[illegible] mins	Uterus [illegible]	[illegible]
Kept out. [illegible]	Listerian with spray. [illegible] drainage	[illegible]	[illegible]	[illegible]
Kept out with Cintrat's constrictor	[illegible] with spray	1 hour	Uterus opened [illegible]	[illegible]

TABLE II. *Utero-ovarian Amputations during Pregnancy, but before the Fœtus*

Date	Operator and Locality.	Hospital or Private House.	Age.	Number of previous labours.	Cause of difficulty.	Space between tumour and symphysis pubis	Advanced in pregnancy.	Condition of woman at time of operation.	Result to woman	Cause of death in woman.
1880 March 2	Prof. Kaltenbach, Freiburg, Germany	Hosp.	32	Primipara	Fibro-myoma of uterus	4 inches	22 weeks	Strength much reduced by uterine hæmorrhage and vomiting	Recovery	
Mar. 18	Prof. Wasseige, Liège, Belgium	,,	35	,, (1 abortion)	Cystic fibro-myoma of uterus		18 weeks	Favourable	Died on 5th day	Peritonitis
Aug. 16	Prof D. Hayes Agnew, Philadelphia, U.S.A.	P. ho.	41	Primipara	Fibro-myoma of uterus	Filled the entire pelvis	6 months	Had been 5 days in labour	Died in 64 hours	Vomiting and exhaustion
1882 July 12	Mr. J. Knowsley Thornton, London, England	Hosp.	38	,, (1 abortion)	,,	—	About 1½ months	Anæmic and emaciated	Recovery	—
July 13	Dr. T. Savage, Rugby, England	P. ho.	25	Primipara	,,		16 weeks	Favourable	,,	—

TABLE III. *Operations for Removal of Fœtus from Abdominal Cavity by*

No.	Date.	Operator and Locality.	Hospital or Private house.	Age	Previous confinements.	Time of operation after rupture.	Condition of woman.	Result to woman.	Result to child.
1	1878 Nov. 22	Dr. Oscar Prévot, Moscow, Russia	Hospital	[illegible]	,,	10 hours	Suffering from incipient peritonitis	Died on 5th day	Dead before operation
2	1880 Feb. 12	Dr. Saxinger, Tubingen, Germany	,,	20	Primipara	6 hours	Very exhausted; tympanites uteri	Died 33½ hours after operation	,,
3	1881 Mar. 14	Prof. E. Pasquali, Rome, Italy	,,	18	[illegible]	2 days in labour. Time after rupture not given	Favourable	Died in 24 hours	,,
4	April 2	Dr Federico Fornari, Ascoli Piceno, Italy	Private house	27	Not known	12 hours in labour Time after rupture not given	Very unfavourable	Died in 51 hours	,,
5	1882 Mar. 21	Dr. Marchand, Paris, France	Hospital	26	[illegible]	1½ hours	Miserably bad	Died same day	,,
6	Nov. 2	Dr. Grigg, London	,,	27	–	22 hours	In state of collapse	Died in 15 hours	,,

APPENDIX.—*Cases omitted from*

No.	Date.	Operator and Locality.	Hospital or Private house	Age.	Number of previous labours.	Cause of Difficulty.	Available pelvic space.	Height of woman.	Time in labour before operation.	Condition of woman at time of operation.	Result to Woman.	Result to child.	Cause of death in woman.
1	1869 July 21	Dr. Horatio R. Storer, Boston, U.S.A.	P. ho.	37	Primipara	Fibro-cystic tumour of the uterus	1½ inch	Ordinary	3 days	Fair	Died in 68 hours	Stillborn (putrid)	Septicæmia
2	1880 Feb. 14	Prof. C. C. Th. Litzmann, Kiel, Germany	Hosp	[illegible]	2	Retention of putrid fœtus in horn of bicorned uterus	Normal	,,	Not commenced	,,	Died on 3rd day	,,	Septic peritonitis
3	June 14	Dr. M. Salin, Stockholm, Sweden	,,	22	Primipara	,,	,,	,,	,,	,,	Recovery	,,	
4	1881 March 7	Dr. Warren, Sydney, New South Wales	,,	32		Fancied tubo-ovarian pregnancy at eighth month	,,	,,	,,	,,	Died on 2nd day		Peritonitis

was viable, which have been tabulated elsewhere as true Porro's Operations.

U[illegible] opened?	Treatment of pedicle.	Dressing, ordinary or Listerian.	Duration of operation.	Weight of tumour.	Special notes.	Reference.
No	Ligatured, and kept out by two long pins	No drainage	75 mins	6½ lbs.	—	Centralblatt für Gynäk., 17 July, 1880. Communication direct from operator.
No	Ligatured, sutured, and dropped in	Listerian, with spray; no drainage	1½ hours	9 lbs	Écraseur chain put on provisionally	Bull. de l'Acad. roy. de Méd. de Belgique, t. xiv, 3me série, No. 4. Communication direct from operator
No	Ligatured, and then secured with a large clamp	Carbolic spray; modified Listerian dressing	2 hours		Foetus putrid	Information from operator through Dr. Harris.
No	Kept out by Kœberlé's serre-nœud, and two long pins	Listerian, with spray	75 mins	-	Rapid growth of tumour rendered diagnosis doubtful as to its being ovarian or fibro-myoma	Communicated direct by operator
No	Clamped, ligatured, and stitched to lower angle of wound	..	..	1½ hours	9 lbs., including uterus and its contents	BRITISH MEDICAL JOURNAL, September 2, 1882

Laparotomy, followed by Amputation of Ruptured Uterus, with Ovaries.

Cause of death in woman.	Treatment of pedicle.	Dressing, ordinary or Listerian.	Duration of operation.	Reference.
Frequent hæmorrhages from pedicle	Kept out by Péan's serre-nœud, beneath which silk ligature	Listerian	45 minutes	American Journal of Obstetrics, October, 1880. Harris. Communication from operator through Dr. Bo[illegible] of St. Petersburg.
Collapse; gangrene of uterus and vagina	Extraperitoneal; Cintrat's serre-nœud	Listerian, with thymol spray; no drainage	70 minutes	Communication direct from operator.
Septicæmia	Dropped in	Listerian, no spray; drainage through Douglas' pouch and abdominal wound	1 hour	Annali di Ostetricia, etc., Milano, 1881, vol. iii. Della amputazione utero-ovarica cesarea, etc., per il Dott. A. Bompiani. Milano, 1881.
Peritonitis	„	..	1½ hours	[illegible] 1881, vol. [illegible] April 1[illegible], 1881.
..	Stitched in lower angle of wound, Chassaignac's écraseur chain	..	[illegible] minutes	Communicated direct from operator.
Exhaustion	Extraperitoneal; Kœberlé's serre-nœud and two long pins	..	2½ hours	..

Table I, for reasons assigned.

Treatment of pedicle.	Dressing, ordinary or Listerian.	Duration of operation.	Special notes.	Reference.
Constricted by double metallic ligature through pedicle, and clamp shield	Ordinary	[illegible]	Removal of uterus not persisted in [illegible] hæmorrhage from [illegible] uterus. Portion of tumour left	Transactions of [illegible] Gynæcological Society of Boston, October, [illegible]
Constricted with wire ligature applied with Péan's constrictor and transfixed with two long pins	Listerian, with spray; [illegible] drainage tube		Operation performed [illegible] pregnancy. [illegible] Müller's modification	[illegible]
Kept out with catgut ligature	Listerian with spray		Operation performed [illegible]. One cornu of a bifid uterus removed. Other part of uterus left	[illegible] Centralblatt für Gynäkologie, No. [illegible] Hygiea, Stockholm, No. [illegible]
Whole uterus with cervix removed. Upper part of vagina ligatured with silk and dropped in	Listerian, with spray; drainage tube through abdominal wound		Operation performed [illegible] under the belief that [illegible]	[illegible] August 2nd, [illegible]

ON NEUROPATHIC PLICA.

Read in the Section of Pathology.

BY J. F. LE PAGE, L.R.C.P.Edin., etc., Manchester.

IN the Dermatological Department of the Museum of the Royal College of Surgeons of England, may be seen a specimen bearing the designation "neuropathic plica." It was presented by me to the Museum through, and at the kind suggestion of, Sir Erasmus Wilson; and I believe I am correct in saying that it is the only one in existence, at least, so far as I have been able to ascertain. At a time when the list of diseases of the nervous system is greatly increasing—pathological research having traced to that system as the fountain many not only so-called functional, but even organic diseases—to add a new name to the list appears to require some apology. The apology I offer is that, inasmuch as it would be highly inconvenient to designate a newly recognised disease by an old name, no choice is left but the adoption of a term not contained in our nomenclature. That the disease is neuropathic, I shall endeavour to make clear. That it is new, I shall not attempt to prove. Probably, the novelty is wholly comprised in the recognition of a condition of things which, considering the prevalence of the disease with which it was associated, has many times occurred, but which has hitherto illuded the vigilance of observers.

The only plica of our nomenclature is plica polonica. In this the scalp is inflamed and excessively tender, and the hair-follicles secrete in abundance a reddish viscous fluid, "which agglutinates the hairs, and by desiccation unites them into a solid mass." The whole length of the hairs is surcharged with the fluid; and, if a single hair be cut, it may be seen oozing from the divided portion. In neuropathic plica the scalp is structurally healthy, and neither the follicle nor the hair itself presents any structural evidence of disease. The plication is not the result of agglutination, but is wholly effected by structural changes produced by a force within. The arrangement of the hair is not characterised by disorder and confusion, but by a certain symmetry which is remarkable and most extraordinary.

The case is briefly recorded in the following notes.

J. H., aged 17, consulted me on September 30th, 1882. She stated that for six or seven days she had felt ill, complaining of more or less general numbness; and that, on September 29th, she suffered the whole day from severe headache, which affected chiefly the brow, together with the sensation of "pins and needles" over the scalp. In the hope of obtaining relief, she, in the evening, washed her head in warm, but not hot, water. After partially drying her hair, which measured three feet one inch in length, with a towel, she commenced combing it out on the left side, in the presence of her parents, who are intelligent and reliable people, and, whilst so engaged, she felt a tearing sensation on the right side of her head, as though the hair were being pulled out, and, on placing her hand to her head, found that it was being drawn up. In one or two minutes nearly the whole of this long hair on the right side of the head was drawn into a hard lump. The parents, who witnessed the extraordinary phenomenon, spent a great portion of the night in a fruitless attempt to untangle the mass. The few hairs combed out were spread on her pillow whilst she slept; but afterwards most of them were found to be drawn up as before, although not tangled as was the larger mass.

On examination, I found the hair on the left side of her head quite smooth, very slightly waved, and not in the least tangled nor drawn up. On the right side, extending to nearly the median line behind and to within an inch of the forehead, the whole mass was contracted to a hard tangled lump, which it appeared impossible to unravel. My patient's parents refused for some days to allow me to cut off the hair, as they, to use their own words, considered it "a visitation from God." On closer examination, I found that, under the superficial portion, the arrangement was strikingly peculiar. the hair being looped and festooned in a way which I might almost describe as beautiful. Under the microscope, individual hairs appeared quite natural, but a very significant fact is brought to light; all the hairs which are contracted, closely curled, and intertwined, are, more or less, flat hairs, whilst those which are looped and festooned are round. Viewed without the microscope, it is at once evident that no dexterity could have produced the most remarkable condition, a condition which art could not produce. Menstruation commenced when she was sixteen, and was irregular until six months before she consulted me. Since that time she had not menstruated. Her appetite was fairly good; her habits were sedentary.

Like every unexplained phenomenon in a hysterical female, I regarded the case at first with suspicion; but after the most careful, the most suspicious scrutiny, the question of deception was inevitably entirely excluded. We observe here the ordinary evidences of so-called hysteria—a disease, of the existence of which we are cognisant solely by its multifarious, its heterogeneous and its marvellously capricious manifestations, the mimetic effects of which produce imaginary diseases *ad infinitum*, characterised by hyperæsthesia or anæsthesia, and frequently by perversion of the intellect and exaltation of the emotions. Centric hyperæsthesia gives rise to false impulses and incoherent reflexes, and the local hyperæsthesia and hyperæmia furnish evidence of centric excitement. A limited area in a condition of exalted nervous and vascular tension is often contiguous to a surface under opposite neurotic influences, evidenced by anæmia and anæsthesia. This is often well marked in the scalp. Irregular, and then suspended menstruation, frontal headache, prickling of the scalp, and other neuropathic symptoms, well marked the case as one of hysteria. We notice the areas under different conditions of nervous and vascular tension. The sensation of "pins and needles" is referred to the hair-bulbs; and the sensation described as that of tearing the hair out, is recognised as the effect of spasms of the little muscles of the hair-follicles. The evidence of local hyperæsthesia is complete. Can we, then, find no connection between this condition of very high nervous tension in the scalp, and even in the hair-bulbs, with the condition produced in the hair itself, which has no connection but that with the hair-bulb? I think we can. Although not attempting to explain the nature of the change effected in the medullary portion, which caused such a diminution in its calibre, as to allow of the tight curling of the flat hairs, I believe that it is nevertheless evident that a very high nervous tension found vent in the hair itself, and, moreover, that this is by no means an uncommon event under like conditions. The coincidence of the otherwise altogether inexplicable change in the hair with the known nervous congestion of the hair-bulbs furnishes evidence, perhaps insufficient, for the professedly sceptic, which to my mind is, if not complete, yet sufficient, that the change produced was effected by the presence in the hair of that form of force which we name nerve-force.

I believe it has fallen to me to be the first to place on record a case of neuropathic plica.

THE MALOJA SANATORIUM AND SPA.

BY A. TUCKER WISE, M.D.

SINCE the development of Davos Platz into an Alpine winter-resort, and a rapid growth in size and population, other places have sprung up having strong claims to be considered equal to that well-known, but rather well-filled, little town. St. Moritz revives an ancient effort to attract people in winter—this time with much success: the Kulm Hotel has, at this moment, nearly one hundred and fifty guests. Wiesen, the picturesque, with its ponderous flanks and million pine trees, is on a fair way to offer health to a limited number who desire quietude and the charms of country life.

It is indispensable for the reputation of the high valleys in Switzerland, that more places spring up for the "winter cure," as it is notorious that, although these places increase in size, population, and independence, energy is needed to keep pace with overcrowding, and to preserve the clean air of the Alpine heights free from contamination. As but few hours can be spent out of the house in winter, it is imperative that hotels, which harbour a number of delicate individuals in search of health, should be rendered perfect in a sanitary point of view, both as regards drainage and ventilation.

Of how much therapeutic value must that air be, which, in five or six hours, can not only neutralise the ill-effects of a contaminated atmosphere for the remainder of the day and night, but can, in numerous instances, favour an almost miraculous recovery! Heretofore, the curative properties of these climates have only been developed to a fraction of their full power; and, whilst the restorative agent has lain at the closed doors and double windows of overloaded hotels, patients have been sent home cured, in spite of what would seem to be, to on-lookers, either medical ignorance of the true antidote or want of common sense.

It is particularly opportune at this epoch of the "Alpine cure," that a large Kursaal is being constructed on the Maloja plateau fitted with arrangements for the propulsion and extraction of air throughout the building. The external air, after passing through wire gauze, is heated to about 50° Cent. (122° Fahr.) in iron compartments, where it is moistened to a proper degree of humidity, and medicated if necessary. Each chamber is supplied with a special tube for entry of the warmed air, and also with two apertures of exit connected with an extraction-shaft. The chief feature, however, of this Belgian enterprise, is the introduction of ozone within the house, for purifying the internal air. A fall of the Inn supplies sufficient motor force for this purpose, and for electric lighting. Those who passed this end of the Upper Engadine fourteen or fifteen months ago would now be surprised to see the change brought about in this deserted but picturesque corner of the valley: ornamental chalets are springing up, a park is being laid out, gardens prepared, and hundreds of workmen engaged in the completion of the Kursaal.

An accidental discovery has been made of a chalybeate water having a large amount of free carbonic acid. It would appear, from the analysis of Professor Reichardt of Jena, that the Paracelsus spring of St. Moritz, has been tapped in the Maloja, which latter place is eleven miles distant, and at a higher level. As the land all belongs to one proprietor, the danger—common in Switzerland—of irregular building and a loose regard to sanitary matters will be avoided.

From observations of the Maloja, I am inclined to think the temperature is a little higher than at Davos; but, up to the present, winter has been too irregular to permit a decided opinion on this point.

SHOT-SILK RETINA.

BY ARTHUR H. BENSON, F.R.C.S.I.,

Assistant Surgeon, St. Mark's Ophthalmic Hospital, Dublin; Opthalmic Surgeon, City of Dublin Hospital.

IN the BRITISH MEDICAL JOURNAL of January 12th, 1884, appeared a paper on the above subject, read by Mr. Spencer Watson before the Section of Ophthalmology of the British Medical Association. In it, Mr. Watson accurately, and, as he seems to think, for the first time, describes the well known appearance of opalescent or "shot-silk" retina. "In these notes," he says, "I shall endeavour to give a definiteness to a vague and (as I believe) hitherto undescribed appearance." He then quotes five cases in detail, and thinks that, in all, he has seen perhaps a dozen such!

Had Mr. Watson consulted Nettleship's *Student's Guide to Diseases of the Eye*, 1879, pp. 168-9, he could have read that "in children, especially those of dark complexion, a peculiar and striking whitish shifting reflection, or shimmer, is often seen at the yellow-spot region and along the course of the principal vessels. It changes with every movement of the mirror, and reminds one of the shifting reflection from 'watered' and 'shot' silk. Around the yellow spot, it takes the form of a ring or zone, and is known as the 'halo round the macula.'"

In 1881, I was for some time engaged examining, for statistical purposes, the eyes of deaf-mutes in some of the asylums about Dublin, and was struck by the frequency of this appearance, often occurring in perfectly healthy eyes, with normal vision and emmetropic refraction.

Latterly, I have been testing the refraction, etc., of numbers of school-children. This day I examined ophthalmoscopically forty-two boys belonging to Artane Industrial School. They were taken by divisions, and in no way selected. The following is an analysis bearing on the point in question. Of the forty-two boys, ranging in age from nine to eighteen years, twenty-nine (or 69 per cent.) exhibited the shot-silk retina to a greater or less degree; fourteen were very well marked cases. Of the twenty-nine, twenty-one had vision of $\frac{6}{6}$, and eighteen were emmetropic, ten of these showing the appearance well marked. Hypermetropia occurred in six cases, hypermetropic astigmatism in three, mixed astigmatism in one, and myopic astigmatism in one. In this latter case, the "shot-silk" appearance was especially marked.

Dr. Keane, who was examining simultaneously other classes of the same school, noted shot-silk retina in about the same proportion.

From the above analysis, it appears that what Mr Watson deemed rare is, in fact, most common; that what he thought only occurred in hypermetropia, occurs in emmetropia and myopia; that what he thought was an indication of defective sight, is commonly found associated with normal vision; and, finally, that what he thought to be an "undescribed condition," turns out to be one fully described in Nettleship's treatise.

It seems unnecessary to discuss further Mr. Watson's paper; "shot-silk" retina is a condition well known to all ophthalmologists, and so common that one has only to examine half a dozen healthy children to find a case or two. That it is observed most frequently in hypermetropia, one need not doubt; and that, in a majority of cases of convergent strabismus, due to hypermetropia, it is present, is also beyond doubt; but that it has anything to do with the diminished acuity of vision is a matter of much doubt. As well might the halo round the macula be accused of a pathological significance.

Few oculists examine normal eyes, or, if they do, it is by the inverted method, and with some definite object. Such appearances as "shot-silk" retina would then be unobserved. In strabismus and other refractive cases, the appearance, if found, is likely to be in some way held responsible for the error. The kind of mirror and the amount of illumination used in the examination make a difference. A short focus mirror, a dull light, and a small pupil, are the most favourable conditions for observing the appearances.

A CASE OF CONGENITAL HYDROCELE TREATED BY LIGATURE OF THE NECK OF THE SAC.

BY F. A. SOUTHAM, M.B.Oxon., F.R.C.S.,

Assistant-Surgeon to the Manchester Royal Infirmary, and Surgeon to the Clinical Hospital for Women and Children.

CHARLES K., aged 18, presented himself as an out-patient in January 1882, with a swelling of the right side of the scrotum, which had been present as long as he could remember. The swelling, which was somewhat pyriform in shape and about the size of a small orange, presented all the characters of a congenital hydrocele of the tunica vaginalis; it was soft, translucent, and fluctuating, surrounding the body of the testis. When the patient coughed, a slight impulse could be perceived. On pressing gently on the swelling or on raising the scrotum as the patient lay on his back, it gradually disappeared, slowly reappearing when he stood up. The testis on the same side was extremely soft, and somewhat smaller than the other. The patient was ordered to wear a truss day and night, in the hope that the constant pressure of the pad upon the neck of the sac might procure obliteration of the canal of communication between the peritoneal cavity and the tunica vaginalis. This treatment was continued for three months, but without any appreciable result, the canal still remaining patent.

It was then determined to perform a radical cure by ligaturing the neck of the sac, as in the plan often adopted in the radical cure of hernia. The patient was accordingly admitted into the hospital; and on April 13th, under anæsthesia, an incision an inch and a half in length was made in the direction of the cord, commencing above directly over the external ring. The cord having been exposed for the same distance, the neck of the sac, which was about the size of a goose-quill, was carefully dissected from it, and then ligatured with strong catgut in two places, namely, just below the external ring and at another point about one inch lower down, care being taken not to include the cord in the ligatures. The neck of the sac was then divided between these two points, and the external wound closed, a small drainage-tube being left in the lower part of the incision. The operation was performed under the carbolic spray, and the wound dressed according to the Listerian method. The wound was completely healed on the seventh day, and the patient left the hospital on April 29th, there still being slight swelling of the scrotum, owing to the presence of a little fluid in the tunica vaginalis; but in the course of a few weeks this gradually disappeared, on painting the skin with tincture of iodine, and keeping the parts well raised in a suspensory bandage. When the patient was last seen, about six months after the operation, all trace of the hydrocele had quite disappeared.

REMARKS. Congenital hydrocele, though not uncommon in infants and young children, usually disappears as the child grows older, especially if a truss be constantly worn, the irritation produced by the pad setting up slight inflammation in the neck of the sac, which, as a consequence, becomes contracted. The fluid present in the tunica vaginalis, if absorption does not take place naturally, may then be readily removed by tapping, or it gradually disappears on the application of some slight irritant over the scrotum; and, as a rule, no further reaccumulation takes place. The affection is consequently of somewhat rare occurrence in adults; and the treatment by the method of radical cure employed in this instance should, as a rule, be reserved for those cases in which obliteration of the canal of communication cannot be obtained by simple means. So long as the neck of the sac is patent, a congenital sac is present, along which a hernia may at any time descend, a result which it is, of course, very desirable, if possible, to avoid. The operation was, therefore, undertaken in the present case, not only with the object of curing the hydrocele, but also with the view to prevent the formation of a hernia taking place.

CLINICAL MEMORANDA.

DR. DUHOMME'S QUANTITATIVE ESTIMATION OF SUGAR IN URINE.

IN Dr. George Johnson's interesting lecture on "The Various Modes of Testing for Sugar in the Urine," he omitted to mention Duhomme's simplification of Fehling's process, which I showed to the Pathological Society at the end of the discussion on diabetes. Since then I have received testimony in its favour from friends who have tried it, and therefore desire to give it the widespread publicity of the BRITISH MEDICAL JOURNAL. The chemical principles are the same as Fehling's process, but the apparatus and subsequent calculation are very simple. Nothing is required but some ordinary test-tubes, and two of Limousin's pipettes graduated to one and two cubic centimètres respectively. One cubic centimètre of urine is drawn up and allowed to escape by drops, the number of drops being counted; if that amount, say, to twenty, then obviously each drop equals one-twentieth of a cubic centimètre; no further measurement is required, as, for that urine and the same pipette, the drops are always of the same size. Two cubic centimètres of Fehling's solution are passed into a test-tube diluted with an equal quantity of liquor sodæ (or water I think does as well), and boiled, and the decolorisation produced in the usual way. Then multiply the number of drops contained in one cubic centimètre of the urine by ten, and divide the product by the number of drops of urine required to produce the complete decolorisation of the two cubic centimètres of Fehling's solution (equivalent to one milligramme of sugar). The result gives the quantity of glucose per litre in grammes and centigrammes. Example: If the number of drops in one cubic centimètre of urine be 20, and the number for decolorisation eight, then $\frac{20 \times 10}{8} = 25$ grammes of sugar per litre of urine. Even this calculation is not required, as in the books furnished with the apparatus there is a table by which the quantity of sugar can be seen at a glance. When the proportion of sugar is large, the urine should be diluted ten times, but for a first trial it saves time to make an approximate estimation with undiluted urine. It ensures accuracy also to have three test-tubes with the test-fluid, the amount of urine added to each differing by one drop. It is obvious that the principle is adapted to Pavy's or other test-fluid, if made for the metric system. At my request, Messrs. Corbyn and Co., of New Bond Street, keep the apparatus, which only costs about 5s.

H. RADCLIFFE CROCKER, M.D.

HUMANE BLISTERING.

VALUABLE as blisters are in the treatment of various diseased conditions, it must be admitted that their application is often avoided on account of the pain and distress they cause the patient, not only during active rising, but at each subsequent dressing, when, to say nothing of the attending discomfort and fatigue, absolute fainting occurs.

In an illness about fifteen years ago, I myself suffered considerable distress following the application of a large blister (which, no doubt, was instrumental in saving my life); but since that time I have never directed a similar torture for others, though I obtain satisfactory results from the blistering process I do employ. I direct the surface requiring such counter-irritation to be well covered with annular blisters about the size of the human iris, cut from vesicating tissue with an ordinary gun-punch, the centre being extracted with a punch of small size. Once secure to the surface, and covered with cotton-wool and bandage, these blisters require no further attention. The discomfort created is so slight that I never meet with the slightest resistance to their application.

The gelatine blister-tissue made by Messrs. Savory and Moore answers well, and the firm supply the same in suitable sizes ready for use.

SAMUEL STRETTON, M.R.C.S., Kidderminster.

OBSTETRIC MEMORANDA.

DOUBLE OS UTERI AND VAGINA.

IF Mr. John W. Taylor wishes to clear up the doubt he has as to the existence of a second uterus in the very interesting case he reports in the JOURNAL of January 12th, he may do so by passing a sound through each os, and, while they are thus placed, taking one in each hand, he can carefully explore for the presence of a septum, complete or partial.

I easily felt a complete septum by this manœuvre in two cases. One was a very rare form of divided uterus and vagina, in which the septum was attached right and left, and is fully recorded, with an illustration, at page 407 of the BRITISH MEDICAL JOURNAL for March 23rd, 1878. The other case occurred in the practice of my friend, Mr. G. B. Morgan, to whose kindness I am indebted for the opportunity of examining it.

JAMES MURPHY, M.D., Sunderland.

SUSPENDED ANIMATION.

THE following case seems to me to be of practical interest in everyday practice.

I was called to attend A. B., a primipara, who was stated to be in the seventh month of pregnancy. I found the os slightly dilated, and labour commenced. About eight hours afterwards, the patient was delivered of a seven months' female child. When born, the child was apparently dead. Artificial respiration was performed, the heart then feebly pulsating; cold and hot baths, with slight blood-letting from the umbilical cord, were also tried. This produced one or two gasps, but the limbs became cold, and the heart's action stopped. After half to three-quarters of an hour had been spent in fruitless endeavours to restore animation, the child was given to the nurse as dead, and placed in a flannel. It lay there for about two hours. When the nurse went to move it to a proper place, she observed it give a gasp, whereupon she put it into a warm bath; and after a while its colour and the heart's pulsations returned. It lived about fifteen hours.

The point of interest to a general practitioner from this case is the question, how long should an attempt to restore life be made, as to a busy man it must of necessity be a very material point whether he has to stay half an hour or two hours after the heart and respiration have both stopped. On the other hand, a life is at stake, and the interest of that young life must be duly considered.

W. AUGUSTUS NORRY, M.B., M.R.C.S., Epsom.

THERAPEUTIC MEMORANDA.

HYPERICUM OIL FOR THE PREVENTION AND CURE OF BED-SORES: ANOTHER CORRECTION.

ON perusal of a work printed some time in the course of the last century, entitled, *A Thousand Notable Things*, I find the following paragraph, which will doubtless interest Dr. Herbert Snow, Mr. Fenn Clark and others, who believe that there is, after all, something new under the sun. In book 2, page 43, we read: "*Ulcers.*—A most excellent oil of St. John's wort. Infuse or steep three days the tops of St. John's wort in excellent wine, then in a double vessel let them heat easily over the fire, and strain them; then again put as many of the tops of St. John's wort in that strained liquor, as you had before, and let them steep therein three days or three nights, then heat and strain them as before. Add thereto three ounces of turpentine and six ounces of old oil, and of saffron the weight of twenty-two barleycorns. Mix and seethe all together in a double vessel until the wine be consumed; what remains put into a glazed or leaden vessel, and keep it safely for use. This oil is of wonderful virtue, chiefly against venomous ulcers and many other diseases. *Mizald.*" Thus what is, hath been.

A. D. MACDONALD, M.B.Edin., Liverpool.

SURGICAL MEMORANDA.

FOREIGN BODY IN THE BLADDER.

ON January 9th, 1884, I received a message to see Mrs. C., aged 64, the wife of a tradesman, and a very fairly intelligent woman. She was the mother of a large family, the eldest being more than thirty years of age. She was seen the same evening by Dr. McConnell, who is associated with me in my practice. She presented to him all the usual symptoms of calculus. The following day, she was seen by us together, when, with the sound, we clearly detected a foreign body in the bladder. We proceeded to dilate the urethra; and, in passing the finger through the urethra into the bladder, we detected a substance of a metallic nature. This we were able to extract by means of a long narrow pair of forceps passed by the side of the finger. It proved to be a hairpin of the ordinary size. This operation was followed by little or no incontinence of urine.

The chief interest in the case was, how the hairpin got into the bladder, and the length of time it had in all probability been there. She appeared to have not the slightest knowledge as to how this entered her bladder, but she tells us that she has been conscious of the presence of something there since before the birth of her first child, more than thirty years ago.

ROBERT STORRS, Doncaster.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

GUY'S HOSPITAL.

(Cases under the care of Mr. THOMAS BRYANT.)

FRACTURE OF THE BASE OF THE SKULL: HÆMORRHAGE AND DISCHARGE OF CEREBRO-SPINAL FLUID FROM THE EAR: ECCHYMOSIS OF THE OUTER CANTHUS: RECOVERY.

[Reported by Mr. SWINDLEHURST.]

ELIZA F., aged 10, was admitted on July 13th, 1882. When playing near some paving-stones which stood on end, she had fallen down, and a stone fell upon the side of her head. She was brought to the hospital in an unconscious state at 8 P.M. Her face was blanched, and there was somewhat profuse hæmorrhage from the left ear. The pupils were equal. Respirations, 20; temperature, 97°; pulse moderate. At 9 P.M., she vomited the contents of her stomach.

July 14th. Vomiting continued during the night, and the vomit was streaked with blood. There was no facial paralysis; the pupils were equal. The concha was filled with thin watery fluid, stained with blood, and the left ear was entirely deaf, but the patient could hear through the cranium. She could answer questions, but only slowly, and some time after the question had been put. The ear was syringed out, but, in two hours, was filled again with a sanguineous looking fluid, very much like cerebro-spinal fluid tinged with blood. An ice-bag was put on the right ear.

July 15th. She was quite sensible, and had no pain. There was less discharge from the ear.

July 17th. Ecchymosis existed around the skin at the outer canthus of the left eye. The patient could hear with the left ear slightly. She suffered no pain.

July 19th. The patient was a little brighter.

July 22nd. She had great pain in the right ear last night, and a good deal of serum was discharged. Pulse, 104; respirations, 29. The temperature was 100.2° in the morning, and 99.6° in the evening.

July 23rd. She had passed a good night. The pulse was 78, and the temperature 98° in the morning, and 98.6° in the evening.

July 25th. She felt well; there was a small discharge of pus from the ear. Pulse, 64.

July 30th. The temperature was 100° in the morning, and 99.4 in the evening. On the following morning, it had further fallen to 98.4°, and the ice-bag was discontinued.

August 1st. There was some shooting pain in the left temporal region. The ice-bag was reapplied.

August 5th. There was no pain in the head, but the ice-bag had been reapplied.

August 14th. She left her bed for the first time. There was no pain in the head. Her power of hearing was better, but she was still slightly deaf in the left ear.

August 18th. She was sent to a convalescent home, being quite well, with the exception of a little deafness of the left ear, in which, however, she could hear a little better than on admission. She could hear a watch tick at the distance of four inches.

The temperature-record did not show any remarkable oscillations: after being at or about the normal point for the first three days, the temperature rose slightly, reaching 99.2° on the morning of the fifth day; it fell, however, immediately, to the normal, but rose again on the tenth day, coincidently with the attack of pain in the ear; this elevation, however, was temporary, and, with the exception of a slight oscillation on the eighteenth day, the temperature did not again rise above the normal point.

SPINA BIFIDA: INJECTION OF MORTON'S SOLUTION OF IODINE INTO THE SAC; EARLY RACHITIC CONDITION OF THE SKULL. DEATH ON THE FIFTH DAY.

[Reported by Mr. BOGER.]

F. L. S., aged six months, was admitted on April 4th, 1883. At birth the patient had a swelling about the size of an egg, situated over the lumbar vertebræ. This had gradually increased until, on admission, it was a large tumour measuring 2.75 inches vertically, and 3.5 transversely, occupying the region of the lumbar vertebræ. The skin over the tumour was extremely thin, from excessive distension, and had in one place broken down, leaving a sinus, from which a discharge had come. This was at first a healthy-looking pus, but lately had become a white fluid. Fluctuation could be felt in the swelling. Morton's solution, consisting of potassii iodidi grs. xxx, iodi grs. x, glycerini ℥i, was ordered for injection.

April 5th. Under chloroform, a small puncture was made; about 2 drachms of white fluid were drawn off, and half a drachm of the above injection was inserted. The child slept well.

April 6th. The child was very restless.

April 9th. The wound was dressed.

April 10th. The child died, apparently from subsequent draining of fluid from the sac.

Temperature,	April	4th, 98.°	Temperature,	April	8th, 98°
,,	,,	5th, 98.°	,,	,,	9th, 97.4°
,,	,,	6th, 98.	,,	,,	10th, 99.6
,,	,,	7th, 97.			

Post Mortem Examination. The brain was perfectly normal. The dura mater stripped off very easily from the base of the brain, and exhibited beneath it a granular appearance, and felt rough. The pia mater and spinal cord seemed unduly congested. There was a spongy deposit of bone on the inner and outer surface of the cranium, porous and very vascular, with thinning and irregular thickening of the tables of the skull in patches, producing at several spots the condition of craniotabes. The spongy condition had almost obliterated the frontal suture, and was also well-marked along the margins (about half the distance from them) of the sagittal suture. Was this condition of skull due to syphilis? It was not extreme enough for the condition described by M. Parrot and Dr. Barlow, and unlike it in one or two respects. Or was it an early condition of rickets? Specimens of the brain, skull, and spina bifida, were retained for further inspection. There were no signs of inflammation in the sac of the spinal tumour.

RAPID AND EXTENSIVE EMPHYSEMA WITH SEVERE COLLAPSE, FROM PASSAGE OF A CART-WHEEL OVER THE THORAX, TREATED AT ONCE WITH MARKED RELIEF BY MULTIPLE PUNCTURES OF THE SKIN. RAPID CONVALESCENCE.

[Reported by Mr. BISSHOPP.]

G. W. S., aged 4 years, was admitted on August 14th, 1883. He had just recently been run over by a dung-cart, the wheel of which had completely passed over his body when in a prone position. On admission, the whole body, neck, and face were very much blown up, and tight as a drum, and very resonant on percussion. Emphysematous crackling was exceedingly well marked. The breathing was short and catchy, diaphragmatic, not intercostal. Respirations 44. The child was cold and collapsed; he seemed to be dying. He was put in a tent in front of the fire, and a steam-kettle was kept going. Nine or ten punctures were made, in the neck, back, cheek, and dorsal region, by Mr. Bryant with a small knife; and, when the air rushed out, it hissed, and blew out the flame of a wax-light. The operation at once greatly relieved the patient. Brandy was given by the mouth. In the evening, the boy was restless and very thirsty.

August 15th. He vomited dark matter containing blood. The emphysema was limited by Poupart's ligaments below, the temporal fascia and superior occipital curved line above: it extended down the right arm to the wrist, and in the left arm to the elbow-joint. The measurement round the abdomen was 22 inches; above the umbilicus, 23½ inches; round the chest, at the horizontal mammary line, 24½ inches. Respirations 60; pulse 150. There had been some bleeding from the punctures.

August 16th. The child was greatly improved. The swelling had lessened a good deal. The respirations were not so [illegible].

August 17th. He was still better. The swelling had nearly disappeared from the face. The urine, specific gravity [illegible], contained no blood, nor albumen, but had a deposit consisting chiefly of urates.

August 18th. He was still better. The respirations were 44, and less laboured. With a stethoscope, decided to-and-fro murmur could be heard over the abdomen. Emphysema could not be detected below the shoulders in the direction of the arms, nor below Poupart's ligament. There was a decided yellowish green discoloration over the front of the abdomen on the left side.

August 20th. The whole of the abdomen was still emphysematous, and the left side of the scrotum probably contained a little fluid as well as air. There was some emphysema of the front and outer part of the upper third of the right arm, but none of the left. The right side of the face had regained its proper size, but there was still a little emphysema at its lower part, and also on the same side of the neck. The left side of the face was slightly swollen and emphysematous. The whole back was emphysematous down to the sacrum. He had a short moist cough. Respirations 44; pulse 156. Linseed-poultices were kept applied to the chest.

August 24th. His right clavicle was found to be fractured at about one inch from the sternal end. The arm was strapped to the chest with a pad in the axilla. A certain amount of union had taken place.

August 26th. Both sides of the face and neck had regained their normal size. Emphysema was still apparent in the abdominal parietes. The right side of the scrotum was much swollen, and had now an emphysematous feel.

August 28th. There was no emphysema of the back. The left side of the scrotum continued to decrease in size. The discoloration of the left side of the scrotum and the left side of the abdomen had almost entirely disappeared. He had now no cough. The respirations and temperature were now about normal.

September 5th. The emphysema had entirely disappeared, except from the right side of the scrotum, which was still a little large, and gave a crackling sensation under the fingers. There was slight green discoloration of the soft parts round the umbilicus. The clavicle was not yet united; there was considerable prominence of the outer end of the inner fragment, which was riding upwards above the outer fragment. The child was otherwise in an excellent condition.

September 9th. He was discharged.

The temperature-record was as follows:

			M.		E.
August	14th	...	—	...	100°
,,	15th	...	100	...	99.8°
,,	16th	...	99.6°	...	98
,,	17th	...	100°	...	99.4°
,,	18th	...	98.6°	...	99
,,	19th	...		...	98.2°
,,	20th	...	99.8°	...	—
,,	21st	...	98.2°	...	98.4°

After this date, it oscillated between 97.2 and 98.4

REMARKS.—The rapid and extensive emphysema which existed in this case, without other evidence of lung-injury, was remarkable; and the relief afforded by puncturing the integument very striking. Had this not been done when it was, the child would have speedily died.

LACERATED WOUND OF THE THROAT INTO THE LARYNX AND PHARYNX BY BROKEN CROCKERY: RECOVERY.

[Reported by Mr. HUMPHREYS.]

Eliza A., aged 49, was admitted on December 28th, 1882. The patient was carrying a jug downstairs, when she fell down about one flight. In falling, the jug became broken, and a triangular part of the handle entered her throat between the cricoid and thyroid cartilages, nearly severing the larynx, whilst another piece entered the side of the pharynx. The wound was very clean cut, and there was a good deal of hæmorrhage.

On admission, the patient was found to be a fairly nourished woman. She had a transverse cut across the thyroid cartilage, just below the notch, about two and a half inches long, with clean-cut edges. The air passed through the wound, but the wound did not appear to be deep, and there was only a slight injury of the trachea, if any. There was no bleeding going on, and no vessels required ligaturing. The patient spoke well, but weakly. Several stitches were put into the wound, and it was dressed with terebene. The head was slightly raised and kept still by sandbags. A piece of china was still in the wound upon the patient's admission.

December 29th. There was a good deal of discharge when the wounds were dressed, and, later on, it became much more profuse. The patient was fed by an enema-pipe through the nose. She was unable to speak well, and her throat required to be constantly cleared.

January 1st. All stitches had been absorbed. The cheeks were a little flushed, but there was much less throat-trouble.

January 4th. Stringy mucus came from the wound, and a small slough came away to-day.

January 7th. The patient's head fell back, and the wound was opened and some air escaped.

January 10th. The head was elevated to keep the edges of the wound in apposition. She was still fed through the nostril.

January 13th. The patient had no pain in the throat. There was, in front of the thyroid cartilage, a raw granulating surface two inches by one inch. The whole looked healthy.

January 24th. The wound was granulating, except at one spot in the centre, through which air and mucus escaped. The pulse was very weak, but regular. The voice seemed a little stronger; the tongue was coated.

January 29th. The patient tried to swallow a little milk, but it caused mucus to come from the aperture in the pharynx steadily, though in small quantities.

February 3rd. No air came through the wound.

February 7th. The wound was granulating well.

February 14th. Mr. Poland reported that no air had passed through the opening for three weeks. The patient was still fed by the tube through the nose. Twice last week, some difficulty was experienced in passing the tube through the nose. An obstruction was met at the level of the larynx. Since then, there had been no such difficulty. The patient was very bright and comfortable.

March 8th. There was a small area of granulating tissue, three-quarters by half an inch. The sinuses were all closed. She could swallow without difficulty or pain.

March 20th. The patient was discharged. The wound was entirely healed.

The following is the record of temperature during the progress of the case.

		M.		E.			M.		E.
Dec.	29	101.0°	...	102.0°	Jan.	19	99.6°	...	99.6°
,,	30	101.0°	...	100.8°	,,	20	99.0°	...	99.4°
,,	31	99.6°	...	102.2°	,,	21	99.0°	...	100.0°
Jan.	1	100.8°	...	...	,,	22	99.6°	...	99.2°
,,	2	101.1°	...	101.8	,,	23	...	...	99.8°
,,	3	...	...	102.8°	,,	24	99.4°	...	100.8°
,,	4	...	...	...	,,	25	98.4°	...	99.0°
,,	5	100.0°	...	100.2°	,,	26	99.6°	...	99.4°
,,	6	98.6°	...	100.0°	,,	27	99.6°	...	99.0°
,,	7	99.2°	...	99.4	,,	28	99.0°	...	99.6°
,,	8	100.2°	...	101.8°	,,	29	99.0°	...	100.2°
,,	9	99.4°	...	100.8°	,,	30	99.8°	...	99.4°
,,	10	100.4°	...	101.0°	,,	31	97.6°	...	99.6°
,,	11	100.2°	...	101.0°	Feb.	1	98.6°	...	100.0°
,,	12	100.2°	...	100.6°	,,	2	99.0°	...	99.4°
,,	13	99.8°	...	100.4°	,,	3	96.8°	...	98.4°
,,	14	98.0°	...	100.4°	,,	4	100.2°	...	99.2°
,,	15	99.0°	...	99.2°	,,	5	99.4°	...	99.2°
,,	16	98.4°	...	99.8°	,,	6	100.0°	...	98.6°
,,	17	99.4°	...	100.0°	,,	7	98.4°	...	100.0°
,,	18	98.8°	...	99.8°					

TRADING IN HUMAN BONES.—At Macclesfield, last week, Henry Aspinal, contractor for the restoration of Macclesfield Old Church, was summoned for illegally removing human remains from the church and churchyard to a rubbish heap near a new street, which is being formed by the corporation. It was proved that a large quantity of human bodies had been removed, several bones being picked out of the soil by idlers, and sold to rag-and-bone dealers. One witness stated that in the soil carted away for the formation of new rope works, he found various kinds of bones which crumbled into dust when touched. The defence set up was that the defendant took all reasonable precautions to pick out the bones from the soil, which was searched three or four times. A fine of £10 was inflicted, with costs. Notice of appeal was given.

ON TRUE AND FALSE ANGINA PECTORIS.—The different forms of angina pectoris have been recently studied by Dr. Huchard, whose paper was read at a meeting of the Paris Académie de Médecine, held on January 8th. The false form may be due to nervous, reflex, or toxic changes, and generally ends in recovery; while the true form is caused by ischæmia of the cardiac muscle; in most cases, the coronary arteries are found diseased, or their opening in the aorta is narrowed by chronic endarteritis; lesions of the cardiac nerves are not frequent. M. Huchard thinks that true angina pectoris may end in recovery, but much more rarely than the false form. For the treatment, he recommends nitrite of amyl, which acts more rapidly than injections of morphia, nitroglycerine, and nitrite of sodium. He also strongly advises the iodide of sodium, given at a dose of 1 to 3 grammes, daily, during several months.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 22ND, 1884.

JOHN MARSHALL, F.R.S., President, in the Chair.

The late Mr. Wheatley.—The PRESIDENT, on the opening of the meeting, said a few words on the loss of the resident librarian, Mr. Wheatley, who had long been the most zealous and courteous of the Society's servants, and who had devoted the whole of his most valuable capacities to the assistance of the Society. He had been out of health before their last meeting, and had veiled his discomfort for a time; but, only a few hours after they had last separated, he was in danger of his life, and within twenty-four hours he was dead. He must defer to the annual address any further remarks, but he felt he should not represent the warm feelings of sympathy throughout the Society if he allowed no occasion for their public expression.

On the Mechanism which Regulates the Arterial Blood-pressure in Health and Disease. By CHARLES S. ROY, M.D. Dr. ROY explained that he had been asked last year to bring forward some of the more recent advances in knowledge of the mechanism of the circulation, and that, though he had been prevented at the time, he hoped he might be able to do so that evening. He wished to aid the explanation of the rules of the general blood-pressure after ligature of large arteries, which was a subject not yet thoroughly understood. If, in one of the lower animals, a ligature or clamp were applied to a large artery, and the pressure of the other parts of the arterial system investigated by a mercurial manometer, such as Ludwig used, it was found that, after ligature, there was a slight rise in pressure, which did not last more than a minute or two, and then the general pressure reverted to what it had been before the occlusion of the artery. This was the case if both femoral arteries were ligatured, or both brachial; or even if the abdominal aorta were clamped; and, immediately after removal of the clamp, the general blood-pressure fell very little below the normal, and for a very short time only. That this showed a powerful mechanism in regulation of the pressure there could be no doubt, but, on the nature of this mechanism, he did not profess to touch. This strong regulative power was shown, too, by the slight temporary influence exerted on the blood-pressure by large injections into the vascular system. A quantity of neutral salt-solution, or of defibrinated blood, equal to the total amount of blood in the animal, might be injected with the same slight influence as followed the occlusion of a large artery; with the exception that, if the blood-pressure in the animal were below normal at the time of the injection, it was thereby raised to normal, and kept there. It was true, however, that, if the quantity injected exceeded a certain high limit, which varied in different animals, the blood-pressure rose considerably, and such cases were fatal. This showed a tendency of the system to keep to a certain particular pressure; and the mechanism regulating this was naturally of great interest. The three factors which were most important in [illegible] were: (1) the force and frequency of action of the heart; (2) the elasticity of the arteries; (3) the resistance of the capillaries. These each deserved separate consideration. First, as to the heart. The instruments generally in use at present, such as the cardiographs of Marey and Burdon Sanderson, were not completely [illegible], inasmuch as they did not measure the absolute force of the heart's action. If, however, there were made direct attachment of levers by hooks to the auricle and ventricle, their relative strengths might be measured absolutely or in comparison; if the hooks were attached to points between auricles and ventricles, the absolute strength of the heart might be best ascertained. With such an instrument, the effects of nerves on the [illegible] of the heart could be demonstrated; the vagus could be shown, if stimulated high up in the neck, to produce either a retarding power alone, or weakening power alone, or a combination of the two; the [illegible] either a quickening power or a strengthening power, or a combination of the two. From this, it might be inferred that there were two sets of nerve-fibres in the vagus, and two in the accelerator, which were [illegible] functionally, and probably anatomically, distinct. This helped to explain a point in Gaskell's researches on arterial pressure, which had been much discussed. Gaskell found that, immediately on the application of a stimulus, the pressure fell for a short time, and then rose gradually to much above normal. That was because the depressing effects of stimulation of the vagus occurred rapidly and lasted only a short time; whilst those of the accelerator came on only slowly and culminated later. It was worth while also to note that stimulation of the vagus nerve might sometimes strengthen the ventricle and weaken the auricle at the same time. The influence of sensory stimuli and of the surroundings, in modifying the power of the heart, was very marked, and introduced many complications. In fact, no attempt could be made in the present paper to settle whether the heart was the moderating force which kept the blood-pressure nearly uniform under varying conditions. The second factor for consideration was the elasticity of the blood-vessels; and details were given of experiments, by a somewhat novel automatic instrument, of the curves of elasticity of vertical and transverse strips of the aorta, showing that, though the transverse strip stretched more readily to light weights, yet, at the normal pressure-point of the animal from which the aorta was taken, the stretching of the two was equal—*e. g.*, in a dog, at a pressure of 90 to 120 cubic centimètres of mercury. The third factor was the peripheral resistance of the capillaries. The capacity of resistance was different in different organs, and in only a few could be accurately investigated, viz., (*a*) in the skin by the manometer, (*b*) in the muscle by the microscope, and (*c*) in the kidney by an instrument like that used by Mosso—viz., a vessel containing water, in which the organ was put, and where the alteration in its bulk was shown by the varying amounts of water displaced. In examining the kidney, it was found that all nervous stimuli caused contraction of the capillaries. In exertion, the renal capillaries contracted, and the muscular dilated, the blood being thus turned to the place where it was wanted. By the injection of salt into the blood, the renal capillaries were dilated, along with those of many other parts; but if urea, or any of the chief constituents of the urine, were injected, the kidney alone was affected; and this happened even after all nervous connections between the kidney and the rest of the body were cut, so that its mechanism must be contained in the kidney itself. The same general rules applied also to the spleen. Time did not suffice to discuss further the many branches of the subject and their applications; but, before concluding, he asked attention for a moment to an instrument for measuring the absolute force of the blood-pressure in man—viz., a small tight elastic pad containing air, and in connection with a simple straight manometer of mercury; if this were applied to the artery, the mercury rose in the tube, according to the pressure of the application; the pulse-wave was visible in the mercury on light pressures, but ceased to be perceptible when the pressure was raised sufficiently to occlude the vessel. At this point, the height at which the mercury stood would show the absolute value of the pressure in the artery. It was an instrument much in use on the Continent, but not in England.—A cordial vote of thanks was given to Dr. Roy, but no discussion was raised.

On a Case of Spina Bifida in a Woman aged 28: Successfully Treated by Operation. Mr. [illegible] described the case. For the first twenty-one years of the patient's life, the tumour had been quiescent, and gave no serious discomfort; for the next seven years, whilst she had been obliged to work hard, it grew larger, and the concomitant cerebral effects in 1883 had become distressing. She had severe headaches, with nausea and vomiting; attacks of vertigo; and trasient loss of sight on pressure of the tumour, or even when she bent her body. She was admitted into the Manchester Royal Infirmary on July 11th, 1883. The tumour reached from three inches above the iliac crest to within an inch of the tip of the coccyx; its circumference was twenty-two inches; its transverse diameter fourteen inches. The skin was thin, the contained fluid transparent to an oxyhydrogen lamp. After five weeks' observation, the tumour was tapped, the diagnosis rendered certain by examination of the fluid; and, whilst the sac was flabby, the finger could detect [illegible] the spinal canal [illegible]. The [illegible] of the tumour was followed by [illegible] headache, vomiting, and pain, which were arrested by a seton in the neck. The tumour refilled, and gradual [illegible] was [illegible] for seventeen days, by [illegible] first of a [illegible], and afterwards of a [illegible]. The [illegible] twenty-eight hours. [illegible]; and, on October [illegible], [illegible] the entire surface of the tumour, [illegible] with chloroform. By [illegible] had gone. On November [illegible], the [illegible] from the [illegible] and the cavity [illegible], and, two months later, the [illegible] to tenderness or discomfort left. The PRESIDENT remarked that the fact that the tumour was cut off from the spinal canal, apparently, during the first twenty-two years, made the case unusual. He called the attention of the Fellows to the woman on whom this interesting operation had been peformed, and who was in attendance in a side-room.

Preliminary Communication on the Existence of Sensory Nerves in Nerve-Trunks, True "Nervi Nervorum." By VICTOR HORSLEY, F.R.C.S.—The author said that, although a fertile source of theory for some time, true sensory nerves had not been described hitherto as supplying nerve-trunks. Both Sappey (*Traité d'Anatomie Descriptive*, p. 223, 1872) and Krause (*Handbuch der Menschlichen Anatomei*, 1882, evidently following Sappey's description) mentioned fine nerve-branches forming a vasomotor plexus around the vessels of the epineurium. In addition to these, which could be demonstrated with ease, there existed also (in man) true sensory nerves concealed by the fat-cells of the epineurium, and terminating by end-bulbs on the perineurium. These alone should be termed *nervi nervorum*, those above mentioned being properly *nervi vasorum*. They appeared to arise occasionally from the primary bundles of nerve-fibres, but also (and perhaps more frequently) from the cutaneous (?) branches given off by the former. Their direction was first at right angles to the primary bundles, and then parallel, running as single medullated fibres of medium size, in the connective tissue of the epineurium, and terminating in end-bulbs very similar to those found in the conjunctiva, etc., and which consisted of a connective tissue-capsule, containing a protoplasmic core at the base, and two nucleated protoplasmic corpuscles at the extremity, close by which the axis-cylinder could be traced, but without appearing to end in them. The localisation of pain in neuralgia, referred to by Mr. Marshall in the Bradshawe Lecture, 1883, was thus accounted for, and an additional aid to "muscular sense" suggested.—Dr. **GEORGE HOGGAN** made some comments on the microscopical specimens with which Mr. Horsley had illustrated his paper, expressing an opinion that the structures which were shown on the perineurium, and termed end-bulbs, were probably sympathetic ganglia.—Mr. **HORSLEY** briefly defended his own views, and quoted in support of them the opinion of Professor Schäfer.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, JANUARY 4TH, 1884.

Stone in the Bladder of a Female. Mr. T. PICKERING PICK read notes of this case. The patient had suffered from incontinence of urine ever since an operation for removal of a stone had been undertaken seven years ago at a London hospital. Several plastic operations had been performed, without success, and for two years fæces had passed from the rectum into the vagina. When the patient came under Mr. Pick's care, he found that the whole of the posterior wall of the bladder had been destroyed, as well as the under surface of the urethra. There was also an opening of the size of a goose-quill, between the rectum and vagina. As there appeared to be no probability of closing the vesico-vaginal fistula, Mr. Pick occluded the vagina by removing a circular belt of mucous membrane from just within the orifice, and bringing the surfaces together with quilled sutures. The operation was attended with marked success, the patient passing her urine by the rectum, being able to retain it "as long as she liked." Mr. Pick then remarked how unadvisable it was to use the gradual dilatation, or to slit up the urethra, for these methods generally caused incontinence. For stones not larger than a filbert, rapid dilatation was best, while, for stones of a larger size, lithotomy was preferable to lithotrity.—Mr. **LUNN** mentioned how difficult it was to perform lithotrity in young children, owing to the danger of injuring the bladder.—Mr. **HOWARD MARSH** asked Mr. Pick as to how his patients bore the urine in the rectum. He also referred to the difficulty of turning the instruments sufficiently to crush the stone in the bladder of a child, and mentioned that frequently the fistulæ were due to syphilitic ulcerations, and therefore impossible to heal.—Mr. **PICK**, in reply, said that he found that his patients tolerated urine in the rectum, and mentioned a case of recto-vesical fistula, due to gonorrhœa, in a young man, in which the rectum became, as it were, a secondary bladder, and lasted for many years with but slight inconvenience.

Caries of the Spine mistaken for Morbus Coxæ.—Dr. **CLIPPINGDALE** showed a case illustrating the difficulty of diagnosing between caries of the spine leading to psoas-abscess and disease of the hip-joint. The patient, a boy aged eleven, had been treated by plaster-of-Paris jackets applied to the back, and weight and pulley attached to the leg, in four different hospitals where different diagnoses were given. Dr. Clippingdale, and his colleagues at the Kensington Dispensary, were also uncertain, at first, of the nature of the disease, but now that many of the sinuses had ceased discharging, it was clear that each hip-joint was perfectly intact, and that caries of the lowest dorsal and uppermost lumbar vertebræ existed. This disease had apparently given rise to a psoas-abscess on each side, and this in time had occasioned sinuses around each hip-joint, similar in situation to those produced in morbus coxæ. Some ostitis of the great trochanter upon the left side had also made the diagnosis difficult.

Excision of the Hip.—Mr. **POTTER** exhibited the patient, a boy eight years old. He had been admitted into the Kensington Infirmary four years ago, and it was found advisable to excise the joint. Mr. Potter said that he had removed the head, neck, and upper part of the great trochanter, as well as a loose sequestrum in the acetabulum. The wound healed completely in nine months, and the patient had since been walking about without a crutch. The shortening was two inches and three-eighths. With the aid of a high boot, the boy could run about without pain. The normal movements of the joint were only slightly modified; that of adduction was decidedly lessened. A few days since, the boy fell, and ruptured a cicatrix in the groin. With this exception, no sinus existed.

Two Cases of Hip-Disease.—Mr. **LUNN** read notes of these cases. Susan A., aged 10, was admitted into the St. Marylebone Infirmary in October 1883, with old hip-disease and a small sinus over the left femur. Four years ago, she had fallen on her left hip, and had been lame ever since. She had been subjected to several operations at a London hospital, and then became a patient for three years at a Hospital for Incurables. On admission, the child looked very anæmic; had ankylosis of the left hip, no apparent shortening, old scars about the hip, and one small sinus still open; some lordosis, with lateral curvature towards right; the viscera were normal. There was also some wasting of the gluteal muscles. The second patient was a laundress, aged 28. She had been admitted into the St. Marylebone Infirmary in December 1883, with hip-disease. Three years ago, she had fallen through some glass and cut her right arm severely. On recovery, after remaining for six months at St. George's Hospital, she noticed that her right leg was painful, causing her to limp. Early in 1883, she was treated at St. Bartholomew's Hospital by extension, for four months. She then went to the Margate Infirmary. On admission, her health was good. She had old scars on her right arm, and wedge-shaped incisor teeth. The nates were not flattened. The right leg was shortened an inch a half, and she was able to stand on it when supported. Ankylosis was incomplete.—Dr. **THUDICHUM** laid great stress upon the use of the stethoscope in such cases. When that instrument was placed over the joint, on moving the articulation, a distinct grating of the bone would be heard when typical hip-joint disease existed; but, if the affection were simple rheumatism, a peculiar soft grinding noise, somewhat like the murmur of a distant engine, would be audible.—Mr. **HOWARD MARSH**, speaking of the diagnosis of these cases, strongly advised that the patient should be examined during all the various natural movements of the spine.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, DECEMBER 5TH, 1883.

D. J. LEECH, M.D., President, in the Chair.

Intrathoracic Tumour.—Dr. **DRESCHFELD** showed two patients the subjects of intrathoracic tumour, probably malignant disease of the gland-structures in the anterior mediastinum.

Hemianopsia and Amaurosis.—Dr. **ROSS** showed several cases of hemianopsia and amaurosis to illustrate the course of the fibres through the optic nerves and tracts. Through the kindness of Dr. Morgan, he was permitted to mention the case of an infirmary-patient who was suffering from double temporal hemianopsia and paralysis of the third and fourth nerves on the left side. The patient was also suffering from multiple sarcomatous tumours in the ribs and sternum, and it was believed that a tumour of the same character was growing from the body of the sphenoid bone, in such a way as to leave compressed the centre of the optic commissure, while a lateral outgrowth to the left side had implicated the third and fourth nerves. A young woman, also a patient of Dr. Morgan's, was shown, who was suffering from partial paralysis of the third and fourth nerves on the left side, complete blindness of the left eye, and temporal hemianopsia of the right eye. It was surmised that a tumour was growing at the base of the skull to the left of the body of the sphenoid bone, and in such a position as to have compressed the cavernous sinus with its nerves, the optic nerve and the optic tract. Another patient was shown who had paralysis of all the ocular motor nerves of the right eye, with paralytic exophthalmos, partial anæsthesia of the forehead, and complete blindness of the eye on the same side, but no restriction of the field of vision of the other eye. An imperfect history of syphilis was obtained, and, under antisyphilitic treatment, there was a slight return of motor power in the muscles supplied by the third nerve, and the pupil, from being dilated, became somewhat contracted, and manifested the alternate contractions and dilatations termed hippus or chorea of the iris. The great movability of the right eyeball showed that there was no tumour in the orbit, and it was believed that an intracranial syphilitic growth existed on the right side, close to the optic foramen and sphenoidal fissure, and not extending sufficiently far back to reach the optic tract of the same side. The symptoms in the next case exhibited consisted of almost complete left-sided hemianæsthesia, including loss of taste of the half of the tongue, loss of smell, and diminution of hearing on the same side, and left-sided homonymous lateral hemianopsia. The symptoms supervened suddenly three months ago, with an apoplectiform attack, and were believed to have been caused by syphilitic thrombosis of the external optic artery, giving rise to a focus of softening in the right optic thalamus. The last case shown was a boy who had some kind of fit six weeks previously, on recovering from which he was found to be quite blind. The patient was known to have been myopic; but, with the exception of posterior staphyloma, the fundus of each eye was normal, and the irides were very sensitive to light. Various tests were applied, which seemed to exclude the possibility of shamming, and it was concluded that the case was one of hysterical amaurosis.

Cases of Gastrostomy.—Mr. JONES showed two cases of successful gastrostomy, the details of which had been given to the Society last year. He exhibited the method of feeding, and read a paper reviewing the statistics of the operation.

Dermoid Cyst of Ovary.—Mr. WRIGHT showed a dermoid ovarian cyst, removed from a woman aged 25. The tumour was noticed for the first time a month before operation. The operation was delayed by an attack of acute peritonitis, immediately after which the cyst was removed; it contained about a pint of round granular masses of sebaceous matter, greenish-brown in colour, and all nearly of the same size; also hairs and brown grumous fluid. The case did well.

Arterio-Venous Varix.—Mr. WRIGHT exhibited the dura mater of a child, who was shown to the Society in May 1882. She had a varicose condition of the arteries and veins of the head, and had been somewhat improved by operation. The torcular Herophili and lateral sinuses were enormously dilated, and at the front part of the straight sinus was a cyst, in communication with the sinus, of the size of a pigeon's egg; in its walls were calcareous plates. The child died somewhat suddenly, having a convulsive fit, followed by coma.

Radical Cure of Hernia. Mr. R. DACRE FOX exhibited a child after operation for the radical cure of hernia.

Card Specimens.—Dr. BROOKE showed a series of very fine casts, illustrative of skin-disease, taken by him from patients during the last few months.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

DECEMBER 11TH, 1883.

T. MCCALL ANDERSON, M.D., in the Chair.

Simple Perforating Ulcers of the Stomach. Dr. JOSEPH COATS showed a specimen where there were two perforating ulcers near the lesser curvature. In the floor of the larger was exposed a branch of the lesser coronary artery of the stomach, which had been perforated, and caused death by traumatic anæmia. A bristle could be readily passed through the aperture in the vessel. The first hæmorrhage had occurred about three weeks before death; and it was interesting to note, in this connection, that the most pronounced fatty degeneration of the heart and liver had in that time taken place. Dr. Coats referred to an almost precisely similar case he had met with some time ago.

Urinary Apparatus from a Case of Stricture of the Urethra. Mr. A. ERNEST MAYLARD showed the parts from a case where Cock's operation had been performed for the relief of retention, after all other means had entirely failed, and in which death took place twenty-four hours after the operation, from coma. In the penile portion of the canal, there was a very tight and tortuous stricture, in front of which were numerous false passages, into which black directors had been passed. Behind the stricture was seen the greatly distended membranous portion, and a large black director indicated the position where it had been incised. In the prostate was a large abscess; the bladder was enormously hypertrophied; and there was dilatation of both ureters, with double hydronephrosis. The kidney-tissue, to the naked eye, was not obviously altered. Mr. Maylard gave a minute account of the clinical history; and, having pointed out the various operative procedures that might have been resorted to, came to the conclusion that Cock's operation was the best under the circumstances.

Malignant Disease of the Head of the Pancreas, with Infarctions of the Liver, due to Obstruction of the Portal Vein, and partially of the Hepatic Artery.—Dr. MCCALL ANDERSON related the clinical history of this case, in which the symptoms were typically those of malignant disease of the pylorus; and referred to the difficulty often experienced, as in the present case, of localising the lesion. In the light of the *post mortem* examination, the points of interest were: (1) the intense gastric symptoms, and the absence of any lesion of the stomach; (2) the well marked jaundice, with a distended gall-bladder, and yet permeability of the gall-duct, through which a probe could be passed; and (3) the absence of enlargement of the superficial veins, of ascites and splenic enlargement, and yet complete obstruction of the portal vein.—Dr. JOSEPH COATS showed portions of the liver in this case, and remarked that, in the fresh state, there were strictly demarcated areas, frequently wedge-shaped, which were strongly suggestive of infarctions, such as were commonly seen in the kidney and spleen, but which Dr. Coats had never before seen in the liver. The explanation of this seemed to be, that the cancerous tumour in the head of the pancreas had involved both portal vein and hepatic artery, the former being greatly narrowed, so that a probe could not be passed, the latter being surrounded by matted tissue, and containing a blood-clot, probably a thrombus. Dr. Coats suggested that this double interference with the circulation had probably induced necrosis in certain parts of the liver. The common bile-duct was not involved in the tumour, but apparently had been sufficiently pressed on to produce obstruction, which the bile secreted at a low pressure was unable to overcome.

Sections of Eyes removed for Sympathetic Irritation, Sympathetic Ophthalmia, and Severe Pain in the Remains of Diseased Eyes. Dr. J. CRAWFORD RENTON presented a case containing sections of eighteen eyes which had been removed for the above affections, and which were mounted by embedding in gelatine, according to the method recommended by Dr. Priestley Smith of Birmingham. Dr. Renton read notes of the more important cases.

ACADEMY OF MEDICINE IN IRELAND: MEDICAL SECTION.

FRIDAY, DECEMBER 14TH, 1883.

W. MOORE, M.D., President, in the Chair.

Specimens exhibited by Card.—Dr. C. S. NIXON: (1) Abscess in temporo-sphenoidal lobe; (2) Scirrhus of the pylorus. Dr. J. MAGEE FINNY: (1) Gangrene of the lung; (2) A perfect specimen of a guinea-worm.

Protean Skin-Affections in Children.—Dr. C. F. MOORE read a paper detailing a protean skin-affection. He stated that children were not unfrequently attacked with a complication, assuming a resemblance to pruritus cutaneus of Hebra, prurigo, pemphigus, and, in some severe cases, pemphigus gangrænosus, or burnt holes of older authors. The diseases which in Dublin had been complicated with the foregoing in varying degrees of severity, were varicella, scabies, insects, dentition, certain forms of rash, induced by innunction of irritating medicinal or domestic remedies, and, rarely, vaccination. The cases which had lately come under his notice were those of children whose ages varied from a few weeks to eight years. He did not think he had seen in this country a case of the disorder specially named prurigo by Hebra. Bad or unsuitable food tended strongly to the production of the disorder. The irritation caused by pediculi and other insects, and by clothing in a damp or uncleanly state, not uncommonly produced pruritus. Unhealthy surroundings, and a low condition of the child, or of its nurse, tended greatly to the production of the ailment which he wished to bring under notice. The treatment of these cases resolved itself into general and local—better sanitary condition, better food for the child, removal as far as possible of the cause of the irritation, through cleanliness, and, generally speaking, soothing applications; baths, with bran, or tar, or liquor carbonis detergens, etc.; mild alteratives, with suitable tonics; cod-liver oil or preparations of iron. In all cases inquiry should be made for the presence of intestinal worms, and the treatment suitable pursued. The affection which he named allied to prurigo, pruritus, and pemphigus, occurred [illegible] that were [illegible] apparently by varicella: in four cases where scabies existed previously: in one case in which tallow had been used as a domestic remedy by inunction: and another in which a very slight appearance of prurigo mitis existed. The latter ailment was apparently increased after vaccination. The cases that had come under his notice had occurred almost invariably either in the cold spring or early winter. He did not refer to the many cases of pruritus and prurigo that he had seen in the adult and in youth. The affection noticed by Mr. Hutchinson, of London, as varicella prurigo, and regarded by Mr. Balmanno Squire rather as ecthyma or lichen urticatus, seemed to resemble cases which he had seen in Dublin, but which were of a very protean character, and did not generally assume the serious forms described by Mr. Hutchinson, or by Professor Hebra in describing the life-long character of the prurigo met with at Vienna.—Dr. H. C. **Tweedy** described the case of a boy, aged 16 who had come under his observation, presenting the features of true prurigo, which he had had since childhood, and which resisted all treatment.—Dr. **Duffey** said Dr. Moore had described several skin-affections, but had not specified the particular one which he considered now prevalent. It was a common thing to find eczema on the soles of the feet and the palms of the hand in infants.—Dr. **Fitzpatrick** did not believe that pure vaccine matter would produce skin-disease in a healthy child.—Dr. **Moore**, in replying, was glad to find that Dr. Fitzpatrick's experience confirmed his own opinion that vaccination in itself was not a cause of skin-disease.

A Case of Pulsating Liver.—Dr. **Walter Smith** reported a case in which he had observed true regurgitant throbbing of the liver in connection with mitral valve-disease. A soldier, aged 35, had suffered from cough and breathlessness for three years. When admitted into hospital, the legs were anasarcous, and the lungs engorged. There was a systolic apical cardiac murmur. There was extreme dusky congestion of the face and hands, and the jugular veins, which were of immense size, pulsated visibly. The urine was albuminous. The liver extended two and a half inches below the ribs, and a distinct expansile pulsation of that organ, extending over right and left lobes, could be seen and felt. The man left hospital after a stay of some weeks. He was admitted shortly afterwards under another physician, and died suddenly. No *post mortem* examination was held.—Dr. **Wallace Beatty** said the patient only lived a few hours after his readmission to hospital, and during that time the liver did not pulsate.—The **President** mentioned a similar case, which had come under his notice three years ago, in which mitral stenosis with dilatation existed together with a visible jugular pulsation, called postsystolic pulsation.—Dr. C. J. **Nixon** thought it would be difficult to distinguish between an eccentric pulsation of the liver, due to regurgitation of blood into the hepatic veins, and that general pulsation which the liver in a state of extreme congestion might receive from a pulsatile condition of the inferior vena cava.—Dr. **Smith**, in reply, admitted the force of the point raised by Dr. Nixon. Still it remained a question why those cases were not observed in Dublin as they had been in London and Newcastle.

Brachial Monoplegia and Anæsthesia.—Dr. C. J. **Nixon**, having exhibited the patient, read the notes of a case of partial motor paralysis of the left arm, occurring in a girl aged 19, who was under his care in hospital. The chief points of interest in the case were, shortly, these. The girl had been engaged in washing clothes in very hot water in May last, when she remarked her hand and forearm becoming numb. Next day, the numbness had extended up to the shoulder, and the entire arm became powerless. Shortly afterwards, the numb feeling extended upwards to the left side of the neck and face, and downwards over the left half of the thorax. When she was admitted into hospital, the notes of her condition were made as follows. Partial paralysis of the left arm was more marked in the movements of the wrist than in those of the elbow, while there was least apparent power in the shoulder. No rigidity of any kind was observed in the movements of the limb. There was complete tactile anæsthesia over the left arm, the left side of the face, including the left ear, and the left half of the thorax. Common sensibility was affected to a very considerable degree. The patient bore on this arm the passage of a needle through the skin, the application of a heated iron, the most severe pinching, and the application of the induced current, without manifesting any expression of pain. The temperature of the left arm was sensibly colder than that of the right; its aspect was considerably altered from the normal state, being of a dusky bluish colour. There were some evidences of trophic disturbances, in the occurrence on the fingers of the left hand of patches like chilblains. There was a marked ischæmic condition present over the anæsthetic parts. There was no alteration in the patient's left fundus oculi. The cornea was completely anæsthetic. There was no achromatopsia. Hearing, taste, and smell appeared to be unaffected. In discussing the points of interest in connection with the case, Dr. Nixon dwelt upon the impossibility of connecting the lesions observed, especially the irregular distribution of the anæsthesia, with any localised central lesion; so that he was obliged to regard the case as an instance of the curious manifestation of the great neurosis, hysteria. In this case, however, there were none of the usual antecedents or concomitants of the hysterical condition. The family-history of the girl was very good, there being a complete absence of any trace of nervous development in the parents, or in her brothers and sisters. The girl's generative system was in no way affected. She had no evidence of exalted sensibility in any part, and her disposition was the opposite of that usually observed in hysteria.—Mr. **Story** corroborated Dr. Nixon's account of the girl's eyes, except that, when he examined her, the lacrymal secretion was the same in both eyes.—Dr. **Walter Smith** thought that the sudden disappearance of anæsthesia did away with an intracranial origin for the disease.—Dr. **Finny** mentioned a fatal case of acute ascending spinal paralysis, in which the *post mortem* examination failed to exhibit any gross lesion to account for the symptoms.—The President, Drs. H. Kennedy, J. J. Murphy, A. Benson, and James Martin having also joined in the discussion, Dr. Nixon replied.

OBSTETRICAL SECTION.

G. H. Kidd, M.D., President, in the Chair.

The **President** expressed his thanks for the honour paid him in electing him as President of the Obstetrical Section, the work of which during the past session he reviewed.

Submucous Fibroid Tumour.—Dr. **Atthill** exhibited a globular submucous fibroid tumour, about the size of a turkey's egg, which he had removed from the uterus of an unmarried lady, aged 35. The patient had suffered for more than two years from constantly recurring uterine hæmorrhage, which had of late become almost continuous and accompanied by great pain. The uterus was found to be completely filled by the tumour, which had been removed by the *écraseur* after dilating the cervix. It was attached by a wide base to the fundus, but examination after removal showed that it had been separated from the uterine wall by a distinct capsule, its connection with the uterus being maintained by a thin investiture of the proper muscular tissue of the uterus, and of the mucous membrane, which had become stretched over it. This was not, therefore, a polypus properly so-called, which should consist of a continuous outgrowth of uterine tissue. There would be no difficulty in tracing the continuity of the uterine muscle into the substance of a true myomatous polypus, while the presence of a capsule causing discontinuity was characteristic of a true fibro-myomatous tumour. This distinction had been drawn by Sir James Paget, but had not been sufficiently attended to.—Dr. **Macan** and the **President** dissented from the definition of a polypus as laid down by Dr. Atthill. They understood by a polypus, a tumour possessing a pedicle, other considerations being immaterial, and having no effect on treatment.

Uterine Polypus.—Dr. **Macan** exhibited a large uterine polypus which he had removed from the vagina of an unmarried woman, aged 45, who had suffered severely from hæmorrhage for twelve years. The tumour had passed into the vagina, being connected with the uterus by a very thin pedicle, which, however, bled very profusely on being cut across by the *écraseur*. The size of the tumour, the great length of the vagina, and the rigidity of the external parts, made the removal of the tumour very difficult; and, in effecting it, a rupture of the posterior vaginal wall into the rectum occurred. The rent had then to be stitched, and the patient was doing well.—Dr. **Atthill** observed that this case was an exception to the rule, that polypi when they had become vaginal rarely caused much hæmorrhage.—Dr. **MacSwiney** inquired whether means ought not to have been employed to lessen the size of the tumour.—Dr. **Horne** observed that multiple incisions of the tumour had been successfully used to effect this purpose in similar cases.—Dr. **Macan** replied that, in his patient, the profuse hæmorrhage which had followed the division of the pedicle had made it necessary to remove the tumour more rapidly than would otherwise have been desirable.

Macerated Twin Fœtus.—Dr. **Macan** exhibited a macerated fœtus which must have died about the sixth month of a twin-pregnancy, the other twin continuing to develop until term. The surviving child, weighing 7 lbs., was delivered naturally. Considerable hæmorrhage ensued, and after the birth of the first placenta, a degenerated placenta, surrounding the second child, followed.—Dr

PUREFOY mentioned a similar case which had occurred in the Coombe Hospital.

Chronic Inversion of the Uterus. Dr. MACAN showed the fundus of an uterus which had become inverted nineteen years ago, after the only labour of a woman now aged 41. Since then, she had suffered from severe hæmorrhage, and had been lately treated by pessaries for prolapse. The upper portion of the vagina was extremely narrow, and the vagina itself so narrow as to prevent the introduction of a hand. He, therefore, amputated the uterus, bringing the edges of the stump together by a number of sutures, after the method advocated by him some years since in a paper read before the Dublin Obstretrical Society. The patient was able to walk about a week after the operation, her temperature never having exceeded normal limits.—Dr. ATTHILL had found attempts to replace recently inverted uteri very dangerous; their tissues were soft and lacerable. When of long standing, the inversion could be more safely treated; but re-inversion might then prove of no great use. Amputation, properly performed, was certainly less dangerous than prolonged and forcible efforts at reduction. The PRESIDENT had frequently practised the operation as described by Dr. Macan, introducing the ligatures first, then amputating with the *écraseur*, and finally bringing the surfaces of the stump together. He had never seen ill-effects from such an operation.

Induction of Premature Labour. Dr. PUREFOY read a paper on this subject. Having sketched the early history of the operation, and the various methods employed, the author specified three classes of cases in which it was indicated: (1) in women with pelvis so narrow that the passage of a living full-timed child was impossible, whilst an undeveloped, yet viable, child might safely be delivered; (2) where several previous successive pregnancies had been interrupted by the children's death; (3) where the women suffered from morbid conditions likely to disappear or become greatly mitigated by delivery. Difficulties arose in practice, owing to doubts as to the exact period of pregnancy, and as to the true amount of pelvic deformity. The presence of deformity increased the difficulty of fixing the period of pregnancy; while the patient's own calculations were unreliable. The size of the child's head must be assumed from that of its known averages at different periods of gestation; while the available pelvic space must be carefully measured, as was often necessary, by the introduction of the entire hand into the vagina. In many cases, the conjugate of the brim being the diameter mostly, if not entirely, at fault, it would suffice to measure this accurately. It was impossible to define narrowly the amount of pelvic deformity to which this procedure was applicable. But its extreme limit might roughly be stated to have been reached when the true conjugate diameter measured 2.75 inches. Dr. Purefoy then narrated the histories of three successive labours induced at the eighth month in a woman with a generally contracted pelvis, whose first labour had only been concluded by a difficult cephalotripsy, subsequently succeeded by a considerable amount of vaginal sloughing. The method adopted on each occasion consisted in the passage of a white elastic catheter between the uterus and the membranes, supplemented by the use of Barnes's bags. Delivery by forceps in each case resulted well for the mother and child. The author concluded that it was necessary, for the certain efficacy of Krause's method, that the catheter should be so introduced as to reach the fundus uteri, otherwise contractions might fail to be set up. Caution must be exercised to avoid wounding the placental attachment. On each occasion, he had found vaginal dilatation of much service in keeping up the uterine action. He did not doubt that the children's lives had been saved by the early application of the forceps, and before the os had been fully dilated.—Dr. MACAN held that the chief danger in the catheter-method consisted in the possible introduction of septic material into the uterus, against which every precaution should be taken.—Dr. ATTHILL could not regard the operation as an entirely safe one, having lost two out of five patients on whom he had performed it. The great danger was septicæmia. He had originally pointed out that the catheter must reach the fundus, in order certainly to bring on labour.—Dr. SMYLY remarked on the great difficulty of determining the size of the fœtus. Reliance could not be placed on the fact that craniotomy had been performed during two or three of the patient's previous labours. He considered a bougie much safer than a catheter, the latter affording a ready channel for the passage of air and septic material into the uterus.—Dr. NEVILLE had assisted the President in three cases of induction of premature labour. The catheter alone had sufficed, in each case, to bring on labour quickly and quite successfully. He would, by preference, employ a bougie, and, of course, take every antiseptic precaution. All things considered, he believed Krause's to be the safest method of inducing labour, and, in his experience, it had also been very speedy.—Dr. HORNE had induced labour in two instances by this method; but one of the patients subsequently died of septicæmia.—The PRESIDENT having, he believed, tried most methods, held that the one under discussion was the best; rupture of the membrane being next best, though not so safe for the child. If the case were one that did not admit of delay, he would employ Barnes's bags. He did not consider it essential that the catheter should reach the fundus, as, in cases in which it had acted quite perfectly, he concluded, from its spiral shape on withdrawal, that it had passed round the uterus between its lower segment and the membranes. He had only once used a stilette, and always softened the catheter well before using it. Labour usually came on within twelve hours.

SUBSECTION OF ANATOMY AND PHYSIOLOGY.

J. M. PURSER, M.D., President of the Section, in the Chair.

Microphotography.—Dr. NEWTON DICKENSON gave a demonstration in the art of microphotography, with an apparatus which he believed to be the simplest and most efficient as yet produced. Photographs by his method could be taken either by day or by night, without any complex and expensive arrangements. The apparatus he described at full length, demonstrating its use by preparing some specimen photographs.

Homologies of Muscles.—Dr. CUNNINGHAM made a communication on the homologies of the musculus sternalis, and the so-called pectoralis quartus, which he illustrated with diagrams. He supported the view advanced last session by Mr. Abraham that the musculus sternalis is an aberrant part of the great pectoral muscle. He had succeeded in tracing its nerve-supply from the internal anterior thoracic nerve. The pectoralis quartus he regarded as a piece of the panniculus carnosus. Its nerve-supply, which he traced in the sloth-bear, proved this.—Mr. ABRAHAM was pleased that Professor Cunningham had so ably proved the idea which he had himself put forward last year. Although in certain text-books of anatomy the muscle in question occupied a small paragraph after the description of the great pectoral, the authors made no allusion to any connection between the two. In only one fœtus, out of three or four examined since his former communication, did he find the muscle, and in that it was developed to a very small degree.

Experiments on the Pneumogastric Nerve.—Dr. SCOTT read a preliminary communication concerning experiments on the central end of the pneumogastric nerve. In some experiments performed by Dr. Purser and himself on the central end of the vagi, certain facts were observed differing from those hitherto described. First, on section of one vagus, the heart-beat was not retarded, but there was a slight fall of blood-pressure; secondly, on section of both vagi, a considerable rise of pressure ensued, associated with a retardation of the heart-beat, these being independent of the stoppage of respiration. The foregoing facts would show that the heart was inhibited by other means than the vagi. The respiration also was differently effected when one or both vagi were divided. In the former case, the stoppage was always followed by expiration; in the latter, by inspiration.—The PRESIDENT testified that the tracings exhibited were accurate copies of the original tracings. They were very curious in a great many respects, and the phenomena were extremely complicated, indicating not only the action on the nerves, but the influence produced by the asphyxia.—Dr. SCOTT, in replying, observed that it was only after the section of both vagi that the beats made their appearance.

A SYPHILITIC MONKEY.—The animal was inoculated in three places with syphilitic virus in November 1882; a [illegible] ulcerated after a period of incubation of twenty-eight days. Later on, various syphilides appeared on the penis, and a swelling of the inguinal, axillary, and submaxillary lymphatic glands was observed; [illegible], and some patches of alopecia of the head and face. Ten months after infection, a yellowish sinuous ulcer formed in the mucous membrane of the palate, but it healed in about three weeks.

LINGUAL HEMIATROPHY IN LOCOMOTOR ATAXY.—This symptom is not unfrequent, according to M. Ballet, and [illegible] at the onset of the disease, with or without [illegible] of some muscles of the extremities. The atrophy [illegible], and the diseased part becomes wrinkled and [illegible] seat of slight tremor, with [illegible]. Mastication, deglutition, and speech remain normal. Lingual hemiatrophy seems to be much more frequent in locomotor ataxy than in any other nervous disease, and may be useful in the diagnosis.

REVIEWS AND NOTICES.

HYGIENISCHER FUHRER DURCH BERLIN. Herausgeben von Dr. PAUL BÖRNER. Berlin: Gr. 8vo., ss. 305. (HYGIENIC GUIDE TO BERLIN. Edited by Dr. P. BÖRNER. Large 8vo, pp. 303, maps, etc.)

THIS handsome volume was compiled by Dr. BÖRNER, with the co-operation of several gentlemen in official positions, in anticipation of the meeting at Berlin, in May last, of the two great German Associations for the Promotion of Sanitary Science and Practice (Gesundheitspflege und Gesundheitstechnik). It deals, in the statistical part, with the meteorology and demography of Berlin, *i.e.*, the houses, population, and hospitals. In the second and larger part, we have an account of the imperial Prussian and municipal authorities concerned with the moral or material welfare of the people; a description of the open places, sewerage, water-supply, lighting, etc., of the city; its markets and baths, kitchens, etc. The educational system and schools of all grades; the Poor-law administration; hospitals and asylums of all kinds, public and private; the vaccine-service and ambulances; prisons, cemeteries, and inquests; fire-brigade; and voluntary associations of a hygienic character—all receive a share of attention. We shall notice only the most instructive of these, whether good or bad.

The burning question of the unsanitary and overcrowded state of the dwellings of the poor confronts us here with a magnitude unapproached, except perhaps in Naples. The greater part of the people live, as in Paris and Edinburgh, in huge barrack-like houses, of four, five, or more stories, built without regard to sanitary conveniences. The average number of families to a house is 14, in some quarters 21, and of persons 60, as against 26 in Paris. Cellar-dwellings constitute 10 per cent. of the whole, and give lodgings to 8 per cent. of the population; while 11 per cent. have to mount fifty feet of stairs or more, where water-supply and sinks, etc., are not provided. We know what that means. But this is not the worst. Eight per cent. of the population have absolutely no homes; and, instead of passing the night, as they do in London, in common lodging-houses, where a minimum of cubic space is enforced and the sexes are separated, they are taken in for the sake of a few pence by the occupants of already overcrowded rooms. One-fourth of the families having children receive these casual lodgers—*schlaf-burschen* and *schlaf-mädchen*, as they are called—the numbers of whom are estimated at 60,000 and 18,000 respectively. Thus, in one room were found a married couple, a nurse-child, a female relative, and one male and three female casuals; in another, a couple with son and daughter, a male relative, and one female lodger, and, in addition, three male casuals. Under such circumstances, is it to be wondered at that 13 per cent. of the births are illegitimate? and, so far from there being any prospect of improvement, every item has only been aggravated during the past twenty years—the percentage of cellar-dwellings having actually doubled in that time.

For several years, *i.e.*, since the period of distress consequent on the wars and epidemics—notably of small-pox, which lasted from 1868 to 1875—the general death-rate has not exceeded 27.29 per 1,000, and is now only 25, an improvement referable to the better systems of sewerage and water-supply being carried out. The labours of Dr. Skrzecka, and his colleagues of the Statistical Department, enable us to study, not merely the causes of death and the ages of the dying, but the relations of these to density of population, the nature of their dwellings, and many other social and domestic circumstances not to be learnt elsewhere, but more or less instructive, to which our space prevents us from alluding. Hospital statistics of a very full character complete this chapter, from which it appears that about 3 per 1,000 of the population are annually received into the nine great general hospitals.

The organisation of the Sanitäts-Verwaltung for the empire, kingdom, province, and city, is very complete, and comprises in its sphere of labour statistics, public health, public works, agriculture, and, in short, all that concerns the health and welfare of the nation. It seems well worthy of attention in any future reorganisation of our local government departments; but to Englishmen, at least, a striking feature is the preponderance of the medical and scientific element, and the almost entire absence of the legal. Efforts are being made for a closer association of the district medical officers with the sanitary authorities in their deliberations.

The water-supply of Berlin, derived from surface-wells sunk into the sandy soil, through which it percolates from the river, has always been of good quality, and was sufficient for the actual wants of the inhabitants; but the increasing population, and, still more, the demand for better flushing of the streets and gutters, led to the construction of extensive waterworks at Stralau, on the Spree, above the city, and at the Rummelsberger Lake. These works were begun in 1852, by the English engineers, Messrs. Fox and Crampton; and slowly at first, but more rapidly afterwards, when water-closets were generally introduced, the new service superseded the public and private wells. The supply, carried to every story of the houses, has from the first been constant, as everywhere else in Germany; but the adoption of meters partially in 1874, and universally in 1878, has reduced the consumption per head from 110 to 90, and, finally, to 62 or 63 litres.

The filthy state of the street-gutters, and the incompetency of the old drains to carry off the water from the newly introduced closets, induced the authorities, so far back as 1860, to resolve on constructing a regular system of sewers of the usual English pattern. The first scheme, that of E. Wiebe, was to follow the example set by Bazalgette in London, and to carry the sewage to a point on the banks of the Spree below the town, where it would have been lifted by a pumping engine into the river. But this was rejected in favour of that of his colleague on the Commission, Hobrecht, by which the whole area was divided into twelve radial systems, the main sewers from which, diverging in every direction, terminate in pumping stations, each in the centre of an irrigation area. The first property was acquired in 1874, and several thousand acres of poor sandy soil, admirably fitted for filtration, have since been taken. Injunctions and legal impediments have interrupted the work, but its success has been complete, chemical and bacterioscopic examination showing that the effluent has no appreciable effect on the water of the river into which it is discharged.

One central cattle-market, with public abattoir, through which the railway passes, and where the animals are examined by highly skilled experts, both before and after being slaughtered, is another institution we would do well to copy.

We have not space to notice the various hospitals and asylums, and the educational and charitable institutions; and the Poor-law system, very different from our own, we may probably discuss at a future time.

The volume is one which, apart from local interest, affords abundant materials for suggestion and reflection to every sanitarian and social reformer.

A TREATISE ON INSANITY IN ITS MEDICAL RELATIONS. By WILLIAM A. HAMMOND, M.D. 8vo, pp. 767. 1883.

DR. HAMMOND, President of the American Neurological Association, is too widely known to our readers, as a high authority in matters neurological, to need any further introduction on the present occasion than that he is the author of the work now under notice. It forms, necessarily, a bulky volume; but, we may add, a full one. Its contents are arranged in four sections—viz.: (1) the general principles and pathology of the human mind; (2) instinct: its nature and seat; (3) sleep; (4) description and treatment of insanity; this last section, in accordance with the title-page, occupying two-thirds of the book itself. It would be impossible, in the space that can be given from the pages of the JOURNAL, to do justice to the author's treatment of these several sections. Suffice it to remark that they are fully up to the level of advanced physiological psychology. We pass, then, to the practical point of treatment. We are met at once by a question of the day: "Shall the insane person be treated at home or in an asylum?" "A few years ago," observes Dr. Hammond, "there would have been but one answer to such a question, either from the physician, or the friends of any patient having the means wherewith to be maintained in a hospital specially set apart for the care and treatment of those so unfortunate as to be the subjects of mental derangement; and, for those not having the means, efforts would have been made to procure their admission into a like institution, supported at the public expense." This is now no longer the case; so much so, that, as friends will keep their lunatic relations at home as long as this can be done with safety, it has, as the author observes, come to pass that almost none but dangerous lunatics are sent to asylums. Dr. Hammond, with reference to this point, arranges lunatics into three groups. 1. "Those forms the subjects of which should never, under any circumstances, be forcibly deprived of their liberty by being committed to an asylum against their will." The forms of insanity embraced in this group are included under illusions, hallucinations—perceptional insanity. 2. "Those forms, a minority of the subjects of which *may* require to be committed to an asylum;" including emotional morbid impulses—intellectual insanity. In these, the tendency is often to acts of violence, when the safety of society requires control or restraint. 3. "Those forms in which a majority may require to be committed:" cases of monomania with exaltation, chronic intellectual mania, acute mania, periodical mania, and epileptic insanity.

Dr. Hammond expresses himself strongly on the defective inspection of the asylums in the United States. "The system of inspection of such institutions," he remarks, "is so inefficient, that the greatest abuses may spring up, and the world be none the wiser, until some day an exposure takes place...............The number of acts of violence committed in public asylums, during the last five years, is many fold greater than that perpetrated by all the lunatics whose condition has been recognised, and who have been under the care of their friends, or in some private institution for the insane."

The reports of the Commissioners in Lunacy for England and Wales present, we may confidently assert, no such picture. The author evidently has a strong adverse bias as to the treatment of the insane in asylums. "My own idea," he adds, "is, that the best of all places for a lunatic of any kind is the family of a physician—of such an one as I have just mentioned. The association of an insane person, day after day, year after year, with others similarly affected, with scarcely the least contact with people of sound mind, is certainly in opposition to the first principles of scientific medicine." The account that Dr. Hammond gives of the character of the class of men who bear rule in the asylums of the State is certainly one that calls for reform. The placing, however, of each lunatic in the family of a physician is a proposal so utterly impossible in Great Britain, that it may be dismissed as Utopian. A more judicious plan has for many years past obtained amongst us—that, namely, of placing cases of incipient or impending mental derangement under single care. This has met with extended approval, and has been followed in countless instances by arrest of the progress of disease beyond the limits of the borderland, and restoration of mental health.

Other means of the treatment of insanity Dr. Hammond divides into mechanical, moral, hygienic, and medicinal. The first involves the question of personal restraint—a question which may be said to be at rest here, and may, indeed, be regarded as involving the second—moral treatment. Hygienic treatment includes the various methods and means of occupation familiar to both professional and non-professional persons, and includes the use of baths of different kinds. Among medicinal agents, the predominance is given to sedatives, *e.g.*, chloral, bromides, opium, hyoscyamin, digitalis. Tonics, such as strychnia, phosphorus, iron, quinine, arsenic, are also enumerated, and their several uses are considered. There may, however, be some reason to think that the *Pharmacopœia* gives less help to the alienist physician than is to be found in moral and hygienic meaures.

A HANDBOOK OF THE THEORY AND PRACTICE OF MEDICINE. By FREDERICK T. ROBERTS, M.D. Fifth edition. Pp. 979. London, 1883.

A PREVAILING phenomenon of medical handbooks, or manuals addressed to students, and in a less degree of monographs also, as they re-appear in new editions, is a very rapid growth in size and in the amount of printed matter; whilst in too many instances there is not a corresponding augmentation in the extent and value of the information conveyed. Now, although Dr. F. T ROBERTS's *Handbook of Medicine* has become more than doubled in size since it was first published, the last three editions have not exhibited the same rate of growth as those preceding. This we consider a recommendation in the case of a work especially addressed to students. For we take it that, considering the additions that must inevitably be made from time to time from the progress of medical research, it is the paramount duty of the writer of a handbook, whenever a new edition is called for, to carefully go over each page of his work, and to eliminate what is no longer relevant, and not, as there is a tendency on the part of authors to do, to add new matter as mere accretion. For if research be in a right direction, and attain its due ends, it must operate by correction of past opinion and practice, as well as by the addition of new doctrine and new facts.

It must be gratifying to Dr. Roberts to perceive how well he has met the requirements of students, as the rapid appearance of new editions of his treatise sufficiently indicates. Other sciences are much weighted by traditionary dogmas, interpretations, and definitions; and of medicine the same may be said. The definitions, the enumeration of symptoms, and the treatment of disease, are laden with statements handed down from the past, and repeated with slight variations in every treatise on medicine; and it will be a happy time when writers exercise a critical spirit in accepting and repeating the stereotyped descriptions of their forefathers.

A judicious trimming may be recommended in the case of the volume before us. And, at the same time, Dr. Roberts might advantageously re-examine some of his chapters, which have passed unchanged during the last two editions, although our knowledge of their subjects has not remained stationary. By way of example, we may cite the chapter on purpura. Further criticism is not needed of a work which has so deservedly won a place in public favour.

PRACTICAL CLINICAL LESSONS ON SYPHILIS AND THE GENITO-URINARY DISEASES. By F. N. OTIS, M.D. Pp. 584. New York: Bermingham and Co. 1883.

THE author of this book is well known, both in this country and abroad, in connection with his views on the normal calibre of the male urethra, and on the treatment of stricture by cutting up to a point much beyond what has been generally accepted as the ordinary size of the healthy canal. Dr. OTIS also holds certain views on the pathology of syphilis, based on the researches of Beale and others some years ago, and indicating the presence of a degraded germinal cell as the cause of the disease. Dr. Otis's opinions on both these subjects have been so frequently before the profession, in so many different publications, that we were somewhat disappointed, on reading the preface to the present rather bulky volume, to find it chiefly devoted to a consideration of the same two points; and we were puzzled to understand why a third book should be required for discussing two questions, each of which had already formed the subject of a separate work within the last few years. On reading further, however, we are glad to find the above-mentioned points—or at least the last of them—less prominent in the body of the work than in the preface. The book, in fact, contains a tolerably detailed account of venereal diseases, in the form of "lessons," which, we are told, were originally distributed to the students of Dr. Otis's class, in short papers of a few pages each, "to prevent errors arising from inattention, or from misunderstanding of the statements made during the lectures."

The first part, which occupies thirty of the sixty-eight lessons into which the book is divided, treats of syphilis and the local contagious ulcer or "chancroid." Many of the leading features of both these affections are illustrated by cases given in detail, and the remarks on symptoms, diagnosis, and treatment are sound and practical.

With regard to the second and larger portion of the work, which deals, for the most part, with gonorrhœa and its sequelæ, the author states that it is not intended to be a systematic exposition of genito-urinary diseases; but that his chief aim has been to present typical and practical cases to assist those who may be collecting material for a treatise on the subject. On the nature and treatment of gonorrhœa, Dr. Otis says he is unable to accept the conventional views. He begins by telling us that gonorrhœa is a vicious, non-specific, contagious, inflammatory disease. He then goes on to say that "it is capable of being originated by a variety of causes, quite independent of a gonorrhœal origin, and even of the venereal act;" that gonorrhœa is identical with infantile leucorrhœa; that a discharge caused by mechanical irritation may produce, when brought in contact with healthy mucous membrane, a disease in no respect different from acute gonorrhœa the result of venereal contagion: that gonorrhœa is capable of being originated, in typical form, through a variety of causes, etc. After such statements as these, one is hardly prepared to find the author speaking elsewhere of "true" gonorrhœa, and of the "contagium" of gonorrhœa. For example (p. 299): "By far the greatest number of purulent urethral discharges are the result of other causes than the contagium of gonorrhœa;" and (p. 324): "Where a short period has been claimed in the cure of the disease, by any method, it has been always doubtful if it was a true gonorrhœa." Again, as regards duration, we read, on page 328: "All cases which, under any treatment or no treatment, get well in a few days, are not true gonorrhœa. All cases which continue beyond six weeks owe that continuance either to sexual excitement, to digestive disturbance causing acidity of the urine, or to localised points of irritation, chiefly contraction of the urethral calibre at some point;" whilst at page [illegible] we read "When it lasts longer than four weeks.........there is a complication present........ This complication is urethral stricture." It would thus appear that the duration of gonorrhœa beyond six weeks may be due to one of several causes, while its duration beyond four weeks must be due to stricture only. As regards treatment, acute gonorrhœa being a "self-limited" disease, neither injections nor the so-called specific drugs are held to be a necessity.

A few words must suffice for the remainder of the work. The subject of stricture of wide calibre, and its treatment by dilating urethrotomy, is, of course, discussed; but, as the author's views on this subject have often been published, we need only say that he still alleges that stricture can be radically cured by his mode of treatment. Spasmodic stricture and reflex irritation of the genito-urinary tract are next considered, and illustrative cases given; while the last two lectures are devoted to digital exploration of the bladder.

To sum up, there can be no doubt that, though unmethodical and sadly in need of careful revision, the book, and more especially that part of it relating to reflex irritation, contains a large amount of valuable matter, which cannot fail to be of use both to authors and to surgeons generally. But some of the "lessons," particularly those relating to gonorrhœa, would have to undergo considerable alteration before we could seriously regard them as—to quote the author's own words—"a medium of communication with students, which could not be misinterpreted or misunderstood."

ON MALIGNANT DISEASE (SARCOMA AND CARCINOMA) OF THE LARYNX. By HENRY T. BUTLIN, F.R.C.S., Assistant-Surgeon and Demonstrator of Diseases of the Larynx, St. Bartholomew's Hospital. London: J. and A. Churchill.

THE author of this work has already published, under the name of *Sarcoma and Carcinoma*, his Erasmus Wilson Lectures, delivered at the Royal College of Surgeons in 1880 and 1881. Mr. BUTLIN did not intend that the lectures should be understood to form a complete treatise on malignant tumours. He rightly considered that the situation of any particular morbid growth is a matter of primary pathological importance; and it happened that he selected cases where the diseases in question attacked the testes, the bones, the tongue, the œsophagus, and the tonsils. Since the lectures were delivered, Mr. Butlin has been placed in charge of a special department at St. Bartholomew's Hospital, where he has taken advantage of every opportunity of studying malignant diseases of the larynx.

The tissue in which any malignant tumour forms is ever found to exert an influence on its structure and general characters, an influence transmitted more or less to secondary tumours; Mr. Butlin believes that the mother-tissue largely influences the degree and kind of malignancy presented by a tumour. This is shown at once by the comparison of the course of central with subperiosteal sarcoma of bone, or of epithelioma of the lip with epithelioma of the tongue. The study of carcinoma and sarcoma must, in future, be localised; for, in the author's opinion, it is quite impossible to formulate any great general laws which shall apply to these diseases until the local study has been made on a much larger scale than heretofore.

The larynx is undoubtedly a good field for study of this kind. When it is the seat of sarcoma, the neighbouring lymphatics do not appear to be involved, nor do secondary growths occur. Sarcoma in many other organs, such as the testis, involves rapid lymphatic infection; on the other hand, when the breast is attacked, the lymphatic glands, speedily involved in carcinoma, do not generally become enlarged. Hence sarcoma of the larynx is peculiarly suitable for operation; and Mr. Butlin shows, from the records of contemporary surgery, that radical measures for its extirpation have been attended with great success. These measures include, of course, partial or complete removal of the larynx. Carcinoma of the larynx is a more common disease than sarcoma of that organ, though, before the days of the laryngoscope, it was believed to be very rare. The intrinsic form is, strange to say, much more frequent than the extrinsic type, which generally attacks the epiglottis. As might be expected, the latter variety infiltrates deeply, and implicates the lymphatic glands at a very early date of its course; it is quite unsuitable for operation. Extirpation of the larynx is justifiable in the early stage of intrinsic cancer; in this disease, the glands are seldom implicated.

Mr. Butlin has studied his experience, and that of others, with the eye and mind of an expert. As in his previous work, all the cases under his own care have been verified by the aid of the microscope. Hence, *Malignant Disease of the Larynx* deserves to be ranked as a standard work, both in pathological and in laryngeal literature.

ANÆSTHETICS. By R. T. FREEMAN, L.R.C.P., M.R.C.S.Eng.

London: 1883.

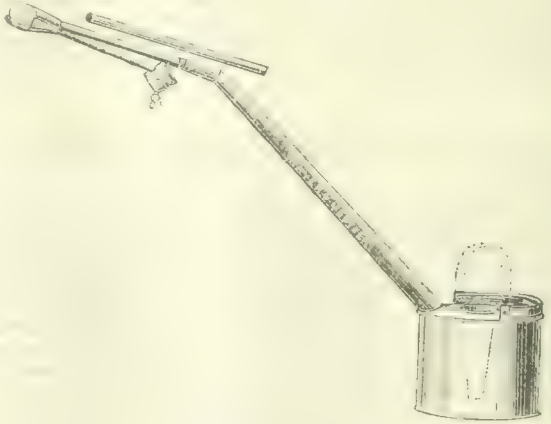
THIS is a little book of about fifty pages, got up in a style very convenient for the pocket. It is addressed "to that branch of the profession particularly interested in the administration of anæsthetics," and the author hopes "it will be received as a pioneer to the more important work in hand." In the first half, we find a short sketch of the history, chemistry, and physiology of the four most commonly used anæsthetics, the account of their physiological action being necessarily brief. The second half is devoted to a description of various forms of apparatus for the administration of anæsthetics, many of which are now obsolete. It also contains a description of the author's spring-gag, which, we should imagine, might be very useful; and of the author's collective apparatus for administering anæsthetics, which appears to be as ingenious as some of Clover's inventions, and as cumbersome. No mention is made of Ormsby's inhaler, now so widely used; but Clover's rather clumsy modification of it is described, though not as such. Nothing is said about the administration of chloroform, except by Junker's inhaler. The author speaks favourably of the general adoption of preliminary narcosis by nitrous oxide gas, and he is inclined to advocate the use of methylene instead of chloroform.

The book is well done, so far as it goes, but it does not go far enough. No such work can be of much use to students which does not contain good practical directions for the administration of anæsthetics, with an account of the dangers to be avoided, and how to avoid them, as far as may be. In this work, all these essentials are conspicuous by their absence, which is, to say the least, disappointing.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

BRONCHITIS AND TRACHEOTOMY KETTLE.

MR. N. H. NIXON, the Secretary of University College Hospital, has designed a kettle for use in cases of bronchitis, croup, or tracheotomy, the special feature of which is that there is a simple and ingenious contrivance for carrying off water resulting in the condensation of the steam, and thus preventing any chance of bedclothes being rendered damp by the drip. The kettle is boiled over a gas-ring, and can consequently be used in any part of a ward or room. An extra length of spouting is provided for adult cases, and the kettle is so constructed that the quantity of water in it can be readily ascertained. It is manufactured by Messrs. Mayer and Meltzer.



EPHEMERAL RHEUMATIC NODES. M. P. Meynet has observed on the fibrous tissues, and on the periosteum of the superficial bones, small nodes, which make their appearance suddenly in people subject to rheumatism, generally during an acute attack. They adhere to the deep tissues, but not to the skin, attain the size of a bean, and last from two to six weeks. Féréol's cutaneous nodes differ in their seat, and in their disappearance after twenty-four hours.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1884.

Subscriptions to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

MEDICAL SICKNESS, ANNUITY, AND ASSURANCE SOCIETY.

In the article of last week announcing the formation and first steps in the progress of the Society now founded under the above title, the word "not" was inadvertently inserted in the last paragraph, in such a manner as to convey the impression that an eleemosynary character might at some time, or in some form, be given to the Society. This error might easily produce an unfortunate effect. It is desirable, therefore, in correcting, to repeat that the principles on which the Society is founded, are those of pure providence and self-help, excluding all charitable gifts, and relying upon the well tried principles of mutual assurance.

ERNEST HART.

The British Medical Journal.

SATURDAY, JANUARY 26th, 1884.

PROGRESS IN THE MEDICAL DEPARTMENT OF HER MAJESTY'S PRISONS.

The Home Secretary has, in a letter to the Chairman of the Prisons Commissioners, written by his direction, congratulated the Commissioners of Prisons on the highly satisfactory nature of their report. A letter of this sort necessarily does not enter much into details. It conveys in general terms that the Home Secretary is satisfied that every department has done its duty. Only in the medical department is there any reference made to statistical detail, a reference of such a "highly satisfactory character," that we produce it verbatim.

"The progressive decrease in the death-rate of the prisoners, which has now reached 7.8 per 1,000 of the prison population (showing a diminution of 2.2 per 1,000 on the mean death-rate of the last ten years, which, so lately as 1875, exceeded 14 per 1,000) is a striking proof of the successful care that has been bestowed on the health of prisoners; and the Secretary of State desires that his satisfaction may be expressed to the medical officers at these results of their efforts. Considering that the class of persons who are placed under their care are generally those whom vice and crime have rendered unhealthy subjects, this death-rate (even taking into account the number of diseased persons released on the score of ill health) must be regarded as singularly low."

Such an acknowledgment, so gracefully made, comes with the more force when we recollect the different opinions on the capabilities and conscientiousness of prison medical officers implied some eighteen months since in the directions to coroners relative to inquests held in prisons. At the time we expressed ourselves in plain terms on the obnoxious order; and now that the Home Secretary has an opportunity, it is to be hoped that he will back his own opinion on the trustworthiness of the medical staff under his rule by rescinding an order which more or less affects the whole medical profession, and which, no doubt, proceeded from want of thought, and not, as lawyers say, "from malice prepense." We look the more hopefully for the accomplishment of this act of justice, because an acknowledgment has recently been made of the value of the services of the medical staff of the Prison Department by a general increase of salary, and although the augmentations are not large, yet the general principle is thereby admitted that it has been underpaid, and was worthy of consideration. We are glad to know authoritatively that the medical officers of the service feel that the BRITISH MEDICAL JOURNAL deserves some credit for this move in the right direction.

The editorial articles which have appeared in the BRITISH MEDICAL JOURNAL during the last two or three years, urging the claims of prison-surgeons on the superior authorities, and the subsequent correspondence in its columns from gentlemen who had representations to make on this or kindred subjects, have not been without effect. The narrow limitation of the service, however, precluded that free correspondence by means of which the army and navy medical officers have made their grievances public; so much so, indeed, that we found much difficulty in obtaining full and accurate information from those who were in a position to give it, but who felt that their hands and tongues were tied.

However, "All's well that ends well;" and we congratulate our medical brethren of the prison services on the well merited eulogium of the Home Secretary, as well as on their present improved prospects, which we regard as only the commencement of better things.

It is no small reward for the labour and responsibility involved in the editorial investigation of such subjects, and in the elaboration of propositions, just and moderate, and likely to attain the desired end, to find practical fruit slowly but surely developed, in the introduction of reforms tending to improve the remuneration, to elevate the status, of our professional brethren, and to secure for them a more fitting and honourable recognition of their deserts.

At a future time, it is our intention to give an analysis of the prison medical officers' reports, as published in the official Blue-Books, both with reference to prison hygiene and the duties of medical officers.

NUDDEN FEVER.

The existence of a severe epidemic of malarious fever in the district of Nudden, in Lower Bengal, for two seasons in succession, led the Lieutenant-Governor to appoint a Commission to visit the district, and to examine carefully the sanitary condition of the villages most affected, and to report on the cause of their unhealthiness. The Commission consisted of Dr. [illegible], Sanitary Commissioner for Bengal, President, [illegible] members of the [illegible] Service; [illegible]. A copy of their report, a very exhaustive [illegible], [illegible] us. The district of Nudden, the scene of this [illegible], is described as a vast alluvial plain, intersected by six large rivers, numerous smaller channels, and a large [illegible] forsaken river-beds and old river-channels in [illegible]. It is said to be dotted with [illegible] and [illegible], with [illegible] villages frequently hidden in [illegible] of [illegible]. The lands are closely cultivated, the natural [illegible] of surface drainage being obstructed by the "tangle of rivers and river-beds which cross and recross one another."

Without the aid of a map, it is impossible to give anything like an accurate description of the various "tracts" or divisions of the district given by the Commissioners; but some points of great sanitary importance can be made sufficiently clear. We have already referred to the number of dry river-beds forming a remarkable feature in the topography of this and all other alluvial plains of the same vast dimensions. The attention of the Commission was directed to the possibility of once more opening up such disused beds for the flow of water. The Commission show, by a reference to a paper by Mr. J. Ferguson, published in the nineteenth volume of the *Quarterly Journal of the Geological Society*, that this reopening of such disused river-beds, save in a few exceptional cases, is simply impossible, and would be a costly, and in the long run futile, battle with natural forces, certain to get their own way. "A river runs in a given course, gradually elevating its bed and the country near it to, or above, the level of the rest of the adjacent delta, until one of two things happens; namely, either the river overflows into a lower tract of country, and commences to raise the new tract, or, if that part of the country be levelled up and completed, the river is gradually choked by its own sediment and 'dies,' and a new one is opened up in some other part of the delta, where the land is lower, and the same process is repeated."

The Commissioners note that the water-supply of the villages is of the worst possible quality; and, with the exception of certain localities deriving their supply from four of the large rivers in the district, the inhabitants of Nudden may be said to have no good water. Cremation has become almost impossible, on account of the scarcity of fuel; the result being that the sources of water-supply are polluted to a horrible extent by the number of corpses freely thrown into them. The Commissioners say that the more intelligent part of the community are aware of the enormous danger of this abominable custom; but the mass of the people are utterly careless and thoughtless on the subject. There is a ghastly tinge of humour in the following incident, related by the Commissioners. "Near Akunduburia, the lake, that is now the source of the Cobuduck, was manifestly the favourite spot for this immersion of corpses, for dozens of turtles came swimming to where we happened to stop to converse with the villagers, evidently mistaking our gathering for a funeral party, and so expecting a meal!"

The Commissioners give a description of the unsanitary condition of the villages and houses, which is neither better nor perhaps much worse than that in Lower Bengal generally.

We need not wonder, then, that fever has long been present in Nudden. It was in the middle of 1880 that the deaths from this cause rose from 1,927 in July to 3,759 in August, culminating in November with the enormous mortality of 12,822. In short, the Commissioners put the death-rate from this fever, from August to January in the year in question, at 51,783. In the following year, the mortality from the same cause was 73,186, being an increase of 18,776 over the previous year. These, it must be observed, are only "approximate figures;" for the Commissioners say that the mortuary-returns have been irregularly kept, and they more than hint that the mortality was greater than the figures given indicate.

As to the nature of the fever, there can be no doubt that it is distinctly malarious; such, in fact, as is seen in Bengal during and after the rainy season, but of a type of extreme severity and malignancy, such as, we think, sufficiently accounted for the intensity of the unsanitary conditions, some of which, but by no means all, we have given above. This appears to be the opinion of the Sanitary Department, of Dr. Lidderdale himself, and of all the medical officers who have had to deal with this terrible fever in its home. The question of its portability by human intercourse has arisen; we know that this is not a characteristic of ordinary malarious fevers; the suspicion of the reverse being the case in this instance, may perhaps be accounted for by the addition to the ordinary malarial poison, whatever that may be, of one of animal origin. That it was of a contagious nature was the opinion, Dr. Lidderdale says, of one of the most experienced practitioners in the district, viz., Baboo Kali Kumar Lahori, who saw the fever from its first appearance; and the Sanitary Commissioner thinks he has much to advance in favour of his opinion. The fever was distinctly intermittent in character, with frequent relapses, splenic enlargement, rapid anæmia, extreme emaciation, dropsy, diarrhœa, quickly followed by death—an offensive smell invariably proceeding from the bodies of those affected.

The remedies for this appalling state of matters are not difficult to state, but their practical application in such a vast district, among a poor, apathetic, and helplessly ignorant population, is one of stupendous magnitude, requiring engineering skill, a great outlay of money, time, patience, and, above all, education in the simplest elements of sanitary science, to be brought home to the minds, if not of the people generally, at least of the heads of the village-communities. It is satisfactory to see that the Lieutenant-Governor of Bengal has now all the facts before him, and, we feel sure, will do his utmost to save the people of this pest-stricken district from utter extermination.

THE MICROCOCCI OF PNEUMONIA.

THE presence of micrococci in pneumonia was first described by Klebs, and afterwards by Eberth. In 1882, Dr. Friedländer published some more detailed observations on the subject, having demonstrated the presence of these organisms in eight successive cases, and having shown that in those cases which died early in the disease they were present in enormous numbers, not merely in the exudation, but also in the lymphatic vessels of the affected portions of the lung. These observations have since been confirmed by several observers; and, in a recent number of the *Fortschritte der Medicin* Dr. Friedländer gives the results of an elaborate investigation on this subject which he has been conducting with the assistance of Dr. Frobenius.

The micrococci of pneumonia are large oval bodies which can be demonstrated by means of any of the aniline dyes, but are best shown by placing the sections first in Ehrlich's gentian-violet aniline staining fluid, and afterwards in a weak watery solution of iodine and iodide of potassium for a short time. In sections so treated, the nuclei and the tissue lose the violet stain in oil of cloves, so that, when mounted, the violet micrococci are very evident on the yellow ground. The micrococci differ from other micro-organisms found in the body in being surrounded by a capsule, which, in Friedländer's opinion, is composed of mucin. This capsule is not very easily demonstrated in sections, being best shown by staining with gentian-violet, but it is well seen in dry specimens of pleuritic exudation, or of the expressed fluid from pneumonic lungs, the micrococci being in both very numerous. These capsules are not, however, always present; in several cases, where numerous cocci were present, the capsules could not be demonstrated, but in all of these the patient had not died in the early period of the disease. They are held to be a product of the life of the micrococcus. These micrococci have not yet been demonstrated in the blood in man, but in the animals in which pneumonia was induced they were present in the blood.

Having shown the constant presence of a particular form of organism in pneumonia, the authors made pure cultivations of these bodies. This they were successful in doing in three instances. The material employed was, in the first instance, the solidified blood-serum used by Koch for cultivating the tubercle-bacillus; but afterwards gelatinised meat-infusion was inoculated with success. In the gelatine, the micrococci grew partly on the surface, and partly downwards into the gelatine, forming an appearance like a pin, the head of the pin being on the surface. This is a mode of growth apparently peculiar to these organisms. They grow also readily on potatoes, in the form of little grey drops; and when again inoculated on the gelatine, they again grow in the form of pins. The micrococci in these cultivations are oval, resembling those in the lung, but no capsules are formed around them.

The third part of the research consists of attempts to produce pneumonia in animals by means of the organisms cultivated in the manner described above, and consists of two divisions: one where the cultivation was injected through the thoracic wall into the pleura and lung; and the other where the micro-organisms were inhaled. The pin-shaped cultivation was diffused through distilled water, and then injected into the thorax of an animal by the glass syringe devised by Koch; the purification of the syringe and skin and the other precautions being carried out in the manner described by Dr. Koch. Injections of this fluid, in quantities varying from a half to one cubic centimètre, into the thorax of nine rabbits, were entirely without effect. Six of these were killed at various periods, but no morbid changes were found, and the other three were allowed to live. On the other hand, injections into thirty-two mice were always followed by the death of the animal, generally in eighteen to twenty hours; and, on *post mortem* examination, a reddish turbid fluid was found in the pleural cavities; the lungs were very red, almost completely empty of air, with numerous patches of red hepatisation; the spleen was enlarged, but the other organs were normal. On microscopical examination, enormous numbers of micrococci were found in the pleuritic fluid, partly free in the fluid, partly contained in lymphoid cells, and they were surrounded by capsules. In the hepatised lung they were also present, and they were found in the blood in considerable numbers, and in the spleen. Control-experiments were performed with the same fluid heated so as to destroy the organisms, but the animals remained unaffected. Numerous cultivations were made from mice, and in all cases the typical pin-shaped mode of growth was obtained, and the organisms so cultivated, when injected into other mice, again produced the disease. Injections into guinea-pigs were not so uniformly successful; in six only of eleven animals was pneumonia produced; the other five remained unaffected. The guinea-pig, therefore, in its relation to these micrococci, stands about midway between the rabbit, which is unaffected by them, and the mouse, which always succumbs. In the case of five dogs treated in the same manner, only one died, and in it was found a typical pneumonia and pleurisy; the other four only showed a temporary elevation of temperature and indisposition, which soon passed off completely.

The inhalation-researches were made entirely on mice, the fluid containing the organisms being introduced by means of a hand-spray into the cage in which the animals were. Three experiments were performed. In the first, two mice inhaled the material for five minutes; one of these was lost, but the other died in four days with advanced pneumonia and pleurisy, the exudation containing the typical organisms. In the second, four mice inhaled the fluid; of these, one died in four days of pneumonia, one was killed in three days, but was found to be perfectly healthy, and the other two remained well. In the third experiment, six mice were used; of these, two died in four days with typical lobar grey hepatisation; the other four were unaffected.

These researches are very striking, and lend great support to the view, which has been gaining ground of late, that pneumonia is a specific infective disease. That all the mice subjected to inhalation did not get pneumonia, is explained by Friedländer on the supposition that, in most cases, little or none of the fluid entered the lungs, because the animals turned their backs to the spray. As regards these experiments, however, there is one omission, for no mention is made of control-experiments, such as spraying cold-water into the cage; for those who hold that pneumonia is simply due to catching cold may say that those animals which died of pneumonia got it from the wet spray, and not by inhalation of these specific micrococci. There are also other points which might have been made more convincing; nevertheless, the research is a great addition to our knowledge, and we hope that it may direct the attention of practitioners to the observation and recording of cases of possible epidemic pneumonia. Such observations can be better made in small towns or villages, where the sick are under the care of a few practitioners, than in large cities, where collective investigation of an outbreak is a matter of great difficulty.

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THE Library of the Royal College of Surgeons of England will, by a recent resolution of the Council, be open from 11 A.M. to 6 P.M.

THE Turkish *Vakyt* states that twenty-five army-surgeons have been appointed for service at Suakim.

MR. R. CLEMENT LUCAS, Senior Assistant-Surgeon to Guy's Hospital, has been elected a corresponding member of the Société de Chirurgie of Paris.

MEMBERS are reminded that all communications as to advertisements, subscriptions, changes of address, and all other business-matters in connection with the JOURNAL, should be addressed to the General Manager, and not to the Editor.

IT is expected that His Imperial Highness Prince Louis Lucien Bonaparte will be present, amongst other guests, at the meeting of the Medical Society of London, on Monday next, January 28th, when the President, Sir Joseph Fayrer, will read a paper on Serpent Poison.

IN April next, Professor Frerichs will have completed twenty-five years of service as Director of the Medical Clinic in Berlin. It is intended to celebrate the occasion by a public festival; and a committee, consisting of Professors Bardeleben, Lauer, Leyden, and others, has been formed to carry out the object. A marble bust of Frerichs will be unveiled on the occasion.

THE annual dinner of the Manchester Edinburgh University Club will take place at the Queen's Hotel, on Thursday, the 31st instant, at 6.30. Sir Joseph Lister, Bart., has accepted an invitation to be present as the guest of the club. Graduates of the University desirous of becoming members are requested to communicate at once with Dr. Hardie, 1, St. Ann's Place, Honorary Secretary.

THE Council of the Society of Arts announce that they have accepted a very liberal offer made by Mr. William Westgarth, a member of the Society, to provide a sum of £1,200 for prizes for essays upon "The Construction of Dwellings for the Poor of the Metropolis," and on "Plans for Reconstructing Central London." The prize for the former essay will amount to £250; for the latter there will be one prize of £500, and three prizes of £150 each. Full particulars of the conditions will shortly be published.

ALLEGED CRIMINAL ABORTION.

AT Marlborough Street police-station, on the 15th instant, an aged man, Emanuel Truman, and his wife, were charged with being concerned in the administration of poison or other noxious drug, and using an instrument to procure abortion, thereby causing the death of a pregnant single woman named West. The nature of the drug alleged to have been given did not transpire. The male prisoner alleges that he has been curator of King's College and St. Thomas's Hospitals, as well as of the Hospital for Women, Soho Square. The prisoners were remanded for the production of further evidence.

THE LIGHTING OF RAILWAY CARRIAGES.

MANY public complaints have lately been made about the insufficient lighting of railway-carriages. It is alleged that compartments of carriages on some lines are often to be found in total darkness, the lamps going out soon after the train has started on its journey. This allegation is a serious one, if only from the consideration that a good light is a powerful preventive of outrage.

CHURCHYARDS AS RECREATION-GROUNDS.

THE Rev. C. E. T. Roberts has written to the Bethnal Green Vestry, informing them that the laying out of St. Peter's Churchyard, in the Hackney Road, as a public recreation ground, has been completed, and that the Bishop of Bedford will perform the ceremony of opening it for that purpose. The vestry has voted £20 for the salary of a caretaker, and the opening will take place as soon as the Works Committee can make the necessary arrangements.

A CONVALESCENT HOME FOR VIENNA.

A CONVALESCENT home in connection with the General Hospital (Allgemeine Krankenhaus) of Vienna, has lately been established at Währing, near that city. It contains at present 100 beds, but that number may be increased. On January 7th, fifteen patients were transferred to it from the hospital. Dr. Moritz Pollak, police-surgeon at Währing, is the visiting, and Dr. Isidor Schnabel the resident medical officer.

DIABETIC PNEUMATURIA.

A CURIOUS case of this rare affection, observed by Dr. Guiard, is summed up in the *Journal de Medecine et de Chirurgie Pratique* for 1883, Art. 12361. The chief symptom was the occasional escape of odourless gases through the urethra after micturition. There were no signs of a communication between the intestine and bladder, but the urine was acid, and contained sugar. The patient having been repeatedly catheterised before the apparition of the pneumaturia, it seems probable that an acid fermentation of the diabetic urine had been set up, in consequence of the introduction of some germ-laden air.

ORIGIN OF THE CHOLERA EPIDEMIC IN EGYPT.

THE discussion on Surgeon-General Hunter's paper, read before the Epidemiological Society, will take place on Wednesday, February 13th, at 8 P.M., at 11, Chandos Street, Cavendish Square. It is expected that many members and visitors interested in the subject will take part in the discussion; and it is requested, with a view to the convenience of the meeting, that gentlemen intending to do so should communicate with Mr. Shirley Murphy, the honorary secretary, not later than Monday, February 11th. It is proposed to limit each speaker to ten minutes, and the names will be noted in the order of the receipt of the applications. The discussion will be opened by Sir William Smart, K.C.B., followed by Surgeon-General Balfour.

HOT DINNERS.

ONE of the most fruitful sources of grumbling, and, it must be admitted, of not unreasonable grumbling, among private soldiers is that, after having been detained on duty, unavoidably, until long after the dinner hour, they are obliged to sit down to a half-cold and decidedly greasy repast, or else to one in which the heat has been retained at the cost of drying it to a cinder in the regulation oven. To remedy this grievance, Sergeant J. Brown, master cook, Commissariat and Transport Corps, quartered at Aldershot, invented, ten or twelve months ago, a contrivance termed a "hot water-oven," consisting of an oblong metallic box, the top, sides, one end, and bottom of which are hollow, as also is the partition dividing the oven into two, an upper and lower compartment. At the top is an orifice, closed by a screw-cap, through which is poured boiling water, entirely filling the space between the outer and inner case. The heat thus obtained for the interior will keep warm the dinners of twenty-four men, if in basins or canteens, or a larger number in dishes, and in no way deteriorated in quality from when first cut. This ingenious contrivance enables the cooks to keep the meals warm for four hours. The oven takes about six gallons of water, which, when it has performed its duty, is released by a tap. So successful has it proved, that four are in constant use at Aldershot, whilst two more have been sent to Woolwich and Chelsea. Unquestionably, the oven will be a boon to the service.

DISSECTING-ROOM CREMATORIES.

WE mentioned last week that authority had been given by the prefect of police of Paris to cremate the remains of hospital-subjects. We have since learned that a report is current in the United States, that the Medical Department of the University of Pennsylvania will build a "crematory" for the destruction of the refuse material from its dissecting-rooms. The plan is undoubtedly one to be highly commended on sanitary grounds, but we doubt whether it would be altogether politic to apply it in this country. The popular prejudice—if such it be—against cremation, is too strong to allow such a scheme to obtain general approval.

INTERNATIONAL CONFERENCE ON NAVAL HYGIENE.

THE *Philadelphia Medical News* states that, in his annual report, Surgeon-General Wales recommends that the medical departments of the great naval powers be invited to a general conference, with a view to the adoption of an uniform nomenclature, classification, and tabulation of diseases, and of a system of interchange of periodical reports of the movement of disease, from which international reports of sanitary conditions all over the world may be published at stated intervals. Such a systematic interchange of information as is here proposed would be of incalculable advantage, not only to administrators, but to students of epidemiology.

MANCHESTER MEDICAL SOCIETY: MICROSCOPICAL SECTION.

THE annual meeting of the Microscopical Section was held at the Owens College on the 15th instant. The following were elected office-bearers for 1884. *President:* H. Ashby, M.D. *Vice-President:* J. Dreschfeld, M.D. *Committee:* J. Dixon Mann, M.D., Mr. A. W. Stocks, Mr. Broadbent, A. H. Griffith, M.B., H. Tomkins, M.D., H. R. Hutton, M.D. *Treasurer:* J. S. Bury, M.D. *Secretary:* A. H. Young, M.B.

HOSPITAL SUNDAY FUND.

A MEETING of the Council of the Hospital Sunday Fund was held on January 22nd at the Mansion House, the Bishop of London presiding. The distribution committee of this year's fund was thus nominated:—The Lord Mayor, M.P., Sir Sydney Waterlow, M.P., Lord Ashley, Mr. J. D. Allcroft, Sir W. McArthur, M.P., Mr. Thomson Hankey, Mr. S. Morley, M.P., Dr. Sedgwick Saunders, Mr. Jervoise Smith, and Mr. Alfred Willett. It was resolved to call a special general meeting of the constituents of the fund—that is to say, the clergyman and two lay members of each contributing congregation—to consider the rule by which no institution to the benefits of which admission can only be gained by election from the general body of subscribers shall be eligible for grants from the fund.

HOSPITAL SATURDAY IN THE METROPOLIS.

THE report of the London Hospital Saturday Fund for the year 1883 shows a considerable augmentation of receipts. During the year, the medical charities of the metropolis have received £1,000 more from the fund than they did in 1882, no less a sum than £8,534 having been divided among them. The gross receipts were £9,783. It appears that a sum of £1,249, or nearly 13 per cent., was spent in the expenses of management and collection. The workshop collections amounted to £6,763, and the street collections to £2,801.

HOSPITAL SUNDAY AND SATURDAY IN LIVERPOOL.

FROM the proceeds of the combined Hospital Sunday and Hospital Saturday collections in Liverpool, a sum of £10,000 was divided last year amongst the medical charities of the city, the following being the grants made:—Royal Infirmary, £3,000; Royal Southern Hospital, £1,600; Northern Hospital, £1,400; Dispensaries, £800; District Nursing Society, £700; Eye and Ear Infirmary, £500; Infirmary for Children, £500; Lying-in-Hospital, £400; Homœopathic Dispensary, £200; Convalescent Institution, £200; Stanley Hospital, £200; Consumption Hospital, £150; St. Paul's Eye and Ear Hospital, £150; Hospital for Infectious Diseases, £100; Cancer Hospital, £50; Dental Hospital, £25; Skin Hospital, £25. The collections for the present year have been made, and promise well.

THE LATE DR. MARION SIMS.

A COMMITTEE of medical men in New York, and various other parts of the United States of America, has been formed for the purpose of erecting a suitable monument to the memory of Dr. Sims in New York. Dr. Fordyce Barker is chairman, and Dr. G. F. Shrady, secretary, and the committee includes also the names of Dr. T. A. Emmet, Dr. Gaillard Thomas, Dr. P. F. Mundé, Dr. S. D. Gross, Dr. W. Goodell, Dr. W. H. Byford, Dr. Beverley Cole, and many others. Contributions of one dollar and upwards may be forwarded to the office of the *New York Medical Record*, which has been constituted the treasury of the fund.—At the meeting of the New York Academy of Medicine on January 3rd, a memoir of Dr. Sims was read by Dr. Emmet.

CALCIFICATION OF THE PLEURA COSTALIS.

AT the *post mortem* examination of a man who had died of cancer of the stomach, at the Hôpital St. Antoine, M. Gilbert found a thick plate of bone-like material covering the internal surface of the ribs on the right side, from the sternum to the vertebral column. This plate measured 12 centimètres in height, and 20 in breadth. Its external surface was smooth, and separated from the ribs by connective tissue, while the internal was rough, and adherent in some places to the lung. Chemically, the plate had very nearly the same composition as bone, but the microscopical examination showed that it was only fibrous tissue loaded with lime-salts.

THE RESIDENT-LIBRARIAN OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

OUR advertising columns contain a notice that a Resident-Librarian to the Royal Medical and Chirurgical Society, in the room of the late Mr. B. R. Wheatley, will shortly be appointed. Candidates are to send in their applications by February 1st, and the terms of the advertisement indicate that a practical acquaintance with the working of a lending library, and a knowledge of foreign languages will be desirable acquirements. The annual salary commences at £150; a residence, with fire and gas, is also provided.

IMPROVEMENTS IN BRIGHTON.

A LOCAL Government Board inquiry has been held with reference to borrowing £25,000 for widening and improving the King's Road, altering the markets, etc. Mr. S. J. Smith, C.E., sat in the place of Sir R. Rawlinson, who was prevented by illness, and adjourned the meeting to an evening hour, at the request of some "working men." These failed, however, to sustain any serious objection to the scheme. That a poll of the inhabitants of Brighton terminated largely in favour of a still more extended scheme of improvement is a matter of general knowledge. Certainly, attractive alterations are being made along the sea-front, and attempts are being made, as in London and elsewhere, to reach also the homes of the very poor, and get some further advantage from the Sanitary Acts.

ACCIDENT TO GENERAL GRANT.

WE learn from the *Philadelphia Medical News* that General Grant, in a fall on the ice on December 24th, struck heavily upon the outer and upper portion of his left thigh. The pain was extreme, and the inability to use the limb complete. The fall, the age of the patient, and the subjective symptoms, suggested probable fracture of the neck of the femur; and the incomplete examination of the limb, which alone was possible at first because of the pain, did not entirely exclude this diagnosis. After the lapse of thirty-six hours, the pain subsided; and then a thorough examination, made by Dr. Fordyce Barker and Dr. L. A. Stimson, failed to discover any objective signs of fracture. The injury appeared to have been a severe contusion of the outer and upper portion of the left thigh, with possible rupture of muscular fibres or attachments in the effort to avoid the fall. The surgeons in attendance confidently anticipated an early recovery.

THE LATE MR. WHEATLEY.

AT a special meeting of the Council of the Royal Medical and Chirurgical Society, held on the 17th instant, the following resolution was passed unanimously: "The Council of the Royal Medical and Chirurgical Society of London desire to express their sorrow at the sudden and unexpected death of their late excellent resident librarian, Mr. Benjamin Robert Wheatley, and their sympathy with the surviving members of his family. The Council also wish to record their deep sense of the value of his services to the Society during the last forty years, and their due appreciation of his constancy and fidelity in the discharge of his important duties." We understand that it is contemplated to establish a memorial of the Society's sense of the unsurpassed devotion which the late resident librarian applied to the conduct of the affairs of the Royal Medical and Chirurgical Society.

ST. JOHN AMBULANCE ASSOCIATION.

MAJOR-GENERAL SAREL, C.B., the Governor of Guernsey, presented certificates to the first aid and nursing classes at that centre last week, at a meeting held at the Constables' office; among those present being the Government Secretary, Colonel Bell; Colonel Jerome, V.C., Fort-Major; Lieut.-Colonel McCrea, A.A.G.; and Mr. Edgar MacCullogh, Lieut.-Bailiff. A warm tribute to the assistance given by the medical profession was paid by the Governor, who narrated several incidents in his own experience, on active service and elsewhere, when a knowledge of "first aid" would have been of incalculable value. One of the deputy-chairmen, Mr. John Furley, has attended an inaugural meeting at Bowes Green, Southgate, where a new district of the metropolitan centre is being established.

THE HOUSES OF THE POOR IN BIRMINGHAM.

ON January 11th, Dr. Alfred Hill, Medical Officer of Health for the Borough of Birmingham, reported to the Artisans' Dwellings Inquiry Committee of the Town Council, that in St. [illegible] ward, which was a typical section of the borough, there were [illegible]; yet a careful inspection had only revealed [illegible] the conditions of which were absolutely prejudicial to health. In these cases, however, the want of knowledge displayed was so lamentable, that it was absolutely necessary [illegible] houses should be instructed in the methods of [illegible] free from filth. In one instance, it was clearly proved that the owner of certain property was solely responsible for the wretched condition in which the houses were found.

LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

PROFESSOR PARKER, F.R.S., will commence his annual course of nine lectures on "Mammalian Descent," in the theatre of the Royal College of Surgeons, on Monday, February 4th, and continue the same each Monday, Wednesday, and Friday, at four o'clock. Professor Flower, F.R.S., will follow with his course of nine lectures on the "Principal Types of the Human Form;" he will be succeeded by Mr. F. S. Eve, F.R.C.S., Erasmus Wilson Lecturer, who will give three demonstrations on "Some Points in Pathology, illustrated by specimens from the College Museum." Professor Sir Henry Thompson will then deliver six lectures on "Some Important Points in connection with the Surgery of the Urinary Organs." The course will be brought to a close by Mr. E. A. Schäfer, F.R.S., who will deliver three lectures, the subject and dates of which will be duly announced.

NEGLECTING TO BURY THE DEAD.

A VERY bad case of this kind has lately occurred at Lower Edmonton. On December 16th, a child died there, and, as it had not been buried on the 28th, the attention of the inspector of nuisances was called to the case, and application was made on the 29th to the magistrates for an order of burial within twelve hours. The body was then removed from the parents' house, having been there thirteen days, to the disinfecting room of the sewage-farm of the Board; but, the body still remaining unburied, the clerk to the guardians was directed to write to the clerk of the Local Board on the matter. It would appear that there must have been some bungling or misunderstanding, as the inspector of nuisances, after ascertaining that the friends of the deceased could not or would not bury the body, had the power to give notice to the relieving officer of the parish "to bury such body at the expense of the poor-rate," which he is bound to do, under a penalty of £5. It therefore seems to have been a waste of time, and quite unnecessary, for the clerk of the guardians to write to the clerk of the local authority, instead of directing the relieving officer, or officer of the guardians, to bury the body forthwith in accordance with the magistrates' order.

HOW SMALL-POX IS SPREAD.

A NEWSPAPER vendor residing in Old Ford Road was summoned before Mr. Lushington, at the Thames Police Court, for sending out a large quantity of newspapers to his customers, after he had been warned not to do so by the inspector of nuisances. The medical officer of health, at the hearing of the case, stated that, as the daughter of the defendant was suffering from small-pox in a room opening into the shop, and as the room-door was open, and the vendor came out of the room into the shop, he had no doubt the papers removed were liable to infection from the disease. The defendant was fined £5 and costs, and was locked up in default, This is a very important decision, as considerable doubt has been expressed as to paper coming within the meaning of the section, and whether or not papers or books can convey infection. Many sanitarians doubt if letters sent by post, or books returned from small-pox patients, can convey infection; but as to the latter, there are cases on record to show that they can. Infection was, however, conveyed from this house into the adjoining parish of Hackney by the removal of a family residing in an upstairs room, one of whom was attacked with the disease fifteen days after taking up her new residence. This case shows the necessity for strictly forbidding children going to school from infected houses, as there was not, so far as could be ascertained, any personal communication between the sick and healthy.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

AT the annual general meeting of this Society, which took place on the 14th instant, the following members were elected to serve as office-bearers for the year 1884. *President:* James Smith Turner, M.R.C.S., and L.D.S.Eng. *Vice-Presidents:* Messrs. Henry Moon, T. Charters White, and George Gregson (resident); and Wm. Doherty (Dublin), J. T. Browne-Mason (Exeter), and Richard White (Norwich), non-resident. *Treasurer:* Mr. Jas. Parkinson. *Librarian:* Mr. Felix Weiss. *Curator:* Mr. S. J. Hutchinson. *Editor of the Transactions:* Mr. Henry Sewill. *Honorary Secretaries:* Messrs. J. H. Mummery (Council), David Hepburn (Society) and R. H. Woodhouse (Foreign Correspondence). *Council:* Messrs. G. A. Ibbetson, Ashley Gibbings, Thos. A. Rogers, Chas. S. Tomes, F. Canton, Alex. Cartwright, W. St. George Elliott, Augustus Winterbottom, and Storer Bennett, resident; and R. Rogers (Cheltenham) W. Hele (Carlisle), A. Wilson (Edinburgh); J. Fenn Cole (Ipswich), Geo. McAdam (Hereford), and W. E. Harding (Shrewsbury), non-resident. Mr. J. Bland Sutton, Lecturer on Comparative Anatomy at the Middlesex Hospital Medical College, read a paper on "Comparative Dental Pathology," illustrated by means of a number of interesting specimens and drawings, in which he indicated the present extent of our knowledge with regard to diseases of the teeth in animals. The retiring President, Dr. Joseph Walker, afterwards delivered a short valedictory address, in which he expressed a strong opinion that some changes were necessary to make the Society more attractive to the junior members of the profession, and to enable it to maintain its position against the rivalry of younger institutions.

A NEW HOSPITAL FOR NORTH LONDON.

THE project which has for some months past been before the public, having for its object the establishment of a large new hospital in the northern district of the metropolis, and of which several notices have, during the past year, appeared in the BRITISH MEDICAL JOURNAL, received, last Saturday, a considerable impetus at a crowded public meeting which was held in Highbury Athenæum. The chair was taken by the Duke of Westminster; and among those present were the Duchess of Westminster, and several other ladies, who were specially invited. The bases of the proposals which have been matured for the establishment of the new hospital are described in the resolutions passed at the meeting, which are detailed in the report of the proceedings published in another column. We understand that about £40,000 are required to carry out the project. Of this amount, the Great Northern Hospital authorities have already on hand a sum exceeding £4,000; whilst the first list of donations announced at the meeting amounted to £2,500.

INQUEST ON A MEDICAL MAN.

ON the 9th instant an inquest was concluded at Aberystwith, relative to the death of Mr. John Edward Mathias, who died in a state of coma under circumstances which led to an analysis of the viscera and medicine administered, at the instance of the Home Secretary. The deceased gentleman had been under the care of Mr Gilbertson, who had prescribed a mixture containing ten grains of bicarbonate of potash, two drachms of liquor ammoniæ acetatis, fifteen minims of spirit of nitrous ether, seven minims of ipecacuanha wine, and five minims of tincture of opium in each dose. Three doses were taken. The dark colour of the medicine appears to have given rise to a suspicion that it might have been tampered with; but such a mixture acquires a darker colour on exposure to light. Dr. Thomas Stevenson reported the viscera as free from all poison, except a trace of morphia; that the residue of the medicine was an ordinary medicinal mixture, containing safe doses of opium, and that there was no essential difference between the mixture and one prepared by himself according to the prescription. Mr. Harries, who made the necropsy, found the right lung completely consolidated, and, when cut, purulent fluid flowed freely into the incision. Under these circumstances, the jury had no difficulty in finding that the deceased died from natural causes; and this opinion, expressed by Mr. Harries, was endorsed by

Dr. Stevenson, who thought that, under that condition of lung, small doses of opium would be operative. The inquest appears to have given rise to a good deal of local excitement; but the coroner's jury took the view that the case was one which demanded a thorough investigation.

THE WHITE ELEPHANT.

THE British public has been much disappointed with the animal which, during the past week, has been the talk of London. There can be no doubt that the average Englishman has long been under the impression that the sacred animal of Siam is a variety of elephant as brilliantly white as a white mouse, or, at least, of a "dead-white" hue, or very pale drab, like some sea-birds. The truth is, that a perfect "white" elephant is a real albino: the natural colouring-matter of the epidermis being absent, the colour of the blood in the cutaneous vessels gives a pale pink tint to the hide. Precisely the same condition causes the blood-red colour of a white rabbit's iris. This pale pink coloration resembles that seen in a well fed Berkshire boar, and the black mottling in the ears of the elephant now deposited at the Zoological Gardens by Mr. Barnum further reminds us of a pattern very common in domesticated pigs. In a leading daily paper, Professor Flower has already described the peculiarities of the new arrival with scientific accuracy; Sir Joseph Fayrer informs us, and several Anglo-Indians concur in his opinion, that the peculiar local deficiency of pigment in this elephant is very frequently seen in British India, and this animal has been chosen in his own country, long before he was sold to Mr. Barnum, to represent the rarer purely "white" elephant, because an example of that purer type could not be obtained. Possibly the arrangement of the very little "white" on Mr. Barnum's elephant's hide was sufficient, according with some local superstition. This elephant is not a fine specimen of his kind, being hog-backed and small for his age, but his tail is perfect, and his tusks are very well formed. He may be instructively compared with the male Indian elephant presented by His Royal Highness the Prince of Wales, a far nobler animal, bigger for his age, and well formed. He is, however, a "muktar," that is to say, an elephant whose tusks are never developed. The Hindus speak of a specimen of this variety as though it were a different animal from the "hottar", or long-tusked elephant.

THE UNDERGROUND RAILWAY AND THE PUBLIC.

IT is not often that the report of the proceedings at a half-yearly meeting of a railway-company affords subject of medical interest, and still less often have we been able to congratulate the Metropolitan Railway Company on care exhibited in watching over the wellbeing of the public. This company has come to be associated, in the minds of many Londoners, with the memory of mephitic vapours, of noxious gases, of foul blow-holes, and of overcrowded carriages. Still it must be frankly admitted that the fact announced by the chairman on January 18th was highly creditable to the executive of the company. Sir Edward Watkin stated that, in the past ten years, they had carried six hundred million passengers, and that not one had been killed or even seriously injured. The directors are able to warrant their passengers "sound in limb;" when will they turn their minds towards making a serious attempt to complete the other clause of the warranty, and, by providing proper ventilation, enable themselves to warrant their passengers "sound in wind" also? Yet another point of interest bearing on the public health, was the further statement that the directors had under consideration a scheme, by which they might be able to provide house-room for a number of workmen on a liberal scale. We are very much with the chairman in his contention that one very important point to be attended to, when considering the question of the housing of the poor, is the provision of homes on the spot near their work. If the Metropolitan Railway Company eventually succeed in providing good healthy rooms for the working classes, at one shilling or one and sixpence a week each, and makes the scheme pay 4 or 5 per cent. on the outlay, it will have accomplished a great public service.

POISONING OF A PRISONER.

ON January 21st, an adjourned inquest was resumed at Wandsworth Prison, respecting the death of George Robinson, aged 51, chemist and druggist, a prisoner in the gaol. The deceased had been under remand in Clerkenwell House of Detention from December 19th; he was committed for three months for an assault upon his wife. While at the police-court he partook of meat-pie and liquid refreshment which were brought to him, it being not contrary to regulations for friends to supply prisoners with food whilst under remand. At 3 P.M., having been previously in good health, he began to suffer pain, and was ill in the van on his way to Wandsworth. When received at half-past five, he was very ill indeed. He was seen by Dr. Mosse, acting for the medical officer of the prison, who found him collapsed, and treated him with bismuth powders and other remedies, but the man died in the course of a few hours, with symptoms of arsenical poisoning. The results of the necropsy made by Dr. Mosse, of the Bolingbroke Hospital, and Dr. Wynter, the chief surgeon to the gaol, were negative. There were no gastric or intestinal lesions, beyond a slight reddening of the stomach, not noticeable till after exposure to the air. An analysis of the stomach and its contents, by Dr. Thomas Stevenson, revealed the presence of arsenic in a soluble form in both the stomach and in vomited matter collected late in the course of the illness. In the stomach and its contents there was one-fifth of a grain, and in the vomit one-third of a grain calculated as white arsenic, and the aggregate amount was 0.58 grain. There was no clue to the form in which the poison had been administered. The quantity found was, perhaps, one-third of a fatal dose; but assuming the arsenic to have been taken during life, some of it must have been absorbed and much rejected by vomiting and purging. The quantity found in the stomach and in the vomited matter was only the residue—the inoperative portion of the whole quantity. The coroner adjourned the inquiry for further evidence.

THE ABUSE OF MEDICAL CHARITY.

THE *Liverpool Echo*, of the 15th instant, contains a clever article upon the abuse of medical charity. The writer admits the existence of the abuse, but urges that the working classes are driven to the hospitals by the high scale of fees demanded by the medical men. "Why," he asks, "should doctors all live in big houses, drive carriages, and live expensively?" But if the writer really thinks that all medical men live expensively, he is very much mistaken; and if he will study the scale of fees by which most practitioners work, we are sure he will agree with us, that there is not much room for cutting down medical charges, if the business of a medical man is still to be reckoned among the learned professions. It is not in this direction that we must look for the remedy for the abuse of medical charity. And, as this course is out of the question, we must turn, as the writer suggests, to the establishment of reliable provident dispensaries. Herein lies the true solution of the difficulty. Let Liverpool follow the example of Manchester, and set on foot a comprehensive system of provident dispensaries, only taking care to avoid those faults which have been pointed out in the Manchester Provident Dispensaries Association. Thus it is that, by endeavouring to create an improved provident dispensary, we shall best remove the abuse of medical charity, and bring good medical attendance within the reach of the working classes.

THE ELECTION OF COUNTY CORONER FOR LANCASHIRE.

AN unfortunate accident, caused by a runaway tram-engine, having resulted in the death of Mr. Barker, coroner for South-West Lancashire, the freeholders of West Derby Hundred have just elected another in his stead. We very much question whether this is a good mode of appointing so important an officer, because the candidate who can spend the most money, and is well up in electioneering tactics, has a much better chance than one who is fitted for the office, either by experience as deputy, or acting as coroner in other districts. For this vacancy five candidates entered, but when it became known that there was only one polling-place for 6,000 voters, who had to go from Liverpool, Waterloo, St. Helen's, Prescot, Warrington, Widnes, Wigan, and surrounding districts, three of these gentlemen retired, and gave, as a reason, the difficulties with which they would have to contend. All the candidates were of the legal profession, one being a barrister. One of the retiring candidates, who had acted as deputy for the late coroner, had been a borough coroner for a number of years, and was a lawyer of many years' standing. No doubt any one of the candidates would have done credit to the office if appointed. But an office of such importance ought to be filled in a different manner, and a selection made from qualifications for fitness only. No doubt the method of election employed prevented a medical candidate from entering the field, for we cannot believe that there is no fit medical candidate with sufficient qualifications to make a good coroner in such a large part of the county of Lancaster, which includes Liverpool, Warrington, Wigan, and other places. The cost to the successful man has been estimated at £2,000, and the appointment, now paid by salary, is worth, we understand, between £800 and £900 per annum.

A CASE OF HYDROPHOBIA.

A BOY, aged 6, has recently died at Horwich, Lancashire, from hydrophobia. He had been bitten on October 27th, in the hip, by a collie dog. (It is curious how often the delinquent is a collie.) His father sucked the wound; and, about a couple of hours later, Mr. Whitaker arrived, and treated the wound in the ordinary way with the solid nitrate of silver. The wound healed, and the boy returned to his usual state of health; but on December 14th he was drowsy; on December 16th, he complained of pain over his left eye; on December 17th, he "could not take liquids without" (in the words of his father) "spasms, or a sort of jerking which prevented his swallowing;" and on December 20th, the fifty-fifth day after the bite, he died. An inquest was held; and the deputy-coroner, Mr. W. Hardy, added one more painful feature to a painful case by criticising the treatment adopted. The treatment was not successful; but it is the most widely spread, and, indeed, the only established and recognised, mode of treatment. The deputy-coroner, however, considered that, if nitrate of silver was to be used, "the liquid form" was "much more preferable to the solid." Of course, in his private capacity, Mr. W. Hardy is at liberty to believe that molten nitrate of silver introduced into a wound inflicted by a rabid dog is the best line of treatment; but the deputy-coroner should recollect that his utterances in his official capacity acquire an importance and a power of inflicting pain that they would not otherwise possess. He did not pretend, he said, to possess any special knowledge; and would, therefore, have been more considerate, more courteous, and more reasonable, if he had refrained from the criticisms in which he indulged.

BABY-FARMING.

WE understand that the Special Purposes Sanitary Committee of the Metropolitan Board of Works has recommended that the Board should urge on the Home Secretary the desirability of the amendment of the Infant Life Protection Act, with a view of making the registration of every person receiving one child to nurse compulsory, and to provide for proper inspection. It was stated at the Board that representations had been several times made to the Home Office on this subject. In the meantime, and just as the clerk at the Home Office pigeon-holes the letter, we are again startled by a most shocking and inhuman case of the starvation of several children, and the deaths of two of them, who had been received by a single woman to nurse in answer to advertisements. The money received by her from the parents was spent in drink, the infants being kept for days without food. She was arrested in a public house, taken before the magistrate at Milton Courthouse, and remanded, crying out as she left the dock, "All right; do what you like with me." It ought to be impossible for a drunken ogre to have it in her power to cause dreadful human suffering to little children, nearly all of whom were under three years of age. Such children are quite helpless; they cannot tell their tale of suffering to the neighbours or to the police, neither can they run away, as older children would. They should all, up to the age of three years, be brought under the provisions of the Infant Life Protection Act, as was in the first instance proposed by the Infant Life Protection Society.

THE GERMAN CHOLERA COMMISSION IN CALCUTTA.

WE learn by this week's mail that the members of the German Cholera Commission, consisting of Drs. Robert Koch, Fischer, and Gaffkey, have arrived in Calcutta; and that every facility is being afforded them for the prosecution of their investigations. It seemed, at first, not improbable that they would have had to proceed to Madras, owing to the absence of cholera in Calcutta; but this absence proved to be of short duration, and cases of the disease were again cropping up; so that there is every probability of there being no lack of material wherewith to work. Rooms have been set apart for the use of the Commission at the Medical College Hospital, where they were steadily at work when the mail left.

SURGEON-GENERAL HUNTER'S REPORT.

THE *Saturday Review* of January 19th, has a long and able article on Cholera in Egypt, reviewing the position taken up by Surgeon-General Hunter, in the address delivered before the Epidemiological Society, and published in full in our columns last week. From the wording of the article, it might be supposed that it was a review of Dr. Hunter's final official report to the Foreign Office. This report, however, which will take up a very wide range, will not, we are informed, be published before January 29th at the earliest.

REPORTED EPIDEMIC OF ENTERIC FEVER AT ALDERSHOT.

WE believe that there is not sufficient justification for the statement which has appeared in some of the daily papers to the effect that there is an epidemic of enteric fever in existence at Aldershot. There are nearly always some cases of enteric fever at Aldershot, and the number at present is very little in excess of the average. Still, it is generally believed that the sanitary state of some parts of Aldershot is far from satisfactory; and it seems not improbable that some steps will have to be taken to improve the present arrangements.

THE MEDICAL ACTS AMENDMENT BILL.

WE understand that it is the intention of the Government to re-introduce, with certain modifications, the Medical Acts Amendment Bill of last session; and that it is not probable that the Bill will be allowed to drop again.

THE PARKES MUSEUM LECTURES.

THE Council of the Parkes Museum, Margaret Street, W., finding that the lectures already delivered there have been increasingly appreciated, as evidenced by a steady growth in the number of the audience, have made arrangements for the continuance of the series throughout the present session. On January 31st, at 5 P.M., Mr. H. A. Darbishire, F.R.I.B.A., the architect to the Peabody Trustees, will give an address on the burning question of the day, "Artisans' and Labourers' Dwellings." On Tuesday, February 12th, Mr. J. P., Seddon, F.R.I.B.A., will give a lecture (also at 5 P.M.) on "The Ventilation of Theatres;" Mr. Geo. Godwin, F.R.S., will take the chair at this lecture. On Thursday evening, at 8 P.M., February 28th, the question of the purification of the air in living rooms and sick-wards will be dealt with, Dr. H. C. Bartlett, F.C.S., taking up the question of the general principles involved; while Dr. Richard Neale will give a description of the structure and mode of action of his "Chemical Lung." On Thursday, March 13th, at 5 P.M., Dr. Henry Veale, Deputy Surgeon-General, whose name is well known in connection with Lord Wolseley's expedition to Egypt, will give a lecture on "The Organisation and Management of Field-Hospitals." On Thursday, March 27th, Mr. Watson Cheyne will give a practical demonstration of micro-organisms, illustrating his remarks by microscopical preparations and photographs. The final lecture of the session will be delivered on Thursday, April 24th, by Dr. John A. Voelcker, of the Laboratory of the Royal Agricultural Society of England, who will take up the subject of milk. This is an exceedingly interesting set of lectures and addresses, and we greatly regret to learn that the museum is in pecuniary straits. The annual subscription entitling to all the rights of membership is one guinea, and so excellent an institution ought not to be allowed to suffer from the want of the small income which is necessary to carry on the work.

RECKLESS CHARGES AGAINST HOSPITALS.

A LARGE number of reckless and quite ungrounded charges and insinuations are made against those who have the management of hospitals. An instance very much in point recently occurred at St. Thomas's Hospital. An inquest was held on December 31st on the body of a woman who had died in the hospital. At the end of the inquiry, and after the jury had given their verdict, it was stated by a relative and a friend of the woman that "the deceased had, in consequence of something being done over which she had no control, been taken from her bed and placed in the bath-room for five hours." The coroner remarked at the same time that "it was a great pity the complaint had not been made before the medical officer attached to the hospital left the inquest-room; and that, if there were any complaint, it had better be made at once to the hospital authorities." It will be seen that there was an insinuation obviously made that the woman had been put into the bath-room as a punishment. To anyone who knows anything about hospitals in general, or St. Thomas's in particular, the insinuation is an absurdity. St. Thomas's Hospital is fortunate in possessing large lofty bath-rooms, heated by hot water-coils, and in no way less comfortable than the wards themselves; they are habitually used for minor operations, for the application of plaster-of-Paris splints, and for other similar purposes. The patient with regard to whom the complaint was made was twice taken into the bath-room attached to the ward in which she was: once to be cleansed and to have new bed-linen, and once in order to have a plaster-of-Paris bandage applied. If every surgical ward in every hospital had similar retiring rooms, it would add very much to the comfort of all the patients in the wards.

THE ALLEGED POISONING BY LOBELIA.

JAMES WALLIS, the aged herbalist, to whose case we have already referred, has been committed for trial by the stipendiary magistrate on a charge of manslaughter, instituted by the [illegible]. Pending the trial, Wallis has been liberated on bail, one of his bail being a well known "American practitioner." Mr. Montagu Williams has been retained for the defence; and it is anticipated that the botanical practitioners of the metropolis will spare no expense to secure the acquittal of their brother practitioner. Into the merits of the case it would be improper for us to enter; but in view of the reiterated assertions of the "Thomsonian" or "Coffinite" practitioners that lobelia is not a poison, we may point out that not only have animals been accidentally and purposely killed by this drug, but that many trials for manslaughter by lobelia have taken place, and two, at least, successfully. Thomson himself, the quack introducer of lobelia treatment, was himself tried for murder by lobelia. He was acquitted: but had he been arraigned for manslaughter, there is little doubt he would have been convicted. It is interesting to note that the late Professor Palmer, recently murdered in the East, nearly fell a victim to lobelia administered by a quack in Cambridge, and an account of the event occurs in Mr. Besant's *Life of Palmer*. Palmer used to assert that a regular practitioner pronounced him actually dead. The fact is that there is no rational doubt that lobelia is a dangerous emetic, and has been the cause of countless deaths. Beck, writing nearly half a century ago, alleged that at that time there had been thousands of victims sacrificed to lobelia in the United States.

ARTERIAL PRESSURE.

AT the last meeting of the Royal Medical and Chirurgical Society, Dr. C. S. Roy delivered an address upon arterial pressure, a subject in the experimental analysis of which he has been engaged during the past few years, with the result of additions to our exact knowledge that are on their way to become classical. The Society was afforded occasion to inspect the instruments by which Dr. Roy has investigated *seriatim* the several factors that concur to arterial pressure as their resultant—instruments the use of which, in Dr. Roy's hands, have given good illustrations of the successful application of the "méthode isolatrice" in modern scientific measurements. This remark applies to each of the three instruments which were shown and described on this occasion—namely, that for measuring arterial elasticity, that for measuring the volume of organs, and especially the cardiometer, by means of which Dr. Roy obtains, on the mammalian heart, data concerning the force of its contraction that are, so to speak, "purified" from the concomitant effects of varying arterial pressure. From such data, Dr. Roy concludes that there exist in the vagus nerve-fibres decreasing the force of cardiac contraction distinct from the fibres that diminish the frequency of the beat, and, similarly, that there exist in the accelerans cordis fibres augmentative of force distinct from fibres increasing the heart's frequency. Many other points of interest were referred to, especially as regards the innervation of the kidney, and the specific susceptibility of its vessels to urinary substances: the only matter for regret was, that time did not permit the speaker to fulfil his intention of discussing experiments on the effect of ligature of large vessels, considered in relation to operation for aneurysm.

WESTON'S WALK.

SHORTLY after finishing the first half of the whole 5,000 miles of his great task, in Liverpool, on the 17th instant, at about half past 9 P.M., Weston underwent a critical examination by Mr. Sibley Hicks of that city, at the request of a physician in London. Mr. Hicks reports Weston as walking splendidly, and, after retiring, having a pulse of 68, with a temperature of 98°, and weighing 9 st. 10 lbs. Weston had thus gained 2½ lbs. in the last [illegible] miles, notwithstanding that he had, on the preceding day, walked 47 miles without a halt. Mr. Hicks considers Weston in perfect health, and an excellent specimen of strict temperance. During the remainder of the week Weston continued his march at the Pembroke Skating Rink, in Liverpool, walking throughout remarkably well, and without the slightest apparent effort. His heel has [illegible] improved again, as he has been able to substitute an open shoe for the heavy [illegible]. Owing to the [illegible] averaged less than four miles an hour. On Monday morning last, about 10 o'clock, in bright pleasant weather, Weston set out from Liverpool for Manchester. [illegible] losing half a mile at least, and [illegible] miles without a rest, in a little under 9 hours. The remaining 14 miles were accomplished in a hall at Pendleton, no suitable place being available in Manchester. Next day, he continued his task in the same place, being rather more drowsy than usual, owing to the frequent turning from the contracted limits of the hall. He started at 6 A.M., but, in 40 minutes, had to sleep for two hours, after which he walked the remaining 44 miles without leaving the track, even for his meals. On Wednesday, he walked to Bolton. Now that Weston has done 200 miles more than the half of his work, or 2,700 miles, it may be interesting to note his diet. He has oatmeal and milk, or poached eggs and toast, or cold underdone beef and brown bread and butter, with coffee, at breakfast. In the forenoon, he indulges in a a few meat-wafers, some biscuits, and a pint of coffee. Generally about 1.30, he dines on mutton-broth, underdone mutton or beef, and a plain pudding of rice, tapioca, or custard, with a cup of tea. His supper is much the same as his breakfast. He endeavours to be as regular as the circumstances will allow in everything, aiming at a pace of about four miles an hour, and avoiding making up time by spurts.

HARVEIAN SOCIETY OF LONDON.

THE annual general meeting and *conversazione* of the Harveian Society took place on Thursday, the 17th instant, and was largely attended by members and friends of the Society, as many as 270 being present during the evening. The report of the Council as to the condition of the Society was highly satisfactory; the number of members who had joined during the past year amounting to 40. Votes of thanks were given to the Council, and to the retiring officers of the Society, particularly to the outgoing Secretary, Mr. W. H. Lamb, for his valuable services to the Society during his two years' tenure of the office. The President, Dr. E. Symes Thompson, then delivered his address. He commenced with a description of the changes that have taken place in the profession since the foundation of the Society (53 years ago), the large development of specialism having entailed various changes necessitating the rearrangement of the usages of the Society. The duties of general practitioners in bringing before the meetings the results of their experience were firmly insisted upon. After a survey of the work of the session, a description was given of the Health Exhibition of Berlin (which Dr. Thompson had visited), with special reference to the forthcoming Exhibition in London. The department of the Berlin Exhibition which dealt with the investigation and cultivation of the minute organisms associated with disease, was carefully described; and it was shown that, by bringing to a focus the results of investigations into the organisms of cholera, yellow fever, pyæmia, and phthisis, a chain of evidence was formed, which could not be made if each link were examined separately. Deductions were drawn as to the prevention of disease by the introduction of other organisms, and specially by the interception of the growth of these noxious germs by means of cold dry antiseptic air. Recent visits to the Alps in winter had led the lecturer to believe that the freedom from fever observed in the Alps, in cases of phthisis in which pulmonary excavation was in progress, was due to the fact that the bacilli did not undergo development; that, while the use of antiseptic inhalations was of essential service in many cases, Alpine air in winter had a similar, but far more potent, action. The address concluded with an eulogy of Harvey, and especially of his freedom from the trammels of false theory, and his respect for the teachings of true philosophy. The gratitude of the Harveian Society to the President and Fellows of the Royal College of Physicians for preserving the precious relics of their immortal founder, was expressed with earnestness and fervour; and the lecturer concluded with a hope that the profession would not allow the casket in which the jewel rested to perish through neglect, but would rebuild Hempstead Church, as a worthy shrine for the honoured discoverer of the circulation of the blood. At the conclusion of the address, a hearty vote of thanks was given to Dr. Symes Thompson for his eloquent peroration, and for the able way in which he had conducted the affairs of the Society during his year of presidency. The officers for the coming year proposed by the Council were then declared to be duly elected; the list was published in the BRITISH MEDICAL JOURNAL for January 5th. Thereupon, Mr. George Field, the newly elected president, took the chair, and declared the *conversazione* open. The walls of the room were tastefully decorated with the artistic tapestries of Mr. Rischgitz, and with beautiful specimens of Genoese, Mezzaris, and Oriental embroidery, lent by Messrs. Howell and James. The display of pictures and works of art was a remarkable one; some water-colours, originally in the collection of Sir Prescott Hewett, lent by Mr. W. Hallett, and a series of etchings by Dr. Evershed, attracting much attention. Mr. Ernest Hart contributed various Japanese works of art; and the unique collection of Japanese bronzes, carvings in ivory and jade, and old lacquer-ware, lent by Mr. E. W. Hennell, was much admired. Besides these and many other remarkable objects of art, Messrs. Weiss, Pillischer, and Harvey and Peak, exhibited novelties in the form of surgical, ophthalmic, and philosophical instruments. The proceedings were enlivened by some excellent music by Chappell's bijou orchestra, which was much appreciated, and which formed a noteworthy feature in the evening's entertainment.

DWELLINGS OF THE POOR.

WHY the Local Government Board should for so many years have refrained from putting in force the powers conferred by the Health Act of 1866, is a question which may well be asked. As Mr. Wilkinson points out in a recent letter to the *Daily News*, the issuing of the notice by Sir Charles Dilke, declaring the enactments in force, might have taken place on the application of that Act in 1866; and for ten years the notice might have been issued, at the discretion of the Local Government Board in 1874. "These dates are," as he observes, "worth noting when the question arises of who is to blame." The vestries, it should be universally known, have compulsory powers to abate nuisances; and, on their failure to do so, aid should be sought direct from the Local Government Board, which has full powers to compel the vestries to do their duty. Mr. Wilkinson points out that one of the great shortcomings of the vestries is the want of a sufficient number of inspectors, and so a society has to be started to supplement the duty of inspection; and the more the society does, the less the vestry will do. As Parliament has laid on the vestries the duty of preventing and removing all nuisances, they cannot do their duty without sufficient inspectors, and they cannot help apportioning the inspectors to the work which they have to perform. He thinks it a positive evil to intervene between them and their responsibilities with any voluntary aid, and calls attention to the full powers which the Local Government Board possesses. "The Nuisances Removal Act, 1855, provides, Sec. 29: Whenever the officer of health shall certify to the local authority that any house is so overcrowded as to be dangerous or prejudicial to the health of the inhabitants, and they shall consist of more than one family, the local authority shall take proceedings before justices to abate, and justices may make order and impose penalty of 40s. This means that the vestry may be compelled by mandamus. The Act of 1860, 23 and 24 Vic., c. 27, enacts, Sec. 16: In any place within the jurisdiction of a nuisance-authority, the chief officer of police within that place, by direction of a Principal Secretary of State, on its being proved to his satisfaction that the nuisance-authority has made default in doing its duty, may institute any proceeding which the nuisance-authority might institute with respect to the removal of nuisances. The Public Health Act, 1866, 29 and 30 Vic., c. 90, sec. 20: It shall be the duty of the authority, either by itself or its officers, to make inspection of the district to ascertain what nuisances exist, and to enforce the provisions to abate. This provides for inspection, and consequently for inspectors; and the performance of the duty may be compelled by mandamus. Sec. 49: Where complaint is made to a Secretary of State that a local authority has made default in enforcing the provisions of the Nuisances Removal Acts, the Secretary of State, if satisfied on inquiry as to the alleged default, shall make an order limiting a time for the performance of its duty; and, if such duty is not performed by the time limited, the Secretary of State shall appoint some person to perform the same, and direct the expenses, with a reasonable remuneration to the person appointed, together with the costs, to be paid by the authority in default; and any such order may be removed into the Court of Queen's Bench, and be enforced as if the same were an order of the Court. The Act of 1874, 37 and 38 Vic., cap. 89, provides, Sec. 19: Where, under the direction of the Local Government Board, the chief officer of police institutes proceedings under Section 16 of the Act of 1860, he may recover from the local authority in default all his expenses which shall not be paid by the party proceeded against. Sec. 20: When the Local Government Board shall have made an order, under Section 49 of the Act of 1866, limiting the time for the performance by any authority of its duty, such order may be enforced by writ of mandamus. The abatement of all nuisances, therefore, is compulsory on the vestries; and the means of compulsion reside in the Local Government Board, and, at its instance, in the Court of Queen's Bench, as the last resort." It would not, he thinks, be necessary to do it often to let vestries know that a strong hand is over them. He would advise persons of influence and position to endeavour to get elected to the vestries; and, if only one such person were on each vestry, a representation from him to the Local Government Board would, in his opinion, set the machinery in motion if the vestry neglected its duty.

INFANTS OVERLAID.

AT an inquest held on January 22nd, before Dr. Danford Thomas, on the body of an infant, aged 3 weeks, who was found dead in bed under its mother while she was intoxicated, the jury, after some consideration, returned a verdict that the deceased died from the effects of suffocation arising from the mother overlying it while in bed, and they were of opinion that the said death arose from the gross culpable negligence of the mother, Selina Clarke, while under the influence of drink, and that she is chargeable with causing the death of the deceased. The mother, who wept bitterly, was taken into custody.

THE ACCIDENT TO THE MARQUIS OF HERTFORD.

THE injuries which the Marquis of Hertford sustained in the hunting field on Monday last proved to be of the gravest character. There was concussion of the brain, from the effects of which the Marquis, for a time, recovered to an extent sufficient to understand observations that were made to him. It soon became likewise evident that the spinal column was seriously injured, and paraplegia rapidly set in. Throughout Tuesday and Wednesday the symptoms became worse, though the Marquis could sleep at intervals and also take a little food. His general condition had slightly improved on Thursday morning. There have been, we are informed, numerous accidents of a milder character in the hunting-field during the past month. The weather has been on the whole particularly favourable for the chase, but the unusual mildness of the season has kept the soil very soft and slippery, and made the country boggy and "blind," many hedges being already in bud, and therefore hard for the horses to clear.

THE HOSPITAL FOR SICK CHILDREN.

A SPECIAL court of the Governors of the Hospital for Sick Children, Great Ormond Street, was held on January 23rd. The secretary's report of the state of the finances was not so satisfactory as could be desired by every well-wisher of an institution which has carried on such good work during the last 33 years, and which has so often brought relief to many a suffering child and solace to many an anxious parent. Mr. A. Lucas said that unfortunately the drainage of the building was somewhat defective. Dr. Buchanan had recommended the committee to call in the services of Mr. Field, of the sanitary department of the Privy Council, and that gentleman had sent in a report, which was then submitted for the consideration of that special meeting. To carry out the suggestions made by him, it would be necessary to expend a considerable sum of money, namely, about £1,500. After some discussion, it was unanimously decided to expend the necessary sum of money. The Governors are highly to be congratulated on this decision.

THE ACCIDENTAL SHOOTING OF A MAN AT THE AGRICULTURAL HALL.

MR. DERRY JONES, of Islington, has given us the following information with regard to the accident at the Agricultural Hall, on Saturday, January 19th. A man, about forty years of age, was leaning over a balcony, looking at the lions which were being fed below, and suddenly felt a pain, as from the blow of a cane, in his right arm. He was brought to Mr. Jones, who found him bleeding from a wound three and a half inches above the right wrist, close to the border of the extensor carpi ulnaris. On examination, the bullet could be felt by the finger, deeply embedded five inches above the wrist, and close to the extensor carpi radialis longior. Mr. Jones cut down upon it, and, with a little difficulty, extracted a No. 2 rifle-bullet, of the kind used in rabbit-shooting. It was much flattened. The patient suffered slightly from phlegmonous inflammation of the wound, the forearm becoming very brawny for two or three days, and there was much shock. The wound was poulticed, and kept open by means of a director, passed in daily. On Thursday morning, the patient was doing very well, and the wound was healing favourably.

OPEN SPACES AND THE RIGHTS OF THE PUBLIC.

IT is well, for the public and their rights to open spaces, that the encroachments of railways and other spoiling agencies have, in the case of all the larger projected schemes, to be sanctioned by Parliament before they can be carried out. And all lovers of good scenery and healthful exercise must have thanked the powers that be, for the timely assistance which they afforded the public during the last session of Parliament in preventing the encroachments of railways in the lake-district of Cumberland and in Epping Forest. The Metropolitan Public Garden, Boulevard, and Playground Association are doing good work in rescuing various small sites in London from that swallowing-up of "unconsidered trifles," for which that body has come into existence, Lord Brabazon being its present chairman. But it is not only in the above-mentioned notable instances that the rights of the public are being continually threatened with extinction. The lords of the manors are, in various parts of the country, frequently found to be endeavouring to restrict the access of the commoners and others to the open spaces over which they would claim more extensive powers. One of the most recent cases of this encroachment is that which the lord of the manor has been recently endeavouring to carry out at Ilkley Moor, near Ben Rhydding Hydropathic Establishment, Yorkshire. Dr. J. F. Little, the medical superintendent of the establishment, has, in the interest of his patients and the public, disregarded the notices which have been posted on the Moor, intimating that "trespassers will be prosecuted; by order." And all who value the highly health-giving character of these public open spaces will appreciate aright the action which he has taken in the matter, and will wish him success in the undertaking. It appears that the rights of the public to roam at will over the Moor for a period far beyond the memory of the oldest inhabitant are well established, and these liberties should be vigilantly guarded.

GUY'S HOSPITAL.

WE are informed that for the last few months, a small number of beds in each of the wards, exclusive of those set apart for accidents, have been reserved for patients who are able of themselves, or through their friends or employers, to pay a sum not exceeding £1 a week, towards the expenses of their maintenance. It was felt to be extremely unadvisable, in connection with the requirements of a large medical school, to curtail in any way the field of clinical instruction; but in consequence of the revenues of the hospital having been seriously crippled by the continued agricultural depression, it has been found essentially necessary to adopt some measures to maintain the hospital in a state of efficiency. Under these circumstances, the governors, after conferring with the medical staff, agreed to carry out the practice of admitting paying patients, so long as they were subject to the same regulations and treatment as free patients; and, as far as can be judged, the plan is meeting with a fair amount of success, the vast majority of the cases having been, in the first instance, recommended by medical practitioners. Contemporaneous with the reception of paying patients, a scheme was drawn up by the medical staff dealing with the proverbial abuse of the out-patient department, and recommending that a small charge should be made, on such patients who were able to afford it, for the medicines and dressings furnished them by the hospital. The outlay on this head exceeds £4,000 a year, and it was considered only reasonable that the persons receiving the benefit, apart from the good moral effect it was likely to produce, should contribute something, however small, to reduce the strain on the institution. The governors have also carried out this recommendation, which came into operation on Monday last, after due notice had been given to all concerned. Poor people, professing their inability to pay the charge of threepence for a week's medicine, are supplied with the same on the first occasion without payment, but are informed that, on their next appearance, they must bring with them a certificate of their inability to pay from an officer of the Charity Organisation Society. In the short time the new arrangements have been in operation, we are assured that there has been no perceptible falling-off in the number of out-patients, but that, on the contrary, the patients cheerfully acquiesce in the change, perhaps because they value the privilege of not being entirely dependent on charity. Out of the 600 and more cases seen and furnished with medicine during the early part of the week, only ten expressed their inability to pay, and an inquiry into the domestic surroundings of some of them, made by an experienced officer of the above society, four were found quite capable of paying; the remainder, coming under the class of urgent and necessitous, were relieved without further inquiry. It should be added that the new arrangements were met, in the first instance, with the sanction and approval of the Charity Commissioners.

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SCOTLAND.

THE weather in Scotland still continues to be characterised by sudden and extreme changes. The mornings of some of the days recently have been marked by the mildness and warmth of spring or summer, while the afternoons have been bitterly cold, and at night the wind has blown with the fierceness and strength of a gale.

THE TAY WHALE.

IT seems that, after all, the skeleton of the Tay whale is not to adorn the Museum of the University of Aberdeen. Mr. Woods, the purchaser of the whale, has written to the Provost of Dundee, saying he is willing to present the skeleton to the Dundee Museum. The offer has been accepted.

ROYAL HOSPITAL FOR SICK CHILDREN, EDINBURGH.

DURING the month of December, the number of patients treated in the Hospital for Sick Children was 103; of these, 63 were in the hospital on November 30th, and 40 were admitted during the month; 31 of these were discharged cured, and 6 were relieved. At the dispensary, 539 patients were treated, and 13 cases were vaccinated, making a total of 552. The average daily sick in the hospital during the month was 53. Of the 290 new cases during the month, 229 were from the city, 48 from Leith, and 13 from the country. Thus the total number of patients treated at the hospital during the month was 655.

PROPOSED AMBULANCE ARRANGEMENT FOR EDINBURGH.

IN the first of the Health Society's lectures this winter, delivered by Professor Chiene, it was pointed out that, notwithstanding the attention paid to hospital treatment in Edinburgh, there was no ambulance available for accidents. The want had, apparently, only to be pointed out, in order to be immediately felt, as a movement is now on foot among certain employers of labour to establish an ambulance society, and to interest the employers of labour and the employed. It has been resolved to invite Dr. Beatson of Glasgow, who is an expert and enthusiast in the cause, to deliver a lecture on the subject.

AN IMPORTANT DECISION.

SO much of the illness of every-day life arises from the defective and insufficient way in which house-drains are laid, that it is with great satisfaction that we observe that, in a case recently tried in the Glasgow Sheriff Court, a householder has obtained a verdict for damages against a builder who had laid the drains in such an unworkmanlike manner that obnoxious gases were emitted from them, and affected the health of the plaintiff and his family. A few more wholesome decisions of this nature would go far to remedy a very fruitful source of mischief.

CLASS OF MEDICAL JURISPRUDENCE IN ABERDEEN.

THE Senatus have resolved that this class shall, in future, be held in summer. Formerly this class was held in winter, and as only fifty lectures are required for the medical examinations, such a course was quite unnecessary. The change is another of those moves in the way of progress that are being carried out in Aberdeen. Students will thus be able to attend the class during their third summer, thus leaving the fourth winter entirely free for those studies that more particularly belong to it.

TYPHOID FEVER IN ABERDEEN.

DR. SIMPSON, the medical officer of health, in his report to the Public Health Committee, gives a full account of the outbreak, the circumstances connected therewith, and the probable causes. The number of persons attacked was 25, with two deaths. Milk, undoubtedly, was the medium through which the poison was transmitted. The milk itself was probably contaminated from the water of a burn that runs close to the farm. The pails and other utensils were washed in this water, which, on analysis, was found to contain an excessive quantity of albuminoid ammonia derived from sewage, the overflow of a school-cesspool, and the drainage of the manure of adjoining fields.

FORMATION OF A SANITARY ASSOCIATION AT DUNDEE.

A PUBLIC meeting was held last week at Dundee, for the purpose of forming a sanitary association in that city. Resolutions were proposed and passed that such an association should be formed for Dundee and district, whose object will be to enable members to procure practical advice on moderate terms, as to the best means of remedying defects in houses of the poorer classes in which they are interested, as well as to ensure the proper sanitary conditions of their own dwellings, and to promote sanitary reform. Office-bearers were elected: the Earl of Strathmore as honorary president; the Earl of Dalhousie, Sir John Ogilvy, Mr. W. E. Baxter, M.P., and Mr. Armistead, M.P., being honorary vice-presidents. A General Council was also appointed.

INTEMPERANCE IN SCOTLAND.

THE number of arrests for drunkenness in Scotland, during the year 1882, have just been made public, in a Parliamentary return dealing with the subject. The total number is 31,723, and of these, 12,254, or about 39 per cent., took place in the twenty-four hours following 6 A.M. on Saturdays. The only county which had a clear record was Zetland. Nearly one half of the total arrests, 15,976, were in the county of Lanark, and no fewer than 14,497 within the limits of Glasgow. From the figures in the return, it is clear that there is either a larger amount of drinking, or more strict regulations by the police, in the west than in the east of Scotland, for it is evident that, judging by the number of arrests, there was, in proportion to the population, about three times as much drinking in Ayr, and double as much in Glasgow and Greenock, as in Edinburgh.

GLASGOW CONVALESCENT HOME.

THE Glasgow Convalescent Home at Lenzie has just completed another year of useful work; no less than 1,450 patients having received the benefits of this institution during the past twelve months. The average stay of each patient in the Home was eighteen and a half days. From the medical report it appears that, of the 1,450 patients, 584 were from the Royal Infirmary, and 279 from the Western Infirmary, thus showing clearly what a valuable adjunct to these charities the Home is. We observe that the funds of the institution are not as ample as its wants would need, and though the subscriptions from the public works show a gratifying increase, it will require larger liberality on the part of the general public, if the benefits of the Home are to be bestowed on as large numbers as in previous years.

CASTOR OIL AS A CORRECTIVE.

THE remedial virtues of castor-oil in the varied ailments of childhood is a time-honoured article of popular faith, but we observe a recent and novel extension of its use in its employment for purposes of ensuring scholastic discipline and obedience. It appears from a recent report in the public papers, that it has been reserved for the authorities who preside over the West Highland School of Lochgoilhead, to inaugurate a new use for the drug. In that school it is the custom to punish the children by none of the recognised methods of correction, such as cane or tawse, but by "doses of castor-oil," and this not in spoonfuls, but by being forced to take a draught from the bottle. The plan must have worked with some measure of success, as it has gone on for some time, and it may have originated in a strong view as to the close connection between ill-health and waywardness. Still, apart from the legality of the whole proceeding, we are inclined to think that the administration of any drug under such circumstances is more a question for the medical man of the place than the schoolmaster.

GLASGOW ANNUAL HEALTH-REPORT.

FROM Dr. Russell's annual report of the health of Glasgow during the past year, we find that there has been an increased mortality over the two preceding years. The deaths registered in 1883 numbered 11,565, representing a death-rate of 28 per 1,000 of the population as estimated by the Registrar-General, and of 27 per 1,000 of the population as estimated by Dr. Russell. The death-rate for the years 1881 and 1882 was 25, and the average death-rate for the ten years 1873-1882 was 27; so that, whatever population be taken as a basis, the death-rate in 1883 has certainly not diminished as compared with the decade immediately preceding, though it is considerably below the average of the ten years 1863-72, which was 31. As to the causes of this increased mortality over last year and the preceding one, full details are at present not available; but, speaking generally, it may be said that it is due largely to the epidemic prevalence and fatality of the three chief infectious diseases of children—measles, scarlet fever, and whooping-cough. Nearly 2,000 deaths were ascribed to these alone, which is between 13 and 14 per cent. of the total deaths, or 3.8 per 1,000 of the population. The death-rate from scarlet fever in 1883 was less than the average of the last ten years, but from measles and whooping-cough, it was greater by fully 1 per 1,000 of the population.

EDINBURGH EYE INFIRMARY.

THE annual meeting of the contributors to the Edinburgh Eye Infirmary was held last week. The report by the Secretary and Treasurer stated that 28,437 persons had applied for advice at the institution since its reopening 34 years ago, and 410 of these have been accommodated in the house for longer or shorter periods During last year, the applicants numbered 1,153, 5 of whom were treated in the house. Since July 1875, 3,538 persons have been treated for affections of the ear, of whom 702 have been during the last year. The number of cases in the throat-department, which was added last November, has steadily increased. The financial report stated that there had been an increase of over £17 in the subscriptions; and the total receipts, £114 7s. 5d., exceeded the expenditure by over £10, which, added to the capital, brought out a total balance of £111 9s. 5d. due by the treasurer. It was proposed that the institution should, in future, bear the name of "The Eye, Ear, and Throat Infirmary of Edinburgh." Reference was made to the loss the institution had sustained by the death of Mr. Benjamin Bell, and it was proposed to express in the minutes their sense of it, and to send a letter of condolence to his relatives.

IMPORTANT MOVEMENT AMONG EDINBURGH STUDENTS.

LAST week there was inaugurated a movement by leading students of Edinburgh University, which, if successfully carried out, will be of much benefit to students and to the university. Hitherto there has been no cohesion in the vast body of young men who constitute the most important feature of Scottish university success. The only occasions on which there was any approach to concerted action of any considerable bodies of students were during rectorial elections, and hitherto that has been almost exclusively on diverging political lines. Now, however, it is proposed to have elected by all the faculties a representative council for students. This council will be able to express the wishes of the students, their opinions on various intramural matters, and will be a means of amicable intercourse with the Senatus Academicus. By the last named body we believe the movement is looked on very favourably.

ROYAL HOSPITAL FOR SICK CHILDREN.

THE twenty-fifth annual meeting of the supporters of the Royal Hospital for Sick Children, Edinburgh, was held on Monday in the Freemasons' Hall there; it was presided over by the Right Hon. the Lord Advocate. The meeting was well attended, and was thoroughly representative. From the report read by the secretary, we learn that during the year 559 children had been treated as indoor patients, of whom 334 had been dismissed as cured, and 80 as relieved. In the outdoor department, 9,790 patients had received treatment; of these, of course a number had attended frequently. Two hundred and fifty-five children had also been vaccinated. In all, 10,604 children received the benefits of treatment by the staff of the institution. Nearly four-fifths of the cases are furnished by Edinburgh, and the remainder by Leith and county districts; the respective numbers of new cases being—Edinburgh, 3,919; from Leith, 893; and from various parts of the country, 316. The report commented favourably on the successful efforts of the lady-collectors in the county districts, and on the fact that the subscriptions for 1883 showed a decided advance on those of previous years. The subscriptions amounted to £1,392 8s. 6d., the donations to £1,111 13s. 7d., and the interest on investments to £130 13s. 7d. Notwithstanding, however, the advance in subscriptions, there was, owing to the large number of fever-cases received and treated in the hospital, a deficit of over £261. Legacies had been received amounting to over £1,447. The chairman, in moving the adoption of the report, spoke hopefully of the future of the institution; and the subsequent speakers warmly advocated the claims of the hospital to the increased generosity of the public.

SANITARY PROTECTION ASSOCIATION, EDINBURGH.

THE seventh annual public meeting in connection with the Sanitary Protection Association was held in Edinburgh last week. Professor Douglas Maclagan, President of the Association, in the chair. The report submitted by Mr. T. G. Murray stated that the history of the association, during the last nine months, had been one of increasing prosperity. The membership had increased to nearly 700, and a very gratifying feature in connection with this was the fact that the subscribers were becoming apparently more aware of the advantage, or, it might be said, absolute necessity of having their houses inspected annually, or even oftener, by the engineers of the association. The number of inspections made during the last nine months was about 900, the resident engineer and two assistant engineers having been employed from day to day almost without intermission. The income of the Association, from March to December 1883, was £850 3s. 5d., and the expenditure £693 2s., showing a balance of income over expenditure of £157 1s. 5d., which, with the balance in favour of the Association in March 1882 of £182 18s. 6d., brought out a total balance of, in December last, £339 19s. 11d. Between 160 and 170 country houses had been inspected by the engineers of the Association. The necessity for the formation of an association in Dundee was shown by facts stated by the medical officer of health there in a lecture, in which he said there had been "147 cases of typhoid fever, and 94 of diphtheria (a total of 240 cases), in 166 different properties, resulting in the deaths of 18 persons from typhoid, and of 43 from diphtheria. In the case of every one of these properties, insanitary defects were found to exist, and in several cases these were of a grave and dangerous character." Mr. David Dickson remarked that, while the Association had done a great deal for the middle and upper classes, it had done comparatively little for the working classes, and he forcibly remarked that it was desirable the Association should reach a lower stratum in the good it was doing. Professor Fleeming Jenkin also spoke of the desirability of extending the usefulness of the Association to the dwellings of the lower classes of society, and said provision was made for such in the by-laws. He, however, looked forward to compulsory legislation for those who owned unhealthy houses. The chairman, in concluding, expressed himself as far from sorry that the remarks of the last two speakers had been made, and hoped their observations might bear fruit. A vote of thanks was cordially awarded to Professor Maclagan for presiding at the meeting.

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IRELAND.

SCARLET fever still prevails in the Hillsborough district of Lisburn Union, but every precaution has been taken to prevent the disease spreading, including the closing of the schools in Culcavey and Newport.

A QUAY-LABOURER, who died in the Belfast hospital last week from injuries accidentally received, was found to have been a female who had passed as a man for many years.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE centenary of this College will fall upon the 11th of next month. In honour of the occasion, Mr. Wheeler, President of the College, is giving a banquet, in the evening, in the Albert Hall of the College, to which his Excellency the Lord Lieutenant has accepted Mr. Wheeler's invitation.

POPULAR TEMPERANCE-TEACHING.

IN these days of great temperance-gatherings, the admixture of error in the addresses of non-scientific speakers is unavoidable. The Church of Ireland Temperance Society are, therefore, to be commended for issuing a cheap pamphlet containing, among other articles, papers on the "Influence of Intoxicating Drinks on Health and Life." These papers have been entrusted to Dr. MacDowel Cosgrave of Dublin, to explain the action of alcoholic liquor on body and brain in a clear, forcible, and accurate manner. The mortality from intemperance is also dealt with, and the estimate of the annual number of probable deaths laid before the Association at Cambridge by Dr. Norman Kerr is declared not to be an over-estimate. The annual mortality in the United Kingdom from personal intemperance was then put at 40,500.

CARLOW UNION.

DR. MCDOWELL has been elected medical officer to Carlow Workhouse and Fever Hospital, and, in consequence, has resigned the post of dispensary doctor to the Carlow district. It is probable that the salary of the latter post will be reduced, and a meeting of the guardians will be held this week to decide the amount of remuneration, and fix the day for the election.

THE CASE OF MESSRS. BOWER AND KEATES.

THE Committee desire to give notice that no more signatures to the memorial, or contributions to the Indemnity Fund can be received after this day, Saturday, January 26th.

The sum of £13 2s. 6d. has been forwarded to the Committee by the York Medical Society, subscribed by the following.

T. Anderson, M.D.; R. Baker, M.D.; A. Ball, Esq.; W. Banks, M.B.; Surgeon Beamish, A.M.D.; W. von Beverhoudt, Esq.; Surgeon Cream, A.M.D., W. Draper, Esq.; H. Fitzsimmons, M.D.; J. T. Hingston, Esq.; R. Hewetson, Esq.; C. K. Hitchcock, M.D.; W. H. Jalland, F.R.C.S.; T. Kirsopp, M.B.; A. Jefferson, Esq.; E. Morganrood, Esq.; S. W. North, Esq.; R. Petch, M.D.; J. Ramsay, M.D.; Surgeon-Major Riordan, A.M.D.; F. Shann, Esq.; W. A. Shann, M.B.; H. C. Shann, Esq.; H. E. Spencer, Esq.; F. H. Weekes, Esq.; I. M. Williams, Esq.

The following is the seventh list of contributions, being those received between the 12th and 21st instant.

H. Gervis, M.D., £5 5s.; E. Reynolds Ray, Esq., £2 2s.; J. Burdon Sanderson, M.D., F.R.S., £2 2s.

The following have sent One Guinea each.—J. Airey, Esq.; J. Brands Allan, M.D.; W. Bruce, M.D.; E. Carver, M.A., F.R.C.S.; F. H. Elliott, M.D.; James Ellison, M.D.; Chas. Hutton, M.D.; W. F. Johnson, Esq.; W. H. Rix, Esq.; W. Sutton, M.D.

Henry Viant, Esq., £1.

The following have sent Half-a-Guinea each.—W. Wightman Cooper, Esq.; J. K. Milne, M.D.; J. G. Fitzgerald, Esq.

The following have sent Ten Shillings each.—Bushell Anningson, M.D.; J. B. Collins, Esq.; J. S. Harris, Esq.; J. T. Hartill, Esq.; J. Wale Hicks, M.A., M.D.; J. D. James, Esq.; W. H. Platt, Esq.; John Scott, M.D.; J. Brooks Shepherd, Esq.

The following have sent Five Shillings each.—W. Stirling Anderson, M.D.; Alfred Clark, Esq.; A. E. Clark, M.D.; C. E. Douglas, M.D.; G. P. Francis, Esq.; E. V. Hemingway, Esq.; W. Hugh Hughes, Esq.; W. Grant Jones, Esq.; R. Hosking, Esq.; S. R. Lovett, Esq.; W. A. Martin, Esq.; G. H. Maskelyne, Esq.; A. Ross Paterson, M.D.; J. T. H. Sealy, Esq.; T. Percy Taylor, Esq.; Jas. Titley, M.D.; R. S. Veale, M.D.

The following have sent Two Shillings and Sixpence each.—W. Marston Clark, Esq.; R. Earlam, Esq.; R. Erskine, M.D.; H. F. Hann, Esq.; Geo. Locke, Esq.; J. Foster Palmer, Esq.

Errata.—"W. Bucknill, Esq.", acknowledged last week, should be "J. C. Bucknill, M.D., F.R.S."; "E. Owles" should be "Edmund Owen, F.R.C.S."; and "J. Jones" should be "Sydney Jones, F.R.C.S." C. S. A. Atkinson, Esq., ten shillings, received on the 2nd instant, and F. J. West, Esq., ten shillings, were inadvertently omitted in previous lists.

F. A. MAHOMED, } Hon. Secs.
R. W. BURNET, }

THE COMING SESSION.

THERE can be small doubt that at the Cabinet Council of Tuesday, which inaugurated the customary series of anti-sessional ministerial deliberations, the relative order and importance of the various measures of social reform to which the Government are pledged, must have claimed principal attention. And it is, to say the least, significant that Sir Charles Dilke, coming fresh from Downing Street to meet his supporters in Chelsea, should have set in the fore-front of next session's work the extension of the franchise and the municipal organisation of the metropolis. County government and the redistribution of seats may therefore be assumed to be regarded by the ministry as subordinate to these. Our present object in referring to the subject is by no means to dogmatise upon the order in which these several measures should be considered by Parliament; but merely to suggest that if Sir Charles Dilke's confident prophecy that within the year "we shall, in all human probability, have the new Government of London constituted by law," is to come true, it will be necessary to curtail the somewhat ambitious programme which has been sketched out for next session. The existing powers that be in the metropolis have determined, in the picturesque language of the Lord Mayor, to "fight the Bill line by line." Even if the Government should, as hinted by the President of the Local Government Board, steer clear of the shallows of Grand Committee, in the hope of finding deeper water in Committee of the whole House, there are many methods open to a strong-willed, powerful, and organised body like the Corporation of London to clog and impede the progress of a measure especially obnoxious to them. Sir Charles Dilke will be unwise if he reckons upon anything less than opposition in every form and shape of which the rules of the House admit. Hence, if the London Bill be persevered in, it must of necessity absorb a very large slice of Government time; and we fear it must ultimately become a question which of the two great subjects—parliamentary reform or local government—shall go to the wall this session. Obviously, this is not the place for the efficient discussion of this point; but it may be permitted to observe that the extension of the franchise and the redistribution of seats must almost inevitably be considered together, and that their settlement would involve the sacrifice of nearly all the disposable time of one session. A House committed to a substantial reform in its method of election must almost of necessity go to the country for reconstitution on the new lines; and, even supposing the present House to hold together for another session after the passing of the Franchise and Redistribution Bills, it would be in no temper for the consideration of a measure involving so many intricacies and irritations as the London Reform Bill. It would, therefore, be at least two years hence before the attention of the House could be concentrated on a subject which is admittedly ripe for immediate legislation. The only possible conclusion appears to be, that next session should be primarily devoted to measures of local government and other social subjects—questions of the franchise and the like being relegated to the session of 1885, for which, indeed, as for the last of the present Parliament, they seem to possess a peculiar fitness.

INTERNATIONAL HEALTH EXHIBITION.
LONDON, 1884.

Memorandum from the Subcommittee on Dress. Group 3. The following is the classification of the Group. Class 13. Collections illustrative of the history of dress, national costume, etc. Class 14. Waterproof clothing, India-rubber, gutta percha, etc. Class 15. Furs, skins, and feathers. Dresses for extreme climates, etc. Class 16. Dress for sport, hunting suits, etc. Class 17. Life saving dress. Divers' dress. Fireproof dress. Class 18. Publications and literature relating to Group 2. Patterns, statistics, diagrams, models. Class 19. Machinery and appliances for the preparation of articles under Group 2. The Subcommittee would suggest that to the classes already named in this group another Class should be added, dealing with "the comparative value of different dress materials as articles of clothing." Under this class should be displayed a number of self-demonstrating specimens to show the comparative value of different dress fabrics with reference to their "warmth," their hygroscopic properties, and the like. Another series of specimens should show the influence of colour in materials in modifying the effects of sunheat. It would be well to show under this class models and drawings illustrative of the effects of poisonous dyes (in clothing) upon the skin. Materials dyed with poisonous and non-poisonous dyes could be placed together for purposes of comparison. The scope of this class may be considerably extended, and made to demonstrate the scientific basis of healthy clothing. The subject of underclothing is of such great importance that the Subcommittee suggest a special display of materials and garments, etc., worn next to the skin. These should be shown in a special room, to which females alone should have access, or which should at least not be open to both sexes at one time. As a special feature in such an exhibition, the Subcommittee would suggest a series of models displaying the first clothing of infants as practised in all countries of the world—so far as such examples could be obtained. Class 13. It is suggested that all dresses and costumes shown should be displayed upon lay figures; and that no modern reproductions of ancient costumes should be admitted. Class 15. It is suggested that the subject of suitable dresses for extreme climates should be demonstrated with as much detail as possible. Class 16. Under this class, it is suggested that especial attention should be given to dresses suitable for women engaging in exercise, such as dresses for mountaineering, for the moors, for swimming, for horse exercise, for gymnastics, and the like. Class 17. Under this class should be actually demonstrated the value of certain substances used for making muslin and like fabrics now inflammable. The various artificial starches made for this purpose should be displayed. The dress of female operatives engaged among machinery may be dealt with in this class. The subcommittee would venture to doubt whether "divers' dress" should be dealt with at all in this section. Class 18. The models should show casts of feet deformed by boots, etc., the feet of Chinese ladies, spinal and thoracic deformities ascribed to tight-lacing. Models to show the position of the viscera displaced by such practices, and the like. Class 19. The Subcommittee would suggest the following under this heading: Machines *v.* hand-weaving; "shoddy" making; glove making by machinery; lace making, illustrated by operatives from Honiton, Nottingham, Brussels, etc.; the making of hats; the making of boots and shoes, and of lasts for the same; the dressing of furs and certain skins; sewing, knitting machines, etc. (in limited number); the manufacture of waterproof fabrics; the making of crape and some special fabrics; the application of jute to the manufacture of dress fabrics; imitation fabrics; methods of false dressing in linen, etc. Communications relating to the above to be addressed to the Secretary, "International Health Exhibition," South Kensington, London, and marked on the envelope for "Dress Subcommittee."

Memorandum from "The Indian" Subcommittee. The object which this subcommittee think should be kept in view in considering the arrangements for the Indian section of the exhibition is the illustration, in as vivid a manner as possible, of the actual life of the masses of the people of India, as regards the three especial objects of the exhibition, their food, their dress, and their dwellings, also, but to a less extent, their education. The committee feel that they must not rely solely on contributions from India, but that they must also expect the aid both of traders and of private individuals in England in securing an effective Indian display. They are, therefore, anxious that it should be distinctly understood that applications for space from Indian traders in England will be readily considered, provided of course, that the proposed exhibits are of a character suitable for the exhibition. As regards Group 1, Food, it will be desirable that there should be complete collections of the ordinary food of the people in some selected districts of each principal Province. Where possible, it would be desirable to have the prepared food itself; when this cannot be done, the raw materials and models might be shown. Thus for a Deccan district, samples of Bajri and jowai, the chief grain foods, of dal and pulses, and of the flour as prepared by the natives for use; models of the chowpattis or loaves; then the condiments, salt, pepper, pickles, etc., as actually used; ghi, gur, and sweatmeats, with the grindstones; models of "chulas" or cooking stoves and the like; cooking pots, dishes, etc., as used. For a coast district, rice in its various preparations, salt, and dried fish, etc. Specimens also of Indian food-stuffs imported in this country are desired, as well as specimens of the various condiments, pickles, preserves, etc., manufactured either for European or local use. Models of edible fruits, especially those known in this country in a dried state would be useful. Also representations or stuffed specimens of animals used as food. Any illustrations of the processes of preparing rice, tea, coffee, etc., would be welcomed. It would certainly create great interest here if a few native cooks could be brought over with plenty of materials, who would cook daily, for sale, say a good Mussulman dinner and a good Hindu dinner, with accompaniments such as are used at caste feasts, weddings, etc. As regards Group 2, Dress, the most important thing will be to show the clothing, etc., of representative classes in representative districts of each province; thus, in Bombay, there might be a

Gujerat Patidar, a Deccan Banya, a Konkan fisherman, a Borah trader, a Parsee merchant– with their women. The dresses should be shown on lay figures, and should be the ordinary habiliments of the people with their ordinary ornaments, also with Charpais, Kamlis, rasais, etc. Exhibits illustrating the construction of Indian fabrics, and specimens of any fabrics of special interest are desirable, also illustrations of silk culture (especially tussur). In Group 3, the Dwelling, possibly there might be exact models of the better classes of houses in representative districts (say of a cultivator of the better class, a banker, a shopkeeper), of the cottages of the lower classes, the huts of weavers, fishermen, etc., of European up-country bungalows, and of a bit of a bazaar in an up-country town. With these models should be shown small dolls, dressed to represent the people at their usual avocations; models of their furniture and of their domestic animals might be put into their houses. Punkas, Tattis and Thermantidotes should be admitted. If, besides the cooks above mentioned, other Indian workmen could be brought over, potters, blacksmiths, weavers, silversmiths, etc., it would form a most interesting feature in this exhibition, and, as illustrating the life of the people of India, possibly not an unsuitable feature.

Memorandum from the Subcommittee on Ambulance. The following heads indicate the articles and appliances which the Committee are anxious may be shown by the Army Medical Departments of various countries, the Societies established to render aid to the sick and wounded in war, and other organisations which may be able and willing to contribute:—1. Personal surgical equipment as carried by the medical officers of the army in question. 2. Appliances for treatment of wounds, carried by the soldier himself in the field. 3. Personal surgical equipment carried by ambulance attendants in the field, consisting of surgical haversacks (Havresacs Sanitaires), medicine panniers (Caisses Sanitaires), surgical knapsacks, field companions. 4. Ambulance appliances carried by men, such as stretchers (Brancards), hammocks, dhoolies, and palanquins. 5. Wheeled conveyances wheeled by men—wheeled stretchers. 6. Ambulance equipment carried by mules, horses, &c. Cacolets, litières, mountain ambulance equipment (Ambulance de Montagne), cooking equipment for mountain campaigns, portable medicine chests, compressed drugs, &c. 7. Wheeled vehicles used for the conveyance of sick, fourgons containing the equipment of hospital corps, surgery waggons, equipment waggons, field cooking waggons, pharmacy waggons, nursing utensils carried in waggons of field hospital. Books of instruction for use, diagrams.—8. Railway ambulances consisting of carriages for wounded, with fittings, cooking carriages, and all the equipment of ambulance trains. Materials for converting ordinary carriages into ambulance carriages. 9. It would be useful if some attendants accustomed to the use of the material accompanied the articles.

Proposed Ambulance Group Classification. Group 3a. Ambulance. Class 31a. Aid to sick and wounded in war. Transport—(*a*) By human agency: Stretchers, litters, dhoolies, palanquins, handcarts, stretchers on wheels. (*b*) By animal traction: Mule litters and chairs, camel and elephant litters, wheel carriages. (*c*) By mechanical means: Railway ambulances, ship or water carriage. Treatment (with portable appliances and portable drugs)—(*a*) On the field. (*b*) In hut hospitals. (*c*) In tent hospitals.—Class 31b. Aid to sick and injured in peace. Transport—(*a*) By human agency: Stretchers, litters, dhoolies, palanquins, handcarts. (*b*) By animal traction: For accidents and injuries, for infectious diseases, for ordinary sickness. (*c*) By mechanical means: Railway carriages for sick and invalids, water carriage. Treatment (with appliances)—(*a*) Hut hospitals for infectious fevers and for epidemic diseases. (*b*) In tent hospitals. (*c*) In hospital ships. (*d*) In sick rooms.

THE NEW WING AT ST. MARY'S HOSPITAL, PADDINGTON.

A LARGE additional wing has been built at St. Mary's Hospital, in compliance with the provisions of the bequest of £25,000 left by Frederick Stanford, Esq., who left that sum to be expended in structural enlargement only. The new wing, which is called the "Mary Stanford Wing," in memory of Mr. Stanford's mother, has now been completed, and is ready to receive the necessary furniture.

The basement of the wing, which is occupied by the Students' Club and Library, has already been described in these columns (BRITISH MEDICAL JOURNAL, vol. ii, 1883, p. 697). The building is a lofty oblong block, rising five stories above the basement, and occupying the ground to the west or rear of the hospital.

The ground-floor consists of an entrance-vestibule from the old hospital, with a sister's room on one side, next the ward, and on the other a staircase, with a large patients' lift; from this vestibule, folding doors lead into a large accident-ward, 100 feet long, 24 feet wide, and 17 feet high, for 24 beds, each bed having 100 superficial feet, and 1,700 cubic feet; the cubic space is, therefore, not very large, though far in excess of what was a few years ago considered necessary. The arrangements for ventilation are simple; the ward has large windows at each end, and side-windows five sashes in height, pivoted at the bottom, opened and closed by a new noiseless gear worked at the side of the windows; on one side, the gear opens only the top sash; on the other side, all the other sashes, except the bottom one, which is disconnected from the gear, but can be opened like the others when required. The centre side-window is a large one, with French casements opening on to a flight of steps leading to the garden terrace. In addition to the window-ventilation, there are twelve Tobin's tubes, as well as Sherringham valve-ventilators, not far from the ceiling. The four gaslights are placed in the middle of the breadth of the room, and above them are large circular grilles, with tubes leading from them, which open into flues, which run up in the wall between the smoke-flues; by this means, it is hoped that some extraction may be obtained to carry off the products of combustion from the gas-jets.

The ward is warmed by two grates with large air-chambers, at the back and under the hearths, into which the external air is admitted and heated, and is delivered into the ward through a large grille with valves behind. After considerable discussion, it was decided to put the fireplaces at the side of the ward, instead of in the middle, as the centre-stoves take up a great deal of room, and, especially when patients are sitting round them, interfere very much with the freedom of movement about the ward.

Round the ward runs a coloured glazed brick dado, 4½ feet high, and the walls above are plastered with selenetic lime, which gives a very hard, cleanly surface. The floor is of teak, and has a block-skirting at the bottom of the dado to keep beds off the walls. At each end of the new wing are towers, connected by a short cross ventilated neck to the ward; the "neck" is provided with Tobin tubes, and an open ventilated cupboard for milk, etc. Beyond these necks, and within the towers, are on one side a scullery, fitted with glazed stoneware sink, with hot and cold water; a water-closet, with self-acting apparatus, and movable front for cleaning; a slop-sink, with open shelf for utensils, and a lifting shutter in front to enclose all; on the other side there is a bath-room, with wash-basins, and a second water-closet. These necks and towers are paved with tiles, and their walls are lined inside with white glazed bricks. The sinks, baths, and wash-basins are trapped at their outlet, and discharge into an external pipe, open to the air at the top, and into an open aired trap at the bottom, disconnected from the drain. The soil-pipes from the water-closets and slop-sinks are open to the air at the top, and, with an easy bend, discharge into the drain at the bottom. This drain at the confine of the hospital properties empties into a disconnecting chamber with an air-outlet, which seems to us to be rather small; but there will undoubtedly be a current of air through the drains, and any possibility of the accumulation of foul matters in the drain will be obviated by periodical flushing by Field's automatic flushing tanks. The water-supply to the sinks, lavatories, and baths, is from a galvanised iron cistern on each side, whose overflows discharge on to the roof; the water-closets and slop-sinks are supplied from a separate cistern.

On the first floor, a corridor joins the old centre corridor of the hospital at one end, and opens at the other on to an enclosed space on the west balcony. This enclosed space, which will be used as an ambulatory, has windows, to be opened or closed according to the weather; it is 7 feet wide and 30 feet long, with doors at each end leading to open balconies, each 40 feet long, with circular iron staircases leading to the garden; these could be used also in case of fire. The enclosed space has also communication with the ward by French casements. To the north of the corridor is the sisters' room and medical ward, 46 feet long, 24 wide, and 16 feet high, for twelve beds; in this ward it will be seen that the floor-space for each bed is 92 square feet, and the cubic space 1,472 feet. The construction of this ward is the same as that below. To the south of this corridor is the new Chapel, with the Chaplain's vestry in the tower. In one of the side windows, there is a stained-glass window to the memory of a sister who died while in discharge of her duties in the hospital.

On the second floor also, there is a corridor, and an enclosed space on the balcony. The ward to the north is similar to the one below, and is to be an obstetric ward, with sisters' room adjacent; and, on the other side of the sisters' room is a disconnecting passage from the corridor, and a special obstetric room for spinal operations. On the south side of the corridor is the second ward on this floor, similar to the other. The enclosed space, balconies, and staircases to the garden, are similar to those on the first floor.

On the third floor are the nurses' dormitories, affording additional accommodation for eighteen nurses, some in single rooms, some in two-bedded rooms; and also a good sitting-room, with a large bow-window, and a balcony right and left along the west front. Every room has a fireplace and one or more windows, and is entered from a corridor with windows at each end of it, and branch-passages to the towers, which have disconnecting necks, and contain a bath-room, sink, water-closet and slop-sink, etc.

The lift and staircase are continued to the fourth or topmost floor, and open on a landing with a glazed screen and folding-doors leading into a ventilated lobby. This floor is appropriated to isolation-rooms. In the centre, opposite the entrance, is the sisters' room, with doors right and left into the wards, 28 feet by 19 feet, by 12 feet high, for three beds each, with 2,084 cubic feet per bed; and on either side beyond these are single isolation-rooms, 13 feet by 19 feet, by 12 feet high, with 2,964 cubic feet to the bed. These wards have a good supply of air from Tobin tubes, and have Sherringham ventilators at the top and in the ceilings, openings from which tubes are taken into flues in the walls carried up to the top of the buildings. The larger wards have glazed brick dados, and are plastered above; and the smaller ones glazed brick from floor to ceiling, so as to be easily purified. They all have the same grates as the ward on the ground-floor. The corridors have Tobin tubes and Sherringham ventilators. The towers are fitted as on the floors below, and the walls are lined from floor to ceiling with glazed brick. There are two separate bedrooms for the night and day nurses of this department.

Above the new staircase and lift is a large tank for 700 gallons, in a tower; and the staircase is carried up so as to get a good doorway on to the roof, which is 102 feet long and 25 wide, and is a lead flat, with parapets. This may, perhaps, be used as an ambulatory in the future.

On the staircase, at each floor, is a fire-cock, and also a cock from a pure water-main.

In addition to the Mary Stanford Wing, a new boiler-house, boilers, engines, tanks, hot-water services, and patient-lift have been erected. These, as well the fire-mains, have been executed by Messrs. Eastons and Anderson, the hydraulic engineers. The architect of the new wing was Mr. Stephen Salter, F.R.I.B.A.

COLLECTIVE INVESTIGATION OF DISEASE.

PAROXYSMAL HÆMOGLOBINURIA.

THIS affection, although regarded by many as a pathological curiosity, is thought by the Committee to be a proper subject for investigation for the following reasons.

1. In the first place, it is believed that the condition is not so rare as has been supposed; and it is hoped that, when attention is drawn to it, many cases now unrecorded may be brought under observation.

2. We know very little of the life-history of the subjects of this affection, and still less of their family-history. Is it hereditary? Is it specially connected with any diathesis? What are the chances of getting rid of the liability to the attacks as life advances?

3. Finally, records of *post mortem* examinations are much wanted; the only case hitherto published being that by Murri, in which any special alterations were obscured by the presence of advanced visceral syphilis.

Further, the Committee feels that an object which should be kept prominently before it, is the collection of the records of cases of rare diseases, the occurrence of which is so far exceptional that the experience of any one person must be exceedingly limited. Such experience, to be of use as a guide in prognosis and treatment, can only be obtained by collective action. This function of the Committee has been recently dwelt upon by Mr. Hutchinson in his address at Manchester (BRITISH MEDICAL JOURNAL, November 3, 1883, p 862). To this end, the Committee is anxious to secure the experience of our hospitals in addition to that of the individual practitioner, and it especially appeals to the resident medical officers and registrars, as well as the physicians and surgeons of the provincial and metropolitan hospitals, to send records of all cases of this disease falling under their observation.

We owe the first description of this affection to Dr. George Harley. As its name implies, it consists essentially in the passage of blood-colouring matter into the urine, in distinction from hæmaturia, in which the blood-corpuscles themselves are present. But this cardinal symptom, which may occur in various conditions (putrid infection, purpura, poisoning by various substances, etc.), in the peculiar attacks which have received the name of paroxysmal hæmoglobinuria, is an idiopathic affection, and is accompanied or preceded by more or less constitutional disturbance; of which, rigor and headache, followed by some rise of temperature, are the most common phenomena. The attack may last from a few hours to a few days.

The colour of the urine varies from that of porter to mere smokiness, according to the period or severity of the attack. It coagulates on boiling, forming a brownish clot. It deposits a copious brown sediment, which, under the microscope, appears to consist of granular matter (broken-down blood-corpuscles?), amorphous urates, oxalates, and granular and hyaline casts.

With guaiacum and ozonic ether, the urine gives the blue tint characteristic of blood-colouring matter. This test is best performed by adding to about a drachm of urine in a test-tube a few drops of fresh tincture of guaiacum and twenty or thirty drops of ozonic ether; the whole to be well shaken, and then allowed to settle, when the ozonic ether rises to the top, holding in solution the red colouring matter of the guaiacum tincture, or, if blood be present, the blue pigment to which this has been transformed. This test should always be used, and suffices, when a spectroscopic examination cannot conveniently be made, together with the absence of blood-corpuscles from the fresh urine, to establish the diagnosis.

With the spectroscope, the urine, which must be filtered and diluted, and then examined in a moderately deep layer, gives the two bands between D and E when oxyhæmoglobin is present, or three characteristic absorption-bands of methæmoglobin, an oxidation-product of hæmoglobin.

The urine should be examined microscopically in every case; and the presence or absence of blood-corpuscles, oxalates, and casts should be noted.

More precise information is needed on the following points. Does albumen appear in the urine before the blood-colouring matter? Does albumen remain, and for how long, after the complete disappearance of the blood-colouring matter?

The subjects of these attacks are usually in fair general health, and many are quite free from any indication of constitutional or organic disease; but a certain number of the reported cases have suffered from ague, or have been exposed to malarial infection. This point should always receive attention, as, in some respects, the attacks have a rough resemblance to a malarial attack; though, undoubtedly, many cases have been quite free from any possibility of such an origin.

In two other cases, there was constitutional syphilis, and these are said to have benefited by antisyphilitic remedies.

It would be very interesting to know whether the liability to these attacks exists in other members of the same family, or is transmitted by descent; or whether other neuroses are common in the relatives of the patient. In one instance, the father and two children have manifested the liability; but this is the only recorded example of heredity.

The influence of cold in causing the attacks has been well established; but it is a point to which attention should be directed, in order to determine, if possible, the kind and degree of temperature which is productive of the attacks.

In a certain number of cases, the first attack has been brought on by a blow, a fall, or by prolonged walking. The cause of the first attack should always be carefully noted. In one case, it was associated with an attack of tonsillitis. The influence of muscular exercise is also still obscure, though it appears to favour the onset of an attack. We should also seek to determine whether the alleged exciting cause is always efficient, or whether the paroxysm is only the *occasional* result of apparently similar conditions.

Attention has been drawn to the relation which this disease appears to bear to symmetrical gangrene. This form of gangrene occurs almost invariably in children, and attacks just those parts of the body liable to suffer most from severe cold, as in frost-bite—the tips of the fingers, toes, ears, and nose. The circulation is very feeble; and the formation of gangrene is preceded by redness, followed by lividity, of the affected parts. It has been observed that such patients frequently pass bloody urine, which deposits oxalates in abundance.

There are very considerable differences in the accounts of the symptoms observed during these attacks. The temperature may be normal, or even subnormal, or may be as high as 103° or 105° Fahr. The skin may be dry, or covered with perspiration; cutis anserina and urticaria have been observed; duskiness of the skin and conjunctiva, or actual jaundice, may be present. The spleen is often, but not always, enlarged. The liver may be tender, or enlarged, or quite normal.

According to Hayem, the blood, under the microscope, presents nothing very special, only the appearance of slight anæmia; but the serum contains free hæmoglobin. Whenever it is possible, a specimen of serum should be obtained by venesection or blistering, and submitted to spectroscopic examination.

It has been noticed that the urine during the intervals may contain albumen, indican, etc. This persistence of albumen is of much practical importance, and information is specially asked for on this head. Whenever albumen is found, the presence or absence of casts, and their characters, should be noted.

Treatment during the attacks has been mainly symptomatic—rest in bed, warmth, etc. The late Dr. Warburton Begbie considered that he had cured a case with scruple doses of chloride of ammonium; but the duration of the attack is so variable, that it is possible to be deceived as to the value of a remedy. In other hands, chloride of ammonium has done no good; while the majority of observers speak favourably of quinine in relatively large doses—ten grains three or four times a day. The marked benefit ascribed to antisyphilitic treatment in two cases has been already referred to.

Dr. C. A. McMunn, of Oakleigh, Wolverhampton, has kindly consented to examine spectroscopically any fluids sent to him in connection with this inquiry. Packages should contain the observer's name and address, to whom Dr. McMunn will send his report.

The Committee is indebted to Dr. Stephen Mackenzie and Dr. Robert Saundby for this memorandum, and also for the card of inquiry which they have prepared.

PAROXYSMAL HÆMOGLOBINURIA.

Synonyms—Intermittent hæmaturia, intermittent hæmatinuria.

Observer's name..................

Address ....

Date of last obs. ....

Initials of patient—or case number.

M. or F. Age.

Single. Married. Widowed.

Occupation.

History of similar affection in relatives (specify relative, age at which it occurred, and issue of case if possible).

Other hereditary diseases in family.

Pre-paroxysmal Conditions.

Locality of residences.

Are any of these reputed aguish?

Has patient ever suffered from ague? If so, state—

Place where it was contracted.

Form. Duration. Date.

Other antecedents (with dates).
  Scarlet fever. Syphilis.
  Bright's disease.
  Injury of any kind. Nature and date.

If urine has been examined before attack, state characters.

Mention any minor ailments to which patient is liable.

Date of first known paroxysm.

Exciting cause of first attack.

Exciting cause of subsequent attacks.

Paroxysm. Date.

Accompanied by rigor, chilliness, cutis anserina, urticaria

Temperature.

Urine. How soon after initial symptom blood-colouring matter appeared in the urine.

Nature of colouring matter.
  Naked eye appearances.
  By guaiacum test.
  By spectroscope.

Microscopic examination. Blood-corpuscles, blood-crystals, oxalates.
  Casts (nature).
  Other deposits.

Albumen. Prior to colouring matter, with the colouring matter, subsequent to colouring matter.

Quantity of urine in 24 hours.

Specific gravity.
  Before attack , during , after .

Reaction.
  Before attack , during , after .

Presence of indican.
  Before attack , during , after .

Enlargement of spleen. Distinct, doubtful.

State of bowels. Regular, constipation, diarrhœa.

Skin. Perspiration, general, local, absent.

Colour of skin, of conjunctiva.

Examination of blood.

Character of coloured blood-corpuscles.
  Do. of colourless.

Serum, coloured, uncoloured, spectroscopic examination.[1]

Subsidence of attack. Spontaneous, due to treatment (specify nature).

Post- or Inter-paroxysmal Conditions.

Urine. Sp. gr. Reaction. Colour.
  Guaiacum test. Albumen.
  Deposits (nature of).

Enlargement of spleen.

Enlargement of liver.

Colour of skin. Conjunctiva.

Relapses, frequency of.

Complications and associations.

Symmetrical gangrene.

Paralysis (nature).

Nephritic or vesical calculus.

Chilblains (where situated).

Have you had a case of this disease under observation at any previous date?

If so, what was the progress and issue of the case?

[1] Serum may be conveniently obtained by a blister or cupping. Serum and urine may be sent to Dr. C. A. McMunn, Wolverhampton, who will examine it spectroscopically and report on specimen.

This card may be had on application to the Secretary to the Collective Investigation Committee, 161A, Strand.

LIST OF RETURNS RECEIVED IN DECEMBER 1883.

I. PNEUMONIA (108).

F. J. Allan, M.D. (2); A. M. Adam, M.D.; A. J. Alliott, M.D.; D. B. Bain, M.D.; J. T. W. Baird, M.B.; G. H. Barfoot, M.D.; R. L. Batterbury, M.D. (2); M. R. J. Behrendt, Esq. (13); C. Biddle, Esq.; W. J. Black, Esq. (2); G. H. Blackmore, Esq.; J. Blair, M.D.; O. Bowen, Esq. (2); G. Deane Bowke, Esq. (3); J. M. Booth, M.B.; W. E. Bradley, M.B.; T. J. Burrough, M.D.; A. Campbell, M.B.; J. B.; J. T. Collin, M.D. (2); E. M. Cosgrave, M.D.; D. G. Crawford, M.B. (2); J. G.; C. G. Dalton, Esq.; T. C. Denby, Esq.; G. A. Deakin, Esq.; W. R. D. Davies, Esq.; E. C. Dickson, M.B.; E. Fenn, Esq.; J. T. George, Esq.; Major Greenwood, jun., Esq.; T. Lambert Hall, Esq.; H. Hamilton, Esq.; H. Handford, M.D.; E. P. Hardey, Esq.; Surgeon-Major Harman; E. H. Howlett, Esq.; De Vere Hunt, Esq. (2); C. R. Illingworth, M.D.; J. A. Irwin, Esq.; E. Jackson, Esq.; Brigade-Surgeon Jessop (2); W. D. Jones, Esq.; C. Lovegrove, M.D.; E. Luscombe, Esq.; J. A. Mackenzie, M.B. (6); M. Mackintosh, M.B.; J. A. Martin, M.D. (3); R. Mears, Esq.; J. Meredith, M.D.; J. W. Miller, M.D.; W. Morris, Esq.; T. C. Murphy, Esq.; A. D. Leith Napier, M.D.; A. O. Neil, M.D. (3); F. T. Pearse, M.D. (3); A. Ransome, M.D.; T. F. Raven, Esq.; John Reid, Esq.; C. J. Renshaw, M.D. (3); R. Ross, Esq.; W. R. Sergeant, Esq. (4); G. A. Sheppeard, Esq.; Tom Bates, Esq.; R. Sinclair, M.D. (8); T. S. Smith, M.B. (2); A. Stewart, M.D.; J. A. E. Stewart, Esq. (4); H. S. Taylor, Esq.; H. G. Terry, Esq.; J. H. Tylecote, M.D.; G. G. Wake, M.D.; W. G. Walford, M.D.; C. C. Walter, Esq.; W. White, M.D. (3); M. M. Williams, Esq.; J. P. Cartwright, Esq.; J. G. Clendinnen, Esq.

II.—CHOREA (32).

C. E. Baddeley, M.B.; D. B. Bain, M.D.; G. H. Barford, M.D.; C. Biddle, Esq.; F. G. Benham, M.D.; J. Mackenzie Booth, M.D.; G. Dickson, M.B.; Lambert Hall, Esq.; H. Handford, M.D. (7); C. Harrison, M.D.; J. L. Jardine, Esq.; J. Stevenson, M.B.; W. V. Lush, M.D. (5); J. Macleod, M.D.; M. D. Macleod, M.B.; C. Macmillan, Esq.; C. Moon, M.B.; W. Newman, M.D.; E. F. Potter, Esq. (2); H. S. Renshaw, M.D.; G. Schofield, Esq.

III.—RHEUMATISM (29).

Francis J. Allen, M.D.; G. Baddeley, M.B.; D. B. Bain, M.D.; M. Dewar, M.B.; E. C. Dickson, M.B.; G. Dickson, M.B.; A. P. Fiddian, M.B.; E. J. Gilbert, Esq.; C. Harrison, M.D.; Ed. Jackson, Esq.; W. E. Luscombe, Esq.; D. J. Mackenzie, M.D. (2); A. Macpherson, M.B.; J. Meredith, M.D.; J. W. Miller, M.D. (2); H. Morgan, Esq.; T. F. Pearse, M.D.; W. Quinton, M.D.; S. J. Reid, M.B.; John Reid, Esq.; H. S. Renshaw, M.D.; J. Stevenson, M.B.; R. Ross, Esq. (2); R. Sinclair, M.D.; J. Taylor, Esq.; W. Sinclair Thomson, M.D.

IV.—DIPHTHERIA (12).

E. W. Bawtree, M.D.; E. C. Dickson, M.B. (2); E. H. Howlett, Esq.; J. T. Macmahon, Esq.; J. B. Macleod, M.D.; W. Morris, M.B.; T. F. Pearse, M.D.; H. Rainbird, Esq.; R. Sinclair, M.D.; H. P. Tayler, Esq.

IVa.—DIPHTHERIA (9).

E. G. Barnes, M.D. (2); E. W. Bawtree, M.D. (2); E. H. Howlett, Esq.; J. B. Macleod, M.D.; J. J. Thompson, Brig.-Surg.; T. F. Pearse, M.D.; J. W. Watson, M.D.

V.—SYPHILIS.

R. Ross, Esq.

Va.—SYPHILIS (2).

R. Ross, Esq.; T. F. Pearse, M.D.

VI.—GOUT (4).

Sinclair Thomson, M.D.; R. Sinclair, M.D.; T. F. Pearse, M.D.; C. H. Watts Parkinson, Esq.

Total number of returns received, 223.

The Committee beg also acknowledge communications from Dr. Leith Napier, Dr. J. Stevenson, Surg. A.M.D., for which they return hearty thanks.

COLLECTIVE INVESTIGATION OF DISEASE.

A GENERAL Committee meeting was held on January 16th (Wednesday), 1884, at 12 noon, at which were present: Professor Humphry (Chairman), Dr. B. Anningson, Dr. G. F. Duffey, Mr. Eastes, Dr. W. C. Grigg, Dr. Mahomed, Mr. Shirley Murphy, Mr. Herbert Page, Dr. Creswell Rich, Dr. A. Sheen, and Dr. Herringham.

The minutes of the last meeting were read and confirmed.

The Secretary reported that he had been requested by Dr. Davis of Chicago to send copies of each card as issued, and that he had promised to do so; also, that of the inquiries which had been referred to the Standing Subcommittee at the last meeting, that on puerperal pyrexia had been issued in a double form, that on hæmoglobinuria was ready for publication, and that on enteric fever nearly so; also that the *Life-History Album* had been published by Messrs. Macmillan.

It was moved by Dr. MAHOMED, and seconded by Dr. A. SHEEN:

"That the returns received on puerperal pyrexia be referred to the Standing Subcommittee, with power to take such steps as may be necessary in connection with the subject, and to cause a report to be prepared on the same as soon as may seem practicable." Carried.

The minutes of the various meetings of the Standing Subcommittee were read and discussed.

It was moved by Dr. A. SHEEN, seconded by Dr. CRESWELL RICH:

"That it is desirable that the forthcoming number of the *Record* contain, if possible, a report on puerperal pyrexia, as well as a report on pneumonia." Carried.

It was moved by Dr. ANNINGSON, seconded by Dr. SHEEN:

"That it be recommended to the Standing Subcommittee to consider the question of issuing such a modification of the card on the etiology of diphtheria as may be suitable for the use of medical officers of health." Carried.

It was agreed to issue an inquiry on the habits of octogenarians, and the matter was referred to the Standing Subcommittee.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 20th, June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
V. Syphilis, acquired.
V*a*. " inherited.
VI. Acute Gout.

URGENT.—*The Committee propose to publish a final report on Acute Pneumonia as soon as possible. Cases are therefore urgently needed. Cards will be received until further notice.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
September, 1883. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

DUBLIN BRANCH.—The seventh annual general meeting of the Dublin Branch will, by kind permission of the President and Fellows, be held on Thursday, January 31st, at 4 P.M., in the Hall of the King and Queen's College of Physicians, Kildare Street. The officers and council for the ensuing year will be elected by ballot, and any other necessary business transacted. Mr. Edward Hamilton, President-elect, will deliver the annual address. The following addition to By-law VII will be proposed: "All interim vacancies may be filled up by the council." The annual dinner of the Branch will be in the College Hall, at 7 P.M. on the day of the meeting. Dinner tickets for members who purchase their tickets on or before Tuesday, the 29th inst., 17s. 6d.; for members purchasing their tickets after that date, and for guests, £1.—GEORGE F. DUFFEY, M.D., Honorary Secretary and Treasurer, 30, Fitzwilliam Place, Dublin. January 2nd, 1884.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.—A meeting will be held on Thursday, January 31st, 1884, at the house of Dr. Cree, St. John's Park, Upper Holloway, N. Dr. George Potter will read a paper on Collective Investigation, and there will be a discussion on the same.—GEORGE HENTY, M.D., Honorary Secretary.

METROPOLITAN COUNTIES BRANCH: WEST MIDDLESEX DISTRICT.—A meeting of the above District will be held on Wednesday evening, January 30th, at the Horbury School-rooms, Notting Hill. The following papers will be read: 1. Cases illustrative of the help the Intermittent Contractions of the Uterus afford in the Diagnosis of Abnormal Pregnancy, by Dr. Braxton Hicks, F.R.S. 2. On Alopecia, its Causes, Varieties, and Treatment, by Malcolm Morris, M.R.C.S. The chair will be taken at half-past eight o'clock by Dr. [illegible] Hare, President of the Metropolitan Counties Branch. [illegible] M.D., [illegible] Secretary, 17, Chepstow Villas, Bayswater. January [illegible]

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.—An ordinary meeting will be held at the Royal National Consumption Hospital, Ventnor, on Thursday, January 31st, at 4 P.M.; James Neal, M.D., President, in the chair. The following communications will be discussed. 1. The work of the Collective Investigation Committee. 2. Paper by Dr. J. Ward Cousins. 3. A selection of cases illustrating the Different Types of Phthisis: Drs. J. G. Sinclair Coghill and W. E. Robertson. 4. The Relations of the Work of Pupil Teachers to their Health: Dr. J. M. Williamson. Members desirous of introducing patients, exhibiting pathological specimens, or making communications, are requested to signify their intention at once to the Honorary Secretary.—Dinner at Marine Hotel, 6 P.M.; charge, 6s., exclusive of wine.—W. E. GREEN, Honorary Secretary.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

A MEETING was held in the Medical Institute, New Edmund Street, on Thursday, January 10th. The chair was taken by the President, Dr. BALTHAZAR FOSTER.

New Members.—The following members of the Association were elected members of the Branch: Dr. Strange, Worcester; Mr. E. J. Collins, Wednesbury.

Communications.—The following communications were read.

1. Mr. Bennett May read a Case of Sacculated Innominate Aneurysm treated by Simultaneous Distal Ligature of Common Carotid and Axillary Arteries.

2. Mr. Lawson Tait showed a series of Cases of Abdominal Section performed during 1883.

3. Dr. Savage showed a Dermoid Cyst, recently removed by him. It contained a large plate of bone, some loose hairs, fat, and a few perfect teeth.

4. Dr. Carter showed a patient suffering from Cheiropompholyx.

5. Dr. Rickards showed for Dr. Nelson a Specimen of Fatty Transformation of the Kidney; in the centre of the Adipose Mass was an Uric Acid Calculus.

6. Mr. Lawson Tait showed an Occluded and Dilated Fallopian Tube (the left), which he had removed on December 17th. The patient had suffered for some months from excessive pain, being hardly able to walk, and profuse menorrhagia. A cystic tumour, as large as a cocoa-nut, had been discovered by Dr. Price, of Dudley Port, who sent her to Mr. Tait for treatment. On abdominal section the cyst proved to be the left tube full of broken-down blood-clots, apparently on the point of becoming purulent. The tube was densely adherent to surrounding structures, and its removal was a matter of great difficulty. The patient made an uninterrupted recovery, and was immediately relieved from her sufferings.

7. Mr. Jordan Lloyd showed a Renal Calculus.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR SPECIAL CORRESPONDENT.]

Dieulafoy's Instrument for Transfusing Blood—Dubois' Gasometer for Administering Chloroform mixed with Air—Bert on Chloroform mixed with Oil—Bochefontaine and [illegible] on the Copper Cure—Letter from the Mayor of Villedieu—M. Pichon and the New Sanitary Decree.

M. DIEULAFOY has presented to the Académie de Médecine an instrument which he has invented for effecting the transfusion of blood in a manner which prevents the blood withdrawn from the veins being in contact with the air. The person who loses the blood and the person who receives it are placed side by side in a recumbent position. It is not necessary to lay bare the veins either of the person bled nor the person in whom the blood is transfused. A needle of a larger calibre than that of a Pravas syringe pierces the skin and enters the vein; the blood passes into a receptacle from which all the air is expelled. This instrument is so ingeniously arranged, that the injection of an air-bubble into the veins of the patient is impossible. Admitting the possibility that air-bubbles find their way into one of the chambers of the apparatus, they rise and accumulate at the upper part of the receptacle, and the blood is withdrawn from the lower part. As the skin and the veins are not injured by this method, the operation may be repeated as often as is considered necessary, and at short intervals. In cases of hæmorrhage, or when œdematous infiltration is present, it may be necessary to lay bare the vein. When the operation is effected, the instrument should be taken [illegible]

M. Dubois has observed disadvantages in M. Saint Martin's gasometer, itself an improved modification of the original apparatus invented by M. Dulong, and employed by him and M. Bert for administering chloroform mixed with air. Aided by an engineer, M. Tatin, M. Dubois invented a gasometer which he considers in many ways superior to its predecessor. It is, nevertheless, inferior to the simple and well known instrument used and invented by the late Mr. Clover.

M. Bert promises to arrive at a method of administering chloroform mixed with oil, which will render the use of an apparatus unnecessary, but will yet be superior to that which consists in the application of a compress, saturated or moistened with the anæsthetic administered. He observes that it is barely possible that country practitioners who are only occasionally called upon to use chloroform, can purchase an instrument costing £8, and keep it in order. Therefore, at a future meeting of the Biological Society, he will describe a method he calls *procédé de campagne* (country-method), in contradistinction to the *procédé de ville* (town-apparatus), when an apparatus is used.

M. Bochefontaine, in an *Etude Expérimentale sur l'Action Microbicide du Sulphate de Cuirre*, arrives at the following conclusions. The spores of mucoraceæ develop in sulphate of copper solution of 1 per cent. The vibriones of putrefaction multiply in cupric solutions of 1 per thousand. In order to arrest the development of vibriones, the solution must be four times stronger than is necessary to kill guinea-pigs, and ten times stronger than that which kills dogs. Artificial bacteræmia (*bactériémie*) is produced in animals whether they be submitted or not to the influence of sulphate of copper injected under the skin in doses insufficient to cause death. Further, bacteria develop in the blood of animals which are killed by sulphate of copper being injected under the skin, or introduced directly into the circulation. These facts, applied to pathology, are opposed to the supposition that sulphate of copper acts as a prophylactic against typhoid fever and cholera. It appears almost certain that the contagious element on which it acts is not composed of the micro-organisms; therefore, if it be established that cholera and other infectious maladies result from the presence of germs, sulphate of copper is inert either to prevent or cure. Infusoria are killed by hypodermic injections of sulphate of copper, which do not endanger the life of animals under experiment; but infusoria cannot exist in blood; therefore, to attempt to establish any analogy between these two growths would result in a most hypothetical theory.

M. Ygouf, who has some members of his family living at Villedieu, now the centre of much interest, and the cause of much discussion, has collected some important facts concerning the value of copper as a prophylactic agent; these facts are all the more important as M. Ygouf has undertaken his investigation with a perfectly unbiassed mind; he has searched for facts to reveal the truth and not to support any preconceived idea. The population of Villedieu amounts to 3,525. The copper-workers are as saturated with copper as is consistent with life. Men with green hair, and skin spotted with green, may be seen in the streets of Villedieu. M. Ygouf furnishes the following statistics. In 1849 there were nine deaths from cholera; among these fatal cases there were copper-workers. The same proportion applied to the population of Paris, during an epidemic, would give 5,700 deaths. The average yearly death-rate at Villedieu is 90. In 1870 an epidemic of small-pox raised the death-rate to 110, in 1871 to 208. In 1882 typhoid fever raised the death-rate to 118: there were a hundred cases of typhoid, and twenty deaths.

M. Tetrel, the mayor of Villedieu, in a letter to M. Ygouf, gives the following information. It is the general opinion there that, owing to the extensive employment in copper-work, cholera-cases are less frequent at Villedieu than elsewhere. Since 1852 there has not been any epidemic of cholera, and the facts gathered by M. Ygouf refer to an earlier period. It is true that in 1848-49 several copper-workers, constantly in contact with copper, were ill with cholera, but here we speak of these instances as exceptional. With regard to typhoid fever and small-pox, during the epidemic of typhoid fever that broke out this year, those districts in which were the smelting houses and coppersmiths' workshops were the most violently attacked; the copper-workers are not more exempt from typhoid fever and small-pox than the other inhabitants of Villedieu. Every year there are one or two cases of diphtheria, there is also a great deal of scarlet fever and measles among the children. The following incident is interesting with regard to the direct action of copper on bacteria in the human economy. A copper-smelter, constantly in contact with copper, contracted "charbon," in 1865, and died in the course o few days; it is evident that in this case the action of copper on th development of the bacillus of malignant pustule was completely negative.

In our last letter we referred to the household sanitary decree issued by the Prefect of the Seine, concerning the removal of refuse, which unfortunately prevents rag-pickers from gaining their livelihood. M. Pichon, a municipal councillor, has constituted himself their champion, and warned M. Poubelle that at a future meeting of the Conseil Municipal he shall ask some questions concerning his decree. M. Poubelle has expressed his willingness to be interrogated. Perhaps M. Pichon's championship, added to the dangerous wrath of this usually inoffensive class of the Parisian community, may succeed in obtaining a modification of the decree which will allow the rag-pickers to ply their trade without endangering the public health. This, all humanitarians must devoutly wish.

CORRESPONDENCE.

PORRO'S OPERATION.

SIR,—Will you permit me, as my paper is going to press, to record another operation, of which I have only just received notice?

Date: October 11th, 1883. *Operator:* Dr. H. Fehling, of Stuttgart. *Patient's age:* 33. *Number of previous labours:* Seven. *Cause of difficulty:* Failure to turn in arm-presentation on account of contracted pelvis from osteomalacia. *Available pelvic space:* C. V., two and a half inches; bisischiatic, one and three-quarter inches. *Time in labour before operation:* Fourteen hours. *Result to woman:* Recovery. *Result to child:* Living. *Treatment of pedicle:* Extraperitoneal transfixed by long pin, surrounded by elastic ligature. *Reference: Centralblatt für Gynäkologie*, 1884. No. 2.

☞ This makes Dr. Fehling's fourth operation, with three recoveries. The 138 cases are distributed among no fewer than 80 different operators. The results of three of the most successful are as follows.

	Cases.	Recoveries.	Deaths.
Professor Porro (Milan)	5	4	1
Professor Breisky (Prague) ...	4	4	0
Dr. H. Fehling (Stuttgart) ...	4	3	1
	13	11	2

Yours faithfully, CLEMENT GODSON.

MEDICAL REFORM: PROTECTION AGAINST UNQUALIFIED PRACTICE BY CHEMISTS AND OTHERS.

SIR,—I quite concur with the remarks on medical reform in your leading article of January 12th; but I venture to affirm that there is one sad deficiency therein—viz., the absence of a provision to enable duly qualified members of our profession to feel any reasonable confidence that, after they have expended their time, energies, and money to secure a legal qualification, they may not have the mortification of experiencing a daily knowledge of the fact that some other person or persons unqualified in their own neighbourhood are receiving at the hands of the public a considerable portion of that income which they looked upon legitimately as their own. Now, if any one disputes this, let him take the trouble carefully to observe for himself the way in which the chemists carry on prescribing, and he will find the evil to be a rapidly growing one; the public are daily being educated to make common cause with the chemists and druggists against the regular charges of medical men, notwithstanding the latter do so much for nothing at the numerous charitable institutions. Some protection is due to the qualified medical practitioner against the unqualified. Then why should not the members of the Government who have, or may have, charge of the question of medical reform candidly acknowledge it, and make suitable provision for it? I ask you, as editor, to plead for the introduction of a clause in the next Medical Bill to secure common fair play to all those practitioners who have obeyed the law by qualifying according to law, and oblige, sir, yours faithfully,

A GENERAL PRACTITIONER.

DEFENCE OF THE PLASTER-OF-PARIS JACKET IN CARIES OF THE SPINE.

SIR,—I have read two articles in your JOURNAL, one of December 8th (p. 1121), and another of December 15th, 1883 (p. 1187), "On the Treatment of Caries of the Spine, with Cases," by Mr. Noble Smith.

Some of the statements made by Mr. Smith in these papers are so directly at variance with numerous observations made by me, that I must be pardoned for calling attention to them. In the first place, he speaks of the most important principle being rest of the diseased parts; but I should add to this principle, another one of equal importance, namely, the relief of the parts from undue pressure, which he does not seem to take into consideration.

He states "yet there is no universally recognised means by which such rest should be secured." I would state that by the proper suspension of the patient, and the proper application of the plaster-jacket, such rest can be secured, and, at the same time, freedom from pressure to the parts obtained. On page 1121, Mr. Smith lays down the principles upon which the mechanical apparatus which the surgeon uses should be constructed. "First, to support the upper part of the body and release the diseased (anterior) parts of the vertebræ from undue pressure, without interfering with free thoracic respiration." A properly applied plaster-of-Paris jacket accomplishes these objects perfectly, without any interference whatever with the normal free thoracic respiration.

"Secondly, to control incurvation of the spine below the seat of the disease; because, if it does not do so, the diseased surfaces will still be pressed and rubbed together, notwithstanding the fixing of the upper part of the spine." A properly applied plaster-jacket supports not only the upper portion of the spine, but also prevents any incurvation of the spine below the seat of disease.

"Thirdly, to be so constructed that the surgeon can himself alter it in accordance with the progress of the case." Inasmuch as the surgeon himself should always personally apply the plaster-of-Paris jacket, he can of course renew it when necessary, and would certainly do so.

He further states that "the instrument should form a back-splint which will act as an immovable artificial spine, and the real spine is to be fixed by fastening the shoulders (drawn backwards) and the abdomen and the pelvis to the splint." If the artificial spine be thus secured by an inflexible and inelastic bar running from the pelvis to the shoulders, and fixed in that manner, the natural growth of the child will be prevented, and this of itself would cause undue pressure upon the diseased parts, and prevent the natural normal elongation of the patient. "Plaster-of-Paris jackets do not *thoroughly fix*" (italics are mine) "the spine." They do not fix it so as to prevent the normal growth of the child: but they do secure such fixation as to prevent any injurious or painful movements. "They interfere with thoracic respiration." This I most emphatically deny, from observation of many hundreds of cases. "They allow the accumulation of dirt." This is always owing to the neglect or carelessness of the surgeon applying it, and of the persons having charge of the patient. "They interfere with perspiration." This is not correct; for the plaster-jacket is porous, and allows the insensible perspiration to pass off freely; and that is one of its principal advantages over the felt, silicate of soda splint, or any other impermeable substance. "They often cause constant discomfort." They never should cause the least discomfort; and, if such be the case, it is due to the improper application of the jacket; and it should instantly be removed, and a new one properly applied. "They obscure the region of the disease, and hide ulcers and abscesses when these form; and cannot practically be altered sufficiently often." There is no occasion for looking at the seat of the disease every day, any more than there would be to take down a fracture and look at that every day. When a man puts a seed of corn in the ground, he knows better than to take it up every day to find out if it be sprouting. If the jacket be properly applied, no ulcers ever occur; and, if abscesses form, they are easily discovered, and a proper fenestra is made in the jacket at the time of its application, the same being renewed as often as may be necessary.

The description given by Mr. Smith of the instrument devised by Mr. Chance is very vague and uncertain; and, as there is no drawing of it, it would simply appear to act on the same principle as the splint of Drs. Taylor and Shaffer—viz., by pressing the weight of the body back upon the transverse processes of the spine, in order to relieve the anterior portion of the vertebræ from pressure. The only advantage over Dr. Taylor's brace appearing to be in it is, that it is secured at the shoulders, and does away with Dr. Taylor's body-belt, or apron, as it is called, which materially interferes with thoracic respiration, and is one of the serious objections to it. But, in disease of the cervical vertebræ, Mr. Smith's appliance would be utterly useless, as it does not support the weight of the head. "No instrument will be of much use unless the surgeon devote his attention to its adjustment and readjustment." I agree with these statements most fully; and there is no instrument that will give the patient the same support and comfort as a properly applied plaster-of-Paris jacket and head-rest, and that will require readjustment less frequently.

"The surgeon must never cease in his endeavours to fix the spine in a suitable position until he has succeeded in relieving the patient from all pain and discomfort; and, at the first arrangement of the instrument, this result may not be easily obtained." This may be true so far as the application of Mr. Chance's instrument or any other of similar construction, as I can well conceive; but it can always be obtained by the proper partial suspension of the patient when applying the plaster-jacket; and the rule is to make this partial suspension until the patient is perfectly comfortable, and there stop and secure your patient in the plaster-bandages, keeping him in that position until the plaster has set. He will then retain this sense of comfort so long as the bandage is properly adjusted. (See pages 459 to 461 of Sayre's *Orthopædic Surgery*, second edition.) "Then the position affected, which may be correct to-day, may be wrong in a few days' time; for, even under the most favourable circumstances, the relations of the diseased bones to one another may alter from day to day until ankylosis commences." This is an impossibility in the plaster-jacket when properly applied, unless it should become broken, when it should, of course, be removed.

I regret very much that the cases of Mr. Smith are so imperfectly reported as to the time and duration of the treatment, as well as the results, as to render them almost useless. Those of his cases which had previously had plaster-jackets applied to them, certainly could not have had them applied according to the principles which I have laid down for their proper application.

LEWIS A. SAYRE, M.D.

285, Fifth Avenue, New York, January 2nd, 1884.

THE COMMUNICABILITY OF PHTHISIS.

SIR,—In a recent number, the JOURNAL has pronounced in favour of the view that phthisis is communicable from the sick to the healthy. Regarding the 261 replies to the Collective Investigation Committee, which affirmed this proposition, it remarks that "the large majority, as might be expected, refer to husbands and wives."

As my own observation in family-practice, whatever its value, leads to an opposite conclusion, I feel bound to lay the facts before you, it being absolutely necessary, for the purpose of correct generalisation, that facts be ascertained from as many sources as possible. It is at least noteworthy that, during 23 years of general practice in the extensive district of North Tynedale, I have not met with an instance where, to my knowledge, husband and wife died of this disease. The population are engaged mainly in pastoral and agricultural pursuits, and, comparatively, they enjoy a large immunity from lung-diseases. Phthisis, however, when it occurs in a family, is often very fatal, and this, whether the members live under one roof or in separate homes. Altogether, 26 fatal cases of pulmonary tuberculosis, among married people, came under my notice during the period mentioned. In most, if not all, the healthy shared the same bed with the sick until the disease had nearly run its course, and were more or less in close attendance throughout. Of the 26 cases, 14 were males and 12 females, and their average age at death was from 40 to 45 years. All the widows survive but one, who died of uterine cancer. The widowers, except two, who died lately, one of pneumonia, aged 69, and the other of gastric cancer, aged 64, also all survive in good health. These marriages were all fruitful except two. Several of the mothers gave birth to children when far gone in consumption, and some of the males were in the last stage when the youngest child was born. Phthisis has already proved fatal to children of nine of these marriages, and, judging from appearances, many more are likely to suffer. Over a half of these 26 persons had near relatives similarly affected. Of the males, four were brothers, and an unmarried brother also died phthisical. These men were engaged in stock farming, an occupation exceptionally favourable to health. The list also includes two brothers, a brother and sister, a female who was the last survivor of a family of eight who all died consumptive, and another female, a member of a family of eight or nine, who all died phthisical except one.

Considering that phthisis is nearly twice as fatal as any other disease in England, husband and wife must of necessity occasionally die of it, altogether independently of contagion, even granting that in some instances it may be communicated from the sick to the healthy. If it be really communicable, sick wives ought to infect healthy husbands, and *vice versa*, with considerable frequency. Supplementary returns, bearing upon this point, from practitioners engaged in family practice would be instructive. Country practitioners, on account of their knowledge of family life-history, are generally well qualified to afford reliable information on this particular subject.

My list, of 26 cases, illustrates very strikingly the far reaching influence of heredity in the production of phthisis. Yet it is probable that the deaths from acquired phthisis, excluding contagion as a cause, are at least equal in number to those due to decided family predisposition. Who has not known many lamentable instances among young men, in whom little or no family predisposition existed, and where there was no exposure to contagion? Upon entering the battle of life, the strongest may fall from over zeal and continued disregard of the commonest and best known, but too often forgotten, laws of health. "Of other diseases developed by respired air, there can be no question that phthisis pulmonalis holds a prominent place on the list." "In the celebrated report of the Army Sanitary Commission, published in 1858, it was proved beyond all doubt that the excessive mortality from consumption amongst the soldiers, and in particular regiments, was due to overcrowding and insufficient ventilation" (Wilson's *Hygiene*).

If the conditions quoted can develop this fatal malady in the constitutions of strong men accustomed to daily active outdoor exercise, is it at all surprising that others may occasionally become victims after prolonged confinement in the too frequently contaminated and depressing atmosphere of the sickroom. The baneful effects of overcrowding and deficient ventilation as a cause of phthisis can scarcely be too strongly or too frequently insisted upon by those whose teachings are likely to influence public opinion.

Recent revelations point to a state of things in our large cities which, if continued long enough, would effect the extermination of the poorer among the working classes. And no external efforts can help them permanently, until the humblest be sufficiently trained to know and appreciate the absolute necessity of cleanliness and ventilation. A higher civilisation, when it arrives, will, to a great extent, banish phthisis and other diseases of an adynamic type, and will strengthen the country to a corresponding degree.—Yours etc.,

GEORGE R. FRASER, L.R.C.P.

Wark-on-Tyne.

HOSPITAL AND DISPENSARY MANAGEMENT.

HOSPITAL ACCOMMODATION IN NORTH LONDON.

GREAT NORTHERN CENTRAL HOSPITAL.

A LARGE and influential meeting was held in the Highbury Athenæum on Saturday last, January 19th, in order to ratify an arrangement which had been come to between the governing body of the Great Northern Hospital and the gentlemen interested in the movement which has been for some time on foot for providing the north of London with increased hospital-accommodation. It is a well recognised fact that, owing to the rapid extension of London, towards the north and south especially, the distribution of hospitals throughout the metropolitan area is very unequal.

The **DUKE OF WESTMINSTER**, who took the chair at the meeting, stated that there were ten general hospitals within a mile and a half of Charing Cross, whereas, in the north of London, comprising the densely populated districts of Holloway, Highbury, Dalston, Canonbury, Barnsbury, Hoxton, and other neighbouring districts, the only hospital available for general cases was the Great Northern Hospital. The Duke of Westminster said that the provision of more hospital-accommodation in the north of London was an absolute necessity, and that the only matter to be decided was the question of ways and means. The amalgamation with the Great Northern Hospital had placed at the disposal of the joint committee a "nest-egg" of £4,000, already collected by the former. The Duke expressed the hope, or rather, as it seemed to us, the confident expectation, that the site for a new hospital would be presented to the committee; and, as the Great Northern Hospital has for years refrained from enlarging or rebuilding its present premises, which are described as "inconvenient and inadequate," owing to an unwillingness to build on leasehold property, such a gift would go a long way towards making the new scheme a reality. The Duke touched on the fact that there had been a serious falling off in the funds of many of the existing hospitals, but refused to be discouraged by this ominous fact.

The **MARQUIS OF SALISBURY** moved the first resolution, expressing the approval of the meeting of the arranged amalgamation. The matter, he thought, was not one which needed to be sustained by eloquence, but was an obvious matter of business. Where they had a large population, rapidly growing larger, they must provide, among other things, a hospital for their wants. A hospital was one of the essential apparatus of a large and growing community. Hospitals suffered from this very fact, that they were so obvious a necessity, because everyone felt that the argument addressed to himself in their behalf might just as well be addressed to his neighbour. Hospitals were everybody's business, and so were rather apt to share the fate which applied to things that were the business of everybody. But the want in this case was due to special circumstances which had already been detailed by the Chairman, and which would be dwelt upon by other speakers. The general ground, however, for increased hospital-accommodation in that part of London was, that it was a part of the metropolis which was increasing with enormous rapidity. For some time, London spread mainly towards the south; whether it was a preferable climate there, or what the attractions were, he did not know; but the great extension was for many years towards the south. Now the wave of population was coming northward, the increase and extension being very rapid indeed. He thought that there was very little danger of pauperising a population by supplying ample hospital-accommodation, but in this new scheme there was a very important feature, and that was the provision of wards for patients who could afford to pay in part or in whole for care and treatment during sickness. The application of this principle extended far beyond the question of pauperisation. The medical attendance given at hospitals was generally very far more skilful than the average medical attendance given anywhere else, and it had always seemed to him rather hard that the richer classes of the community were, by the very fact of their being well-to-do, shut out of the best medical advice, treatment, and attendance that could be obtained. Doctors commonly remarked that their patients would be much better attended to in a hospital than in a private house; but, because the patients were well-to-do, they could not be received into hospitals under the charitable conditions which obtained. Hence, for the sake of such sufferers, it was desirable that paying wards should be provided in the projected new hospital. But there was a further advantage involved in this matter. They could not have heard or read what the poor—especially in the remoter districts—thought of hospitals, without knowing that there existed in their minds a deep seated suspicion that they were made the subjects of experiments. Hence there was great unwillingness and reluctance displayed on the part of many of the poorer classes to enter hospitals on that account. Nothing would tend to remove this suspicion more effectually than their seeing their well-to-do neighbours enter hospitals in order to derive the benefit of the superior treatment and attention which they afforded. They would then be perfectly certain that not only was the skill good, but that the practice of hospitals was such as to command the confidence of the rich, and their confidence would be given much more readily when they found that the hospital-accommodation was not merely offered to them individually and separately as a class. For all these reasons, he concluded by moving the resolution which he had read.

Lord **GEORGE HAMILTON** seconded the resolution. He hoped that that great and influential meeting would supply a motive force and power which would develop itself in the way of large funds being devoted to the project, so that in a short time they might have a large hospital in that part of London worthy alike of its originators, and the locality in which it was situated. The resolution was then put and unanimously carried.

Mr. **M'CULLAGH TORRENS**, M.P., moved the next resolution, which was to the effect that the Great Northern Central Hospital should be a General and Free Hospital with paying wards, and defined the constitution of the governing body. This was seconded by Mr. Marshall Lang, who pointed out that the population of the northern districts of London amounted to little less than a million, and comprised numerous representatives not only of the wealthy class with money to give in charity, and of the poor, who were the proper recipients of such charity, but also a large and increasing middle class who were able to pay, but yet needed the advantages which a hospital conferred.

Sir **ANDREW LUSK** moved a resolution, constituting the committee of management. Mr. **W. BURDETT-COUTTS** seconded the resolution, which was unanimously adopted.

Mr. **C. TOWNSHEND MURDOCH** proposed: "That a building fund be opened, and subscriptions invited in furtherance of the objects of the foregoing resolutions." The committee had in view two or three sites which seemed to be suitable for the erection of the hospital, but it was wise at present for them to keep their own counsel on this subject. The negociations which had been pending had retarded the collection of subscriptions, but he had already received aid to a considerable amount. Among the subscribers were the Duke of Westminster, who gave £500; the Baroness Burdett-Coutts, £300; Mr. W. Burdett-Coutts, £100; Mr. W. Brander, £500; Mr. Edwin Austin, Mr. W. Harrison, the Hon. R. Capel, and Mr. W. Jones Lloyd, £100 respectively; Mr. J. Passmore Edwards, M.P., £52 10s.; and Mr. Edwin Fox, £50. Professor LEONE LEVI seconded the motion, which was agreed to unanimously.

On the motion of the Hon. R. CAPEL, seconded by Dr. CHOLMELEY, Senior Physician to the Great Northern Hospital, a vote of thanks was accorded to the chairman, and to the other noblemen and gentlemen who had come from a distance to aid the movement.

PAY-HOSPITALS.

MR. J. S. WOOD of Tooting, writing on the subject of pay-hospitals in a contemporary, shows that, out of all the chief general and special hospitals of London, 49.3 per cent. of them at the present time apply this principle to their in-patients or out-patients, or both. The following are the figures.

Hospitals.	Number in London.	Number which adopt the paying system in some form.
General	22	7
Pay	4	4
Women	4	4
Children and Women	[illegible]	2
Children	9	6
Lying-in	4	—
Fever	1	1
Consumption	6	1
Throat and Ear	2	2
Dental	2	1
Ophthalmic	5	1
Paralysis	4	3
Skin	3	3
Orthopædic	3	1
Other special hospitals	5	2
	77	[illegible]

In 1881, £28,909 was received by the various hospitals, convalescent homes, and medical institutions, from the payments of the patients. By a calculation, he finds that the percentages of patients' payments are to the gross cost of maintaining all the hospitals which share the Hospital Sunday Fund: 1879, 3.40 per cent.; 1880, 4.08 per cent.; 1881, 3.99 per cent.; 1882, 3.97 per cent. At the Bolingbroke House Pay-Hospital, which receives in-patients only, but has attached to it a provident dispensary as its out-patient department, with about 1,300 members, the percentage of self-support in the past year was 68.5 per cent.—that is, £68 10s. was paid by the 123 patients towards every £100 which they cost the institution. The lowest fee received in the hospital was 10s. 6d., but the majority of applications received for admission were from those who state their willingness to pay all they were able, usually 5s. or 7s. 6d. per week, in preference to entering a general hospital for treatment. The Rev. Canon Erskine Clarke, the trustee of the Bolingbroke House Pay-Hospital, however, is proposing to inaugurate a system of insurance of indoor treatment by which a person living in London lodgings, when sick, may get a few weeks' medical treatment in Bolingbroke House, upon payment of a yearly premium of, say, 10s. or 15s. With regard to the Chelsea Hospital for Women, contributions have been required from both in- and out-patients for 12 years past. Every patient who has entered the hospital, both free and paying, has paid a weekly average of 16s. 2d. Out-patients who come unprovided with a subscriber's letter are charged 6d., and each one of the 26,701 out-patients, including free and paying, has paid an average of 3d. at each attendance. Mr. Wood says: "I need scarcely add, that poor patients who are really fit objects for charity are readily received, and in no way are they treated differently from those who contribute something towards their support." In advocating the paying principle, he would not seek to make our hospitals merely paying medical homes, they should be primarily, and first of all, sick charities; and, secondly, provident institutions.

THE PROVIDENT SYSTEM.

DR. ALEXANDER STEWART has contributed a valuable article to the *Glasgow Medical Journal*, in which he gives the result of [illegible] years' experience as a medical officer of the Paddington Provident Dispensary.

This dispensary is one of those which were set on foot a few years ago by the Metropolitan Provident Dispensaries Association, [illegible] system of provident dispensaries [illegible]. Dr. Stewart was one of the medical officers of this association, and now he gives us the benefit of his experience. We welcome such a paper as this. It is written in an excellent spirit. Dr. Stewart does full justice to the promoters of the Provident Dispensaries Association, while at the same time he points out, with the logic of facts, the weak points of the provident system, and the dangers to which it is exposed. The chief objection which is urged against the provident system is that the remuneration is inadequate, and not sufficient to secure, and to retain, the services of a high class of medical men. Dr. Stewart shows that the average payment is less than fivepence a visit. It would seem, then, that what is needed is to raise the rate of remuneration by such means as shall fall lightest upon the members. Perhaps the terms might be raised a trifle all round; or the number of children who are admitted gratuitously might be further limited; or a graduated scale might be introduced, and the members divided into two classes, as at Battersea. By some such alterations as these, the provident system must be developed. It seems to be agreed on all hands that it is the best means of providing for the medical wants of the working classes. At the recent conference on hospital management, there was a consensus of opinion in its favour. But it is still far from perfect. The Council of the Social Science Association would do good service if it were to call another conference, with the view of promoting united action among the managers of provident dispensaries, and considering how the system can be developed, so as to make it more useful to the industrial classes, and more acceptable to the medical profession. At any such conference, a paper similar to that which is now before us would form a valuable basis for discussion.

THE CITY DISPENSARY.

THE annual meeting of the governors of this institution was held on January 16th, at the Dispensary in Watling Street. Mr. Thomas Spreckley, the subtreasurer, presided; and, in opening the proceedings, pointed out that the institution had done an enormous amount of good in relieving patients, and helping poor men and women who were trying to help themselves. The institution has received support from the Councils of the Metropolitan Hospital Sunday and Saturday funds, and from various livery companies and parishes in the city. The total number of patients relieved during the year, including 1,350 on the books on January 1st last, was 16,220. Of that number, 15,087 had been discharged cured, 25 died, and 1,108 remained on the books. The total receipts for the year amounted to £2,242, which included a balance in hand of £792; annual subscriptions, £459; and donations and dinner-tickets, £491. The expenditure was £1,417, which left a balance in the hands of the treasurers of £825 1s. 5d.

DISPENSARY FOR CONSUMPTION AND DISEASES OF THE CHEST, BELFAST.

THE Committee of Management, in their first annual report, have given an account of the formation and establishment of this institution. They refer first to the great prevalence of phthisis and other chest-affections in Belfast, and the inability of the Poor-law dispensary-system to cope with diseases of the kind. About five years ago a beginning was made under the auspices of Dr. H. S. Purdon and Dr. Simpson, with the object of establishing a dispensary for the special treatment and relief of persons affected with diseases of the chest. It was first located in Donegal Pass, where its work was carried on with success as a provident institution, a small sum being charged for medicine from those who could afford it. In the early part of 1881 the dispensary was changed to Joy Street, and afterwards to its present position in College Square, where it carries on its work with vigour and success. From its commencement, 832 patients have been under the care of the medical staff. To those who cannot afford to pay anything tickets are given, while, to others, the small sum of one shilling is charged. The income for the year was £118, and the expenditure £94, leaving a balance of £24 in the hands of the treasurer.

DUBLIN ORTHOPÆDIC HOSPITAL.

THE seventh annual meeting of the supporters of this association was held on December [illegible]. Mr. William Findlater, M.P., presided. From the report submitted to the meeting we learn that "during the year, 60 cases were admitted into the hospital, making, with 22 patients in the institution on October 1st, 1882, a total of 82 cases under treatment. Sixty patients were discharged during the year, leaving 22 in the hospital on September 30th, 1883, and the number of cases that attended the dispensary during the past year was 5,840. The report was unanimously adopted, as was also a resolution declaring that the institution, being the only hospital in Ireland exclusively devoted to the treatment of deformities, was worthy of the generous support of the public; and that, in view of the inadequacy of the present hospital to accommodate the number of cases seeking admission, the meeting urged the committee to procure more extensive premises, and pledged itself to raise additional funds.

MEDICO-LEGAL AND MEDICO-ETHICAL.

MEDICAL REPORTS IN LAY-PAPERS.

We are glad to see the following notice published in the *Kentish Observer* of January 17th; and we feel assured that the profession will applaud the action taken by the staff of the Kent and Canterbury Hospital. The unauthorised publication of the names and doings of the members of the staff of a public hospital by editors, reporters, and interviewers, is an evil against which the profession is powerless, notwithstanding the many cases in which the practice is a source of great personal annoyance.

"We, the undersigned members of the surgical staff of the Kent and Canterbury Hospital, request that our names may not be mentioned in the lay-press in connection with any operation we are required to perform by virtue of our position.

"(Signed) CHAS. HOLTTUM,
"F. WACHER,
"T. WHITEHEAD REID,
"JOHN GREASLEY.

"January 10th, 1884."

IS A SURGERY A DWELLING HOUSE?

W. M. (Bootle) enquires whether a surgery is a dwelling-house? He states that the inspector of taxes has contended that it is.

*** It is impossible to answer this question with certainty, without knowing what the premises are. By the Customs and Inland Revenue Act, 1878, "every house or tenement which is occupied solely for the purpose of any trade or business, or of any profession or calling by which the occupier seeks a livelihood or profit," is exempted from inhabited house duty, and the exemption is not taken away "although a servant or other person may dwell in such house or tenement, for the protection thereof." If a surgery be a separate tenement, it is exempt, but it it be only a room in a dwelling-house, it is not.

ETIQUETTE OF NEW COMERS.

N. S. P., who proposes to go into practice in a small town, which is increasing very little in size, and where there are already a number of medical men, inquires the etiquette under such circumstances; whether he ought to call on each medical man, and state his intention, and whether he could then properly accept any patients that applied to him.

*** The rule of the profession (diverse from that pursued in ordinary social life, in relation to new residents), on commencing or changing the locality of practice, in town or country, entails on each new comer, young or old, an obligation to call, with as little delay as may be, upon every duly qualified legitimate medical practitioner resident within a reasonable distance of his own selected place of abode, and courteously announce his intention to practise in the locality.

A POINT OF MEDICAL ETIQUETTE.

We have received copies of a correspondence which has passed between "A Member" and a homœopathic practitioner. We have submitted the matter to an eminent authority, who has made the following remarks.

*** It would have been well had Mr. P., before acting upon the reported message from Mr. B., taken the precaution of assuring himself of its accuracy as delivered, either by a renewed visit or by a courteously worded note of inquiry; for such communications are too often magnified and misrepresented in the course of transmission, especially when entrusted to uneducated people. Had Mr. P. done so, we think it probable that he might have been induced to modify and delay his reply-note to Mr. B., who, not unnaturally under the circumstances of the serious illness of his wife and family, was likely to be more or less prejudiced by the reprehensible remarks (if correctly reported by the messenger) made by the superseding practitioner. Mr. C., the tone of whose letter to Mr. B. is so far self-condemnatory as to need no editorial comment.

In reference to the charges for professional attendance and medicine (of which latter the quantity stated—thirty-nine bottles—appears large for so short an attendance), we are unable, in the absence of various essential particulars, to offer an opinion. Mr. P., however, may consult with advantage the *Medico-Chirurgical Tariffs* issued by the late Shropshire Ethical Branch, and published by W. Wardle, Shrewsbury. He will, moreover, act advisedly in not pressing for a settlement of his professional charges until after the family's recovery from illness."

The amount of the last Dublin Hospital Sunday Fund collection is announced to be £4,212 16s. 6d.

MILITARY AND NAVAL MEDICAL SERVICES.

ARMY MEDICAL ORGANISATION IN WAR.

On Friday, the 18th instant, Surgeon-Major Evatt, of the Army Medical Department, read a paper, at the Royal United Service Institution, on the subject of hospital organisation in time of war; and on the assistance that might be obtained from the militia and volunteer services for the purpose of increasing the efficiency of the regular field-hospital establishments. Surgeon-General T. Longmore, C.B., occupied the chair; and among the audience were General Sir C. Walker, K.C.B., and Lord Chelmsford, G.C.B.; Surgeon-General W. A. Mackinnon, C.B.; Sir Galbraith Logan, K.C.B.; Inspector-General Dr. Lawson; and other officers of the regular and volunteer services. In commencing his discourse, the lecturer complained of the little attention that had been given by combatant officers to the subject of army medical organisation, either in former days or in recent times. He described the organisation that existed at the time of the Crimean War, when the army corps that embarked in the Eastern campaign had, "with each of its forty-seven units, a hospital varying in size according to the size of the unit;" and declared that the regimental system, as then put to the test by actual war, proved itself to be a failure and a sham. Dr. Evatt enlarged on the faults that existed in the medical system of the Crimean period, and then referred to the changes that were introduced in 1857 and 1858 by Sydney Herbert's Committee. He maintained that, although Sydney Herbert inaugurated some improvements, his fatal error of maintaining the regimental hospital system neutralised all their advantages. The real progress in the Army Medical Service he traced to the War of the Rebellion in America, and the campaign of Sadowa, and to the disasters of Sedan and its sequences. These events led to the medical systems of foreign armies being more studied, and brought about the introduction of the new system of unification in 1873, with its further development in subsequent years. The scheme of army hospital organisation, under the unification system, was then described, and the constitution of "bearer-companies" and "field-hospitals," as at present arranged, explained in detail. As regards the field-hospitals, the lecturer said that, although correct in principle, they had many defects. These defects were shown by first pointing out the establishment of an English field-hospital for 200 beds, and then comparing it with the establishment of a field-hospital for 200 beds on the Indian scale. The total *personnel* of the Army Hospital Corps for the English field-hospital was 37, while in the Indian field-hospital the number was 122. Dr. Evatt stated that 93 attendants at least were needed for an English field-hospital. He particularised some of the special wants for which this attendance was needed. In an English field-hospital, there was not one man, he stated, allowed for carrying water for the hospital. "This is the most killing want," the lecturer urged, "as it goes at the root of all cleanliness; and, if I am to get water to my hospital, I must have men to do it. We want at least eight fatigue-men to supply water for the hospital." And so with conservancy or sanitary police; none were supplied; and, in a hospital-camp in war, these men were indispensable. Surgeon-Major Evatt dwelt upon various instances of similar want of forethought in the present army hospital arrangements, and mentioned a number of other points in the medical organisation which required settlement in order to secure efficient working of the hospital system in time of war. He concluded by showing the urgent need that existed for obtaining large reserves to supplement the restricted establishments maintained in time of peace, by making suitable arrangements for their supply, on war breaking out, from the militia and volunteer services; and proposed that a distinct militia branch of the Army Hospital Corps should be formed, equal in number to the needs of the home army hospitals in war time, so as to free the regular hospital corp and its resources for war, and that this "medical militia branch" should be called out yearly for training and practice, like the ordinary combatant militia.

A discussion followed the reading of the paper. The only combatant officer who spoke was General Lord Chelmsford, who remarked that the charge made by the lecturer, as to the want of interest on the part of combatant officers in questions of military medical organisation, was unfortunately well sustained by their absence on the present occasion. Lord Chelmsford admitted that it was very unfair on the medical department to demand from it a proper discharge of its duties in regard to hospital administration, if it were not given the requisite means for fulfilling its responsibilities. A large amount of money, he said, was needed for keeping up the various parts of the army, the medical department included, in such a state of efficiency as to be ready at all times for an outbreak of war; an amount, indeed, so large that no Government, whether Liberal or Conservative, liked to ask for it. The real responsibility for deficiencies should be put on the country at large, not on this or that Government. He hoped, however, that the defects which Surgeon-Major Evatt had pointed out would be repaired, as far as practicable, by those in authority, who alone had the power to enforce what was necessary in such matters. At the same time, he feared that the present system of hospital arrangements, though it would, no doubt, in time turn out to be all that was expected, must be prepared to encounter great difficulties before it attained the state of perfection which Surgeon-Major Evatt and everyone else must desire.

The Chairman made some concluding observations: and, having referred to the fact that the improvement of the army hospital organisation is well known to be engaging the earnest attention of the Director-General of the Army Medical Department and the War Department at the present time, as a result of the investigations of Lord Morley's Committee, proposed a vote of thanks to Surgeon-Major Evatt, which was heartily accorded by the meeting. The proceedings then terminated. Surgeon-Major Evatt's lecture will be published in the *United Service Institution Journal*.

THE NEW ARMY UNIFORM FOR FIELD SERVICE.

THE pattern and colour of the new uniform to be worn by troops on active service in the field has been so far settled, that it is about to be issued to an infantry regiment at Aldershot for practical trial. Although spoken of as a Kharkee dress, it differs from the Kharkee uniform worn in India, in being made of a kind of woollen serge, and in being darker in colour than the Indian material. The Indian material is a sort of cotton cloth and of a rather light dust-colour. We defer further observations on the new clothing of the army, which is intended to serve for undress purposes on fatigue-duties in barracks as well as for use on active service, until we have had an opportunity of observing the dress in actual use.

STATIONS OF ARMY MEDICAL OFFICERS, FROM OFFICIAL ARMY-LIST, PUBLISHED BY AUTHORITY, JANUARY 8TH, 1884.

THE subjoined table will be of interest to army medical officers. Except the medical officers of the Guards, who are not on the "roster," the figures would seem to indicate that, for each five years' foreign service army-surgeons ought to get, even with the extra duty in Egypt, on an average, four years at home. The highest administrative ranks do not, however, appear to enjoy much more than one-third of their service at home. In other words, the higher the rank, the larger the proportion of foreign service.

---	Home.	Abroad.	Not Shown.	Guards.
Surgeons-General	3	6	1	0
Deputy Surgeons-General	13	16	1	[illegible]
Brigade-Surgeons	20	27	1	1
Surgeons-Major "over" 20 years' service	50	78	6	[illegible]
Surgeons-major "under" 20 years' service	95	113	6	[illegible]
Surgeons	126	188	6	[illegible]

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

EXAMINATION IN PHARMACY AND PHARMACEUTICAL CHEMISTRY. The Special Board for Medicine (in conformity with Grace, November 15th, 1883) issue for the guidance of students proceeding to Medical and Surgical Degrees the following Schedule, defining the range of the examination in Pharmacy and Pharmaceutical Chemistry. The questions will have reference to the weights and measures of the *British Pharmacopœia* and of the Metric System, and their mutual relations; the nature and use of the pharmaceutical processes of infusion, decoction, distillation, percolation, and solution; the chief steps in the preparation of quinia, morphia, carbolic acid, salicylic acid, hydrocyanic acid, ether, chloroform, and the chlorides of mercury; the more important impurities or adulterations which may be associated with quinia, morphia, opium, ether, chloroform, iodide of potassium, subchloride of mercury, mercury with chalk, and sulphuric acid, together with the tests by which they may be detected; the chief instances of chemical incompatibility between drugs which are in common use; the proportions of the essential ingredients contained in the pharmacopœial preparations (for internal use) of arsenic, antimony, opium, atropia, morphia, quinia, and strychnia: and the chief ingredients of the more important compound preparations; the common or popular names of the more important drugs and preparations. The student will, moreover, be expected to recognise ordinary specimens of the more important crude drugs and of the more characteristic preparations.

APPOINTMENTS.—The following appointments have been made: —J. H. Randall, B.A. (Pembroke), and J. C. M'Connell, B.A. (Clare), Assistant-Demonstrators in Physics; R. H. Solly, Demonstrator in Mineralogy, and Assistant-Curator of the Museum; Walter Gardiner, B.A. (Clare), Demonstrator in Botany; A. Sheridan Lea, M.A. (Trinity), Senior Demonstrator in Physiology; W. D'Arcy Thompson, B.A. (Trinity), Junior Demonstrator in Physiology; A. Harker, B.A. (St. John's), Demonstrator in Geology.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE NOTIFICATION OF INFECTIVE DISEASES.

ACTING upon the initiative of the Dublin Sanitary Association, a joint deputation from that body, and from the Council of the Royal College of Surgeons in Ireland, the Irish Medical Association, and the Council of the Dublin Branch of the British Medical Association, waited upon the Chief Secretary for Ireland, on the 17th instant, with the object of pressing upon him the importance of Government introducing a Bill for the notification of these diseases, on the lines of the one suggested by the Council of the Dublin Branch and by the Committee of Council of the Irish Medical Association, and which was brought into the House of Commons in 1882 by Messrs. Meldon, Q.C., Brooks, Findlater, and A. Moore. This Bill, it may be remembered, threw the onus of notification upon the person in charge of the patient; but also permitted the medical attendant, if he should think fit, to notify the sanitary authority. It was approved by the King and Queen's College of Physicians (who petitioned Parliament in favour of it), by the Royal College of Surgeons in Ireland, by the Irish Medical Association, and by the Dublin Branch; but was "blocked" when put down for second reading, and thus shared the same fate as Mr. Hastings's and Mr. Gray's Bills, both of which made notification compulsory on the medical attendant. The deputation was introduced by Mr. Brooks, senior member for Dublin, and consisted of delegates from the bodies named above.

Dr. **ROBERT MCDONNELL**, F.R.S., on the part of the Dublin Branch, spoke first. As the Chief Secretary, he said, knew, there were several proposals and a great deal of conflict of opinion amongst different persons as to the people on whom should rest the responsibility of the notification of infectious disease. He thought it would be admitted that Mr. Meldon's Bill, which they had come to support, was rather a good compromise, in which the various conflicting points had been met in the only way in which it was possible to meet them—that was by each party yielding something. As to the importance of the subject, it was unnecessary for him to occupy time referring to it. He believed the various associations represented here to-day were in accord in this, that in the measure which they now advocated, they had a common ground upon which they might possibly stand together, and press forward a Bill which would be of the most unbounded use in this country.

Dr. **HAMILTON** (President-elect of the Dublin Branch) said this subject had been discussed very closely and with great care by the Dublin Branch of the British Medical Association. They found themselves placed on the horns of a dilemma. They were all anxious, on the one part, that there should be notification of infectious diseases, because that was a matter which concerned vitally the public health, and as a matter of duty they were obliged to give it every possible countenance. At the same time in the Bill proposed by Mr. Gray, the onus of notification was altogether thrown on the medical attendant. This the Association did not consider to be wise or prudent, and they were of opinion that it would necessarily disarrange the natural sympathy and feeling that should exist between the patient and his medical attendant. By this Bill of Mr. Meldon's, they could get rid of the difficulty in the case by taking the onus off the medical attendant and throwing it on the occupier or person in charge of the patient. He thought the details of the Bill furnished a safeguard, and the notification would be made in due time.

Mr. R. O'**BRIEN FURLONG** (Chairman of the Executive Committee of the Dublin Sanitary Association) said that with regard to that association they were all laymen, and they took exactly the same view of this question as the professional gentlemen present. The Dublin Sanitary Association had considered carefully all the various proposals for carrying out a system of notification of infectious disease, and they came to the conclusions—first, that an imperative and absolute necessity existed for some system of notification of disease; second, that no measure would be satisfactory which was not a general act—they did not think it would be sufficient to allow different towns, as was the case in England, to seek for local acts as they thought proper; and that they were satisfied that no measure would be satisfactory for Ireland which did not proceed on the lines laid down by Mr. Meldon's Bill, namely, that the duty of notification should rest on the occupier or person in charge of the patient unless relieved from that obligation by a certificate from the medical attendant, but that it should be optional with the medical man whether or not he would give that notification. Mr. Furlong referred to the results of the various systems of notification in English towns as reported to the Local Government Board, and spoke of the great necessity of a system of notification in Dublin—the tendency to bad epidemics of zymotic diseases in Dublin and in Irish towns being greater than in English towns. He remarked that the only tangible objection to the system of notification that appeared to exist in England was the cost to the town of hospital accommodation. That objection could not apply to Dublin, because the hospital accommodation for infectious cases was unusually large in that city. He believed there were five hundred beds for infectious cases. With regard to the question of a general Act as opposed to local Acts, the tendency of modern legislation was, he said, to embody in a general Act various provisions, instead of leaving it to towns to get their own Acts, and that was so, especially with regard to the Public Health Act of 1878, which embodied all the powers conferred by local Acts. With regard to the principle of the occupier notifying, in preference to the medical man, the Sanitary Association was satisfied, after very careful and anxious study of the question, and from replies made by medical men throughout the country, that no other system would be satisfactory.

In reply to an inquiry from the **CHIEF SECRETARY**, as to the present feeling of the medical profession in those towns in which they had now some experience of the working of the system of notification, Dr. **JACOB** said the condition of affairs was this. In the great majority of cases, the compulsory notification clauses which governed the English towns were introduced into and hidden in private Bills—Water Bills, Gas Bills, and so on—and, in the majority of instances, there was no opportunity whatever afforded to the medical profession in these towns to express any opinion on the subject. So far did this go in some cases, that, whereas the law was that no Bill could be promoted out of the borough fund, unless after public notice giving the inhabitants an opportunity of discussing it, some of the towns evaded the necessity for holding a public meeting by not taking the money from the borough fund. And, as a matter of fact, the great majority of the medical men of these English towns in which compulsory notification had been decreed found themselves face to face, not with a Bill, or proposal, or suggestion, but with an Act of Parliament; and that was the first intimation of putting the compulsory notification system into operation in these towns. The medical officers, therefore, had no opportunity of expressing their opinion on the question; but, wherever an opportunity was afforded, they did protest in the most earnest way against the compulsory duty of notification being imposed on them. In Liverpool, recently, an attempt was made to introduce the system, and it met with such strong opposition that it was defeated in the Town Council. The Council then sent a deputation to the towns in which the system existed, and the deputation reported, and the proposal was again made, and defeated a second time. He desired to press upon the Chief Secretary the fact that, in the Parliamentary return before, the medical reports were from officers of health and Corporation sanitary officers exclusively, not from the profession at large.

Dr. **GEORGE F. DUFFEY**, Honorary Secretary of the Dublin Branch, also drew the Chief Secretary's attention to some points in favour of notification in the report of the English Local Government Board, and informed him, as expressive of the feelings of a large body of the profession, that the British Medical Association, which now numbered twelve thousand members, passed a resolution at its annual meeting in Worcester in 1882, affirming the principle of compulsory notification, but, at the same, expressing the opinion that the compulsion to notify should be placed on the householder as his duty as a citizen, and not on the medical man. Dr. Duffey also referred to the statements made by Sir Charles Dilke in answer to a deputation from the Association that waited upon him in reference to the subject in July, 1882, and to the fact that Sir Charles Dilke had expressed his willingness to refer Mr. Hasting's Bill, if it came up again, to a select committee to take evidence on the subject of the notification of infectious disease generally, and the best method of making it. Now, the deputation submitted to the Chief Secretary that Mr. Meldon's Bill, which was drawn up by the Dublin Branch of the British Medical Association, of which he had the honour to be secretary, was the best method of settling the question; and further, that no Act of the kind, which had not the support of the medical profession in the kingdom—as Mr. Meldon's Bill had—could be worked satisfactorily or effectually.

The Vice-President of the Royal College of Surgeons in Ireland and the Registrar of the College of Physicians having informed the Chief Secretary that their respective corporations were in favour of Mr. Meldon's Bill, Dr. **JACOB**, as President of the Irish Medical Association, said that it should be understood that they did not appear there in any way as a professional trades-union, in order to save the medical men of the country from certain responsibilities. Experience, he thought, showed that they would be quite willing to accept any responsibility that would be for the advantage of the public and consistent with their duty. The chief reason the Association was against Mr. Hastings's and Mr. Grey's Bills was not that they wished to evade an unpleasant duty, but because experience showed, more particularly in Ireland, that the result of the imposition of such a duty on them would be to exclude medical men from the early treatment of infectious disease, a result which, he need hardly remark, would be disastrous. It was admitted by the Public Health Committee of the corporation that dispensary medical officers, who were also the sanitary officers, on whom the duty of notification rested, were systematically excluded by certain members of the lower classes of the population from the early treatment of disease, while irresponsible practitioners, who were under no such obligation to report, were, as a rule, called in. After full consideration of the question, the Irish Medical Association had come to the conclusion that it would serve every purpose—some 99 out of 100 cases of infectious disease—if the onus were thrown on the occupier of the house, and would insure that medical men would be called in at the earliest possible moment.

The **CHIEF SECRETARY**, in replying, said: It appears that there is absolutely no dissent as to the question of extending the system of notification to Ireland, and extending it over the whole island. Likewise, there is no dissent as to the great advantage which that system has been in those towns and cities where it has been adopted in the sister island. He should have supported a Bill for the notification of infectious diseases in Ireland, if there had been only one Bill, and if there were no difference of opinion upon its details. But most of the speakers and gentlemen who addressed him have referred to a point—a narrow point, but to which they attach very great importance—and they have quite convinced me that it is in their minds a very important point, and those minds are of such a nature that the very greatest respect must be paid to any conclusion at which they arrive. I should be quite unwilling to express any definite opinion here in this room to-day. Before I come to a conclusion in the matter, it will be necessary to consult very carefully with Sir Charles Dilke, and to obtain a good deal of information which can only be obtained from printed and from written documents, and which, I think, it is probable will confirm everything that has been stated in this room to-day. If the statement which has been made, that, in 99 cases out of every 100, or even 97 or 98 out of every 100, the system which finds favour here will be as effectual as the system which has been adopted in the English towns, be accurate, it is a matter of so very great importance to pass a measure of this sort, and, when the measure has been passed, to have it worked in a manner which is congenial to those who will have so large a part in working it, that it will be in itself a very great argument for acceding to your wishes. I may say that I am very anxious indeed to obtain detailed information as to the feelings of the medical profession in those towns and cities where they have had experience of the working of the measure; and if any gentleman can think of any means of putting me in possession of that feeling, I shall be very much obliged if he will suggest it to me. It is quite plain that before there is any serious attempt to extend the system to Ireland, and still more to extend it to the whole island, that point must be cleared up to the satisfaction of the Government. I can assure the deputation that I will use great diligence in coming to a conclusion; and, in coming to a conclusion, I shall be very considerably influenced by the very moderately expressed opinions which I have had the pleasure of hearing to-day—opinions that I am quite convinced proceed in the very largest degree from public spirit and philanthropy.

The deputation then withdrew.

HEALTH OF ENGLISH TOWNS.—During the week ending the 19th instant, 5,980 births and 3,479 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 8,762,354 persons. The annual rate of mortality per 1,000 living in these towns, which had been 22.2 and 21.0 in the first two weeks of this year, further declined to 21.0 during the week ending the 19th instant. The rates in the several towns, ranged in order from the lowest, were as follow: Wolverhampton, 11.3; Blackburn, 15.6; Portsmouth, 15.7; Halifax, 16.4; Bradford, 17.2; Hull, 17.3; Bolton, 18.7; Nottingham, 18.8; Bristol, 18.9; Newcastle-upon-Tyne, 19.3; Derby, 19.7; Leeds, 19.8; Plymouth, 20.0; Norwich, 20.2; Birmingham, 20.3; London, 20.5; Liverpool, 20.7; Brighton, 21.7; Huddersfield, 22.5; Leicester, 22.8; Oldham, 23.0; Sunderland, 23.3; Preston, 23.6; Salford, 24.1; Birkenhead, 24.7; Sheffield, 25.0; Cardiff, 25.7; and Manchester, 27.6. The average death-rate last week in the twenty-seven provincial towns did not exceed 20.9 per 1,000, and was, therefore, but slightly higher than that recorded in London. The 3,479 deaths from all causes registered last week in the twenty-eight towns included 460 which were referred to the principal zymotic diseases, against 447 and 456 in the two preceding weeks; of these, 117 resulted from whooping-cough, 108 from scarlet fever, 100 from measles, 61 from "fever" (principally enteric), 28 from diphtheria, 27 from diarrhœa, and 19 from small-pox. These 460 deaths were equal to 13.2 per cent. of the total deaths, and to an annual rate of 2.7 per 1,000. This zymotic rate last week was equal to 2.6 in London, and averaged 2.8 in the twenty-seven provinciclal towns, ranging from 0.0 and 0.6 in Plymouth and Derby, to 4.2 in Preston, Huddersfield, Sheffield, and Sunderland, and 5.8 in Salford. The fatal cases of whooping-cough in the twenty-eight towns, which had been 103 and 99 in the two preceding weeks, rose to 117; this disease caused the largest proportional fatality in Huddersfield, Brighton, and Newcastle-upon-Tyne. The deaths referred to scarlet fever, which had increased from 104 to 117 in the three preceding weeks, declined again to 108, and caused the highest rates of mortality in Sheffield, Leeds, and Salford. The 100 fatal cases of measles were 16 less than those returned in the preceding week, but caused excessive death-rates in Salford, Birkenhead, and Oldham. The deaths referred to different forms of fever, which had been 51 in each of the first two weeks of the year, rose to 61 last week; the rate of mortality from this disease was equal to 2.2 in Cardiff, 1.9 in Blackburn, and 1.3 in Salford. The 28 fatal cases of diphtheria recorded in the twenty-eight towns last week included 16 in London and 3 in Hull. The 19 deaths from small-pox in these towns exceeded by 7 the number in the preceding week; 6 were returned in Sunderland, 5 in London, 4 in Birmingham, and 4 in Liverpool. The death-rate from diseases of the respiratory organs, judged by the metropolitan returns, continues much below the average; the 397 deaths referred to these diseases in London last week, though somewhat exceeding those returned in recent weeks, were as many as 142 below the average weekly number, and equal to a rate of 5.2 per 1,000. The causes of 81, or 2.3 per cent. of the 3,479 deaths registered last week, were not certified either by medical practitioners or by coroners. In London, the proportion of such deaths did not exceed 1.5 per cent.; whereas it averaged 3.0 per cent. in the twenty-seven provincial towns, and showed the largest excess in Hull, Salford, Birkenhead, and Halifax.

HEALTH OF SCOTCH TOWNS. In eight of the principal Scotch towns, having an estimated aggregate population of 1,254,607 persons, 878 births and 532 deaths were registered during the week ending the 19th instant. The annual rate of mortality, which in the two preceding weeks had been 25.4 and 21.1 per 1,000, rose last week to 22.0, which was 1.0 above the average rate for the same period in the twenty-eight large English towns. Among these eight Scotch towns, the death-rate was equal to 15.6 in Dundee, 18.0 in Leith, 19.2 in Edinburgh, 19.3 in Greenock, 20.2 in Perth, 22.0 in Aberdeen, 25.0 in Paisley, and 25.9 in Glasgow. The 532 deaths registered in these towns, last week, included 87 which resulted from the principal zymotic diseases, of which 22 were referred to diphtheria, 22 to whooping-cough, 17 to diarrhœal diseases, 12 to scarlet fever, 8 to measles, 6 to "fever," and not one to small-pox. These 87 deaths were equal to more than 16 per cent. of the total deaths, and to a rate of 3.6 per 1,000, exceeding by 0.9 the rate recorded last week in the twenty-eight English towns. No deaths from any of these zymotic diseases were returned in Perth, while they caused the highest death-rates in Glasgow, Edinburgh, and Aberdeen. The 22 fatal cases of diphtheria showed a further increase upon those recorded in the first two weeks of this year, and included 8 in Glasgow, 8 in Aberdeen, and 3 in Edinburgh. Of the 22 deaths from whooping-cough, which also showed an increase upon recent weekly numbers, no less than 17 occurred in Glasgow, and 4 in Edinburgh. The 12 fatal cases of scarlet fever included 8 in Glasgow, and 4 in Edinburgh. The deaths referred to measles and fever showed a decline from those recorded in the preceding week. The rate of mortality from diseases of the respiratory organs continues to be much below that recorded in the corresponding season of last year, and was last week equal to 4.2 per 1,000. Of the 532 deaths registered last week in these towns, as many as 74, or nearly 14 per cent., were uncertified.

HEALTH OF IRISH TOWNS.—In the week ending January 5th, the total number of deaths in the sixteen principal town districts of Ireland was 455; the average annual death-rate represented by the deaths registered being 27.6 per 1,000 of the population. The respective rates for the several districts were as follows: Sligo, 14.4; Lisburn, 14.5; Galway, 16.8; Kilkenny, 16.9; Dundalk, 17.5; Newry, 21.1; Belfast, 22.1; Lurgan, 25.7; Dublin, 27.1; Drogheda, 29.6; Wexford, 29.9; Londonderry, 33.9; Cork, 38.3; Armagh, 41.3; Waterford, 41.7; Limerick, 43.2. The deaths from the principal zymotic diseases in the 16 districts were equal to an annual rate of 3.5 per 1,000, the rates varying from 0.0 in Newry, Kilkenny, Drogheda, Wexford, and Sligo, to 20.7 in Armagh; the 8 deaths from all causes registered in the last named district comprised 4 from whooping-cough. Among the 92 deaths from all causes registered in Belfast were 5 from scarlatina (being 4 under the number for the preceding week), 3 from whooping-cough, and 3 from diarrhœa. Among the 59 deaths in Cork were 8 from measles, and 1 each from typhus, enteric fever, and diarrhœa. Among the 32 deaths in Limerick were 1 from measles, 1 from scarlatina, and 4 from whooping-cough; of the 19 deaths in Londonderry 2 were from scarlatina, 1 from enteric fever, 1 from diarrhœa; and of the 3 deaths in Lisburn 1 was caused by scarlatina, and 1 by enteric fever.—In the week ending January 12th, the number of deaths was 425; the average annual death-rate was 25.7 per 1,000, the respective rates for the several districts being as follows: Drogheda, 4.2; Lisburn, 9.7; Newry, 10.5; Sligo, 14.4; Galway, 16.8; Waterford, 20.8; Cork, 22.1; Belfast, 25.0; Dundalk, 26.2; Dublin, 26.7; Londonderry, 28.5; Armagh, 31.0; Lurgan, 35.9; Limerick, 36.7; Kilkenny, 42.3; Wexford, 51.3. The deaths from the principal zymotic diseases in the 16 districts were equal to an annual rate of 3.6 per 1,000, the rates varying from 0.0 in Galway, Newry, Drogheda, Wexford, Sligo, Lisburn, and Lurgan, to 10.3 in Armagh; the 6 deaths from all causes registered in the last named district comprised 2 from whooping-cough, 4 fatal cases of which disease had been registered during the preceding week. Among the 104 deaths registered in Belfast were 6 from scarlatina (being 1 over the number for the preceding week), 3 from whooping-cough, 2 from diphtheria, and 4 from diarrhœa. Among the 34 deaths registered in Cork were 5 from measles, 1 from scarlatina, 2 from typhus, and 2 from simple continued and ill-defined fever; and among the 27 deaths registered in Limerick were 1 from measles, 2 from scarlatina, 1 from enteric fever, and 1 from diarrhœa.

HEALTH OF FOREIGN CITIES. It appears, from statistics published in the Registrar-General's return for the week ending the 12th instant, that the death-rate recently averaged 31.0 per 1000 in the three principal Indian cities; it was 26.0 in Bombay, 30.8 in Calcutta, and 38.3 in Madras. Small-pox caused 21 deaths in Madras, showing a further decline from recent weekly numbers, and 3 and 26 deaths from cholera were respectively returned in Bombay and Calcutta; "fever" showed the largest proportional fatality in Calcutta. According to the most recent weekly returns, the average annual death-rate per 1,000 persons estimated to be living in eighteen of the largest European cities was 26.3, and exceeded by 1.3 the mean rate during the week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 32.8, and somewhat higher than in recent weeks; the 584 deaths included 26 from typhus and typhoid fever, and 22 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 23.8; it was 22.9 both in Copenhagen and Stockholm, and was 26.9 in Christiania. Scarlet fever caused 4 deaths in Stockholm and 3 in Christiania. In Paris the death-rate was equal to 23.6, and was lower than in recent weeks; the deaths included 26 from diphtheria and croup, and 29 from typhoid fever. The 207 deaths in Brussels, including 9 fatal cases of small-pox, gave a death-rate of 28.3. In Geneva the rate was 23.8, and two of the 32 deaths resulted from scarlet fever. The usual return from the principal Dutch cities—Amsterdam, Rotterdam, and the Hague—does not appear to have come to hand. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 25.7, and ranged from 22.0 and 22.1 in Dresden and Hamburg to 33.3 in Breslau and Trieste. Small-pox caused 42 deaths in Prague, a further increase upon recent weekly numbers. Diphtheria showed more or less fatal prevalence in most of these German cities, but especially in Dresden, where 19 of the 97 deaths resulted from this cause. The death-rate was equal to 25.0 in Venice, and 31.7 in Turin; in the latter city two fatal cases of small-pox, and 11 of measles were recorded. The 152 deaths in Lisbon included 2 from small-pox and 9 from diphtheria, and were equal to a rate of 38.9. The table gives returns from but two American cities; the rate was 21.2 in Baltimore, and 21.6 in Philadelphia. Diphtheria caused 28 deaths in Philadelphia, and 12 in Baltimore; 14 fatal cases of measles occurred in Baltimore, and 11 of typhoid fever in Philadelphia.

A CONVALESCENT FEVER HOSPITAL.

AT the meeting of the Asylums Board, on Saturday last, it was, after a long and animated discussion, resolved, by a majority of ten, to acquire the Winchmore Hill site, for the purpose of erecting a convalescent fever hospital.

INDIA AND THE COLONIES.

INDIA.

DR. CORNISH, Surgeon-General, has been appointed a member of the Madras Legislative Council.

THE Government of Bombay has published a long memorandum on the plague among cats, which appeared at Ahmednuggar two years ago, and at Siroor last June. The Government seems to think that the plague may have some connection with the cholera, and invites opinions on the subject.

A NEW HILL-STATION.—The Lahore paper states that Cherat in future, as regards medical administration, is to be considered as a hill-station, on the same footing as Murree, Landour, and Darjeeling, the officer in medical charge being appointed by the Surgeon-General at Simla. This appointment can only be for a season, and not for a year, as in the other cases; as there are no troops at Cherat in the winter.

OFFICERS OF HEALTH IN BOMBAY. At a recent meeting of the Town Council of Bombay, to consider the Municipal Budget, it was decided that two assistant health-officers, instead of one, should be appointed, and that one of these officers should be a medical man. It is satisfactory to note that steps are being taken to improve the sanitary condition of Bombay, and that the municipality is awake to the necessity of having skilled medical supervision of all alterations intended to bring about this desirable result.

OBITUARY.

WILLIAM HAWKINS GARRINGTON, J.P.

THERE passed away on the 15th instant, at the advanced age of 79, after a long and honourable career, at his residence, Southsea, Mr. William Hawkins Garrington. His professional education was acquired at St. Bartholomew's Hospital. He obtained the L.S.A. in 1826, and the diploma of the Royal College of Surgeons in 1845. Among his early appointments was that of medical officer to the workhouse at Portsmouth, and for a short time he was on the staff of the Royal Portsmouth Hospital. As one of the oldest practitioners in the district, he was elected to the chair of the Southern Branch of the British Medical Association. In 1859, he was elected Mayor of Portsmouth—an office which he filled with credit to himself and to the satisfaction of the town. He was the senior magistrate for the borough; and, as a mark of the esteem in which he was held by his brother justices, they presented him with his portrait, which is now hung in the council-chamber. He enjoyed in a marked degree the confidence and esteem of his patients, and the repute which he had gained in his profession was all the more appreciated because of the kindliness and patience which were always shown both to rich and poor. But Mr. Garrington was most familiarly known, and will be best remembered, as coroner for Portsmouth—an office which he most efficiently filled during the past nineteen years. Nothing could be more satisfactory than the exhaustive and business-like manner in which his inquiries were conducted. Whether the case were the most ordinary "death from natural causes," or a mysterious homicide, there was the same quiet determination to arrive, if possible, at the truth. He was, moreover, an admirable specimen of the English gentleman, his affability to his friends and his courtesy to all being among the most conspicuous of his traits.

His funeral was attended by all the members of the medical and legal professions of Portsmouth, Southsea, and the immediate neighbourhood, who could be present: by the magistrates, town-councillors, aldermen, and mayor, and other public officials; and by several hundreds of others, including many of the principal inhabitants of the borough. This large and representive gahtering was a fitting mark of respect to one who, during a long professional, public, and official career, gained golden opinions from all classes of the community.

Mr. Garrington has left two sons and four daughters; and is succeeded in his practice by his son, Dr. Arthur M. Garrington, who for many years past had been his partner.

We have been favoured with an account of Mr. Garrington's illness and of the *post mortem* examination, drawn up by his friend and attendant, Mr. H. Burford Norman, from which we take the following extracts:—Mr. Garrington's last illness extended over seventeen days, ending on Tuesday, January 15th. He had suffered much inconvenience at times for many years from the inefficient action of the bowels, which obliged him to take frequently some aperient medicine, and had inspired him with the belief that he was the subject of some organic disease as the cause of this trouble. This fear was not shared by his medical friends, and he was actively engaged in the practice of his profession, and discharged his duties as coroner quite well up to the time that the last illness commenced. At the onset there were no serious appearances, but after a few days he began to suffer much from hiccough, distension of the bowels, and feculent vomiting. No relief followed the use of O'Beirne's tube, either by the passage of wind, or of fæces when a copious enema was administered. He had no great pain, and careful palpation of the abdomen threw no further light upon the matter. He had always one tender spot on these examinations, in the left side of the abdomen, about midway between the umbilicus and crest of the ilium.

He found great comfort from the use of ice, and from hypodermic injections of morphia. He was fed with peptonised enemata, and on the whole was tranquil and cheerful. Any attempt to take food by the mouth only caused sickness and hiccough. Three hours before his death, vomiting, which had been kept in abeyance by the treatment pursued, returned suddenly, and with great violence, and he gradually sank, retaining consciousness to the last.

The *post mortem* examination showed that the colon was pervious and healthy up nearly to the cæcum. The cæcum itself, and adjoining part of the colon, the appendix vermiformis, and the end of the ileum, were all glued together and to the pelvic wall by old adhesions, constituting, as it were, a tangled mass. The small intestines were distended, with flatus and pulpy fæces, and very much congested, particularly towards the lower end of the ileum. There were no signs of recent peritonitis. The ileo-cæcal valve was much thickened by some hard deposit in its coats, so that a stream of water could scarcely be made to pass through it. This deposit appeared to be the centre from which inflammatory action had been set up in the adjacent parts. The mucous coat of the bowel at the valve seemed to be in a state of incipient ulceration; the muscular coat of the ileum near the valve was much thickened. It was a curious point in the case that all the disease found after death was just on the opposite part of the body to the only spot which during life was painful to the touch.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 17th instant, and, when eligible, will be admitted to the pass-examination, viz.:

Messrs. S. Wilson and H. Levy, students of St. Thomas's Hospital; E. K. Holman, H. Stilfox, and A. Cuolahan, of Guy's Hospital; S. A. Clarke, and W. Williams, of St. Mary's Hospital; L. L. Verano and A. E. Wynter, of St. Bartholomew's Hospital; F. C. Brodie and S. W. Quartley, of the Middlesex Hospital; J. W. Winterburn, of the Manchester School of Medicine, and J. R. Turner, of the Sheffield School of Medicine.

Six candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months, and one for six months.

Rejections.—At the primary or anatomical and physiological examinations for the diploma of membership of the Royal College of Surgeons, which was brought to a close on the 17th instant, when 211 candidates had been examined, no less than 66, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months, and 13 for six months, making a total of 79 rejected candidates. At the corresponding period last year, there were 190 candidates, of which number 139 passed, 44 were referred to their studies for three months, and seven for six months.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners on the 21st instant, viz.:

Messrs. G. B. Hoffmeister, B.A.Cantab., Furnival's Inn; F. Webster, L.S.A., Bewdley; H. A. Sheppard, L.S.A., Southampton; C. J. J. Harris, L.S.A., Wandsworth Common; J. Bell, L.R.C.P.Lond., Albert Street, N.W.; E. D. Kirby, M.B.Ed., Leamington; N. E. Mackay, M.D.Halifax, Halifax; F. U. Anderson, L.R.C.P.Ed., Halifax; J. W. Harris, L.S.A., Ivybridge, Devon; F. R. Bradshaw, M.B.Durham, Ampthill Square; H. J. Ley, M.B.Ed., Teignmouth; C. S. Young, L.S.A., Dundee; G. W. Ridley, M.B.Durham, Newcastle on Tyne; A. W. Scott, L.S.A., Stourbridge, E. W. D. Kite, L.S.A., West Bromwich; G. T. Myles, L.R.C.P.Ed., Bristol; E. D. Minter, L.R.C.P.Ed., Plympton; G. H. Williams, L.R.C.P.Ed., Warrington; W. L. Edwards, L.R.C.P.Lond., Carmarthen; and J. J. Prendergast, L.R.C.P.Ed., Melbourne.

Seven candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months, and one for three months.

The following gentlemen passed on the 22nd instant, viz.:

Messrs. W. B. Aitken, M.B.Glasgow, Dalsy, Ayrshire; A. S. Kendall, M.D. Belle Vue Med. Coll., Sydney, N.S.W.; W. M. Buxton, M.B.Durham, Alderney Road, E.; W. H. Bean, L.S.A., Colchester; L. A. Lawrence, L.S.A., Belsize Avenue, N.; R. P. Jefferson, Leeds; W. H. Francis, M.B.Ed., Coquimbo, Chili; A. H. Jackson, L.R.C.P.Ed., Holtham Road, N.W.; F. Spicer, M.B.Durham, Carleton Road, N.; H. P. Taylor, B.A.Cantab., Barnard's Inn; J. P. Parsons, M.B.Durham, Blackheath; and J. Scott, B.A.Cantab., Barnard's Inn.

Five candidates were approved in Surgery, and, when qualified in Medicine, will be admitted members of the College; and ten candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months, and three for three months.

The following gentlemen were admitted members on the 23rd instant, viz.:

Messrs. C. Kebbell, Brighton, A. O. Lankester, Belsize Park, B. Hunt, B.A.Oxon., Oxford, students of St. Bartholomew's Hospital; R. Koettlitz, Dover, of Guy's Hospital.

Six candidates who passed in Surgery at previous meetings of the Court, having subsequently obtained medical qualifications, were admitted members of the College, viz.:

Messrs. E. J. Wenyon, M.B.Lond., Coniscliffe, near Darlington, and J. F. Saunders, L.S.A., Gravesend, of Guy's Hospital; W. J. Tilley, L.R.C.P.Lond., Shepherd's Bush Green, and E. N. Sheldrake, L.R.C.P.Lond., Albion Street, W., of University College; W. Bradbrook, L.S.A., Green Street, E., of the London Hospital; C. J. Weller, L.R.C.P.Lond., Coleshill Street, W., of St. George's Hospital.

Five candidates passed the examination in Surgery, and, when qualified in Medicine and Midwifery, will be admitted members of the College. Eleven candidates were referred for six months, and four for three months.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 17th, 1884.

Ingle, Arnold Clarkson, Regent Street, Cambridge.
Saunders, James Frederick, Park Place, Gravesend.

The following gentleman also on the same day passed the Primary Professional Examination.

Dow, Hugh Aitken, Edinburgh University.

MEDICAL VACANCIES.

The following vacancies are announced:

ARDEE UNION. Medical Officer, Dunleer Dispensary. Salary, £[illegible] per annum, and fees. Election on February 4th.

BRECON INFIRMARY.—Resident House-Surgeon. Salary, £120 per annum. Applications by January 31st.

DERBY AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Second Assistant Surgeon. Salary, £160 per annum. Applications to Mr. J. Bullivant, 58, Abbey Street, Derby.

DERBYSHIRE GENERAL INFIRMARY.—House-Surgeon. Salary, £100 per annum. Applications by January 26th.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Applications by January 31st.

GENERAL INFIRMARY, Leeds.—House-Surgeon. Salary, £[illegible] per annum. Applications to Dr. T. Clifford Allbutt by February 8th.

HAYDOCK LODGE ASYLUM, Ashton, near Newton-le-Willows, Lancashire.—Medical Superintendent. Salary, £200 per annum. Applications to E. H. Beaman, Medical Proprietor.

HOSPITAL FOR WOMEN, Soho Square. Two In-patient Clinical Assistants. Applications to the Registrar.

KING'S COLLEGE HOSPITAL.—Sambrooke Medical Registrar. Applications to J. W. Cunningham, Esq., King's College, by January 31st.

NOTTINGHAM BOROUGH ASYLUM.—Assistant Medical Officer. Salary, £100 per annum. Applications by February 16th.

PAROCHIAL BOARD OF PENNYGOWN AND TOROSAY.—Medical Officer. Salary, £80 per annum. Applications to Alex. Macdougall, Inspector of Poor, Auchnacraig, by February 2nd.

RADCLIFFE INFIRMARY, Oxford.—Honorary Physician. Applications by February 6th.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Librarian. Salary, £250 per annum. Applications by February 1st.

ROYAL SOUTH LONDON DISPENSARY, St. George's Circus, Lambeth Road, S.E.—Honorary District Surgeon. Applications to Mr. Hentsch by January 26th.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN. Physician. Applications to G. Scudamore, Secretary, Lower Seymour Street, Portman Square, W.

SUSSEX COUNTY HOSPITAL.—Physician. Applications by February 6th.

SUSSEX COUNTY HOSPITAL.—Assistant-Physician. Applications by February 6th.

THE HOSPITAL FOR SICK CHILDREN, 49, Great Ormond Street, Bloomsbury. Assistant-Surgeon. Applications by February 6th.

WEST HERTS INFIRMARY.—House-Surgeon and Dispenser. Salary, £100 per annum. Applications by February 6th.

WESTMINSTER GENERAL DISPENSARY, Gerrard Street, Soho.—Physician. Applications by January 29th.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—House-Physician. Salary, £100 per annum. Applications by February 8th.

MEDICAL APPOINTMENTS.

APTHORP, F. W., M.R.C.S., L.R.C.P., appointed Admiralty Surgeon's Agent, Chichester Harbour Division, *vice* Thomas Dutton, M.D., M.B., M.R.C.P., resigned.

BEAMISH, S., M.D., appointed Medical Officer to the Union Hall Dispensary District, Skibbereen Union.

BOURNE, A., L.R.C.P., appointed Visiting Medical Assistant to the Newcastle-on-Tyne Dispensary, *vice* T. Clarke, M.B., resigned.

FISHER, S. Winter, M.D., appointed Honorary Physician in Ordinary to the Brighton and Hove Dispensary, *vice* Dr. Tyler Smith, resigned.

HANDFIELD-JONES, Montagu, M.B.Lond., M.R.C.P., appointed Assistant-Physician to the Chelsea Hospital for Women.

HARVEY, W., F.R.C.S., appointed Medical Officer of Health to the Newton Abbott Union and Urban Sanitary Authorities of Dawlish and Wolborough, *vice* L. Armstrong, M.R.C.S., resigned.

MEEHAM, N., M.D., appointed Medical Officer to the New Ross Union Dispensary, *vice* P. Mullin, L.R.C.S.I., deceased.

MIVART, F. C. St. George, M.R.C.S., appointed Honorary Surgeon to the Western General Dispensary.

SMYTH, F. Sydney, L.R.C.P., L.R.C.S.Ed., appointed Honorary Medical Officer to the Royal Kent Dispensary (Brockley District).

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTH.

EMERSON.—On the 21st instant, at 1, Park Side, Cambridge, the wife of P. H. Emerson, Esq., B.A., M.R.C.S., of a daughter.

MARRIAGE.

HOUGH—REDMAYNE.—On the 17th inst., at Brathay Church, Ambleside, by the Rev. E. H. Perowne, D.D., Master of Corpus Christi College, Cambridge, assisted by the Rev. G. F. Hough, brother of the bridegroom, and the Rev. H. S. Callander, Vicar of the Parish, Charles Henry, third son of James Hough, of Cambridge, to Alice Maud, second daughter of Giles Redmayne, of Brathay Hall, Ambleside.

DEATH.

BATEMAN.—On the 11th instant, at Cape Town, South Africa, Lewis Philip Bateman, M.R.C.S., L.S.A., son of John Bateman, of Dudley, in the [illegible]th year of his age.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY..........St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY.......St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY..........King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY.........St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. S., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu., F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu., F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. The President (Sir Joseph Fayrer) will read a paper on Snake-poisoning, its Nature and Treatment, with a Fatal Case of Snake-poisoning.

THURSDAY.—Abernethian Society, St. Bartholomew's Hospital, 8 P.M. Mr. Lyndon: Medical Openings in the Colonies.—The Parkes Museum, 5 P.M. Lecture, by Mr. H. A. Darbishire, F.R.I.B.A., on Artisans' and Labourers' Dwellings.

FRIDAY.—West London Medico-Chirurgical Society. Mr. Keetley will show cases of (1) Hey's Amputation, (2) Pirigoff's Amputation (two cases), (3) Syme's Amputation, (4) Amputation through Knee-joint, Patella being left. Dr. J. Allden Owles will read brief notes of the progress and end of a case of Aphasia.—Medical Society of Charing Cross Hospital, 8 P.M. Mr. F. A. Saw will read a paper on Homœopathy. Dr. A. Julius Pollock will take the chair.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

RESIDUAL EVIDENCE AND COLLECTIVE INVESTIGATION.

SIR,—The amount of rhetoric expended in praise of collective investigation promises to be endless, as it has already been profuse and unprecedented, not to say excessive and surfeiting. Returning somewhat wearily to the perusal of yet another "address"—that in which Dr. Duckworth sums up, in your last number, the results and embodies the hopes of the collective investigators—I am struck very forcibly by the meagreness of the showing compared with the profuse expenditure and the elaborate laudation. According to recent JOURNALS, something like £1,600 has now been voted for this purpose. Thus far, according to Dr. Duckworth, the main achievement realised is what he quaintly describes as "the issue of a large and difficult problem," than which "none has excited more widespread interest, and, at the same time, more obloquy." This problem which has excited obloquy is the question of the contagion of phthisis. "The residuum (!) of evidence adduced so far," he says, "goes to prove" that any fears of contagion are all but vain, and that "only under conditions of extreme contiguity and of most vicious hygiene can this malady prove communicable." I should have thought that this was exactly where the question previously stood, according to the universal experience of mankind in general, and of medical practitioners in particular, and that, if the "residual evidence" obtained by so much effort has added no more to our knowledge, the less boasting about it the better. On other subjects, he has nothing but hopes and explanations to offer. A little more of the "bread" of knowledge, and a little less of the "sack" of addresses and mutual admiration, would, I think, make collective investigation infinitely more palatable to ordinary mortals, such as your obedient servant,

A MEMBER.

INHALATIONS (ESPECIALLY ANTISEPTIC) IN PULMONARY AFFECTIONS.

SIR,—While acknowledging Dr. Hassall's courtesy, in his explanation respecting the reason why he had not replied sooner to my communication in the BRITISH MEDICAL JOURNAL, I feel myself constrained to offer a few further remarks on the subject, and to reply to Dr. Hassall's objections respecting the efficacy of inhalations in these cases.

Dr. Hassall wishes to know what kind of inhaler I use. If Dr. Hassall will kindly refer to the pages of the BRITISH MEDICAL JOURNAL of a twelvemonth ago, he will find a description, by Dr. Yeo, of the inhaler used by that gentleman in all such cases, and which I have invariably adopted for my own patients, and which is made for me by Down, Bros., St. Thomas's Street, Borough. I do not claim any originality as to either inhaler or treatment, but took my ideas entirely from the writings of Dr. Burney Yeo, of whom I avow myself a complete disciple. I may add, the inhaler in question is of the naso-oral description.

Dr. Hassall, I see, continues incredulous respecting the efficacy of treatment by inhalation, with the present appliances in vogue at least. Let me recommend him to try Dr. Yeo's inhaler, and I feel confident his views will soon be modified. Let me also recommend Dr. Hassall to read attentively Dr. Yeo's "Lectures on Consumption and its Antiseptic Treatment" (published by Churchill); as also a clinical lecture, delivered by the same eminent authority, on "Phthisis treated by Antiseptic Inhalation," which appears in the BRITISH MEDICAL JOURNAL of July 1st, 1882.

Finally, in reply to Dr. Hassall's questions, let me beg to ask him another. Dr. Hassall suggests that "the nourishing diet, tonics, and cod-liver oil" produced so happy and rapid a change in my patient's condition. Now, to take one solitary instance among the unfavourable symptoms my treatment removed, let me ask Dr. Hassall: Can "nourishing diet, tonics, etc.," remove strongly marked fœtor of breath in a day or two? Awaiting Dr. Hassall's solution of this problem,—I remain, sir, yours very faithfully,

J. BRINDLEY JAMES, M.R.C.S.

MEDICAL OFFICERS OF CONVICT PRISONS.

"A CONSTANT READER" inquires as to what are the duties, the rate of pay, and the steps to be taken to become medical officer of one of Her Majesty's prisons; also what length of service is necessary to obtain a pension, etc.

*** The pay in Her Majesty's convict prisons commences at £250 for assistant-surgeons, and afterwards depends upon length of service and the particular prison to which the medical officer may be attached. Ten years service must have been fulfilled to entitle the holder of an appointment in any branch of the civil service to a pension. Applications should be made in the first instance to the Secretary, Her Majesty's Convict Prisons, Home Office, Whitehall, S.W.

MEDICAL SPEAKING-TUBE.

MR. F. SYDNEY SMYTH asks what is considered to be the best substance used in making the ordinary night speaking-tube, and whether any ironmonger or gas fitter can fix such a tube.

A Case of Hydrophobia.

SIR,—I was called on Monday, November 19th, to see a case of supposed derangement of the throat; and I found the patient, a man, aged about [illegible], suffering from symptoms which closely resembled those of hydrophobia. Up to the present time he had always been a remarkable healthy man, never before having had any occasion to send for a medical man.

Last June, it is stated, a dog, supposed to be mad, rushed into the yard, and the patient, seizing him in his arms threw him down without, it is affirmed having been bitten or injured, and the dog was subsequently killed. He continued perfectly well until Friday, November 16th, when he got wet, and sat for the remainder of the evening in his damp clothes. On Sunday he felt chilly and unwell, and on the same evening he noticed that he had a marked difficulty in swallowing liquids.

On Monday, when I was called to see him, I found him in bed, capable of speaking and describing his symptoms collectively. Upon attempting to drink, he first gave three or four convulsive gasps, and then swallowed a small quantity with a violent effort, which appeared to cause him great distress, and he lay down immediately afterwards in a state of extreme prostration for some minutes. His throat presented nothing abnormal, his tongue was covered with a thick white fur; his bowels were fairly regular, and there had been no gastric disturbance. I ordered him five grains of calomel and ten of jalap, to be taken at night, giving enemata of warm water to relieve the distressing thirst of which he complained. I also ordered him a mixture containing belladonna and chloroform.

On the following morning I found that the nervous symptoms had increased. The sound of the rain on the windows caused him great distress, and the thought of drinking threw him into a condition of extreme terror. During this time there was an absence of the hyperæsthesia of the surface, which generally accompanies rabies, but pressure on a certain spot situated between the eleventh and twelfth dorsal vertebræ caused a diaphragmatic spasm. Observing that the belladonna had produced no dilatation of the pupil, I increased the dose, and on the following day I observed an abatement of the symptoms. He had, in the mean time, vomited a certain amount of an orange-coloured and very acrid material, and he imagined that he was relieved, and could drink water with greater ease. I then made him drink some luke-warm water, to assist in clearing the stomach, and I gave him ten minims of tincture of Indian hemp, which relieved the spasms so remarkably, that his wife, who was at first anxious for a second opinion, seeing him so much relieved, decided to leave him alone. I then ordered the dose of Indian hemp to be repeated in six hours, and in the evening I got a message to say that he was much better and was able to drink. During this time attacks of spasmodic spermatorrhœa were marked symptoms.

On the following morning I was sent for, and a second opinion was also obtained. He agreed with me upon the nature of the disease. We went to the patient, whom we found nearly pulseless; the heart sounds were almost inaudible, and there was copious vomiting, the vomited matters resembling coffee-grounds. A few râles were heard over the back of his lungs, and, after about an hour, trismus, accompanied by tetanic spasms, set in. He became semi-delirious, and died at about 11 o'clock in the morning.

With the exception of the absence of the extreme hyperæsthesia of the skin, the symptoms were otherwise typically those of hydrophobia.—Yours faithfully, ALFRED A. HAYES, L.K. and Q.C.P.I., L.R.C.S.I.

Early Occurrence of Cholera in India.

SIR,—Some of your readers may possibly be interested to know that Sir E. Clive Bayley, in the course of his researches in Indian history, has discovered what is probably much the earliest notice of the occurrence of epidemic cholera in India. The epidemic compelled Ahmud Shah I, in the year 1438, to raise the siege of the fort of Mandoo in Malwah. It killed several thousand men in the course of two days, and the survivors were unable to bury the dead.

The disease was "of a kind little known in Hindostan." It is variously spoken of as *taun*, or *azim*, or *waba*, all terms descriptive of pestilence, and *waba* is the word usually employed by Arabs at the present day to designate cholera.

I regret that this information did not reach me in time to be inserted in the new issue of *The Annals of Cholera up to the year* 1817.—I am, etc.,

January 16th, 1884. JOHN MACPHERSON, M.D.

The Occupations of the Blind.

SIR,—My attention has been drawn to a paragraph in your paper on the above subject, in which it is stated that, out of 23,000 blind in England and Wales, only 11,000 are unoccupied, and this unoccupied class includes children and old people. Would it were so! but, by reference to the tables, it may be seen that the occupation set down is either that actually followed by the blind person or that followed by him before he became blind, and this invalidates all conclusions to be derived from the tables as respects the occupations of the blind. In the table two are marked as dentists, six as painters (artists), one as a photographer, and twenty nine as coachmen. No one is more anxious than I am to find new remunerative occupations for the blind, but the above employments seem hardly compatible with loss of sight. On the other hand, occupations are actually followed by certain blind persons which are sufficiently extraordinary. Thus the Registrar General mentions a blind ostler and a blind fisherman; in both of which cases inquiry showed that the information given in the returns was correct. I myself know of a blind sculptor, a blind night caller, two blind men who load waggons, one man buys poultry on commission; and another blind man is recently dead who was a horse dealer on a large scale.—Yours truly, T. R. ARMITAGE, M.D.

33, Cambridge Square, Hyde Park, London, W., January 17th, 1884.

Bread for the Diabetic.

SIR,—The best preparation of gluten for diabetic patients, in my opinion, is a little *[illegible]*, prepared by M. Victor Foucart, 31, Passage Vero-Dodat, Paris, and called by him "Pains pour gastralgiques de gluten." He charges one franc per 100. I always order enough for a month's consumption at a time for my patients, who, after having tried all our English preparations, are unanimous in expressing themselves as almost reconciled to the loss of bread when they can get these. They keep well in a tin in a dry place, and can be got over with little or no trouble. They can be split and buttered, or munched up whole. They are also good for corpulent people, and can be used with advantage in other cases.—I am, etc., H. D. PALMER.

Nayland, Colchester, January 20th, 1884.

Albuminuria and Chlorodyne.

SIR,—Two cases have recently come under my observation, and very much puzzled me; perhaps you may deem them worthy of record in your JOURNAL, and some of your contributors may be able to suggest some explanation of them.

A boy suffering from well marked valvular disease of the heart, the result of rheumatic fever, became anasarcous to an extreme degree, and the urine became albuminous. The usual remedies for such a condition were tried, without the slightest benefit, and the case was considered absolutely hopeless. To relieve the boy's distress, the mother, on her own responsibility, gave him a few drops of chlorodyne; and, as the dose seemed to comfort him, she repeated it again and again. Strange to relate, from this moment the dropsy began to diminish, and eventually quite disappeared. The urine, at the same time, became quite free from albumen, and the boy is now well, except that he has a loud *bruit* over his heart, and his liver seems abnormally large. At the time, I considered that the administration of chlorodyne and the diminution of the dropsy were not cause and effect, but merely coincident in point of time; but a case now under my care leads me to think there must be some other relation between the two circumstances.

A banker, aged 62, has long suffered from weak dilated heart, and of late the lower extremities have become œdematous up to the body, and at the same time heat and nitric acid showed the presence of albumen in the urine. The usual remedies for cardiac dropsy, including convallaria majalis, were tried without benefit. As my patient complained very much of sleeplessness and restlessness, I sanctioned his taking thirty drops of chlorodyne every night. To my surprise, on testing the urine two days afterwards, not a trace of albumen could be discovered. No material change had taken place in the condition of the legs, but the œdema had perhaps decreased rather than increased.

In both these cases I had, from the beginning, considered the albuminuria as the result of congestion of the kidneys from obstruction to the circulation at the heart, and not as produced by independent renal disease. The entire disappearance of the albumen from the urine shows that this view was correct.—I am, sir, yours faithfully, EDWARD E. MELRES, M.D.

Plymouth, January 15th, 1884.

Treatment of Hydrocele after Unsuccessful Injection of Tincture of Iodine.

SIR,—I have a case of double hydrocele, in which puncture and injection of tincture of iodine have altogether failed. As I was not the operator, I am unable to state the amount and strength of the tincture injected. In my own practice I have never been called upon to repeat the injection, a single operation having sufficed.

I shall be obliged if any more experienced member will advise me—1. Whether to use iodine again, or some substitute? 2. If tincture of iodine be recommended, should it be pure or diluted? 3. What is the minimum quantity likely to succeed? 4. Should the temperature of the injection be raised, as recommended by M. Alphonse Guérin, of the Hotel Dieu, Paris? 5. Should all be allowed to return through the cannula, or only a portion? 6. How long is it necessary to retain the injection in the tunica vaginalis? 7. Is it better to operate on both sides simultaneously, or not? I have hitherto believed it to be good practice to perform the two operations at the same time, but shall be glad to learn the opinion of other members.

In conclusion, I may add that my patient is young, and otherwise healthy. The cause is obscure, but no pre-existing disease of either testes or their coverings can be ascertained.—I am, sir, faithfully yours,

ULTIMA THULE.

Varicella.

SIR,—Your South African correspondent, in his letter in your last issue, makes the following assertion: "Adults are rarely, if ever, attacked with chickenpox." This statement requires some modification. The experience of this hospital shows that, during the past four years, eleven cases of varicella have been sent to the hospital certified as variola, and the ages of these patients have been as follows: one each at 7, 10, 12, 17, 20, 24, and 31 years, and two each at 21 and 22 years. Doubtless your correspondent would say that these statistics prove too much, as tending to show that varicella is rather a disease of adults or adolescents than children. This is, however, explained by the fact that children under seven years of age are not admitted to the institution. Still, I think we must allow that varicella in the adult is not so rare a disease as your correspondent would infer.

Again, your correspondent says: "Anyone who has had experience of small pox can recognise at a glance the difference between the two" (variola and varicella). Although this is true in the majority of cases, I have seen some cases where the diagnosis has not been so easy. The temperature and general constitutional symptoms do not always help us, for I have seen cases of varicella in which the constitutional disturbance has been more marked than in some cases of well modified variola, where the dorso-lumbar pain and sickness have been absent or very slight.—I am, sir, your obedient servant,

[illegible], F.R.C.S.Ed., Resident Medical Officer,
Small Pox and Vaccination Hospital, Highgate Hill,
Upper Holloway, N., London, January 18th, 1884.

Practice in New Zealand.

SIR,—I shall be glad of any information with regard to "The North Island of New Zealand, as a field for practice." Would it be wise to go out with a very limited sum, say a clear hundred, or two hundred pounds at the most? If not, in which of our colonies would you recommend a young [illegible] qualified practitioner, suffering with slight albuminuria, to settle, who finds that the cold and damp climate of England aggravates [illegible]? Are medical appointments easily obtainable in New Zealand? To whom should I apply for information in these matters?—Yours faithfully, ANXIETY.

Suitable Residence Wanted.

SIR,—A gentleman who resides near this town wishes to obtain information as to the best locality in France as a place of residence for his eldest son aged 14, a boy of great promise who suffers from severe and repeated attacks of bronchial catarrh, threatening to become chronic in character. He wishes to combine a climate likely to benefit his son's peculiar throat affection with a locality where a good English and classical education can be obtained. Perhaps you or some member may be able to point out such a locality.—I am, sir, yours faithfully, WM. McNEEL, M.D.

Stranraer, N.B., January 21st, 1884.

PAINS IN THE TIBIA, IN A HARD DRINKER.

SIR,—I have under treatment a patient, aged 56, a butcher, addicted to drinking, suffering from very severe aching pains in the left tibia, from knee to the ankle, and occasionally in the right. This came on as a sequel to slight pneumonia. There is no raised temperature, nor signs of local inflammation, nor evidence of syphilis, though the pains are very bad at night. The patient is emaciating, and the case has not at all yielded to the following treatment during two months: salicylate of potash, quinine, iodide of potash (up to five-grain doses three times a day), chloride of ammonium, belladonna, and opium. The local treatment has been mustard plasters, [illegible], liniment of aconite, extract of belladonna, [illegible], and hot [illegible]. There is no evidence of kidney or heart affection. I connect the distressing pain with his previous drinking habits, as I once had a very similar case, and I shall be very glad of some suggestion as to treatment.—Yours truly,

QUÆRENS.

SUNSHINE IN 1883.

SUMMARY of bright sunshine as recorded by W. E. Kilburn, Esq., St. Lawrence, I.W., compared with that at Kew recorded in the *Times*.

Summary of Months.

St. Lawrence.	Hrs.	Mins.	Kew.	Hrs.	Mins.
January	50	43	January	44	30
February	86	31	February	72	[illegible]
March	183	9	March	129	30
April	186	18	April	146	0
May	226	32	May	212	30
June	193	25	June	171	30
July	161	44	July	163	0
August	241	45	August	[illegible]	0
September	122	0	September	111	30
October	130	11	October	104	0
November	73	50	November	76	[illegible]
December	51	50	December	37	[illegible]
	1,694	24		1,476	0

NOTE.—It is requisite to bear in mind that the foregoing tables contain the record only of bright sunshine, and do not include days which might otherwise come under the head of bright and sunny days; haze, or mist, or the passing of a light cloud arresting the power of the recording instrument. With regard to St. Lawrence, some allowance must also be made, in consequence of the Undercliff falling into shade between 6 and 7 in the evening during the summer months, depriving the instrument of a considerable amount of sunshine, which would otherwise be recorded in fine weather. There is also the same loss from the sun rising behind the Hill.

It will be perceived that the months given are not regular calendar months, the record of one month running occasionally into that of another, which arises from the necessity of making them correspond with the record published in the *Times* each Thursday.

The record at the Undercliff for 1883 appears to have been 14 hrs. 54 mins. less than that for 1882; while at Kew 31 hrs. 23 mins. more were recorded, the result being, 1882, St. Lawrence, 1,709 hrs. 18 mins., Kew, 1,444 hrs. 37 mins.; 1883, St. Lawrence, 1,694 hrs. 24 mins., Kew, 1,476 hrs.

PROFESSOR RINGER ON ERGOTINE.

SIR,—In reference to Professor Ringer's experiments with ergotine, recorded in the BRITISH MEDICAL JOURNAL of January 19th, is there not a possible fallacy in the supposed result, in connection with the probability that, in such an animal as the tortoise, there will exist, present in or near the small arteries, peripheral nervous mechanism capable of altering the calibre of the arterioles? Granted that such be the case, may the ergotine not act through these, and not directly on the muscular tissue of the arterial wall?—I remain, your obedient servant,

G. A. ATKINSON, M.B.

Edinburgh.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following were the questions in Surgical Anatomy and Surgery, Midwifery and Diseases of Women, and Medicine, submitted to the candidates at the recent pass-examination for the diploma of member.

Surgical Anatomy and Surgery.—1. Describe the operation of tying the common carotid artery. Give the anatomical relations of the vessel in the neck. Mention the anastomoses for carrying on the circulation. 2. The male urethra being laid open along its upper surface in its entire course, describe the parts exposed to view. Give the relative dimensions of its various regions. Name the situations most prone to injury and disease. 3. Describe an ordinary case of suicidal "cut-throat." Give the treatment, immediate and remote, with any complications which may occur. 4. In what way does a strangulated differ from an obstructed (incarcerated) hernia? Give the symptoms and appropriate treatment of each condition. 5. What parts are most frequently affected by epithelial cancer? Mention its most common local causes. Sketch its pathology and treatment. 6. Explain briefly the following terms: Cirsoid aneurysm; Pott's fracture; ectropion; Amussat's operation; ptosis; "réduction en masse."

Midwifery and Diseases of Women.—1. What discharges may take place from the genital canal during pregnancy? What are their causes? and how would you recognise them? 2. Describe the mechanism of labour, with the head presenting, and the occiput posterior and to the right. 3. Describe the cephalotribe, and mention the cases in which it is specially indicated. 4. What conditions produce enlargement of the cervix uteri, and how would you distinguish between them?

Medicine.—1. What are the causes, anatomical characters, symptoms, physical signs, and treatment of acute pericarditis? 2. Give an account of the clinical history of a typical case of measles, and indicate the chief complications and sequelæ to be feared. How would you treat it? and what measures would you take to prevent the spread of the disease? 3. What are the causes of pyloric obstruction? Point out its pathological effects, symptoms, diagnosis, and treatment. 4. Mention the principal ingredients in the following officinal preparations, and give a concise account of their actions and therapeutic uses, with their doses: Pulvis jalapæ compositus; liquor arsenicalis; liquor hydrargyri perchloridi; mistura scammonii; pilula saponis composita; mistura ferri composita.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. T. A. Beck, Ryde; Mr. [illegible] Wilson, London; Dr. W. Jackson Cummins, Cork; Mr. Thomas Payton, Smethwick; Mr. Wheelhouse, Leeds; Dr. Norman Kerr, London; The Secretary of the Medico-Psychological Association; Dr. E. Mackey, Brighton; Professor Flower, London; Dr. W. McNeil, Stranraer, N.B.; The Secretary of the Parkes Museum; Mr. David Davies, Bristol; Mr. P. H. Emerson, Cambridge; The Secretary of the General Hospital, Wolverhampton; Mr. A. T. Street, Oxford; Our Aberdeen Correspondent; Dr. [illegible], London; [illegible], London; Mr. G. Eastes, London; Mr. [illegible], Leeds; Mr. F. T. Paul, Liverpool; Dr. Kirkwood, Peterborough; Dr. S. W. Fisher, Brighton; Dr. Latham, Cambridge; Mrs. Hey, Bournemouth; Mr. C. Lovegrove, Llanwddyn; Mr. G. R. Leekes, Kesh; Dr. Thomas Dutton, Sidlesham; The Secretary of the Society of Arts; Dr. Ogston, Aberdeen; Mr. E. Powell, Nottingham; Mr. J. P. Roberts, Ravensthorpe; Messrs. Hogg and Son, London; The Secretary of the Manchester Medical Society; Mr. R. B. Sellers, Rochdale; Mr. C. E. Lay, Oxford; Dr. Sutherland, London; Dr. Bond, Gloucester; Mr. M. Handfield Jones, London; M.B.; Mr. F. Petrie, London; Mr. A. Campbell, Mapelthorpe; Mrs. R. Burton, Trieste; Mr. G. H. Mounsey, Hanley; Dr. A. Quarry Silcock, London; Mr. Edward G. Clayton, London; Dr. J. S. Cumming, Glasgow; Dr. [illegible], [illegible]; The Secretary of the Social Science Association; Dr. F. Barnes, London; Mr. T. M. Stone, London; Mr. W. A. Thomson, Ampthill; Dr. E. Firth, Norwich; Our Paris Correspondent; Mr. J. Luce, Liverpool; Dr. D. A. Cullimore, London; Mr. G. F. Hentsch, London; Mr. J. B. Martin, Ventnor, Isle of Wight; Mr. Harold Hendley, London; Mr. G. A. Atkinson, Edinburgh; Sir Edmund Lechmere, London; Dr. [illegible], Castletown, Isle of Man; Mr. Perry, Wigan; Dr. E. H. Vinen, London; Mr. H. D. Palmer, [illegible]; Mr. [illegible] Scott, London; Dr. Styrap, Shrewsbury; The Editor of the *Science Monthly*; Dr. MacCombie, London; Dr. Macpherson, London; Mr. James Hudson, Nelson, New Zealand; Dr. H. Pollard, Manchester; Dr. Althaus, London; Mr. F. Sydney Smyth, Brockley; Dr. Sawyer, Birmingham; The Secretary of the Central Veterinary Medical Society; Dr. P. O'Connell, Sioux City, U.S.A.; Dr. J. Macdonald, Dunedin, Otago; Dr. James Wallace, Greenock; Mr. Herbert Goude, London; Messrs. Routledge and Co., London; Dr. J. Rogers, London; Mr. T. Whitehead Reid, Canterbury; Mr. W. Gillespie, Methven, Perth; Dr. Ringer, London; Mr. A. H. Benson, Dublin; Member; Mr. Gilbert Bowick, Bedford; Mr. C. Macnamara, London; Mr. T. V. Golding, Southport; Mr. E. D. Tomlinson, Beverley; Mr. S. Stretton, Kidderminster; Dr. James Niven, Manchester; Dr. J. Spottiswoode Cameron, Huddersfield; The Kreochyle Company, Leytonstone; Mr. J. Limont, Newcastle-on-Tyne; Mr. C. Farmer, Hexham; Dr. A. Simpson, Perth; Mr. A. J. Dixon, London; A Minor; Dr. T. Collins, Aberdeen; Mr. William H. Battle, London; Dr. Collie, London; A Member; The President of the Royal College of Surgeons; Mr. T. L. Smith, Alcester; Dr. T. M. Dolan, Halifax; Dr. Kaeser, London; Mr. A. MacLean, Leatherhead; Dr. Fairlie Clarke, Southborough; Mr. A. Macpherson, Chester; Mr. Arthur Kempe, London; Mr. R. Nason, Nuneaton; Mr. H. Horton, Bromyard; Mr. C. Macpherson, Bonar Bridge; H. M.; Sir W. Smart, London; Mr. De Vere Hunt, Bolton; Dr. E. D. Mullan, Londonderry; Mr. Shirley F. Murphy, London; Dr. Hunter Mackenzie, Edinburgh; Mr. A. May, Moreton Hampstead; Mr. A. W. Mayo Robson, Leeds, etc.

BOOKS, ETC., RECEIVED.

The Teeth, their Formation, Diseases, and Treatment. By Thomas Gaddes. London: David Bogue. 1883.

Surgical Experience in the Zulu and Transvaal Wars 1879 and 1881. Edinburgh: Oliver and Boyd.

A Manual of Midwifery for Midwives. By Fancourt Barnes, M.D., M.R.C.P. With Illustrations. Second Edition. London: Smith, Elder and Co. 1883.

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AN ADDRESS

ON

THE NATURE OF SNAKE-POISON;

ITS EFFECTS ON LIVING CREATURES, AND THE PRESENT ASPECT OF TREATMENT OF THE POISONED.

Delivered at a Meeting of the Medical Society of London, Monday, January 28th, 1884.

By SIR JOSEPH FAYRER, M.D., F.R.S., K.C.S.I.,
President of the Society.

THE communication which I have the honour of making to you this evening is in fulfilment of a promise made last April, after the discussion of a paper on a similar subject by Dr. Badaloni of Nocera, which excited considerable interest and some criticism with regard to the purely scientific aspect of snake-poisoning, its treatment, and its relation to the vital statistics of countries in which venomous snakes are more numerous than in our own (in this respect) more highly favoured one.

I propose to describe the nature and the mode of action of snake-poison on living creatures; and, being most familiar with the Ophidia of India, I shall select some illustrations from that source, especially as it affords typical examples of snakes which are endowed with this terrible power of destroying life.

Let me ask your attention to some points in the structure of the apparatus which is concerned with the elaboration and inoculation of the poison which it is the purpose of this paper to describe.

The order Ophidia has three subdivisions:

1. Ophidia Colubriformes (innocent);
2. Ophidia Colubriformes Venenosi;
3. Ophidia Viperiformes.

The two latter are all poisonous—they are the Thanatophidia, and well merit this name in India, where they destroy, probably, 20,000 human beings annually.

The general anatomical structure and distinctive characters of a snake are well known, but I will ask you to notice certain differences between: 1. an innocuous and a poisonous snake; 2. between a poisonous colubrine and a viperine snake.

The crania, drawings, and dissections before you, illustrate these differences. Snakes are provided with sharp re-curved teeth, which are firmly fixed in the maxillary, palatine, and pterygoid bones; by the form and arrangement of these teeth, poisonous may be distinguished from innocent snakes.

The harmless snake has two complete rows of ungrooved small teeth, one outer or maxillary, and one inner or palatine row; in the majority, there are from 20 to 25 teeth in the outer row.

In the venomous snakes, the outer row is represented by one or more large tubular fangs, firmly ankylosed to the maxillary bone, which is movable, and, by its movement, causes the erection or reclination of the fang, so marked in Viperidæ. In the innocent snake, the maxillary bone is elongated, and gives insertion to a row of teeth; in the poisonous colubrine, it is much shorter, giving insertion to only one or more teeth, the anterior and largest of which is the poison-fang.

In the viperine snakes, the maxillary bone is reduced to a mere wedge, giving insertion to a long curved and tubular fang, which is a much more formidable weapon than the fang of the cobra, or other colubrine snake. These fangs, when reclined, are covered by a sheath of mucous membrane, in which lie also several loose reserve fangs, in different stages of growth. When the working fang is lost by accident, or is shed, one of the reserve fangs takes its place, becoming fixed to the maxillary bone, and placed in communication with the duct of the poison-gland.

The teeth vary considerably in the different subdivisions of the order. They are described as being perforated. Though this is apparently the case, it is not really so. They are dense and compact, enclosing the usual pulp-cavity; but, being folded on themselves, form either an open groove, as in the Hydrophidæ; a complete canal, as in Cobra; or a more complete tube still, as in Viperidæ. During development, the laminated tooth folds like a leaf on itself, and so forms the channel along which the virus is conveyed; and thus, as you will observe, the tooth makes a most complete hypodermic syringe.

The poison is secreted by a conglobate racemose gland situated in the temporal region behind the eye. It is of considerable size, about that of an almond in the cobra, and is furnished with a duct which opens into the capsule of mucous membrane enveloping the base of the fang; the venom thence flows into the dental canal, and is injected into the wound when the tooth penetrates the bitten object. At the orifice of the duct, it seems probable that there may be a sphincteral arrangement of muscular fibres, which enables the snake to control the ejaculation of the virus.

I have not been able to make out such a sphincter in the Elapidæ; but Dr. Weir Mitchell says it exists in Crotalus. I may have overlooked it, and think it probable that further examination may detect it in other poisonous snakes. I may here just refer to the remarkable mechanism by which, the ectopterygoid bone being pushed forwards, the maxillary is made to rotate, and to erect the fang in the viperine snakes; and to the action of the temporal and masseter muscles, which, whilst they close the jaw in the act of biting, at the same time compress the gland and force the poison through the duct. Time does not admit of anatomical details; but they are fully described in the *Thanatophidia* (p. 1 to 5), and are represented in the sketches and specimens before you.

Before I pass on to consider the poison, let me say a few words about the poisonous snakes themselves. Here I may remind you that the only poisonous snake in Great Britain, and, indeed, in a great part of Europe, is the adder—Pelias berus—a viper (or some variety of it); and that, in comparison with the cobras and vipers of India and the Tropics, it is feeble in its venomous power.

The venomous colubrine snakes of India are: of Elapidæ, the Naja tripudians or Cobra, Ophiophagus elaps or Hamadryad, Bungarus ceruleus or Krait, Bungarus fasciatus or Raj-sampni, or Sankni; of Xenurelaps, X. bungaroides, and the various species of Callophis; Hydrophidæ, a very numerous family of sea-snakes, are all very poisonous, but, being confined entirely to a marine or estuarial life, are not so dangerous to human life as others.

The viperine snakes are represented by Daboia Russellii (or Tic polonga, or chain-viper); Echis carinata (or Kuppur, or phoorsa-snake); these are true vipers; whilst the Crotalidæ, or pit-vipers, are only feebly represented by the Trimerisuri, Peltopelor, Halys, and Hypnale; these are much less poisonous than their American congeners, Crotalus, Lachesis, Craspedocephalus, and others. The Najadæ are the most virulent of the colubrine snakes; none are more deadly than the Cobra or Hamadryad. Of Viperidæ, the Daboia and Echis are probably as deadly as any of the African forms.

In 1868, I resumed an investigation, begun in 1854, on the subject of poisonous snakes and the nature and effects of their venom. During that inquiry, which continued till 1871, I ascertained from official sources that, out of a population of 120,972,263 (Dr. Hunter). 11,416 persons died of snake-bite in the year 1869. Subsequent returns show that the mortality continues at very much the same rate. The Sanitary Commissioner, in his report on the North-West Provinces and Oude for 1882, tells us that 6,515 persons were killed in that year by snakes and wild beasts, out of a population of 44,107,869. In 1881, in all India, there were 22,377 deaths from the same cause.

In destructiveness the snakes stand in about the following order: Cobra, Krait, Echis, Daboia. The Ophiophagus elaps, Bungarus fasciatus and Hydrophidæ are deadly, but less numerous, and therefore less destructive to life.[1]

The returns cited represent only a portion of India, and there is good reason to believe that the total annual mortality of the whole peninsula is not much, if at all, under 20,000 persons, or, roughly, about one in every 10,000.

The subject is of much general interest, and it is as important to humanity as to science to ascertain the nature and properties of the poison, and to discover what may best counteract it.

Snake-poison is secreted by glands which represent the parotids in other creatures (a small gland is connected with the duct of the poison-gland in Daboia, and was figured in a drawing by me made in 1869; Dr. Wall suggests that its secretions may in someway modify the action of the poison, perhaps giving it the peculiarity in which it differs from the cobra-venom) and is probably a modification of the saliva, though different in its action from that innocent and indispensable secretion. The analogy is more probable if, as suggested by some physiologists, Mr. Busk and others, there be an active principle in it, closely allied to the ptyaline of saliva.

The virus is a transparent, slightly viscid fluid, faintly acid in reaction, of varying specific gravity, 1.058 being the average (according to Wall) of a mixture of virus taken from several cobras. It is of a bitter taste in the Cobra, but not bitter in Daboia. It is of a faintly straw-coloured hue in Cobra; in the Ophiophagus of a golden yellow. When dried it loses from 50 to 75 per cent. of water (Wall) and forms a semi-crystalline substance like gum-arabic. It is secreted in considerable quantities, and, if a fresh and vigorous cobra be made to bite through a leaf stretched across a spoon or shell, several drops can be thus obtained. Examined under the microscope it is structureless, but a few cell-forms and micrococci may be detected. The mucus of the mouth may be the origin of these organisms, and it is probable that there is nothing characteristic in them, for the most active venom is free from them (Wall). The poison is exhausted when the snake has bitten frequently, and it is then comparatively harmless; but it rapidly becomes dangerous again.

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[1] Of American elapidæ, Elaps [illegible]; [illegible] of American Crotalidæ, the Crotalus (rattlesnakes), Lachesis, [illegible] (West Indies), and of African Elapidæ, Naja haje, Naja [illegible] [illegible] Cerastes, and four or five others are all very dangerous.

"If the virus be kept in the liquid state it first becomes neutral, then alkaline, and a few feathery cubic, crystals form: if preserved in a loosely corked test-tube, it will become cloudy, smell offensively, and swarm with bacteria, but still it is poisonous.

The alkalinity now lessens, and the reaction becomes again acid; the fluid then coagulates into a firm whitish opaque substance, somewhat like the coagulated white of an egg, but of a lemon-colour.

"If a small quantity of fluid is left uncoagulated, it is poisonous, and the washings of the coagulum are also poisonous" (Wall).

Heating cobra-poison to boiling point (Wall says) does not destroy its physiological action, though less local inflammation is caused by it so treated.

Snake-poison has been examined by chemists, but a complete or exhaustive analysis has not yet been given.

Fontana in 1781, and Prince Lucien Bonaparte in 1843, made an analysis of the virus of the adder (Pelias berus), and came to the conclusion that it contained an active principle, to which he gave the name of Echidnine or Viperine, which he succeeded in separating. The paper in which he describes the process was read before the Union degli Scienziate Italiani at Lucca in 1843, and is in our library; so far as I know, but little has been added since Prince Lucien Bonaparte's investigations; further analysis will probably confirm or modify his views, and perhaps add to our information. The Prince laboured under the disadvantage of having only adder-poison to analyse. With a better supply of cobra, daboia, or crotalus virus which might now be obtained, there are good grounds for hoping that the chemistry of snake-poison will be exhaustively worked out. This is now being done in America by Drs. Weir Mitchell and J. E. Reichardt, who have published some results of their work.

In 1873, cobra-poison from Bengal was submitted to Dr. Armstrong, F.R.S., for analysis, and he obtained the following results:

Crude Poison.	Alcohol Precip.	Alcohol Extract.	Albumen for Comparison.	
				(Ralfe.)
Carbon, [illegible]	[illegible]	[illegible]	[illegible]	53.5
Nitrogen, [illegible]	[illegible]	[illegible]	[illegible]	15.5
Hydrogen	[illegible]	7.0	7.1	[illegible]
Sulphur	[illegible]		..	[illegible]
Oxygen		...	...	[illegible]
Phosphorus			.	[illegible]

This is an incomplete analysis, but it is to hoped that the same eminent chemist may be disposed to continue the investigation when supplied with more virus.

The following is an epitome of Weir Mitchell's and Reichardt's investigations, which relate chiefly to crotaline poison, but include a partial analysis of some dried (colubrine) poison from India. They find that the venom of the crotaline snakes can be subjected to the action of the temperature of boiling water, without completely losing its poisonous powers. The activity of the venom, however, of Crotalus adamanteus seems to be destroyed by a temperature below 176° Fahr. Mitchell, some years ago, showed that the venom of Crotalus durissus is not destroyed by boiling, and the curious fact is noted that the venom of Crotalus adamanteus should thus differ from the venom of other snakes.

The symptoms caused by the venom of the different snakes with which they have operated do not, they say, differ radically, save in degree; but there are symptoms which suggest that further investigation may enable them to point out certain differences by which it will be possible to discriminate one form of poisoning from the other. This is partly in accordance with what has already been observed in India, and notably by Dr. Wall.

The investigations, so far, lead them to conclude that the poison of the cobra is the most active, next that of the copper-head, then of the moccasin, and lastly, of the rattlesnake; but their researches on this head are not yet complete.

They are unable to confirm the statement of Gautier of Paris that an alkaloid, resembling a ptomaine, exists in cobra poison. Professor Wolcott Gibbs, they say, was unable to find an alkaloid in the poison of Crotalus, but they have satisfied themselves that the venom contains three distinct proteid bodies, two of which are soluble in distilled water, one which is not soluble. These bodies have certain properties and reactions, which are detailed in their monograph on the subject.

Hitherto, observers have regarded the venom of different snakes as each representing a single poison; but it appears that, of the three proteids before mentioned, one is analogous to peptone, and is a putrefacient poison; another is allied to globulin, and is a most fatal poison, probably attacking the respiratory centres, and destroying the power of blood to clot, while the third resembles albumen, and is probably innocuous. The separation of the poisons necessitates a long and elaborate series of researches, the results of which will be subsequently reported. Mitchell and Reichardt have also ascertained that the poison of the rattlesnake (Crotalus adamanteus) copperhead (Trigonocephalus contortrix), and moccasin (Toxicophis piscivorus) are destroyed by bromine, iodine, hydrobromic acid (33 per cent), sodium hydrate, and potassium permanganate.

It appears that the activity of the venom differs not only in character and intensity in different genera and species, but also in the same individual under varying conditions of temperature, climate, health, and state of vigour or exhaustion at the time. It is a most virulent poison, and it takes effect when absorbed into the circulation, either by inoculation, or, as I demonstrated in India (quite against all former and universal belief) when applied to a mucous or serous membrane, proving that it may neither be sucked from a bite, nor swallowed with impunity.

It acts most rapidly on warm-blooded creatures, sometimes with very great rapidity, when it enters a vein; it is deadly also to cold-blooded creatures, and to the lowest form of invertebrate life. Strange to say, and this, to me, is one of the greatest of its mysteries, a snake cannot poison itself, or one of its own species, scarcely its own congeners, and only slightly any other genus of venomous snake, but it kills innocent snakes quickly. It has been ascertained that a vigorous cobra can kill several dogs, or from a dozen to twenty fowls, before its bite becomes impotent, and then the immunity is of brief duration, for the virus is rapidly reformed.

In 1868 and 1869, I observed that, whilst the general characters of the effects of snake-poison are alike, yet viperine differs from colubrine poison. The poison of Naja kills without destroying coagulability of the blood, whilst that of Daboia (viper) produces complete permanent fluidity (*Thanatophidia*, p. 4), and, in connection with this, "the blood of an animal killed by snake-poison is itself poisonous, and, if injected into an animal, rapidly produces its poisonous effects. I have transmitted the venom through a series of three animals with fatal results."

In 1868, I described the difference of the action of cobra and daboia venom in the case of two horses bitten by these snakes (*Thanatophidia*, p. 79). At pages 72-73, *op. cit.*, I also pointed out the peculiar action of daboia-venom in causing early convulsions. In some the convulsions are more marked, and, in others, death is preceded by a more decided state of lethargy. In the bite of the echis, the local symptoms are peculiarly severe, so (*Thanatophidia*, p. 631) Dr. Wall gives a more complete exposition of the varying effects, and shows them to be greater than I supposed.

Snake-poison is a neurotic, and kills by extinguishing in some way (some molecular change) the source of nerve-energy. It is also a blood-poison and an irritant; if applied to mucous and serous surfaces, it causes inflammation; absorption then takes place, and the symptoms of general poisoning are induced. It causes great local disturbance, as well as blood-change; for, if the bitten creature survive long enough, the areolar tissue may inflame, suppurate, and slough. If it enter by a large vein, life may be destroyed in a few seconds. It was supposed the more active poisons acted by shock through the nervous system; but the rapidity with which a poison can be distributed through the circulation would account for the most rapid death from snake-bite. The chief effect is on the respiratory apparatus, and death occurs by asphyxia, but the whole voluntary muscular system is also affected, and general paralysis results;

whilst the long continuation of cardiac pulsation after apparent death proves that it is not due to failure of circulation.

The action of snake-poison is discussed at full length in the *Proceedings of the Royal Society* by Dr. T. L. Brunton and myself (1873-74-75-78). These researches led us to conclude that the action of the poison is—1, on the cerebral and spinal centres, especially the medulla, inducing general paralysis, especially of respiration; 2, in some cases (where the poison has been conveyed through a large vein directly to the heart by tetanic arrest of cardiac action, probably owing to action in the cardiac ganglia; 3, by a combination of these causes; 4, by blood-poisoning of a secondary character.

The phenomena vary according to the nature of the snake, and the individual peculiarities of the creature injured, the chief difference being observed in viperine as contrasted with colabrine poison. The latter is a nerve-poison of great deadliness, but as a blood-poison it is not of much power. Viperine poison, on the other hand, is a more potent blood-poison. Dr. Wall summarises the difference in the action of daboia (viperine) or cobra (colubrine) poison as follows. "Cobra-poison, when introduced slowly into the circulation, produces gradual general paralysis, but at the same time shows a preference for certain nerve-centres; paralysis of the tongue, lips, and larynx being very marked symptoms, and respiration is very quickly extinguished after the paralysis shows itself. Death is often attended with convulsions, which are clearly due to carbonic acid poisoning. Introduced with a fair amount of rapidity, these symptoms are rapidly developed, the paralysis being preceded by gentle stimulation, which causes slight muscular twitchings. Injected in a large quantity into the circulation, the stimulation is so violent as to cause general convulsions, of which, however, the respiratory muscles have the chief share, and which are immediately followed by paralysis and death.

"Daboia-poison, though not injected directly into the circulation, causes the most violent convulsions, which are in no way necessarily followed by paralysis and death, but may be for the time completely recovered from. They do not depend on carbonic acid poisoning. The paralysis that succeeds is general, and lasts a very considerable time before respiration is extinguished. There is no evidence of the tongue, lips, and larynx being especially paralysed; they probably only suffer in the same degree as other parts. Cobra-poison very quickly destroys the respiratory functions (after slight acceleration, the respiration becomes slower and the excursus is lessened). Daboia-poison at first quickens the respiration very much more than cobra-poison does (and the lessening of the excursus and the slowing of the breathing does not occur so soon). The respiration generally in daboia poisoning has a peculiarly irregular character. This function certainly exists longer under the influence of daboia-poison than under that of cobra-poison. The effect of cobra-poison on the pupil is so slight as to be a matter of doubt. Daboia-poison nearly always causes wide dilatation in the earlier stages of the poisoning. Salivation is a constant symptom of cobra-poisoning; it is exceedingly rare in daboia-poisoning.

"The effect of cobra-poison on the blood is not very great. Sanious discharges are rare, albuminuria has not been seen, and recovery is striking and complete, when it takes place. In daboia-poisoning, on the other hand, sanious discharges are the rule. Albuminuria is usual should the victim live any time; and, after the nerve-symptoms have passed away, the subject has to go through a period of blood-poisoning, little, if at all, less dangerous than the primary symptoms: we have, in addition, the greater local mischief caused by daboia-poisoning, and the greater power it has of destroying the coagulation of the blood.

"The physiological properties of daboia-poison undergo great change by its being heated to 100 C. in solution, losing the power of producing primary convulsions, whereas cobra-poison remains unaltered. Daboia poison kills birds at once in convulsions, whereas with cobra-poison, unless the poison has been directly injected into the circulation, death occurs only after paralysis.

"Lastly, amphibia recover from an amount of daboia-poison that would be necessarily fatal in the case of cobra-poison."

Without unreservedly accepting Dr. Wall's conclusions, I regard them as an able summary of the action of different kinds of snake-poisons, and are confirmatory of the deadly nature of Indian as compared with European snake-poison.

The local effects of the poison are partial paralysis of the bitten part, pain, infiltration, swelling, inflammation, and ecchymosis round the spot where the poison has been introduced, and sometimes in other and distant parts; and, if the animal survive for some hours, infiltration and incipient decomposition of the tissues and hæmorrhagic discharges. The general symptoms are depression, faintness, cold sweats, nausea, vómiting, exhaustion, lethargy, and unconsciousness.

Dogs vomit, and are profusely salivated. They present an appearance as if the hair were "staring." As the poisoning proceeds, paralysis appears in the limbs, commencing generally in the hinder parts, with a tendency to creep over the whole body, involving the muscles of deglutition, and loss of co-ordinating power of muscles of locomotion.

Albuminuria, hæmorrhagic discharges (especially in viperine poisoning), relaxation of sphincters, exhaustion, lethargy, and convulsions, precede death.

In fowls, the appearance is that of great drowsiness. The head falls forwards, rests on the point of the beak, and gradually the fowl, no longer able to support itself, rolls over on its side. There are frequent startings, as if of sudden awaking from the drowsy state, then convulsions and death.

In cases where the quantity of poison injected is large, and it is at the same time very active (as in cobra), and the bitten animal small and weak, or if it have entered a vein, death is almost instantaneous, as from shock. In such a case, the cardiac ganglia are probably paralysed; at all events, the heart suddenly ceases to beat.

The effects of snake-poison on man are much of the same character, and may be studied in the details of sixty-five cases recorded in the *Thanatophidia*; which also give an idea of the duration of life. Dr. Wall has summarised these cases as follows. "The average length of time of the 65 cases is 15.17 hours, but the average is raised by the exceptionally long duration of a few cases of viperine poisoning, so that a better estimate of the probable duration of time will be obtained by dividing the period in spaces of one hour each, and determining what percentage of deaths occur in each.

	Percentage.		Percentage.
One hour and under ..	[illegible]	Between 7 and 8 hours	[illegible]
Between 1 and 2 hours ...	12.3	[illegible]	[illegible]
" 2 " 3 " ...	[illegible]	[illegible]	[illegible]
" 3 " 4 " ...	[illegible]	[illegible]	[illegible]
" 4 " 5 "	1.54	[illegible]	[illegible]
" 5 " 6 " ...	[illegible]	Over [illegible]	[illegible]
" 6 " 7 " ...	[illegible]		

"The most fatal periods appear to be between two and three hours, and more than twenty-five per cent. of the total deaths take place between one and three hours after the infliction of the bite."

It appears, also, from the above report, in which the exact spot in 54 cases is described, that 94.54 per cent are wounded in the extremities.

Place of Bite.	Percentage of Cases.	Place of Bite.	Percentage of Cases.
Fingers and wrist... ...	[illegible]	[illegible]	[illegible]
Forearm	[illegible]	[illegible]	[illegible]
Elbow	[illegible]	[illegible]	[illegible]
Shoulder	[illegible]	Ear	[illegible]
Feet, toes, ankle	[illegible]	[illegible]	[illegible]

This is a matter of some interest, as the hope of success lies in preventing access to the circulation, and in the facility of removing the part injured, and with it the inoculated venom.

The greater proportion of deaths recorded, result from the direct effects of the poison; chronic cases in which death or recovery resulted after protracted periods, are less frequently referred to.

Snake-poisoning in this country is of the viperine character, and, though happily the activity of our viper is feeble compared with that of the tropical Viperidæ, and, except in the case of very weak or young creatures, its immediate effects as a nerve-poison are [illegible] yet the effects on the blood and locally on the tissues may be productive of severe and even dangerous symptoms.

The result of my experience is that, so far, no physiological antidote to snake-virus is known, and that, when the full effect on the respiratory centres is produced, remedies are of little, if any, avail: albeit, when the poison has entered in smaller quantities, treatment may be of service on general principles.

Viewing the apparent analogy between curara and snake-poisoning, death in both being caused by paralysis of the respiratory apparatus, Dr. L. Brunton and I hoped that, by maintaining artificial respiration and supporting the heart's action, we might keep an animal poisoned by snake-virus alive until elimination had taken place, and the result of some experiments [illegible] to some extent, for animals were kept alive for many hours, but succumbed at length when the artificial respiration was withdrawn. Mr. V. Richards, who repeated our experiments in India, succeeded in thus keeping an animal alive for days, though it, too, succumbed finally. In the case of curara, artificial respiration is completely successful, though not so in snake-poisoning. This seems to show that the damage done by the snake-poison is of a more serious and permanent nature than that by curara, as indeed I am inclined to believe. I do not say that a physiological antidote is impossible; all I assert, is that it has not yet been found. I would encourage efforts to devise methods of treating snake-poisoning in whatever degree it presents itself, for some means of neutralising the poison, or of restoring the damaged nervous system and blood, may still be found. At any rate, it is with snake-virus as with other deadly poisons; there must be a quantity, however small, which, though dangerous, is not of necessity fatal; and in such cases we may influence the result by treatment, and save life in some. But, after long and repeated observation in India, and subsequently in England, I am forced to the conclusion that all the remedies hitherto regarded as antidotes are absolutely without any specific effect on the condition produced by the poison, and that such aid as we can give must depend on preventive and local treatment.

I will now briefly describe the measures to be adopted in the treatment of snake-poisoning, and especially refer to the permanganate of potash as a remedy, and shall read a letter from Dr. M. Lacerda of Rio de Janeiro, written by that distinguished physician as a commentary on the discussion which took place here last April on Dr. Badalonis's paper.

The first and most important indication is to prevent the poison from entering into the circulation; to this all else is subsidiary. The rapidity with which this takes place depends a good deal on the part of the body bitten, and on its vascularity. When the poison enters a vein, if the bite be inflicted by a vigorous snake, the result is generally rapidly fatal. Experiments on animals show that bites inflicted on parts, even where large veins are not implicated, produced their effects so rapidly, that only immediate severance of the part, or complete constriction, prevented absorption.

It is necessary, therefore, as quickly as possible after a bite has been inflicted, to apply a ligature above, and so tighten it as to completely arrest the circulation. As it happens in 94 per cent. of cases that the bite is inflicted on an extremity, this may frequently be accomplished; but, in parts where no ligature or elastic bandage or cord can be applied, proceed at once to excise the bitten part; this, indeed, should be done in all cases, ligature or not; then make an incision through the bite, and reflect the skin; expose the tissue wherever that is altered in colour, dissect it out, and be careful to remove every part of it; then apply cautery or some escharotic, or the permanganate solution, taking care that it reaches as much as possible in every direction where the poison may have infiltrated (Wall). After this is done, the ligature may be relaxed; for, if the virus be destroyed, the danger of its entering the circulation is past. Should it have already entered, as is only too probable, all that can be done is to give stimulants, keep the patient warm, at rest, and, when the respiration begins to fail, use artificial respiration, and endeavour to keep him alive till the poison be eliminated.

In 1869, I gave instructions for the treatment of snake-bite, and, excepting that I would substitute Esmarch's bandage for the ligature, as recommended by Dr. Wall, and that five per cent. solution of permanganate of potash should be applied to the wound when the venom has been carefully dissected out, or injected when it has not been cut out, I have nothing to alter in these suggestions.

Suction, being unlikely to be of much avail, is practically useless to the patient, and dangerous to the operator, and it should neither be encouraged nor relied on. Insist on the importance of quiet and perfect rest; the temperature should be kept up; the respiration, if it begin to fail, supported by artificial methods. Where the poison has happily been limited to the seat of inoculation, and in cases where no great quantity of virus has been absorbed, we may hope to do good; but, where the poison has entered the circulation in larger quantities, and the physiological symptoms are developed, the prognosis is exceedingly unsatisfactory.

As soon as possible after a person is bitten by a snake, apply a ligature made of a piece of cord, or elastic bandage, round the limb or part, at about two or three inches above the bite. Introduce a piece of stick or other lever between the cord and the part, and, by twisting, tighten the ligature to the utmost. After the ligature has been applied, cut the punctures, to the depth of a quarter of an inch, with a penknife, or other similar cutting instrument; let the wounds bleed freely; or, better still, excise the punctured part and all the infiltrated areolar tissue subjacent to it. Apply either a hot iron or a live coal to the bottom of these wounds as quickly as possible, or inject into the subcutaneous cellular tissue a solution of permanganate of potash, five per cent., or some carbolic or nitric acid. If the bite be where a ligature cannot be applied, with a sharp penknife, cut out the bitten part and all the infiltrated cellular tissue to the depth of a quarter or half of an inch; then apply the hot coal or hot iron to the very bottom of the wounds, or, better, the permanganate of potash. Give fifteen drops of liquor ammoniæ diluted with an ounce of water immediately, and repeat it every quarter of an hour for three or four doses, or longer if symptoms of poisoning appear; or give hot brandy, or rum, or whisky, or spirits with equal parts of water, about an ounce of each (for an adult), at the same intervals.

If symptoms of poisoning set in and increase, if the patient become faint or depressed, unconscious, nauseated, or sick, and respiration begin to fail, with symptoms of paralysis of tongue and fauces, apply mustard poultices, or liquor ammoniæ on a cloth, over the stomach and heart; continue the stimulants and keep the patient warm, but do not shut him up in a hot stifling room, or a small native hut; rather leave him in the fresh air than do this.

Chronic, *i.e.*, milder cases, must be treated on the same general principles. Do not make the patient walk about if depressed; rouse him with stimulants, mustard poultices, or ammonia, but let him rest.

If the person be brought, as he or she probably will be, some time after the bite has been inflicted, and symptoms of poisoning be present, the same measures are to be resorted to. They are then less likely to be successful, but nothing else can be done.

In many cases the prostration is due to fear; the bite may have been that of a harmless or exhausted snake, and such patients will rapidly recover if so treated and encouraged. If they be poisoned, but, as frequently is the case, not fatally, these measures are the most expedient.

A plain summary or translation of these suggestions might be hung up in public places. The people should be warned against incantations, popular antidotes, and loss of time in seeking for aid. Every police-inspector of whatever grade might be taught the application of the simple measures I have described, and should be enjoined to make them known as widely as possible among the police and the people.

There can be little doubt that recoveries from Indian snake-poisoning occur chiefly in cases where the snake has been exhausted or harmless, or has bitten imperfectly, and in a few cases where prompt interference has prevented the entry of the poison into the circulation.

Let me now make some remarks on the remedial value of permanganate of potash. During my investigation of the value of remedies for snake-poisoning, permanganate of potash was not omitted, and I made the following experiments.

June 12th, 1869. 1. A fowl was bitten by a cobra in the thigh at 3 P.M; at 3.1 fifteen drops of solution of permanganate of potash were injected into the spot; dead in seven minutes, 3.35. 2. Forty drops of solution of permanganate of potash were injected into the external jugular of a dog. This produced no apparent effect on the animal. At 3.48, it was bitten by a cobra (which had bitten before and was not fresh) in the thigh; the fang-punctures were at once washed with the strong solution of permanganate, which was well rubbed in; 3.52, sixty more drops were injected into the vein; 3.54, two drachms were injected into the bowel, all the symptoms of cobra-poisoning advancing rapidly; 4.12, forty more drops were injected into the jugular vein; 4.25, the animal died, thirty-seven minutes after the bite.

In 1878, Dr. Brunton and I made the following experiments, which confirm the power of the permanganate to neutralise the poison before it has entered the circulation, but show its inefficiency when it follows it.

Experiment 1.—Five milligrammes of poison were dissolved in one cubic centimètre of water, and mixed with one cubic centimètre of liquor potassæ permanganatis of the *P.B.*, and injected under the skin of a guinea-pig. No symptoms were produced, and the animal remained quite unaffected.

Experiment 2.—Two rabbits of the same litter, each weighing exactly 2 lbs., were taken. Five centigrammes of cobra-poison were dissolved in one cubic centimètre of liquor potassæ permanganatis (*P.B.*), and allowed to stand for about eight minutes. The mixture was then injected under the skin of the flank of one rabbit. No symptoms whatever were produced, and the animal, though kept under observation for some weeks, remained quite unaffected by the poison. Five milligrammes of cobra-poison, dissolved in two cubic centimètres of water, were injected into the other rabbit at the same time. During the injection a little of the poison was lost, so that the animal did not receive the full dose, yet it died in thirty minutes.

Experiment 3.—April 4th, 1878. Guinea-pig, weighing 1½ lbs.; injected four centigrammes of cobra-poison into the leg. 4.1 P.M., ligature applied immediately; permanganate of potash applied immediately. 4.5 P.M., twitching; 4.10 P.M., dying; 4.13 P.M., convulsion; 4.14 P.M., death.

Experiment 4.—April 4th, 1878. Guinea-pig, weighing 1 lb. 3.45' 20" P.M. Injected $\frac{2}{3}$ grain (= 4 centigrammes) of cobra-poison, under the skin of the leg. A ligature was applied round the leg in one minute, and in five minutes permanganate of potash was rubbed into an incision made over the site of injection. 3.52 P.M., ligature cut; 3.53, twitching violently, leg paralysed; 3.57 P.M., dying; 3.58 P.M., dead—less than thirteen minutes.

Dr. Wall, who has carefully investigated the subject, makes the following pertinent remarks (*Indian Snake-Poisons*, p. 129): "As it was found that potassium permanganate does destroy the poison, steps were taken to see if it would be of any practical use in the treatment of animals suffering from snake-bite. It was found, by experiment, that a considerable quantity of potassium permanganate, dissolved in a weak saline solution, could be injected into the circulation of an animal without producing any immediate effect (I found the same with a strong solution). A dog, suffering from cobra-poisoning, had a cannula placed in its saphena vein; a solution of potash was injected, but, though a large quantity was cautiously and gradually introduced into the circulation, and though at the same time life was prolonged by artificial respiration, in no way was the least benefit to be perceived from the remedy. The reason is obvious. It is quite true that potassium permanganate destroys the active agent of cobra-poison by oxidising it; but, when introduced into the blood, it of course commences oxidising indifferently all the organic matter with which it comes into contact; but it has no power of selecting one organic substance for oxidation rather than another. The oxidising power of the permanganate is, therefore, exerted on the constituents of the blood generally, instead of being reserved for the cobra-poison in it alone; so, if cobra-poison be dissolved in an organic solution, and the permanganate be added before injection, the poison suffers little, if any, diminution in strength, for oxidation has taken place chiefly at the expense of the other organic matter. Thus, it would be necessary to destroy all the constituents of the blood by oxidation before all the poison in it could be destroyed too. If a substance should be found having the power of oxidation, with a special affinity of exercising it on snake-poison, the problem of the treatment of snake-bite would be solved, but potassium permanganate has not the special power."

It has been pointed out that there are other substances which greatly diminish or destroy the action of snake-poison when mixed with it out of the body. Of all such agents, permanganate of potash is probably the best; still it seems to be of little value in practice.

Wall further remarks: "It may be asked why, if metallic salts, tannic acid, hydrate of potash, and permanganate of potash, destroy snake-poison, should not these substances be used in preference to excision. The reply is obvious. If we could know the exact position of the poison, and if there were only one deposit, we might probably succeed in destroying it by injection. But to remove the poison deposited by the bite of a snake requires a most intelligent observation, guided by eye, sight, and judgment, but an injection of a chemical agent must be, to a great extent, made by guess-work, and the solution, instead of following the poison, takes the line of least resistance in the tissues, often leading it far from the poison."

In a pamphlet (*Experiments on Permanganate of Potash and its Use in Snake-poisoning*) dated 1882, Richards says: "A solution of 5 per cent. of permanganate of potash is able to neutralise the poison;" and recommends that this should be injected into the bitten part after a ligature has been applied; it is less likely to cause sloughing of the tissues than any other agent which could neutralise the venom. In a letter, dated July 22nd, 1882, he says: "It is, in my experience, the best local application we possess. It is not a physiological antidote, but is a chemical one, and is utterly powerless to effect any influence on the lethal action of snake-poisoning." (He means the constitutional action.) He is of opinion "that, whenever opportunity offers, the injection of permanganate of potash should be resorted to, assuming that a ligature has been efficiently applied (where it can be applied at all) within five minutes from the bite. In the average run of cases, the permanganate will certainly destroy the poison lying beyond the ligatured part," if it come into contact with it; but, as Wall pointed out, the difficulty of insuring its contact with the poison is so great as to render it practically unreliable. I agree with Richards that, so far as it goes, it is a good local application, and as such it ought to be used, or, in its absence, tannic acid or liquor potassæ might be resorted to with the same object; but as a constitutional remedy, as a physiological antidote, it is powerless, like all others that have been tried and have failed to do good. Dr. Lacerda himself, although he attributes the highest value to it as a chemical antidote both as a powerful oxidising agent and by the action of the potash, says: "as to the idea of finding a physiological antidote for snake-poisoning, I entirely agree with you that is a Utopia."

Dr. Lacerda's letter is most interesting and instructive. He says that he has been led to write to me by reading the report of a discussion at this Society on April 16th, 1883. With some preliminary observations, he continues: "I beg leave to protest against an opinion attributed to me by some of your colleagues, but which I have never sustained. I refer to the opinion that attributes to bacteria the effects of the poison. I have weighty reasons for considering such an hypothesis as entirely false. I recognised, indeed, by means of repeated and careful observations that the venom contains micrococci in great numbers, and I made a communication on this subject three years ago to the Academy of Sciences of Paris. These corpuscles, however, exist in the venom in an accidental manner, as also in the human saliva, and play no important part in the effects of the poison. This last acts as a chemical agent producing a rapid alteration in the molecular composition of the albumen which enters into the formation of almost all animal tissues. On the blood, given certain conditions, its effects are very rapid, almost instantaneous; the same happens with the nervous and other elements, whose functions are disturbed immediately that the venom comes into contact with them. Now, such immediate action can never be attributed to bacteria. You see, therefore, that this unsustainable theory cannot be invoked in endeavouring to explain the neutralising effects of permanganate of potash.

"Having made this protest, I will proceed to indicate the points on which I cannot agree with certain of your colleagues and with yourself, in regard to certain questions relative to snake-poisons. In the first place, I do not consider it exact to say that this venom, inoculated in the tissues of an animal, invades rapidly the organism. On the contrary, numerous experiments made during three years have proved to me that the venom is slowly absorbed by fractions, acting first locally on the tissues in which it has been inoculated, the elements of which imbibe the venom little by little and fix it. This destructive local action is at times, of itself alone, sufficient to produce, a short time after the inoculation has been effected, general disorders of a reflex character, which are not unfrequently confounded with the disorders due to the generalisation of the venom, which require a greater time for their manifestation.

"In those cases in which the effects of a generalisation of the venom were produced within a short time after the inoculation, some vessel had been opened by the inoculating instrument, giving the venom free entrance into the circulation.

"Another point in regard to which I cannot agree with some of your colleagues is, that there are species of snakes whose venom actuates principally upon the blood, while others act specially upon the nervous centres.[1] For the Brazilian species, at least, I can affirm that this opinion is erroneous, and it does not appear to me probable that the species inhabiting India furnish an exception to the rule of unity of action of the venom, that I have verified for Brazil. With the venom from a single species, I may even say, of a single individual, an animal may be made to succumb by causing profound perturbations in the central nervous system, without apparent alteration in the blood; or *vice versâ*, with slightly pronounced disorders of the nerve-centres and profound alteration of the blood. Everything depends on the conditions in which the experiment is made.

"Passing now to the essential point of the discussion that took place in the Medical Society, I will give in a few words how I understand and how I judge that the successful effect of permanganate of potash should be comprehended. You yourself, by experiments made in 1869, recognised that permanganate of potash, mixed with the venom, took from it its noxious properties. Certain conditions of the experiments led you, however, to deny the efficacy of this chemical agent in the cases in which the venom had been inoculated in the tissues. As you know, however, I have demonstrated by numerous experiments and innumerable clinical facts that the neutralisation takes place even in the midst of the tissues, which makes this substance a chemical antidote of great value.

"The permanganate of potash acts upon the venom, destroying it in two ways: first, as a powerful oxidising agent; second, by the potash that forms the base of the salt. When a current of nascent oxygen is passed through a concentrated solution of the venom, this loses entirely its noxious properties. This experiment, which I have repeated many times, has given me always the same result. Let us suppose now that an individual is bitten. If injections are made in the place of the bite from five to ten minutes after the inoculation of the venom, this is promptly neutralised *in situ*, and the individual runs no further danger. A great number of facts like this have been observed in Brazil. If aid be given late, hours after the bite, when the tumefaction of the wounded part is very pronounced, and the phenomena that indicate the entrance of the venom into the circulation have already declared themselves, injections repeated in various parts of the wounded member, starting from the wounds made by the fangs of the reptile, still give very good results. Nor is it difficult to explain the good results in this case. The venom, as I have said, acts first locally, and only enters the general circulation after the lapse of a certain time, and by portions. The permanganate of potash, meeting in the tissues with the venom, which is little by little diffusing itself, neutralises it in the various points where it has been diffused, and thus stops the source of supply. The entrance of new and successive portions of the venom into the general circulation being thus impeded, the organism takes charge of the elimination of what has already been introduced, and which was insufficient to compromise the life of the individual.

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[1] Dr. Lacerda has probably operated only with [illegible], has not had the opportunity of witnessing the difference of action exerted by [illegible] poison. [illegible] experiments show that direct [illegible] general contamination [illegible] where [illegible] has been penetrated.

"We will now suppose a case of greater gravity, in which a vein is wounded, and there is a rapid penetration of a large quantity of venom into the circulation. Even here, an injection of a solution of one-hundredth of permanganate of potash may be practised in the vein, since we have recognised that no bad effects are produced in dogs by a dose of from two to three cubic centimètres. In this case, the good results are problematic, in view of the rapid diffusion of the venom in the organism; but then, if permanganate of potash does no good, no other substance could be useful. These cases, fortunately uncommon, are beyond all help.

"As to the idea of finding a physiological antidote for snake-poison, I entirely agree with you that it is a Utopia."

After careful consideration, fully admitting that in permanganate of potash we have an agent which can chemically neutralise snake-poison (as indeed was shown by Dr. Brunton and myself in 1878), I do not see that more has been done than to draw attention to a local remedy already well known as a chemical antidote, the value of which depends on its efficient application to the contaminated part (which Dr. Wall has pointed out is too uncertain to be reliable). We are still then as far off an antidote as ever; and the remarks made by me in 1868 are as applicable now as they were then; they were as follows.

"To conceive of an antidote, as that term is usually understood, we must imagine a substance so subtle as to follow, overtake, and neutralise the venom in the blood, and that shall have the power of counteracting or neutralising the poisonous and deadly influence it has exerted on the vital force. Such a substance has still to be found, nor does our present experience of drugs give hopeful anticipations that we shall find it. But I repeat that where the poisonous effects are produced in a minor degree, or where the secondary consequences are to be dealt with, we may do much to aid the natural powers in bringing about recovery."

In conclusion, fully acknowledging the value of recent researches, I would express a hope that the subject may receive further vigorous investigation, and that efforts may be prosecuted especially in the direction of search for some method of increasing elimination of the poison, of ascertaining the exact nature of the lesion of the nervous system and blood, and how far they are removable; that, as to local measures, with the view of preventing entry of the virus into the circulation, and of neutralising it *in situ*, improvements on present methods may be sought for. As to advance in the investigation of the physiological aspects of the question, much may still be done, as also in respect of the chemistry and microscopical character of the virus itself, and the blood and tissues of the poisoned. But these inquiries, of such importance to the human race can, I fear, make but little progress whilst the present restriction on all physiological research continues to be maintained.

A review of the subject of snake-poisoning would be quite incomplete without acknowledgement of the valuable labours of such Indian observers as Dr. Short, Dr. Nicholson, Dr. Stradling; Drs. Stewart, Ewart, Richards, and Wall, who have added materially to our knowledge, also Dr. Halford, in Australia, Dr. Lacerda, in Rio Janeiro, Dr. Lauder Brunton, F.R.S., in London, and Drs. Weir Mitchell and Reichart, who are now engaged in the most important and much needed investigations of the chemistry of the poison and the condition of the blood and tissues of the poisoned.[1]

I am indebted to the Director-General of the Army Medical Department for the following interesting case, which will appear in the next *Army Medical Department Report*.

Colonel M., while serving in Zululand, near the lower Tugela river, was bitten in the leg just below the knee, and, after the lapse of a few seconds, became sensible of extreme shock, and at once felt certain that a snake had bitten him. He rode back to camp, and, when first seen, ten minutes after the infliction of the injury, was in the following condition. There was pain, ecchymosis, swelling, and partial paralysis of the bitten part. He was so exhausted that he had nearly fallen off his horse. The forehead and hands were bathed in cold perspiration; the extremities were cold and pale; there was great nervous depression, with sense of impending death; respiration was hurried. Quickly following this, bilious vomiting set in, with loss of co-ordinating power; numbness of extremities and lips, and dragging sensation of the face; intense pain in neck, troublesome cough, with thick viscid expectoration. The pulse was, from the first, weak and rapid, rising from 120 to 150; restlessness and anxiety became very distressing. Vomiting ceased at 9 P.M., but soon afterwards still graver symptoms developed; vision rapidly failed; the eyelids drooped, the speech became thick and nasal; there was paralysis of the tongue and soft palate, with dysphagia. There were also clonic convulsions of the upper extremities of the muscles of the chest; the breathing was stertorous, with low muttering. At 12.45, he spoke for the last time, and then lapsed into a semi-comatose condition, and died at 2 A.M., ten hours after the bite.

Tight compression was made above the seat of injury, between the bite and the heart; wound enlarged, and an attempt made to remove all the blood and poison from it. Nitrate of silver and ammonia were applied freely to the surface of the wound. Ammonia and diffusible stimulants were administered by mouth. To relieve the distressing vomiting, sinapisms were applied to region of stomach, and brandy, with soda-water, given; the restlessness was combated with hypodermic injections of morphia (half a grain for a dose); the morphia gave great relief, which, however, was only transitory. Hot water-bottles were applied to the feet, and stimulants were given with an unsparing hand, but were not always retained. Ammonia was also injected subcutaneously.

Post mortem examination made nine hours after death. Body well nourished. Cadaveric rigidity well marked. Hypostatic congestion. Great discoloration of scrotum and finger-nails. Situation of bite on left leg at upper and inner side of calf, about three inches below internal condyle of femur, and immediately over internal saphena vein. Appearance that of a small pin-puncture; lower part of leg rather swollen. On removing the skin from the region of the wound, there was found great sero-sanguineous extravasation into the surrounding tissues, and the muscles were soft and infiltrated with blood; the internal saphena vein was punctured. The venous system on the left side much congested. The glands in left groin, in long axis of limb, enormously enlarged and congested. Glands in right groin normal; pericardium normal. Heart, right cavities of, full of fluid blood; left cavities empty; valves healthy; no clots. Lungs normal. Liver congested, and slightly enlarged. Gall-bladder fully distended. Spleen somewhat enlarged, otherwise normal. Stomach slightly congested, rugæ well marked; contents, a small quantity of glairy mucus. Kidneys normal. Omentum contained much adipose tissue. Intestines normal. Bladder normal, contained a small quantity of urine. Brain somewhat congested, otherwise normal. Blood in a fluid state.

The snake which inflicted the fatal wound was not seen; in all probability, Colonel M. trod on one asleep; which then struck at him. The systemic shock was at once apparent after receipt of the injury, which is accounted for by the puncture of the internal saphena vein, and the introduction of the poison direct into the general circulation. The clothing traversed by the fang of the snake was, first, cloth garter; second, khakee riding-breeches; third, drawers of light material. From the high situation of the puncture, the opinion of competent judges was that the snake which inflicted the wound was a "black mamba," one of the large African viper species not identified.

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[1] Snakes exhibited at the meeting were: Cobra, Russell's viper, Echis carinata, Bungarus ceruleus, Bungarus faciatus, Callophis, Vipera rhinoceros (river jack), Pelias berus (adder), Lachesis mutus (bushmaster); with dissection of their poison apparatus; crania of snakes, models of poison-fangs, and drawings of crania and poison apparatus.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

PROCEEDINGS OF SECTIONS.

ON DEFECTIVE LACTATION, ITS CAUSES, AND HOW FAR IT MAY BE INFLUENCED BY DRUGS.

Read in the Section of Obstetric Medicine.

By THOMAS M. DOLAN, M.D., F.R.C.S.Ed., Halifax.

In some papers published in the *Practitioner* in 1881, I attempted to throw some light on the influence exercised by drugs on the milk of mothers and nurses, taking, at the same time, a general survey of the whole question of lactation.

It would be impossible, in a short paper, to enter into details of my experiments, I must, therefore, be content to lay before you the conclusions at which I arrived. This I do in the hope that they may be corrected, if they be proved wrong; and that the riper experience of others may throw additional light upon a subject which I deem to be even of national importance.

I shall formulate a number of general principles, as you will thus be in a better position to discuss my views.

1. All therapeutical agents intended to act on the mammary gland must first enter the blood, or be capable of stimulating the blood-supply in the mammary apparatus. This principle follows from what we know of the processes involved in the making of milk, and depends on the general principle that nutrition is dependent on blood-supply.

2. All the drugs derived from the families Liliaceæ, Cruciferæ, Solanaceæ, Umbelliferæ, etc., enter the blood and impregnate the milk, so that poisons in any of these classes must be administered with caution to the mother or nurse, lest the nursling may be injured. I have furnished instances, as dill, aniseed, and coriander, to prove this.

3. There is no true galactagogue in the sense in which it is understood. The nearest approach to this is to be found in jaborandi; but this drug is not persistent in its action, as it only temporarily affects the mammary secretion.

4. There is an antigalactagogue, belladonna.

5. In inaction of the mammæ, the milk may be increased and influenced by medicines.

6. The salts of milk may be improved by the administration of medicines.

7. Various physiological actions—purgative, alterative, diuretic, etc.—may be produced in the child by the administration of drugs to the mother.

8. If we are to expect any improvement in milk-secreting power, both as to quantity and quality, we must look to diet and hygiene for the attainment of that object.

I shall next briefly summarise some of the causes why lactation is defective.

1. It may be defective from mechanical causes: (*a*) through non-development of the lactiferous tubes; (*b*) through non-development of the cæcal terminations of the ducts; (*c*) through non-perfection of epithelium. These are conditions which preclude treatment. It may also be defective from a plethoric state of the body; this is a condition strictly amenable to treatment. A carefully regulated diet, avoidance of stimulants, with milk as a leading article, plain but nutritious food, and the occasional administration of castor-oil, will soon remove the obstruction.

2. There is another condition, viz., torpor of the mammæ, when treatment will be beneficial. The inactivity of the secretory apparatus may be overcome by the application of the electric current several times daily, in succession, for [illegible] to twenty [illegible] at a time, or by irritation of the nipple, warm poultices, and the breast-pump.

3. The commonest cause of defective lactation is [illegible]. The anæmic condition is intimately associated with general degeneracy, so that the subject of defective lactation is only part of a more general question.

We cannot expect much benefit from the therapeutic [illegible] [illegible] [illegible] [illegible] to the [illegible] point [illegible] This is [illegible] to be found in the [illegible] more nutritious fare, in the neglect of hygienic rules, and violation of those great natural laws which bind all creation, by the men and women of the present generation. We have every indication of degeneration in our large towns and cities. They are derived from the numerous advertisements of the hundred and one patent foods for children, of restoratives and tonics for adults, of hair-restoring articles, of magnetic and electrical contrivances, of mechanical supports specially devised for the use of the female sex. These advertisements and instruments are the superficial indications of degeneracy.

When we come to consider the food of the factory-operative, we can readily understand why the milk-supply is defective. The operative artisan's or labourer's wife lives chiefly on slops, as weak tea and freshly baked cakes, by means of which her digestive functions are injured, and the power of assimilating better nitrogenised food is destroyed. Milk is seldom used, except to colour tea; leguminous plants and other vegetables, except potatoes, are looked upon with contempt. You can tell by their teeth that their diet is defective; even the number of dentists in our large towns are an indication of this imperfection. When, added to such a diet, we have badly ventilated houses, impure air, we need not wonder at the anæmic stunted appearance of a large number of women of this class, or at the large number who cannot suckle, or who produce milk, which is not sufficient to maintain the life of their children, being deficient in nitrogenous or carbonaceous products. Their diet is barely sufficient to make an imperfect kind of bone, muscle, nervous structure, or blood, so that, when the blood has discharged its several missions, there is little left for any supplemental wave; and thus we find that menstruation is imperfectly carried out, that when conception takes place the fœtus is but badly nourished, and as a result we have many delicate children, many imbeciles and insane, and an appalling infant-mortality.

If any further evidence as to degeneracy be desirable, it is forthcoming. Every observer may note in the street and the workshop the general stoop of our town-population, their narrow flattened chests, bent spines, unequal shoulders, and other evidences of defective diet and impaired nutrition. Dr. Roth has brought forward some very strong evidence on the progressive degeneration of the physique of the population in Great Britain. He tells us that, of 1,600 recruits, after having accepted the shilling, 400 were rejected because they suffered from eye-disease, small malformed chest, curvature of spine, varicose veins, varicocele, muscular tenuity, and other complaints. Of 5,567 boys, 4,410 were rejected; they were under standard of chest-width, and under standard of weight (Dr. O.'s reports).

Dr. Ferguson has produced some evidence regarding the steady degeneracy of the factory-population, and of the yearly increasing number of children unfit for work. The result of Dr. Ferguson's, and subsequently Dr. Roberts's reports, may thus be summarised. 1. Factory-children have a disposition to flat feet, and to a relaxed state of the ligaments of the knee and elbow-joints. 2. They do not compare favourably with agricultural children. 3. They are short of stature; they produce the impression of having bones too old for their heads and ages. 4. They have a general disposition to knock-knees. 5. Many have "old scars in the neck," considered sequelæ of eruptive fevers. 6. In a large majority, the gums are red and spongy. 7. The development and condition of the teeth are very unsatisfactory: (*a*) they have [illegible] and are irregular; (*c*) the crowns of the teeth are contracted, with serrated edges and deep perpendicular grooves, as if a file had been drawn across them; (*d*) caries exists very often, usually in one of these grooves. The state of the teeth proves some fault in the health, and inattention during the early stages of the development of the children.

The prevalence of deformities amongst young girls applying for work at a large [illegible] factory is thus described [illegible] an establishment in Nelson Street, Liverpool. "It is most distressing to stand at our counter on a Monday morning and see the number of little girls deformed in their persons by being employed [illegible] visible in workmen, but is still more visible in [illegible] of the lower orders. He says: "Many are thin and consumptive; their eyes hollow; their nose sharp; their skin streaked with red patches. They have suffered too much; have had too many children; have a washed out, or oppressed, or submissive, or stoically impassive air. We feel that they have endured much, and can endure still more. Even in the middle and upper classes, this patience and sad hardening are frequent We think, when we see them, of those poor beasts of burden deformed by the harness, which remain motionless under the falling rain, without thinking of shelter. Verily, the battle of life is harsher and more observable here than elsewhere; whoever gives way falls. Beneath the rigour of climate and competition, amidst the strife of industry, the weak perish or are degenerated.......Hence those shameful quarters of London, Liverpool, all the great towns; those spectres in tatters, gloomy or drunk, who crowd the dram-shops, who fill the streets with their dirty linen and their rags hung out on ropes, who lie on a soot-heap amidst troops of young children; horrible shoals, whither descend all whom their wounded, idle, or feeble arms could not keep on the surface of the great stream. The chances of life are tragic here, and the punishment of improvidence cruel."

It is pleasant to turn from this gloomy and depressing description of one section of society to another class, viz., the agricultural. Women living in agricultural districts produce milk good in quantity and quality on a diet assimilating, to a certain extent, to that of the graminivora and herbivora. The country-bred mother lives on plain homely fare; good well baked bread, made from pure flour; good milk, vegetables in abundance, such as turnips, carrots, cauliflower, leguminous seeds, peas, beans, lentils; and she has thus vegetable fibrine, and albumen, starch and gluten, and salts in abundance, from which to elaborate the precious juice so important to her offspring. She has, above all, plenty of fresh air and exercise. Though her fare is simple, you may see, by her appearance, that it is sufficient for the building-up of a healthy organism; her cheek is ruddy and brown, her muscles are developed and strong, her bones well knit and large, her size is proportionate, and she is not the stunted, pallid, weak, anæmic mother, familiar to those who practise in large towns. If you want a good indication as to her health, look at those great indices, the teeth, and you will find them, if not pearly and white, certainly perfect and sound.

Though on this plain fare she eats less than men under similar conditions, she has a reserve fund on which to draw, not only during the time of lactation, but for her menstrual periods, and for the purposes of conception, when an additional call is made upon her by the requirements of fœtal life.

Meat rarely enters into her diet. We need not wonder at the result obtained by almost a strictly vegetable diet, if we remember what chemical research has told us about the constituents of vegetables.

We have here an illustration of how much can be done by diet, supplemented, it is true, by other agencies, a healthier and sounder mode of living, so that, better than any dependence on drugs to remedy defective lactation must be a reformation based upon conformity with those great laws upon which animated and inanimated nature thrives.

It is useless to point out an evil without suggesting a remedy; and, in view of the existing evil of defective lactation having its primary cause in fathers and mothers, I must point out the means of improving their condition.

There are indications that we are recognising the condition of our working-classes, evidenced by the health-lectures freely and generously given to the people by members of our profession; by the opening of cookery-classes, and by the extension of physical education. An active sanitary crusade has begun, into which a number of earnest philanthropists have thrown their souls; so that we may look more hopefully to the future, especially as this is supplemented by a national system of mental and physical training.

Physical education will do much. It aims at the root, by commencing with our young growing population, by proposing the teaching of the elementary principles of anatomy, physiology, and hygiene proper, in her schools, and by adding to this knowledge the physical exercises which will develop the muscular system of our boys and girls.

We may reasonably expect to hear, in the future, less about women who cannot suckle their own children, or who yield such poor milk that the child does not thrive on it; less of infantile diarrhœa and marasmus, less of patent foods; for, when we have produced a higher physical development, the mother herself will be capable of nursing her offspring.

There is one great agency to which I look hopefully, as it is a practical method of counteracting the great evil, intemperance, so detrimental to our women. The cocoa-house movement should become a great factor in the elevation of our national character, and the improvement of the physical condition of our population. It must tend to promote habits of sobriety amongst the people, and must prevent some of the waste of wages at present diverted from proper food-supply, and hitherto expended upon alcoholic products.

If the programme be carried out in its integrity, the working classes, male and female, will have light, airy, cheerful rooms opened to them where they can obtain coffee, cocoa, tea, milk, soups, meat, vegetables, good dinners, at cheap, though fairly remunerative prices. Thus, a certain amount of money will be spent upon true articles of food, the workwomen and female operatives will at a moment's notice to obtain some nourishing food to support them during their work, where previously they have resorted to the public-house for a stimulus. The ultimate advantages to be derived from placing at the convenience of our female labouring population refreshment-houses of this class must be of necessity an improvement in their moral condition.

This social revolution, which in the metropolis has received a powerful impetus from the medical profession, and particularly from Mr. Ernest Hart, must ultimately be extended to all our large towns and cities, where it should meet with equal support from members of the medical profession.

It will be asked, is lactation equally defective amongst the higher classes? Are they equally unable to suckle their children? Are they ignorant on the great subject of hygiene? Do their children suffer from the manifold evils which affect the lower strata of society? Setting aside the large number who will not leave the luxury of their lives, fashionable amusements and the rest, to perform that duty which every conscientious mother should fulfil, there is also a larger class who are not able to produce milk. This no doubt arises from a certain high pressure under which they live, from a highly artificial mode of life, the product of modern civilisation. Their diet is not conducive to produce healthy blood, and we find anæmia, hysteria, nervous disorders, insanity, as a result; so that not only are they unable to reproduce healthy structure for the waste going on in their own bodies, but they are still more unable to furnish a supplemented wane of nutrition required by the demands of menstruation, conception, pregnancy, and lactation. Every London physician can pick from his note-book numerous cases of young ladies, who have no useful occupation or amusements, whose bodily health and moral nature are perverted by the atmosphere in which they live, and whose delicacy is systematically fostered by their own mothers; and who thus become totally unfit for the position of mothers. Every accoucheur can tell us of the infants produced, of the care which has to be bestowed to rear them; so that physical education must not be confined to the lower classes.

Amidst the highest and the lowest strata, there is a medium: the great middle class. It is amongst this class I find the best mothers, and the least amount of degeneracy. This stratum is, no doubt, the back-bone of the country, from which is produced both the physical and intellectual material from which our great men are derived. The homely life, the domestic virtues, of this class are great factors in a nation's welfare.

In accordance with the wise ordinances of nature, the female has been endowed with highly complex organs for the reproduction and nourishment of our race. Woman's mission, if special organs be any guide, must ever be regarded in its association with motherhood, as purpose seems thereby fulfilled.

For the complete accomplishment of maternity, important physiological changes, evolutional and nutritive, have to be undergone. Facts demonstrate that the forces tending to reproduction are weakened, that the reserve or supplementary materials from which the forces are drawn are not sufficient to meet the drain produced by pregnancy and lactation; or, in other words, that our feminine stock is not improving. Heredity steps in, and perpetuates or intensifies the evil; so that dangers to the race, affecting every stratum of it, are to be apprehended.

To be forewarned is to be forearmed; to recognise an evil is the first step to its removal. These observations will not be in vain if they lead to further discussion and ventilation of the great questions which, I believe, underlie the subject of suppressed or defective lactation in the women of our generation. These conclusions have been purely brought about by my attempt to estimate the therapeutical influence of drugs, during lactation, on either nurse or nursling.

A CASE OF OSTEOMALACIA IN A CHILD.

Read in the Section of Diseases of Children.

By JUDSON S. BURY, M.D., B.S.Lond.,
Assistant-Physician to the Clinical Hospital for Children, Manchester.

THE specimens of tibia, radius, ulna, and rib, exhibited to-day, were obtained from a female child aged 8 months. When first seen, about a fortnight before death, the child was much wasted, and very small for its age; it weighed 5 lbs., and the length of the body was 45 centimètres (about 17.75 inches), which is at least 10 centimètres, or about four inches, shorter than it should be at that age. All the limbs were bent; the tibiæ were strongly arched forwards, and felt thickened, the femora were bent outwards and backwards, and the arms and forearms presented an outward curve. The chest was fairly shaped; there were no grooves, and no detectable enlargements at the junction of the ribs and cartilages. The occipital bone yielded to pressure in one or two places. The mother stated that the child was born at the full time, that the limbs had been bent since birth, and that the midwife who attended her had remarked on their bent condition. There was no history of syphilis, and, beyond the soft spots in the occipital bone, nothing to suggest the presence of hereditary syphilis. The mother had another child aged two years and a half, who was quite healthy. At the *post mortem* examination, the fragility of the bones was very striking; the femur, or the radius, or any other bone, could be bent with the greatest ease, and it required the utmost care to remove a rib without breaking it. The ribs presented spontaneous fractures near their angles; at the junction of bone with cartilage, there was not a trace of beading; the epiphysal line was perfectly straight, and the microscope did not reveal any proliferation of cartilage; the columnar zone was of about normal depth, and the line of advancing ossification was perfectly even.

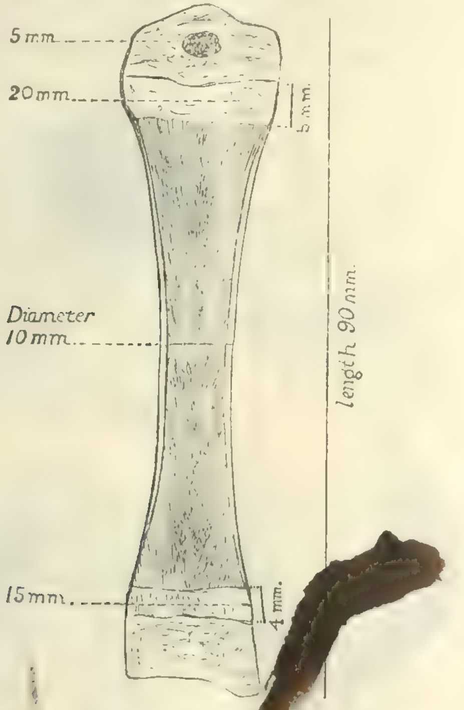


Fig. 1.—Tibia drawn from measurements given in Professo Kohn's case. Child aged 16 months.

On slicing the tibia, red pulp bulged out; after washing this away, it was found that, beyond a thin shell of cortical bone, the rest of the shaft was filled up with soft, dark red, medullary tissue, together with a scanty trabecular framework. The upper and lower epiphysal lines were quite even, and not wider than natural. It is important to note that the upper centre of ossification was very large, and that the lower was already present (Fig 2A), though it normally appears in the second year (Fig. 1). The other bones were in a similar condition. A piece of the parietal bone was obtained, and, on squeezing it, red pulpy material exuded. You see how thin and fragile the bone is. The spleen and other viscera appeared quite natural.

We have then a condition of softening of bone, without a trace of proliferation of the zone of cartilage which intervenes between the shaft and epiphysis. Does the absence of the latter sign exclude rickets? It is the most constant sign met with in rickets, but is it a pathognomonic one? That is, is it found in every case of rickets, and never found in any other disease? We know that, in rickets, enlargements at the growing ends of the bone and softening of bone-tissue may coexist in varying proportions; but if the latter condition *only* be present, have we another disease, osteomalacia, or are we to consider osteomalacia and rickets as different phases of the same disease? Dr. Rehn of Frankfort has recently reconsidered the existence of osteomalacia in childhood. He reports what he considers six examples of this disease, and in one of them he obtained a *post mortem* examination. The case is as follows. The subject was a girl aged 16 months, very slender; and the skeleton was very thin. There was much softening of the parietal bone at the posterior part, and considerable thickening at the junction of the ribs and cartilages. Both scapulæ were thin at the edges. The clavicles and the bones of the forearm were fractured. All the long bones, with the exception of the left tibia, were flexible; the lower limbs were quite straight. Von Recklinghausen gives the following account of the right tibia and the right radius. The tibia was quite straight and somewhat flexible; it showed osteoid trabeculæ, which were easy to cut; they were next to the periosteal layers of bone, especially in the middle of the shaft, but were also found in the middle of the spongy axial substance, and also in the bone-cortex. At the upper end, there was a rachitic zone, 20 millimètres broad, and 5 deep; there was also one at the lower end, measuring 15 × 4 millimètres. The radius exhibited a similar appearance; there was no medullary canal, the substance of the bone was uniform, cartilaginous, and finely porous. At both ends, there was a distinct rachitic zone. Microscopically, the appearances were similar to those met with in osteomalacia; thus the bone-trabeculæ, except those in the cortical parts, were almost devoid of lime; the growing ends, however, showed the proliferation of cartilage met with in rickets. In three or four of the other cases, recovery took place.

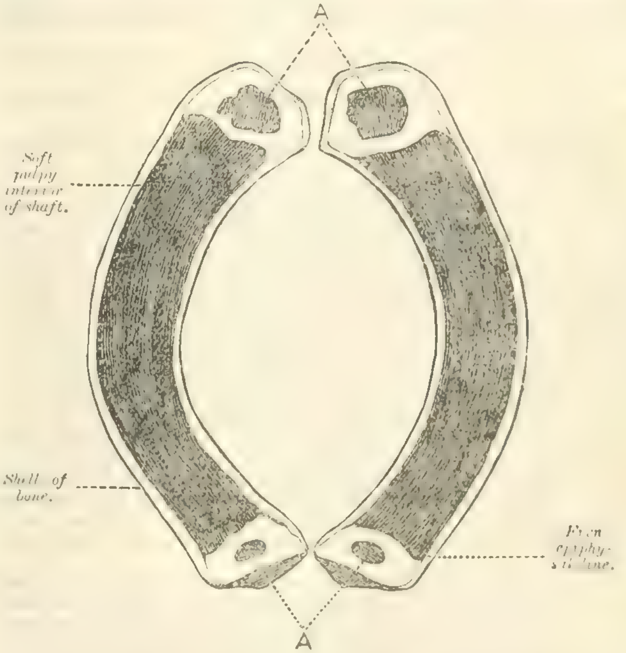


Fig. 2. Section of Right Tibia. Child aged 8 months.
A. Increased osseous centres in epiphyses.

Professor Rehn then gives a summary of premonitory symptoms; he mentions feeble nutrition, marked restlessness, sleeplessness, and especially great irritability on movement. The characteristic signs he considers to be the association of great softness and flexibility of the long bones with only slight swelling at the epiphyses and ribs.

In consequence of the softness of the bones, fractures occur, and even in the scapulæ. Cranio-tabes was present in two cases. The intensity of the disease was greatest in the forearm and leg-bones, then in the humeri; and the femora suffered least. There was no diarrhœa. The spleen was enlarged in three cases. Anæmia and emaciation were marked in all. No pyrexia was observed in uncomplicated cases. The urine did not show any increase of earthy phosphates.

The course of the disease was chronic, and lasted many months. Death occurred in two cases in consequence of diffuse bronchitis in one, and bronchopneumonia in the other. With regard to etiology, all the cases occurred during the first two years, and the disease began in the first year. They were all females. The food was, in all probability, poor in phosphoric acid and lime. No hereditary influence could be traced, and no evidence of hereditary syphilis. The disease is to be diagnosed, Dr. Rehn says, first, from congenital syphilis, secondly, from rickets; the softening of bone that sometimes occurs in syphilis being associated with other indications of the presence of the disease, is easily recognised. He finds the following differences from rickets:

1. The high degree of softening, and the slight epiphysal swelling;
2. The thinness of the whole skeleton; in rickets, thickening of the bones;
3. The straightness of the lower extremities, which in rickets are usually curved;
4. Pain on movement much greater than in rickets.

It seems to me very difficult to see anything distinctive in the two last signs; and the diagnosis, if one is to be made, between osteomalacia and rickets surely depends upon what views we hold with regard to the importance of the relations between what Sir William Jenner calls "the increased preparation for ossification" in the epiphysal cartilages and softening of bone-tissue. The bones that I have brought before you certainly seem to be more closely allied to the disease known as osteomalacia than to rickets. Dr. Rehn's case might be looked on as a sort of link between the two diseases; but without presuming to criticise the opinion of such a high authority as von Recklinghausen, perhaps I may venture to say that, if we are to hold on to anything as a sign of rickets, it is to the proliferation of cartilage-cells, to the hyperplasia that occurs in front of the irregular advancing line of ossification; and it must not be forgotten, too, to what a great degree erosion and softening of bone may take place in unmistakable rickets; this is well seen in sections across the middle of the shaft of this rickety radius kindly lent by Dr. Ashby.

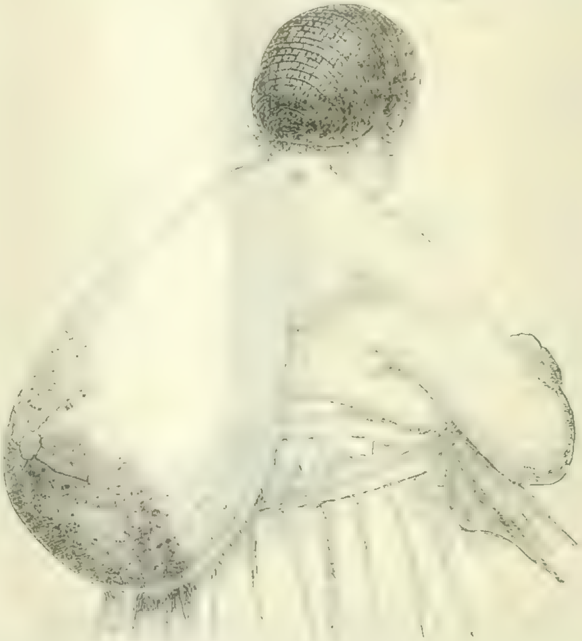
There are three leading differences between the tibia in Dr. Rehn's case and that in mine. The former is straight, and thinner than natural; the latter is curved, and at least as broad as natural; the former has epiphysal zones, measuring respectively five and four millimètres, the latter scarcely one millimètre; and, lastly, the structure of the shaft is different. A bone may be flexible from at least two causes: either the framework, though abundant, is deficient in lime; or there is no want of lime, but the trabecular framework is very scanty; the former holds in Dr. Rehn's case, the latter in mine. When the trabeculæ in this specimen are touched with the point of a knife, they feel quite gritty, and the microscope verifies this. They have not been deprived of lime, but are being gradually eaten away, as a whole, and replaced by a soft cellular tissue; and you see that in places the process has led to the formation of cystic-like cavities. The defective calcification in Dr. Rehn's case may be explained in two different ways: either lime has been abstracted from previously healthy bone, or the latter has been gradually absorbed, and new bone, deficient in lime, laid down in its place. The latter view is strongly held by Kassowitz, in his recent monograph on rickets; and he dogmatically asserts that, both in osteomalacia and rickets, all the limeless parts of the bone are new formations, laid down in the place of absorbed calcified bone, or formed independently at the surface of bone; and that the process is never due to decalcification. Varying degrees of calcification are easily seen in carmine preparations of rickety and osteomalacial bone, not primarily softened by reagents; the bone deficient in lime takes a brilliant red colour, and contrasts with the silver-grey of the still calcified parts. I have a section showing this very well, and I pass round a rough painting of the appearances seen. One of the principal arguments of Kassowitz is, that the new uncalcified layers which stain bright red are never found to be continuous with the calcified lamellæ, as would be the case if lime were simply abstracted from formerly existing calcified lamellæ; and he says that those who, like Volkmann, Ribbert, etc., believe in an abstraction of lime from fully formed bone, have never explained how it is that the limeless parts, which are concentric with the medullary spaces, are never continuous in series with the yet calcified portions. Kassowitz would, I suppose, regard the condition of these bones as a support to his theory. They illustrate his first stage, when the whole bone, not merely the lime, is removed; but it would be out of place here to enter into a histological discussion.

LARGE DORSAL TUMOUR REMOVED TO RELIEVE DYSPNŒA AND CARDIAC DISTRESS.

Read in the Section of Surgery.

By J. WARD COUSINS, M.D.Lond., F.R.C.S.,
Surgeon to the Royal Portsmouth Hospital.

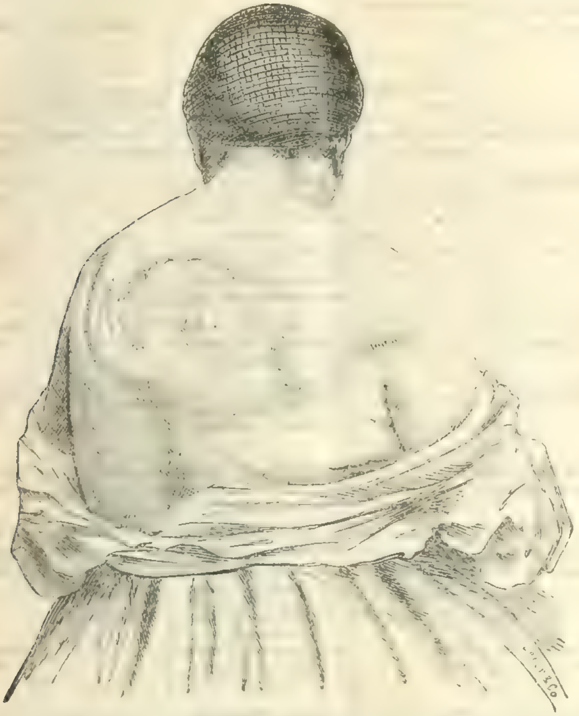
Mary Ann N., widow, aged 65, came under treatment on March 1st, 1883. She had a large dorsal tumour, which had been growing fifteen years; and, for four years, it had been rapidly increasing in size. The circumference at the base was 28 inches. She stated that she had suffered from cough and shortness of breath ten years, and occasionally from severe bronchitis. On admission into the Royal Portsmouth Hospital, she complained of the weight of the tumour, and great distress during movement. The chest-symptoms were very severe. At night, she slept in the sitting posture. Her face was livid, puffed, and marked with prominent venous markings. The act of expectorating was attended with prolonged distress. On examination, loud bronchial sounds were heard at all parts of the chest, with some crepitation in the dorsal regions. The cardiac impulse was weak, and the second sound loudly accentuated. The pulse 96, soft, compressible, and irregular. The urine was normal, and free from albumen. An attempt was made to sling the tumour, but it was abandoned, as it caused pain and respiratory trouble.



An operation was performed on March 15th. The tumour was placed on a wooden tray, and this was supported by ropes secured to the roof of the theatre. It was an ordinary fatty growth, intersected with very thick fibrous bands, and covered with dilated veins, which were very varicose about the base. The weight of the mass was nearly thirty pounds.

For some days after the operation, the temperature was high, and the chest-symptoms very urgent, but the patient gradually made a complete recovery, and the wound soundly healed.

A few days since, she came again to the hospital to report progress. Her appearance was much improved, and she could walk several miles, and go upstairs without discomfort. The superficial vessels were much less distinct, and the skin looked healthy. The respiratory and cardiac sounds were normal, and the pulse was full and regular.



REMARKS.—The complete relief of all the chest-symptoms is the main point of interest in the case. The condition of the patient before the operation was certainly very critical. The weight of the tumour embarrassed the respiration, and prevented due expansion of the chest. Cardiac failure was, however, the great source of danger. The heart was greatly taxed in sustaining the circulation, and the serious retardation of the venous current was evident from the distension of the veins, and the chronic obstruction of the pulmonary system. The absence of marked valvular insufficiency and renal complication rendered the result of operative interference fairly favourable. Ether was carefully administered during the operation, and repeated hypodermic injections were employed to relieve the urgent symptoms of cardiac failure.

REMARKS ON THE TREATMENT OF PLACENTA PRÆVIA.

Read in the Section of Obstetric Medicine.

BY JAMES MURPHY, M.D., B.A.,
Surgeon to the Hospital for Women and Children, Sunderland.

THE number of cases in the table which has been shown is fifteen; in all the mothers recovered completely, and, with one exception, rapidly; the exception being with case No. 4, who was attacked with phlegmasia alba dolens, which rendered her recovery very tedious.

Of the children, five were born alive; of these, two died within a few hours, the remaining three doing well. Thus, one in three was born with life; but only one in five ultimately survived. This is, no doubt, a high mortality, but several of the cases were not seen till after the death of the child. In case No. 10, the fœtus was dead and putrid; in cases Nos. 2, 4, and 5, the fœtus was found to be dead when the patient was first examined; and in cases Nos. 3 and 14, the early stage of pregnancy sufficiently accounts for the result. Thus, while all the deaths may fairly be said to be due to the placental presentation, where there was a chance of treatment only four children were lost of nine cases, and of those three survived, three out of a possible nine.

This is in accordance with the experiences of most men, that the fatality of mothers and children in placenta prævia is not due so much to the impotence of our art, as it is to fatal hæmorrhage taking place before professional assistance has been obtained, or where that assistance has been of a helpless do-nothing character. Therefore, when we know that the placenta is presenting, in every case where the child is fairly viable (after the seventh month), the fatal hæmorrhage may ensue at any moment; and, by inducing labour, this can be prevented to a very great extent; and we have the opportunity of being present when our help is of vital importance to the patient and her offspring. The experience of those who advocate this mode of procedure, fully confirms its soundness. Dr. Gaillard Thomas reports eleven cases with one death from *post partum* hæmorrhage, and one from puerperal fever. Out of my fifteen cases, none of the mothers died. Hecker lost but three cases in forty; Hoffman, two cases in thirty; Barnes, up to 1864, had sixty-two cases with six deaths, and had a remarkable run of twenty-nine cases without a fatal issue; and Spiegelberg had four deaths in seventy-four cases, from hæmorrhage, and eight from other causes; while Lusk puts down the usual mortality, from hæmorrhage alone, at 25 per cent.; and Müller, of Stuttgart, who published, in 1877, an account of 1,574 cases collected from various sources, estimates the percentage of maternal deaths of all causes at about 40.

In the majority of cases, we have warning that the placenta is presenting, from the hæmorrhages that take place towards the end of pregnancy. These were formerly supposed to be due to the cervix casting off the placenta in the act of its being taken up and expanded during the last months of pregnancy. With a few exceptions, however, most writers have abandoned this theory, for the good and sufficient reasons, first, that the cervix does not expand so early as the floodings occur, or, indeed, until very near the end of pregnancy; and, secondly, that the placenta is never attached to the cervix. Dr. Barnes then suggested that the floodings occurred from detachment of the placenta, arising from an excess in rate of growth of the placenta over that of the cervical zone, a structure which was not designed for placental attachment, and which is not fitted to keep pace with the placenta. Hence, the placenta shoots beyond its site, and hæmorrhage results. Now, great as is my respect for Dr. Barnes, I very much doubt if hæmorrhage ever occurs from this cause. The idea that the placenta shoots beyond its site is purely hypothetical, and would apply to normally situated placentæ as well; and, though I carefully looked for it, I never found atrophy, or other indication of its having occurred, in any of the cases recorded. Further, the bleeding would be more likely to occur at the circumference than at the centre, and would be placental, and not uterine, which Dr. Barnes alleges not to be the case. I have no doubt that bleeding occurs from the four causes stated by Dr. Matthews Duncan; namely, either by rupture of an utero-placental vessel, or marginal utero-placental sinus, by partial separation of the placentæ from accidental causes, such as a jerk or fall, or in consequence of uterine pains from miscarriage commencing, but being arrested at an early stage. But, if we consider that contractions are frequently taking place in the uteri of pregnant women, and that these contractions have more or less of a shrinking effect on the normally placed placenta, and have a decidedly expanding effect on the placenta placed over the os, we readily perceive how liable an utero-placental vessel or sinus is to be opened, or even a portion of the placenta itself detached. Whatever be the cause, certain it is that such hæmorrhages occur with great frequency towards the end of pregnancy. When they occur early, they generally lead to abortion, which is generally not more serious than abortion from other causes, and thus supply their own treatment. Hæmorrhages occurring later, but previously to the seventh month, are, as a rule, not serious, as in Müller's cases no death occurred before the seventh month; and he finds that bleeding occurs in cases of complete placental presentation in the greatest frequency from the twenty-eighth to the thirty-sixth week, and, in cases of the incomplete form, more frequently after the thirty-second week. These bleedings should be taken as a serious warning; as, though occasionally they may be slight, still not unfrequently the next hæmorrhage may prove a fatal one; and hence, as I have before urged, when the child is fairly viable, and the diagnosis of placenta prævia established, the sooner labour is induced, the safer for both mother and child.

Then comes the question, How is labour to be induced? or, having commenced, how is it to be conducted? To save unnecessary repetition, I may here state that the operation is the same in principle, whether labour has already begun or not; and differs only in application in the manner suited to each stage. Now, with

Table of Fifteen Cases of Placenta Prævia.

Number of Case.	Patient's Age.	Number of Pregnancy.	Usual Medical Attendant.	When first seen.		Month of Pregnancy when Hæmorrhage first occurred.	Amount and Duration of Hæmorrhage before Treatment.	State of Os when first seen.	Presentation of		Treatment.	Result to		Date.
				Month of Pregnancy	Condition.				Placenta	Fœtus.		Mother.	Child.	
1	27	3rd	Midwife	6½	Very faint	6½	Very severe for three hours	Closely contracted	Marginal	Head	Dilatation of os; separation of placenta; version	Recovered	Dead.	Dec. 4, 1877
2	29	4th	Dr. G. Welford	8½	Extreme collapse; convulsions from loss of blood	8	Enormous loss after labour commenced; had three floodings previously	Fully dilated	Complete	,,	Hand passed by side of placenta; foot immediately seized; version	,,	,,	Mar. 12, 1878
3	35	6th	Dr. Berwick	5	Pale, and very faint	5	Severe flooding for two hours	,	,,	,,	Labour-pains very violent, which rapidly expelled both placenta and fœtus naturally	,,	,,	Sept. 14, 1878
*4	32	7th	Midwife	Last	Completely blanched, and in an extreme state of collapse	7½	Great loss on commencement of labour; two previous floodings	Size of florin; easily dilatable	,,	,,	Barnes's bags; separation of placenta; version	,,	,,	Mar. 5, 1879
5	37	11th	Dr. Maling	Last	Great faintness	7½	Great loss intermittingly for three days while labour was going on; four previous floodings	Dilated fully	,,	,,	Hand passed by side of placenta; foot seized; version	,,	,,	Sept. 28, 1879
6	42	1st	Dr. Morgan	Last	Fairly good	8½	Slight hæmorrhage on commencement of labour; two previous floodings	Size of shilling; very rigid and unyielding	,,	,,	Barnes's bags; dilatation very slow; separation of placenta; Tarnier's forceps first, then Barnes's forceps	,,	,,	Mar. 25, 1881
7	26	3rd	,,	Last	Very good	8	,,	Size of half-a-crown dilatable	Partial	,,	Barnes's bags; dilatation rapid; separation of placenta; pains strong, and labour quickly completed naturally	,,	Recovered	Mar. 31, 1881
8	34	5th	Dr. Murphy	Last	,,	Last	A sudden and severe gush of hæmorrhage occurred an hour before I saw her	Size of shilling, and dilatable	Complete	,,	Barnes's bags; separation of placenta; forceps	,,	Dead	June 21, 1882
†9	32	7th	,,	Last	,,	,,	Severe on commencement of labour; no previous flooding	Size of shilling, rather rigid	Partial	,,	Digital dilatation; separation of placenta; version	,,	Alive; died in 6 hours	Aug. 1, 1882
10	37	11th	Dr. Maling	6	Very faint, and blanched	4½	Hæmorrhage had been going on, more or less severely, for previous six weeks	Would admit tip of finger; rather rigid	Complete	Breech	Barnes's bags; separation of placenta; all hæmorrhage ceased; foot brought down; fœtus dead and putrid; traction	,,	Dead	Oct. 20, 1882
11	32	4th	Dr. Bernard	8½	Very good	8	Once, a fortnight before; no recurrence	Would admit tip of finger; dilatable	,,	Head	Labour induced by digital dilatation; afterwards Barnes's bags; separation of placenta; version	,,	Recovered	Nov. 1, 1882
12	43	7th	,,	7	Blanched	6½	More or less continuous for a fortnight	Would scarcely admit tip of finger; dilatable	,,	,,	Same as last case; version	,,	Alive; died in 1 hour	Feb. 6, 1883
13	37	7th	Midwife	Last	Fairly good	8	Slight; one previous flooding	Size of florin; dilatable	Marginal	Breech	Barnes's bags; separation of placenta; version	,,	Recovered	Mar. 2, 1883
14	20	1st	Dr. Murphy	5	Very faint	5	Very severe for four hours	Size of florin; dilatable	Shoulder	,,	Digital dilatation; separation of placenta; version	,,	Dead	Mar. 8, 1883
15	40	9th	Dr. Beattie	8	,,	—	Very severe for two hours; one previous flooding	Size of half-a-crown dilatable	Complete	Head	Barnes's bags; separation of placenta, which was pushed to one side; forceps	,,	,,	Apr. 26, 1883

* Phlegmasia alba dolens.

† Narrow conjugate diameter; version performed in all labours; only one other child born alive.

all due respect for the authorities who recommend it, I would suggest that the day of the vaginal plug is gone; that it is now as unscientific in principle as it was uncertain and unsafe in practice; and that the rupture of the membranes is not such an easy matter in some cases, and, besides, is very unreliable in stopping hæmorrhage, and interferes with the easy and rapid performance of version, should that be afterwards deemed advisable. What is required is a measure that will restrain the flow of blood, and, at the same time, shorten labour; and that is best supplied by means of Barnes's hydrostatic bags—or, as I prefer, by Steele's modification of them. In a few cases, resort to the preliminary introduction of the sponge-tent or tupelo-tent may be necessary; but, in the majority, with patience and gentle pressure, the finger can be introduced, and thus prepare the way for the smallest-sized bag. Dr. Barnes has pointed out that there is a natural spontaneous arrest of hæmorrhage attained when that part of the placenta which has grown within the lower zone has been detached, provided uterine contractions concur; and, though he does not give the reason for it, I would suggest that it is this. While the placenta lines the inside of the uterus, and is attached to it, the slight separation which necessarily takes place on the expansion of the os, causes the connecting vessels to be put on the stretch; and, while thus stretched, if partially ruptured, they cannot contract; hence the continuance of the bleeding. But, when the placenta is separated to the extent Dr. Barnes mentions, it becomes flaccid, and does not drag on the vessels, and, therefore, permits them to contract, which they readily do, provided the uterus be contracting. Hence it is advisable to pass in the finger, and separate the placenta well round the os, sufficiently to permit this flaccidity to occur; if the uterus contract well, hæmorrhage will now cease; but if it go on, ergot should be given. I invariably give this in all cases of placenta prævia, but, if possible, wait till a later stage, so that it may act with the removal of the fœtus. If all go on well, it is best to proceed gently to fully dilate the os, without using any undue amount of force, though, in the event of hæmorrhage, it may be necessary to deliver before the os is fully dilated; and, when it is well dilated, if the pains be rapid and strong, the membranes, if not previously ruptured, may be torn, and the case left to nature, as in cases Nos. 3 and 7. Such cases, however, are exceptional; and, as a rule, it will be desirable to expedite matters, as the partial separation of the placenta has an asphyxiating effect on the fœtus, and the sooner it is born the better. The means to be employed will depend on circumstances. If the head be within reach, the forceps may be used, as was the case in three of my cases; more generally, version will be found suitable, simple traction being used in one breech-case.

To sum up: In all cases of placent prævia after the seventh month, labour should be induced, and previously to that, if the flooding be frequent or severe; labour should be induced by dilatation of the os, the placenta separated sufficiently to permit flaccidity, and the dilatation proceeded with to the full extent. If not contra-indicated, ergot should then be given, and the child removed by the most rapid and gentle method. Such are the remarks I have to present on the treatment of placenta prævia; and, while they contain nothing particularly novel or original, and fifteen cases are too few to dogmatise on, still they are sufficient to fairly test a method which I have hitherto found successful, and I trust I have stated the line of treatment clearly and distinctly, so as to leave no room for hesitation for those who will follow it when called upon to act.

In all the cases, as soon as the placenta was separated sufficiently, the hæmorrhage ceased completely, or became so very trivial as to be of no consequence.

P.S.—Since the Liverpool meeting in August, two more cases have come under treatment (making a total of seventeen); in each, labour was induced at the eighth month; both mothers recovered rapidly, and both children were born alive, one of which survives. For these cases, I am indebted to Drs. Fell and Beattie.

ON THE UNITY OF POISON IN DISEASES.

Read in the Section of Public Medicine.

By G. DE GORREQUER GRIFFITH, L.R.C.P.,

Founder of, and late Senior Physician to, the Hospital for Women and Children.

IN the brief space necessarily allotted each member, it would not be possible for me to do more than give a very short summary of this subject.

In the year 1875, I first called attention to the fact, that what is termed scarlatina occurring in the puerperal is frequently not scarlatina at all. But, before I proceed further, I must explain what I mean. I hold that there are two forms of scarlatina: the orthodox—viz., that contracted from a previously affected person, or something infected thereby—and the septicæmic, or toxæmic—viz., that which is evoluted or generated *de novo*, as a result of autogenetic blood-poisoning, such as occurs in puerperal cases, or is evolved as a consequence of hetero-genetic blood-poisoning, such as arises (where no scarlatina had existed before) from drains, sewers, imbibition or ingestion of deleterious articles of drink—water, milk, cream, etc.—or of food; and from decomposing animal or vegetable substances. This toxæmic or septicæmic scarlatina, which is evoluted from the above causes, is identical with the "surgical scarlatina" of Paget; and will, on strict investigation, be found to be the form of scarlatina which more usually prevails among puerperals. In saying, "It is not scarlatina at all," I mean it is not the orthodox—namely, that which is recognised by all the profession; and is, as all agree, contracted from a previously infected person or thing.

While carrying on this investigation, I was struck with the unity of origin in cases of puerperal fever, and typhoid also; and, in pursuing the inquiry, found how, from the same source, there would spring erysipelas; scarlatina, typhoid, puerperal, and diphtheria fevers; sore umbilicus in infants, sore eyes, sore mouth, and sore throats, embracing a very wide area of inflammation and inflammatory conditions of palate, tonsils, pharynx; and, passing still further on in the respiratory tract, the larynx, the bronchi, the pleuræ, or the pleuræ and lung, would be found involved; so that toxæmic or septicæmic laryngitis, bronchitis, pleurisy, pneumonia, and pleuro-pneumonia, attacking a variety of persons, may all, as in the case of the other forenamed ailments, viz., toxæmic, typhoid, etc.—as I call them to distinguish them from the orthodox—be traced to the same causes; as could also hepatitis, diarrhœa, dysentery, cholera, enteritis, hæmorrhoids, and a large number of affections hitherto considered to be utterly distinct, and having no connection with each other, no point in common, no place where all meet together, because they diverge so much afterwards. Hence I formulated, as a heading to my papers, unity (as regards origin) of poison in the diseases I have just enumerated, and in many others, usually considered to be separate and entirely distinct.

This unity and differentiation in the course of evolution is now recognised by many medical men. Moreover, I found one disease (I adhere to the current word), or, as I term it, one set of symptoms, to be evoluted from another, in some cases so far apart in nosological arrangement as to be said to be wholly and entirely distinct, distinct even to specificity; and a number of nosologically divided diseases (sets of symptoms) to be evoluted from the one unity-point, the one common ancestry—differentiated no matter how widely, as they actually become, afterwards. I have, therefore, extended the formulated heading into "Unity of poison in diseases usually considered to be separate and entirely distinct; and the evolution of one from another apparently quite distinct, and of many diseases—seemingly all different—from one unity or common origin;" evolution from this unity leading to differentiations. Further, I recognise that symptoms occurring in the course of an affection, say such as scarlatina, symptoms which ordinarily are termed "complications," may become primary motors of disease, originating a fresh epidemic, it may be—fresh, inasmuch as it would differ from that in the course of which it was itself evoluted. For example: Diphtheria not unfrequently is met with as a "complication" of scarlatina (I would say it was part and parcel of the scarlatina), which, in this instance, would be spoken of as the primary disease, the other as being secondary; this latter would be conveyed to a number of persons, even to such a number, it may be, as to constitute an epidemic, spreading fast from one to another. Then this diphtheria would cease to propagate itself, or would cause something quite different to be evoluted, or would cause diphtheria to be evoluted in the persons exposed, or in the course of these evolutions it would hark back to that which set it agoing—viz., scarlatina; or there would originate or evolute, in a number of the exposed, certain other symptoms, usually considered sequelæ, but not actually part of the scarlatina; so that another outburst of something, seemingly altogether different from scarlatina and diphtheria, would take place, to cause perhaps another new evolution; or, again, to hark back to scarlatina or diphtheria, or both combined, as it would be termed; or would, as it were, leap forward and cause to be evoluted, in a certain number of cases, a very ulterior sequelæ of scarlatina—say rheumatism, or rheumatic fever, and heart and pericardic[1] affections; or the latter *per se*; or, it may be, nephritis (the scarlatinal form) would be evoluted, without any other intermediate symptoms being noticed, or any pre-existing warnings having been detected, or indeed been noticeable or detectable, such a form of nephritis as would be infectious—infective nephritis, I would call it—inasmuch as it has the power to set up scarlatina, or diphtheria, or any other ailment or group of symptoms coming within the range of its infectivity. In this way, new sets of symptoms may be evoluted, new outward manifestations of the inward workings or evolution, a new disease in fact, as would be said in current medical phraseology. In this I am fortified by the Bradshawe Lecture of Sir James Paget, and his and Sir William Gull's addresses on "Collective Investigation of Disease."

By unity of poison, I would beg my hearers to bear in mind I mean, not that the poison is always the same, but that the one poison—the one *origo mali*—whatever it may be, will originate several so-called different affections—widely different seemingly, widely different they would be spoken of, widely different even to be considered in every respect "specific."

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[1] See Dr. Sansom's recent Lettsomian Lectures, in which is confirmation of this.

A LITTLE KNOWLEDGE.—A candidate at a recent examination for a scholarship under the School Board is reported to have made the following statement concerning the process of digestion: "The food passes through the liver, and evaporates by means of little holes called capillaries." The examiner who published the answers suggests that this novel theory had its origin in the study of some cheap diagram of the digestive system. Knowledge of this kind is indeed a dangerous thing, and worse than honest ignorance. There is a simple ignorance, and there is a conceited ignorance; that is, there are people who are ignorant and know that they are; and there are people who are ignorant and think they know. The latter only are a dangerous class.

CASE OF PERFORATION OF STOMACH FROM GASTRIC ULCER.

By ARTHUR CAMPBELL, M.B., Mablethorpe, Alford.

EMMA S., aged 30, married, having three children, first suffered from dyspeptic symptoms about fourteen years ago. She came under my care in 1879, having previously been under the treatment of several medical men, but without obtaining relief. She had almost constant pain in the left hypochondrium and back, increased by food, with frequent attacks of sickness, the pain somewhat abating after vomiting. She was weak and anæmic, had scanty menstruation, the tongue was red and raw in patches, the edges thin and much indented; there was tenderness on pressure over the region of the stomach, the pulse was weak and quick; there was no history of intemperance, or of the occurrence of hæmatemesis; the appetite was capricious, and she had little self-control, so that her disease was aggravated by the indigestible food which she swallowed.

After a short time under my care, she went to Lincoln Hospital, where she remained six weeks, during a portion of which time nutrient enemata were tried, and food by mouth entirely excluded. Under this treatment, she rapidly lost strength from the great intolerance of ingesta by the rectum. She returned home worse, and after consulting several medical men, and despairing of cure, asked me to attend her for the purpose of mitigating her sufferings if possible. I again saw her in 1880, and from August to November in that year, tried every means of treatment for her relief I could think or hear of, but without success. During the latter month, I first tried nitrate of silver, giving one-sixth of a grain in solution in distilled water, desiring the patient to take each dose immediately before food, and warning her of the likelihood of increased irritation from the earlier doses. Her food was, and had been, regulated as most suitable to her. For about a fortnight her pain was greater, and during one of her severe attacks of vomiting which came on, and usually lasted three or four days, I discontinued the use of the drug; but, on her recovery, she recommenced its use, and I eventually prevailed upon her to take it for nearly nine months. After the continued use of the drug for some time, her pain and sickness decreased in severity and frequency until the middle of the year 1881, when she became quite free from both, and had gained twenty pounds in weight. A very faint trace of lead-coloured discoloration could be seen across the bridge of the nose, and extending to each cheek, and was the only disfiguration arising from the long continued use of the nitrate of silver.

In September, 1881, she first menstruated, after the cessation of the function for about two years; and about February, 1882, she became pregnant, and was confined of a healthy living female child on November 14th. A few weeks previous to this event, a violent attack of sickness took place, which I attributed to her pregnancy. For the first six months after her confinement she was in good health; but, after an illness from which the child suffered, and during which Mrs. S. almost constantly carried the child in her arms, dyspeptic symptoms again set in, and she gradually became worse, until December 12th, 1883, when she had a slight attack of hæmatemesis, which occurred on January 2nd. From the commencement of this illness, she took nitrate of silver in pill with opium, but little or no relief was derived.

On January 12th, 1884, about two or three o'clock in the afternoon, while she was cleaning her kitchen, Mrs. S. was attacked by a sudden and violent pain in the abdomen. I was immediately called, and found her in great agony, sitting on a sofa, her clothes loosened, and making strong pressure with her hands over the seat of pain in the lower part of her body. The muscles of the abdominal wall were spasmodically knotted; the countenance wore an agonised expression; there was flatulence, but no sickness. She had just taken a little brandy, but had no food since early morning. The pulse was so feeble, that I feared her instant death, and gave a draught containing compound spirit of sulphuric ether, and injected morphia hypodermically. As soon as possible, hot linseed poultices were applied, and repeated every ten or twenty minutes. At this time the symptoms all pointed to colic: severe pain moving from place to place, relief produced by firm pressure and heat, normal temperature, pulse not unusually quick for the patient (104), flatulence, no sickness. The possibility of perforation having occurred, although the symptoms would lead one to doubt it, made me regret having given the draught, and I resolved to give no more food or medicine by the mouth. I therefore administered hypodermic injections every two hours, or as often as necessary; but after the first hour, the pain decreased to a great extent, and hot and heavy poultices always gave relief.

On January 13th, at 2.30 A.M., I saw her, and inquired as to the state of her bladder. She had not passed urine since the previous morning (seventeen hours), and found it impossible to do so now. I therefore passed a catheter, and drew off about six ounces of sherry-coloured urine. The small quantity did not alarm me at first, as it was not unusual for the patient to go twenty-four hours without relieving her bladder; but the abdomen had become slightly tender. The pulse was not quickened, and the character of the pain had become altered. At 8.30 I gave her a hypodermic injection of morphia, and at ten an enema of brandy, beef-tea, and a few drops of laudanum. At 11.45 I again passed the catheter, and drew off two ounces of urine, and found signs of an abortion about to take place. At 2 P.M. she dosed for first time. At 3 I repeated the enema. Dr. Lanphier saw her with me at 4 P.M.; the pulse then was 140. The temperature had risen to 99.8°; there was severe pain; the abdomen was more tender, and labour-pains were complained of. About 5 P.M. we removed the fœtus and placenta, and, in order to prevent hæmorrhage, gave a hypodermic injection of ergotine. The pulse had become exceedingly weak, but teaspoonful doses of champagne, frequently repeated, partially restored her. At 7.30 I again passed a catheter, as the patient wished to be saved the pain of moving, and drew off about one ounce of urine, making about nine or ten ounces during the past thirty-four hours. Her condition was now hopeless; the morphia was discontinued on account of the suppression of urine, and belladonna suppositories substituted. Her pulse became weaker, her extremities cold, and she ultimately succumbed at 10.40, suffering great pain to the last.

With some difficulty I obtained permission to make a *post mortem* examination, and, fourteen hours after death, I opened the abdomen, which was inflated with gas, which escaped on the introduction of the knife, leaving the intestines flaccid. The omentum was pale and friable; the intestines were also extremely pale and contracted; the stomach was small; the abdominal cavity contained several pints of serum, with a few flakes of lymph; there were no signs of congestion in any organ. On opening the stomach, the surface was smooth and creamy; the rugæ had almost disappeared; the only contents were two pills. Near the cardiac orifice an ulcer was found, in shape round, about the size of a two-shilling piece. At the bottom of this was a circular hole, as if a small bullet had been shot through. Near this perforation was, what I considered to be, the cicatrix of the former ulcer from which she suffered. The kidneys and liver were small and pale, and, were it not for the perforation in the stomach, the organs were such as one would expect to see after death by starvation. The uterus was about eight or nine inches long, and, in appearance, what one would expect after abortion.

REMARKS.—During the last few months of Mrs. S.'s life, she ate very little, dreading the agony consequent on the presence of food in the stomach; she consequently became extremely anæmic and thin. Before her convalescence, in 1881, when she was also very anæmic, I found the greatest difficulty in producing any signs of irritation in the skin of her abdomen; mustard, if left on for hours, failed to produce redness, and croton-oil liniment produced only a faint crop of pustules, after frequent applications; but, during the period when she was apparently free from gastric trouble, mustard acted readily.

The draught by the mouth might well have been omitted in treatment, but her collapse was so great that I feared instant death, and therefore risked it, seeing that the symptoms pointed to intestinal colic rather than to perforation.

Perhaps an earlier discontinuance of morphia might have been advantageous, when the suppression of urine was so great; but the previous history of the woman's habits, and the extreme violence of her agonies, decided me to the continuance of the drug most likele to relieve. In giving champagne by the mouth, we trusted that the small quantities would be absorbed before reaching the stomach.

In conclusion, I shall be inclined to give nitrate of silver in solution rather than in pill, in any succeeding case where I may require its use for a stomach-disease, as the pill is apt to become inert.

SYPHILIS AND TABES.—M. Abadie does not accept Fournier's opinion, according to which every case of locomotor ataxy has a syphilitic origin. He says that atrophy of the optic nerve, though an early symptom, is never benefited by mercurial treatment. M. Ranse believes that some syphilitic lesions of the central nervous system may simulate, but not cause, true locomotor ataxy.

A CLINICAL OBSERVATION IN SUPPORT OF THE THEORY OF THE CONTAGIOUSNESS OF PULMONARY CONSUMPTION.

By FRANK OGSTON, M.D., Aberdeen.

FROM all that could be learned of the family-history of Mr. and Mrs. G., no suspicion of an hereditary tendency to consumption could be traced; on the contrary, both his and her forefathers had been noted as being healthy and long-lived, and they themselves, at the ages of fifty-seven and fifty-five respectively, are quite hale and strong. Their family consisted of six sons and two daughters, between the ages of thirty-one and twelve; and they had been strong and healthy children, with no apparent tendency to disease.

About three years ago, the third son (George) caught cold, as it was said, and came from his home in Glasgow, where he was living with his wife, to be nursed in his father's house in Aberdeen. He was examined by a medical man in town, who stated that he was suffering from pulmonary consumption; and he died about two months afterwards. The accounts of his illness leave no doubt that the disease was correctly diagnosed, and that it had run its usual course.

There is an obscure history that some of the members of George's wife's family had died of consumption; but she had none of the symptoms of it, and was quite well when last heard of.

George had been nursed by his sisters, Kate, aged then about twenty-one, unmarried, and Mrs. B., aged eighteen, since married, who, it is stated, were then both stout healthy girls.

The first month after George returned to his father's house, a younger brother (Charles), aged fourteen, slept in the same bed with him; but afterwards, for convenience of nursing, went into another room.

Shortly before George's death, Kate began to lose colour and flesh; but little notice was taken of her, as it was ascribed to fatigue and grief for her brother.

In July 1882, I was called to see Mrs. B., who had been married a few months previously, and who occupied, with her husband, part of the same house with her parents. I found consolidation of the right apex, and a larger patch of consolidation in the left apex, which had just commenced to break down. She had an anæmic appearance, but was fairly plump. Her forenoon temperature was generally about 100°, but she had no night-sweats. The paroxysmal cough was the chief source of complaint. The disease progressed rapidly, in spite of cod-liver oil emulsion, Coghill's inhaler, etc.; and, in November, she died in a few minutes from an attack of hæmoptysis. She had become rapidly emaciated, and both lungs were extensively broken down. The sputa, which had become abundant, swarmed with bacilli.

During Mrs. B.'s illness, my attention was called to her sister Kate, who was nursing her, and I found in her also apical consolidation to a slight extent, with rapid pulse and an anæmic appearance. She had no cough at that time, and seemed to improve when ordered hæmatonics and separation from her sister.

During the same summer, a boy came to my house from time to time, complaining much of shortness of breath and weakness. On examining his chest, I found a suspicious dulness at the left apex. I gave him quinine and iron tonics, and he improved for a time. I did not see him for a few months; but one day I found him in Mr. G.'s house, when I discovered that he was one of the family—in fact, Charles, aged now nearly seventeen.

From time to time I visited Kate and Charles, who became gradually worse; and in a few months they died, with all the symptoms of phthisis, within a few days of each other.

There now remain four sons: the eldest, a tailor's cutter, is married, and has two strong and healthy boys; the second, [illegible] is the picture of vigorous manhood; the third, a sailor, who comes in point of age between George and Kate, is a strong and vigorous man, who has come through many hardships, having been several times wrecked: "on one occasion, he was in an open boat on the Atlantic for fifteen hours, with no clothing but his night-dress, and then three days with only a suit of oilskins above the night-dress" (a brother's statement); and the youngest, a boy now of fifteen years, is a draper's apprentice, and is strong and healthy.

Here, then, we have a man suffering from consumption brought into a healthy household, infecting first a brother, who slept with him, and then his sisters, who were engaged nursing him, while his four remaining brothers, who came little into contact with him, escaped. The presumption of contagion seems strong.

CLINICAL MEMORANDA.

PICRIC ACID AS A TEST IN URINE CONTAINING QUININE.

THAT picric acid is an extremely delicate test for albumen, there can be no doubt in the mind of any one who has given it a trial; and we are much indebted to Dr. George Johnson for its introduction, especially as the mode of application is so simple. I wish here to notice a few points with reference to the reaction of the test in the urine of those who are taking quinine; this has been noticed by Dr. J. F. Nicholson, in the *Lancet* of November last, and alluded to by Dr. G. Johnson in his lecture, and also in the JOURNAL of January 19th, where he replies to a criticism of Drs. Cook and Watkins. It seems, however, to have been regarded rather as an exceptional occurrence, and only to arise in cases where large doses are taken, as in ague. Some weeks ago, I was examining for albumen the urine of a phthisical young lady; with the heat and nitric acid tests I obtained a negative result; on trying picric acid, I was somewhat surprised to find a milky opalescence, dissipated, however, by heat. The patient having a cavity at the left apex, my first idea was that peptones were present, and gave rise to the turbidity; but, on testing with Fehling's solution, the colour-indication was not obtained. I now remembered the fact of quinine (of which my patient was taking a grain and a half thrice daily) giving rise to similar turbidity, but had not anticipated that such would be the case with small doses. I therefore experimented first with a solution of sulphate of quinine in normal urine, and found that a recognisable opalescence was produced by the addition of picric acid to a solution of one-fortieth of a grain of quinine to an ounce of urine. I now proceeded to try the internal administration, and took two grains at 11 A.M.; at 2 P.M. there was no reaction with picric acid; at 4 P.M. two more grains were taken, and at 6 P.M. the urine passed showed faint opalescence in the upper portion of the test-tube; after standing a while, some urates settled at the bottom of the tube, coloured by the picric acid; at 9 P.M. a third dose of two grains was taken, and an hour later there was very marked opalescence; similarly next morning in the urine passed at 7 o'clock. It is not remarkable that such should be the case, when it is considered that about two-thirds of the quinine swallowed is believed to pass off in the urine, its excretion commencing half an hour from the commencement, and continuing two or three days, though some of it may appear in the [illegible] from [illegible] in which it is taken. With these facts in view, it is well to be on the look-out as to whether patients are taking quinine, especially as many prescribe it for themselves without seeking medical [illegible]; the dissipation by heat of course readily distinguishes it from an albuminous turbidity; [illegible] as an interesting chemical fact, which must be of common occurrence. The other alkaloids in common use, *e.g.*, morphia, atropia, and strychnia, do not react nearly so readily as quinine with picric acid; and, their medical dose being small, it is impossible for them to present this characteristic in the urine.

With reference to peptones, I have no personal experience; but I can endorse Dr. George Johnson's opinion, that picric acid is a much more delicate test than Fehling's solution, having found that an exceedingly dilute solution of peptones yielded a distinct opalescence with picric acid, which solution had to be increased to five times the strength before the characteristic colour with Fehling's solution could be detected.

WM. S. [illegible], M.D.Lond., [illegible]

THERAPEUTIC MEMORANDA.

ALUM IN WHOOPING-COUGH.

A CORRESPONDENT, writing [illegible] use of alum, [illegible] the [illegible] profession. [illegible] a very old and [illegible] of the world [illegible] still, after a [illegible] trial of [illegible] after the [illegible] small doses of [illegible] at the same time I [illegible] Alum [illegible] This is given three [illegible] for a child [illegible] years. This mixture has a rough bitter-sweetish taste, and is much relished by children. It also answers well (without belladonna) in convalescence from bronchopneumonia attended with head-sweating and loss of appetite.

The *modus operandi* of alum is not so clear. Dr. Meigs gives a drachm in honey every ten minutes in croup till the child vomits, and in this disease prefers it to all other remedies; and it may possibly be by some action short of emesis that it acts in whooping-cough. I have, however, myself never given it in such doses (which could not be long continued), and am inclined to attribute its utility to its astringent, bracing, and tonic action on the blood and on the mucous membranes of the stomach and air-passages.

Whooping-cough proves fatal in most cases by subacute catarrhal bronchitis—a condition which small doses of alum are eminently calculated to prevent and restore.

It is possible, also, from its antiputrefactive properties, that it may exercise some deleterious influence on the *materies morbi*, or what I may perhaps call the germs of the disease. However this may be, alum is an excellent remedy. In the combination above given, I have almost invariably found it to lessen the cough, increase the appetite, strengthen the child, and in the end cure the disease.

Sometimes, however, a hacking spasmodic cough, preventing sleep, which no drug seems to relieve, occurs. Here, one or two teaspoonfuls of brandy, or less, according to age, with a double or fourth part of hot water and very little sugar, answer remarkably well.

D. H. CULLIMORE, M.D., etc.,
Physician to the North-West London Hospital.

ANTISEPTIC INHALATIONS IN PHTHISIS.

Now that this subject is receiving so much attention, and after Dr. Hassall's demonstration of the failure of most methods of inhalation to produce any antiseptic effects in the air-cavities of the lungs, it may be useful to draw attention to an apparatus which was designed for a very different purpose some months ago by Mr. Gibbs, of the firm of Cuxon and Co., Wednesbury, who are makers of all antiseptic appliances. The apparatus was made for me to take the place of the spray in operating, or else to fill the operating-room with antiseptic air, and so to do away with the necessity for the spray. It consists of a box with two chambers. A revolving fan, worked by turning a handle, sucks the air through a filter in one chamber, and then drives the air through the second chamber, which contains oil of eucalyptus poured on to stick-charcoal, and then delivers the air through a wide-mouthed hose, at the rate of 200 cubic feet a minute, thoroughly charged with the eucalyptus-vapour. Turpentine answers as well, and is much cheaper. A room can speedily be filled with antiseptic air, and by means of a water-current the supply can be made continuous.

H. LANGLEY BROWNE, West Bromwich.

ANTIGALACTAGOGUES.

I MIGHT be permitted to add my testimony to the recent discussion in the JOURNAL on the above subject. In India, women use belladonna as a household remedy, as an external application over the breast, when they wean babies, as an antigalactagogue. They generally keep in their houses round, flat and smooth stones to make extracts, by rubbing on them roots, nuts, wood, bark, etc., of different medicinal agents, using water, spirits, etc., as media. In the case of belladonna, they make a watery extract. I have seen it used as such with good effect. In my experience in cases of small-pox, where mothers were compelled to be separated from the babies, and where there was no hope of their return for weeks, I found a combination of five to ten grains of iodide of potassium, and five minims of tincture of belladonna, for a dose, given every four hours, answer admirably well;and, on looking over my cases, I find I never was required to administer more than twelve doses. In some cases, ordinary adhesive plaster was applied to support the breast, and, in a few painful cases, I used extract of belladonna and glycerine (1 to 8 strength) as an external application, with internal administration of iodide of potassium. In cases of threatening abscess, I have found a combination of iodide of potassium with cinchona a valuable remedy. I may say that Indian women use the fresh leaves of datura and a species of stramonium as antigalactagogues, and castor-oil plant leaves as a galactagogue.

MONTAGUE D. MAKUNA, L.R.C.P.Lond., M.R.C.S.

OBSTETRIC MEMORANDA.

CHEYNE-STOKES RESPIRATION.

A QUERY in the JOURNAL for December 15th, p. 1219, reminds me of a case of Cheyne-Stokes respiration in a newly-born child.

On July 18th, 1879, I attended a lady, aged 25, in her second accouchement, who, according to her own computation, was confined three weeks prematurely. The labour lasted not quite six and a half hours, and was easy and natural. The child, a male, at birth seemed perfectly healthy; was normal in appearance, of average size and weight, and respired immediately on the birth of the head and chest. Five hours after birth, however, it became ill. When I saw it, six hours after birth, he appeared dead, and was laid aside. The general external signs of death by apnœa were present. On my moving the body, the child took a spasmodic inspiration, like a first breath. After a few seconds, another inspiration followed; then a third, and so on, with gradually decreasing intervals, until respiration became normal. The heart's action, too, became normal, and the body grew warm and natural in colour. After a short time, his breathing began to grow quick, and ran up to hyperpnœa, and then declined to apnœa. During the apnœal stage, which lasted five minutes, I failed to perceive the least motion of the thoracic or abdominal walls, neither could I hear the child breathe. With the stethoscope, I could hear the heart faintly beating forty times per minute.

No drug of any kind had been given the child. Nothing amiss could be found on careful examination of the body. The bowels had moved spontaneously. Still, as it would twist, draw up the lower limbs, and cry, as if from colic, an enema of simple tepid water was administered, which caused a large alvine evacuation, with seeming relief. At the times when the child appeared to suffer from the recurrent abdominal pain, I noticed slight twitching of the facial muscles, with rolling of the eyes. Then followed a paroxysm of Cheyne-Stokes respiration. In seven hours, there were a dozen attacks of this abnormal form of breathing. The child died in an apnœal stage, twelve hours after birth. No necropsy was allowed.

Both parents drank a good deal. During her pregnancy, the mother partook freely of beer, if not of stronger drinks. She was also suspected, on good grounds, of using bromides, chloral-hydrate, and opiates. Her first child, a male also, was very puny and delicate.

It was a typical example of Cheyne-Stokes respiration. It is very unusual to see the apnœal stage last so long as five minutes; but I took the time by my watch. I am unable to suggest any explanation in this case.

P. O'CONNELL, M.D., Sioux City, Iowa, U.S.A.

MESSRS. SAMPSON LOW AND CO. are about to publish a work under the title of *Voyages of Discovery in the Arctic and Antarctic Seas and Round the World*, being personal narratives of attempts to reach the Poles, North and South, and of an open boat expedition up Wellington Channel in search of Sir John Franklin and Her Majesty's ships *Erebus* and *Terror* in Her Majesty's boat *Forlorn Hope*. The work, to which is added an autobiography of the veteran author, Deputy Inspector-General Robert M'Cormick, R.N., F.R.C.S., who is now in his eighty-third year, has been printed under his active superintendence. It will be dedicated, by special permission, to the Duke of Edinburgh.

BEQUESTS AND DONATIONS.—Sir Edward Henry Scott, Bart., of Cavendish Square and Sundridge Park, has bequeathed £500 to the Middlesex Hospital, £100 to the Bromley Cottage Hospital, and £300 to St. Mary's Hospital.—Mr. William N. Burroughs, in celebration of his eighty-fourth birthday, has given £500 to the Great Yarmouth Hospital, and £500 to the Fisherman's Hospital, in that town.—Mrs. Caroline Case, of Folkestone, has bequeathed £300 to the Liverpool Royal Infirmary.—Mrs. Jane Austen, of St. Leonard's-on-Sea, has bequeathed £100 each to the Infirmary, the Home for Invalid Gentlewomen, and the Convalescent Home for Children, all at St. Leonard's.—The Grocers' Company have given £100, and the Goldsmiths' Company £25 to the Lock Hospital and Asylum.—A bazaar at the residence of Mrs. Allen, Brighton, has realised £225 for Miss March's Convalescent Home at Blackrock.—Mrs. Thomas Martin has given £100 to the Royal Alexandra Hospital for Sick Children.—"J. B." (per Messrs. Hall and Co., Union Bank, Brighton) has given £100 to the Sussex County Hospital.—"A Friend" (per Dr. P. C. Smyly) has given £100 to the Throat and Ear Hospital, Dublin.—Mr. Stanley H. Hewitt has given £52 10s. to the Evelina Hospital for Sick Children.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

BRITISH LYING-IN HOSPITAL.

ALBUMINURIA, WITH GENERAL DROPSY.

(Reported by Dr. JOHN PHILLIPS.)

THE patient, E. P., aged 37, had previously given birth to five living children. She had had scarlet fever when young. In this, her sixth pregnancy, she first noticed that her arms and legs were swollen, and that her abdomen was unusually large, at the eighth month of gestation. She consulted Dr. Whittle of Brighton, who found about one-sixth albumen in her urine, and verified the presence of ascites and general anasarca. The legs being especially swelled with dropsical effusion, Dr. Whittle, regarding the case as of a threatening nature, sent her to London, to be in the wards of Dr. Fancourt Barnes.

On admision into the hospital on October 6th, 1883, the abdomen was unusually distended with ascitic fluid, masking the contour of the enlarged uterus. There was general anasarca, and the urine contained one-fourth albumen. On examination, *per vaginam*, the matron found the os soft and dilatable. Two hours afterwards, labour set in spontaneously, and ended in five hours, with the natural delivery of a dead male child.

The child, in its turn, was universally œdematous; the abdomen was unusually distended with ascitic fluid. The cuticle was desquamating, and the child had evidently been dead several days.

The placenta was equal in bulk to three full-sized natural placentæ at full term; it was unusually hypertrophied and dropsical. The chorion villi were hypertrophied.

The lying-in was normal, as was the temperature, with the exception of its rising once to 102° Fahr. on the fourth day. The quantity of the albumen in the urine diminished day by day, until only a trace was present on her discharge in good health from the hospital on October 24th, 1883.

REMARKS BY DR. FANCOURT BARNES.—The above case is an interesting example of albuminuria of pregnancy, associated with dropsy. The amount of dropsy in this case was unusually great; and it is instructive to note how such a case should have terminated in natural labour, without any sign of convulsions or other complication.

LEEDS PUBLIC DISPENSARY.

CASE OF TABETIC ARTHROPATHY.

(Under the care of Dr. BARRS.)

FREDERICK G., aged 42, entered the army twenty-five years ago when in his seventeenth year. He was discharged invalided, with a "chronic sprained ankle of the right foot," nine years ago; since then, he followed the occupation of a cowman. He had, with the exception of early years in the army, been a temperate man. He had gonorrhœa twenty-four years ago, not followed by any constitutional signs. There was no subsequent venereal infection. Beyond that, one brother suffered from unilateral sciatica. There was no family history of neuropathic taint. He was married; his wife was living and healthy. In 1874, he sprained his right ankle. He was running with a heavy weight upon his back, when he fell with his legs doubled under him. He had not fallen before, and the accident was clearly not due to any atactic condition existing at the time. He was in bed seventy-five days, and unable to walk properly for six months afterwards. He gave up work as a cowman in August 1882, on account of the affection of the left leg to be described. For two or two and a half years he had been unable to move about with any certainty in the dark. He said: "If I can't see where I am going, I begin to fall up against things." In the daytime and in a good light, he said, he had no difficulty in getting about, until, of course, the affection of the hip set in. At this time, also, he had attacks of what he called "rheumatism" in his legs, generally attributed by him to change in the weather. He said the pains were usually situated in the ankle-joints, shin-bones, and knee-caps, and were of a distinctly intermittent shooting or darting character. These attacks of so-called rheumatism were always preceded by curious attacks of coughing, followed by vomiting. The coughing came on quite suddenly, and was accompanied by some expectoration; then followed epigastric pain and retching, with vomiting of food which had been recently taken. He had passed two or three months without an attack; but in May 1883 they appeared once in six weeks, and lasted usually three or four days. The initial pulmonary and gastric crisis lasted not usually more than twenty-four hours. The gastric crises and fulgurant pains excluded each other most completely. There had never been diarrhœa; and between the attacks he was free from any stomach or lung-symptoms whatever; neither were they induced by irregular or unusual diet. He had never suffered from girth-pain or from double vision. He was a well nourished, healthy looking, well built man, of quite average intelligence. The face was scarred and the nose deformed, as the result of injury, not of disease. There had at times appeared to be a little want of symmetry in the muscles of expression. The only cranial nerve affected seemed to be the motor branch of the ciliary ganglion, as evidenced in the condition of the pupils, which was fairly well marked. On June 19th, 1883, the right pupil was $1\frac{3}{4}$ millimètres in diameter, while the left was 3 millimètres, in a poor light, which, even in the left eye, would mean an unnaturally contracted pupil. Both pupils reacted fairly well in convergence for near objects, but for light they were completely fixed. The action of the external muscles of the eye was good. The vision was good in both eyes, and the fundus showed no morbid change.

Any affection of gait he might have was entirely masked by the impairment resulting from the marked changes in the left hip. The limbs were well nourished and symmetrical, with the exception to be described presently. The skin showed no trophic changes, and the muscles, considering their long enforced idleness, were of good bulk and tone.

Ordinary tactile sensation was much blunted in quality, from the soles of the feet up to the middle of the calves, or thereabouts. The reaction period was normal. There was marked analgesia over this area. The plantar reflex was entirely gone, as was also the knee-jerk in both limbs. Cremasteric reflex was present. Muscle-sense, roughly tested, did not appear to be impaired. The bladder and rectum were not affected, and the testes and penis were normal in appearance.

Joints of Lower Extremities. There was much thickening and deformity of outline of the right ankle-joint, giving rise to some stiffness of the joint. The condition was not unlike that seen after a badly united Pott's fracture. The condition was clearly the result of injury. The attention was at once arrested by the very unusual conditions of the left hip and thigh adjacent. There was a large more or less rounded smooth swelling of the upper and outer part of the thigh and hip, extending upwards almost to the crest of the ilium. An acquired lordosis and the swelling had given the buttock on this side a greater prominence. The surface of the swelling had a natural appearance, except for a few enlarged superficial veins. The swelling was not quite uniform, but seemed to be greater at points corresponding to the intermuscular spaces of the part, or as though a large fluid swelling existed between the muscles, and bulged as much as possible between them. At first sight, the mass had almost the appearance of a large growth attached to the upper end of the femur. There was also swelling, but to a much less degree of the thigh below as far as the knee. As he stood, there was considerable lordosis and tilting of the pelvis. In the horizontal posture there was eversion of the foot, inability to raise the heel; and on careful measurement, the affected limb was two inches shorter than its fellow. There was unusually free movement of the left hip-joint, with dull grating. It seemed almost as though anything like proper limitation of the movements of the head of the femur was entirely abolished. There was an entire absence of pain, both on passive and on active movement; and, in spite of the manifest disorganisation of the joint, he was able to walk some distance with the help of a stick.

The history of the joint-affection is shortly as follows. In November 1881, a swelling appeared in the right foot about the first metatarso-phalangeal joint. It came on gradually, and reached its maximum in a week. The skin was red and extremely painful. This cleared up in two months. At this time the left thigh began to swell, the limb from knee to hip being involved; the knee-joint was also swollen. A year ago he first felt pain in the left hip, and the limb continued swelled, and remained unchanged in that respect up to June 1883.

REMARKS.—The case appears to be, in its full development, a typical one of the destructive form of Charcot's disease. The history of the case is not quite that given by Charcot, whose description, however, was based only upon seven cases. Variations from such results will clearly become more frequent as the recorded cases increase in number. The acute, almost gout-like, affection of the right foot, followed by a complete recovery, is a very interesting point in the case, especially when read by the light of recent observations by Pitres and Vaillard on peripheral neuritis, which lesion undoubtedly affords the most reasonable explanation of the incidental and asymmetrical manifestations in cases of locomotor ataxy.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 25TH, 1884.

Sir ANDREW CLARK, Bart., M.D., LL.D., F.R.C.P., President in the Chair.

An Unusual Form of Dislocation of the Hip.—Mr. **WALTER RIVINGTON** contributed this case. On August 6th, 1883, a man, aged 34, was standing with his legs apart and his body bent forwards, when some large packing cases fell upon him, striking him on the right side of the head and right hip. The head of the right femur was displaced from the acetabulum. The symptoms were complete immobility of the thigh, which was slightly flexed; abduction and commencing inversion of the whole limb, and shortening to the extent of three-eighths of an inch. Under ether it was readily reduced on the first employment of manipulation, the head entering the acetabulum with a click, and with slight grating. The dislocation differed from the ordinary sciatic form in the abduction, slight inversion, and less amount of shortening; and it did not resemble some published instances of anomalous displacements. It might best be described, perhaps, as the first stage of a sciatic displacement. On September 11th, the patient, being able to walk, left the hospital cured.

Wound of the External Carotid by a Stab in the Parotid Region; Recurrent Attacks of Hæmorrhage; Temporary Ligature of the Carotid Trunk, combined with Ligature of the External Carotid at the Seat of Injury.—Mr. **WALTER RIVINGTON** furnished notes of this case. The patient, a carman, aged 31, was stabbed by his wife in the left parotid region on December 24th, 1882. Hæmorrhage had ceased before his admission into the London Hospital, and his wounds were brought together by sutures. On December 30th and 31st some hæmorrhage occurred, but it was readily arrested by pressure. Swelling of the left side of the face and erysipelas supervened, necessitating incision and the insertion of drainage-tubes. He went on well till Monday the 15th of January, 1883, when severe hæmorrhage occurred, arrested by pressure with a sponge and bandage. On the following morning he was seen by Mr. Rivington. On the removal of the bandage and compress blood gushed out in a strong jet from a wound over the position of the external carotid behind the jaw. Pressure stopped the hæmorrhage. To avoid loss of blood during the process of securing the wounded vessel, Mr. Rivington cut down upon the carotid above the ordinary seat of bifurcation of the common carotid, and, passing a catgut ligature round one of the carotid trunks (either the common or external carotid), tied it so as to stop the current without dividing the coats of the vessel. On removing the pressure from the wounded external carotid only a languid stream issued, and the vessel was tied above and below the opening. The ligature round the main trunk was then untied, but left under the vessel, and the wound was closed, the ends of the ligature passing out between its lips. No more hæmorrhage occurred, and the patient made a good recovery. The catgut ligature dissolved and came away from under the main trunk, spontaneously, on the sixth day after operation.—Dr. **COUPLAND** observed that a very similar case had been reported in a former volume of the Society's *Transactions*, and that the patient was present in the anteroom for examination.

Angina Pectoris in which the Anginous Symptoms were rapidly followed by Pericardial Effusion.—Dr. **DONALD HOOD** gave notes of this case, the history of which was briefly as follows. A gentleman, aged 65, resting on a sofa, apparently asleep, was suddenly aroused by the window-curtains being on fire. He quickly jumped up to extinguish the flames, and, within half an hour of this exertion, he was suddenly seized with severe heart-cramp. Seen shortly afterwards by Dr. Hood, he was noticed as being blanched, barely able to speak, with his heart's action irregular and fluttering, pulse of peculiarly low tension, and agonising cramp-like pain over the cardiac region. Hot stimulating applications, brandy, ether, and opium, were used freely, and the patient slowly lost the pain, and a general improvement of the circulation took place. Twenty-four hours after the commencement of the attack, a soft pericardial shuffle was noticed. Within a few hours, it had deepened into a distinct rub. From this time, during the succeeding ten days, the case assumed all the characters of one of pericardial effusion, the amount of fluid being but moderate, and apparently completely absorbed within the ten days. A fortnight later, the patient was found to have a systolic apex-murmur, and symptoms of incompetency of the mitral valve rapidly developed. The patient died four months later from syncope, and, at the time of death, was the subject of cardiac dropsy. No *post mortem* examination could be obtained. Dr. Hood suggested, as a possible explanation of the primary attack, with its subsequent train of symptoms, that the patient was the subject of some fibroid degeneration of the heart. Roused from sleep by the flames, his alarm and exertions caused a sudden distension of the heart-cavities, which possibly gave rise to some lesion of the visceral layer of pericardium, and so started the pericarditis. In support of this hypothesis, Dr. Hood called attention to the series of cases of fibroid disease of the heart collected and published by the late Dr. Fagge in the twenty-fifth volume of the *Transactions of the Pathological Society*, and stated that in more than half of these cases the patients were found to have been the subjects of pericarditis. He further suggested that fibroid degeneration of the heart should be looked upon as a possible factor in those cases of pericardial effusion in which it was difficult to explain the cause of the pericarditis.—Dr. **BURNEY YEO** asked if the patient had shown any signs of renal changes, or of arterial degeneration.—Dr. **DE HAVILLAND HALL** narrated the history of a patient who, soon after quarrelling with his son, was seized with pain in the præcordium; and, when he was seen by Dr. Hall, the spasm was of a severe character, accompanied with frequent and feeble pulse; there was no murmur audible, and the temperature was not raised. The case clearly looked like angina; and Dr. Hall prescribed diffusible stimulants, with a subcutaneous injection of morphia. Two days later, the patient was visited again, when it was asserted that, though better on the intervening day, pain was still experienced. At this time, friction-sounds were heard over the heart, and death occurred five days afterwards. Dr. Hall considered that this case was plainly one of angina, succeeded by pericarditis forty-eight hours after the attack.—Dr. **GLOVER** asked if Dr. Hall had noticed any elevation of temperature in the later stages of his case; and, in reply, Dr. **HALL** said the highest recorded figure was 99° or 100°.—The **PRESIDENT** expressed curiosity to learn why Dr. Hood had not resorted to nitroglycerine as a remedy in the treatment of his case. He also desired to know what degree of temperature had been reached in it; and, in connection with this question, drew attention to the fact that many cases of pericarditis went through their course without any exaltation in this respect.—Dr. **DUCKWORTH** suggested that pericarditis might pass unrecognised under the description of angina pectoris. He had seen no cases in which the former succeeded on the latter, but he recognised the existence of a pseudo-angina, especially when disease of the aortic valves existed, and thought Dr. Hood's case might possibly be of such a nature. Few physicians had seen fatal cases of angina, and for each such there were many in which the pain did not terminate in death, being of the character of an acute temporary neuralgia.—Dr. **ANGEL MONEY** asked how Dr. Hood's case differed from one of ordinary pericarditis?—**THE PRESIDENT** replied that Dr. Hood had not, he thought, introduced the case as having any special features as one of pericarditis, but as one of pericarditis ensuing on angina.—Dr. **EWART** observed that it was a question how far analogous symptoms to those of angina might be caused by dilatation of the heart and large vessels. He had met with cases in which cardiac pain was brought on by excitement, as in a case mentioned. Deposition of fibrin resulting from injury of such an organ might produce an amount of irritation equal to the setting up of pericarditis, and, in an enlarged aorta, or a ruptured aneurysm, the antecedent conditions necessary might be found.—Mr. **COODE ADAMS** made the suggestion that fatty degeneration of the heart might bring about the result described; extravasation through a rent in one such case had been described.—Dr. **HOOD** explained, in answer to Sir Andrew Clark's query, that he saw the case on a Sunday night, and was unable to obtain nitro-glycerine to administer. Temperature was normal throughout. The urine was of good density, and there was no arterial degeneration.

Empyema followed by Abscess in the Brain.—Dr. **DE HAVILLAND HALL** described this case. S. N., aged 19, a pupil-teacher, was admitted into the Westminster Hospital, August 20th, 1883. The patient had empyema following an attack of acute pleurisy three years previously. She had been tapped, and a drainage-tube left in. When first seen by Dr. Hall at Christmas, 1881, she was suffering from hectic in consequence of imperfect flow of pus; immediately, however, that perfect drainage was established, her condition improved, and for a year she was able to resume her duties. The reason of her last admission into hospital was the hope that the chest had sufficiently fallen in to allow of the withdrawal of the drainage-tube; but, when this was done, the evening rise of temperature which occurred showed that pus was accumulating, and the tube had again to be introduced. Just as the patient was about to return home, she began to complain of headache; this was followed by vomiting. On the 11th day from the onset of cerebral symptoms the temperature, which previously had been subnormal, began to rise. There were slight convulsions on the left side of the trunk and face, the drowsiness became more profound, and she died comatose. Shortly before death there was a copious purulent discharge from the left nostril. At the *post mortem* examination, which was made by Dr. Hebb, the left pleura was found extremely dense; a cavity, capable of containing several ounces of fluid, lay between the opposing surfaces, elsewhere the parietal and visceral pleuræ were united. On removing the brain, an abscess in the left posterior lobe burst; no other pathological appearance was detected. The abscess, spherical in shape, and about the size of a hen's egg, lay in the white matter; the walls were nearly an eighth of an inch thick, hard, and of a purplish brown colour; the contents were a thick greenish pus, which had an offensive odour. In commenting on this case, Dr. Hall insisted on the importance of having a double opening in cases of empyema, the lower one being made, if possible, in the eleventh interspace—a drainage-tube being passed through the two openings, and the ends tied together. By this means perfect drainage was attained. He claimed the case under consideration as a success, so far as the empyema was concerned, as the treatment was so far beneficial, that the patient was able to resume her duties; whereas, prior to the double opening being made, she was much exhausted by the constant suppuration, and consequent hectic. Turning to the question of cerebral abscess, Dr. Hall mentioned some cases in which this disease had followed empyema. In his case, the thick abscess-wall pointed to its being of many months' duration; the absence of symptoms till towards the end being explained by the seat of the lesion being at a distance from the motor and sensory centres, which apparently were not compressed. The two symptoms which ushered in the terminal period, viz., headache and vomiting, were those commonly observed in such cases. He was unable to give any explanation of the discharge of pus noticed from the left nostril shortly before death. At the necropsy, in spite of careful search, no appearance of suppuration was detected at the base of the brain, and there was no communication between the abscess and the nose.—Dr. BURNEY YEO expressed himself strongly in favour of Sir Joseph Lister's operation in cases of chronic empyema, whereby a free incision was made, and a portion of the seventh rib excised in the axilla. In his own practice this plan produced good results, and three cases were instanced by Dr. Yeo in proof. He wished to know how Dr. Hall regarded this operation. German authorities selected the fifth interspace in front as the point of operation, because of difficulty arising in old standing cases from the thickened deposits found in the axillary region.—Mr. PARKER pointed out that no particular spot could be named as suitable in all cases, and that empyema should be treated where found. In empyema of the whole chest, however, he preferred Dr. Yeo's plan to that indicated by Dr. Hall. Had the case narrated by the latter been under his care, he would have been dissatisfied with any less result than a cure, which, he thought, ought to have been obtained in this. When operating in such cases he made a single opening, into which he inserted two drainage-tubes to promote free discharge of pus. No portion of rib need be removed if the opening made were large enough. He found good results to follow from well scraping the cavity in old standing cases.—Mr. PEARCE GOULD considered the unsatisfactory termination of the case should not be credited to the operation, which was, in itself, successful. It was difficult to explain the abscess of the brain in association with empyema, but it had to be admitted that it was septicæmic, as shown by the temperature-chart of the case. Mr. Hulke, he observed, regarded the existence of subnormal temperature with headache as indicative of intracranial suppuration. Was any tubercle of the brain found in Dr. Hall's case? He agreed with Mr. Parker that all cases of empyema were not alike, and thought encouragement to operate in the eleventh interspace in some cases was found in the fact that the diaphragm did not in this situation interfere, a cavity remaining there. Moreover, where the wall of the chest collapsed in an empyema, the eleventh interspace was the only spot where a wide space existed, the diaphragm not being adherent, so that good drainage might be secured there. He believed it would have been a good plan in Dr. Hall's case to have left the upper tube in place instead of removing it. Commenting on Mr. Parker's plan of employing two tubes, Mr. Gould instanced the case of a gentleman on whom he operated, making a single free opening in the post-axillary line, inserting only a single tube. The patient, though much reduced, made a good recovery.—Mr. GODLEE thought it rash to ascribe the brain-abscess to the empyema, unless examination had been made to discover a suppurating spot in the ear or nose. He approved the removal of portions of three ribs in some old cases of empyema, thus affording an ample opening for free drainage. Two tubes would not be called for if the single opening were made sufficiently large. In one case he had operated on, and which died from other causes than the empyema, he found a formation of new bone progressing.—Mr. BARKER advocated excision of part of the rib to prevent nipping of the drainage-tube during collapse of the chest-wall. There would be no difficulty in obtaining free drainage, provided the opening was sufficiently large. In one case, he removed parts of three ribs, and in it complete renovation of bone occurred; and in young subjects especially, such a proceeding could be recommended.—A MEMBER said he had seen two instances within the last year in which cerebral abscess followed empyema treated by removal of rib.—The PRESIDENT said the discussion had brought out the fact that, under certain conditions, inflammation might occur without a rise of temperature; and also that septicæmia and even fever might exhibit an assemblage and progression of symptoms without exaltation of body-heat. In the London Hospital, recently, was a young married woman with phthisical family history, who had been five times operated on at Guy's, and then sent to the country. She returned with a dry pleuritic rub over the whole right chest. With rest in bed she improved, and one large opening was then made in the lower part of the axilla. She was discharged well, and with the right lung natural. While wearing the tube, she exhibited small storms of fever, which always subsided on the removal of small accumulations of pus, to which they were due.—Dr. HALL said consideration was given, before operating in his case, to Dr. Burney Yeo's suggestion, the lower opening having been purposely selected. It should be remembered, in judging the result, that the case was one of fistulous empyema, and had been progressing sixteen months before it came under his care; and, in such a case, the low operation offered the most favourable chance. The wall of the cerebral abscess was one-eighth of an inch thick, and must have, therefore, been some time in formation. There was no evidence of tubercle in the brain, nor of any diseased bone at the base of the brain, in the nose or ear.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

ORDINARY MEETING, JANUARY 11TH, 1884.

W. N. PRICE, Esq., President, in the Chair.

Concealed Ante Partum Hæmorrhage.—Mr. ARTHUR ROBERTS read notes of two cases of concealed *ante partum* hæmorrhage. A woman, aged 40, in the eighth month of pregnancy, had an attack of faintness and vomiting while engaged in washing clothes. On examination an hour afterwards, the os uteri was found about two inches in diameter; there were no pains; no external bleeding. Similar attacks of faintness with vomiting recurred at intervals of two or three hours. In fifteen hours she was delivered of a dead child after a short labour. Four spongy clots (each of the size of a child's head) followed the expulsion of the placenta; they seemed to have existed for several hours; probably each clot represented an attack such as above described. The next case was that of a woman, aged 24. This also occurred in the eighth month of pregnancy. The symptoms were precisely similar to those of the first case. The os uteri was small, hard, unyielding. Mr. Roberts, therefore, did not think it prudent to give ergot. Delivery occurred naturally in thirteen hours; a large clot followed the placenta; further bleeding had been guarded against by ergot, given immediately the fetus was expelled. Dr. BRAITHWAITE related a similar case which he had seen some years previously, the patient dying from the effect of hæmorrhage. He thought that ergot should be given, and delivery effected as early as possible. Mr. [illegible] and others spoke on the subject.

Gastrotomy for Extra-uterine Gestation.—Dr. JAMES BRAITHWAITE read notes of a case of gastrotomy for extra-uterine gestation. The child was dead at the time of operation, but the mother was now well.—Mr. **Robson** thought that cases of extra-uterine fœtation were nearly always tubal, and the history of Dr. Braithwaite's case of pain and collapse about the third month probably indicated a rupture of the tube at that date, and an escape of the ovum into the broad ligament, where it developed.

Use of the Catheter in Retention of Urine.—Dr. **Barrs**, having read notes of the following case, proceeded to make some remarks upon the general use of the catheter in cases of retention occurring in medical practice. A woman, aged 54, was admitted into the Leeds Fever Hospital in the third week of enteric fever. Five days after admission, retention occurred, requiring the use of the catheter; catheterism was practised by the nurse twice daily, until the death of the patient twelve days later. The urine remained practically clear and sweet until three days from the commencement of catheterism, but then became fœtid and mixed with much blood. There was constant admixture with large quantities of blood until death, with all the usual signs of intense cystitis. At the necropsy, there were found advanced suppurative nephritis, and an almost gangrenous inflammation of the bladder. The typhoid lesions were quite healed. The distinction between the conditions locally existing in cases of retention arising from general and central causes, and those existing in retention from chronic urethral obstruction, were first dwelt upon, and the necessity for keeping them continually in view, in discussing such cases as that read, duly pointed out; great importance being attached to the fact that, in the first class of cases, the distension never reached the extreme limits of the second class. Dr. Barrs was inclined to attribute the fatal cystitis and consequent kidney-lesion to the mechanical injury done by the catheter to the already enfeebled and altered mucous membrane, and not, of necessity, to the introduction of organisms by the instrument. Dr. Barrs was inclined to think that, in cases of central spinal disease or general asthenic conditions, it might, in many instances, be safer to allow the bladder to empty by natural overflow, than to draw off the urine by means of instruments, so long as the urine showed no putrefactive changes. That simple non-obstructive retention, with sweet urine, might be so treated, he thought was shown by the fact that, in many cases of paraplegia, such overflow existed without giving rise to any untoward results, in some cases, for many weeks. Dr. Barrs concluded that the simple distension of the bladder by sweet urine was no justification whatever for the passage of the catheter.—Dr. **Clifford Allbutt** welcomed the questioning of any practice which might sink into a dangerous routine. At the same time, his mind was very far as yet from admitting that fever patients should lie with distended bladders. It had hitherto seemed to him that such a state was positively injurious to the patient's chance of recovery. After the recent discussions on catheterism, he spoke with diffidence, but, nevertheless, with a strong opinion that the dangers of catheterism were two, and two only—namely, renal disease and septic poisoning.—Dr. **Churton** asked if it would be considered justifiable to permit the urine to overflow from a distended bladder due to myelitis affecting the lumbar enlargement, as in such a case the nutrition of the bladder was decreased, and its liability to morbid action increased.—Dr. **Jacob** and Dr. **T. C. Smith** also spoke.—Dr. **Barrs**, in his reply, stated that he had seen a case of fracture of the spine in the dorsal region, in which the urine had been designedly allowed to dribble away for several weeks; but he had no experience of this method in lumbar myelitis.

Linear Osteotomy.—Mr. **Edward Atkinson** read notes of three cases of linear osteotomy. Case I. A boy, aged 12, had ostitis of the middle third of the tibia, due to being hit on the shin by a stick three years before. Medicinal and other treatment gave no relief, and he complained of a dull aching, worse at night and on walking. Mr. Atkinson made a vertical incision, four inches long and one-third of an inch deep, into the bone by means of Hey's saw. Full antiseptic precautions were adopted. The temperature never rose above normal, and the wound healed in eight days. One month later, the boy felt quite well. Case II. A woman, aged 28, injured her right leg by a twist eight years before. Dull aching, worse at night, and swelling over the upper third of the tibia, without superficial inflammation, indicated ostitis. Linear osteotomy was performed as in the last case; and when seen two months afterwards, she was quite well. Case III. S. P., aged 29, when ten years of age, fractured the right forearm at the lower third. Five years ago, she began to suffer from pain at the site of the old fracture. When she was seen by Mr. Atkinson, there were the ordinary signs of ostitis over the lower third of the ulna. Linear osteotomy was performed, the periosteum being very thick. In three weeks, she was discharged well. Mr. Atkinson said that he had brought these cases forward for three reasons. 1. All three having occurred in his wards within a few months seemed to suggest the opportunity for remarking upon the usefulness of a treatment which was not so often practised as it might be. 2. Painful swellings of long bones occurring at some distance of time after the injury which gave rise to them, were perhaps too often regarded and treated as periostitis, whereas almost always the pain and swelling were due to inflammatory changes in the bone itself, which was relieved by free incision. 3. Occasionally, as in the last case, where the periosteum was the chief seat of disease, the fullest trial of internal treatment failed to benefit, while linear osteotomy seemed to give prompt and permanent relief.—Dr. **Clifford Allbutt** related a case which he had asked Mr. Teale to see, where a chronic periostitis of some years' duration had been relieved by free incision.

Hypertrophied Bladder.—Mr. **Atkinson** showed a pathological specimen of partly hypertrophied bladder, with dilated ureters and pelvis of kidney, due to enlarged prostate. At the fundus of the bladder was a saccule of the size of a walnut, which communicated with the bladder by means of a small opening just admitting a No. 4 catheter. At the top of the saccule was a minute valvular opening through which urine had escaped into the peritoneum. The man at sixty had been admitted for retention of urine, and relieved of a large quantity of ammoniacal urine. Mr. Atkinson remarked that it was evident, from the attenuation of the saccule and the small opening, that the process of rupture had been very gradual; and that, judging by the amount of urine in the abdomen, extravasation must have been going on for the five days which elapsed between the full distension of the viscus and death.

LIVERPOOL MEDICAL INSTITUTION.

THURSDAY, JANUARY 17TH, 1884.

Cirrhosis of the Liver.—Dr. **T. A. Wood** (Woolton) showed a specimen of advanced cirrhosis from a patient who had been a long time under his care. Four or five years ago, the liver extended two inches below the margin of the ribs. Fifteen months ago, it attained its largest size, reaching four inches below the ribs; since then it had gradually receded, until it could not be felt at all. The reason, however, that he brought the case forward was on account of the unusual cause of death, which was hæmorrhage into the peritoneal cavity, where, at the *post mortem* examination, a large quantity of clotted blood was found.—Dr **Davidson** considered this a very rare cause of death in cirrhosis. He had never met with such a case.

Dysenteric Abscess of the Liver bursting into the Lung.—Dr. **Caton** showed the organs of a man, aged 29, who was admitted with pyrexia, and pain and tenderness over the liver. He had suffered severely four years ago with dysentery, while abroad. There was a marked increase of the liver-dulness, both in front and behind. The pyrexia increased soon after admission, and a cough came on, with prune-juice expectoration, which the following day became very fœtid. This condition continued, and he rapidly became exhausted and died. At the *post mortem* examination, a large fœtid abscess was found at the upper convexity of the right lobe of the liver capable of containing three or four pints of pus; this had opened through the diaphragm and lung. Dr. Caton had declined to aspirate this case, as he found that, when the liver was punctured for abscess in cases where the locality of the abscess could not be detected by fluctuation, the results were not good, and he had seen two or three good recoveries follow a discharge of the matter through the lung.

Intrathoracic Tumour.—Dr. **G. Hamilton** showed the chest of a boy, aged 3 years, who was admitted with catarrhal pneumonia and diarrhœa. Shortly after admission, two enlarged glands were noticed above the clavicle. They steadily increased in size, and the chest behind, especially on the right side, became extensively dull on percussion. The child was in hospital for two months, and died of gradual emaciation. At the *post mortem* examination, a quantity of new growth was found in front of the spine, which spread out over the chest-wall, especially on the right side. It had not involved any of the internal organs by secondary infection, and had the appearance of a sarcoma.—Dr. **Oxley** considered it a case of malignant lymphadenoma.

Colour-Blindness.—Mr. **Bickerton** brought forward the case of a ship's mate, who, after being four and a half years at sea, was refused his master's certificate by the Board of Trade examiner owing to defective colour-sense. While at sea, his duties had required him to navigate his vessel into crowded ports, both by day and night, and he had never experienced any difficulty in doing so. Before applying for a master's certificate, he had been tested by his tutor, who pronounced his colour-sense correct; and when returned by the examiner, he was again tested by the tutor, and described the colours shown him correctly. This led to the further examination by Mr. Bickerton, who found that he was completely colour-blind. An inquiry into his family-history showed that he inherited his defect from his mother, who was incompletely colour-blind (failed at Holmgren's first test, though she passed the second and third). The sight of his father, sister, and one brother, was normal; but an elder brother, who obtained his master's certificate some years ago, was told by the local chairman of the Board of Trade that he was "a little defective in colours." Mr. Bickerton remarked that oral testing, as at present used for the detection of colour-blindness in sailors and railway-porters, was not a sufficient safeguard, and that the system required remodelling. He considered that the only reliable tests were those recommended by Professor Holmgren of Upsala.

Supposed Rupture of the Kidney.—Dr. MACFIE CAMPBELL read the notes of an accident which had occurred to a young patient of his while making a driving tour in Wales. He had leaped over a hedge into a field at a lower level than he expected. Landing on his feet, he fell over on his left side, and shortly after complained of intense pain, and voided bloody urine. He was taken into Denbigh, and placed under the care of Dr. Lloyd Roberts, whose notes of the case were read to the meeting. The pain was very acute, and was only relieved by the local application of ice. The day after the accident, the urine was of specific gravity 1022, deposited on boiling one-sixth part, and contained blood-casts and broken tubules. Dr. Campbell saw him two days after, when his temperature was 101°, the blood and pain persisting, with sickness and rigidity of the abdominal muscles. He, however, rapidly recovered, and was able to be brought home to Liverpool on the tenth day. Dr. Campbell called this a case of rupture, as the immediate symptoms were so acute; he discussed the diagnosis between slight rupture and contusion, and suggested various ways in which such an injury could have been caused in this apparently slight accident. The boy had formerly suffered from albuminuria after fever.

German Measles.—Dr. STEEVES read a short paper on five cases of German measles recently under his care. They all occurred in children, four in the same family, the other a neighbour. They were all exposed to the contagion of scarlet fever, there being no cases of measles nor German measles from which they could have been infected. The incubation lasted ten days, the premonitory fever twenty-four hours. The rash lasted from three to four days, and consisted of minute papules coalescing into irregular patches, and appearing first on the face. The throat was mildly affected in all, and the cervical glands were enlarged; in two, the suboccipital glands as well. Desquamation occurred only in one. Headache was marked at the onset.—Dr. T. A. WOOD frequently met with German measles. He regarded the appearance of the rash on the face as an important guide on the diagnosis.—Dr. ARCHER considered that German measles was a specific fever, and could not be contracted from either scarlet fever or from measles. In all the cases he had seen, the premonitory fever had been two or three days.—Dr. ROBERTSON had only once met with German measles to his knowledge, and that was among German emigrants. When admitted, the symptoms were like measles, and the glands of the neck were enlarged. The rash disappeared in three days, but the temperature kept up a few days longer. It was a remarkable feature of the epidemic that several of the cases were followed by croup, and tracheotomy had to be done in many, of which only one recovered. He did not think that he had ever met with German measles since that time, and was much disposed to believe that what many would call German measles were really only cases of slightly modified scarlet fever or measles. He doubted the character of those which had been read to-night, and said that he had met with epidemics of scarlet fever differing in a much greater degree from each other, than the cases which were brought forward differed from typical scarlet fever.—Dr. STEEVES, in his reply, maintained that his cases must be regarded as genuine German measles.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, JANUARY 18TH, 1884.

T. O. DUDFIELD, M.D., President, in the Chair.

Work of a Medical Officer of Health.—Dr. WALFORD read a paper entitled A Nine Years' Stewardship as Medical Officer of Health at King's Lynn, its difficulties and results, especially with reference to the improvement of the dwellings of the poor. He said that, when he took office in 1873, the population of the town was about 17,000, and that the corporation allowed a fee of two shillings and sixpence to the parish medical officers for every report made to him of cases of infectious disease, or any other matter requiring his attention; that through the ladies of the district visiting society, the police, the assistance of brother medical men, and in various other ways, he also received much valuable information, so that it could very rarely happen that anything demanding his attention could escape notice. He used, at regular and frequent intervals, accompanied by his borough surveyor, to make regular inspections of his district. Lynn was very similar to all the large towns of this country in having the same vices, the same wretched slums, squalid misery, poverty, and overcrowding; and a year or so before Dr. Walford took office there was a somewhat similar agitation going on at Lynn, and in its local papers, about the dwellings and sanitary condition of the poor, as was now going on in London. Dr. Walford found that his sanitary authority was always ready to enforce the various Acts relating to the housing of the poor, such as have not generally been made use of; in fact, he was exceptionally favourably circumstanced in this respect. He soon found he had two classes of the poor to deal with; those who would help themselves, and those who would not. The former took every advantage of improvements, and being naturally more thrifty and able to pay a better rent than their improvident neighbours, would try in every way to raise themselves. With regard to the other class, all improvements of every kind were completely thrown away upon them; he remembered many instances in which such people, having a good house to start with, or having a dilapidated house thoroughly repaired, very soon wrecked it by putting every piece of wood they could detach into the fire, and they more often than not paid no rent. As Lynn was a manufacturing seaport town, there was always plenty of work there, and yet rents were low; and Dr. Walford considered that the wretched condition of the poor was mainly, if not entirely, due to their own improvidence. With regard to overcrowding, with a large number of the poor this was merely a matter of wages in proportion to rent. Given a poor man, therefore, with a large family, out of regular work or in indifferent health, he could only obtain such accommodation as his wages would afford, which was often certainly insufficient for sanitary purposes; but still, as no one could compel him to go into the workhouse, or drive him into the street, or give him a better house, the only thing to do was to leave him where he was. As to overcrowding from the introduction of lodgers into a house or room, it was most difficult, if not impossible, to find out how many would come into a house or room at night for a shakedown; and though one might sometimes get a landlord to eject a tenant whose habits were suspicious, the result was probably only to produce overcrowding elsewhere. As a result, Dr. Walford considered that the existing Acts were amply sufficient to deal with the matter as far as it could be dealt with; that very great improvement was effected, during his term of office, in the dwellings of the better class of poor; while, as to the others, after years of work, he was obliged to confess that very little, if any, improvement, was effected, and he thought that none would be until they got a policeman to stand at the door of each hovel to look after the behaviour of its inmates, and to see that no one entered after the registered number of occupants had passed in. Dr. Walford also spoke of the effects of the reporting of infectious diseases. When he began his duties, shortly after a severe epidemic of scarlet fever, he found people willing to adopt every sanitary precaution, so that, for some years, scarlet fever was hardly known there; but, after seven or eight years, this very immunity from the disease engendered such an indifference to it, that he had much greater difficulty in enforcing the proper measures, and, as a result, the mortality was high.—In the discussion which followed, the President, Drs. Moore, Armistead, Dixon, Corner, and Waterworth, and Messrs. Lovett and Wynter Blyth, took part.

CHESTER MEDICAL SOCIETY.—FIRST ORDINARY MEETING.

FRIDAY, JANUARY 4TH, 1884.

EDWARD WATERS, M.D., President, in the Chair.

President's Address.—The PRESIDENT, on taking the chair, thanked the members for the honour they had conferred on him, and, in an interesting address, sketched the good results likely to follow the establishment of the Society, both in cementing friendly relations between its members, and as a means of conveying and receiving information about topics relating to the profession. He especially dwelt on the importance of younger members coming to the front, and trusted that those holding hospital and parochial appointments would communicate their interesting cases for the benefit of their less fortunate brethren.

Diseased Heart.—Mr. GEORGE HARRISON showed a heart with calcareous deposits on the aortic valves, and signs of ulceration on the mitral valve. The specimen was from a boy, aged 17, who died suddenly in the workhouse infirmary. There was no history of rheumatism. On physical examination, there were found some hypertrophy, a double aortic, and slight mitral murmur. On *post mortem* examination, the pericardium was found full of fluid. The other organs were healthy.—The PRESIDENT referred to the very early age at which such extensive organic disease was found, and thought probably the patient had suffered from endocarditis when very young.

Fracture of Frontal Bone.—Dr. H. W. KING showed a patient who had sustained a compound comminuted fracture of the frontal bone. Whilst unloading a flat at Connah's Quay, he was struck on the head by the handle of a crane, and fell perfectly insensible. He was sent by train to the Chester Infirmary. On admission, he was semiconscious; temperature 98°, and pulse 70. There was a loss of brain-matter. His pulse and temperature rapidly rose for some days, and delirium set in. He remained in this condition for some days, semiconscious, and only just able to take his food. After this, he gradually improved, small pieces of bone continuing to come away at short intervals. He was now quite well, though greatly disfigured.—A discussion took place, in which the President, Mr. Taylor, Mr. Granger, Mr. Watson, Dr. Roberts, Dr. Haining, and Dr. Macpherson took part.

Empyema.—Dr. STOLTERFOTH showed a patient who had suffered from empyema, and whose pleural cavity had been opened, and a drainage-tube introduced. The patient was a girl aged 15. None of the rib was removed, and the drainage-tube remained patulous throughout. The temperature fell from 104° to 100° a few hours after the operation. The tube was left in for three weeks; and, on removal, the sinus rapidly healed up. The expansion was now normal.

Life Album.—Dr. MACPHERSON showed the Collective Investigation Committee's new Life-Album, and gave a short account of the objects the Committee had in view.

REVIEWS AND NOTICES.

THE OPERATIVE TREATMENT OF INTRATHORACIC EFFUSION. By NORMAN PORRITT, L.R.C.P., M.R.C.S. London: J. and A. Churchill. 1883.

THIS is the Fothergillian Prize Essay for 1883; and the Medical Society of London have done well in crowning with honour such a specimen of indefatigable labour and industry. The book consists largely of quotations from leading authorities, and a great part is taken up with a careful survey of the literature of the subject; and this part might, with great advantage, have been abridged, and more prominence given to the author's own views and experiences, which are of considerable interest.

The anatomy and physiology of respiration are thoroughly described, and especially the exact position and attachments of the thoracic muscles.

The different kinds of effusion—serous, fibrinous, sero-fibrinous, sero-purulent, and sanguineous—are all considered; and thirty-eight cases, under the author's care, are given in illustration. The first point, on which he lays most stress, is the choice of the proper spot for puncture; he strongly criticises Professor Marshall's preference for the fifth interspace, when the pectoralis major is thin, and where the external intercostal muscle terminates to the outer side of the spot in question, it being here that the empyema necessitatis is supposed to usually point.

Mr. PORRITT gives a table of seventeen cases of perforation of empyemata, in only three of which the bursting took place in the fifth interspace, in one just below the nipple; the others opened mostly in the lower spaces, and several posteriorly. Mr. Porritt advocates the selection of the eighth intercostal space, about the junction of the anterior two-thirds with the posterior one-third. To find this spot, he says: "It is necessary to mark on the skin the position of the angle of the scapula when the arm is by the side, and also when the arm is raised above the head. One inch below the middle of the line drawn between these two points, will be found the desired spot." These remarks refer to the right side; if the effusion be on the left side, the same directions are to be followed but the seventh interspace is to be chosen.

The nature of the operation to be performed depends on the probable character of the fluid; if it be serous, the author uses not aspiration, in the usual sense of the word—*i.e.*, aspirators, more or less complicated—but, like Dr. Douglas Powell, he prefers the siphon arrangement of India-rubber tubing, three-sixteenths of an inch in diameter, connecting the trocar and cannula with a dish of five per cent. of carbolic acid, placed on the floor. Unless there be great displacement of the organs, he never draws off more than two pints at a time, trusting that the lymphatics and blood-vessels, now relieved from pressure, will absorb the rest. For purulent effusions, he may be said to unhesitatingly follow the lead of Sir Joseph Lister; and he advocates free incision with antiseptic dressings, changed, as it appears to us, at rather long intervals—using, not carbolised gauze, but salicylic silk, manufuctured by McGill of Leeds.

Mr. Porritt mentions, without sufficiently dwelling on, the two objections to the antiseptic mode of dressings in these cases: (1) the causation of carbolic poisoning, and (2) the lessened facilities for examination of the chest. The former may be remedied by substituting another antiseptic, such as boracic acid; the latter is more serious, and often leads to the state of the opposite lung being entirely overlooked; for, with the continued hissing sound of the spray, auscultation becomes impossible, and we have to trust to narrowly watching the patient's temperature, pulse, and weight, and to carefully examining the expectoration.

The author's results of operations are decidedly good, and he may be congratulated on them.

From what we have said, our readers may gather that we highly commend the work; and, while agreeing with the author on most points, we think he has hardly recognised the importance of counter-openings in the chest, and the presence of drainage-tubes in the pleural cavity, as the most effective means of promoting contraction and collapse of the chest-wall, this being the one thing to be aimed at in the treatment of chronic empyema.

While recognising the importance of rib-section, he omits all notice of Mr. Marshall's later operation of dividing the costal cartilages, which has some advantages, and is not a very serious proceeding.

ESSAYS ON DIET. By FRANCIS W. NEWMAN. London: Kegan Paul, Trench and Co.

THIS little book consists of a series of seven lectures and articles published by the author from 1868 onwards. The object of each is the same—viz., to urge the economy, healthfulness, and general suitability of vegetarianism. There is a good deal of inevitable repetition, as the lectures were given to different people at different times, and as all were intended to advance the same argument. The force of the argument is developed under three heads.

1. If the British people are to increase in numbers, and to become to any extent independent of foreign supplies of food, they must inevitably become vegetarians. If they do so, the author thinks that sixty or seventy millions of people might be supplied with food grown on our own soil. It is assumed to be desirable that we should increase in numbers, and the arguments of those who disagree with this opinion are not referred to, or, if so, only in the most distant and incidental way. But, of course, an essential part of the argument is that, *a fortiori*, the present population of thirty-five millions could most easily be supported from home-grown food, while we should become much richer by spending much less money on food, besides the fact that we should keep our money at home much more than we do.

2. It is argued that much disease is due, or may be due, to flesh-eating. On this head we could have desired greater concreteness of statement. As regards cattle, it is contended that foot-and-mouth disease may possibly (as believed by an eminent cattle-breeder) be due to breeding from immature parents, in order to meet the ever increasing requirements of the market, although the author does not say that he himself holds this opinion. He does think, however, that the long and fatiguing journeys made by cattle coming from abroad, and from distant parts at home, to be slaughtered, must throw them into a fevered state, and that to eat the flesh of such animals cannot be wholesome. There seems to be weight in this view; but, beyond the statements that vegetarians suffer less from zymotic diseases, and that their wounds heal more readily than those of flesh-eaters—neither of which is supported by much proof—no special facts are urged in support of it. There is, in fact, rather less accuracy in the book than we should have expected from its writer. For example, the story of Dr. Black's treatment of the

historian Ferguson is twice told; and in one place we are told that Ferguson was sixty-one years of age, and in the other that he was "over 50." This is a small matter, but twice also occurs the statement that small-pox has increased in Britain in the last twenty years. One of these occasions seems to have been in 1872, when the author (as we infer from internal evidence, though no date is given) was lecturing to the Society of Friends in Manchester. Now, it is well known that there was a most severe epidemic of small-pox in 1871 and 1872, the mortality reaching the figures of 1,022 and 831 per million respectively. But, taking periods of five years, the mortality from small-pox had fallen continuously from 279 per million in 1850-4, to 199 in 1855-9, to 190.6 in 1860-4, and to 147 in 1865-9. Yet these important facts, which are not stated, are flatly contradictory of the statement in the text. Still more extraordinary is it that, though the book was published in 1883, and although the mortality from small-pox in the five years 1875-9 (after it is said that the disease was increasing among us), was 81.6 per million, a much smaller figure than has been registered since 1850-4, yet this is not stated. A reference to the Registrar-General's report could easily have prevented the misstatement. In 1878 the small-pox mortality was 74 per million, in 1879 21, and 25 in 1880, yet neither are these facts mentioned. If this were the only kind of statement on which vegetarianism had to depend, we could not expect to see it extend much among us. We are sorry to see it, since it detracts from our power of receiving other facts on this authority; and yet there is much that is most readable and instructive in the book, and many of the arguments are no doubt most weighty. Of course arguments are founded on the condition of the peasantry of many countries, which show that the most robust health and longevity are compatible with vegetable feeding. These have, and ought to have, great force.

3. The third line of argument is that, if vegetable-feeding is sufficient for health, it is cruel to slaughter inoffensive animals, and that to do so must have an injurious effect on the morals of those who act in this way. The author does not attach so much importance to this argument as to the other two.

Probably the most interesting part of the book will be thought to be Chapter VI., in which the author developes his views on the land-tenure of Great Britain. It would be out of place to discuss these in a scientific journal, but they are no doubt very suggestive, and worthy of careful consideration.

PRACTICAL PATHOLOGY, a Manual for Students and Practitioners. By G. SIMS WOODHEAD, M.D., F.R.C.P.E., Demonstrator of Pathology in the University of Edinburgh, etc. Pentland: Edinburgh.

THIS book will undoubtedly prove useful to practitioners, and to all who have not constant opportunities for practical pathological work. It will also, we doubt not, be appreciated by the younger members of the profession.

At the commencement of the work, we find a list of the instruments and apparatus required for necroscopic work; and further on, a list of appliances useful for histological research. There is no doubt that these lists are complete, but it is doubtful whether all the apparatus described are in general use. Certainly, much valuable work has been done, and will in future be done, with a much less complete set of appliances.

A useful description of the best method of making *post mortem* examinations next follows; and, although it is difficult in such a subject to avoid apparent plagiarism, there is much that is original in this chapter. The author, however, in one matter falls into an error of omission which is common to nearly all works on this subject. This is in the question of the weight of the brain. Of course, it is a good plan to weigh the brain; it is, however, hardly sufficient merely to state the bare result in so many ounces, but the relative proportion between the weight of the brain and that of the entire body should be ascertained. By this means, a much more reliable indication of the comparative value of different brains would be obtained than by a mere statement of separate weights.

The various pathological conditions of the liver are carefully described. Among these is "cloudy swelling," an early stage of the process of fatty degeneration. The description here given may be considered as the best that has hitherto appeared. The author makes an important distinction between fatty infiltration and fatty degeneration of the liver. The plates illustrating these two conditions mark the difference very clearly. The different forms of cirrhosis are also well described and delineated.

The heart, which is the organ next described, also receives fair treatment at the hands of the author, and the plates alone give a good idea of its different morbid conditions.

As a rule, sufficiently complete description is given of each morbid condition to make the reader wish there had been a little more in one or two places. The spleen, for instance, and its appearances in disease, would certainly afford more scope for investigation than the author allows in his pages. The descriptions of morbid conditions of the nervous system are meagre, when we consider the variety of forms of degeneration observed in this tissue. Not one word is said about miliary degeneration, or about Clarke's grey degeneration; and we find only a cursory mention of the degenerations which are found in the nerve-corpuscles themselves. Nor is there any just reason why the word "sclerosis" should be completely ignored, and the term "descending degeneration" substituted.

There is one more criticism which applies to the whole of the work. The author takes for granted that the different morbid appearances will be at once recognisable from his description of their naked-eye appearances, and proceeds to give the directions for staining, clearing, and mounting, which apply to each special case. It would have been better had he given some general method applicable to all, and by which the different morbid appearances could have been more easily discriminated; and then, when the nature of the specimen had been determined, the proper agents for the perfect demonstration of its peculiar structure should have been described. This is specially the case as regards the morbid growths which are given towards the close of the work. There is, in this part, a tabular description of the differences between sarcomata and cancerous tumours, which will be welcomed by many of those who are not in the habit of examining these growths every day. The comparative characters are here well described, and there is no doubt that this is, perhaps, one of the most important points in the book.

Notwithstanding certain defects to which we have alluded, we feel conscious that the perusal of *Practical Pathology* will prove highly useful and beneficial to the class of readers for whose benefit it has been prepared.

LEÇONS SUR LES MALADIES MENTALES. Par B. BALL. Paris: 1883.

THE students of psychology who listen to M. BALL's lectures are to be congratulated on having so accomplished a teacher, and one who clothes his ideas in such excellent language. M. Ball is lucid in his descriptions of the various forms of insanity, and graphic in his narrations of cases. There is a certain freshness in style, and in the mode of expressing well-known facts and truths, which cannot but render his lectures agreeable reading. We turn to his pages with interest and curiosity to know what he will say on the points of most psychological interest at the present time; and here, in passing, we must express our surprise that the author should not have carried his English antecedents and proclivities into practical effect by supplying a good index to the work. There is, of course, the *Table des matières*, but he must know, as well as ourselves, how irritatingly disappointing this is to an English reader, accustomed to what alone can be called an index, an alphabetical list of the contents of the work. We hope it will be supplied in another edition, which so good a work is almost sure to reach.

After speaking of the irresistible impulses characteristic of epilepsy, M. Ball turns to those originating otherwise, and observes, "under a more durable and systematic form, and one more closely associated with the character of the individual, these morbid proclivities constitute a true insanity long recognised by alienists, which Prichard has named moral insanity, and of which M. Trélat has made a profound study in his justly celebrated work on *Lucid Insanity*."

M. Ball knows a man, otherwise honourable and full of intelligence, who has risen from a very moderate position to one of great wealth. The remarkable qualities which have aided him in his career have been marred by an irresistible desire to lie, which pursues him to the smallest details of life, and which destroys all value in his word with those who know him intimately. This insanity, M. Ball assures us, is the only irregularity of a mind otherwise perfectly intact and clear, which has never been troubled with the shade of derangement. M. Ball admits a suicidal and a homicidal impulse, pure and simple; of the latter, he says that there exists, in reality, a blind instinct, a special impulse, which dominates the murderer and [illegible] him. "Numerous and perfectly authentic examples establish the truth of this statement." From dogmatic denial of such impulse he appeals to facts, and gives a very striking case of a man upright and conscientious in all other respects than the desire to kill. On this point, he appeared to be "absolutely destitute of moral sense." M. Ball's final conclusion is, that "the most perfect health of the intellectual faculties may co-exist with insane criminal acts."

M. Ball enters fully into the consideration of saturnine insanity, and its relations to general paralysis of the insane, with which it has so many characters in common that in some cases it is impossible to distinguish the two forms, except from the history of the case, or from the morbid appearances found in the brain and spinal cord after death. We are somewhat surprised, in this and other instances, that M. Ball, who must enjoy special facilities for a thorough acquaintance with English psychology, should avail himself so sparingly of the labours of British alienists. Thus we find no reference to the cases reported by Dr. Rayner and others, of lead-poisoning and insanity. This by the way. There may, in both affections, be extreme embarrassment of speech, there may be exalted ideas, and there are tremors of the muscles and difficulty of walking. On the other hand, in the pseudo-general paralysis of lead, the pupils are not so apt to be unequal, the tremors of the hands are more marked, and mentally there is often ill-humour instead of the characteristic general well-being of true general paralysis.

M. Ball has some good observations on choreic insanity, which he describes under three forms; the first is marked by incoherent delirious mania, differing from ordinary maniacal excitement in the acts attempted or begun not being accomplished: there is a chaos of contradictory impulses; the second form shows itself by hallucinations, especially of sight, to which succeed violent agitation and destructiveness, scarcely distinguishable from the delirium of fever; in the third form, melancholia is the prominent symptom. Heredity is sometimes strongly marked in this affection. We have seen a case of choreic insanity in a woman, ultimately assuming the form of disseminated sclerosis, in whom the father, grandfather, and brother, laboured under chorea. Very few remarks are made by the author on insanity complicated with paralysis agitans. We expected more, as Dr. Ball read an interesting paper on the subject, at the section of mental diseases, when the International Congress met in London.

Our space does not allow our alluding to more points of interest in this work. We must content ourselves with referring our readers to the lectures themselves, which will maintain and extend the well-merited reputation of the Professor of the Faculty of Medicine of Paris.

NOTES ON BOOKS.

A New System of Medical Book-Keeping for General Practitioners. By **Alfred Sheen**, M.D., Cardiff: Lewis.—We have before drawn attention to this ready method recording the daily visits, prescriptions, and what is equally to the point, the earnings of general practitioners. This ready method, however, requires a little study, ere the neophyte acquires a full appreciation of its simplicity. Then all will be easy, and the time saved will be, at the end of each year, fully appreciable to the purchaser thereof.

A new medical society has been organised under the name of "The New York Society for Medico-Scientific Investigation." The objects of the society are, first, the introduction and proving of new drugs; secondly, the reproving of drugs, the knowledge of which is incomplete or inaccurate; and thirdly, the collection of data bearing upon disease in general. Since this would include the investigation of epidemics, their causes, the conditions, atmospheric and climatic, under which they occur, the relation of drugs thereto, the so-called season remedy, to say nothing of other subjects, the new society is not likely to become soon extinct for lack of material.

Poisoning by Cyanide of Potassium.—Mr. J. W. Harrison, resident medical officer of the Melbourne Hospital, reports, in the *Australian Medical Journal*, a case of poisoning with cyanide of potassium, in which the patient (a man, aged 33) took a quantity of the salt, "equal to two peas in size." He was almost unconscious when admitted; the almond odour was quite distinct; the face was flushed; the pulse rapid, small, and feeble; and there were slight convulsions. The stomach was carefully washed out, and sulphate of magnesia was then introduced. Ammonia was applied to the nostrils, and he rallied; and, finally, he recovered so rapidly as to be able to leave the hospital the following day.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

Subscriptions to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161a, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 2nd, 1884.

MEDICAL LEGISLATION.

The power of the Association will very soon have to be exerted in favour of the Government Medical Bill, drafted on the basis of Lord Camperdown's Royal Commission on the Medical Acts.

We have authority for stating that the Government have determined to introduce it as early as possible, and we have also authority for stating that the Government consider the continued support of the Association is of the greatest possible importance.

In the year 1882, at the jubilee anniversary of the Association, held in Worcester under the presidency of Dr. Strange, the Report of the Royal Commission was hailed as a triumph, and the Medical Reform Committee was instructed to request the Government to adopt it as a basis for legislation. In November of the same year, the Lord President of the Privy Council received a representative deputation from the Association, strengthened by representatives of the *Lancet* and the *Medical Press and Circular*, and consented to attempt legislation. The Government Medical Bill was accordingly introduced by the Lord President in the House of Lords, and, after full discussion and considerable emendation, was successfully carried through, very important amendments having been introduced through representations emanating from the Association. The Government received an unusual number of deputations, and evinced a willingness to entertain various amendments when the Bill got into Committee; but this stage was never reached, owing to the pressure of other business. There is good reason to know that the Government regretted much that the Medical Bill of 1883 did not become law.

At the last annual meeting of the Association, held in Liverpool in August last, the main principles of the Bill were approved as embodying the cardinal principles which the Association had always advocated, and the Medical Reform Committee was reappointed to continue, if necessary, the struggle for their realisation in the event of the Bill failing to pass during the session of Parliament.

The Medical Reform Committee is carrying out the instructions of the Association, and the Government are, as already stated, about to renew their attempt at legislation. It therefore remains for the Association loyally to support the Government, by petitions to both Houses of the Legislature, and by the exertion of the private influence of the members of the Association on members of Parliament.

THE GOVERNMENT AND THE HOMES OF THE POOR.

In a leading article which appeared in these columns on December 22nd, 1883, when the discussion as to the amelioration of the homes of the poor was at its height, we took leave to doubt the necessity for any further legislation on the subject, if the powers that already exist were properly exercised by the duly constituted authorities. And this, as will be seen by their answers to the deputation from the Mansion House Council, which recently waited on them, is the opinion both of the Home Secretary and of the President of the Local Government Board. Of the two ministers, the opinion of Sir Charles Dilke is the more practically important, as not only does this question of the housing of the poor come specially within the province of his own department, but he has taken pains, by an exhaustive inspection of the slums of London, to find out with his own eyes exactly where and what are the defects in the sanitary machinery of the Metropolis. Sir Charles rightly treated the necessity of improving the dwellings of the poor as taken for granted, and as admitting of no difference of opinion. The public conscience has awakened with a start to a sense of the terrible state of affairs in the housing of the poor, which sanitarians have for years been denouncing, and health-officers bewailing. It is felt on all hands that something must be done.

Short-sighted philanthrophy recommends the appointment of a Royal Commission to inquire into the subject, and some organs of public opinion have gone so far as to talk of such a commission as one of the essentials of next session.

It is difficult to see what a Royal Commission on the dwellings of the poor could do for us, which has not already been done in any and every newspaper during the last two or three months. The evil is undisputed; the measures to be adopted for the removal of the evil are practically undisputed. The great and pressing question is, how to get these measures set about? The deputation answer this inquiry by demanding further legislation, though the particular powers which they desire to see strengthened do not appear to be very clearly defined. Sir Charles Dilke and Sir William Harcourt answer it; the one covertly and discreetly, the other more directly and openly, by urging the necessity for a reform of London government, so that the existing law shall be more evenly and thoroughly applied.

There can be no doubt that the sanitary organisation of London is at the present time in a very lamentable condition. That the Metropolis of the world should be left to the mercy of thirty-nine vestries and district boards, having no relations with each other, and hardly an opinion in common, is a scandal to the nation, and an open sore to all thinking men. Some kind of reform is imperatively called for. Whether the institution of a single municipality or groups of municipalities be the preferable plan is, for the purposes of our argument, immaterial; the grave and urgent problem to be solved is the creation of the "motive power," of which both ministers made much in their recent speeches. You may pass Acts by the dozen, and make each more severe and rigorous than the last; but, if they be not practically carried out by the authority which has to set them in motion, they are mere waste paper. It is fair to suppose that a single municipality elected for the whole of London would attract to it men of a better class than those who dominate the councils of the smaller organisations. Moreover, the cost of carrying out its sanitary work would be distributed evenly over the entire Metropolis, instead of pressing heavily upon the poorer parts of it. But it must be clearly understood that the mere setting-up of one bureaucracy instead of a number will not serve to ameliorate the condition of the dwellings of the poor. The subject is an unattractive one, no doubt. It offers no immediate prospect of splendid results; it cannot be disposed of by the mere expenditure of money; it is not a matter which, once settled, is for ever disposed of. It needs, on the contrary, the most steady and the most patient application on the part of those charged with its administration. Years must elapse before visible improvement is manifest, and generations before the present evils can be eradicated. Yet the work is one which the highest statemanship may think not unworthy of notice. The condition of the masses in the present day is an all-important social problem, which, if left unsolved, may bring about in the future serious and wide-spread mischief.

THE PLACE OF PANCREATIN IN THERAPEUTICS.

DR. J. S. HAWLEY, of Brooklyn, contributes to the *New York Medical Record*, of October 13th, the following useful remarks on a popular method of treatment.

The great importance attached to the nutrition of the sick, in modern medicine, has naturally and very reasonably led to the administration of digestive ferments to aid in the preliminary act of digestion, and also to the adoption of many devices for conforming alimentary substances to the impaired digestive functions, which attend all acute and most chronic diseases. This impulse has been so potent as to force the pendulum of medical opinion and practice far beyond the point of equilibrium, and which at the present time seems to oscillate between the extremes of scepticism on the one hand, and an easy credulity on the other. The part which pancreatin is now playing in this important field of therapeutics, the wide range of its digestive activities, and the extraordinary attention which has been directed to its use by the late Lumleian lectures by Dr. Roberts, are sufficient reasons for inquiring into its proper use. It is by no means uncommon for men even of genius and learning, who have been fortunate or wise enough to make a step forward in the treatment of disease or the amelioration of human maladies, to be carried by their enthusiasm and the exaltation which attends success to attribute to their discoveries or improvements an extent of application which subsequent observation shows to be unwarranted.

This remark is well illustrated in the title given by Corvisart to the first pamphlet issued by him on the use of pepsine, *Dyspepsie et Consomption*. The very great control over the processes of digestion and nutrition which his discovery of the use of pepsin afforded, impressed him with the belief that its influence would be sufficient to arrest the ravages of consumption.

The question to be discussed is not as to the relative value of different digestive ferments, but, admitting the value of all, to determine what is the rational and effective mode of using pancreatin. The proposition submitted, and an attempt to prove which will be made, is, that pancreatin cannot be effectively or usefully administered by the stomach, but can only be employed for modifying foods before they are taken. The argument will be presented in relation to the anatomical, physiological, and experimental aspects of the subject.

When we examine the anatomical arrangement of the alimentary canal, and the order in which the digestive ferments are delivered to and brought into contact with the ingested food, we are struck with this peculiarity, that they are generated and delivered at points remote from each other. Comparatively recent demonstrations have shown that the pancreatic fluid possesses three distinct ferments, viz., amylolytic, proteolytic, and emulsifying. Now, it would seem to be a fair deduction and sound reasoning to conclude that if the pancreatic fluid could effectively perform these several offices upon crude food, then the salivary and gastric secretions were useless and in excess of any want of the system. But their presence is proof of their necessity, and the existence of ferments lower down in the alimentary canal, supplementary to them, is proof that their action is preliminary, and the fact that their offices are performed where the next lower ferment cannot reach them is proof of their incompatibility. So much may be concluded by *a priori* reasoning from the anatomical arrangement. The physiological aspect of the case will be found in harmony with and confirmatory of the above. The gastric juice is not only known to be acid, but its ferment, pepsin, is inert in any other than an acid medium, while the pancreatic fluid is alkaline and is inactive in any other vehicle. This one physiological fact is sufficient to show that the two ferments cannot act together. One other physiological fact goes to establish the same conclusion, that is, the destruction of the pepsin in the duodenum by the action of the bile. Hermann (*Elements of Human Physiology*, p. 174), speaking of intestinal digestion says: "Solution of albuminous bodies is effected, most probably, by the pancreatic juices, as the activity of the gastric juice which reaches the intestine is destroyed by the bile." Dr. Lucien Corvisart, speaking of the pancreatic digestion (*Braithwaite's Retrospect*, No. xxxix.), says: "When the gastric and pancreatic juices are separated they act in succession, and thus the peptone may be doubled; but when mixed, the action of each is checked—they neutralise each other. Nature prevents this conflict, first, by separating the two juices by the pylorus; second, by the bile, which destroys the pepsin, as shown by Poppenheim." Certainly the demonstrated fact that the activity of the pepsin is arrested in the duodenum, not only by the alkalinity of its fluids, but by the direct agency of the bile, is fairly conclusive evidence of the incompatibility of the two agents which meet these. But the question still remains, Can pancreatin pass through the stomach, come out unimpaired, and in the duodenum take up its office and play the same part as freshly secreted pancreatic juice? In other words, can pancreatin be usefully employed by administration by the mouth?

The extensive use of remedies in which pepsin and pancreatin are combined, implies a belief on the part of many physicians that pancreatin can survive the action of the gastric juice and pass on unharmed into the duodenum, where it is free to perform its office. So far from this being the case, however, there are many reasons for believing that pancreatin is digested in the stomach like any other proteid. Lehman says: "The principal constituent of the pancreatic juice is a substance resembling albumen or casein." Herman (*Elements of Human Physiology*, p. 142) says: "Its specific constituents are several albuminous bodies, which are scarcely distinguishable from albumen itself, and to which many observers ascribe the ferment action" (pancreatin). Now, it is difficult to understand why a substance of the nature of albumen or casein should not be digested by pepsin, whose sole object and use is to digest albuminoids, and whose ability to digest that whole range of substances is well known. But the determination of this point does not rest upon inference. It has been shown by Kühne that "pepsin in acid solution actually destroys trypsin (one of the constituents of pancreatin); trypsin in alkaline solution does not possess the converse power of destroying pepsin, which, however, is altogether inactive in an alkaline fluid."

Mr. E. Scheffer, of Louisville, has demonstrated, by careful experiments, the fact that pancreatin digested with pepsin loses its activity in respect to all its properties. From a number of experiments, ingeniously contrived for the purpose of demonstrating this, want of space will permit quoting only two. First, "To a solution of one-half grain of pepsin, in two ounces of acidulated water, was added two ounces of pancreas-liquid, obtained by rubbing down and beating three ounces of chopped pancreas with small quantities of water, until, after three strainings, four ounces of liquid were obtained, which readily saccharified starch at the temperature of the air. The pepsin-solution containing the pancreas-liquid, after four hours' digestion, was filtered, neutralised, digested with starch-paste, and tested, but no sugar-action was obtained." Second, "To two ounces of pancreas-extraction was added a solution of one-fourth grain of pepsin in two drachms of water, acidulated with five drops of hydrochloric acid, and the mixture treated as described before. Neither from the acid nor from the neutralised solution, after digestion with starch-paste, did I obtain any sign of sugar by Trommer's test; while the pancreas-extraction, by itself, treated with starch, had given the most copious precipitate of oxidulated copper."

To the same effect are the following experiments, made by Dr. William Roberts of Manchester (*Lumleian Lectures*, page 36), for the express purpose of determining the question under discussion:

"I prepared a solution of lactic acid, corresponding in saturating power to the normal gastric acid (2 per 1,000 of hydrochloric acid). To fifty cubic centimètres of this dilute lactic acid, I added five cubic centimètres of a solution of pepsin, and five cubic centimètres of an active extract of pancreas. I prepared a second similar, but substituted filtered saliva for the pancreatic extract. The mixtures were then placed in the warm chamber for one hour. At the end of this period, the solutions were exactly neutralised and tested; they were both found to be absolutely inert, not a vestige of amylolytic nor proteolytic power had escaped destruction.

"I had an opportunity of testing the same question in a still more satisfactory way. While I was examining the throat of a patient suffering from an ailment which did not affect his general health, a portion of the contents of the stomach was ejected, and fortunately caught in a clean vessel. This was immediately filtered, and about ten cubic centimètres of clear acid solution was obtained. The period of digestion was three hours after breakfast. One-half of this was devoted to testing its saturating power. It was found to possess an acidity very nearly corresponding with that of normal chyme. To the remaining portion, five drops of extract of pancreas and five drops of filtered saliva were added, and the mixture placed in the warm chamber for one hour; at the end of that time it was exactly neutralised, and divided into equal portions. One portion was tested with a drop of starch-mucilage, and found to be absolutely devoid of amylolytic power. The other portion was added to an equal volume of milk, rendered slightly alkaline with carbonate of soda, and was then placed in the warm chamber. Not the slightest digestive action was produced on the milk in twelve hours.

"With this evidence before me, I am unable to accept the conclusions of Defresne and others in Paris, who allege that saliva and pancreatic preparations can resist the normal acidity of the stomach in full digestion, and who recommend the administration by the mouth of pancreatic preparations during the period of chymification."

It appears then that the evidence afforded by the anatomical distribution of the digestive fluids, by the physiological constitution of these juices, as well as the conditions under which they perform their functions, and the results of experimental inquiry, al point to the conclusion that pancreatin not only cannot act in the presence of the gastric juice, but is deprived, by gastric digestion, of all power to perform its functions.

There remains one more aspect of the question to be considered, viz.: Can pancreatic preparations, by any device, be protected from the action of the gastric juice in their passage through the stomach, in such manner as to preserve their digestive potency intact until they arrive in the duodenum, where the conditions are favourable for their action?

Dr. Fothergill proposes to accomplish this by administering ten or fifteen grains of bicarbonate of soda with a dose of liquor pancreaticus at "the tail of the digestive act. This passes it securely through the stomach, just as a guard of soldiers sees a merchant convoyed over an unsettled frontier infested by robbers." Theoretically considered, this expedient is open to several objections.

First, the alkali and the liquor pancreaticus are commingled, hence the pancreaticus is as much exposed to the attack as the alkali; as, if the soldiers who were sent to guard a company of merchants should mix indiscriminately with their unarmed charge, an attack upon this promiscuous assembly would be as likely to prove as damaging to the guarded as to the guards. If the alkali could be made in some way to surround the pancreatin, so that the acid gastric juice could be neutralised before the pancreatin became exposed, more certainty would attend the device.

Second, it must not be forgotten that ingesta of no kind pass directly through the stomach. It is the nature and office of the stomach to retain its contents, and to pour out gastric juice upon them. Under these circumstances, how long would ten or fifteen grains of alkali resist the acid of the stomach? It is proposed to give the alkali and pancreatin an hour and a half or two hours after the ingestion of a meal, at "the tail of the digestive act." Does not the digestive act continue from four to six hours? Can "the tail of the digestive act " be determined? Does not every fresh ingestion provoke a fresh discharge of gastric juice? Certainly, such a procedure, to say the least, must be subject to very great uncertainties. The stomach is well called an "acid gulf," "which we have to guard against; else our artificial pancreatic secretion is useless, of no earthly avail." It seems more probable that this "acid gulf" would swallow up any adventurous pancreatin which should attempt to cross it, than that the rash adventurer should cross it in safety. But, theory aside, it is claimed that clinical experience justifies the conclusion. It, however, should not be forgotten that clinical experience is invoked in defence of the use of pancreatin, not only unguarded by an alkali, but actually in combination with acidulated pepsin, which both Dr. Roberts and Dr. Fothergill assert to be fatal to pancreatin. The whole course of therapeutics is strewn with the wrecks of remedies which have been foisted upon the profession by the supposed results of clinical observation. Perhaps nothing is more delusive than a fragmentary and ill-digested collection of clinical facts. The sources of error are too numerous, and the conditions too complicated, to allow clinical observations to determine any important conclusion until many facts, well observed and carefully collated, have been brought to bear on the question. More especially must this be the case when the clinical observations contravene what are supposed to be well demonstrated scientific facts, as in the case under consideration. Science will be of little avail in promoting the advancement of the medical art, if facts established by research and observation are to be lightly set aside by clinical observations short of absolute certainty. It seems far more reasonable to conclude that clinical experience will, in the end, conform to scientific demonstrations.

But whichever way the progress of observation and experience may determine this question, pancreatin has before it a wide therapeutic field. Second only in importance to the promotion of the digestive act within the organism is the adaptation of foods to the conditions of disease. The whole subject of the nutrition of the sick may be influenced by the use of this agent. The patent fact that the stomach, in common with all other organs of the body, is impaired by all acute and many chronic diseases, affords a wide scope for the use of artificially digested foods; but more especially is pancreatin likely to revolutionise the vexed question of infant-feeding.

The principal obstacle to the successful administration of cow's milk is alleged to be the density of the coagulum formed by the action of the acids of the stomach upon the casein of the milk, thereby preventing its proper digestion. The devices for overcoming this difficulty have been numerous, but none of them entirely satisfactory. The use of pancreatin-preparations appears to meet this difficulty fully. Dr. Roberts (*Lumleian Lectures*) ascertained by many experiments that pancreatin acts with great rapidity upon the casein of milk, and if not fully peptonising it, certainly rendering it non-coagulable by heat or acids. This would seem to leave little to be desired in the matter of the adaptation of cow's milk to the purposes of infant-feeding. In the case of feeding infants upon farinaceous substances containing a large preponderance of starch, as they all do, the objection to their use is deemed to lie in the inability of very young infants to saccharify starch, either by the action of the salivary or pancreatic secretions. This inability to digest starch has been attributed to non-development of the salivary and pancreatic functions, which, it is alleged, has been physiologically demonstrated. But over and above any demonstrations, such inability might well be inferred from the fact that infants are constituted to receive, and the Creator has provided for their use, a food which requires the action of neither salivary nor pancreatic digestion. The salivary secretion, being only diastasic, finds nothing in the milk to act upon. The gastric juice is amply sufficient to digest the casein; and as to the fat in the milk, it does not require the action of the pancreatic juice, for all nascent milk is in a perfect state of emulsification. So it appears that the infant is fully able to digest milk through the action of the stomach alone, and we may fairly infer that functions would not be provided for before there was need for their employment. This amylaceous apepsia of infants has been met by numberless devices, as is attested by the legion of infants' foods, which, by methods more or less effective, have been devised to overcome it. The most complete as well as the most scientific of these methods is that known as Liebig's, which consists in saccharifying the starch by the action of the diastase in malt. This is an expensive and somewhat difficult process, so much so as to be unsuccessful in the hands of the average mother or nurse, and has consequently fallen into the control of manufacturers. But, by the use af artificial pancreatic preparations, this conversion of starch is accomplished with the minimum of trouble and skill. It consists imply in adding to the cooked food, at blood-heat, the pancreatic liquid, and allowing it to stand in a warm place one hour. A process so simple and so effective certainly seems likely to banish many of the infant-foods which are now urged upon the attention of mothers and physicians.

The question, "What is the place of pancreatin in therapeutics?" may, in view of the facts set forth above, be confidently answered; not as a remedy to be administered internally, but as an agent for adapting foods to the impaired digestive functions of the sick, and especially to the preparation of cow's milk and farinaceous foods for infant-feeding.

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AT one o'clock on Wednesday morning, a fire broke out in the back part of a furniture warehouse, adjoining the office of the British Medical Association, in the Strand. The latter building received considerable damage; especially in the room occupied by the compositors of the JOURNAL, the roof of which was much injured. The windows of the editors' rooms were also utterly destroyed, as was also the glass roof of the General Secretary's office. Some of the contents of the rooms were scorched, or injured by water; but no injury of importance appears to have befallen the large amount of original articles and other MSS. awaiting publication, which are kept in one of the rooms that was most exposed to the fire. Messrs. Bradbury and Agnew, of Bouverie Street, who have for several years managed the press-work of the JOURNAL, at once most kindly offered the use of a room on their premises for the completion of the present number. The Telephone Company also, immediately on request, supplied a new instrument in place of the one destroyed by the fire. The business of the Association will still be carried on at the office in the Strand, to which all communications for the Editor, or Secretary, should be addressed, as usual. The premises and "plant" of the Association are fully insured in the Sun and the London Assurance Company.

MR. WILLIAM PRICE, the Welsh "Druid," of Llantrissant, has been committed for trial by the magistrates at Pont-y-pridd, on the charge of attempting to burn the body of his illegitimate child.

MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

A MEETING of the newly constituted Executive Committee was held on Thursday, January 31st. It was announced that 128 gentlemen had been enrolled during the week ending January 26th. The total number of members is now about 175. A full report will be published next week.

THE ILLNESS OF THE EARL OF PEMBROKE.

WE understand that the Earl of Pembroke, whilst recovering from an oblique fracture of the left clavicle, and a fortnight after the accident, was, apparently from cold, suddenly seized with a severe and very painful attack of pleurisy on the left side, at the lowest part of the thorax. The severity of the attack, it is hoped, has to a great extent subsided, but the course of the case must be tedious. His Lordship, we hear this morning (Thursday), has passed a tranquil night, and is thus far going on satisfactorily.

PROFESSOR TARNIER has been unanimously elected Professor of Obstetrics in the Faculty of Medicine at Paris, in place of the late Professor Depaul. Professor Pajot will continue his lectures at the Clinique d'Accouchements.

ALLEGED ATTEMPT TO BRIBE A MEDICAL MAN TO MURDER.

A MAN, named Sydney Clay, a tobacconist in the Holloway Road, was on Wednesday committed for trial on the charge of endeavouring to persuade Mr. Eustace De Gruyther, a medical practitioner, to murder his (Clay's) illegitimate infant child. It appears that the child was under the care of Mr. De Gruyther; and it is alleged that Clay offered him a sum of money if he would slowly poison it. Mr. De Gruyther, of course, refused to accede to such a proposal, and communicated with the police regarding the matter.

THE LATE DR. HILTON FAGGE.

A COMMITTEE has been formed at Guy's Hospital for the purpose of raising a suitable memorial to the late Dr. Hilton Fagge. The committee consists of members of the staff of Guy's Hospital, and past and present students. The next meeting will be held at Guy's Hospital, in the medical officers' room, on Monday, the 4th proximo. The following resolution was adopted at the first meeting of the committee, held on Monday last. "That subscriptions be asked for the purpose of placing in an appropriate position in the hospital a bust or other memorial of the late Dr. Hilton Fagge; and that any surplus of the amount raised be devoted to aid in the education of his children." Dr. Frederick Taylor and Mr. Charters J. Symonds are the honorary secretaries to the committee.

CHARING CROSS HOSPITAL MEDICAL SOCIETY.

AT a meeting of the Students' Club, Surgeon-General Hunter in the chair, farewell addresses were presented to Dr. Colquhoun and Mr. Ayerst Hooker on the occasion of their leaving the school. To Dr. Colquhoun, late assistant-physician to the hospital and Lecturer on Botany, an illuminated address was presented by Mr. Cantlie, congratulating Dr. Colquhoun upon his obtaining the Chair of Medicine in the University of Otago, New Zealand. To Mr. Ayerst Hooker, of Egypt, late Demonstrator of Chemistry in the Medical School, an illuminated address was also presented by Surgeon-General Hunter in the name of the students, congratulating him upon his gallantry and heroic behaviour during the late cholera epidemic in Egypt, and also on his having obtained a gold medal from the British Government, and the Order of the Medjidie from the Khedive, as a recognition of his services.

"THUNDER AND SMALL-BEER."

THE theory that milk, beer, and many similar fluids, are liable to be "turned sour by thunder," is a very widespread popular belief; and, like many other popular beliefs, it would seem to have some foundation in fact, and to be susceptible of scientific explanation. In the course of a learned paper, "On the Effect of Heat on the Atmospheric Dust," recently read by Mr. Aitken before the Royal Society of Edinburgh, the author showed that a disturbed electrical condition of the atmosphere greatly favoured the deposition of dust; and he suggested that this might be the explanation of the common belief that milk more readily turns sour, and that similar fermentive processes are more rapidly induced, in thundery weather, the electrical conditions leading to the deposition of a greater number of bacteria in a given time.

CORPORAL PUNISHMENT AT SCHOOLS.

IT is by no means an uncommon thing now for a schoolmaster to be summoned before magistrates on a charge of assaulting a pupil. There seems to be a misapprehension in the minds of many people as to what are the rights of schoolmasters and their pupils respectively in this matter. At common law, a master is considered as standing *in loco parentis* to his pupil, and is entitled to chastise him in the same way as a father might. This position may be varied by agreement between the parties; as, if a father stipulates with the schoolmaster that his son is not to be subject to corporal punishment, or if the rules of the school forbid the master administering it, or only allow him to do so in certain specified instances. In the absence of any such agreement, however, a master may, in his own discretion, administer reasonable chastisement to his pupils. If a complaint be brought against him in a court of justice, the question which the court ought to consider is, how far the chastisement which was administered was or was not reasonable, having regard to the circumstances of each particular case. This question is often by no means easy to decide; and the decisions given by different courts are by no means easy to reconcile with one another. But a good deal of ill feeling might be spared, and cases might with advantage be kept out of court which now are brought there, if boys and their parents would remember that masters have, *primâ facie*, a right to chastise their pupils, and that a charge of assault can only be maintained if the punishment be excessive.

OPEN SPACES AND THE RIGHTS OF THE PUBLIC.

THE movement for preserving and extending the rights of the public to open spaces has now taken such fair hold of the community, that we may expect to find in the future that the encroachments of railway companies and of builders will be more narrowly scrutinised than was the case in past days. We are glad to notice that, in the coming session of Parliament, a Bill will be introduced, having for its object the placing of those parts of the Malvern Hills which consist of common lands in the hands of conservators, who shall be empowered to prevent encroachments thereon, either by the rich or poor. This lovely stretch of hill-country seems in the past to have been the prey of neighbouring landowners and those exercising manorial rights, who have been gradually filching from the public the common land over which, from time immemorial the people have been wont to roam.—A meeting has been held at Hampstead, at which it was decided to inaugurate a movement for securing additional open land on the borders of Hampstead Heath, by the purchase of various plots of land otherwise likely to fall into the builders' hands. It was suggested that the cost could be met by public subscription, and the help of the City Corporation and the Metropolitan Board of Works. We can but wish this movement every success, though we may have some doubts thereon, when we remember the nearness of success obtained by those who strove to inaugurate the Paddington Park, and the oblivion of that project which seems now to have fallen upon all concerned. We, however, wish the good people of breezy Hampstead complete success in their praiseworthy object, which we heartily commend to the help of other dwellers in the metropolis. The high value, as health-givers and health-restorers, of heaths and commons to those who can seek their exercise and pastime thereon, is notorious; and it is matter for felicitation that these lovely spaces scattered broadcast throughout our island are likely to be jealously guarded in the future from the attacks of encroaching lords of the manor and others who would appropriate the rights of the public in order to advance their own private ends.

ELECTION OF BOROUGH CORONER FOR PORTSMOUTH.

THE contest, if it could be so called, for the appointment of Coroner to the borough of Portsmouth, resulted in the election of Mr. Bramsdon, a lawyer; but, in point of fact, there was no contest. Three medical men had originally started. One of these, who, from his position as a citizen, would have been a formidable opponent, withdrew at an early stage, and a second at the last moment, leaving only one candidate, Dr. Claremont, to represent the medical profession. As, however, Dr. Claremont, although well fitted for the post, is comparatively a stranger, having only recently commenced practice in Portsmouth, Mr. Bramsdon's election was a foregone conclusion, as not only had he acted previously as deputy coroner, but he had many personal friends amongst the municipal authorities. It is to be regretted that some medical man of long residence did not proceed to election. He would have stood a very fair chance, as the late Mr. Garrington, by whose decease the post became vacant, was a member of the medical profession, and, by the soundness of his judgment, gave universal satisfaction. The public at large has to be satisfied that no taint or suspicion shall attach, uninquired into, to the circumstances of any death, and the ratepayers have to be satisfied that the coroner's expenses are reduced to a minimum. Mr. Bramsdon was proposed by Alderman Pink, who supported his own opinion by instancing the fact that the late medical coroner had found it necessary at times to seek legal advice. But he forgot that, whilst legal advice was occasionally required, medical knowledge was indispensable. A coroner's inquest is not a criminal inquiry, although it may lead to one. Its primary object is to ascertain the cause of death, when the circumstances under which the death occurred are not those which are customarily called "natural." The great object attained in having a medical coroner is, that a decision based on knowledge can be arrived at, whether in the first instance an inquest may or may not be necessary. In many instances, only a man medically educated can venture an opinion, and legal knowledge is of no avail; whereas the modicum of law required to conduct a coroner's inquest could be acquired by any educated man gifted with common sense in a few hours. Let us hope that the Portsmouth Town Council, which, judging by its official utterances, was chiefly influenced in its selection on the grounds that the successful candidate would not be likely "to hold unnecessary inquests," and was not a man "to be gammoned by the doctors,"—will not regret the change of profession, and find that a lawyer is not a whit more modest on the question of fees than a member of the medical profession.

ABERDEEN UNIVERSITY CLUB, LONDON.

A LARGE and influential meeting of members of the University of Aberdeen, was held on Wednesday, January 23rd, at the Inns of Court Hotel. The chair was taken by Sir Andrew Clark, Bart., M.D., LL.D., who explained that the object of the meeting was the establishment in London of an Aberdeen University Club. The club was to be essentially social, and a dinner would be given twice a year. Sir Andrew Clark then called upon Dr. Ford Anderson to propose a resolution to the meeting that an Aberdeen University Club be founded. This was seconded by Dr. Fancourt Barnes, and carried unanimously. The following officers, who had previously signified to the secretaries their readiness to accept the offices, were nominated: *President:* His Grace the Duke of Richmond and Gordon. *Vice-Presidents:* Dr. Bain (Lord Rector); Sir Andrew Clark, Bart., M.D., LL.D.; Dr. Matthews Duncan; Mr. J. Farley Leith, Q.C. *Council:* Dr. James Anderson, Dr. Ford Anderson, Dr. Fancourt Barnes, Dr. Mitchell Bruce, Mr. Cantlie, Professor David Ferrier, Mr. J. Gerard Laing, Mr. G. Paul Macdonald, Dr. Stephen Mackenzie, Rev. Donald MacLeod, M.A., B.D., Dr. A. Reid, Dr. A. Westland. *Secretaries:* Dr. R. Burnet and Mr. R. M. Routledge.

HUNTERIAN SOCIETY.

THE following is the list of officers and council nominated for the ensuing year. The election will take place on February 13th. *President:* Robert Fowler, M.D. *Vice-presidents:* A. L. Galabin, M.D.; R. Clement Lucas, B.S.; Major Greenwood, M.D.; W. C. Toulmin, Esq. *Treasurer:* H. I. Fotherby, M.D. *Trustees:* H. I. Fotherby, M.D.; D. de Berdt Hovell, Esq. *Librarian:* P. L. Burchell, M.B. *Orator:* James E. Adams, Esq. *Secretaries:* G. E. Herman, M.B.; Charters J. Symonds, M.S. *Council:* M. Brownfield, Esq.; F. M. Corner, Esq.; E. Dukes, Esq.; T. R. Fendick, Esq.; E. G. Gilbert, Esq., M.D.; P. Y. Gowlland, Esq.; W. Talbot King, M.D.; A. A. F. Rasch, M.D.; H. A. Reeves, Esq.; W. Rivington, M.S.; G. J. B. Stevens, Esq.; R. G. Tatham, Esq. *Auditors:* J. E. Adams, Esq.; Stephen Mackenzie, M.D.; E. Dukes, Esq.; W. Rivington, M.S. *Library Subcommittee:* James Greenwood, M.B.; George Roper, M.D.; Walter Rivington, M.S.; A. H. Smee, Esq.; W. C. Toulmin, Esq. The annual oration will be delivered by Dr. Roper, on February 13th, at 8 P.M.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

SIR GEORGE BURROWS, Bart., having resigned the office of President, an extraordinary general meeting of the Society will be held on Friday, February 8th, for the election of his successor. The Court of Directors has nominated Sir James Paget, Bart., for the office. At a meeting of the Court of Directors, held January 23rd, 1884, Mr. Charles Hawkins moved, and Dr. Quain seconded, the following resolution, which was carried unanimously:—"The Court of Directors, in accepting the resignation of Sir George Burrows as President of the Society, desire to place on record its high appreciation and grateful sense of the valuable services he has rendered in this capacity. The constant watchful and benevolent interest which for seventeen years as President he has taken in the affairs of the Society, has in a great measure contributed to its successful management and its present prosperous condition, and this Court feels confident that Sir George Burrows, on retiring from the office of President, will carry with him the affectionate regard of the entire Court of Directors, and the esteem and gratitude of every member of the Society."

TWO-EYED RIFLE-SHOOTING.

TWO-EYED rifle-shooting has recently been the subject of numerous letters in a prominent morning contemporary. It is perfectly clear from the there recorded testimony of such eminent authorities on shooting as Dougall, Hay, Lowe, and Malet, that a person shooting with both eyes open has a considerable advantage over those firing in the ordinary way under circumstances of varying or defective illumination, or where rapidly changing objects form the target, and he will probably be at least their equal under ordinary circumstances. The question then arises as to the way in which this kind of shooting is effected. In ordinary vision the eyes working together have certain incontestable advantages, even where the image of one eye is suppressed. This is well recognised by microscopists, as one of the correspondents has pointed out, and also by those in the habit of using the ophthalmoscope. The advantage thus gained is probably due to a resting of the muscular apparatus, both external and internal, of the eye, as vision can continue longer under such circumstances without fatigue or aching. A state of rest of the eye must also favour accurate taking of aim in the ordinary way, though the image of the other eye must be suppressed, as in the cases of the microscope and ophthalmoscope. But there is another method of taking aim, that in which the marksman does not look carefully along the barrel, or perhaps even fails to raise it to his shoulder, but judges the distance and direction of the object, and adapts his aim accordingly. It is on this principle that a stone is aimed by the hand or a pea discharged from a pea-shooter. This method is said to be habitually employed by the Chinese, and, in its essential points, by the distinguished shots to whom reference has been made. Under such circumstances, the image of the second eye, instead of being suppressed, becomes of great use; for not only is the vision of each eye rendered less uncertain, but the two together see somewhat more distinctly than either separately. Also, the distance can be judged far better and the aim taken more quickly, points of great practical importance when rapidly moving objects of unknown size and distance are to be aimed at, in circumstances very different from those of ordinary shooting at Wimbledon, and far more allied to those actually existing in the recent South African war. We cordially add our voice to those of the eminent shots who are desirous of impressing on the War Office the merits of this method of shooting.

IODOFORM IN CHRONIC CYSTITIS.

In an interesting article in the *St. Louis Medical and Surgical Journal*, November 1883, Dr. David Prince gives the result of his treatment of cystitis by iodoform. Reasoning from the fact that iodoform had a sedative effect on irritable surfaces, he decided to apply it internally to the inflamed bladder. Starch was used as the vehicle, one drachm and a quarter of iodoform being ground with one drachm and a half of starch, and mixed with eight ounces of water. Three ounces of this were used as an injection. The result was satisfactory; obstinate cases of chronic cystitis, it is stated, yielded to this treatment. Dr. Prince suggests that the treatment of moderate strictures of the urethra, accompanied by vesical inflammation, may be advantageously managed by a precursory treatment with iodoform and starch, after which the treatment by electrolysis and the mechanical means for dilatation may be employed. It is anticipated, from this experience, that the treatment may be employed for gonorrhœa. The employment of pencils or bougies of iodoform in gelatin has been very satisfactory, but their retention cannot be prolonged beyond the first act of micturition. In the employment of the proposed injection, it may be expected that the iodoform will not be completely expelled by the first passage of urine, on account of the adhesion of the heavy crystals of iodoform to the mucous membrane.

ARSENIC IN A HUMAN BODY.

The *Medico-legal Journal* of September last contains an interesting account, taken from the *American Chemical Journal*, of the critical examination of nearly one-half of the entire muscle and bony tissue of Jennie Cramer, disinterred six months after burial, the object being to ascertain the actual amount of arsenic in the whole body, and to gather all the facts possible relative to the distribution of arsenic in the corpse. The case of the woman Cramer has given rise in the United States to much comment, and the public mind has been left in great doubt concerning it. The body was found floating in the shallow water of a sandy beach. It bore no evidence of having been long in the water, and a necropsy made at the time failed to reveal the cause of death. Into the methods of analysis employed we need not enter. The quantitative results are given with great exactness, and in minute detail. The summary is as follows:—

	Total weight.		Total $A S_2 O_3$.
	Lbs.	oz.	Grains.
Left arm	2	11¼	... .094
Right leg, except thigh bone ...	10	4½	... .118
Thigh bone...	0	7	... —
Transverse section	8	15½	... .186
Muscle from breast	1	2¼	... .098
„ „ back	1	6	... .356
	24	14½	.852

The entire body, without the internal organs, weighed 57 lbs.; thus the arsenious acid found was in the proportion of 1.95 grain for the entire muscular and bony tissue. By another calculation it was estimated that the amount of arsenic present in the whole body at the time of death, calculated as arsenious oxide, was 3.12 grains. The analysis showed an uneven distribution of the arsenic from none, or very little, in the bones, up to a quarter of a grain in the muscle of the back, and a greater amount in the larger vessels and organs of the body, which fact Professor Chittenden claims as clearly indicative that the arsenic was taken but a short time before death. He also asserts that in chronic poisoning, or when the arsenic has been in the body a considerable time before death, the kidneys indicate this clearly; while in the case of Jennie Cramer, the amount of arsenic in both kidneys was only 0.03 grain, while there was nearly three times as much in the tongue and throat, a fact which, as he says, conclusively shows that this was not such a case, but that the poison must have been taken shortly before death. Again, it has been asserted that the presence or absence of arsenic in the brain is an index as to whether the poison was introduced into the body before or after death. By no ordinary process of diffusion, within a limited time, could arsenic pass from the alimentary canal to the brain. But, on the other hand, in cases of poisoning by arsenious acid, the absence of arsenic in detectable quantities in the brain, as Professor Chittenden points out, in no wise proves that the poison was not taken before death. For, as E. Ludwig has shown, in poisoning by arsenious acid, the bones and the brain contain but mere traces of the poison, while the liver, as a rule, contains most arsenic. In the case of the woman Cramer, one-third of the brain was found to contain 0.025 grain of arsenic, or in the proportion of 0.34 grain to 1 lb. of brain and the alcohol in which it was mixed when delivered for analysis. Hence the arsenic was in a form readily soluble, and diffusible. We think, however, that the facts as regards the brain are not in favour of the view that the poison had been administered to her shortly before death. The whole paper is well worthy of the consideration of toxicologists, who can appreciate the magnitude and difficulty of the task which Professor Chittenden undertook.

THE MEDICAL MISSION, CHIN-CHEW.

The city of Chin-Chew contains a population of about 300,000 inhabitants, and has a high literary reputation. Many men from its schools have risen to the highest positions in the Chinese empire. Before 1867, there were no Christians in or near Chin-Chew; but in that year a mission was established by the English Presbyterian Church. Many difficulties attended the mission during the first twelve years of its existence, but these were happily overcome; and in 1881 a hospital and dispensary were opened, under the care of Dr. David Grant. The first report is now before us. The hospital contains accommodation for 30 in-patients. During the year 1882, the number of in-patients was 218, while the out-patients amounted to nearly 4,000. In looking through the list of the diseases treated, we notice that there were 230 cases of leprosy, 46 of excessive opium-smoking, and 75 of elephantiasis. Seven cases of elephantiasis scroti were submitted to operation, and all except one proved successful. Among the upper classes, however, foreign medicine and surgery are still held in contempt, as the following incident shows. A case of incised wounds of the scalp, legs, and hands, inflicted in a quarrel, was treated successfully. The patient was first seen by several of the native physicians, who, pronouncing him to be dead, declined doing anything for him. The patient had lost a large quantity of blood, and was unconscious when seen; he remained so for ten days, during which time he was entirely fed *per rectum*. The wounds healed kindly as the patient gradually gathered strength. His assailant was afterwards tried, and escaped with the payment of a small fine; the mandarin remarking that, "a barbarian" being able to treat the wounds successfully, they must have been of a trifling nature. Around the hospital are grouped a variety of agencies intended to bring Christian teaching and influence to bear upon the persons who resort to it.

CHOLECYSTOTOMY AND EXTIRPATION OF THE GALL-BLADDER.

Dr. Martin Burke of New York has recorded, in the *New York Medical Record*, two cases of successful incision of the gall-bladder. The first was a youth aged 18, incapacitated from work through a pain in the abdomen, which was severe and constant as long as he stood erect. Immediately to the right of the ensiform cartilage was a small fluctuating tumour, painful on pressure, and of the size of a duck's egg. There was slight jaundice, and elevation of temperature, little or no constipation, and no abdominal tenderness, except over the swelling. Suppuration of the gall-bladder was diagnosed; and Dr. Kearny, a colleague of Dr. Burke, made an incision into the swelling. A large quantity of bile and pus escaped; and, a week later, a probe could be passed, through the wound, three inches deep into a cavity. The wound healed rapidly. The second case was that of a woman aged 50, a rheumatic subject. She had been seized, a year before treatment, with a violent pain in the right hypochondriac region. Local sensitiveness on pressure continued, notwithstanding frequent blistering and leeching. A second acute attack supervening, an incision was made over the tender spot in the hypochondrium; an abscess-cavity was thus opened, and fifty gall-stones discharged, their combined weight being one hundred and thirty grains. Poulticing, as applied before the operation, was continued, and the wound was washed out thoroughly every six hours. A drainage-tube was kept in the wound for eight days. After a week of continued convalescence, the patient completely lost her appetite, which was restored by the use of the wine of Mariani, which appears to contain coca. Recovery was perfect. Throughout the course of this case, jaundice appears to have been entirely absent. Extirpation of the gall-bladder was recommended by Langenbuch at the Congress of German Surgeons last year, and has been undertaken in three cases with the view of preventing the repeated accumulation of gall-stones. The first operation gave a satisfactory result. In the second case, no stones were found, but the gall-bladder was much thickened and inflamed; the patient was cured, and there was no return of the pain which was felt before the operation. The third case was that of a woman, aged 34, who had suffered, for about a year, from violent hepatic colics; the pain had become continuous, and the patient was unable to work. A hard and painful tumour could be felt in the region of the gall-bladder; an incision was made, and the gall-bladder was found much thickened and contracted around two large calculi; the whole sac was extirpated, and a complete recovery ensued. Langenbuch advises to begin by detaching the gall-bladder from the liver, and then to tie the cystic duct.

TYPHOID LARYNGITIS.

In his dissertation published by Delahaye, Dr. Dérignac states that this complication may appear at the onset of the disease, or during its progress. There is generally some pain, often accompanied by deafness and swelling of the lymphatic glands of the neck. The mucous membrane is at first red, and interspersed with small greyish granulations, which soon disappear, leaving in their place superficial ulcers. These ulcers increase rapidly in size, and their surface presents a characteristic appearance, compared by the author to that of grey granite. In some cases the inflammation gives rise to gangrene, retropharyngeal abscess, or necrosis of the laryngeal cartilages; but more often cicatrisation takes place after a time. The local treatment should be the same as is known to be efficacious in other ulcerative diseases of the larynx and fauces.

PULSATING EMPYEMA.

This interesting affection has been made the subject of a dissertation by Dr. Comby, who gives some additional information about it in the *Archives Générales de Médecine*, Nos. 11 and 12, 1883. A pulsating empyema presents the ordinary symptoms of chronic pleurisy, associated with visible and tangible pulsations which simulate those of an intrathoracic aneurysm of the aorta. The pulsations may occupy a large surface, or a limited part of the thoracic wall; they are observed on the left side only, and appear one or two years after the pleurisy itself. Two conditions are necessary for their occurrence; first, the left lung must be indurated, and transformed into an almost solid fibro-elastic mass; then this fibro-elastic mass must be fixed by adhesions to the pericardium, but not retracted towards the vertebral column in the usual manner. These conditions were only found by Comby in phthisical patients, and the prognosis is of course very unfavourable. A pulsating empyema is liable to be mistaken for an aneurysm of the aorta, but there is no expansion, no *bruit* and no modification of the femoral pulse, while the existence of fluid in the pleural cavity is constant. Intrathoracic malignant growths, and Graves's pulsating pneumonia may also cause some difficulty, and must not be forgotten in the diagnosis.

GENERAL PARALYSIS.

M. Baillarger has published, in the *Union Médicale*, a paper on this subject, from which we quote the following conclusions. General paralysis is essentially a paralytic dementia. It may run its whole course without any exaltation of ideas, but there is a form of insanity, sometimes called paralytic insanity, which is characterised by ambitious or melancholic ideas, and by symptoms of muscular ataxy. This form may end in recovery, but more often it goes on gradually to simple or paralytic dementia. Paralytic insanity is sometimes caused by a diffused peri-encephalitis, and in that case remissions are frequent; but the primary disease runs its course and ends, after a relatively short time, in simple or paralytic dementia.

CHINESE PATIENTS.

If we may take literally a statement published in the *New York Medical Record*, the "Heathen Chinee" must be a most satisfactory patient, for he invariably carries out instructions to the letter, is very grateful, and always pays his bills. The infant "Chinee" is a very small baby as a rule, and does not average more than six pounds. In the arrangements for childbed, it would appear that they have a full appreciation of the importance of cleanliness; as napkins for the lochia, they use a thick soft paper which looks like muslin, and they also use paper for protecting the bedding, one sheet being replaced by another as soon as it has become soiled. The paper is a stout, smooth, light brown fabric, not much like ordinary Western papers, and is prepared for use by crumpling and rubbing it with the hand. Being tough and thick, it is completely transformed by this process, and makes a soft fabric, almost impermeable to water, and admirably fitted for temporary protection to the bedding. This practice seems to have the great advantage of economy and cleanliness, inasmuch as the napkins and bed-protector for each case are absolutely new, and therefore quite free from any possible taint of infection. It might be worth while for the benevolent persons who lend to poor lying-in women a "bag" of linen to take into consideration the possibility of using this cheap and cleanly substitute.

SIR WILLIAM MAC CORMAC'S LECTURE IN NEW YORK.

When in America, Sir William Mac Cormac was invited to give a lecture at the Bellevue Hospital Medical College. He chose as his subject his Personal Experiences of Surgery in Time of War. A picturesque and interesting account was first given of Sir William's experiences in the Anglo-American Ambulance at Sedan, when the deserted city became suddenly flooded by the defeated and retreating French army, and when, after having fretted with impatience at delayed transport and unwilling idleness, the staff of the ambulance found themselves suddenly overwhelmed with work. Those were the days before Listerism, and Sir William bewailed the number of cases that ended fatally from blood-poisoning. "In cases of ligature for hæmorrhage, the bleeding too often recurred, and the resections, in many instances, either ended in amputation or in death. Most of the resections of joints were in the so-termed secondary period. I agree with Langenbeck in thinking the primary resections, though performed immediately after the injury, are unsatisfactory. The power of regeneration, the probability of procuring an useful limb or joint, are much less. In the secondary stage, the periosteum has become thick and vascular; it can be more readily detached from the bone, and its powers of osseous reproduction are enormously increased. Immediately after any injury, it is very difficult to detach and preserve it to any extent; it possesses very little power of forming new bone. Besides, there is in the secondary period a better delimitation of the injury; its extent is better known; some of the fragments have necrosed, others show vitality. Cases only fit for amputation have already been disposed of. In resections for gunshot injury of joints, we may lay down for certain the necessity for preserving the periosteum as a condition of success; and we may also affirm that these operations should not follow the formal rules for excision of joints, for in most instances we can save portions of the joint; and, whenever it is practicable, partial excisions are to be performed; they are less dangerous to life, and the functional results are better. I know of several cases in which very complete reproduction of the lost parts has followed, even where large portions of bone were removed. The ankle-joint and the elbow-joint are the articulations most suitable for surgery of this kind, and after them, the shoulder and the wrist. The hip and knee have been seldom successfully excised for gunshot-wound. For these, conservative treatment is the only applicable method, viewing the great mortality after operative interference in these two articulations. Indeed, for the cases of penetrating wound of the knee-joint, Bergmann and Reyher have demonstrated, by their experience during the Turco-Russian war, that the method of antiseptic occlusion, healing under an antiseptic scab, with complete immobilisation in plaster-of-Paris, is by far the most successful method of dealing with gunshot wound perforating this articulation. These results, published in Volkmann's *Vorträge*, are most surprising. If I remember rightly, nineteen out of twenty-one cases recovered, not only with preservation of life and limb, but actually with free, and in some cases perfect, movement of the joint." Sir William warned his hearers against probing too freely for a missing bullet, and gave a remarkable example of a bullet found after death in the knee-joint, wedged beneath the articular surface of the condyle, which it had entered after ripping up the front of the tibia. Its position had not been recognised; and the wound had, therefore, not been probed. The man recovered with a movable joint. Contrasting the non-antiseptic treatment of wounds in the Franco-German war with the strictly antiseptic system of the late Egyptian campaign, Sir William pointed out that whereas, in the former, pyæmia, erysipelas, and secondary hæmorrhage made terrible havoc, in the latter not a single case of erysipelas, or pyæmia, or blood-poisoning, occurred—a result quite unprecedented in the history of military surgery in any part of the world. The lecture concluded with a few graceful words of compliment and encouragement.

THE INTERNATIONAL MEDICAL CONGRESS OF 1884.

A LETTER just received from Professor Panum, the President, gives some interesting details of the arrangements in progress for the meeting of the International Medical Congress in Copenhagen, on August 10th. In June of last year a provisional programme of the business to be transacted in the different sections was sent to the principal medical men in each country interested in the various subjects. Many valuable communications have been promised in consequence. Nearly four hundred non-Scandinavian colleagues have already announced their intention to attend. From France, amongst others, come Pasteur, Paul Bert, Ranvier, Charcot, Verneuil, Cornil, Hayem, Malassez, Chauveau, Ollier, Tripier, and Lepine; from Italy, Bizzozero, Mosso, Golgi, Perroncito, Novaro, Reymond, Giacomo, Baccelli, Tommasi-Crudeli; from Holland, Donders, Guye, Engelmann, Heinsius; from Germany, Virchow, Ludwig, Esmarch, Volkmann, His, Braune, Kronecker, Munk, Kühne, Heidenhain, Vogt, Bernstein, Grohe. The most eminent men of Sweden and Norway have become members of the various committees of organisation, so that the Congress, at the instance of the President himself, will possess a truly Scandinavian character, and the medical men of Sweden and Norway will attend in as large numbers as if the Congress were their own. Professor Panum trusts that a large number of English medical men will be present, the more so as English is one of the official languages. The Danish Parliament and the city of Copenhagen are taking an active interest in the success of the meeting, so that "we shall not be ashamed," Professor Panum adds, "of being compared with previous congresses, always excepting the Congress of London, whose prodigality we certainly shall not have the presumption to imitate. The King and Crown Prince evince great interest in the success of the meeting. We do not intend to mention in our programme any festivities, solemnities, and such like. We would rather emphasise our intention to make the Congress a meeting for strictly professional and scientific work."

ILLNESS OF DR. C. THEODORE WILLIAMS.

WE regret to have to announce that Dr. Charles Theodore Williams is laid up with severe typhoid fever at his father's villa at Cannes. He arrived there on January 7th, having left Naples on the 5th. On the 8th, he began to complain of headache and aching of limbs, which recurred on the following days, but he was not seriously ill till the 14th, when the temperature rose to 102°, and all the symptoms became pronounced. Dr. Bright has been in constant attendance, with Dr. Frank in consultation. During the first week, the temperature rose on several days to 104° and 105°, and the abdominal complications have been severe, with much pain and distension. These distressing symptoms have been mitigated during the last week, and the temperature has lowered to 100° and 101°, but it generally rises to 103° during part of the day; and, although perspiration has occurred for several hours in the last two days, there are as yet no symptoms of defervescence. Happily, liquid food and stimulants are well borne, and a fair amount of sleep is obtained from mild opiates. The case is still one of much anxiety.

THE RECENT CASE OF TYPHOID FEVER IN THE TEMPLE.

WE are glad to hear on good authority that the Benchers of the Inner Temple have decided to appoint a committee to investigate and report on the sanitary arrangements of their Inn, to which public attention has recently been directed through the occurrence of a case of fever at Harcourt Buildings. We do not know how wide the commission of the committee may be; but we trust that they will not content themselves with repairing and ventilating a closet here and there, where complaints may have been made, but will have a thorough investigation of the whole system of drainage and water-supply by some competent authority. In many blocks of buildings (as, for instance, in Harcourt Buildings, where the recent case of fever occurred), the water-closets are lighted and ventilated by windows opening on to the common staircase in the middle of the building. Moreover, in the majority of cases, even in residential chambers, there is no separate and disconnected water-supply for drinking purposes. Under these conditions, it is evident that mere plumbers' work will be of little use, unless directed by engineering knowledge and experience.

BABY-FARMING.

AS if to confirm our statement of last week that children up to three years old should be included under the provision of the Infant Life Protection Act, another case has come to our notice from Moss, in North Wales. An illegitimate child had been placed, when a few days old, with a woman to nurse. It died last week at the age of fifteen months, and its weight was then only eight pounds. In consequence of rumours that another child in charge of this woman had died somewhat mysteriously, and that this one had been poisoned or starved to death, a coroner's inquest was held, and the jury on the medical evidence returned a verdict that the child died in consequence of insufficient and improper food. What the sufferings of this poor child were through the long fifteen months of its starvation, no one but its own wasted form can tell.

SCOTLAND.

THE WEATHER IN SCOTLAND.

THE unsettled and variable weather prevalent throughout Scotland for some time, culminated, on the evening of Saturday, January 26th, in a storm of unprecedented severity. Its effects have been felt over the whole of the country, and though telegraphic communication has been more or less interrupted, already reports are being received of disasters both by land and sea. The gale was accompanied by heavy showers of snow, and the barometrical reading was one of the lowest recorded this century, the mercury standing at 27 inches.

GLASGOW SCIENCE LECTURES.

THE recent lecture of this series was delivered by Professor Cleland, of the University of Glasgow, who chose as his subject the "Terminal Forms of Life." Under this text he gave his views upon the evolution-question of the present day, and, with clearness of argument and logical consistency, showed that he could not accept the somewhat degrading theory which would associate man with the brute forms of the past. As to man's present position, he regarded him as a terminus, and not only a terminus, but the terminus of the advance of vertebrate life, and it seemed to him in the last degree improbable that, in the future, there would be a progression in the construction of the human body that would give birth to greater intelligence than the sages and heroes of antiquity. A very hearty vote of thanks was awarded to Professor Cleland for what was one of the most interesting and attractive lectures of the series.

GLASGOW TRAINING HOME FOR NURSES.

IT is now about ten years since this institution was first started in Glasgow, and every year has seen it increasing in importance and usefulness. At the last meeting of its supporters, held on January 24th, a very encouraging report was read. From it we learn that the demand for the nurses of the institution has been greater than in previous years, and that the necessity of having a larger staff has necessitated a decided extension of the building. This has now been carried out, and there is accommodation for thirty-three nurses, as also ten rooms for private patients who are able to afford payment for the use of the rooms. By this latter provision, the home is meeting a want in Glasgow; and when it is stated that into the private rooms and general wards 210 patients were admitted during the year, we gather a fair idea of the amount of useful work the institution is accomplishing. Testimony was borne to this, at the meeting, by Professor George Buchanan and others, and it is to be hoped that a short time will now see the home self-supporting, which is the aim of those who are interested in carrying it on.

THE RECTORIAL ADDRESS IN EDINBURGH UNIVERSITY.

THE Right Honourable Sir Stafford Northcote, M.P., Lord Rector of Edinburgh University, has inaugurated his career in that capacity in a manner which contrasts most favourably with the practice that had obtained for some years past, by delivering his inaugural address to the students during the session in which he was elected. On several previous occasions, the Lord Rector did not deliver his address in the session in which he was elected, and sometimes not even in the subsequent one, so that many of the students who were his constituents had passed from the university. Owing to the somewhat boisterous conduct of a limited number of the students at the last rectorial address, difficulty was experienced in obtaining a suitable hall for the ceremony on this occasion; ultimately, however, the Free Church Assembly Hall was obtained, and on Wednesday, January 30th, Sir Stafford Northcote delivered his address there. The accommodation of the hall is only for 2,000 persons; and as nearly 2,700 students had matriculated at the time of the election, the first duty of those in charge of the arrangements was evidently to provide accommodation for as many of them as possible. The distribution of tickets of admission was entrusted to the newly constituted Representative Students' Committee. This committee has impartially performed its duty, and one marked effect has been the entire exclusion of the staff of assistants to the professors from the meeting. The committee also issued a manifesto to the students, expressing the strong desire that existed that they should, by their conduct at the meeting, render the occasion in every way creditable, by orderliness and demeanour worthy the occasion. Previous to the ceremony of installation as Lord Rector, the University, through its Lord Chancellor, Lord President Inglis, conferred on the Lord Rector the degree of LL.D. The address of Sir Stafford Northcote, evidently carefully prepared, was well received, as was the right honourable gentleman himself. The meeting, of course, exhibited some of the usual vivacity, but left little to be desired; and it is to be hoped it will form the happy precursor of many such creditable meetings.

THE TAY WHALE.

WE have not heard the last of this monster of the deep. The enterprising purchaser advertised that the whale was to be disemboweled on Friday, under the superintendence of Professor Struthers. The professor, with his assistants, proceeded to Dundee to perform this by no means agreeable operation. The astute owner of the whale erected a platform for the convenience of visitors, and charged a sum for admission to see the *savants* at work; and work they did, to the strains of a volunteer band. As was remarked by one facetious onlooker, the band "may have helped to keep down the smell." As may be imagined, the bandmaster must have had some difficulty in selecting tunes appropriate to such an unusual occasion. What more appropriate than the "Mermaid," and "In the North Sea Lived a Whale"? The whale is to be stuffed, and is to go on a "starring" to Glasgow and other large towns. So much for commercial enterprise. The fame of the Tay whale may come to outrival that of the white elephant, or even of Jumbo himself.

IRELAND.

LISTOWEL WORKHOUSE.

AN election took place recently for a medical officer to this workhouse, at a salary of £75 *per annum*, in the room of Dr. Ulysses Fitzmaurice, resigned. There were four candidates: Messrs. John Clancy, J. O'Halloran, J. Moynihan, and John T. Dillon, the last-named being successful. The proceedings were of a very stormy character.

THE DUBLIN ORTHOPÆDIC HOSPITAL.

A CALICO fancy ball in aid of the furnishing fund of this hospital is to be held at the Rotunda on Thursday, February 14th.

HEALTH OF DUBLIN: QUARTERLY REPORT.

DURING the quarter ending December 29th last, the births registered in the Dublin Registration District amounted to 2,207, being equal to an annual ratio of 1 in 39.6, or 25.2 in every 1,000. The deaths were 2,441, or 27.9 per 1,000; and, omitting the deaths (53) of persons admitted into public institutions from localities outside the district, the rate was 27.3 per 1,000. The number of deaths from zymotic diseases numbered 314, being 21 over the number for the preceding quarter, but 67 under the average for the fourth quarter of the ten years 1873-82: the deaths from these diseases were equal to an annual rate of 3.6 per 1,000. Of the 314 deaths, 137, or 44 per cent., were caused by scarlet fever, 13 from typhus, 33 from typhoid, 59 from diarrhœa and dysentery, and 41 from whooping-cough. The mortality from diseases of the respiratory system was 176, being 74 under the average for the corresponding quarter of the past ten years: the deaths in this group comprise 323 from bronchitis, 70 from pneumonia, and 24 from croup. The deaths of 222 children were ascribed to convulsions, 27 per cent. of the total number of deaths of children under five years being returned as due to this cause. To apoplexy, 28 deaths were ascribed; to other diseases of the brain and nervous system, 125; and to diseases of the circulatory system, 165. Phthisis caused 271 deaths, being 48 above the average; mesenteric disease 75, and cancer 59. The mean of the mean weekly temperature for the quarter was 44.0°; and the rainfall measured 7.338 inches.

UNION OFFICERS' SUPERANNUATION BILL.

A DEPUTATION, consisting of official representatives of the King and Queen's College of Physicians, the Royal College of Surgeons, the Irish Medical Association, and of the Dublin Branch of the British Medical Association, and accompanied by Mr. Brooks, M.P., Mr. Meldon, M.P., and Dr. Lyons, M.P., waited upon the Chief Secretary on the 23rd ultimo, with reference to this Bill. Mr. Trevelyan expressed his approval of the Bill. He stated that although he could not undertake that it would be introduced in the next session as a Government measure, yet that if Mr. Herbert Gladstone, who was in charge of the Bill last session, and who displayed so much ability and tact with regard to it while it was before the House, would reintroduce it this session, the Government might give it its support.

THE STEWART LEGACIES.

THE late Dr. Henry H. Stewart, of Dublin, who established and largely endowed the Stewart Institute for the training and maintenance of imbecile children, at Palmerstown, county Dublin, left by his will a large sum of money in legacies. The residue of his property he left to trustees to be applied to the maintenance and support of such religious and educational objects as they, assisted in their judgment by his widow, might think proper. His widow survived Dr. Stewart but a short time; and a suit for the administration of the residue of the property—which on a former occasion was stated in court to amount to £34,000—has just come under the consideration of the Master of the Rolls. Under the scheme which had been drawn up for the management of the fund, the Master of the Rolls has directed a sum of £5,000 to be given to the Stewart Institute, and ordered that the remainder should be divided into two parts—one to be devoted to founding literary and medical scholarships in Trinity College, the other to be applied in founding similar scholarships in the Royal University of Ireland.

THE MULLEIN PLANT.

IN the report of the judges on drugs and pharmaceutical preparations which were recently in the Cork Exhibition, they state, in reference to the preparations of mullein (extracts and decoctions) which were exhibited, that they could not undertake to judge them or any similar articles whose chemical and physiological properties have not been investigated, or, at least, the qualities of which have not been empirically recognised by competent authorities. The mullein plant, or *Verbascum thapsus*, enjoys a reputation as a remedy for diseases of the respiratory organs; hence the name of cow's lungwort given to it. The order to which it belongs includes several plants having marked physiological properties; among others, the foxglove and the seeds of the mullein are said to stupefy fishes. Again, several other species of the genus *verbascum—e.g.*, *verbascum nigrum* (the black mullein), *verbascum blattaria* (the moth-mullein), and *verbascum zernacha*—have properties which indicate the presence of some active principle in the genus; and on these grounds there may be some reason for the popular opinion about the medicinal qualities of the mullein plant.

THE DWIGHT INSURANCE CASE.

ONE of the most remarkable trials of modern times has recently taken place in New York State. We refer to what is known as the Dwight Life Insurance Case. We are indebted for our knowledge of it to articles in the New York press; but more especially to an editorial article in the *Medical News* (1883, vol. ii, p. 685), and an original article in the same journal (1884, vol. i, p. 30), from the pen of Dr. Horatio C. Wood, one of the experts for the insurance companies. A full report of the evidence given at the trial, has not as yet been published.

Colonel Dwight was a prominent person in New York State commercial circles, and was wont to describe himself as accustomed to "bore with a big auger;" but he would be more correctly described as boring big holes with a small auger, since he conducted gigantic building operations with borrowed money. He lived at the rate of £36,000 a year; had accumulated, though only forty-one years of age, £80,000 of debts, had dissipated his wife's fortune; had but two pounds in money, and his wife eight shillings, and was borrowing money to pay his board, when he became bankrupt in 1878. He was discharged from his bankruptcy only nine days before his death. But on July 31st, 1878, he began, whilst still a bankrupt, to apply for insurances on his life, when he was keeping a boarding establishment. Before the middle of September, in the same year, he made applications to thirty-one insurance companies for insurances amounting to the aggregate sum of £78,000, requiring annual premiums to the amount of £2,600; and he secured his applications by making false statements. By September 22nd, 1878, he had been accepted or rejected by every life insurance company in the States, except one; and had secured, in all, policies of insurance on his own life representing £51,200, and requiring for their maintenance payments of over £1,600 a year. Whenever it was possible, he stipulated for quarterly premiums, and when this was impossible, for half-yearly premiums, although the payments would in this way be increased by £200 a year. But he died after paying the first quarter's (or half year's) premiums. Before all the policies were secured, some of the companies discovered the falsifications in the applications, and refused to deliver some of the policies. Thereupon, various companies, whilst Dwight was still apparently in perfect health, informed him that, as his insurances had been obtained by fraud, no further premiums would be received from him, and that in case of his death no money would be paid on the policies, and they offered to return him the premiums already paid, and demanded back the policies. Their demands were refused.

The colonel was now 41 years of age, 6 feet 2 inches in height, in health weighed 220 lbs., and was a man of immense strength, activity and endurance. After his very harassing pecuniary difficulties, he was greatly fatigued and exposed on a hunting expedition, in a rather mountainous district, during the month of September and the first ten days of October. He became ill about October 11th, and the symptoms, as described by Dr. Burr, his medical attendant, were sleeplessness, entire want of appetite, loathing of food, and frequent vomiting, chiefly of the drinks he had taken. News of his illness reached the companies, who despatched Dr. C. H. Parker to see him on November 6th. This gentleman found nothing abnormal with any of the organs of Dwight, and obtained from Dr. Burr, in the patient's presence, the history of an obscure illness in which the only objective symptoms were the vomiting, and some evidences of a paroxysm on November 2nd, said to resemble an attack of pernicious fever, but which had lasted only a few minutes, and in which the temperature had remained steadily at 98.5, with the pulse at 80.

Dr. Burr's own statement is that his patient had improved till November 1st, when he was dressed and sitting up; that, on the next day, on rising to open the door of his room, Dwight suddenly became faint and fell back on his bed unconscious. The symptoms were those of a congestive chill. Stimulants and restoratives were employed, and, in the course of an hour, he was able to speak. Fluid extract of gelsemium, and Fowler's solution, were given; and when Dr. Parker saw Dwight on November 6th, suspecting chronic arsenical poisoning, he asked for a specimen of the patient's urine, but was met with the reply that as arsenic was being given, this metal would of necessity be in the urine.

To prepare for the expected return of the chill one week later, the patient was prepared, on November 8th, by the administration, late in the evening, of a solution of morphia, internally and hypodermically; and the doses were repeated at 2 A.M. on the 9th, as severe pain had occurred in the hypochondriac region. Some depression of the patient's vital powers ensued from the use of morphia; but the second paroxysm of supposed pernicious intermittent fever was attended with no characteristic symptoms. After this, Dwight improved, and on the day of his death, November 15th, the day before the expected return of the chill, he expressed himself as unusually comfortable. During this day, large doses of morphia were administered, one dose of two grains, followed by others, amounting in the aggregate to at least three grains; and some of this hypodermically. Morphia had been freely given previously during his illness, and Dwight, though not an opium *habitué*, is stated to have been very insusceptible to its action. Such large doses of morphia, on the 15th, and the previous use of gelsemium for a fortnight, must necessarily have resulted in considerable vascular and pulmonary depression; and the conditions revealed at the necropsy showed that the treatment pursued was peculiarly hazardous, yet no narcosis occurred. The patient sat up dressed, transacted legal business, and at 9.30 P.M. was seen by Dr. Burr, with whom he conversed. A little later, his wife and his wife's sister left him, and he bade them good-night. His lawyer had seen him on that day with reference to the payment of the second quarterly premiums, and Dwight had stated that he had no money wherewith to pay them. At about 11.30 P.M. his wife was called, and went instantly to her husband's room. She was followed in two or three minutes by her sister, Mrs. Owen, who found in the room Mrs. Dwight, Mr. Hull, his assignee in bankruptcy, and Mr. Spaulding, the hotel proprietor. Dwight showed no sign of life after Mrs. Owen entered.

The only important testimony in regard to the occurrences at the time of death was that of Mr. Hull. The companies declined to put Mr. Spaulding into the witness-box, on the ground that he had a guilty knowledge. It appears that two days before his death the deceased sent for Mr. Hull, and asked that gentleman to sit up with him on the night of the 15th, as "in any emergency he thought that I (Hull) was cool and would not get excited." This remark is susceptible of an explanation. It might mean that Dwight knew that he was to be prepared for his expected paroxysm by large doses of morphia; and it is unlikely that had Dwight meditated concealed suicide by strangulation, he would have secured the attendance of Mr. Hull. This gentleman testified that he was stationed in the next room between 11 and 11.30 P.M.; and the Colonel had apparently been sleeping, when he heard him gasp for breath and call "Charley." Mr. Hull ran to him, raised his head, and gave him brandy. He then ran to call Mrs. Dwight, and thinks that on his return he administered brandy a second time. When the wife came, the bell was rung for Mr. Spaulding, who came; and subsequently other members of the family arrived. Hence it was a necessary assumption of the suicide by strangulation theory that there was a material suppression of evidence. Dr. Wood, one of the companies' experts, with an obvious bias in their favour, says that the bed had a high head-board of such a character, and that it would be easily possible for a man to hang himself whilst in bed. Indeed, the theory of the companies at the trial was, that Dwight had committed suicide by strangulation.

The last will of the deceased is an extraordinary document. In it he stated that his only assets are the moneys to be derived from his life insurances; he made careful provision to keep the assets out of the hands of his creditors; he left sums to four churches; and he bequeathed large legacies to the Judge of the Supreme Court of his district, and to several of the most prominent lawyers of the town in which he lived, including the district attorney, who would, of necessity, be connected with any inquest that might be held to inquire into the cause of his death. On the other hand, it is only fair to state that Dwight was a sanguine man, impecunious it is true, but a gigantic speculator; and it might fairly be assumed that the large insurances were legitimately intended to bridge over the period between his impecuniosity and that enterprise with "millions in it" upon which he had entered. It is not unlikely, from the revelations of the necropsy, that the deceased was in the incipient stage of mental derangement when false ideas of wealth are entertained.

Two necropsies were made, the first fifty-eight hours after death, by Dr. Delafield, and was deposed to at the trial, on behalf of the defence, by Dr. Swinburne, who was the originator of the strangulation theory. Dr. Delafield found an enlarged softened spleen, and changes in the intestinal glandular apparatus, indicative of the prodromal stage of typhoid; the heart was small, and its muscular tissue somewhat degenerated. This alleged degeneration was, however, contested by experts for the defence. There was also chronic pachymeningitis, and a small hæmorrhagic extravasation connected with this. Dr. Delafield attributed the supposed congestive chills to sudden feebleness of the heart; and that in the second attack the heart had ceased to act. We attach less importance to the second necropsy, made five months later, when the heart is stated to have been found firm and healthy, with no signs of degeneration, though at the first necropsy, after the closure of the body, a pint of concentrated solution of carbolic acid, arsenic, camphor, and corrosive sublimate was poured into the thoracic cavity. It may be accepted, however, that the heart was fairly healthy.

Almost the sole actual evidence of suicide was that afforded by a heavy indentation in the neck, commencing on the right side near the hyoid bone, and extending upwards and backwards to within an inch of the centre of the posterior part of the neck, at an angle of forty-five degrees; and on the left side a similar furrow, extending backwards from the cricoid cartilage towards the back of the neck to within an inch and a half of the other mark. There were also "several small ecchymoses of skin of back and shoulders; anterior part of arm, small ecchymosis." There was no injury to the hyoid bone, to the larynx, or to the trachea. Medical witnesses for the defence asserted that the mark was due to a ligature. It was parchmenty at the bottom. There was, however, strong positive evidence that the mark was accidental. The undertaker, who washed the body directly after death, found no crease or mark as of a rope or otherwise upon the neck. He put the body in an ice-box in such a way that the head was forcibly bent forward on the body, so that the chin rested on the chest, the occiput being raised so as to bend the neck at an angle of forty-five degrees. These conditions would account for the furrow observed later on the neck, and possibly, as the head was supported, for the extension of the mark round the back of the neck. The mark was visible at the second necropsy.

The lungs were variously stated to be unduly inflated, and slightly emphysematous; the bronchi congested, and coated with mucus. The lungs were, in fact, generally congested and œdematous. The probable connection of this with morphia administration was strangely ignored by the experts for the defence. If, indeed, Dr. Burr's statements as to the large doses of morphia administered be accepted, and that of the lay witnesses as to the final cessation of respiration, the theory of strangulation is disposed of. Nor do we learn that any section of the supposed seat of ligature was made.

As might be expected, the insurance companies failed to defend their case successfully against the executors; and we heartily endorse the statement of the editor of the *Medical News*, that "eminent experts should view all sides of similar cases, and become judicially minded, if they would retain any of the influence belonging to the scientific character in presence of court and juries." In the Dwight case, this judicial capacity appears to have been singularly wanting in the experts for the companies. A theory of strangulation, advanced in the teeth of eye-witnesses to the contrary, and unsupported by anything but an external mark on the neck, and slight signs of asphyxia, is surely injudicial; and, if it be correct that no section of the deeper structures of the neck beneath the furrow was made, the evidence of those who made the necropsy, and advanced the strangulation theory, is deprived of all value. At the same time, the moral circumstances of the case are highly suspicious.

The Dwight case exhibits some points in reference to the evidence of experts which call for observation. Thus, certain hypothetical questions (apparently in writing) were given to the experts, and their answers are recorded. Some of these questions would appear to have been so framed as to purposely mislead the experts. Thus, a question runs: "You examine * * * the body of a man found dead at about 11 P.M., having been last seen alive one hour and a half before," etc.; to which Dr. Wood answers that, to quote his own words, "the death could *only* have been produced by strangulation *with a cord*." The italics are ours. Yet there was testimony that Colonel Dwight had been seen alive at a later period. Comment is needless. Again, according to the law of the State of New York, no physician is allowed to testify concerning a patient, or to give information which has been imparted to him by a patient, unless the latter gives his consent. The companies resisted the contention of the plaintiffs, that the right of waiver passes to the executors of a dead man, but this contention was admitted by the Court. The executors' counsel, however, declined to avail themselves of it, by putting Drs. Burr and Orton, the Colonel's medical attendants, into the witness-box, to testify as to the symptoms exhibited by the deceased in his last illness. Such a law as that of the State of New York might enable executors to make a coroner's inquest nugatory, and lead to the concealment of crime.

DR. MAHÉ'S REPORT ON THE ORIGIN OF THE LAST EPIDEMIC OF CHOLERA IN EGYPT.

M. MAHÉ, sanitary inspector at Constantinople, was intrusted with a special commission from the French Government to investigate the origin of the outbreak of cholera in Egypt. On arriving at Alexandria, M. Mahé communicated with the principal European delegates of the Sanitary Council. The predominate opinion among them was that cholera was imported. Some among them believed that the epidemic had a local origin. Dr. Hussan Pasha, President of the Council, Dr. Chaffey Bey, and Dr. Ferrari shared this view, which resulted in the development of the very original theory that bovine typhus, which has ravaged Egypt during the last year (it must be remembered that bovine typhus has been endemo-epidemic the last two and twenty years), engendered human typhus, which again was the starting point of a pathological eccentricity, a bastard malady, half cholera half typhus. At Cairo, cholera was believed to be imported, and the theory of the hybrid affection was not admitted by the members of the council of public health.

M. Mahé, after ascertaining the prevailing opinion, commenced a personal investigation. He left Cairo and visited Ismailia, Suez, Port Said, Damietta, Mansourah, and finally returned to Alexandria. He learned that an epidemic of cholera had broken out three times at Ismailia. The first time it was imported by a sanitary *cordon* of indigenous soldiers who came from Mansourah, the second by the terror-stricken from Mansourah, Zagazig, and other places, who took refuge at Ismailia. The last epidemic was imported by English troops who took refuge from the cholera epidemic at Cairo. M. Mahé states in his report that the inhabitants and medical men of Ismailia concur in holding the English officers responsible for the outbreak; that they imprudently contaminated the city, formerly healthy, by establishing the soldiers close to inhabited houses, facing the principal establishments of the city. They were met with in the streets, in public walks, and were camped on the banks of canals into which they threw the excrement of patients. In consequence of the constant complaints of the inhabitants, the English troops occupied the Khedive's palace at Ismailia, which they left infected. The inhabitants assured M. Mahé that they had seen the English troops more than once bury their dead cholera patients in the sand-lots close to the pipes which supply Port Said with water. The bodies were left barely covered. There were twenty-eight deaths among the soldiers in a very short space of time; of these, twenty-five were from cholera. Among the inhabitants, the first infected were the Arabs and the children who gained a livelihood by selling fruit to the English soldiers. At Suez, M. Mahé gathered evidence that the rules of quarantine are by no means rigidly enforced either before entering the Canal or afterwards. Communication with isolated vessels is by no means impossible. The sanitary officials, whose duty it is to visit the vessels and decide concerning them, are not men whose capacity and honour appear very evident. M. Mahé concludes that a radical change in the organisation of the sanitary service is urgent, in order to protect Egypt from the arrival of vessels from India bringing with them infection. At Port Said, matters are equally bad. The captains of vessels undergoing quarantine are often seen taking an evening walk. The stokers are a constant cause of communication between the vessels in quarantine and the land-population. They are only engaged for the voyage; their names are not inscribed among those of the crew, nor among those of the passengers. It is thus impossible to ascertain either their number, their names, where they disembark, when they leave, or their death. The captains of vessels often allow their stokers to leave the vessel before arriving at Port Said, just at the spot where the vessels that run between the Canal and Damietta. Thus control, already difficult, is even made still more so by the connivance of the sanitary authorities. It is this state of affairs which enabled the stoker Mohammed Khalifa, of whom so much has been written, to disembark at Port Said from a vessel which had left Bombay and was suspected to have cholera-cases, and then proceed to Damietta, where M. Mahé, on inquiry, ascertained that he had been seen before cholera broke out.

Mohammed Khalifa was not the only person who might probably have acted as a conductor of cholera. A pilgrim fair took place at Damietta, and lasted from the 13th until the 20th of June; 2,500 persons visited the city during that time, among whom were the stokers of vessels, workpeople and merchants from Port Said, besides foreigners, such as Syrians, Afghans, Boukharales, etc. Indians sold different stuffs from their country; two Meccah merchants also sold Indian goods. The first death from cholera happened on the 21st of June.

M. Mahé exposes the inaccuracies contained in the report made by MM. Chaffey Bey and Ferrari, and refutes the hypothesis that the epidemic of 1883 was a resuscitation of that of 1865, and believes that it was imported to Damietta either by travellers or by goods. The sanitary *cordon* round Damietta was established too late, cholera had already reached neighbouring localities. Communication between Damietta and the environs is very easy. The first case of cholera which had been observed at Mansourah was that of a soldier from Damietta, who had been present at a necropsy of a cholera patient. M. Mahé admits the partial utility of sanitary *cordons;* they prevent the wholesale immigration of inhabitants to cities non-infected.

M. Mahé suggests the following measures.

1. The sanitary council at Alexandria should be quite independent of the Egyptian Government.
2. The sanitary officials of the Canal should be independent of the local government.
3. A penal sanitary code should be drawn up in concert with the consuls who represent in Egypt the different foreign powers, and be enforced according to the judgment of a commission composed of consuls and the important sanitary officials of the Canal.
4. A large lazaretto should be established in the Red Sea, near Suez, at Dyebel-Tor, exclusively for ordinary vessels which undergo quarantine, and not available for the pilgrim vessels from Hedgaz, which should be in quarantine at El-Widi.
5. The sanitary taxes in the Egyptian ports should be remodelled to the pattern of those in force in the Turkish ports, which are in proportion with the necessities of the service.

THE CASE OF MESSRS. BOWER AND KEATES.

THE eighth and final list.

The following have sent One Guinea each.—T. A. Carter, M.D.; A. E. Cumberbatch, F.R.C.S.; G. Borlase Hicks, Esq.; J. Irving, M.B.; T. J. Maclagan, M.D.; W. Pearse, Esq.; J. B. Story, M.B.; W. L. Underhill, F.R.C.S.

The following have sent Half-a-Guinea each.—W. Curtis Hugman, F.R.C.S.; G. Knapton, Esq.; C. Latham, Esq.; W. H. Latham, Esq.; A. C. Tunstall, M.D.

The following have sent Ten Shillings each.—R. Ives, Esq.; R. J. Pye-Smith, F.R.C.S.

The following have sent Five Shillings each.—W. Grant, M.B.; B. Harvey, Esq.; H. Hick, Esq.; W. A. Maybury, M.D.; M. F. Ryan, Esq.

F. A. MAHOMED, } Hon. Secs.
R. W. BURNET, }

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 20th, June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
V. Syphilis, acquired.
Va. „ inherited.
VI. Acute Gout.

URGENT.—*The Committee propose to publish a final report on Acute Pneumonia as soon as possible. Cases are therefore urgently needed. Cards will be received until further notice.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
September, 1883. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d

PROCEEDINGS OF THE COUNCIL.

At a meeting of the Council, held in the Council Room, Exeter Hall, Strand, W.C., on Wednesday, January 16th, 1884; present—Mr. C. G. Wheelhouse, President of the Council, in the chair; Dr. A. T. H. Waters, President; Dr. W. F. Wade, Treasurer; Dr. Bushell Anningson; Mr. Alfred Baker; Dr. M. M. De Bartolomé; Dr. T. Bridgwater; Dr. A. Carpenter; Dr. C. Chadwick; Dr. J. Ward Cousins; Dr. G. W. Crowe; Dr. J. L. H. Down; Dr. D. Drummond; Dr. G. F. Duffey; Dr. W. A. Elliston; Dr. B. Foster; Dr. C. E. Glascott; Dr. W. C. Grigg; Professor G. M. Humphry; Mr. T. V. Jackson; Mr. Evan Jones; Dr. H. T. Lanchester; Dr. W. G. Vawdrey Lush; Mr. C. Macnamara; Dr. F. A. Mahomed; Mr. F. Mason; Dr. W. Withers Moore; Mr. R. H. B. Nicholson; Dr. C. Parsons; Mr. R. J. H. Scott; Dr. A. Sheen; Mr. S. W. Sibley; Dr. E. M. Skerritt; Mr. T. Sympson.

The President of the Council reported that no objection had been raised to the minutes as printed and circulated, whereupon Dr. Grigg gave notice that he would move at the next meeting:

"That the abstract of the minutes of the adjourned annual meeting, No. 871, be referred for correction to the subcommittee appointed to report on the proposed alterations of the by-laws relating to the Branch organisations."

Read letters of apology for non-attendance from the President-elect (Dr. Cuming); Dr. Clifford Allbutt, F.R.S.; Mr. Barron, Mr. Dix, Dr. C. Holman, Mr. Husband, Dr. Eyton-Jones, Dr. McVail, Dr. Rickards, Dr. Rees Philipps, and Dr. Strange.

The President of the Council reported that Sir Andrew Clark had accepted the invitation to give the Address in Medicine, Dr. Redfern the Address in Physiology, and Dr. G. W. Kidd the Address in Obstetric Medicine.

Read letter from Dr. Rogers, thanking the Association for the resolution on his behalf passed at the last meeting, and expressing great gratification for the consideration of the Council.

Read letter from Dr. Alexander Henry, thanking the Council for the increase in his salary.

Resolved: "That the 152 candidates whose names appear on the circular convening the meeting be, and they are hereby, elected members of the Association."

Read communication from Surgeon-Major Sibthorpe, I.M.D., and Surgeon A. M. Branfort, I.M.D., asking for the recognition of a proposed Branch, to be called the South Indian Branch.

Resolved: "That the proposed Branch in Madras (to be called the South Indian Branch) be, and it is hereby recognised as, a Branch of the British Medical Association."

Resolved: "That, subject to revision by the President of Council, the proposed by-laws of the South Indian Branch be approved and confirmed."

The President of Council drew attention to the case of wrongful prosecution of Messrs. Bower and Keates for malapraxis.

Resolved: "That the minutes of the Journal and Finance Committee of to-day's date be approved, and the recommendations carried into effect."

> The minutes of the Journal and Finance Committee include report upon examination of quarterly accounts, amounting to £1,131 17s. 1d.; the auditors' report on the examination of quarter's payments and receipts, a memorial forwarded by Sir William Jenner on the publication of medical bulletins, and Editor's memorandum thereupon, to the former of which the President of Council was instructed to reply; and the recommendation that the Treasurer be empowered to invest a further sum of £3,000 in some first class security.

It was moved: "That the minutes and report of the Printing and Office Subcommittee of the 15th instant be approved, and that the Subcommittee be empowered to continue their inquiries, and to report the result to the Journal and Finance Committee."

> The report of the Office and Printing Subcommittee contains a recommendation that a freehold site now offered for building adjacent offices upon be valued.

Whereupon an amendment was moved: "That the question of the removal from the present site be adjourned for consideration until the next quarterly Council, and the subject of the union of the commercial with the social position be submitted to a Subcommittee consisting of equal numbers of the Journal and Finance Committee and non-members."

The amendment having been put from the chair, the same was declared to be carried.

The amendment was then put as a substantive motion, and also declared to be carried.

A deputation of the Poor-law Medical Officers' Association attended to ask for the assistance of the British Medical Association by its influence and consideration. The deputation consisted of Dr. Rogers (Chairman), Mr. James Cornwall, Mr. D. B. Balding, Surgeon-Major Evatt, Dr. Walter Smith, Dr. Grubb, Mr. J. Wickham Barnes (Honorary Secretary).

The Honorary Secretary, Mr. Wickham Barnes, read minutes of the Council of the Poor-law Medical Officers' Association, of which the following are copies:

> At a council meeting of the Poor-law Medical Officers' Association, held on January 16th, 1884, it was unanimously resolved that the Council of the British Medical Association, now assembled at Exeter Hall, should be earnestly requested to bring the subject of superannuation of Poor-law medical officers before their members, with a view to united and energetic action towards making superannuation compulsory after long and continued Poor-law medical service.
>
> The Council of the Poor-law Medical Officers' Association desire to draw the attention of the Council of the British Medical Association to the large number—estimated at over 2,000—of Poor-law medical officers who are non-members of the British Medical Association, and to the advantages which would accrue to them if the Poor-law medical service could be, in some way, more intimately associated with that body.

The President of the Council, on behalf of the Committee of Council, promised that the representations of the Poor-law Medical Officers' Association should receive the full consideration of the Council.

The consideration of the minutes of the Arrangement Committee, and other business, was postponed till the next meeting of the Council.

BRANCH MEETINGS TO BE HELD.

The North-Western Provinces and Oudh Branch.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons Shirley Deakin and W. A. Morris, 8, City Road, Allahabad.

Staffordshire Branch.—The second general meeting of the present session will be held at the Railway Hotel, Stafford, on Thursday, February 28th, at half-past three o'clock in the afternoon.—Vincent Jackson, Secretary.—January 28th, 1884.

South-Eastern Branch: West Kent District.—The next meeting of this district will take place on Friday, March 28th, at Woolwich; Sir James Hanbury, K.C.B., A.M.D., in the chair. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary of the district, A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than February 29th. Further particulars will be duly announced. A. W. Nankivell, Honorary Secretary.—January 29th, 1884.

Border Counties Branch.—The Spring meeting will be held on Friday, February 22nd. It is requested that notices of papers, specimens, etc., be sent at once to either of the Honorary Secretaries: H. A. Lediard, Carlisle; J. Smith, Dumfries.

SPECIAL CORRESPONDENCE.

PARIS.

[From our Special Correspondent.]

Transfusion of Blood in Bright's Disease.—Infection with Tuberculosis.—Chorea Provoked by a Nasal Injection.—Incompatibility of Potassium-Iodide and Quinine-Sulphate.—The Minister of Commerce and the Académie de Médecine.—Chevaliers of the Legion of Honour.—Candidates for the Vacant Obstetric Chair.—The Dupargue Prize.—Recent Theses.

M. Dieulafoy, whose instrument for transfusing blood we described in our last letter, has furnished some interesting data concerning transfusion of blood in Bright's disease and epistaxis. Three patients were submitted to this treatment; two appeared to be permanently cured; the third exhibited rapid amelioration, but eventually death ensued. The first patient was a man who had suffered for twenty-five years from violent attacks of epistaxis, occurring once or twice each year. Every form of treatment, including hypodermic injections of ergot, sulphate of quinine, nasal [illegible] of iced water, and plugging the nostrils, failed, and the patient's condition became serious; he was subject to fainting fits, almost reaching syncope. M. Dieulafoy proposed ligature of the external carotids. M. Hayem suggested transfusion of blood. One hundred and twenty grammes (about 4¼ ounces) were injected into a vein of the arm. Hæmorrhage was immediately arrested, and, in fifteen days, the patient was in perfect health. In a patient suffering from Bright's disease, transfusion of 100 grammes of blood was followed by disappearance of dyspnœa after twenty-four hours. Fifteen days subsequently, the patient left the hospital, apparently cured. The third case, which ended fatally, was that of a female patient suffering from uræmia, which declared itself a year ago. She was put on the milk diet, and grew worse. One hundred and twenty-five grammes of blood were infused, and rapid improvement resulted. Three weeks afterwards, she took cold whilst walking in a garden; about a month afterwards, she had a miscarriage, but recovered in ten days. A few weeks later, all the serious symptoms returned; transfusion of blood was again practised, producing rapid but transitory improvement. In a few days, the patient died. M. Sevestre also tried transfusion of blood on a patient *in extremis*, who was suffering from Bright's disease, supposed to arise from lead-poisoning; death followed in forty-eight hours. Bartels, in his treatise *On the Diseases of the Urinary Organs*, speaks of transfusion of blood in Bright's disease, and chronicles a case cured by this treatment. M. Dujardin Beaumetz, at a recent meeting of the Société Médicale des Hôpitaux, argued that, in structural lesion or pernicious anæmia, transfusion of blood can only be of service when the patient has sustained a considerable loss of blood. M. Dieulafoy, on the contrary, considers that the advisability of treating the condition of dyscrasia by transfusion of blood is a question to be studied rather than denied. M. A. Robin suggests that experiments should be made to ascertain whether the simple injection of a ferment does not produce the same results as injecting blood.

At a recent meeting of the Académie de Médecine, M. Verneuil related the following history. In July 1877, a house-surgeon (interne) at the St. Eugénie Hospital, who performed all the *post mortem* examinations, one day noticed a papule at the base of the nail of his third finger. The apex presented a white spot, and a few drops of pus escaped from it. It was frequently cauterised, but the phalanges became attacked, and a cold abscess spread over the back of the hand. After three years' treatment, having failed to produce any improvement, M. Verneuil amputated the finger. The house-surgeon was believed to be cured, and practised in the provinces. Quite recently he has been again attacked by cold abscesses in the lumbar region, causing intense pain; during violent attacks of pain, the arms exhibit clonic convulsive movements. M. Verneuil has operated a second time. He is convinced that his patient became inoculated with tuberculosis when performing a necropsy. A similar misfortune happened to Laënnec. One day, when operating on a tuberculous patient, he slightly cut himself with a saw. A swelling appeared on the wounded part. Laënnec cauterised it with antimony-chloride. The swelling disappeared, but twenty years subsequently he died from tuberculosis.

M. Gellé has communicated to the Biological Society an interesting case of chorea following a nasal affection. The patient, a child, aged eight years, complained of difficulty in breathing. On examining the naso-pharyngeal cavities, it was observed that there was occasional spontaneous obstruction of the nasal fossæ in consequence of hypertrophy of the turbinate bones, and deviation of the septum, catarrhal congestion, and exaggerated secretion of the nasal mucous membrane. Nasal fumigations and injections were used. Three days afterwards the child complained of violent headache, especially in the frontal region. His brother at the same time observed choreic movements of the arms. M. Gellé was convinced that the child was suffering from an attack of chorea; he, therefore, discontinued the nasal injections, and in a few hours the convulsive movements disappeared. They returned, however, when the injections were resumed, although they were practised with the greatest care.

At a recent meeting of the Société de Biologie, M. Rabuteau made a communication concerning the incompatibility of iodide of potassium with sulphate of quinine. He frequently observed that when these two substances are administered together, or one a short time after the other, even in small doses, such as one gramme of iodide of potassium and half a gramme of sulphate of quinine, anorexia, nausea, and even vomiting, frequently ensue, accompanied by colic. The pulse becomes feebler, paleness, and feeling worried and fatigued.

The Minister of Commerce (M. Meline), has addressed a letter to the Académie de Médecine, asking that body to communicate to him the opinion it holds concerning trichinosis, and also to indicate the symptoms exhibited by that affection analogous to those of typhoid fever.

MM. Strauss and Nocard (of the Pasteur Commission) are, by a decree of January 11th, enrolled among the chevaliers of the Legion of Honour. It is the general opinion that what is esteemed an honour has never been more justly awarded.

The Société de Médecine of Paris will award, in 1884, the Duparcque Prize to the best work on the pathology of the ovaries and ovaritis. It must be written in French. May be sent in either in manuscript or printed, but any work that has been published more than two years previously will be excluded from competition. As the Duparcque Prize was not awarded in 1883, a gold medal will be added to the sum of 1,200 francs (£48).

M. Laurent, of the Medical Faculty of Lille, has written his doctoral thesis on "Cremation: its History and Sanitary Importance;" M. Fockenberghe, of the same Faculty, "On Normal Boots" (*De la Chaussure Normale : Étude d'Hygiène*).

CORRESPONDENCE.

THE POOR-LAW MEDICAL SERVICE AND THE BRITISH MEDICAL ASSOCIATION.

SIR,—At the late meeting of the Council of the British Medical Association, a deputation from the Poor-law Medical Officers Association was granted a hearing. The deputation came to ask the Council to draw closer, in whatever way they might deem suitable, the relations between the two associations. I hope all poor-law medical officers who have the interest of their service at heart, will write and use their influence with the Council of the British Medical Association to support this important move. They will have much to gain by such an union, for all the growing power of that Association may be exerted in their favour. To-day the poor-law medical officers seem to me to want a powerful advocate, and where can they find a better one than the British Medical Association?

The Association have also much to gain, as it is quite certain that, as soon as the poor-law doctors find they are being befriended, they will join it in considerable numbers.

I hope one day to see a distinct subcommittee of the British Medical Association, to be called the Local Government Subcommittee, dealing with all those important subjects now grouped under this head.

Local government in England is only beginning; and, as the years go on, legislation will be more and more of such a nature as to affect very much the medical profession, and particularly that portion now in the poor-law service. I hope a powerful subcommittee will be formed to take cognisance of this line of business. I would like to point out how essential it seems to me that a unification of all local councils and municipal authorities should be effected. It is of great importance to us to have all local self-government put into a good position, and to induce good men to undertake it. The only way to achieve this is to enlarge and unify the duties of the municipal councils or local boards. If a number of overlapping boards dealing with various questions co-exist in the same county or borough, they will all be weak and indifferent. What is needed is, that in every borough or county the whole of the police, sanitary, school-board, poor-law, and every possible municipal work, should be centralised in a single powerful board. Medical men can see that it is only in this way that the pay and status of the poor-law doctor can be developed.

When in the boroughs the municipal and poor-law boards are combined, the medical officer of health of the borough will become the principal medical officer of the borough, and the poor-law doctors will become his subsanitary officers, every officer acting for his district under the general supervision of the medical officer of health.

It is essential to submit to this subordination. If it be not so arranged, each medical officer is an unit by himself; but, by combination and subordination to a chief, protection is given, and many advantages gained. Leave of absence, consultation, and sick-leave are all possible if the parish doctors in each borough be combined under the medical officer of health.

Further, when this combination is made, the parish doctors will become *de facto* the police doctors, and will have their pay raised in consequence by the amount now paid to another doctor. It is essential, I think, that the parish (or, as I would call them, the district) medical officers should be in charge of others besides paupers, as it is in this way that really good men will be chosen for the service. If it were paupers alone who were treated, high attainments might not be looked for. The passing of recruits for the army might also be the duty of the district medical officers, their pay being increased in proportion. All this work, and the pay raised in proportion for it, would develop in every town a body of officials able to deal with all sanitary and medical questions, and would give to the poor really efficient and combined medical aid. The policy of Mr. Stansfeld, in not encouraging poor-law medical officers to be the medical officers of health, may be met by this method of making them subofficers, under a chief who would be the responsible medical officer of health for the district, be it borough or county.

In the same way, when the county boards are formed, under the county government reorganisation Bill, we, as a profession, should agitate for a county medical officer of health, serving under the county board, and to whom all the rural health-officers would be subordinate as subofficers. This county chief would be the protector of the rural medical officers, and through him their reports and complaints would reach the board for the county. The care of the police, of county *employés*, etc., would be also the duty of the rural district officers; and they would be doing duties analogous to the district officers in the boroughs.

It is in this way a civil medical service for England can be built up, and the health of the people raised by sanitation. Sickness seems to me to be the greatest cause of pauperism, and it can only be checked by complete sanitary organisation for the country. The poor-law service is that germ which we must develop. The British Medical Association can do all this with ease, and it will find supporters in every class of the English people. Anyone can see what an awakening as to sanitary matters is going on everywhere in England. The great way to forward it is gradually to convert all medical officials into sanitary agents, and to combine their work. Once the boroughs and the counties are organised, it is very easy to develop the Medical Department of the Local Government Board into a National Health Department, with its representative in the House of Commons as a Health Minister. It only needs the least ripple of combination on the part of our profession to push forward such a condition of affairs.—Yours,

GEORGE J. H. EVATT, M.D., Surgeon-Major A.M.D.

Royal Military Academy, Woolwich, January 1884.

THE MEDICAL SICKNESS, ANNUITY, AND ASSURANCE SOCIETY.

SIR,—As an intending member of the above Society, I should be glad if you would allow me space in your valuable JOURNAL to make a few suggestions.

1. As to the admission of members without a medical certificate for the first six months, a time during which a very large number will probably join; surely, this is a great mistake. Many men who have such constitutional taints as commencing phthisis or slight heart-disease, do not know this themselves until told by their medical attendants. If many such be admitted during the early career of this Society, they will burden it with large disbursements for sick-pay, when it has no reserve fund to fall back on. Under such circumstances, nothing can prevent it from failing, and that very soon. It ought to be a *sine quâ non* that every man, before being admitted a member, should undergo a strict medical examination, and that it be made by a man well established, or a member of the Society. Among any such large class of men as we are, there exist, without doubt, many "black sheep," who would pass a man suffering from some incurable disease, or the like, or perhaps a drunkard. Undoubtedly, the majority will be *bonâ fide*; but, unless their medical examination is strict at the commencement of the Society, the calls on its exchequer will be very heavy when they should be least so, and when it cannot bear numerous payments well. I, for one, [illegible] not think of joining until this point is altered; for altered it should be, and that at once, or else numbers of men will be admitted who, by their continued sickness, will go far to prevent the success of a Society which supplies a long felt want.

2. There are no stipulations as to the cause of illness. If men are [illegible] for contracting such diseases as delirium tremens, or the various specific diseases, there will be a very large, and, to my thinking, unfair, payment of money in sick-pay. I feel certain that a large majority of actual members, or those about to become so, would agree that men suffering from diseases wilfully brought on by themselves should not receive any benefits in sick-pay from the Society; and I would suggest that such diseases as delirium tremens, syphilis, gonorrhœa, etc., be thus specified.

3. The number for forming a quorum of the Executive Committee is very small. When such a body is invested with great powers, ought not the number required to be at least seven?

4. I do not see any clause in the draft of rules as to who will have to bear the liabilities should the Society become bankrupt, and as to whether they are limited to the amount of money paid by each member as premium.

Apologising for trespassing so far, but having the interests of the Society warmly at heart, I am, etc., M.B.

⁂ The letter of "M.B." will be laid before the Executive Committee, and will no doubt be carefully considered. In the mean time, the following remarks may be made.

1. The question of a medical certificate was fully considered by the Executive Committee, and it was held that some such declaration as the one adopted might with safety be applied to the foundation members. All present sickness assurances are combined with a comparatively large annuity, and some counterbalance will be afforded in the case of a delicate life by the small probability of the annuity age (sixty-five) being reached. Further, in the present proposals for membership (over 100 have already been received), the answers to the questions show a very good class of lives. There is not any desire to underrate the importance of medical examination, which it was never intended to forego for more than a short period.

2. As to illnesses brought about by the misconduct or intemperance of a member, no doubt provision for such cases, with other valuable suggestions that may be elicited by consideration and discussion, will be incorporated in the rules before they are finally submitted to the first members' meeting for adoption.

3. The smallness of the quorum of the Executive Committee is a merely provisional arrangement; and, doubtless, when the work has to be fully taken in hand, the number will be increased. The present number is only settled by resolution, and not by rule.

4. As to the liability of members, under the Friendly Societies Act, there is no responsibility beyond the mere payment of contributions, which is purely voluntary, and may be discontinued at any moment. At present, however, there is every indication of the Society becoming rapidly successful, as letters of approval are being received from all parts of the country.

THE PROVIDENT PRINCIPLE.

SIR,—It seems very desirable that some conclusions should be arrived at respecting the wisdom and practical use of fostering the provident principle in the way in which your short article on Dr. Stewart's report in the *Glasgow Medical Journal* suggests. The provident principle is the same as that of assurance against fire, accident, and the event of death; a scientific principle the more widely applied the more accurate in results. If any one consider the question carefully, he will see that it is as reasonable to provide against the butcher's and the baker's bills as against the doctor's. The provident principle cannot be applied as in life-assurance, where a comparatively remote contingency or risk is shared by large numbers and supported by small payments. The necessities of sickness are fairly equally divided, and the amount *per annum* of service and medicine required is not confined to a few, but is spread equally enough to make the principle of providence impossible, unless the payment be so high as to be of little or no advantage.

Under such circumstances, it is unreasonable to expect the healthy, or those having small risk, to pay comparatively large fees for those to whom the risks are so great as to be certainties. Theoretically, it will be seen that Dr. Stewart's conclusions are self-evident, and that, however humane it may be to force provident habits on the working classes, it ought to be clearly pointed out that those who are charitable in this respect are so at the cost of the poor medical men they employ. To supply medicine and pay a visit for 5d. is enough to prove this.

There is one fact to which I must draw your attention, as it is a very important one. You may remember that the conjoint committee appointed by the Association and the Charity Organisation Society, of which I was a member, gradually—or rather suddenly—resulted in the Metropolitan Provident Aid Association. Five thousand pounds have been spent by this company (limited liability)—that is the total of the shares taken up—and the question may fairly be asked, With what result? I say the question is a serious one, because the Charity Organisation Society is supporting this institution, and allowing contributions of charitable persons to be subscribed while this Company is still in existence, and no account has been given of the way in which the money has been expended. Nothing can prove more clearly that provident dispensaries, conducted in the best manner, must fail.—Yours obediently,

ROBERT LEE.

TREATMENT OF CARIES OF THE SPINE.

SIR,—To Dr. Sayre's observations upon my paper, I beg to reply *seriatim.*

1. Dr. Sayre states that I mention "rest" of the diseased parts, but as to relief of those parts from undue pressure "he (referring to me) does not seem to take (it) into consideration." And then, a few lines lower, Dr. Sayre quotes my words "to support the upper part of the body and release the diseased (anterior) parts of the vertebræ from undue pressure;" so that his own letter contains the refutation of his assertion.

2. With regard to my remarks about thoracic respiration, Dr. Sayre states that "a properly applied plaster jacket" accomplishes its object perfectly "without any interference whatever with the normal free thoracic respiration." In answer to this statement, I beg to quote his book upon *Spinal Disease, etc.*, page 11: "When the disease is situated in the dorsal region, the jacket should not be opened, for the reason that if the respiratory movements of the chest are permitted to go on without restraint, the heads of the ribs will necessarily move freely in their articular facets, and the disease will be increased rather than diminished. But if the ribs be held still, and the diaphragm thus made to act more fully, the breathing, instead of being thoracic, is rendered diaphragmatic and abdominal.........When the thorax is thus firmly secured, the anus and perinæum will rise and fall synchronously with the diaphragm. ....If manual pressure be applied to the perinæum, a feeling of suffocation will be produced. It is, therefore, necessary in some cases, when the thorax is thus secured, that the patient should sit upon a chair with a hole in the seat like a close-stool," etc.! This is a distinct contradiction to what Dr. Sayre now writes; and, further on in his letter, referring again to my assertion that the jackets interfere with thoracic respiration, he writes: "This I most emphatically deny."

3. As to the comparative facilities for alteration, I may state that a mechanical apparatus can be altered in a few minutes without disturbance of the parts; a plaster jacket not so.

4. As to the natural growth of the child, there is no restriction whatever to growth caused by the plan I advocate; and I believe that in this respect also it possesses an advantage over plaster jackets.

5. As to the accumulation of dirt and the interference with perspiration caused by the jackets, these are subjects upon which your readers will form their own opinion.

6. As to obscuring the region of the disease, Dr. Sayre writes: "If abscesses form, they are easily discovered." This is contrary to my experience.

7. My description of the instrument, he says, is very "vague and uncertain." I had already described and figured it in the BRITISH MEDICAL JOURNAL, vol. ii, 1882, p. 833. Moreover, I desired to advocate principles, rather than any special instrument, and I even pointed out how those principles might be carried out with a plaster-of-Paris splint.

8. In disease of the cervical vertebræ, a head-piece can be applied to the instrument quite as easily as it can be to a plaster jacket, and I have had some very satisfactory cases of this kind.

9. As to suspension, I believe that we can place the spine in a good position so as to relieve the diseased (anterior) parts of the vertebræ from undue pressure, without resorting to this sometimes dangerous proceeding.

10. As to the relation of the diseased bones to one another altering from day to day, I refer to the changes due to natural resolution; for which, I hold, the surgeon ought to watch.

11. With regard to those of my cases which had been doing badly with plaster jackets, Dr. Sayre states that "the patients certainly could not have had them applied according to the principles which" he has "laid down for their proper application." In answer to this, I beg to say that the jackets were applied by hospital-surgeons of high repute in this metropolis, men whose surgical skill precludes (in my opinion) the possibility of their neglecting to apply the jackets with great care and accuracy.

But after all, my paper was simply based upon the results of my experience. I have seen a great many cases treated by various plans; some benefitted by plaster jackets, many others in which these jackets were unsuccessful. I was not prejudiced in the matter; I merely made use of the apparatus which I found answered best the purposes of a mechanical support; and I have met with great success.

From published papers of others upon the subject, from the expressions of some London surgeons, and from the letters which I have received from various parts of the country and from America, I find that the enthusiasm with which the plaster-of-Paris jacket was first hailed has considerably abated.

In conclusion, I beg to repeat that it is my desire to advocate certain principles of treatment rather than any special instrument; and I would further most emphatically urge that too much reliance should not be placed in any mechanical apparatus, but that all our resources—medicinal, dietetic, and hygienic—should be taxed to bring about resolution of the disease, and ankylosis of the affected structures—of those structures which, by resting, we place in the most favourable condition for repair.—I am, sir, yours faithfully,

24, Queen Anne Street, London, W. NOBLE SMITH.

THE NEW DRAINAGE OF MENTONE.

SIR,—At the first meeting of the Society of Mentone Medical Practitioners, of which I have the honour to be president, I drew the attention of the members present, thirteen in number, to statements respecting the drainage of Mentone which had appeared in a medical contemporary, and had been copied by various political journals, statements calculated to injure this health-resort. The medical members of the town Bureau d'Hygiène, who were present, gave detailed information as to what had been done and was doing with reference to the drainage-works. The subject was subsequently discussed in all its bearings, and I was requested by the Society to give publicity in England to the information.

Previously to the advent of strangers, there was no drainage-system whatever at Mentone, as is the case in all the small Italian towns at the present day; the plan adopted obviating, as the inhabitants think, all necessity thereof. Nearly all the inhabitants are landed proprietors, and depend all but entirely on human manure for fertilising their olive, lemon, and orange-trees. The excreta, as also the house-slops (small in quantity in a land where soap and water are but sparingly used), are collected in small barrels. When these are full, they are carried on donkey-back to the mountain-terraces on which the trees grow. A trench is dug around the base of each tree, and the manure, mixed with earth, therein deposited. It really is the primitive earth-system. Thus, although the atmosphere inside the house is occasionally tainted, there is no collection of stagnant fermenting fæces in or near the house. The rain-water and more abundant washing-slops run drown the street in a gutter, as your correspondent correctly states.

When hundreds, nay thousands, of visitors arrived at Mentone, this primitive earth-system could no longer be applied to them, and cesspools were built to all the villas and hotels, with ventilating-shafts carried from the cesspool to the roof of the house. This system still universally obtains, and it will be difficult, if not impossible, to alter it. Mentone is very peculiarly situated. The town itself is built on the shoulders and extremity (*menton*, chin) of a promontory that terminates a mountain 1,500 feet high, itself lying as a buttress against this mountain amphitheatre, 4,000 feet high, which circumscribes and forms the district.

The ascent from the shore to the old castle and cemetery, which occupy the apex of the town, is very precipitous, rising above 200 feet in half a mile. In the bays, east and west of the old town, there is very little level ground, the ascent beginning very near the shore-line. Everywhere the rock is near the surface. The rains at Mentone are all but tropical, especially in spring and autumn. Often three or four inches of rain fall in twelve or twenty-four hours, carrying with it soil and sand in such quantities as to render the sea turbid, quite yellow, for a mile or more from the shore. The new drains are merely constructed to carry off these floods of rain-water, which inundate the lower parts of the town, as also what are called "*eaux menagères*," or house-water, and are not permitted to receive human excreta. They are made high and wide; first, that they may be able to carry off these sudden masses of water; secondly, that they may not be choked with the soil and sand which the rain-water brings with it; and, thirdly, that if they be so choked, men may be able to get inside and clean them.

When I first arrived at Mentone, in 1859, the lower parts of the town were occasionally inundated, as described, after heavy rains, and such a state of things was accepted by the population as one of the necessary conditions of life. With above two thousand winter visitors, however, and a very much higher state of civilisation, such inundation can no longer be accepted; hence the size of the drains now building. Moreover, none of the houses in the old town have been connected with the new drains, and a clause has been adopted by which, should such a connection be made in the future, a proper siphon-trap will have to be made between the drains and the houses.

The inhabitants are to pour their house-slops into them by trapped gullies, but not the fæces, which are to be collected as of yore (in the old native town) and carried off to the country.

It is the presence of the numerous visitors inhabiting the villas, and assembling in large hotels to the number of 100, 200, or more (the Hotel Victoria has 200 beds), that renders the drainage of the locality difficult. Small sewers would have burst with the heavy rains and have overflowed; whilst it is feared that the large sewers now building would allow solid matter to collect (especially during the five months' summer drought) were they used for sewage. There is a water-company now in operation at Mentone, which, in the season, distributes daily over 400 cubic mètres of water (the mètre is 3 feet 4 inches) to its clients, all of which finds its way to the sewers; but it is thought that even that amount would be insufficient to scour efficiently the main drains in the level part of the town if the latter were used as sewage-drains. The old town is to be still better off, for a small stream or rivulet from the valley of Mentone, at a higher elevation, is to be daily let into the sewer in the Rue Longue described by your correspondent, and it has been thought best, therefore, to continue the system of cesspools, at least, for the present. The latter are, or ought to be, always emptied by the pneumatic apparatus so much used in Paris and elsewhere on the Continent. When it is used by the hotel and villa proprietors, and not shirked to avoid expense, there is no smell or inconvenience whatever. A vacuum is established in a large cask or tub drawn on wheels, like a water-tub, only larger. The cesspool is connected with it by a gutta-percha tube, and, on turning a valve, the contents of the cesspool are precipitated into the tub by atmospheric pressure. The diffiulty is to know what to do with the contents of the tubs. A locality was at first given to the contractor a long way up one of the valleys, but objections have been raised to this mode of disposal of the town sewage; and it has been recently determined by the municipal authorities to throw it into the sea, at a distance from the land, on the maritime side of the new jetty or pier. A ledge of rocks, which advances into the sea, continuing the promontory on which Mentone is built, will, it is hoped, render this feasible and safe. There is a strong sea-current trending along the coast from east to west, which will, it is thought, carry off the sewage to the sea, away from the coast.

The Medical Society suggested to the town authorities to provide flat-bottomed boats and a steam-launch, and to tow the sewage out to sea daily; but the heavy expense this plan would have entailed has negatived it, at least for the present.

Up to the present time, the system described—well-built, well-cemented cesspools, with good and efficient ventilation at the roof of the house—has sufficed to keep Mentone exceptionally healthy. During the twenty-three years I have resided here, there has been no epidemic among the visitors, and the only cases of typhoid fever we have seen amongst them, with very rare exceptions, have been imported cases. I may also mention that I have only seen at Mentone three cases of real diphtheria during that long period, and two were fatal. I do not call tonsillitis, with albuminous pultaceous deposits on the tonsils, diphtheria. I used to see such cases when I began to study medicine fifty years ago, have seen them every winter everywhere ever since, and have never known a fatal case. My German colleagues here, and many English practitioners, following, I am told, German teaching, call these cases diphtheria—most incorrectly.—I remain, sir, very truly yours,

Mentone, December, 1883. HENRY BENNET, M.D.

MEDICO-LEGAL AND MEDICO-ETHICAL.

A QUESTION OF PRECEDENCE.

SIR,—I should like to ask a question on a matter of precedence. If in labour twins be known to exist, and, on examination, a hand present, and should it become necessary to put the hand back, and bring down and deliver the other child first, in point of law, which child would be the heir, the one presenting with the hand, or the one first actually born? I cannot find a reference to this in any work on medical jurisprudence.—Yours truly,

Halifax, January 23rd, 1884. T. M. DOLAN, M.D.

*** We are not aware that this question has ever been settled in a law court. The law has not defined "live birth" except by judicial decisions, but these have made it clear that live birth means completely born. We believe, however, that, under the circumstances named, the first fully born child would, if a male, be the heir. Compare the story of Pharez and Zarah, Genesis, chap. xxxviii, v. 27-30, with chap. xlvi, v. 12, where the first fully born child, Pharez, is treated as the elder son, although the hand of Zarah came out first.

MILITARY AND NAVAL MEDICAL SERVICES.

LADY NURSES IN MILITARY HOSPITALS.

Our contemporary, the *Broad Arrow*, has some very judicious remarks, in a late issue, on the above subject, which are well worth the attention of the authorities. One statement, however, requires qualification. "The experiment," the writer says, "did not succeed at Netley." Now it is quite true that the "lady superintendent," to whom the conduct of the "experiment" was first committed, very nearly made shipwreck of the system. This lady had high notions on the subject of her duties, her dignity, and her authority. A month had hardly elapsed before the place was in an uproar. It was evidently her "mission" to establish in the Royal Victoria Hospital an *imperium in imperio*. With this view the military commandant, the principal medical officer, the executive staff of the various divisions of this great Hospital, were given to understand that "the nursing" was the be all and end all, the sole purpose for which the whole establishment was created and kept up, and that as her position was superintendent of "the nursing," her voice was to be supreme. The functionaries above named very soon had practical experience of what that very practical and plain-spoken man, John Knox, called the "intolerable regimen of women," and they rebelled against it. This led to a War Office inquiry. The issue of this was a foregone conclusion, for it was conducted by War Office officials, two of whom were deeply committed to "the nursing" system as understood by the lady whose mode of carrying on her duties was the subject of inquiry, and one of them so deaf that he might as well have been sitting on the cross of St. Paul's, as in the court room, when the inquiry was going on. The result was a triumphant acquittal. This did not mend matters; and "the nursing" was carried on with as high a hand as before, finally culminating in an incident which, as it illustrates in an instructive way the "regimen of women," we must relate. In the medical division was, at the time in question, a soldier in the last stage of cardiac disease, drawing near the end of the thorny path he had to travel, perfectly helpless and suffering greatly. In attendance on this man was a particularly handy and kind orderly, who ministered to this patient in a way no one else could. On a particular night this orderly placed his bed on the floor at the patient's bedside, ready to give assistance when needed, which it was, frequently. The lady-superintendent, going her rounds at night, found this state of matters, and at once directed the orderly to leave the ward. In vain the patient pleaded his entire dependence on his attendant; but as this was not "nursing" in accordance with her notions, she persisted, on which the poor patient flew into a passion of rage, and immediately expired. This filled the cup to overflowing. Another inquiry was conducted, this time by the late General William Hay, an officer of a calm temper and judicial mind; and shortly afterwards the lady-superintendent vanished into space, and with her, "the nursing" as understood by her. Then, and not till then, "order reigned" within the walls of the Royal Victoria Hospital. Under another lady a new system was introduced, which has been a complete success. Under her, the system of female nurses has been a great blessing to the sick and wounded soldiers, and a great help to the medical officers, between whom and the lady superintendent and her staff of nurses, the best relations have existed, and we believe we are right in saying that not one unpleasant incident has happened to disturb the harmony of all concerned in the treatment of the sick and the discipline of the hospital.

Surely here is a lesson for all who are charged with hospital administration, civil or military. If our space admitted, we could "point the moral" by another illustration, to which we can only refer. Some years ago some "lady nurses" were sent to the General Hospital at Madras. Their notions on "the nursing" were much the same as those of the first superintendent at Netley. The result was the same. Powerful Government House influence for a time prevailed against the doctors, but there, as elsewhere, the "intolerable regimen" proved too much even for Government House, and the ladies had to be relegated to their proper place and functions in hospital work and administration.

INDIA AND THE COLONIES.

SOUTH AFRICA.

THE EPIDEMIC IN SOUTH AFRICA. We recently received from a correspondent in Kimberley, South Africa, a piece of skin taken from the body of a white man, who died in the Dutoitspan Lazaretto, from the epidemic which has been extensively prevalent in that region. The nature of the epidemic has been, as our readers are aware, much disputed, the cases presenting certain peculiarities which led some of those who saw them to doubt whether the disease was true variola. We have submitted the piece of skin we received to Dr. John MacCombie, Medical Superintendent of the South-Eastern District Fever and Small-pox Hospital, who has reported to us the eruption on the skin presents, both to the naked eye and on microscopical examination, the appearances and structures characteristic of the eruption of small-pox. Telegraphic information with regard to the manner in which the epidemic is spreading appears fully to confirm this opinion.

We have also received from Dr. Robertson, of Kimberley, a couple of photographs, one of Mrs. R., and the other of her son George. It will be remembered that Drs. Jameson and Crook were stated to have said that the members of this family were suffering from chicken-pox. We have, from notes supplied us, given our opinion that they were suffering from small-pox, and the photographs fully bear this out. The boy's appearance is characteristic of an unvaccinated small-pox patient about the tenth day of the eruption. The boy fell ill on December 2nd, and the photograph was taken on December 13th. The plump pustules, the swollen skin, and the way in which he sits on the chair so as to avoid, as much as possible, pressure on the tender skin, are all typical of small-pox. The great majority, if not all the vesicles of a case of chicken-pox, might be expected to have dried up before the tenth day of the eruption. Mrs. R.'s face and hand (the only parts photographed) are also quite typical of small-pox. With regard to the epidemic generally, the Board of health are to be congratulated on the vigorous measures they have taken to combat the spread of the disease; and, in spite of the opposition of certain sections of the community, their efforts have been rewarded with a large amount of success. The concealment by the mine-owners of cases of small-pox amongst natives in their employ is a practice which calls for the severest censure, not only on account of the danger to the patients themselves from defective nursing and bad sanitary surroundings, but also on account of the danger of infection spreading from them to others in their neighbourhood. It is worthy of remark that the majority of the cases seem to have come from Dutoitspan, where there has been most disinclination among the residents to consider the disease small-pox, and where, consequently, preventive measures were less likely to be faithfully carried out than in those districts where the dangerous nature of the disease was fully realised.

AUSTRALIA.

INQUIRY INTO THE PREVALENCE OF TUBERCULOSIS IN VICTORIA.—The extensive prevalence of tuberculosis, both among men and animals, in some parts of Australia, is attracting a good deal of attention. The Hon. J. Buchanan has brought the subject before the Upper House of Victoria, and a board, consisting of Mr. Buchanan, M.L.C., Mr. J. L. Dow, M.L.A., and Drs. Allen, Jamieson, and Plummer, has been appointed to inquire into and report on this alleged prevalence of tuberculosis in the colony, and on any danger to the public health that may be thereby incurred. At the first meeting of the board, it was resolved that Professor Allen and Dr. Jamieson be requested to draw up a draft of a circular to be sent to veterinary surgeons and others, soliciting information and assistance on the matters to be inquired into. At a special meeting of the Veterinary Medical Association, held in Melbourne, the secretary stated that he had called the meeting in consequence of the action of the Hon. J. Buchanan, above referred to. After a considerable amount of discussion, the following resolution was passed: "That it is the opinion of this meeting that tuberculosis in cattle is rapidly increasing throughout the colonies; that tuberculosis is communicable from cattle to their own and other species, as well as to man, by the ingestion of the flesh and milk of affected animals, and by inoculation and inhalation; and that, in the ox tribe, it is both hereditary and congenital."

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

LOCAL AUTHORITIES.

THE behaviour of parochial boards has come in England to be recognised as capable of improvement; in London particularly it has been suggested that the vestryman is not omniscient, and that the conclusions at which he and his colleagues arrive are not always the result of the exercise of common sense. But while it has become the fashion in the south to look somewhat critically upon the actions of our parochial rulers, we would fain have hoped that the harder headed Scot would have shown greater capacity for dealing with local affairs. It is, therefore, somewhat disappointing to find that Stirling at any rate must be regarded as exceptional, if we are to retain our good opinion of Scotch local government. The medical officer to the Stirling Parochial Board had pleaded for better accommodation than was afforded him for the examination of paupers in the parochial offices. As a result of his complaint, Dr. Littlejohn, of Edinburgh had, at the instigation of the board of supervision, inspected the arrangements. The office, his report informs us, consists of a good sized room, a considerable portion of which is boarded off to form a passage, which is a public one, leading to the old council chamber, and to the Burgh court; this apartment is occupied by the inspector, his clerk, and the doctor; the only waiting-room for the paupers is the passage, through which ratepayers pass to pay their taxes and for other purposes. Under these disadvantageous circumstances, the doctor has to see his patients, but even then his view of them is limited, for his only opportunity is a square opening in the partition separating the room from the passage. Dr. Littlejohn may well point out that there are some examinations which cannot conveniently be conducted in such a situation! The only other opportunity for a more private examination of a patient is an adjoining night-shelter, which consists of but one apartment, used at night by male tramps, but access to this can only be obtained by exposing both doctor and patient to the weather in the passage from one to the other.

Dr. Littlejohn has been bold enough to suggest that another room should be found for this purpose.

The result produced by his report is instructive. It was regarded as ludicrous, discourteous, and eventually ordered to lie on the table. An ingenious member of the board recollected that, when the medical officer's services were first engaged, there was no statement in the agreement that a room should be provided, and that the rules of the board of supervision stated that the medical visitation of paupers should be at their own homes. After a lengthy debate, the inspector was ordered that this part of the rules should be carried into effect.

What course the board of supervision will take under these circumstances remains to be seen, but the result of such action as that of the Stirling board is obvious enough; if the medical officer be obliged in future to attend at their own homes all sick paupers, however slight or severe their ailments, a far greater claim will be made upon his time, and the salary must, sooner or later, come to be apportioned with regard to this demand.

SANITARY INSPECTORS AND SANITARY AUTHORITIES.

AT the last monthly meeting of the Association of Public Sanitary Inspectors, an interesting discussion took place on two papers which had been read at a previous meeting, one on the position of the sanitary inspector, and the other on his tenure of office. Mr. G. P. Berram occupied the chair, and in opening the discussion remarked that there was a general unanimity of opinion that the sanitary inspector was not in the position he ought to be; that, in the country districts, at any rate, private influence was so predominant amongst those who constituted the sanitary authority that the inspector could not do as he would, and then if anything went wrong the cry was "What is the sanitary inspector doing?"—Mr. Sherborne (Chelsea) said, as far as his district was concerned, the inspectors were more or less free agents. It seemed that one of the Acts of Parliament had been lost sight of, the Act of 1874, which gave the Local Government Board power to compel any metropolitan district, or any district with more than 10,000 ratepayers, to enforce the third section of the Sanitary Act, that which was called the Lodging House Section. The Board had now drawn attention to that Act, and that was one reason why the urban and rural inspectors should be on a level. He moved a resolution declaring it to be desirable that the position of the metropolitan, urban, and rural inspectors should be assimilated.—The motion was seconded by Mr. Poulson, inspector of the Tottenham district, who remarked that he had never found the Board he worked under opposed to sanitary reform.—A country inspector said some inspectors refrained from reporting the bad state of property lest they should lose their appointments. After his appointment to the first district he inspected, which was in Worcestershire, he was distinctly told that the less he did the better it would be for him.—A London inspector said, as far as London was concerned, the inspectors had no reason to complain, and that it made no difference to him whether the property he had to report belonged to a vestryman or to anyone else. Ultimately the resolution was agreed to, as was also another declaring it to be expedient that the appointment of all officers should be approved of by the Government sanitary authority, and that no officer should be dismissed by any local authority without final appeal to and approval of the Government sanitary authority.—A paper on the sanitary inspection of the dwellings of the poor was then read by Mr. T. Buckworth, sanitary inspector of St. Saviour's, Southwark, in which, referring to overcrowding, he said the erection of dwellings on the block-system was not to be admired, as they did not meet the requirements of the people they were intended to benefit. Torrens's Act and Sir Richard Cross's Act, if fully carried out, he thought would remedy the evil, as had been done at Birmingham. The sanitary condition of London, he believed, was far better than it was ten years ago, and as an evidence of this he stated that the death-rate for the past twelve months in London was the lowest it had ever been. Discussion on the paper was postponed.

THE RESPONSIBILITIES OF POOR-LAW MEDICAL OFFICERS.

WE learn from the *Devon Evening Express* of the 14th instant, that a case has recently occurred at Brixham which has been the subject of complaint against Mr. Searle, one of the district medical officers of the Totnes Union. It would appear that the wife of a labouring man, earning from fifteen to eighteen shillings a week, and, therefore, hardly a pauper, had been attended by Mr. Green, also of Brixham. The woman was in labour, and the case, being a somewhat complicated one, Mr. Green decided not to go on with it, and the services of the parochial medical officer, Mr. Searle, were applied for, and his attendance requested, on an overseer's order, marked urgent.

This order Mr. Searle declined to recognise, alleging as his reason that as it was the relieving officer's day at Brixham, and that he must shortly be there, the overseer was acting *ultra vires* in issuing an order. A short time afterwards the relieving officer appeared, and, application being made to him, another order was given, and Mr. Searle attended the case. The woman subsequently died; a complaint was afterwards made to the Board of Guardians respecting Mr. Searle's refusal to attend to the overseer's order, and, after some discussion, it was resolved "that the clerk should write to Mr. Searle very strongly, and inform him that he was bound to attend, and the Board would insist on his attending to the orders of their officers."

Although we sympathise with Mr. Searle under the peculiar circumstances in which he was placed, we hold that he was in error in not complying with the overseer's order. At the same time, we do but express our opinion that the said issue of overseers' orders opens a wide door to unfair exactions of time and trouble on the part of poor-law medical officers, and ought to be restricted to the most urgent cases.

THE PARISH OF ST. GILES, CAMBERWELL, AND THEIR MEDICAL OFFICER.

WE have received the particulars of some alleged sharp practices in the parish of St. Giles, Camberwell, of which Dr. Pinder, Poor-law medical officer, would appear to have just reason to complain. It would seem that he is frequently called upon to attend sudden emergencies, such as accidents and cases of fatal injury, necessarily without any official order; and that the police and Poor-law authorities refuse payment. In the special case before us—one of fatal cut-throat—the coroner refused to call in medical evidence, the police to issue a certificate authorising a fee; and the parochial authorities declined to recognise their liability, although the deceased and her friends were absolutely without means. The right remedy, drastic though it may be, would appear to be to positively refuse all attendance unless the applicant comes provided with authority. Such a course of conduct would bring these economical public functionaries to their senses, and teach them that they have no right to demand the time and services of professional men for nothing.

HEALTH OF ENGLISH TOWNS. In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 8,762,354 persons, 5,261 births and 3,410 deaths were registered during the week ending the 26th ult. The annual rate of mortality in these towns, which in the three preceding weeks had been 22.2, 21.0, and 20.7, further declined last week to 20.3. The rates in the several towns, ranged in order from the lowest, were as follows: Norwich, 15.0; Bradford, 15.9; Portsmouth, 16.9; Leicester, 16.9; Preston, 17.3; Derby, 17.3; Wolverhampton, 17.3; Bristol, 17.7; Hull, 17.9; Blackburn, 18.4; Bolton, 18.7; Birkenhead, 18.9; Sunderland, 19.1; Oldham, 19.1; Nottingham, 19.3; Cardiff, 19.5; Birmingham, 19.6; Halifax, 19.8; London, 19.9; Plymouth, 20.7; Huddersfield, 21.2; Salford, 21.4; Liverpool, 22.0; Brighton, 23.1; Sheffield, 24.1; Newcastle-upon-Tyne, 24.1; Leeds, 25.5; and Manchester, 26.8. In the twenty-seven provincial towns, the death-rate averaged 20.7 per 1,000, whereas in London it did not exceed 19.9. The 3,410 deaths from all causes registered last week in the twenty-eight towns included 130 which were referred to whooping-cough, 97 to scarlet fever, 86 to measles, 48 to "fever" (principally enteric), 27 to diarrhœa, 26 to diphtheria, and 4 to small-pox; thus, 418 deaths resulted from these principal zymotic diseases, against numbers increasing from 447 to 460 in the three previous weeks. These 418 deaths were equal to 12.2 per cent. of the total deaths, and to an annual rate of 2.5 per 1,000. This zymotic death-rate was equal to 2.6 in London, and averaged 2.4 in the twenty-seven provincial towns, ranging from 0.0 in Norwich and Sunderland, and 0.4 in Portsmouth, to 4.2 in Brighton, 4.9 in Manchester, and 5.6 in Leeds. The deaths referred to whooping-cough in the twenty-eight towns, which in the two preceding weeks had been 99 and 117, further rose last week to 130, and caused the highest rates of mortality in Brighton and Sheffield. The fatal cases of scarlet fever, which had been 117 and 108 in the two previous weeks, further declined last week to 97; this disease caused the largest proportional fatality in Leeds, Preston, and Birkenhead. The deaths from measles also showed a further decline from recent weekly numbers, but showed an excess in Derby, Salford, and Oldham. The fatal cases of fever, which had been 51 and 61 in the two preceding weeks, declined last week to 48, and caused the highest rate in Blackburn. The 26 deaths from diphtheria in the twenty-eight towns last week included 16 in London, 3 in Birmingham, and 2 in Liverpool. The fatal cases of small-pox in these towns, which had been 12 and 19 in the two preceding weeks, declined to 4, of which two were recorded in London, and 2 in Birmingham. The mortality from diseases of the respiratory organs, judged by the metropolitan returns, still continues much below the average, owing to the unusual mildness of the season. The 360 deaths referred to these diseases in London last week were fewer than those recorded in any recent week; they were as many as 179 below the average weekly number, and equal to an annual rate of 4.7 per 1,000. The causes of 91, or 2.7 per cent. of the 3,410 deaths registered last week, were not certified either by medical practitioners or coroners. In London, the proportion of uncertified deaths did not exceed 1.4 per cent.; whereas in the twenty-seven provincial towns it averaged 3.7 per cent., and showed the largest excess in Salford, Hull, Leicester, and Halifax.

HEALTH OF SCOTCH TOWNS. During the week ending the 26th ult., 782 births and 485 deaths were registered in eight of the principal Scotch towns, having an estimated aggregate population of 1,254,607 persons. The annual rate of mortality, which had been 21.1 and 22.0 in the two preceding weeks, declined to 20.1, and was slightly below the average rate for the same period in the twenty-eight large English towns. Among these eight Scotch towns, the death-rate was equal to 15.2 in Dundee, 17.2 in Leith, 17.9 in Edinburgh, 20.1 in Aberdeen, 20.2 in Perth, 21.4 in Paisley, 21.5 in Greenock, and 22.6 in Glasgow. The 485 deaths from all causes registered in these towns last week included 74 which were referred to the principal zymotic diseases, against 74 and 87 in the two preceding weeks; of these, 23 resulted from whooping-cough, 14 from measles, 12 from diarrhœal diseases, 11 from diphtheria, 7 from scarlet fever, 7 from "fever," and not one from small-pox. These 74 zymotic deaths were equal to more than 15 per cent. of the total deaths, and to an annual rate of 3.1 per 1,000, which exceeded by 0.6 the average rate last week in the large English towns. No deaths were referred to any of these diseases in Perth, while they caused the highest death-rates in Edinburgh and Aberdeen. The 23 fatal cases of whooping-cough showed a slight further increase upon the numbers returned in the two previous weeks, and included 16 in Glasgow, 3 in Aberdeen, and 3 in Edinburgh. The 14 deaths referred to measles exceeded by 6 the number in the previous week; 7 were recorded in Edinburgh, and 5 in Paisley. The deaths from diphtheria, which had been 13, 17, and 22 in the first three weeks of the year, declined to 11 last week, of which 5 occurred in Glasgow, and 2 in Aberdeen. Of the 7 fatal cases of scarlet fever, 5 were returned in Glasgow, where 4 other of the 7 deaths from "fever" were also recorded. The rate of mortality from diseases of the respiratory organs in these Scotch towns was little more than half that recorded in the corresponding period of last year, and was equal to a rate of only 3.7 per 1,000. Of the 485 deaths registered last week in these towns, as many as 80, or more than 16 per cent., were uncertified.

HEALTH OF FOREIGN CITIES. From the return for the week ending the 19th instant, it appears that the annual death-rate in the three principal Indian cities recently averaged 31.6 per 1,000; it was equal to 25.8 in Bombay, 29.7 in Calcutta, and 42.2 in Madras. Small-pox caused 45 deaths in Madras, and cholera 17 in Calcutta and 8 in Madras; the death-rate from "fever" showed the largest proportional excess in Calcutta. According to the most recent weekly returns, the average annual death-rate in twenty-three large European cities was equal to 27.7 per 1000 of their aggregate population; this rate was 7.0 above the mean rate last week in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 35.3, and showed a further increase upon the rate prevailing in recent weeks; the 627 deaths included 16 from typhus and typhoid fever, and 20 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate did not average more than 20.2, the highest rate being 24.5 in Copenhagen; scarlet fever caused 3 deaths n Stockholm. The death-rate in Paris was equal to 24.5, and the 1,055 deaths included 41 from diphtheria and croup and 21 from typhoid fever. In Brussels, the deaths gave a rate of 24.4, and included 11 from small-pox. The rate in Geneva was equal to 28.3, but no zymotic fatality was reported. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 28.7; the rate was equal to 30.1 in Rotterdam and 30.0 in Amsterdam, where 10 fatal cases of diphtheria and 26 of croup were recorded. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 28.0, and ranged from 23.2 and 26.3 in Berlin and Dresden, to 31.2 in Vienna and 35.8 in Prague. Small-pox caused 33 deaths in Prague, 4 in Buda-Pesth, and 3 in Vienna. Diphtheria showed excessive fatality in Dresden, Berlin, and Trieste. In three large Italian cities the mean death-rate was 29.4, the recorded rate being 25.5 in Turin, 30.1 in Rome, and 34.8 in Venice; measles caused 14 deaths in Turin. The 161 deaths in Lisbon were equal to a rate of 41.2, and included 4 from diphtheria. The mean death-rate in four of the largest American cities was equal to 23.5, the rate ranging from 19.7 in Brooklyn to 25.2 in Baltimore. Diphtheria caused 21 deaths in Philadelphia and 11 in Baltimore; the deaths referred to typhoid fever in these two cities were 12 and 3 respectively.

DISTRICT OFFICERS AND CERTIFICATES OF LUNACY.

Sir,—Will you kindly give me advice in the following case? In this borough, as in others, the district or workhouse medical officers have always been asked to visit, and sign certificates of lunacy in their own districts. Now, the Bench threaten to oblige one to go into another's district, and threaten to indict any one refusing to visit a lunatic, or supposed lunatic, and report on the case. The Act clearly gives power to the magistrates to call in any surgeon they like; but can it compel any surgeon, objecting to do so, to act except in his own district? An answer to this will oblige, yours faithfully,

A Poor-law Medical Officer.

*** We hold that no justice, stipendiary, or borough magistrate, has any power to order that any given district Poor-law medical officer, physician, or surgeon shall, at his mandate, visit and report on the state of a lunatic, or supposed lunatic. All that the law requires of a district medical officer is, that he shall report to the relieving officer the fact of the existence of a pauper lunatic, or supposed lunatic, in his district; and the justice, etc., may then call in the aid of any medical man, who may choose to accept the duty and the fee appertaining thereto. He may clearly refuse to act if he be so minded.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 24th.

Marriner, William Herbert Lister, Gunterstone Road, W.
Pilgrim, Hubert Wilson, St. Augustine's Road, N.W.
Urwick, William, St. George's Road, Pimlico.
Vince, John Foster, Wheeley's Road, Birmingham.

The following gentleman also on the same day passed the Primary Professional Examination.

Heath, Charles Joseph, St. Bartholomew's Hospital.

MEDICAL VACANCIES.

The following vacancies are announced:

ARDEE UNION.—Medical Officer, Dunleer Dispensary. Salary, £145 per annum, and fees. Election on February 4th.

BOSCOMBE PROVIDENT INFIRMARY, Bournemouth.—Resident Medical Officer. Salary, £60 per annum. Applications by February 11th.

CHORLEY DISPENSARY.—House-Surgeon and Apothecary. Salary, £130 per annum. Applications by February 20th.

GENERAL INFIRMARY, Leeds.—House-Surgeon. Salary, £100 per annum. Applications to Dr. T. Clifford Allbutt by February 8th.

HANTS COUNTY LUNATIC ASYLUM.—Junior Assistant Medical Officer. Salary, £120 per annum. Applications by February 15th.

HEARTS OF OAK BENEFIT SOCIETY.—Consulting Physician. Applications by February 16th.

HOSPITAL FOR WOMEN, Soho Square.—Two In-patient Clinical Assistants Applications to the Registrar.

MANCHESTER ROYAL INFIRMARY.—Second House-Physician. Applications to the Chairman of the Medical Board at once.

MANCHESTER ROYAL INFIRMARY.—Fourth House-Surgeon. Applications to the Chairman of the Medical Board at once.

NOTTINGHAM BOROUGH ASYLUM.—Assistant Medical Officer. Salary, £100 per annum. Applications by February 16th.

PAROCHIAL BOARD OF PENNYGOWN AND TOROSAY.—Medical Officer. Salary, £80 per annum. Applications to Alex. Macdougall, Inspector of Poor, Auchnacraig, by February 2nd.

RADCLIFFE INFIRMARY, Oxford.—Honorary Physician. Applications by February 6th.

ROYAL SURREY COUNTY HOSPITAL, Guildford.—House-Surgeon. Salary, £75 per annum. Applications by February 6th.

SEAMENS HOSPITAL (late Dreadnought), Greenwich, S.E.—House-Surgeon. Salary, £50 per annum. Applications by February 5th.

SUSSEX COUNTY HOSPITAL.—Physician. Applications by February 6th.

SUSSEX COUNTY HOSPITAL.—Assistant-Physician. Applications by February 6th.

THE HOSPITAL FOR SICK CHILDREN, 49, Great Ormond Street, Bloomsbury. Assistant-Surgeon. Applications by February 6th.

WEST HERTS INFIRMARY.—House-Surgeon and Dispenser. Salary, £100 per annum. Applications by February 6th.

WEST NORFOLK AND LYNN HOSPITAL.—Honorary Physician. Applications by February 8th.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—House-Physician. Salary, £100 per annum. Applications by February 8th.

MEDICAL APPOINTMENTS.

Booth, E. H., M.B.Lond., appointed House-Physician to the Seamen's Hospital.

Crocker, J. Hedley, M.R.C.S.E., L.S.A., appointed House-Surgeon to Charing Cross Hospital.

Dodson, Arthur E., L.R.C.P.Edin., L.S.A.Lond., appointed House-Physician to Charing Cross Hospital.

Felix, Edward, L.S.A., appointed Resident Obstetric Officer to Charing Cross Hospital.

Gamgee, Arthur, M.D., F.R.S., appointed Physician to the Manchester Hospital for Consumption and Diseases of the Throat.

Huzzey, R. Lee, L.S.A., appointed House-Physician to Charing Cross Hospital.

Jones, J. T., M.R.C.S., appointed Surgeon to the Westbourne Provident Dispensary and Maternity, *vice* J. J. Gawith, M.R.C.S., resigned.

Larder, Herbert, M.R.C.S., L.S.A., late Senior House-Physician to the Westminster Hospital, appointed Assistant Medical Officer to the St. Marylebone Infirmary.

Limont, James, B.Sc., M.B., (late Senior House-Surgeon), appointed House-Physician to the Infirmary, Newcastle-on-Tyne.

Macdonald, John, L.R.C.P. and L.R.C.S.Ed., M.R.C.S.Eng., appointed Lecturer on Materia Medica in the University of Otago.

Molyneux, I. Francis, M.R.C.S., L.R.C.P.Ed., appointed House-Surgeon to Charing Cross Hospital.

Myles, H. G., L.R.C.P., appointed Medical Officer to the Abbeyshrule Dispensary of the Ballymahon Union, *vice* J. T. Myles, L.R.C.P., deceased.

Nance, A. C., M.R.C.S., appointed Junior Resident Medical Officer to the General Hospital for Sick Children, Pendlebury, Manchester, *vice* F. H. Mayor M.R.C.S., promoted.

Purvis, R. Scott, M.B., appointed Visiting Medical Assistant to the Newcastle-on-Tyne Dispensary, *vice* J. Foggin, L.R.C.P., resigned.

Reynolds, J. J., L.R.C.P., appointed Medical Officer to the Boxford District of the Cosford Union, *vice* C. P. Mann, F.R.C.S., resigned.

Roberts, Henry W., M.R.C.S., L.S.A., appointed Divisional Surgeon to the Brockley Police Station.

Novel Mode of Committing Suicide.—The methods adopted by suicides in order to attain their end, are often extremely eccentric. A few years ago was reported the case of a man who deliberately seated himself on a barrel of dynamite and ignited it; quite recently, a young man, aged 20, the son of an ironfounder, committed suicide by jumping down a cupola in which iron was being melted; the metal was at a white heat at the time, and death was probably instantaneous. Water was poured in to cool the cupola, but the body when removed would appear to have been almost completely cremated.

A Contribution to Statistics of Syphilis.—In a clinical lecture recently delivered by Mr. W. Whitehead, at the Manchester Royal Infirmary, he said: "It is a singular fact that during the last twelve months I have not met with a single chancre, either in my private practice or at the Lock Hospital. I could trace, as originating in Manchester, notwithstanding a large increase in the number of infective sores that have come under my observation. All the chancroids that have presented themselves, have been contracted in other towns, notably Stockport and Liverpool. In singular contrast, considering the close proximity of the towns, I am informed by Mr. Lowndes, that in Liverpool the proportion of infective sores to chancres is one in four, a relative proportion that existed in Manchester two years ago. I cannot pretend to account for this sudden disappearance of chancroids from this town, but I make the statement to explain why I have so few opportunities of providing for your clinic a sufficient number to enable you graphically to contrast the wide dissimilarity of the two diseases."

OPERATION DAYS AT THE HOSPITALS.

MONDAY..........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY..........St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY........St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY............King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY.........St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W. 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu., F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu., F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Royal College of Surgeons of England, 4 P.M. Professor Parker's Lecture on Mammalian Descent.

TUESDAY.—Pathological Society of London. Mr. Bowlby: Sporadic Cretinism. Dr. Barlow: A Case of so-called Fœtal Rickets (?) Cretinism. Dr. Lediard: Epithelioma of the Foot after Injury (card). Dr. Hale White: Fibroid Disease of Heart. Mr. Butlin for Mr. Benton: Carcinoma of Œsophagus. Sir H. Thompson: (1) A Growth from the Bladder; (2) Calculus impacted in a Sac in Bladder. Dr. Norman Moore: [illegible] Disease of Ovary. Dr. Angel Money: Spinal Cord of a Recent and Old Case of Infantile Paralysis. Dr. Sainsbury: Malignant Disease of Mesentery. Mr. G. Stokes: Pigmentary Degeneration of the Tongue (living specimen). Mr. Bowlby: Dermoid Cyst of the Finger (card).

WEDNESDAY.—Obstetrical Society, 8 P.M. Dr. Matthews Duncan will show Dr. Ansard's Vest. Specimens will be shown by Dr. Galabin and Dr. Horrocks. Mr. Alban Doran: The Relation of Prolapse of the Vagina to Hernia, illustrated by two Pedigrees. Annual meeting. The President, Dr. Gervis, will deliver the annual address.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

MEDICAL SICKNESS, ANNUITY, AND ASSURANCE SOCIETY.
PRELIMINARY EXPENSES FUND.

	s.	d.
Mr. C. E. Shelly (Hertford)	10	6
Mr. A. T. Wear (Newcastle)	10	6
Mr. J. Altham Read (Galloway)	10	0

A HOSPITAL AMBULANCE.

SIR,—Being desirous of improving our ambulance arrangements at this hospital, I will esteem it a favour if you or any of your correspondents can give me any information regarding the best sort of ambulance-car, and the probable cost of an efficient vehicle for such purposes.—I am, sir, your obedient servant,
THOMAS COLLINS, M.D., Superintendent.

Royal Infirmary, Aberdeen, January 23rd, 1884.

WHOOPING-COUGH.

SIR,—In answer to Mr. Blenkarne's inquiry respecting the use of alum in the above disease, I may state that it has been extensively used, and found to be of great service, more especially after the first stage. The dose recommended is a grain for each year of the patient's age, up to twenty, generally given four times a day, either in syrup, or wrapped up in water-paper. Further information can be gleaned from *Diseases of Children*, by Drs. Meigs and Pepper, and the *Medical Digest*.—Yours truly, ARTHUR KEMPE, M.R.C.P.

THE SHOEING OF HORSES.

SIR,—In the JOURNAL for December 15th, I notice a letter from Dr. Watters, of Stonehouse, in which he refers to a short article of mine in a late number of the *Veterinarian*, on horse-shoes.

It has been well said that a horse's body would last as long as two sets of legs, and this is true, as things are at present. But why is it so? Not surely because the legs are worse constructed than the body, but simply because man has tried to improve on the original form of the hoof—one among many instances of his meddlesomeness with the inferior animals, as he is pleased to call them. He cuts six inches off the tail of his horse and three inches off the tail of his spaniel under the delusion that he is "improving" these appendages, and making them look "prettier." These are, however, harmless freaks compared with the liberties he takes with the horse's frog. The evolutionist will pardon me for once using the old phraseology, if I say that nature has cunningly devised the frog to act as a buffer in diminishing the shock conveyed to the frame by each stroke of the foot on the earth, and man has invented the horseshoe to checkmate Nature in her endeavours to maintain the wonderful machine in good working order, the results of the interference being plainly enough seen in the broken knees, or rather, wrists, the cracked hoofs, swollen legs, and a whole Pandora's box of ills, which every horse-owner knows to his cost.

A more extended experience of the Charlier-tip, formed of a few ounces of steel, has confirmed all the views I expressed in the *Veterinarian*, and satisfied me that a horse shod with the tip never stumbles, needs no preparation in frosty weather, and, in all probability, has a few years of useful work added to his life.

On buying a horse, Dr. Watters' first step seems to be to strike off the mass of iron in which blacksmiths delight, substituting a steel tip, weighing a couple of ounces, and his experience fully justifies the step; but, nevertheless, I cannot help thinking that it is safer to pursue the following course, as it must not be forgotten that one failure might be the means of deterring a hundred horse-owners from trying the new plan. I, therefore, always advise my friends to have their horses shod for the last time with the old shoes, at the same time insisting that the shoeing-smith on no account touches the frog or the crust. These shoes ought to be allowed almost to drop off, which will happen in about six weeks or two months, and by this time the frogs will have somewhat regained their natural form. Then the Charlier three-quarter shoe may be put on, and, next time of shoeing, the tip only ought to be used. In March, when the roads begin to dry, the tips may be knocked off the hind feet and, a month later, those on the fore feet may follow. The horse will then work until the approach of winter, when possibly the tips will be again required, if the horse have to run on country roads, but London horses would, I think, be able to go all the year round without tips, or require them on the fore feet only.

The inhabitants of London can scarcely realise the [illegible] it would make in their lives were all the streets paved with wood, and [illegible] their horses. The money saved would amount to about [illegible] a year for each horse, but this sum I would suggest being expended [illegible] for the wheels of cabs and carriages.

Contrary to what might be expected, it takes longer time and greater care to get a horse employed on the land, where used to the old system of shoeing. It seemingly needs a certain amount of [illegible] the hard roads to ensure speedy success.—Yours faithfully, RICHARD GREENE.

Berry Wood, Northampton.

DETERMINATION OF SEX.

SIR,—I shall be obliged if you will allow me to reply to Dr. Campbell's criticisms upon my first letter on this subject; and this can probably best be done by taking the paragraphs of his letter *seriatim.*

That the ova, whose impregnation results in the numerous young comprised in any one litter, are not all of precisely the same age, may be inferred, I think, from an examination of the ovaries of such animals (*e.g.*, rabbits) killed in different stages of "heat." Several ovisacs are to be found, prominent on the surface of each gland, and on the eve of dehiscence, but affording naked-eye evidences of varying degrees of maturity. On the other hand, that "unmated spermatozoa continue to lurk"—or, in other words, that they retain their vigour and motive power in the female passages, for a considerable period—"for certainly as much as eight days, and probably for longer" (for even three weeks, it has been said, in some cases) is an accredited fact. Under these circumstances, it does not seem improbable that a single coitus should result in the (perhaps simultaneous) impregnation of ova of different ages. Dr. Campbell seems to use the term "ripe" in more senses than one; if we assume that an ovum is "ripe" for (*i.e.*, capable of) impregnation as soon as it is extruded from the ovary, does this necessarily prevent it from undergoing further development or maturation of any kind (*e.g.*, "owing to its being for a longer period exposed to the warmth of its mother's body," *see* Harvey, Coste, Thury, etc.); and thus, in some sense at least, "improving by keeping"? That a mature spermatozoid may, under certain conditions, continue to "ripen," *i.e.*, to strengthen one or other of its three chief tendencies—the stimulating, the sex-fixing, and the infective—is not, *primâ facie*, impossible; but the uterine passages would not, perhaps, afford the most favourable conditions for such a process; and, further, while the main tendency of the ovum is towards continued development into the individual, that of the sperm-cell lies rather in the direction of affording a stimulus requisite (in the higher animals) to such development.

I am inclined to agree with the view expressed by Dr. Campbell in the latter portion of the third paragraph of his letter; it is borne out by information derived from sheep, goat, and mule-breeders. The sexual behaviour of the female mule, especially, is a case in point; and in South Africa, I had under observation for ten months a mongrel bitch which, without exhibiting the usual signs of "heat," permitted connection with the male at any time, and appeared sometimes to seek it; at the end of the time mentioned, the usual symptoms of the œstrus developed, and impregnation subsequently occurred. Shortly afterwards, the bitch was accidentally killed during my absence from home.

I do not allege that "the sexual peculiarities of the articulata are a law to the vertebrata;" nor did I argue "that the tendency of the human ovum must be masculine, because virgin queen-bees and neuters produce only drones." I mentioned the case of the bee as being probably the most widely known of the very numerous instances of parthenogenesis afforded by the more highly developed members of the invertebrate kingdom; and as exemplifying the result which appears almost invariably to attend (in cases where the sex is distinguishable) the unchecked development of the unimpregnated ovum; so that I am not concerned to prove that the "sexual proclivities of mankind are, in all particulars, the same as those of bees." With regard to the effects of infantile underfeeding and overcrowding, the treatment of surplus population, and other social similarities which the two classes of beings appear to afford, the works of von Siebold, Lubbock, etc., afford interesting details; but (although this is really somewhat beside the question), the action of the insectal spermatheca has its counterpart, to a certain extent, amongst some vertebrates, *e.g.*, in the common fowl, a single coitus suffices for the fertilisation of five or six (or even twenty—Hunter) eggs, the subsequent laying of which may occupy eleven to seventeen days (Coste); while in the turkey, access to the male on a single occasion only appears sufficient to secure the impregnation of all the eggs laid during the season.

In all the forms of life—higher or lower, sexless or otherwise—it is obvious that it would be advantageous that the offspring should have the opportunity of inheriting those diverse powers of adaptation to, and influence upon, the environment, which would be more widely possessed by two individuals—because their experience and heritage would be more varied—than by a single parent; and, because the union of two individuals commonly precedes the development of the ovum in the higher animals, is it "misleading" to point out one of the advantages which accrue from that circumstance? Man eats to live; but is it "misleading" to say that it is advantageous to eat food of the best quality? If Dr. Campbell care to read my letter again, he will see that I do not maintain that "the tendency of this union" is, necessarily, or in all cases, "to compel into a female what, if left alone, would have been a male;" but, rather, that this would, under one set of conditions, probably be one of the results; while, under the opposite conditions, the result—as regards the sex of the offspring—would probably be reversed. Nor have I anywhere stated that the fixation of its sex would be an "advantage to the resulting offspring."

It is, of course, a matter, first of opinion, and finally of proof, whether the result of selection and inheritance, acting throughout the evolutional development of the organic world, has or has not so affected the female element as to beget and strengthen the tendency, if left to itself, to produce individuals of the male sex; clearly, if the individual benefits in the struggle for existence by inheriting more or less of the qualities of both its parents, it would be advantageous that males should secure the production of female offspring; and that females should produce males, in order that further opportunities for sexual union (with its resulting advantages to the race) might be secured and indefinitely perpetuated. And, although in the vertebrata—so far as we yet know—the unimpregnated ovum "simply dies," are we thence justified in denying that (as I wrote) "this tendency—an imperfect potentiality—exists in every unfecundated ovum, only it is not carried far enough;" since, "in the higher animals, it is only under the further stimulus afforded by the union with the sperm-cell, that the ovum is enabled to fulfil its mission of development?" To roundly deny the occurrence, now or ever, of parthenogenesis amongst the vertebrata, is easy enough, and is very probably correct; but I know of no one whose knowledge and research would enable him to definitely prove such a negative; yet, to admit the statement as proved (multi-national legend and tradition notwithstanding) is not by any means the same thing as disproving the existence of such a tendency; any more than it would disprove the tendency with which Dr. Campbell appears to credit the ovum, viz., that of impressing its mother's sex upon the individual into which it develops.

The phenomena (they are not quite those "of gestation," surely) which attend the operations of artificial salmon or trout breeding, and which eventuate in the production of a large number of young of both sexes, are precisely such as might be expected to follow—in accordance with my views—the union of the milt with the numerous ova which have been successively developed in the ovary of the female fish, and which cannot, therefore, be of precisely the same age; moreover—as Dr. Campbell suggests in the earlier portion of his letter—some of the spermatozoa may be "riper" than, or certain of their tendencies more developed than those of others. But if separate batches, representing equal bulks or weights, of ova were squeezed from the same fish—thus separating, to some rough extent, the older ova from those more lately produced—and each batch mixed with equivalent quantities of milt, and subsequently treated identically, though separately, with respect to temperature, food, etc.; and then, finally, the number of fish of each sex developed in each batch tabulated and compared—the conditions would more nearly approach the rigid requirements of experiment, and the results would be more worthy of record and discussion. But, if Dr. Campbell will go a step higher in the vertebrate scale, and will repeat some experiments on frogs (which are not yet sufficiently complete for publication); if he will collect the "ripe" ova as they are about to be extruded from the female, and will fertilise separate portions at successive dates with the seminal fluid of the male; will keep these exposed to the same conditions; and will, lastly (*pace*, for the present Pfluger's conclusions) determine the number of each sex produced in the different cases; he will have reason, I believe, to admit that there are some facts which at least appear to support the views expressed in my letter. Further, if he will extend his investigations to the aves—will, *e.g.*, only allow a virgin pullet a single access to the cock after she has laid her first egg; will collect, mark, date, and set the twenty-five or thirty eggs which she subsequently lays; and will, at the same time, and as a control-experiment, set a similar number of the first laid eggs of another pullet of the same age, which has been permitted unrestricted intercourse with the male up to the time of laying her first egg; and will compare the number of fertile eggs, and the sex of the chick hatched from each egg of corresponding date, he will probably find some further corroboration. Under such circumstances, will he deem it absurd or misleading to seek and endeavour to trace evidences of the working of a similar law in the case of mammals; or feel bound straightway to dismiss the similar evidence which crops up incidentally in the writings of Walker, Orton, Alex. Harvey, etc., anent this subject?

The statement which I made with respect to the results of covering cows and mares at different periods of heat was founded on the tables in the pamphlet published by M. Marc Thury, already alluded to by one of your correspondents: his statistics were derived mainly from observations on cattle, and, although admittedly insufficient, are probably the most complete of their kind.

As regards the effects of the observance of the special Levitical precept which bears upon this question, it must be again noticed that we are ignorant both of the time usually occupied by the descent of the ovum, and of the usual site of impregnation; or, again, how far the minimum of twelve days' abstinence enjoined by the Jewish law may trench upon, or overlap, the period of comparative rest which is believed to follow menstruation. I have understood that it is the opinion of students of history that, from the time of Moses, and for a period corresponding to that during which we should expect this precept (amongst others) to be universally and strictly followed, the number of male births must have very considerably exceeded that of females, as some compensation for the great loss of male life involved in the frequent wars, plagues, famines, and captivities to which the Jewish nation was exposed.

With respect to the instances recorded in Dr. Campbell's concluding paragraph, he will, I am sure, admit that, in a question of this nature, for fifty cases which can be adduced on one side, another fifty can easily be brought forward on the other. We may find some explanation of this variation in the varying relative potency of the three main attributes of the sperm-cell. And yet, the notion that sons take after their mother, and that daughters rather resemble the father, is so general, as to have become almost proverbial. I recently met with it, quoted as a generally accepted truth, in one of the books of a distinguished living novelist, a compatriot of Dr. Campbell. It is not, however, from any one set of facts, however complete, or by any single branch of the inquiry, that we can hope to settle a problem of such wide bearings and manifold applications as is that of the differentiation and determination of sex. While stating my theory somewhat bluntly, as I did, I hoped thereby (in addition to gaining something of clearness as well as of conciseness) to attract attention and excite discussion. I hope to be able to treat the subject more fully hereafter; but whether, in the light of subsequently-acquired facts, my present views are upset or are strengthened, is a matter of no moment compared with the hope of acquiring some knowledge whereby we may be able to foretell more exactly the course of those maladies which we now vaguely recognise as hereditary, and to indicate with something like certainty the individuals in whom, in successive generations, their manifestations will reappear.—I remain, sir, yours truly, C. E. SHELLY, B.A., M.B.Cantab.

NERVI NERVORUM.

SIR,—Will you kindly insert, in correction of the report of my communication to the Royal Medical and Chirurgical Society, my statement to the effect that the corpusculated appearance at the extremity of the end-bulbs is fallacious, and is really due to a twisted core surrounding the axis-cylinder.—I remain, yours sincerely, VICTOR HORSLEY.

R. E. X. will see that his question with regard to the etiquette to be observed on entering a new district was answered in the JOURNAL for January 26th, p. 196.

KAIRIN.

SIR, I write in the interests of "pyretic" patients, as your reviewer, without apparently having had any experience of this drug, finishes up his article with something stronger than faint praise. I have tried kairin in several cases, with the best possible result; in two or three cases of peritonitis, it acted as a charm, without the deafening effects of quinine when pushed. In one case, after the removal of a dermoid cyst of the ovary, in twenty-six hours the temperature was 104.2°, pulse 120, countenance dusky, abdomen tympanitic. I gave three grains of kairin every hour, and the temperature and pulse came steadily down. I think, if a fair trial be given, it will be found that in kairin we have a very valuable and powerful remedy.—Yours faithfully, HEYWOOD SMITH.

THE MEDICAL SERVICE OF ATLANTIC STEAMERS.

SIR,—In the JOURNAL of August [illegible], "J. M." endeavours to refute several of my statements in the one of June 20th, on the strength of having served in one company only, according to his own admission—namely, the Allan Line.

From the account he gives, this company seems such an Elysium that it is to be wondered why all emigrants to America do not travel by its vessels. Amongst other things which reflect great credit on that line (if, on impartial investigation, they turn out to be strictly correct), "stewards and stewardesses are only too kind to emigrants;" a captain of long experience has only received one complaint from the steerage, and the sick are provided with "several roomy well ventilated hospital wards;" the epithet [illegible] is not added. Recent correspondence by no means confirms the above statements as to the perfection of the sanitary arrangements of the Allan fleet, and certainly the so-called hospitals of the newest and finest steamer of that company do not warrant any such enthusiasm, but are certainly most inferior in size, ventilation, and position. As complete contentment is not a characteristic of the human race, even on board emigrant-ships, the very fact of a commander of experience having only received one complaint from emigrants during his career, would incline to show, not that other complaints were never made, but that he, like a great many others of his class, discouraged all communications of a nature likely to prove inconvenient to himself, and relied on his purser and stewards to prevent them reaching him; and it requires more than average courage and resolution for an emigrant to obtain an interview with a commander forewarned by his satellites of a probable complaint. Moreover, in the case referred to by "J. M.," the emigrants began to complain as soon as the stores they had provided were exhausted—a fact not exactly a testimony in favour of the food provided by the company. I have been at sea several years as an executive officer, a medical officer, and a passenger in both steam and sail, and in lines to the east, west, and south, and have frequently seen vessels which, to use the old service phrase, were "floating hells" for their emigrants; and as often have I seen the complaints of these poor people set aside, not only in private, but in Government inquiries, owing to the power of the companies over their servants, as the captain and purser, who, though not unfrequently gentlemen of refined and kindly feeling, are in as abject a condition of slavery as ever disgraced mankind; for a man is nothing but a slave when he has to speak with the tongue, hear with the ears, and see with the eyes, of his company. On these occasions, the physician is often interrogated last, and is invariably informed that he is not to substantiate the complaint preferred; that is, should he be sufficiently conscientious to show symptoms of supporting the interests of the people committed to his charge. I am quite aware that all companies require a "medical log" to be kept, and that (on Atlantic steamers) the Board of Trade demands a report of sickness and treatment every voyage; but, should the log contain any remarks on the subject of sanitary or other defections, he is very speedily told that a log of such a nature was never intended, and that a senior surgeon, with a prior claim, has been appointed to the ship; and more than one company order their surgeons to send in their Board of Trade reports for supervision, lest anything detrimental to company-interests should reach official quarters.

Of all appertaining to the medical department on Atlantic steamships, the hospitals are usually the worst; and these, unsuitable as they may be, are frequently filled with cooks and stewards, for whom there is seldom any accommodation, as well as let to passengers, both intermediate and saloon, particularly in first-class lines in the busy season. I have many cases recorded of passengers being turned out of the hospital while the Government medical inspector looked in, and their return thither before the official had left the ship—to report which fact, it is needless to say, would have been to lose my berth at the end of the voyage, a fact I had already learned, for, having made a report to a Government inspector he had himself warned the company that my dismissal and their interests were synonymous. This gentleman's treason to his appointment and profession will bear future reference. In such instances, there is not a single berth left for hospital-purposes, and the surgeon is mildly, but firmly, informed that it will not be to his advantage to turn out passengers, though an epidemic make it essential. But, even admitted that the surgeon has complete and sole jurisdiction over his hospital (which is seldom the case, notwithstanding notices condemning commander and company in so many pounds' penalty, should they not be ready for instant use), there is one circumstance which renders it almost equivalent to signing a death certificate of any patient, to send him into the hospitals of nearly every western ocean-steamer, be the vessel of a good or third-rate class; this being that the hospital is always on deck, with the doors opening towards the bulwarks, so that, in moderate weather, there is always a foot or so of water on the floor; and, in heavy weather, they are not unfrequently filled by a sea, while it is impossible for a patient to leave, or for a surgeon or steward to approach them, without risk to their lives. Many a time have I been knocked down, washed round the deck, and almost [illegible], while attempting to see my patients in hospital at night, and [illegible] them almost dead with fear at the amount of water, [illegible] were lying. [illegible] the [illegible] runs through the hospital [illegible] temperature [illegible] and I have [illegible] of steam, and [illegible] on the floor of a [illegible], owing to the heat being [illegible].

[illegible]

[illegible]

preparation and handling of food; nor is it pleasant to have one's sleeping apartment regulated by a servant suffering from the effects of present or early indiscretion. Chloroform, by the way, is included in compulsory medicines.

In conclusion, I can only say that, if Government supervision were needful when the [illegible] to America was six guineas, and when passengers were fed at from [illegible] a day, the latter including cabin-passengers and crew, far more is it required now, when the fare is £4, £[illegible], and even £3; every inducement is offered to the shipowner to reduce the emigrant to the [illegible] of comfort, or even safety, and to hold the iron hand of prompt dismissal more firmly than ever over his one possible protector—the surgeon.

The late correspondence on the "Atlantic Medical Service" created, for a short time, some little consternation in the shipping, and owners began to consider whether a little reform might not be beneficial to themselves; but their fears have somewhat subsided, and they are beginning to regard the efforts of the British Medical Association, the American Medical Association, and others who have taken an interest in the subject, as already defeated, and, therefore, attempted improvements have been left unfinished, new and fine lines are being launched, in which the medical department is the last considered, and relegated to spare holes and corners, which have been condemned as unsuited for all other purposes, and older ships are having the surgeon's quarters and hospital-room reduced, which before were very passable. But I would call the attention of the shipowners, in their renewed feeling of security, to the words of one of the greatest of heroes, who, with his ship sinking under him, his men decimated, and hailed by the enemy's commander as to whether he struck his ensign, replied, "We have not yet begun to fight."—I have the honour to be, sir, your obedient servant,

B[illegible]THWAITE.

CHOLERA AND THE IMMUNITY OF SHIPS AT SEA.

SIR,—In the able leader of November 10th, entitled "Pettenkofer on Cholera and Quarantine," you draw attention, amongst other things, to the immunity of ships on the high seas, or rather the "speedy disappearance of cholera after a ship has left an infected port." You say the subject deserves consideration, and it is with this object I ask your permission to lay before the profession the reasons which appear to me to explain it.

Before proceeding to do so, however, it is necessary to dispel one error into which either Pettenkofer or the author of the article has fallen. This is the more necessary, as other mistakes of the same kind have lately occurred. Thus Dr. Lewis, in the columns of a contemporary, has been made to say at Amsterdam (and I cannot but think he must have been misinterpreted) that the cholera had never been introduced into the Andaman Islands during the last twenty-five years, when, as a matter of fact, such is not the case, the disease having been carried into those islands and to Rangoon by the s.s. *Aracan* in 1864. "Again, the article says there is no instance of the conveyance of the disease by Indian steamers to Australia, the Cape, or even to Mauritius though the majority of passengers by the last line were coolies." As regards the Cape and Australia, so far as I know, all is well, but, as regards Mauritius and the coolie ships, such is not the case, as the following quotation from Surgeon-General Gordon's careful notes on cholera will show.

"Into Mauritius in 18[illegible] by coolies from India by the ship [illegible]. Into Mauritius in 1856, by the ships [illegible] and [illegible]. They severally arrived at Port Louis on January 5th and 8th, having coolies on board. Deaths from cholera had occurred in both during the voyage. On arrival, the coolies were landed at Gabriel Island. A [illegible] on that island having been attacked, was landed at Port Louis by the steamer *Victoria*, and the crew of this vessel being permitted to ramble through the town cholera broke out, and sacrificed thousands of victims. Again, into Mauritius in 1859, by the *Topage* from Calcutta." These instances show plainly enough that the disease may be conveyed even long distances if favourable conditions for the stowage and fertilisation of the [illegible].

I have gone into those cases at some length with the hope that they may show the miasmatists how foolish it would be to assert that the distribution of cholera would not have been [illegible] had these coolie ships never left Calcutta for Port Louis.

This may seem a work of supererogation, but such were the words of Dr. Bryden, one of the ablest writers of this school, in speaking of spread of cholera by returning pilgrims in Peshawur. In the main, however, Pettenkofer's contention holds good, and the disease generally exhausts itself at sea to such a degree, that there is little danger of infection to those on shore if the duration of the voyage exceeds the period of incubation, and no fresh cases have occurred on board ship.

This is not [illegible] voyage to Mauritius [illegible] Europe [illegible].

The contention [illegible] out inquiring too deeply, analogy teaches us something. Dysentery, malarious fevers, and [illegible] campments.

[illegible]

27, Welbeck Street, Cavendish Square, W. P. H. [illegible], M.D.

DANGERS OF FALSE TEETH.

SIR,—I have before me two cases of false teeth, each of which has recently caused the death of its wearer.

For the first of these, as well as for his notes, I am indebted to Mr. Butlin, by whom the patient was treated. As, however, he intends to publish full particulars, I need refer only to those which chiefly concern the dentist The patient, while asleep, managed to get his plate of false teeth so firmly lodged in his throat, that every effort to remove them failed. In the morning, he was taken to St. Bartholomew's Hospital, where œsophagotomy was successfully performed; but, unfortunately, he died on the fourth day after the accident from blood-poisoning.

In the second case, the plate was found by a student who was dissecting. It was firmly imbedded in the pharynx of a pauper, who was certified to be 85 years old, and to have died from phthisis. There were, however, no tubercules, and from the position, and the circumstances in which it was found, it was evident that death was due to suffocation, caused by its slipping out of its place and lodging in the throat, probably during a paroxysm of coughing. The existence of this gold plate, which weighs 156 grains, could not have been known (for, if it had been, it certainly would have been appropriated by somebody); and, of course, the medical certificate would have been very different.

The first plate is disgracefully made, and, as Mr. Butlin truly remarks, a a most formidable obstacle; it is of gold, an inch and a quarter long, and supports three incisor teeth, which are pivoted into the roots of the lateral incisors by two wires, each three-eighths of an inch in length; these were meant to fix it permanently, but, as the roots decayed, the place became loose, and finally dropped into the throat. The other plate is of superior workmanship, and of a more usual type; it holds six teeth, fastened by two gold bands, one to a molar, the other to a bicuspid; these are at each end, and, unfortunately, project in opposite directions. The special danger in this kind of plate, is that, if it enters the gullet lengthways, the clasps at one end cut into the pharynx and anchor it there; the effort at expulsion throws it across, and the band at the other end immovably transfixes it.

These two cases occurring, simultaneously, are sufficiently impressive; but scarcely a week passes without some accident from the same cause being reported. I think, therefore, that special attention should be directed to the subject.

Most accidents arise from the folly of wearing false teeth during sleep. There is no more reasonable excuse for this dangerous practice, than there is for people to go to bed with misfitting boots to make them comfortable; in either case, if they be properly made there should be no discomfort from them. Another unnecessary danger too often arises from the way the plates are made. Small, movable plates, with thin wire fastenings or bands, are objectionable not only from the risk of swallowing them, but also because the fastenings damage the teeth to which they are attached. Large suction plates are much more satisfactory; because, if by any chance they do get into the throat they are easily expelled, for there is nothing to fix them there, and they are too large to be swallowed. The prejudice against them arises from the mistaken notion that, by covering the palate, taste is interfered with. What really happens is, that the thickness of the plate deprives the tongue by so much of the space to which it is used, and also hinders it, at first, from appreciating so readily the form of the food; fish-bones, etc., cannot so easily be detected. This is, however, only a temporary inconvenience, for in a very short time it accommodates itself to the altered conditions. I can speak from considerable experience, because for twenty years I have employed suction upper plates exclusively, and have made hundreds for all sorts of people, in every possible variety of case.—I am, sir, your obedient servant,

51, Wimpole Street. NATHANIEL STEVENSON.

J. P. has not inclosed his card.

BRUTAL ASSAULTS AND THE PUBLIC PROSECUTOR.

SIR,—However desirable it may be to seek to raise the poor of "outcast London" to a higher state of morality by means of external influences such as improved dwellings, etc., such efforts will, I fear, prove futile so long as intemperance reigns supreme.

On December 13th, at 7 A.M., I was called by the police to see a poor woman whom I found almost moribund from severe concussion of the brain —so severe, indeed, that I feared a fatal issue from laceration of brain-substance. The scalp showed marks of violence, and the body presented recent bruises in various places. On inquiry, I learned from an eye-witness that the husband had returned home drunk at 3 A.M., and, without provocation, had beaten her violently about the head with his heavy boot until she fell unconscious on the floor, on seeing which, he thought it advisable to disappear. The wife remained in a critical condition for eight or ten hours, and then slowly recovered consciousness; and in the afternoon, the husband, who had learned that she was not dead, returned home.

As the patient, for the time being at least, is out of danger, the police refuse to prosecute, and she dare not do so herself, knowing full well vengeance would be in store for her on the release of her husband. So the assailant, like many others, goes scot-free. One would almost say that it was a pity for society, and indeed for this poor miserable woman herself, that she was not killed outright, as her demoralised husband, who has given her venereal disease on three separate occasions, and spends his time in debauchery and brutality, makes her so-called home a perfect pandemonium.

I was surprised to learn from the police that it was not part of their duty to bring this affair before the notice of the Public Prosecutor; and I deplore the fact the more since hearing of the "Keates and Bower" case. Now what course ought the medical attendant to pursue in such a case?—I am, etc.,

London, January 22nd, 1884. SAM. WILSON.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

Handbook of Electro Therapeutics. By William Erb, M.D. London: Sampson Low, Marston and Co.

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LECTURES

ON

THE PHYSIOLOGY AND PATHOLOGY OF MENSTRUATION.

Delivered at St. Mary's Hospital Medical School.

By ALFRED WILTSHIRE, M.D., F.R.C.P.,Lond.,
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GENTLEMEN,—We now approach the consideration of one of the most remarkable functions of the human economy, namely, menstruation, variously called the "menses," "catamenia," "periods," "courses," "changes," "terms," "shows," "flowers," and so on, a great diversity of names for this function being prevalent among the laity. Reference is made to it in the Sacred Book, the Bible; and laws, divinely inspired, are therein laid down for the observance of God's peculiar people, the Jews; laws which, after the lapse of thousands of years, are still piously observed by that remarkable people. The late Dr. Laycock, in his interesting work *On the Nervous Diseases of Women*, says of it: "There is no one function which has excited greater attention than the menstrual; law-givers, theologians, philosophers of every age, and the whole mass of mankind have taken an immediate, because necessary, interest in the matter; and the consequence has been, that much stress has ever been laid upon its importance in the female economy."

Menstruation is a function, as its name implies, of periodical occurrence, and is characterised by a discharge of blood from the female generative organs; taking place typically, in women who are neither pregnant nor suckling, every month between puberty and the change of life. But, while in the majority of women the flow recurs at intervals of lunar months, there are considerable variations of the period within the limits of health. Thus many are "regular" every three weeks; others every five weeks; some every fortnight; while, in a few six weeks, and two, three, or more months may intervene between each menstruation, such periods representing the normal type of their catamenia. This implies a law of periodicity, and it may be said that the reproductive function in animals affects hebdomadal periodicity.

It has been customary to regard the function as specially pertaining to, or affecting only, the reproductive organs, but this is too restricted a view to take of it. It has much more widely reaching influences, the whole economy sharing in the cyclical perturbance. In the words of Dr. Farre, "Menstruation has evidently a much deeper signification than is declared simply by the flux, which is probably not the most important part of the function, although it constitutes the external sign or evidence of it;" and it will be my endeavour to show that the systemic phenomena associated with menstruation have important bearings upon practice. Besides, the function is not peculiar to the human female; for not only do the nearest allies of the human species display it, but a large number of creatures lower in the scale than apes, also possess it, or its analogue; as mares, asses, cows, sows, bitches, cats, etc. We shall see that its evolution is orderly, and corresponds broadly with the development of the generative organs of animals, attaining its highest level in those whose organic evolution is completest. It may be stated that in mammals—with possible and yet undiscovered exceptions—in proportion as we ascend the scale of being do we find the œstro-menstrual flux increasingly manifested; its sanguineous character becoming more and more pronounced, as the highest limits of organic development are attained. It appears to keep pace mainly with the evolution of the sexual organs, and to be chiefly correlated therewith.

You will gather, from my remarks upon the comparative physiology of menstruation,[1] that the evolution of the function can be traced from obscure and lowly beginnings upwards, indications of its inception being recognisable in inferior creatures; and the fostering influence of domestication and civilisation will become apparent as we trace its upward progress.

In most writings upon the subject, you will find the statement that the menstrual flow recurs every month, that it is accompanied by congestion of the generative organs, maturation of Graafian follicles, and, according to some, by a special growth in, and shedding of, the lining membrane of the body of the uterus. This is, in most respects, in agreement with facts, but it falls short of complete truth. It is to the influence exerted by the menstrual process upon the economy at large that I desire especially to direct your attention. The systemic disturbance is distinct and marked; it is evinced in every element of the organism. The vascular system is notably implicated; so are the nervous, renal, hepatic, and glandular systems; while the cutaneous phenomena exhibit interesting analogies.

The most prominent feature of menstruation is a flow of blood from the genitals, the amount varying widely within the limits of health; the average normal quantity varies from two to eight ounces. It appears to be habitually less in those who follow laborious occupations than in those whose lives are luxurious, though doubtless there are many exceptions to this rule.

Many circumstances influencing the general health may affect the amount of discharge, such as the quality and quantity of food, the nature of the occupation, and the healthiness of habitations—in a word, the environments.

The duration of the flow also is variable, lasting in some only an hour or so, in others upwards of a week; the average lying between two and five days. The menstrual fluid consists of blood, with which is mixed epithelium and mucus of the generative passages. The peculiarity of the blood is, that ordinarily it is uncoagulated, and its fluidity has been attributed to the action of the vaginal mucus; some (Retzius and Donné) alleging that it is due to the acidity of that secretion, while according to others (Mandl), the mere presence of mucus or pus suffices to prevent coagulation. Microscopically, blood-corpuscles and epithelial *débris* are recognised. It has a faint odour, which has been likened to that of the marigold. When obtained pure from the uterus, its reaction is alkaline.

The body of the uterus is the chief source of the discharge, though the Fallopian tubes are believed to yield some.[2] Accordingly, much attention has been paid to the condition of the organ during menstruation, and especially to its mucous lining. Ordinarily, its mucous membrane (the uterus being regarded as a mucosa muscularis) is increased in thickness at the periods to upwards of a quarter of an inch, becoming then rugose. Kölliker has stated that numerous round and fusiform cells are developed during menstruation; and Engelmann, in conjunction with Kundrat, made researches showing that a change in the mucous membrane preceded the discharge, this being preparatory to the reception of the ovule. Subsequently, there would appear to be fatty degeneration of the different elements composing the mucous membrane, including the superficial blood-vessels. This may have an important bearing upon the mode of exudation of blood. Long since, Tyler Smith remarked the dehiscence of the uterine lining in certain specimens; while Dr. Williams, I believe, regards a prolonged growth and somewhat complete shedding of the mucous membrane as requisite for the exercise of the menstrual function. De Sinéty, on the other hand, asserts that normally there is no such desquamation, and Courty also considers that the formation of a new mucous membrane each month is not demonstrated.

Observers differ as to the exact nature of the changes which occur in the mucous lining. Dr. Flint considers there is an exfoliation of epithelium, but not of mucous membrane. Some maintain that the whole mucous membrane of the body of the uterus is shed every month; others (*e.g.*, de Sinéty and Courty) contend that nothing of the kind occurs. Dr. Arthur Farre regards the uterine capillaries as having open mouths or stomata which dilate every month, continuous bleeding being prevented by the tonic contraction of the thick muscular wall of the uterus obstructing their calibre during the interval. Coste held that the blood exudes through the capillaries without laceration of their coats: that the process is one of diapedesis, in fact; and the recent observations of Vulpian, Cohnheim, and others compel the admission of the possibility of such an occurrence. The blood-changes presently to be described may influence the process, and deserve consideration in this connection.

My own inquiries support the conclusion that some breaking down of tissue usually occurs at the surface whence menstrual blood escapes, whatever that may be—normally the uterus; abnormally, other portions of the [illegible] this change [illegible] of the character of fatty metamorphosis of the epithelial structures. The process may in truth be regarded as partaking of the nature of a moult.

It should be mentioned also that, according to some observers

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[1] See BRITISH MEDICAL JOURNAL, March 3rd, 10th, and 17th, 188[illegible]

[2] [illegible]

(Depaul and Guéniot), the process is most active on the side of the uterus corresponding to the ovary furnishing the ovule.

Tarnier and Chantreuil also say that the changes in the mucous membrane of the uterus are most marked on the side corresponding to the ovary containing the follicle in process of evolution.

In discussing the changes in the uterine mucous membrane, it should be borne in mind that the periodical afflux of blood to the organ exaggerates the apparent thickening of that structure; and that, in the absence of vascular turgescence, its real thickness would be found less than is generally supposed. It is not denied that there is some augmented cell-production, but it is suggested that part of the bulk of the swollen mucous membrane is due to a vascular turgescence which is transitory. Menstruation is accompanied by intermitting uterine contractions; as a necessary corollary, there are corresponding dilatations, and the tidal flux and reflux promoted by this process is favourable to the escape of blood from capillaries, the nutrition of whose parietes is impaired by molecular change.

If the ovaries be excepted, the relations of the uterine annexes to menstruation have been somewhat neglected. At least one constituent element deserves consideration, that, namely, which may be regarded as a platysmoid muscle, or pelvic diaphragm; the widely spread and extensive layer of muscle encompassing the uterus and adjacent pelvic viscera, so well described by Rouget. This disseminated muscle springs into great activity during the œstrum. The surmise may be permitted that, during menstruation, it may aid in producing the vascular repletion (in which venosity is so prominent) of the pelvic viscera.

Virchow has dwelt upon the importance of these structures. He says (*Cell. Path.*): "The thick muscular layers which traverse the ligaments are capable, under the irritating influence of the menstrual excitement, of provoking contractions analogous to those which are so clearly manifested in the external parts of the genito-urinary passages."

Those portions of Müller's ducts—the primitive generative canals —known as the Fallopian tubes, functionate as efferent ducts of the ovaries, and may therefore be regarded as subordinate to the latter organs; but, as integral parts of the genital tract, they are not without significance in relation to menstruation, although the high estimate of their importance in the process attributed to them by some writers yet requires substantiation.

The systemic phenomena manifested in the vascular apparatus justify the inference that menstrual blood escapes from the place of least resistance, that being normally the uterus.

Menstruation generally sets in with a feeling of *malaise*, or "poorliness," as it is significantly called, accompanied by a sense of weight and fulness in the back and genitals, a weary expression of countenance, darkness under the eyes, pallor or duskiness of the skin, tympanitic distension of the bowels, headache, lassitude, and so on. Such, or kindred symptoms in infinitely varied combinations, are manifested by the majority of women; but, though many habitually escape discomfort, individual peculiarities are common. More rarely, an abatement of customary discharges or eruptions is observed. In considering these phenomena, two facts become apparent: first, that they mostly affect cutaneous or mucous structures, ectoderm or endoderm; and, secondly, that they are associated with more or less marked vaso-motor changes.

Now, the general or systemic disturbance displayed at the advent of a period is called the menstrual molimen—a word derived from *molior*, to move or stir, an attempt or struggle; hence *molimen menstruale*, the menstrual diathesis or impulse.

The time of life at which the function appears is called puberty—an epoch characterised by remarkable changes in the bodily and mental constitution of women, who arrive at maturity at an earlier age than men. The attendant phenomena are, briefly, as follows. A great developmental impulse is perceptible in the human female; both mind and body exhibit striking changes. Vaso-motor disturbances are now perceptible. They are shown by occasional pallor, and by an increased tendency to blush—the prototypes of similar vaso-motor disturbances at the close of menstrual life. The bodily configuration is altered from that of the spare, thin, and angular girl, to the rounder fulness of early womanhood. The breasts become fuller; the hips widen; and a marked increase in plumpness is not unusual.

Mr. Darwin, referring to sexual selection, remarks: "It accords in a striking manner with this view of the modification and reinforcement of many of our mental faculties by sexual selection, that, firstly, they notoriously undergo a considerable change at puberty; and, secondly, that eunuchs remain throughout life inferior in these same qualities."

Dr. Maudsley well remarks (*Body and Mind*): "In the great mental revolution caused by the development of the sexual system at puberty, we have the most striking example of the intimate and essential sympathy between the brain as a mental organ and other organs of the body. The change of character at this period is not by any means limited to the appearance of the sexual feelings and their sympathetic ideas, but, when traced to its ultimate reach, will be found to extend to the highest feelings of mind, social, moral, and even religious."

Alienists are well aware that puberty is a trying time for the feeble-minded; and that insanity, previously concealed, may then become overt. Here, again, Dr. Maudsley well says: "The time of this mental revolution is, at best, a trying period for youth; and, where there is an inherited infirmity of nervous organisation, the natural disturbance of the mental balance may easily pass into actual destruction of it."

Now, in reference to these changes, I wish to direct your attention to facts of singular interest. The capability for reproduction does not arise until somewhat late in the life of the individual, when the body has attained nearly its full stature; and that aptitude is ordinarily evinced by the establishment of the menstrual function. Like conditions obtain in the lower animals—in some, perhaps, at a relatively earlier period of life; and the characteristic flux is increasingly sanguineous as the creatures rise in the scale of creation, being in the apes and higher monkeys almost as pronounced as in the human female. We find the generalisation to be in the main true, that, with increasing complexity of structure in the generative organs, there is increased complexity of function. But, in accordance with a law accepted by most biologists, functions govern structures. Thus, Mr. Herbert Spencer (*Biology*, vol. i, p. 167) says: "It follows that function is, from beginning to end, the determining cause of structure;" and Gegenbauer (*Elements of Comparative Anatomy*, p. 9) also says: "Physiological functions govern, in a certain sense, structure; and, so far, what is morphological is subordinated to what is physiological;" while Milne-Edwards, as quoted by Larcher in *Archives Générales de Médecine*, vol. i for 1859, p. 291, in an essay on "Hypertrophie du Cœur," says: "C'est la fonction qui détermine l'organe, et non l'organe qui détermine la fonction."

The antiquity of this law is coeval with Aristotle, who is reported, in Dr. W. Ogle's recent translation of his writings, *On the Parts of Animals*, p. 122, to have said: "Nature makes the organs for the function, and not the function for the organs."

Menstruation, then, though far from being the cause, is significant of the aptitude of the female for procreation, and is ordinarily accompanied by a diminished rate of growth. The relations of growth and reproduction are happily formulated in the words of Mr. Herbert Spencer (*Biology*, vol. ii, p. 436): "The antagonism between growth and sexual genesis, visible in these general contrasts, may also be traced in the history of each plant and animal. So familiar is the fact that sexual genesis does not occur in early life; and, in all organisms which expend much, begins only when the limit of size is nearly reached, that we do not sufficiently note its significance. It is a general physiological truth, however, that while the building up of the individual is going on rapidly, the reproductive organs remain imperfectly developed and inactive; and that the commencement of reproduction at once indicates a declining rate of growth, and becomes a cause of arresting growth." Gegenbaur (*El. Comp. Anat.*, page 52) says: "The phenomenon of the multiplication of the individual is primitively closely connected with nutrition. Not only is nutrition the cause of the growth, and consequent increase in size of the body, but it gives rise to a condition in which the organism converts the excess of nutrient material brought to it into the means for producing a new individual."

It does not follow that because conception is possible at puberty, it is therefore proper or desirable. Skilled observation teaches that reproduction in the immature is fraught with danger, both to mother and to offspring. Puberty and nubility are not to be regarded as uniformly synonymous, though that belief would seem to actuate the Hindoos and Eskimo in their early marriage customs. The reticence practised by most civilised races, in this respect, operates advantageously upon communities as upon individuals; for, as Mr. Darwin has shown, habitually premature breeding tends to suppress adult characteristics.

Regarding the age at which the function manifests itself, we find that, in temperate climates, puberty usually arrives between the fourteenth and fifteenth years; but there are wide variations in this. I have known menstruation to occur in three, if not four instances, at the early age of nine, and I have known it delayed to the twenty third year. In reference to very early menstruation, we may distinguish between precocious and premature; whilst the so-called menstruation in newly born infants is to be referred to a different category, as also are the hæmorrhages which accompany acute specific and other diseases.

Cases in which menstruation has been established before the eighth year are regarded as precocious; those occurring at the eighth, ninth, and tenth year are said to be premature. But these terms are arbitrary; for, in some instances, the bodily development has been such as to permit healthy child-bearng even as early as the eighth year, several such cases being on record. Mr. Dodd records a case, in the *Lancet* (April 9th, 1881), of menstruation at the age of twelve months, and the delivery of a fine child at the age of nine years.

M. Bouchut relates a case of menstruation at twenty-two months of age, recurring every four weeks, and equal in amount to that of adults. Sir A. Cooper records a similar case. Carus and Kussmaul mention cases of early menstruation and pregnancy at the eighth year. Dr. Copland recorded a case, seen by himself, where the catamenia began at the sixth year, and he mentions cases even earlier. Prochownik *(Arch. für Gynæk.)* has lately recorded the case of a girl who died of acute bronchitis at the age of three years, who, from the age of one year, menstruated every month. At the *post mortem* examination, the uterus and ovaries were healthy, and the latter showed normal corpora lutea.

Menstruation is said to occur early among the Hindoos and African negroes, and generally at an earlier period in hot than in cold climates. Pouchet quotes Velpeau as stating that, in Lapland and Greenland, women menstruate only every three months; and Gardier says that, in Polar countries, it occurs only twice or thrice a-year. Schroeder states that it only sets in at the eighteenth year in the Swedish Laplanders; and Dr. Barnes quotes Dr. McDiarmid, surgeon to Sir John Ross's Arctic Expedition, as remarking that, amongst the Eskimo, it is often delayed until the twenty-third year, and then only appears scantily during the summer.

Dr. Barnes remarks: "I also know women, of feeble sexual development, who menstruate in India and not in England." Cazeaux makes a similar statement, and I myself have met with such instances.

But we find that racial peculiarity affects this function; for it has been observed that English girls born and residing in India menstruate, on an average, at about the same age as their sisters born and living in England; and in Austria-Hungary, where German and Hungarian people dwell near together in certain parts, the Magyar or Hungarian girls menstruate about two years earlier than the Germans. The effect of warmth is well shown by Dr. Emmet, who states that "more than half the women who have been under my observation menstruated for the first time during the season of four months between the beginning of April and the end of July. The explanation offered is that the organs of generation are in a more active state at this period of the year than at any other time" —an observation that is abundantly confirmed.

The average age of the commencement of menstruation of many hundreds of cases observed by myself is fourteen years and nine months. This seems to be about the usual English average. The menses cease at the "change of life," or menopause, which arrives, on an average, about the forty-fifth year. I have known it occur as early as the twenty-ninth year, and to be delayed as late as the fifty-fifth year, but such cases are rare. Just as puberty marks an epoch when life is in the ascendant, so is the climacteric the harbinger of vital declension. The "change of life" coincides in point of time, and is closely associated with, profound nutritional (degenerative) alterations in all the tissues, particularly in that most important integrating system, the vascular. Not only do the sexual glands and their appendages wither and fall into the desuetude of age, their functions therewith becoming abrogated or annihilated, but all the peculiar influences, reflex and other, derived from them cease to operate actively upon the organism.

The "change of life," or menopause, is a physiological process; and, under normal circumstances, should transpire without undue constitutional commotion. But, whether from certain of the artificial relations of civilised existence, or from the disproportionate demands upon the nervous system, the function sometimes fails to subside so peaceably. This epoch may prove one of sore trial, and is justly dreaded by some women. Dr. Maudsley says (*Body and Mind*): "The natural cessation of menstruation at the change of life is accompanied by a revolution in the economy, which is often trying to the mental stability of those who have a predisposition to insanity. The age of pleasing is past, but not always the desire, which, indeed, sometimes grows then more exacting; there are all sorts of anomalous sensations of bodily distress, attesting the disturbance of circulation and of nerve-functions; and it is now that an insane jealousy and a propensity to stimulants are apt to appear, especially where there have been no children."

The relation of the ovaries to menstruation has been the subject of much discussion; the most discrepant views being advanced by the partisans of opposing camps; and still further difference has arisen as to the exact relation of ovulation, or the ripening of Graafian follicles, to menstruation. Because, in a few instances, women have menstruated after the removal of both ovaries, it has, on the one hand, been held that these organs cannot be essential to the function, while, on the other, it is alleged that their removal is commonly attended by its entire abrogation. Premising large qualifications, there is truth in both statements. Those who allege that menstruation may continue with its wonted regularity after the removal of the ovaries, do so on the evidence afforded by ovariotomies or oöphorectomies, wherein both ovaries have been removed without affecting the flow. Undoubtedly, such cases are on record; but I would beg your special attention to this important fact: that, while they are rare, they are, without exception, in mature or adult women, that is to say, in persons in whom the function has long been established, and whose bodies have been, and presumably therefore remain, subject to its periodical impress. The ovaries are now often excised to arrest hæmorrhage from uterine fibromata, and for other maladies, with, it is alleged, abundant success. No cases are known in which the complete ablation of the ovaries in early life has been followed by menstruation; it is abundantly proved that the removal of the sexual glands in early life is attended by the absolute abrogation of the sexual characteristics of the sexes. The whole truth rests absolutely with neither side, though it predominates enormously in favour of those who hold that the ovaries exert an important influence over menstruation.

And with regard to the ovulation-theory: here, also, the conflicting views admit considerable reconciliation. The researches of Pouchet, Bischoff, Raciborski, and others, have demonstrated the intimate relations that ordinarily exist between ovulation and œstromenstruation. Although this relation is in the normal state harmoniously synchronous, yet it has been shown that ovulation may occur without its accompaniment, menstruation. It is held, by those who affirm that menstruation is directly excited by the maturation of Graafian follicles, that it only occurs in association with the ripening of Graafian vesicles, just as happens at the time of œstruation in the females of the lower animals; and they alleged that menstruation is the exact analogue or counterpart in the human female of œstruation in the lower animals—a statement which is to a large extent, if not entirely, accurate.

In the human female, there can be no question that the menstrual function is largely associated with the maturation of Graafian follicles, and that women, like the lower creatures, are more apt for conception about the period of menstruation; but, as sexual aptitude is not confined in women solely to the period of heat, and intercourse may be indulged in at any time, it is obvious that a disturbing element is introduced, and that, under artificial conditions, ova may be matured through sexual stimulation, or follicles ruptured under sexual excitement, which, but for such intervention, would have remained quiescent or dormant until the next normal œstruation. Darwin says: "Corporeal, periodical, and mental habits become changed under domestication, and the changes are often inherited."

The higher organisation of woman, and the conditions of her life, render possible the more frequent proportional maturation of ova than in the lower animals in a wild state; and thus follicles may ripen out of their proper time and season, not only in consequence of her higher evolution, but under the stimulus of unwonted excitement.

Menstruation in women, in the ordinary normal undisturbed way, runs an even course with œstruation in the lower females up to a certain point, but goes beyond it in that both the flow and ovulation may occur independently one of another. When the highest sexual organs (ovaries or testicles) are completely removed early in life, the characteristic sexual differences either do not appear, or are conspicuously modified; but, when their removal is deferred until these sexual differences have arisen, endured for some time, and have permanently left their mark upon the organism, the record of them, though perhaps not absolutely indelible, seems persistent in proportion as it has become established; and this may depend not alone upon its mere duration, but also upon the original intensity or inherent vigour of the sexual system.

Now, though observation shows that menstruation, largely analogous with œstruation in the lower animals, usually coincides with the ripening of Graafian follicles, yet it would appear to be not necessarily and invariably dependent thereupon. Ovulation may occur without menstruation, for women may conceive who have never menstruated, while the not unfrequent conceptions of suckling women whose catamenia are absent are additional proofs of its independence. Ovulation is of higher genetic importance than menstruation. I have recently met with two instances of conception before the appearance of the menses. In one case, a well grown girl was married at the age of fourteen, became pregnant, and bore a fine child before she was fifteen, without ever having seen a menstrual flow. I am indebted to Sir Joseph Fayrer, for the information, given from personal observation, that "a refined people like the Hindoos never allow their daughters to menstruate if they can help it, the husband (marriage taking place at a very early age) being sent for." Roberton quotes from Elphinstone's *India*, that in Hindustan, by the code of Menu, a girl may be married at eight, or even earlier; and, if her father fail to give her a husband for three years after she is marriageable (*i.e.*, capable of becoming a parent), she is at liberty to choose one for herself. At p. 17, the following quotation is given from a Sanskrit scholar, the Baboo Gupta: "Atri and Kasyapa" (Hindoo sages) "state that, if an unmarried girl discharge the menstrual fluid at her father's house, the father incurs a guilt similar to that of destroying a fœtus, and the daughter becomes *Brisalce*, or degraded in rank." Schroeder, in Von Ziemssen's *Cyclopædia* (vol. x, p. 320), states that, "Among the Hindoos, girls are obliged to marry before the establishment of the menses, because menstruation occurring in a girl who has not had the opportunity to conceive is regarded as infanticide." Power (quoted by Copland) considered gestation to be the natural condition of the mature female organs, and that a female menstruates because she does not conceive; an opinion that is shared by others. The foregoing facts, and those of superfœtation, show that menstruation plays a subordinate part to ovulation; it being clear that that which is essential for the reproduction of the species is of higher importance than that which may be dispensed with—the flow of blood.

The whole subject of menstruation—its evolution, physiology, and pathology—will be fully elaborated in a work shortly to be published by myself; these lectures being necessarily much condensed.

ABSTRACT OF THE HARVEIAN LECTURES

ON

PROGNOSIS IN HEART-DISEASE.

Delivered before the Harveian Society of London, November 1883.

By W. H. BROADBENT, M.D., F.R.C.P.Lond.,
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LECTURE II.—DISEASES OF INDIVIDUAL VALVES.

Aortic Stenosis.—We have been considering the general prognostic indications in valvular disease; we have now to take up the study of affections of individual valves. The first valvular change to be considered will be aortic stenosis; and we are at once struck by the contrast between Walshe's statement, "that narrowing of the aortic orifice stands first in the order of frequency among valvular diseases," and the statistics of the *post mortem* records of St. Mary's Hospital, as edited by Dr. Phillips, which give only 11 cases out of 151, with a few more in which stenosis of this orifice was associated with insufficiency of the valves. The explanation of this discrepancy is found in the fact that the systolic basic murmur, which is the diagnostic sign of aortic obstruction, is producible by other causes than obstruction. All the cases in which a systolic aortic murmur was audible have been classed as cases of aortic stenosis; while in only a small proportion of them was this condition present. I have long recognised that, while a systolic aortic is one of the commonest of the valvular murmurs, actual narrowing of the orifice is the most rare of the valvular changes.

A systolic aortic murmur may be due to several causes, which will now be enumerated.

1. Anæmia may be mentioned first. It is not well understood how it is that watery blood, deficient in corpuscles, gives rise to murmurs; but the fact is exemplified by the venous hum heard in the neck, by the pulmonary murmur, and also, though less commonly, by a systolic aortic murmur; this accompanies the first sound, and does not substitute itself for it. With this anæmic aortic murmur may be grouped the hæmic murmur of very similar character, which sometimes accompanies or follows acute febrile disease of long duration, such as typhoid and rheumatic fever.

2. Mere roughening of the orifice or valves, or impaired flexibility of the latter, slight congenital malformation, fenestration of one or more of the cusps, a shred of fibre hanging from the edge of a valve, may give rise to a loud systolic murmur, without offering the least obstruction to the course of the blood.

3. Dilatation of the aorta just above the valves, the orifice and valves remaining unchanged, produces a murmur; the blood passing through an aortic opening of normal size into a larger cavity beyond is thrown into eddies, the vibrations of which produce a sound heard as a murmur. In none of the above mentioned conditions is there stenosis of the orifice or obstruction to the stream as it issues from the heart; the condition last named has dangers of its own, but they do not arise from aortic obstruction.

4. Acute narrowing of the mouth of the aorta is almost always due to changes in the valves, the cusps of which may be stiff and rigid with rounded and thickened margins; or adhesion may have taken place between the valves at the angle in which they meet; or, without being greatly thickened, the valves may be affected with atheroma, which destroys their flexibility, and puckers and contracts them, and may go on to calcification.

5. It is also possible, that, by dilatation of the ring at the root of the aorta, valves, not themselves greatly diseased, may be so put on the stretch that they cannot fall back, but remain as an obstacle to the stream of blood.

It is clear that the first point to be ascertained, when a systolic murmur is present, is, whether it indicates the existence of obstruction or not; in this we shall be greatly assisted by the history and existing condition of the patient. We should conclude that the murmur was hæmic when there was marked anæmia, or if the patient were convalescing from an acute illness, especially if murmurs were heard at other valves as well. A systolic aortic murmur appearing at middle age or in advanced life will seldom be due to actual narrowing of the orifice, but will be caused by roughness or rigidity of the valves, or by dilatation of the aorta above the valves with perhaps atheromatous irregularities in its walls. The significance of such a murmur at this period of life varies enormously; it may be produced by a harmless tag of fibre, or it may indicate aneurism of one of the sinuses of Valsalva, but it is rarely that as actual obstruction that injury results. The loudness or character of the murmur does not give us much help; hæmic aortic murmurs are usually soft and smooth, but so also may be murmurs due to extreme narrowing, especially when there is weakness of the ventricle, and languid propulsion of the blood; thus the gradual enfeeblement, and ultimate disappearance of a systolic aortic murmur, may be a most serious prognostic fact.

We turn now to the changes in the condition of the heart produced by aortic stenosis. The change, by which aortic obstruction will be overcome, will be hypertrophy of the left ventricle. The physical signs, therefore, of this hypertrophy, the position and character of the apex-beat and impulse, and the modifications of the sounds will enter into the diagnosis of actual narrowing of the aortic orifice. The character of the aortic second sound may aid in distinguishing hypertrophy compensatory of obstruction from the hypertrophy attending renal disease; it will usually be indistinct in the former, and always accentuated in the latter case. Almost more important than the hypertrophy of the left ventricle, will be the character of the pulse. The pulse-wave will be long and slow; the artery will be small and full between the beats of the pulse; a large sudden pulse is incompatible with aortic stenosis unaccompanied by regurgitation; and when it is a question whether or not an aortic systolic murmur is due to obstruction at the orifice, the pulse becomes the most certain criterion to which we can appeal; if there be an apparent contradiction between the indications of the heart, and those of the pulse, the latter must dominate. Even when there is co-existing aortic regurgitation, which tends to render the pulse large, sudden, and collapsing, the development of these characters is interfered with by stenosis. Nearly all authors concur in making aortic stenosis the least dangerous of the valvular affections, and, on *a priori* considerations, such would seem to be probable, but this conclusion will scarcely seem quite secure, if the cases of systolic aortic murmur, without actual narrowing of the orifice, are eliminated; the relative danger of real stenosis cannot, without further experience and inquiry, be estimated with confidence; but, it is certainly greater than has been supposed.

As a rule, aortic stenosis proves fatal by the slow operation of dropsy, and for the most part mitral regurgitation is present either as a secondary consequence of dilatation, or, as an independent affection produced by the endocarditis which damaged the aortic valves. So long as the obstruction at the aortic orifice is uncomplicated by mitral change, the danger attending the disease will not be imminent. The secondary changes will take the well known backward course. Beginning with the hypertrophy, there will follow dilatation of the left ventricle, favoured by anæmia or any other form of debility; then will come systemic stagnation, from diminished propulsive power in the ventricle; and sooner or later there will be regurgitation through the mitral valve, resulting either from the dilatation, or from actual lesion of the valve or its tendinous cords, produced by the increased pressure consequent upon the powerful contraction of the ventricle, or from the combined operation of these two influences. This marks a downward step, and makes the prognosis grave. It further appears to me that, dropsy having once set in, there is a smaller probability of recovery than in most other valvular affections, it being always understood that when this complication has been prematurely induced by exposure or exertion there is some hope that it may be successfully combated and warded off for a time.

Aortic Incompetence or Regurgitation.—The diagnostic sign of this condition is a murmur produced by the backward rush of the blood from the aorta into the left ventricle during its diastole, audible in different cases over very various parts of the cardiac area. The direction in which the diastolic murmur is conducted has not seemed to afford distinct information diagnostic of the particular cusps most affected. The vibrations which cause the murmurs are conveyed to the surface by the walls of the ventricles, and not by the contained blood; the blood, thrown into sonorous eddies, will communicate the vibrations to all parts of the ventricular wall indifferently, and not impinge upon any special point, carrying thither the sound. The amount of blood returned into the ventricle is a matter of the first importance, in estimating the prospects of life and comfort before the patient, and we have now to consider the different sources of information on this point.

The murmur itself affords but vague indications. Generally speaking, a loud murmur is a proof that the heart is acting with vigour, and also that the leakage of the valves is not excessive; it is usually, therefore, among the favourable auguries. On the other hand, a weak, short murmur, indicating an opposite state of things, may be a note of impending danger or death. But there are so many exceptions to the rule hinted at, that it is not to be relied upon absolutely. A very important auscultatory sign, however, is the presence or absence of the aortic second sound in the neck. The point of this sign is this: the aortic second sound is produced by the sudden tension of the aorta and its semilunar valves at the moment of the closure of the latter; it is not their clicking as they meet, or the tension of the valves alone under the column of blood, but the vibration of the entire ascending aorta. If, then, the incompetence be considerable, there cannot be the sudden check to the column of blood which sets the aorta vibrating, and the diastolic murmur takes the place of the second sound; if, on the contrary, the leakage be only small, the required check or shock is given by the closing valves, and the second sound is distinct, although there may be a murmur. It is not the murmur drowning the sound; the murmur may be loud or feeble. In the neck it is not heard, and, listening here, we have the advantage of being out of reach both of the murmur and of the pulmonary second sound. A second sound in the neck indicates that the regurgitation is small in amount, and is consequently a very favourable prognostic element.

Other evidence on the question of the amount of the regurgitation is obtained from the changes which it has induced in the heart. It has already been pointed out that, if the normal amount of blood is to be propelled through the systemic arteries, when a certain proportion of that sent by each systole into the aorta is returned into the ventricle, an increase in the capacity of the ventricle is necessary—it must be dilated; this process is effected by the distending influence of the backward pressure from the aorta during the diastole of the ventricle, when the muscular fibres are relaxed and unresisting. Finally, hypertrophy results from the excessive function, energy, and activity imposed upon the walls of the ventricle by the mechanical conditions present. It is in aortic incompetence that the extremes of dilatation and hypertrophy of the left ventricle are met with, and they are, with certain qualifications, the measure of the regurgitation, in the absence of symptoms such as conspicuous breathlessness on slight exertion, faltering action of the heart, with tendency to fainting or giddiness. It is an interesting and important question, up to what age effectual compensation for serious aortic regurgitation is possible. In my own experience, all really satisfactory examples have been among those in whom the valvular lesion has been established under the age of twenty. The amount of dilatation attending a given degree of incompetence will vary according to the amount and duration of the care bestowed upon the patient during the first few months of its existence. If he have been allowed to leave his bed too early, and engage in exercise before the heart has fully recovered from the effects of acute disease, the dilatation will have gone farther than if due precautions had been observed till the strength was fully restored. Another effect of the regurgitation, the characteristic pulse attending it, must be considered before all the prognostic indications can be brought to a focus. This is the well-known collapsing or water-hammer pulse; the artery at the wrist is large, empty between the beats, which latter are short and sudden. The cause of the collapse after each sudden pulsation is that, in consequence of the loss of the support of the aortic valves, the column of blood is not sustained, and it drops out of any vessel which is above the level of heart, in obedience to gravity; so, in order that all these features may be fully realised, the hand must be above the level of the heart, and above the shoulder or elbow. The arteries are large, because the entire contents of the left ventricle, expanded to two or three times its normal capacity, are launched into the arterial system, distending it momentarily to a corresponding degree. Other consequences are that the pulsation in most of the arteries becomes visible, especially in the carotids, brachials, and temporals; the arteries are tortuous, the radial pulse becomes audible on raising the hand, and pulsatile reddening of the palms of the hands, or of a red patch on the forehead induced by friction, is observed, especially when pyrexia is present.

The collapsing character of the pulse is indispensable as an evidence of aortic regurgitation, unless there is concomitant stenosis which may interfere with the suddenness of the beat, and with the completeness of the collapse. In the entire absence of this modification of the pulse, a diastolic basic murmur would not indicate any considerable regurgitation.

Bringing together the elements of prognosis in aortic regurgitation at a period when symptoms have not become prominent, and when, therefore, compensation is fairly effectual: if, with the diastolic murmur, the second sound be distinctly audible in the neck, the dilatation and hypertrophy are inconsiderable, and the pulse exhibits the collapsing character only in a moderate degree. If, moreover, the valvular affection be the result of endocarditis, and therefore probably stationary, the patient may enjoy life, and do hard work, untroubled by symptoms of any kind for years. A case was related of a medical man known to have had aortic regurgitation for twenty-six years, in whom the late Dr. Sibson had given a favourable prognosis on exactly these grounds, which had been verified by the patient's having carried on a hard-working country practice, with all its trying incidents. When he was examined in October 1883, the aortic second sound was still audible in the neck; the hypertrophy and dilatation had reached only a moderate degree; and the visible pulsation in the carotids, and collapsing pulse at the wrist, while quite characteristic, were inconspicuous.

Aortic incompetence sufficient to abolish the second sound in the neck, and to give rise to considerable dilatation and hypertrophy, and to well marked collapsing pulse, may for many years be compatible with apparent health and strength. The patient will be capable of ordinary work and exercise, but will be sooner out of breath on going uphill, or from any unusual exertion, than a man in health; or may feel suddenly faint and giddy, instead of losing his breath. The future, in such circumstances, must be estimated on the principles laid down in the first lecture. After calculation of the degree of valvular inefficiency, we must consider the tenacity of the family constitution and the vigour of the individual, the age, habits, occupation, and circumstances; bearing in mind that, even in the most favourable cases, the nutrition of the enlarged heart will not be well maintained after middle age; and that, as years increase, there is a tendency to increased resistance in the peripheral circulation. We must look, therefore, for failure of the heart, and accession of symptoms [illegible] before the natural term of life; and, besides this, there is the possibility that the compensatory equilibrium may at any time be seriously disturbed, or finally overthrown, by imprudent exertion, or anxiety, or acute illness of any kind—a possibility which becomes a probability in certain cases.

When the disease is established early in life, even extreme damage to the valves may be so far compensated by dilatation and hypertrophy that the subject may live for many years, as was illustrated by a case in which acute rheumatism at the age of 14, in 1868, left behind regurgitation, attended with a maximum amount of dilatation and hypertrophy, together with secondary mitral regurgitation and exaggerated signs of every kind, which the patient survived for fourteen years, earning his livelihood as a greengrocer. He died suddenly in May 1882, during convalescence from slight subacute rheumatism, when the aortic valves were found to be practically non-existent, and the heart weighed 42½ ounces.

When, on the other hand, aortic regurgitation comes on late in life, partly from the fact that it will in most cases be progressive, and partly from the diminished aptitude of the heart to undergo compensatory changes, the prognosis is most grave. An example was related, in which a fatal termination followed the establishment of the disease in a gentleman aged 34, at an interval of only sixteen months. In these cases, the presence or absence of the aortic second sound in the neck is of extreme importance. The unfavourable prognosis dates from its disappearance, which in some cases is delayed for a considerable time.

We have still to trace the symptoms which lead up to a fatal termination in the form of valvular disease under consideration. They fall into two series, according as the ultimate effect on the circulation is arterial stagnation, from lack of *vis à tergo*, so-called asystole, or venous obstruction. In the former class, there occur syncopal and anginoid attacks, paroxysms of dyspnœa, a sense of oppression in the chest, pain in the cardiac region, irregularity and intermission of the pulse and heart-beat, which replace the regularity which prevails up to the moment of incipient failure of the heart. Dropsy is significantly absent, and there is no habitual dyspnœa. The *pulsus bis feriens* is felt (this is a peculiar double beat of the pulse felt on moderate pressure; it is produced by a double systolic effort of the heart). The characteristic irregularity of the pulse begins with the occasional occurrence of a short and rapid beat, which breaks the rhythm. It is difficult to decide whether it is an abortive systole or an attempt to supplement a systole which has been more or less inadequate; it succeeds the previous beat very quickly, and has a longer than normal pause after it. It is when the predominant tendency is to arterial stagnation, that sudden death is liable to occur; and, as said before, aortic incompetence is the one valvular affection in which this danger exists.

Dr. Walshe's statement that sudden death is more liable to occur in simple cases—that is, in cases not complicated by dilatation and hypertrophy—is not borne out by the statistics of St. Mary's Hospital, or by personal experience outside the hospital; but in a certain sense it is true—viz., as applying to aortic regurgitation occurring late in life.

In the other series, in which the final symptoms are due to pulmonary and venous obstruction, the last stage does not differ materially from that of mitral disease. The mode of causation of the symptoms is, in fact, almost identical, since insufficiency of the mitral valve is an intermediate stage in their production. There must, however, be imperfect filling of the system from the arterial side, as well as obstruction in the veins, which must be an aggravation, and must contribute to the hastening of the final and fatal stasis of the vital fluid. The supervention of mitral regurgitation has been said to be an element of safety, by preventing paralysis of the heart from over-distension. Sudden death, however, occurs in spite of it; and the danger in aortic regurgitation arises, not from resistance to the systole, in which case alone mitral incompetence would afford relief, but from undue filling in diastole, which it would indirectly tend to aggravate. Serious inadequacy of the mitral valve being once produced, its effects will gradually develop themselves in backward pressure upon the pulmonary veins, with consequent congestion of the lungs, cough, shortness of breath; next, hypertrophy and dilatation of the right ventricle, and, finally, dropsy.

THE BOOKS OF THE YEAR.—We learn from *The Publisher's Circular* that 4,732 books were published during the year 1883. Theology heads the list with 794 newly issued volumes; 556 educational and philosophical works were published, and 349 works of fiction, while history and biography accounted for 414. Voyages and books of travel numbered 210; and books on political and social economy, and on trade and commerce, 187; 163 medical and surgical treatises, and 130 works on law and jurisprudence, also appeared during the year. Thus, while theology is responsible for one-sixth of the total number of books; education and philosophy, for one-eighth; and fiction for one-thirteenth; medicine and surgery have only contributed one-twenty-second part.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

PROCEEDINGS OF SECTIONS.

ON THE PRODUCTION OF HEAT IN FEVER.

Read in the Section of Medicine.

By W. WITHERS MOORE, M.D., F.R.C.P.,
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THE regulation of the temperature of the body, in health and disease, has occupied the attention of some of the best observers during the last quarter of a century; and yet it must honestly be confessed that the question is still a moot one. According to Senator, "the temperature of the body is a direct consequence of the chemical processes of life," or, in other words, of the oxidation of hydrocarbons and nitrogenous matters, and is regulated by the skin, which is the great cooling agent, the superfluous heat being got rid of by radiation, conduction, and evaporation. But as, under normal conditions, the temperature of the body is constant, while the loss of heat from the skin is very variable, and depends much on external circumstances, it seems necessary to suppose that some centre exists which specially presides over the production or discharge of heat. Such a controlling centre has been hypothetically placed by Virchow, somewhere in the intracranial nervous system; and this idea has to a certain extent been adopted by Dr. Burdon Sanderson, who writes to me thus: "At all times in the normal body the available means of heat-production is in excess of the demand; but under normal conditions the temperature is constant, because, as soon as it rises above the normal, the production of more heat automatically ceases. This automatic check-action is maintained by the nervous system. If it be impaired, the temperature rises quite irrespectively of the absolute amount of heat produced per minute or per hour in the body." I must confess to not quite grasping the point in this last statement; for, unless the automatic check-action also control the "liberation of heat" from the body, it is difficult to see how the temperature can rise independently of the absolute amount of heat generated.

It is, however, to the production of heat in fever that I would specially desire to direct attention. There are two main theories by which it is attempted to explain the origin of heat in fever; viz., the neuro-paralytic, which ascribes it to a derangement of the nerves regulating the escape of heat from the body, and the biochemical, which explains fever by assuming an increased production of heat, owing to accelerated tissue-change. Hence the question to determine is, whether production or discharge is primarily disordered. The thermometer teaches us that the actual heat of the surface in fever is greatly above normal; and it is difficult to understand, even if all evaporation be arrested, how the body can, by any nerve-influence, be rendered independent of the physical laws of radiation and conduction. Nay, rather the contrary; for, according to Dr. Leyden's conclusions, "the discharge of heat is increased in fever, whether the temperature be constant, fall, or rise; consequently it is certain that the production of heat is increased." In rheumatic fever the temperature is often very high, though the body be drenched with perspiration; so that great heat must be lost by evaporation. In addition, Murri's experiments made on dogs, negative the idea of fever being due to a neuro-paralytic lesion; for in fever more heat is given off than in health; whereas, after section of the spinal cord, when the inhibitory power of the regulating centre is arrested, less heat is given off.

The theory then, that the liberation of heat at the surface of the body is controlled or restrained in fever through disorder of the nervous centre, so that by "retention" the temperature rises, must for the present be abandoned, until more reliable evidence can be adduced in its favour; and we are of necessity compelled to look upon fever as a disorder of protoplasm. We may take it as granted that the temperature of the body is the balance of the production and discharge of heat, and that probably the phenomenon of excess of heat in fever is due to a disproportionately large destruction of albumen, which leads to an increased discharge of urea, and also to an increased formation of carbonic acid. The urea, which is probably derived from the blood-corpuscles and tissues, is increased, in an early stage, to three times as much as would be excreted by the same person in health on a fever-diet; and it is notable that

TABLE I.—*L. K., aged 32, Idiopathic Anæmia.*

	Pulse.		Temperature.	
	M.	E.	M.	E.
Nov. 19	—	120	—	100.6
20	—	—	—	101.6
21	—	130	—	100.2
22	—	121	—	101.2
23	112	—	101.2	—
24	120	—	100.8	—
25	—	124	—	99.6
26	—	—		100
28	—	116	—	100.4
30	—	116	—	99.8
Dec. 1	—	116	—	100.5
2	—	120	—	98.5
3	—	120	—	101
4	—	116	—	100.7
5	—	121	—	100.2
6	—	128	—	102
7	—	128	—	102.3
8	—	132		100.5
9	—	120	—	100.8
10	—	120	—	100.8
11	—	120	—	100.8
12	—	112	—	100.4
13	—	—	—	101.4
14	—	108	—	100.4
15	—	108		101
16	—	112	—	101
17	—	—	—	101.2
18	—	—	—	102
19	—	120	—	101.2
20	—	108	—	99.6
21		104	100.4	—
22	—	104	—	100.6
23	—	110	—	101.6
24	—	112	—	99.3
25		112	—	101
27	—	104	—	102.2
28	—	108	—	101
29	—	116	—	102
31	—	104	—	101
Jan. 1	—	108	—	100.2
3	—	108	—	101
4	—	108	—	100.4
5	—	108	—	100.4
6	—	112	—	100.1
7	—	120	—	102
8	—	112	—	101.2
9	—	108	98.4	100.4
10	—	108	—	99.8
11		112	—	100.8
12	—	108	—	101
14	—	108	—	101
15		124	—	102.4
16	—	104	—	99.2
17	—	96	—	99.4
18		116	—	100.4
19		104	—	99.6
20		112	—	99.4
21		104		99.8
22	—	128	—	101.4
23		120	—	100.8
24	—	116	—	100
25	—	104	—	99.3
26	—	104	—	99.5
28	—	—	—	100.2
29		—	—	101
30		120	—	103.8
31	—	110		101
Feb. 1		114	—	99.6
3	—	114	—	100
Feb. 4	—	114	—	100
5	—	—	—	100.4
6	—	—	—	101.4
8	—	108	—	99.6
9	—	120	—	99.6
10	—	120	—	100.8
11	—	130	—	101.8
14	—	—	—	101
15	—	—	—	101.2
16	—	120	—	100.2
17	—	—	—	100.6
18	—			102.6
19	—	118	—	100.2
20	—	—	—	100.4
21	—	104	99	100.5
22	—	104	—	101
23	136	128	103[1]	103
24	—	120	98.5	105
25	—	120	103.4	103.2
26	—	—	101.4	103.3[2]
27	—	126	101.8	104[3]
28	—	136	102	104
29	—	132	—	103
March 1	—	120	102.6	103.3
2	—	120	100.6	102.5
4	—	88	98.4	98
5	—	—	98.5	98
6	—	92	101	98.6
7		92	98.4	98.6
8	—	96	99.8	—
9	—	96	—	99.2
10	—	96		99.2
11	—	128	—	104.2
12	—	136		103.6
13	—	100	98.5	98.8
14	—	100	—	100
15	—	96		99
16	—	100	—	98.7
17	—	112		101.4
18	—	90		99
19	—	90	—	97.8
20	—	106	—	100.2
21	—	104		99.5
22	—	112		101.4
23	—	124	100	103
24	—	124	103.8	100.8
25	—		99.6	101
26	—		99	103
27	—	—	99	104.4
28	—	—	99	101.2
29	—	—	98	101
30	—	—	99.2	101
31	—		99	102.4
April 1	—	—	98.2	98.8
2	—	—	98	98.[illegible]
3	—	—	99	100
4			98.3	99
5	—		98.2	
6	—		98.2	98.4
7		—	98	99
9	—	—		98
10	—			99
11	—			99.4
12	—			99.6
13	—			100
14	—		—	100.1
15	—		—	100.1
16				101
17			—	100.4

[1] On February 23rd, at 2 P.M., temperature [illegible]; at [illegible] P.M., [illegible]; at [illegible] P.M., [illegible].

[2] On February 27th, at 2.30 P.M., temperature 103.6.

[3] On February 26th, at 2.30 P.M., temperature 101.

TABLE II. *L. K., aged 34, Idiopathic Anæmia.*

Date.	Pulse.	Temperature.		Urine.			Bowels.
		M.	E.	Ozs.	Spec. Grav.	[illegible]	
June 11	96	101.4	101.2	60	1007	0.5	1
12	80	102.5	101.4	74	1008	—	1
13	76	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
14	82	101.4	101.8	[illegible]	1010		2
15	76	100.2	101	51	1008	0.6	1
16	120	100.4	101	72	1010		2
17	120	101.2	102	52	1007		1
18	112	100.8	101.2	[illegible]	1008	0.7	[illegible]
19	110	100.4	101	60	1008		1
20	110	100.6	101	[illegible]	[illegible]	—	1
21	120	100.6	101	[illegible]	[illegible]		1
22	116	100.3	101.8	[illegible]	1010		1
23	112	100	[illegible]	51	1009		1
24	118	100.2	102	60	1008	—	1
25	110	100	102	[illegible]	[illegible]	[illegible]	2
26	116	101.2	102.4	[illegible]	[illegible]		1
27	120	102.2	102	62	1010		1
28	136	100	101.6	68	1008		2
29	112	99.6	100	[illegible]	1012	1.2	1
30	112	99.4	101	44	1010		1
July 1	124	100.2	[illegible]	[illegible]	[illegible]		[illegible]
2	120	[illegible]	[illegible]	[illegible]	1010	[illegible]	2
3	100	100	99.8	44	1011		1
4	100	[illegible]	100.4	46	1011	—	1
5	112	[illegible]	100	[illegible]	1012		2
6	108	99.4	100.4	42	1013	1.3 nearly	1
7	108	99.6	100.4	[illegible]	1012	—	1
8	116	99.6	99.1	[illegible]	1013		1
9	108	99.6	100.2	41	1012		1
10	116	100	[illegible]	[illegible]	[illegible]		2
11	108	99.2	100.4	[illegible]	[illegible]		2
12	104	99.2	[illegible]	45	1014		2
13	108	99.3	100.8	52	1010	1.1	2
14	100	99	[illegible]	51	[illegible]		[illegible]
15	104	99	[illegible]	[illegible]	1013		3
16	120	99.2	100.8	[illegible]	1015	1.1	3
17	108	[illegible]	100	[illegible]	[illegible]		2
18	120	98.8	100	[illegible]	[illegible]		2
19	108	98.8	100.2	[illegible]	1012		2
20	96	99	[illegible]	[illegible]	[illegible]	[illegible]	3
21	108	[illegible]	[illegible]	52	[illegible]		3
22	102	[illegible]	100.2	[illegible]	[illegible]		2
23	108	98	[illegible]	63	[illegible]	[illegible]	2
24	108	[illegible]	99.6	[illegible]	[illegible]		3
25	96	98.8	101.2	49	[illegible]		2
26	120	98	[illegible]	[illegible]	[illegible]		
27	120	[illegible]	101.4	58	[illegible]	[illegible]	
28	96	99	[illegible]	58	[illegible]		1
29	108	99	101.6	66	1012	1.3	3
30	120	[illegible]	102.6	[illegible]	[illegible]		2
31	108	[illegible]	101	40	[illegible]		1
Aug. 1	108	97.8	100.6	60			2
2	108	98	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	96	98.2	[illegible]	[illegible]	[illegible]		[illegible]
4	96	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
5	96	99		[illegible]	1016	—	3
6	[illegible]	[illegible]	100	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
8	108	98.6	[illegible]	[illegible]	[illegible]		[illegible]
9	[illegible]	99	[illegible]	[illegible]	[illegible]		[illegible]
10	[illegible]	98	100.2	[illegible]	[illegible]	1	[illegible]
11	120	[illegible]	100	58	[illegible]		[illegible]
12	108	99.2	[illegible]	54	1015		
13	[illegible]	98.6	[illegible]	[illegible]	1016	1.6	2
14		98.4	99	[illegible]	1016		[illegible]
15	100	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
16	108	[illegible]	[illegible]	[illegible]	1016		[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
18	120	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	100	[illegible]	[illegible]	[illegible]	[illegible]

this excessive discharge of urea precedes the rise of temperature, and therefore is not the result of it. Leyden's observations show also a continued increase in the amount of carbonic acid discharged in fever; but, according to Senator, this increase is less than 30 or 40 per cent., and may possibly be partly due to the heightened temperature, expelling more rapidly the formed carbonic acid, and so the increase may be more apparent than real. Dr. Burdon Sanderson, in his able paper on the process of fever, [illegible] "We are at liberty to adopt the tissue-origin of fever, as the basis on which we hope, eventually, to construct an explanation of the process." These reflections, on the source of heat in fever, were suggested by the consideration of the following case.

In November 1879, L. K., a married woman, aged 32, was admitted under me in the Sussex County Hospital, with idiopathic anæmia. It was a typical case, both as to the general appearance and symptoms, and the microscopic characters of the blood. All the usual remedies were tried, including arsenic, none of which, she said, she could or would take; and for some weeks she lay at death's door, when I determined to give her secretly three minims of Fowler's solution three times a day in her food [illegible]; the [illegible] rapidly improved, and in six weeks after [illegible] was able to walk out of the hospital. This case [illegible] much for its recovery, as for the state of [illegible] throughout its course, [illegible]. I may [illegible] that [illegible] lowered the temperature.

On thinking over this case, I [illegible] record that the urea was [illegible] never found the quantity [illegible] normal. This, [illegible] with the [illegible] and debased character of the [illegible] breathing [illegible] the [illegible] heat was [illegible] determined that, should another case [illegible], I would [illegible] to the [illegible]

Singularly enough, in June 1881, L. K. came in again, in a very similar condition; the prostration, however, being scarcely so profound as before.

Her general health had been good until three months previously, when she had frequent bleeding from the nose, and which still continued, lasting three or four hours at a time. She complained of headache, and had not kept any food down for seven weeks. It is needless to detail her symptoms, as it is not pernicious anæmia, but rather the coincident fever, to which I would direct your attention. Suffice it to say that she again presented the typical characters of the disease, but the fever did not run so high as on the previous occasion. Profiting by former experience, the treatment by arsenic was at once commenced, and in the same manner and dose as before; the result was equally satisfactory, for she went out cured in ten weeks.

The same absence of all chest-trouble was as conspicuous as on the former occasion. The temperature did not rise beyond 104.° The quantity of urine represented the fluid taken—chiefly milk, soda-water, and lemonade—for at first no solid food was tolerated; but, towards the end of her stay, the appetite became very ravenous for animal-food.

The emaciation was considerable; but our late house-surgeon, Dr. Uhthoff, saw L. K. in February 1883, looking plump and well coloured. The percentage of urea in the case was low, and exactly tallied with the specific gravity, as shown in Table II. The marked increase in the amount of urea towards the ends of the case was no doubt due to the large increase of store-albumen, from the greatly improved appetite and desire for animal-food.

In considering this case, we may, I think, take it for granted that the fever was not the cause of the anæmia, for it is not present in all cases, and it usually occurs late in the disease and precipitates a fatal issue.

Is the fever the direct result of the anæmia? Many considerations favour this view. In cases of chronic starvation, a rapid and decided rise of temperature often occurs in the last few days of life; a like symptom, too, is sometimes present in other forms of anæmia, *i.e.*, leukæmia, chlorosis, etc., and is equally variable in its character. M. Mollière made observations on eight young chlorotic women, who presented no other signs of disease beyond the anæmia for which they were under treatment. The temperature was taken every morning and evening in the rectum, over a period varying from two to fifty-one days, and was found to oscillate between 101.8° and 102.8°; and, what is more to our purpose, the amount of urea eliminated daily was estimated, and found to be normal.

Again, we know that a diminution of the oxygen-carrying hæmoglobin, as a general rule, lowers the temperature of the body; and such is the case usually in this disease; but it is quite conceivable that, in an extremely impoverished condition of the blood, as, for instance, when the red corpuscles are reduced to a fourth, or even a tenth, the nutrition of the nerve-centre, or centres (if such there be), which preside over the regulation of heat, may be so impaired that they no longer exercise effectually their inhibitory power; or, again, that the vital power in the tissues is so lowered that they are unable to resist the action of even the very limited supply of oxygen which is presented to them.

But all this presupposes that fever is due to the oxidation of nitrogenous tissues; and we ought, therefore, to find a corresponding increase in the solids of the urine, and not the reverse, as in the case under consideration. We are, therefore, driven to seek for some other explanation of the febrile state.

In high fever, such as occurred in L. K., the quantity of heat given off is nearly twice as much as the normal, which loss, according to Senator, occurs by radiation and conduction, and, during the crisis, by evaporation. Mollière suggests that the increased heat may be explained by the hypothesis of a combustion, the products of which are not so easily recognised as urea. It may be so, but he offers no proof of it.

We are told by chemists that heat is always set free when chemical compounds of a more stable kind are generated from such as are less stable, even when oxidation has no part in the process; and upon this fact Immermann has built up a theory to account for anæmic fever.

"There is nothing absurd," he says, "in supposing that the molecular structure of the cell is, from a chemical point of view, lax and unstable, requiring (at any rate in the more highly organised animals), a continual restorative activity on the part of the blood, for its maintenance. Should this restorative influence fail, or prove inadequate, owing to some defect in the composition of the nutrient fluid, the complex substance of which the cells consist will spontaneously decay and break up into a number of more stable products."

Thus we have a possible source of increased production of heat in those extreme forms of blood-disease of which pernicious anæmia is the chief type; but what becomes of the nitrogen? Dr. Burdon Sanderson, who kindly suggested the publication of the case, says, in a note to myself: "The pyrexia of your patient I take to be dependent on disorder of that part of the central nervous system which regulates most chemical processes by which heat is produced. The temperature is higher, not because oxidation is taking place at a greater rate, or heat produced at a greater rate, but simply because oxidation and heat-production go on, notwithstanding that the increased temperature of the body ought to have, so to speak, shut the safety-valves." But ought we not to have the *débris* of combustion manifest somewhere, if the fire have gone on burning in excess of the needs of the body from neglect of the regulator? Again, to what was the first rise of temperature due? If not to excessive production, it must be to lessened liberation of heat.

Dr. Anstie, to whose mind a similar difficulty seems to have occurred, offers the suggestion that, in fever, the force which ordinarily becomes latent in tissue-building is set free in the form of heat; thus accounting for its excess independently of the destruction of nitrogenous and fatty tissues. But Dr. Anstie furnishes no data on which he founds this hypothesis.

In the case related, we have two important facts; viz., an enormous decrease in the number of the oxygen-carriers, and an absence of the usual evidence of increased combustion in the urine, which seem wholly irreconcilable with the further fact of the state of decided pyrexia which prevailed in both of L. K.'s illnesses. Seeing, then, that the urine in the present case fails us as an emunctory of the *débris* of combustion, can we find another outlet for it?

The alvine evacuations at once suggest themselves; but for the first four weeks there was seldom a second daily action, and sometimes none at all. And, further, Dr. Parkes has pointed out that the diarrhœa of typhoid fever, even though it does favour the escape of chlorides, is not to any considerable extent the channel for the escape of nitrogen; so that we cannot look for any help in this quarter.

Failing the bowels, we turn to the skin; and here we are met with the fact that in this case all sensible perspiration was arrested; and we can scarcely take for granted that much solid matter passed away with the insensible perspiration, more especially when we recollect that, in the profuse sweating of rheumatic fever, the urine bears unmistakable evidence of its being the natural outlet of febrile *débris*.

The lungs, no doubt, excrete in fever an increased amount of carbonic acid, but, as already noticed, not to such an extent as has been assumed; and we have no evidence that nitrogen finds egress there.

Such are the reflections suggested to me by this interesting case, and I must confess my inability to carry the inquiry further; and shall, therefore, be grateful to any member who will offer any solution of my difficulty as to how the temperature came to rise in L. K.'s case.

ON THE USE OF SULPHIDE OF CALCIUM IN THE TREATMENT OF SCABIES.

Read in the Section of Medicine.

By THOMAS M. DOLAN, M.D., F.R.C.S.Ed.,
Surgeon, Shibden Industrial Schools; Medical Officer Halifax Union Infirmaries.

In some of the most recent works on medicine, I find that sulphur-ointment alone is suggested as a remedy for scabies. Thus, in a work which has gained for itself a world-wide reputation, Quain's *Dictionary of Medicine*, the line of treatment is laid down as follows.

"In order to cure an ordinary case of scabies, it is simply necessary that the patient before going to bed should thoroughly apply, and gently rub in, sulphur-ointment to every part of the body, excepting the skin of the face and scalp; and in order to keep the ointment in contact with the skin, he should sleep in his underclothes, such as drawers, jersey, shirt, and gloves, and in the morning take a warm bath. The process should be repeated the next night, after which the ointment should be used every night for a week or ten days to those parts of the body only which are specially attacked."

All who have to deal with scabies—as medical officers of industrial schools and Poor-law medical officers—will agree with me that such a method of treatment is not only unnecessary, but tedious, disagreeable, and expensive. It would be impossible to apply it in the majority of cases.

In some recent text-books on therapeutics and materia medica, sulphur-ointment is also recognised as the treatment for scabies. In consequence of this, I have been induced to bring the treatment of scabies before the Section, in order to give a practical hint on a line of treatment which recommends itself on the grounds of efficiency, economy, and rapidity of cure. It is not by any means a new method, but it does not appear to me to be sufficiently known or appreciated. It is the treatment by sulphide of calcium. This name is also applied to a powder, the pills of which, in small doses, are very useful in the treatment of boils. The preparation used is in a liquid form, and from its colour, is known in the army and in the Poor-law service as golden lotion. It may be made from the following formula: Flower of sulphur, 100 parts; quicklime, 200 parts; water, 1,000 parts. Boil the whole for some time, stirring occasionally until the substances become incorporated, allow the liquid to cool, and decant into hermetically sealed bottles. It should not be made in a metal vessel; and as in the process of making the smell is not agreeable, care should be taken in this respect.

There is a great difference in the preparations in the market. The best preparations I have met with, I have obtained from Richardson and Son, Leicester; Clarke, Bleasdale, Bell, and Tollington, of York.

The method of application is as follows. The patient is first put into a warm bath; he is then painted with a brush dipped in the solution, and placed in bed, either in blankets or in a flannel nightgown made for the purpose. After a short time, owing to the deposit of the sulphur, the patient's body is almost of the colour of a guinea. The beneficial effects are speedily manifested; the itching ceases, and, as a rule, in simple cases, after another warm bath, the patient may be discharged cured.

In long standing neglected cases, the duration of treatment would be longer, as the scales and crusts produced by itching and neglect have to fall off. Scabies underlies many of the forms of skin-disease seen in Poor-law practice, and this is a practical point to bear in mind. I have used the sulphide of calcium since 1869, when I first entered the Poor-law Medical Service. I have since treated some thousands of cases, using the sulphide alone. My experience enables me to testify the accuracy of Dr. Bourguignon's statement that it is a specific for scabies. It has the following merits: it is a clean application—different in this respect from the sulphur-ointment; it is easy of application, and will penetrate—here again it has an advantage over the sulphur-ointment; it is cheap and speedy in its action; one or two applications will, as a rule, be sufficient; it does not require the destruction of any clothing, nor the complicated process described by Dr. Liveing in Quain's *Dictionary of Medicine*. At the end of the short article from which I have quoted, Dr. Liveing briefly alludes to this method, and says: "This lotion is effective, but it is apt to irritate the skin, and is not so generally useful as the sulphur-ointment." In a small number of cases, the use of this remedy causes roughness of the skin. Its over-use or abuse produces troublesome irritation of the skin. This may be at once remedied: the patient should be ordered a bath of soda and water, when all ill effects will speedily disappear.

The sulphur-ointment should be expunged from our text-books as an obsolete form of treatment. The sulphide of calcium should take its place. I believe it is used in the army in England and on the Continent, and generally throughout the Poor-law Medical Service, so that my testimony is not singular as to its value.

Cleator Moor.—Dr. Eaton records with satisfaction a diminution in the mortality from zymotic causes during 1882, as compared with the previous year, and he thinks that a further decrease may be looked for when the prevalent notion that these diseases are inevitable has been dispelled. Commencing on the fatality from scarlatina, the health-officer observes that all the cases can be accounted for by the opportunities of personal contact between the affected and healthy, a state of things which seems to have been brought about by the inherent carelessness of parents. This disorder caused 7 deaths out of a total of 18 recorded from zymotic causes. The general death-rate represented 14.52 per 1,000, against 13.9 recorded in 1881, an unsatisfactory feature being the increase in the number of deaths of children under five years of age, which numbered 75 against 63 recorded in 1881. There was also a considerable increase in the fatality from chest-complaints, and wasting diseases of infants claimed an unusually large number of victims.

OSTEOTOMY OF THE HIP.

Read in the Section of Surgery.

By C. B. KEETLEY, F.R.C.S.,

Surgeon to the West London Hospital, and to the Surgical Aid Society.

My paper deals with ten[1] osteotomies of the hip, performed on nine patients.

No.	Date.	Name.	Age.	Above or Below the Trochanters.
1	February 1st, 1881	Alice B.	25	above
2	April 10th, 1881	William M.	14	above
3	October, 1881	Alice B.	[illegible]	above
4	February 28th, 1882	Joseph S.	[illegible]	below.
5	April 4th, 1882	Elizabeth A.	24	above.
6	June 6th, 1882	Alfred J.	9	below.
7	December 12th, 1882	Alice H.	16	above.
8	April 10th, 1882	Joseph S. (again)	16	below.
9	—	Kate C.	6	below
10	September 13th, 1883	Edith N.	18	above.

Six were done above the trochanter, and four below it. Nine were for ankylosis, one was for an irreducible dislocation. All were done in the West London Hospital, with the chisel and mallet, and under strict Listerian modes of operating and dressing. The dressings were changed, in all the cases but two, at most once or not at all. In the two exceptions, drainage-tubes were used, as I now think, needlessly. Once recurrent hæmorrhage necessitated a renewal of the dressings within three hours. All did well. The constitutional disturbance was surprisingly small.

Each patient was kept in bed six weeks, and allowed to discard crutches and sticks in a few weeks more.

An iodoform pad was usually placed next the wound, then a quantity of packing. Then the ordinary dressing with jaconet was applied, over all, an India-rubber bandage, covering the whole dressing completely.

The effect of the operation may be gathered by contrasting these two diagrams with the figure in the splint (further down in this paper) and from the following statement of facts.

Cases 1, 2, and 5 have now no apparent shortening whatever, and wear symmetrical pairs of boots. Case 7 wears about half an inch of cork sole. Case 3 wears a cork sole, 2 inches at the heel, and ¾ inch at the sole. The deformity in her case was originally very great. Case 4, which originally required a cork sole of 7½ inches, is now made level by one of 2½ inches.

In most of these patients, walking more than a mile used to cause fatigue and pain in the back. All but Case 9 can now walk vigorously. This Case 9 is very exceptional. She, a bright little girl of six years old, had never even stood in her life. She can now walk.

Being almost all young women and youths, they are vastly improved in spirits as well as in health; and, finding themselves no longer cripples, but merely marked by a slight limp, life has now new charms and hopes for them.

With reference to supratrochanteric osteotomy, I wish to draw your attention to certain points of importance, nowhere in surgical literature, to my mind, satisfactorily treated: 1. The place of incision; 2, the size of the osteotome; 3, the direction; 4, the position of the patient during operation; 5, the method of snapping the early divided bone in two; 6, the way to bring the limb down; 7, the mode of preserving, and even of increasing, the gain as regards position.

Trisect a line joining the anterior superior angle of the great trochanter, and the anterior superior spine of the ilium. Take a point at least half an inch below the junction of its middle and inner thirds. Enter a sharp-pointed steel director at this point, and pass it down to the bone you are about to divide. It will have to go downwards and inwards, but chiefly backwards; how much each way, you must judge by taking carefully the bearings of the great trochanter to the condyles of the femur, by noticing also the fatness or leanness of the patient. Send your knife[2] along the director (the use of which was first suggested to me by Mr. Willett), and make an incision large enough to admit one finger. Pass in your finger and feel, with the pulp, the inner edge of the anterior border of the great trochanter. Do not tear the deep parts in the effort to feel more. Take out your finger, and pass in the chisel. The chisel should be large, heavy, and decidedly wedge-shaped in section.

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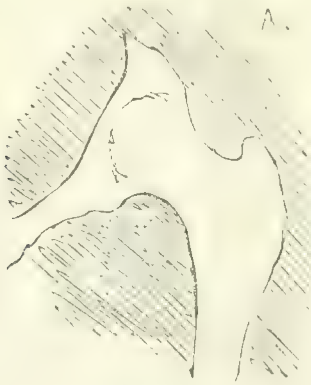
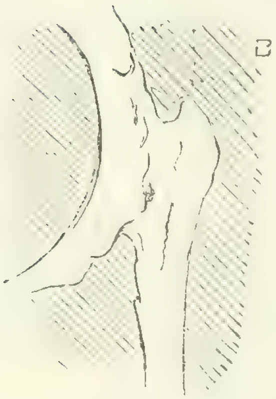
[1] I have added a tenth, operated on since the paper was read. This has been done now exactly a month. The wound is [illegible], and the [illegible] in excellent position, but the patient is [illegible].

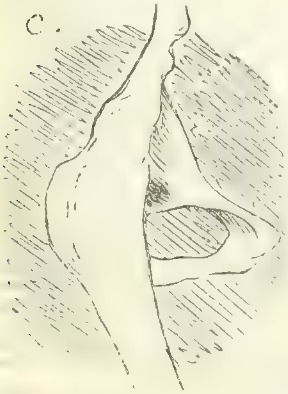
[2] In my last case, I [illegible] and thrust down to the bone [illegible] the point of [illegible] in the groove of the director. [illegible] the hæmorrhage almost to nothing. [illegible] but in these [illegible] even the [illegible] change of dressings.

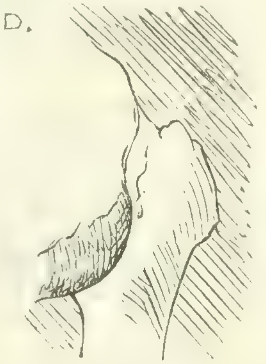




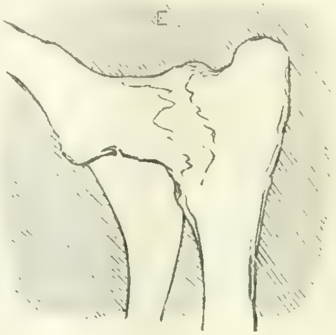
Now for a most important point—the plane in which to place the chisel-blade. This should always make a slight, but not very large, angle with the longitudinal plane of the shaft of the femur.

Drawings A, B, C, D, E, are from the four specimens in the Museum of the Royal College of Surgeons. C and D are respectively front and back views of the same specimen. It will be noticed that only one, A, presents anything like the appearance of the diagram placed in text-books to illustrate "subcutaneous" division of the neck of the femur. It the last mentioned diagram, a narrow saw is always placed in position, forming an angle of 45° with the axis of the femur. A saw so placed with respect to specimens B and E would either get into the pelvis, or, more probably, cause the operator great embarrassment and waste of time.





A represents a section; B, C, and E, are views from the front; D is a view from behind of the same specimen as that shown in C.

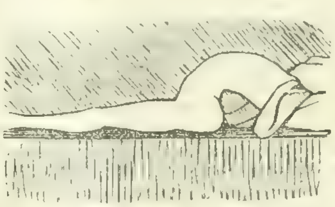


All the drawings illustrate very well the necessity of getting well inside the great trochanter. All show the desirability of placing the chisel in a plane slightly oblique with respect to a plane drawn antero-posteriorly through the axis of the femur.

The bony points which it is necessary to examine and compare the positions of, in trying to discover the nature, position, and size of the bone forming the ankylosis are—1, the condyles of the femur; 2, the top of the great trochanter; 3, the anterior superior spine of the ilium; 4, the tuberosity of the ischium. Nos. 1 and 2 are sufficient to tell you where the femur is, and how it lies; Nos. 3 and 4 give the same information about the pelvis. The patients are often far too fat for much to be made out by direct palpation of the hip.

In the actual course of an osteotomy, as Dr. McEwen points out, the chisel conveys important information, much as a probe does. Make use of this to guide you in cutting the bone sufficiently.

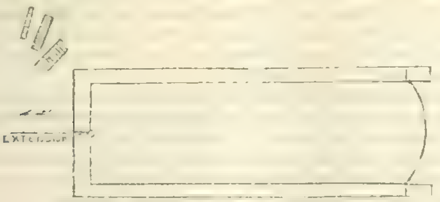
The patient should lie supine on a sand pillow. In finally snapping the bone, rotate it a little as you forcibly bring it down. Put the limb in good position at once. It is absolutely necessary not to be afraid of employing force; this should be the ample force of a strong man exerting himself, but well within his strength.



F.

I have generally tenotomised the adductors, but not very extensively. It is quite clear that a complete tenotomy of all the adductors would leave nothing to resist the strain of manipulation, except the skin and the femoral vessels. Where there are deep cicatrices on the inner side of the hip, and always in infratrochanteric osteotomy on a thin patient, you must remember the vessels.

For my first cases, I employed double extension in the after-treatment. The second weight was used to pull outwards from the upper part of the thigh. It was a source of comfort and relieved pain. But the best results have attended the use of this splint. As the annexed diagrams indicate, it is an ordinary double splint or trough, such as that invented by De Morgan, and modified by various surgeons, but entirely simple, and free from elastic bands, pulleys, springs, etc. The patient lies in it, with the foot of the side operated on strapped down to the crosspiece of the splint. Little blocks of wood, not unlike an octavo book in size and shape, are placed between the crosspiece of the splint and the sole of the foot of the sound side, and the patient is told to keep the knee of this leg straight. In this way, and without any other bandaging, the angle of abduction or adduction of the hip operated on can be regulated so nicely, that a little abduction can be made to exactly compensate for an inch or so of real shortening. Of course, pads and padding are used with the splint. Extension is not always required; when it is, apply a weight to the middle of the foot-piece (see the arrow in the diagram), and raise the bed-foot on blocks.



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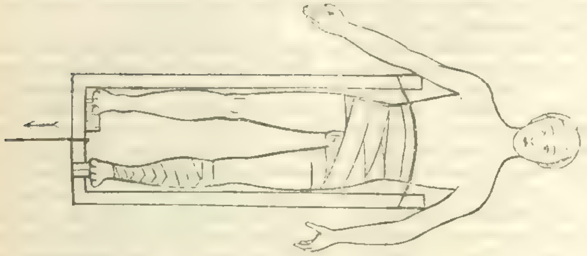

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In conclusion, I beg of you to excuse the somewhat authoritative way in which I have laid down as law what is, after all, merely opinion open to discussion. I have chosen to do so only with a view to conciseness, and in order to spare your time.

CASES OF ABDOMINAL SURGERY.

By T. J. WALKER, M.D.,

Surgeon to the Peterborough Infirmary.[1]

THE following ten cases have occurred consecutively in my private and public practice during the past fifteen months, and, although of little value as compared with the long series of cases recorded by the leaders in abdominal surgery, I think they are worthy of the notice of the profession, as marking the strides made in recent years in this department of our art, and as illustrating some points of very great practical importance. Into the details of the cases I shall not enter, but shall briefly allude to the points of interest where they exist in any of the series.

CASE I. H. W., labourer's wife, aged 33. July 10th, 1882. Ovarian tumour. Ovariotomy. Lister's antiseptics. Cured.

CASE II. W. K., seedsman, etc., aged 57. July 31st, 1882. Epithelioma of gullet and trachea. Gastrostomy, incomplete. Lister's antiseptics. Died.

CASE III. M. W., railway labourer's wife, aged 40. August 17th, 1882. Strangulated femoral hernia. Herniotomy. Lister's antiseptics. Three days. Cured.

CASE IV. E. K., railway signalman's wife, aged 37. September 20th, 1882. Soft fibro-myoma of uterus. Extirpation of uterus and its appendages. Lister's antiseptics; drainage-tube. Cured.

CASE V. H. W., wife of coal agent, aged 37. March 5th, 1883. Ovarian tumour. Ovariotomy. Lister's antiseptics; drainage-tube. Cured.

CASE VI. H. W., wheelwright's wife, aged 54. June 15th, 1883. Ovarian tumour. Ovariotomy. Lister's antiseptics; drainage-tube. Cured.

CASE VII. Mrs. W., independent, aged 63. June 24th, 1883. Strangulated femoral hernia. Herniotomy. Cured.

CASE VIII. J. S., waiter's wife, aged 41. July 9th, 1883. Infiltrated irreducible hernia and peritoneal fistula. Extirpation of sac and reduction of contents. Drainage-tube. Cured.

CASE IX. M. P., labourer's wife, aged 47. September 12th, 1883. Ovarian tumour. Ovariotomy. Lister's antiseptics. Cured.

CASE X. E. C., factor's child, aged 13. September 13th, 1883. Ovarian tumour. Ovariotomy. Lister's antiseptics. Cured.

Case I, ovariotomy, calls for no special comment, excepting that I may mention that this was the first case of the class in which I determined to carry out strictly the rule of limiting the number of my assistants to that actually necessary, and of excluding spectators, who might be the unconscious vehicles of septic or other germs. I may also say that I take very special precautions to prevent the possibility of myself being the source of infection, and that I request my consultants to adopt similar measures. By Lister's antiseptics, I mean operating under carbolic spray; the use of carbolic solutions as practised by Lister; the dressing with carbolic gauzes. I do not, however, use protective to any wound; do not apply a layer of wet gauze next to the incision, nor do I cover the dressing with waterproof tissue, but with strips of plaster, as practised by Sir Spencer Wells. The pedicle, in all these cases, was treated by ligature, cut short, and dropped into the abdomen. In most of the operations ether was the antiseptic used, and was generally administered by Dr. W. E. Paley. The patient, Mrs. W., recovered without a bad symptom, her temperature never reaching 100° after the first day, and her convalescence being rapid and uninterrupted.

Case II, incomplete gastrostomy, is one of greater interest. The patient applied at the infirmary in May, 1882, with dysphagia. Laryngoscopic examination showed the larynx and vocal cords quite healthy, and the diagnosis was for some time uncertain; but, the voice and breathing becoming affected, and the indurated gland parting in the neck, cancer was diagnosed. Dysphagia became greater, and the arguments for and against gastrostomy were put before the patient, and he declined the operation until, having had, for some time, no food but that administered *per anum*, he begged me to give him the chance afforded by the operation of prolonging his life. Although the patient's condition had become very unfavourable, at his earnest solicitation, the first stage was performed on July 31st. On making an incision below the cartilages of the ribs, the collapsed colon came into view, and was at first taken for the stomach. This organ, however, lay far back below the diaphragm, at the extreme depth of my finger from the wound. It was drawn down, and attached by sutures to the margins of the opening in the abdominal wall, the whole proceedings being rather more difficult than I anticipated. The patient, who was in a most critical state during the operation, rallied well; but, on the following day, he began to breathe with difficulty, secretion acumulating in the trachea, and he died within thirty-six hours. On *post mortem* examination, it was found that the cancer had ulcerated completely through from the œsophagus to the trachea, and that the latter was full of secretion from the growth, which, in his exhausted state, the patient had been unable to expectorate. The stomach was adherent to the circumference of the wound throughout. None of the sutures had penetrated its mucous lining, and there was no trace of peritonitis from the wound. So far as it went, the object aimed at in this, the first and most important stage of gastrostomy, had been attained, and the case may be regarded as telling in favour of the operation in simple insuperable stricture of the œsophagus; but, in cases of malignant disease, I would never urge, indeed, hardly recommend, an operation, the object of which is merely to prolong life, while leaving the disease itself untouched. Cases of gastrostomy, ending as did this case, are, I doubt not, far more common than public records would lead us to suppose. That a man should die as did my patient is nothing extraordinary; that he should recover is so, and it is the extraordinary, not the ordinary case, which is usually published.

Case III, herniotomy, is of interest, as the patient had been operated on for strangulation of the same rupture three months before by Dr. Cane. This caused no special difficulty in the second operation. It was performed under the spray, the wound healing in three days without suppuration; a result, I might say, which I have occasionally obtained without Listerism, where the wound has remained septic.

Case IV, hysterectomy, is, from the comparative novelty, rarity, and magnitude of the operation, of some interest, and calls for more detail. Mrs K., aged 35, a nullipara, consulted Dr. Kirkwood, my partner, in October, 1881, believing herself to be pregnant. The abdomen was enlarged, and she had constant sanious discharge. A tumour was diagnosed, and the patient was not seen again for four months, when the tumour was found to be greatly increased, and evidently equal with the uterus. The patient was wasting, and suffering much from its presence. Not being able to come to a precise diagnosis as to its nature, I advised the patient to see Sir Spencer Wells, who wrote as follows.[2]

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[1] Read before the Huntingdon Medico-Chirurgical Society.

"Mrs. K.'s is a more doubtful case, and I share your hesitation, but I am disposed to regard it as a multilocular ovarian cyst, so closely connected with the uterus as to draw it up almost out of the pelvis; but I have often operated in such cases, and found quite a sufficient pedicle............ I would make an exploratory incision, removing the tumour, if it is ovarian; if a soft fibro-myoma, then remove both ovaries, so as to bring about atrophic change in the uterus."

On August 29th, the patient's digestive functions being seriously impaired by the bulk of the tumour, which, though causing little pain, was a source of great discomfort, she was admitted into the Peterborough Infirmary. The abdomen was very prominent; unfortunately the notes of the measurement are lost. There was an obscure feeling of fluctuation, causing some of my friends, who examined the case, to feel very positive as to the presence of fluid. There was no evidence of adhesion to the abdominal wall. *Per vaginam*, the uterus was felt to be drawn up completely out of the pelvis. On September 21st, an incision was made into the abdomen and the tumour exposed. It was at once seen that it did not present the usual appearance of an ovarian cyst. On examination it was found to spring from the pelvis by a thick stalk, and it was so elastic, and gave so deceptive a feeling of fluctuation, that we thought it best to punctuate. It proved to be solid, and by careful examination we satisfied ourselves that it was a soft myoma of the uterus, and decided to remove the tumour with the uterus and its appendages in preference to performing oöphorectomy. I strangled the cervix and broad ligaments by three silk ligatures, and then removed the growth. There was severe hæmorrhage into the pelvis, due to an accident against which special precautions should be taken when the pedicle is broad, and has to be divided very close to the ligature, viz., the retraction of the broad ligament, so as to escape from the ligature. By the aid of Wells's long forcipressure forceps I was able to check this and reapply the ligature; and after the usual careful cleansing of the peritoneal cavity, I closed the wound, inserting one of Keith's glass drainage-tubes. The patient was greatly collapsed, and did not rally for twelve hours. The pulse and temperature kept down, but sickness was most troublesome. For five days nutrition was mainly carried out by enemata, and on the fourth day I discontinued even the ice by the mouth, directing the nurse to administer more fluid by the rectum, giving half the quantity of beef-tea twice as often and diluted. On the following morning—the fifth day—the patient was delirious and exhausted, but with no other bad symptom. I found, on inquiry, that, although only half the beef-tea had been given in each enema, the whole amount of brandy had been administered, the delirium being the result of the increased brandy taken *per rectum*. The patient was intoxicated, although she had never tasted a drop of alcohol. This little incident in the case is of value as showing the power of alcohol administered *per rectum*. There was slight cystitis during the second week of convalescence, but this soon ceased, and the patient left the hospital on October 17th cured.

Case V, ovariotomy, was one of very rapidly growing ovarian tumour, leading me to suspect before the operation that the tumour might be malignant. In November 1882, Mrs. W. came under the care of my partner, Dr. Kirkwood, for peritonitis with obstruction of the bowels, stercoraceous vomiting, etc. She recovered under treatment, but Dr. K. found a small pelvic tumour, and directed the patient to see him again in a few months. He saw nothing more of her, however; and in March, I was asked by Mr. Jolly to see her with him. I found her wasted to a skeleton, the abdomen enormously distended by the tumour, partly fluid and partly solid. The patient evidently knew it must speedily end fatally unless relieved. She was removed to the hospital, and, on March 5th, ovariotomy was performed. Troublesome hæmorrhage occurred from the numerous adhesions. It was checked by ligature, the pedicle ligatured and dropped into the cavity of the pelvis, the wound closed, and a Keith's tube inserted. The temperature was 100.8°. This rose after the operation, and reached 100° on the third day, but was never more than 99.4° on any other occasion, although the discharge from the tube certainly became offensive in the course of convalescence, and the patient was troubled with diarrhœa and sickness. She left the infirmary, cured, twenty-five days after the operation.

Case VI, ovariotomy. This patient had been previously attended by Dr. Bury, of Wisbech, with whom I first saw the case on the day on which I operated at the patient's house. The tumour was made up of numerous thin walled loculi, some of which ruptured during removal. In this case, therefore, I used a drainage-tube. The temperature rose on the second evening to 101°, and there was sufficient pain to require opium; but, by the fourth day, it was steady at 99°. On the fifth day, there were sickness and other signs of irritation of the bowel, which ceased when Dr. Bury removed the tube, and the patient convalesced rapidly.

Case VII, herniotomy, I mention only in connection with a series, but operation was required under circumstances which never should, but not unfrequently do, occur. I was called to the lady, six miles from my house, on June 24th, and, on arriving, was informed that she had been attacked with pain on the 20th, four days before, when her husband, taking counsel of a so-called homœopathic chemist, had treated the case, but had found that the effect of his doses of castor-oil was not to produce a dejection, but to cause his wife to vomit a potful of fæcal matter. This unexpected phenomenon had induced him to send for a doctor. I found a strangulated hernia, sent him for my instruments and for assistance, and operated, a cataract of fæces being vomited up whilst the patient was under ether. She made a good recovery, though some suppurative cellulitis delayed the curing of the wound.

Case VIII, operation for the cure of incarcerated hernia, peritonitis, and peritoneal fistula. Mrs. S., aged 44, applied, on March 4th, 1882, to the house-surgeon of the Peterborough Infirmary for relief for femoral hernia on the right side. The tumour had existed four years, and was about the size of a cocoa-nut. The greater part (intestine) was easily reducible, leaving a hard nodular portion, which could not be removed. On April 2nd, immediately after a stool, the bowel became incarcerated, but was returned by the patient after three hours. This was followed by great pain in the sac, nausea, and constipation. She was admitted into the hospital, and recovered under opium-treatment in five days, and left, being unwilling to submit to any operation for the radical cure of the hernia. Fifteen months later, on the 6th July last, I was called to Mrs. S., and found an opening in the sac, through which serum was exuding. She told me that the hernia had enlarged to the size of a quartern loaf; that latterly it had been very painful; but that it was relieved since the opening had formed; that the same thing had occurred before; and that, after lying in bed with wet cloths over the opening, it had healed, and she had got well. Her bowels were open; she had no sickness; temperature and pulse only slightly disturbed. Four days later, urgent symptoms having arisen, she consented to the operation. The fistula had ceased to discharge: the tumour had greatly enlarged; there was a constant vomiting of intestinal secretions. Temperature 104°; pulse 140; and the general condition of the patient such that very little hope was entertained of benefit from any operation. With the assistance of Dr. Kirkwood, I proceeded to reopen the fistulous orifice. Not more than a drachm of fluid serum escaped, nor was the tension of the sac relieved. When I next dilated the opening so as to introduce the finger, extending the incision upwards, I was able to pass my finger to the crural canal, and found the opening into the abdomen quite free, the finger passing readily by the side of the bowel through the neck of the sac into the general peritoneal cavity. It was evident that the urgent symptoms did not depend upon strangulation. I therefore laid the coverings of the hernia freely open in their whole length; and, carefully separating the emptied coils of the protruding two feet of inflamed intestine one from another, gently replaced them in the abdomen. There remained a large fleshy mass about the size and shape of a kidney, with a neck very much like a part of the bowel, passing through the abdominal ring. Having by careful examination satisfied ourselves that this was omentum, we removed it, having first ligatured the pedicle. The next step was to cut away, by elliptical incision, the whole of the coverings of the hernia, including skin and sac, merely leaving enough to allow the edges to be brought together without tension. I then closed the wound, passing the sutures, as a matter of course, through the peritoneum, leaving space for the insertion of a glass tube. This I passed down into the pelvis, my knowledge of its value alone, as I consider, justifying the previous steps of the operation.

If the cases of hysterectomy and others in this series show what may be done where the wound and the peritoneal cavity are kept aseptic by Listerian or other measures, this case illustrates what may be done in asepticism by drainage. On the following day, the tube was full to overflowing of most abominably stinking discharge, but the patient's temperature and pulse had fallen to 99° and 100 respectively; and, beyond a little sickness and slight pain, her condition was most comfortable. This putrid discharge continued for several days; but Mrs. S.'s convalescence was steady, and I ceased attending her on August 17th, leaving her, as I hope, radically cured of her rupture, although she will, as a measure of precaution, wear a truss. Among all the advances in abdominal surgery of the present day, drainage by means of large tubes stands, I think, preeminent.

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[2] Sir S. Wells, writing recommending me to publish the case, gave me permission to quote from his letter.

Case IX, ovariotomy, was a very simple case. The tumour was of the left ovary. The right I found slightly enlarged by several small and thin-walled cysts, and I therefore removed it also, although it is questionable whether it would have taken harm if left. No tube was used, and, by the end of the second week, the patient appeared well, but recovery was hindered by inflammation round the stump of this ovary. The temperature rose on the fourteenth day, the bowels ceased acting, and there was sickness. Further exudation could be felt in the right iliac fossa. The lump, however, disappeared on the twentieth day, synchronously with a fall of temperature; but there was no evidence of any discharge of pus.

Case X, ovariotomy, is interesting chiefly on account of the youth of the patient. I saw her first in the end of February. I found a tumour rather high in the abdomen, which I diagnosed to be ovarian. This interfered but little with the child's comfort, although it gradually increased in size. In the beginning of August, she had slight peritonitis, and on the 13th of September ovariotomy was performed. The tumour was made up of so many thick-walled cysts, that it was not possible to lessen its bulk as much as usual before removing it, and I had therefore to enlarge the abdominal incision. The abdomen contained serum and flakes of lymph; but I did not use a drainage-tube. The temperature was 101.4° on the evening of the operation, though it fell in zigzag fashion to normal on the morning of the fourth day. The rise and the rapid pulse showed, I think, slight peritonitis. The little patient was, however, well in a fortnight.

These ten cases are, I believe, all in which, during the past fifteen months, I have had to incise the peritoneum. In a case which I saw with the gentlemen here present, where a patient, the subject of hernia, was moribund from peritonitis and obstruction of the bowels, we determined on making the incision and examining the hernia; but the sac was empty, and I think we did not open it.

It would be unfair to leave the impression that all my cases of abdominal section have been as successful as those here recorded. I have opened the abdomen for the removal of tumours eighteen times. Four cases of ovarian tumour and one of parovarian cyst ended fatally, The remainder have recovered. The favourable results in my more recent cases depend, I believe, mainly on three factors, the importance of which is recognised by all operators, although there have been many unseemly disputes as to their relative value. The first is, most minute attention to keeping the wound aseptic; the second is, perfect closing of the abdominal wound, and dropping the pedicle into the abdominal cavity; the third, the use of drainage where there is the least doubt as to the operation being, and the wound and abdominal cavity remaining, aseptic. There are, of course, in addition, many details of the operation, learned either from the extensive experience of other operators, or from my own more limited practice, which are important; but to these no allusion is here necessary.

CATHETER-FEVER.

By JAMES NIVEN, M.B., M.A.Cantab.

THE following remarks are suggested by the recent observations of Sir Andrew Clark on catheter-fever, and by the debate which followed at the meeting of the Clinical Society.

In the beginning of 1879 the late Dr. Hutchinson, in the course of a series of lectures on intermittent pyrexia, pointed out the liability of the urinary track to become the starting-point of attacks of intermittent fever, and cited in instance two cases; one, that of a man aged 40, suffering from stricture, in whom the formation of a false passage, the result of unskilful catheterising, excited an attack of fever, lasting over a week, and disappearing with the passage of a bougie into the bladder; the other, that of a man, aged 45, in whom the impaction of two small calculi in the left ureter led to a pyæmoid fever which, after a course of four weeks, ended in death. Albuminuria set in about the end of life. No pyæmic deposits were found.

I may add the following case. A medical man, about 33 years old, after an operation for piles, required the passing of a catheter. This was followed by a rigor and remittent fever lasting about a week. The temperature attained a height of 104° or so on the second evening. He describes the illness as terrible, and attended for some days with the sensation of impending death, even when he was delirious. Both before and since he has been perfectly healthy.

With the phenomena of the passage of a gall-stone everyone is familiar.

It may be taken for granted that the class of cases to which Sir Andrew Clark alludes have no necessary connection with renal insufficiency, and that they are to be regarded as septic or irritative affections, or a combination of the two.

On the one hand, it seems clear from the phenomena of the passage of concretions along the bile-duct, ureter, and urethra, that these passages are very rich in both motor and in sensory nerve-connections. Any irritation in them would therefore be liable to produce severe constitutional disturbance. How great a difference may be produced by change of seat of a lesion is at once obvious, when we compare the constitutional effects of a whitlow with those of the same size of a boil on the chest. It seems reasonable to presume, therefore, that severe irritative continued disturbance may be produced by continued irritation in the urethra.

A curious fact illustrating the extreme sensitiveness of the region where the urethra enters the bladder is the shiver which many people experience when about to micturate. We call to mind also that, with stone in the bladder, the close of micturition is attended with pain at the point of the penis.

Again, constipation, especially after defæcation, often leaves a slight burning feeling in that region, attended with excitation at the point of the penis, not unattended with more or less sexual reflection. These and other similar well known facts suggest to us the proximity of the sexual centre to that regulating the neck of the bladder, but they also remind us of the great sensitiveness of this portion of the urethra. Of the powerful impression which is sometimes produced by the passage of a catheter we are at once reminded when see, as we occasionally do, men get faint or become sick when the catheter is passed, even in the absence of acute urethritis.

On the other hand, some of the cases referred to are probably septic, and due to septic materials lodged in catheter-abrasions. Such cases would be liable to occur in tender states of the prostate gland, like the third case I have mentioned. It is clear, at any rate, how necessary it is to employ a catheter scrupulously cleansed, both inside and out, and to pass it without the employment of force.

One remark of Mr. Savory's, in the course of the debate, struck me greatly. He said, "I am also sure that in many of these cases the kidneys are not affected in the ordinary way, that is to say, in ways corresponding to the description which we get in certain works on diseases of the kidney."

It seems reasonable to regard it as likely that the nervous connection between the kidneys and the rest of the urinary track is close, so that a shock impinging on any part of the urinary track, while it radiated over the rest of the system, would light with exceptional force on the kidneys.

In Dr. Sanderson's second case, although for a day or two before death the urine was smoky and albuminuric, there was no evident disease of the right kidney. Doubtless the microscope would have revealed catarrh. In another case, in which I lately performed a *post mortem* examination, where a small tumour of, I believe, a harmless nature had been removed from the urethra a few years before, the bladder was but slightly affected; one kidney was dotted all over with little patches of pus, the pelvis containing a good deal; the other was a typical large white kidney. There never was any dropsy. We are all familiar with the so-called extension of inflammation from the bladder along the ureters to the kidneys. I have such a case now where extremely little urine is passed. There is cystitis, and albuminuria out of all proportion to the white corpuscles. There is great pallor, but no dropsy. I have found no casts. Whether this be taken as a case of nephritis or not, such cases are common enough.

Now, it is very doubtful whether the disease of the other kidney in the first class is caused by overwork, or in the second by extension. It is at least as likely to be due to nervous disturbance, propagated along lines of least resistance. My impression is, that cystitis produces a marked influence on the amount of urine secreted, and that urethritis exercises an influence also, though not so great. When we recall, therefore, the great nervous disturbance sometimes produced by catheterism, the great influence of emotions, such as fear, and of hysterical conditions, on the secretion of urine, and the probability of a close connection between the different parts of the urinary track, we are inclined to suspect that a temporary derangement of the action of the kidney has something to do with the severity of some of these cases, even though such derangement is not revealed by *post mortem* examination. The effect produced on the kidneys would be dependent on two main factors—the magnitude of the incident shock, and the relative strength of the kidney, or, in other words, the diathesis of the individual. That this is so may be inferred from such facts as the albuminous polyuria which follows section of the renal nerves, the selective incidence of acute nephritis, and the varying occurrence of albuminuria in fevers.

Dr. MacCombie of the Deptford Hospital pointed out to me, about three years ago, that scarlatinal nephritis has a tendency to run in families, two, or even three, of the same family being affected with it. This observation I have had other opportunities of confirming.

As an illustration of a renal phenomenon not usually described in books, the following case may be given.

A lady, aged 41, became suddenly ill after severe exertion in the month of June last. For some years she had been subject to palpitation on exertion. Her temperament was neurotic. She had had two attacks of rheumatic fever. She presented the appearance of one suffering from severe cardiac dyspnœa. The action of the heart was markedly irregular, now going on very fast, now quite slow, now missing one, two, or even three beats. The pulse was soft and fairly full. Urine normal, no albumen. There were no cardiac murmurs, but there could be no doubt of severe cardiac affection, and the prognosis was grave. With absolute rest and other treatment, she recovered so as to be able to get about; and I was not again called to see her till the beginning of November, when it was plain that the end was approaching. Both legs were much swollen. There was no dropsy elsewhere. Her breath had an urinous odour. The tongue was dry and thickly furred. She sank into a hysterocomatose state, and died, as it seemed to me, from uræmic poisoning.

Post Mortem Examination. The lungs were congested and œdematous. There was a large amount of urinous-smelling fluid in both pleural cavities and in the pericardium. Both cardiac ventricles were considerably dilated. All the valves were incompetent, the aortic least so, their edges being thick and rounded; on the tricuspid were some vegetations. A band of innumerable capillary hæmorrhages ran on the surface of the heart along the junction of the left auricle and ventricle and between the two ventricles. The liver was markedly nutmeg. The spleen was apparently normal. The kidneys were apparently normal, peeling readily.

REPORT OF THE BRITISH LYING-IN HOSPITAL FOR 1883.

By HEYWOOD SMITH, M.A., M.D., and FANCOURT BARNES, M.D.,

Physicians to the Hospital.

DURING the year 1883 there were 168 women delivered in the hospital, of whom one died; giving a mortality of 0.595 per cent. Of the 170 children born in the hospital, 94 were males, or 55.2 per cent.; and 76 were females, or 44.7 per cent. There were 8 stillborn children, or 4.7 per cent., of whom 3 were males, and 5 were females.

Among the mothers there were 41 primiparæ, or 24.4 per cent.; and there were 127 multiparæ, or 75.5 per cent. There were 5 breech-cases, or 2.9 per cent.; 4 deliveries by the forceps, or 3.5 per cent.; one case of cephalotripsy; 4 cases in which the induction of premature labour was had recourse to, in one of which delivery was subsequently completed by cephalotripsy. There was one case of *post partum* hæmorrhage which was controlled by ergot and abdominal pressure.

There was one case, sent up to the hospital by Dr. Whittle of Brighton, with albuminuria, ascites, and anasarca. She was delivered naturally of a stillborn male child, which was also affected with ascites and anasarca. The placenta, which was expelled naturally, was hypertrophied and dropsical, and very nearly equal in bulk to four ordinary sized placentæ. The patient recovered without any complications, and left the hospital, having only a trace of albumen in the urine.

The morbility among the mothers was as follows. In 27 primiparæ the temperature did not exceed 100° Fahr., or 16.07 per cent.; in the multiparæ it did not exceed 100° Fahr. in 91 cases, or 54.1 per cent.—giving a total of 118 cases, or 70.2 per cent., in which it did not exceed 100° Fahr.

In 7 primiparæ, or 4.1 per cent., the temperature was over 100° Fahr., but did not exceed 101° Fahr. In 9 multiparæ, or 5.5 per cent., it was over 100° Fahr., but not over 101° Fahr.—making a total of 16 cases, or 9.5 per cent., in which it did not exceed 101° Fahr.

In 10 primiparæ, or 5.9 per cent., the temperature rose above 101° Fahr., and in 25 multiparæ, or 14.8 per cent., it rose above 101° Fahr., making a total of 35 cases only, in which the temperature rose above 101° Fahr.

We draw attention to the fact that, under the continued antiseptic treatment in the hospital, the morbility among the mothers has decreased each year. The mortality in the hospital remains nearly the same as during the two preceding years, viz., 0.595 per cent. The one death which occurred in the hospital during the year was that of a strumous young primipara, aged 19, whose labour was natural, and in whom no lesion of the genital tract was discoverable.

Among the eight cases in which operative interference was resorted to, no death occurred. The antiseptic system which we have published on several occasions during the past years has been rigidly adhered to in all its details. We observe with satisfaction that during the past year the Edinburgh Maternity Hospital appears, from its published report, to have introduced the plan, originally adopted in the British Lying-in Hospital, of having carbolic spray continuously playing in all the wards.

SURGICAL MEMORANDA.

PLASTER-OF-PARIS JACKET IN CARIES OF THE SPINE.

AFTER reading the two articles in the JOURNAL of December 8th and 15th last, respectively, by Mr. Noble Smith, "On the Treatment of Caries of the Spine," I purposed giving details of several such cases I had treated by plaster-of-Paris jackets, and remarking on some points in which such an appliance, in my opinion, excels not only that described by Mr. Smith, but also the majority of those complicated and expensive instruments advertised and sold by surgical instrument-makers. But Professor Sayre himself replies in the JOURNAL of January 26th, to many of the objections raised by Mr. Smith. So now, in place of detailing any cases in order to show the all but universal (if not universal) applicability of plaster-of-Paris jackets to those cases, I should wish to say a word or two concerning the sources of failure in their use.

And, first, I should wish to direct attention to the fact that, unless every detail is carefully attended to, the comfort of the patient may be sacrificed, and the efficacy of the jacket greatly lessened. 1. The patient ought to have a closely fitting very fine white woollen undershirt (or guernsey), without sleeves, but having shoulder-straps. 2. Great care must be exercised in suspending the patient as directed by Professor Sayre. 3. The bandage is to be carefully applied, being brought well below the crest of the ilium (which gives the jacket a fixed point below), and from this to be carried spirally upwards, with as few reverses as possible. If this advice be followed, that is, the bandage not merely wound round the body, but applied systematically and with an object, we should avoid the unpleasant experience which befel a friend of mine. He applied a jacket to a child, and requested the mother to appear with the child next day for inspection. She did appear, but bearing the child on one arm, and the jacket over the other, and I am afraid he put the blame on the plaster. 4. The patient should be kept suspended till the hardening process is well advanced, thus preventing cracks in the jacket, which only too often are the source of very great discomfort. 5. The jacket should be kept on for a sufficient length of time. If those points were attended to, this, the cheapest and most easily adapted application for such cases, would be shown, by results, to be by far the most efficient.

While resident surgical assistant in the Western Infirmary here, I applied considerably over fifty plaster-of-Paris jackets in cases of carious vertebræ, in various situations and in various stages of advancement; and those patients on whom they were applied reported themselves at intervals of from a fortnight to six weeks. When thus showing themselves, it was a very rare exception to hear of complaints beyond that which could be remedied by the paring of a sharp edge of the bandage; and, if more than this were complained of, the application of a fresh jacket, with increased care in all cases, proved comfortable. In no case have I ever come across a patient who was desirous of discarding a plaster-of-Paris jacket from any real or fancied inconvenience; but the reverse of this has been my experience.

Within the last eight months, I have applied nine such jackets in private practice. These patients I see at intervals with the gentlemen for whom I applied them, and all express themselves as now free from pain, able to attend school, and, in one case, to business, and are altogether very comfortable.

Everyone who has had the opportunity of seeing, as I had some two years ago, through the kindness of Professor Sayre's assistant, Dr. Taylor, the jackets carefully applied by Professor Sayre, can only wonder why medical men persist in calling in the aid of the saddler and his appliances, often uncomfortable in the extreme, and, in the majority of cases, quite inefficient, when they could themselves apply the most suitable remedy.

J. WALKER DOWNIE, M.B., 7, Sandyford Place, Glasgow.

CASE OF RUPTURE OF INTESTINE.

W. H., aged 32, fell from a tree, a distance of twenty feet, on December 24th, 1883, about four o'clock in the afternoon. He had dined at one o'clock. He fell flat on his body, and was found by those who went to his assistance lying on his belly. With help, he walked two hundred yards to a truck, on which he was taken home. He did not lose consciousness. When seen at 5 P.M., he was suffering from pain, chiefly over the region of the bladder, in the left groin, and in the right flank. There was an abrasion of the right elbow, and his lips were cut. There was very little shock. He said that he wanted to pass urine, but could not do so; he had passed urine before ascending the tree. A catheter was passed, and about a pint of clear straw-coloured urine withdrawn. He was ordered to have thirty drops of tincture of opium every three hours, and ice and milk. At 7 P.M. he was found lying over the edge of the bed vomiting, and had thrown up his dinner partially digested, and containing a few clots of rather bright coloured blood. As he had a good deal of abdominal pain, a quarter of a grain of morphia was given subcutaneously, and a bran poultice applied to the abdomen. The temperature was 99°; the pulse was rather frequent and hard. He could take a deep inspiration which caused pain only in the right flank. At 10 P.M., he had expectorated some mucus tinged with blood, but had had no further vomiting. He could bear firm pressure all over the abdomen, but there was tenderness in the left groin. About three ounces of clear urine was drawn off by the catheter. Temperature, 100.6°; pulse, 100; respiration, 24; he was very cheerful.

December 25th, 11 A.M. He said he felt comfortable. He could bear firm pressure on the abdomen; there was tenderness in the right flank and left groin. Half a pint of strong smelling dark brown urine was withdrawn by the catheter. He was ordered to continue the opium-mixture, milk, and ice. Temperature, 100.2°; pulse, 93; respirations, 26; his breathing was shallow, but he could take a deep breath. At 5 P.M., there was no change in the breathing; half a pint of urine was withrawn by the catheter; the abdomen was rather distended and resonant; pain was not increased. I left him feeling comfortable and cheerful. I did not see him again, but was told that about 10 P.M. he complained of pain in the abdomen for about an hour, and then was easier. He was cheerful and comfortable up to 3 A.M., when, after a few deep inspirations, he died.

Post mortem examination thirty-seven hours after death. The abdomen was distended and discoloured; there was considerable peritonitis, with lymph very thick in patches on the small intestine in the left iliac region; much congestion of the intestine, which was ruptured at about the junction of the ileum and jejunum, opposite its mesenteric attachment; the rent would admit the introduction of three fingers. There was no other lesion. In evidence given at the inquest, it came out that a piece of wood about three inches by five inches was found under the body of the man; this would probably account for the rupture.[1]

A. MACLEAN, M.D., Kew.

TOXICOLOGICAL MEMORANDA.

POISONING BY PRIVET-BERRIES; AND BY FRENCH BEANS.

ON October 27th, 1883, I was called to two children, aged 3 and 5 respectively, who had both eaten freely of the ripe berries of the common privet (*Ligustrum vulgare*) They both had vomited very freely, and had also been purged several times. Their pulses were very feeble. The younger, who was much more affected than the elder, appeared collapsed, and her pulse was almost imperceptible. She had also vomited some bloody mucus. Hot mustard-poultices applied to the epigastrium, and frequent doses of aromatic spirits of ammonia, relieved their symptoms; and some hours afterwards both children were quite well again.

In another case, I was called, on January 3rd, 1884, to a child, aged 2½ years, who was supposed to be dying. When I saw her, she was rolling about on her nurse's knee in apparent agony, and was vomiting freely. Her pulse was very feeble; and, on examining the vomit, I found portions of the dried seeds of the French bean (*Phaseolus vulgaris*), which had no doubt caused her symptoms. The same treatment effected a cure in about two hours' time.

FRANK BROADBENT, M.R.C.S., Collingham, Notts.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

WANDSWORTH AND CLAPHAM UNION INFIRMARY.

MYXŒDEMA: DEATH: NECROPSY.

[Reported by Dr. JAMES ALLAN, late Assistant Medical Officer Wandsworth and Clapham Union Infirmary.]

E. P., a female, aged 67 at time of death in March, 1882, was under observation in the Wandsworth and Clapham Union Infirmary for over three years.

She was a domestic servant, unmarried, and the only survivor of a family of nine. All her brothers and sisters had died of chest-complaints. In both father's and mother's family there was a history of phthisis. The patient had always been a delicate ailing woman. When about 18, she began to have a pain in the left side; it was aggravated by exertion, and continued on and off throughout life. She lost her teeth while young, was a poor eater, took very little animal food, as it did not agree with her; beer she took regularly, often also port or sherry, and sometimes gin and water. She "never was one to perspire much." The catamenia appeared at the age of 20, and ceased at 44; usually there was pain at the periods. At the age of 22 she had a disappointment in love. About the middle of the year 1879 the patient first noticed swelling of the eyelids and of the hands, but was not confined to bed until January, 1880, when she had to be in bed from debility. After this date, till the time of her death, she was only occasionally able to leave bed for a short time.

Her case, however, did not attract much attention until June, 1880, when her condition was as follows. She was confined to bed but able to do needlework; the face was rather swollen and without expression; and the nose was thick and broad; on both cheeks there was a patch of a pink colour; the lips were large and thick, and the mucous membrane of a violet colour; there was œdema of the eyelids and under the eyes; the hair of the face was scanty. The puffing under the eyes was, at times, very marked, and of a translucent appearance; subsidence was accompanied by copious discharge of clear fluid from the eyes and nostrils. The teeth were nearly all gone, the tongue was large and flabby, the appetite was capricious, the bowels constipated, and she was troubled with eructations, and complained of pain in the left hypochondrium and in the back. Her speech was slow, the mental operations also slow, and memory was impaired; her temper was usually placid, but occasionably irritable. She complained of a sensation of great weight in the occipital region; she was kept awake often at night by painful flexions of the toes on the soles of the feet. The skin was dry and had a glistening appearance; the cutaneous lymphatics were much enlarged. A lymphatic vessel of the forearm felt like a hard cord, nodulated and rigid; a blow on this, on one occasion, snapped it across, and a painful swelling resulted, lasting for several days. Although the limbs seemed somewhat swollen, they did not pit on pressure. There was puffing of the back of the hands; the hands were not deformed. Every two or three weeks the fingers of both hands, but especially the forefingers, became cold, numb, of a waxy pallor, and quite insensible to pain, so that a needle could be introduced without the patient feeling it, and no blood escaped from the puncture. This peculiar condition of the fingers would last a day or two, and then passed away to a considerable extent. She always felt cold. The lower limbs were weak, and felt heavy and tight.

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[1] I think it is worthy of remark that, when the coroner for West Surrey found that a *post mortem* examination had been made without his order, he gave the medical witness the full fee of two guineas.

Examination of the chest showed the lungs to be emphysematous. The first aortic sound was accentuated, and the second sound was not heard. Much alarm was caused by taking a sphygmographic tracing of the radial pulse; she felt very warm, but did not perspire. There was frequent sighing respiration. The temperature ranged from 95° to 97°. The quantity of urine passed in twenty-four hours varied from two to three pints. The specific gravity ranged from 1008 to 1012. The urine was alkaline, and deposited phosphates, and gave an occasional trace of albumen.

These symptoms continued, without material alteration, up to the date of her death. For several days before death she was in a semicomatose state, but could be roused, and then complained of pain in her left side.

Necropsy.—There was a large amount of fluid in the membranes of the brain. The heart weighed 11 ounces; it was dilated and fatty; the valvular openings were enlarged, and there was aortic incompetence. The right lung weighed 14½ ounces, the left, 9½ ounces; both were œdematous and emphysematous. The liver weighed 41½ ounces; the spleen, 3½ ounces; the right kidney weighed 4 ounces, the left, 4½ ounces; the capsules were adherent, the cortical part was small, and the pyramids obliterated. In the cellular tissue behind and in the neighbourhood of the kidneys, there was infiltration of a jelly-like substance of a reddish colour. The colon was very much dilated, and its walls atrophied.

NORTHAMPTON GENERAL INFIRMARY.

DISEASE OF THE KNEE-JOINT: EXCISION.

(Under the care of Mr. PERCIVAL.)

S. W., aged 40, a labourer, was admitted on March 4th, 1882. He had always enjoyed good health, until he met with an accident three years before admission, pinching his knee between two barrels. He continued at work for six months, feeling slight pain in the knee, which, however, afterwards became so painful as to prevent him from walking, and he was "laid up with it" for some time.

His general health was unaffected, but the right knee was ankylosed in the extended position. Any attempt at flexion caused great pain, though gentle movement of the limb was well borne. There was thickening of the whole head of the tibia; the patella was fixed; the natural depressions of the knee were lost. The circumference of the diseased joint was half an inch more than the sound knee, and its temperature was increased; there was no jumping or starting of the knee; pressure on the heel caused slight pain.

On March 17th, the patient being under the influence of ether, the usual operation for excision of the knee was performed, with antiseptic precautions. The limb was put up and fixed with wax and wax bandages, in an interrupted splint, after Mr. Howe's method, and slung in a cradle.

An examination of the joint showed that the cartilages of the condyles were partly destroyed; the femur was healthy; the cartilages of the patella were partly destroyed; the head of the tibia showed considerable disease; the semilunar cartilages were entirely destroyed; a portion of the right articular surface was exposed, and about its centre was a small sequestrum, of the size of a threepenny-piece; the tibia was healthy at the line of section, except at the part corresponding to the sequestrum, which presented an inflammatory deposit; the synovial membrane was thickened and vascular, and of a purplish red colour.

March 18th. The wound was dressed; there was free oozing of blood from the inner side. The temperature in the morning was 101.4° Fahr.; in the evening, 103° Fahr.

March 19th. The dressing was renewed. One stitch was removed, and the wound syringed out, a little fluid collecting. The temperature in the morning was 102.2° Fahr., and in the evening 102° Fahr.

March 21st. There was no redness or tension of the wound, which secreted a semi-purulent fluid. The patient was talkative at night, and slept little; the tongue was covered with a brown fur at the root, and he complained of thirst. The temperature in the evening was 102°.

March 23rd. The evening temperature was 103° Fahr.

March 24th. The temperature was 99° in the morning, and 102.4° in the evening.

March 29th. The temperature was 99° in the morning and 100° in the evening. The wound had united in front; there was no swelling or bagging of matter. The discharge was moderate, and consisted of grumous pus; he slept well, and the leg was comfortable.

April 20th. For two weeks the dressings had not been changed; during that time he made uniform progress, and the discharge was slight.

May 8th. The splint was removed for the first time since the operation; the leg was in good position, and good union had occurred; a short back splint was now applied.

He could raise the leg from the bed lying on his back, and could bear manipulation. He was allowed to get up.

June 21st. He was able to walk well with one crutch.

REMARKS.—The advantage of this form of splint and the wax bandages is perfect immobility of the limb during the whole course of recovery.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 5TH, 1884.

J. WHITAKER HULKE, F.R.S., F.R.C.S., President, in the Chair.

Sporadic Cretinism.—Three papers, of more than usual interest, dealing with the subject of sporadic cretinism in an exhaustive manner, were read. The first was by Mr. BOWLBY, who showed four specimens. 1. A very large male, born at full term, who lived one hour. The head was large, well-shaped, and the cartilaginous base was normal. The back of the neck was occupied by masses of subcutaneous fat. The skin was œdematous, and semi-translucent. The thyroid gland was absent. The upper and lower extremities were very short, and the epiphyses were large in proportion to the shafts, and readily separated from the diaphyses. Under the periosteum of many of the long bones was a soft white material of undetermined nature; the ribs presented an oblique fissure at their external ends. 2. A fœtus born at term. The body was of normal size. The head was natural of shape, and the cartilaginous base of the skull was natural. The extremities were extremely shortened, epiphyses being normal and the shafts exceedingly short; there was no enlargement at the epiphysial lines, and no attempt at ossification in any of the epiphyses. The ribs were short, and the anterior extremities enlarged and nodular. 3. A fœtus measuring twelve inches. The head was broadly pyriform, being enlarged in the transverse and vertical diameters. The frontal, parietal, and occipital bones were represented by a single continuous case of bone widely open in front and above, the other cranial bones were depressed; all were light, dry, and porous. The ribs were very thick. The extremities were stunted, all the bones of them, including the phalanges, were thick, heavy, and more or less bowed; the epiphyses were large in proportion to the shafts; but there was no swelling at the epiphysial lines. 4. The head was natural, but there was cleft palate. The forearms were very short and curved; the lower extremities were also very short and somewhat curved. The microscopical appearances in all the cases were very similar. In the epiphysial cartilages the cells were not arranged in rows at the junction of the epiphysis with the shaft; there was no evidence of ossification at this point. Between the bony part of the shaft and the cartilage of the epiphysis was a well-marked layer of connective tissue continuous with the periosteum. This condition was present in the bones examined. Mr. Bowlby's specimens being all from a museum, he was unable to give any clinical details. Briefly reviewing his cases, and comparing them with those recorded by Dr. Hilton Fagge, Dr. Barlow, Mr. Shattock, and others, he noted that in none of his cases was there any premature synostosis of the basilar process with the sphenoid bones. In his first case the thyroid gland was absent, and there was a great excess of adipose tissue at the back of the neck, though there were no definite fatty tumours. The other cases afforded no evidence on either of these points. The chief interest in his specimens, however, lay in the extreme shortness of the bones of the extremities, and this he attributed to the ingrowth of connective tissue at the junction of the epiphysis with the diaphysis. As to the proximate cause of this, after referring to the admitted resemblance between cretinism and myxœdema, he suggested that in sporadic cretinism, and perhaps also endemic, there might be a tendency in the connective tissue of the periosteum to overgrowth, and observed that, after the removal of the thyroid gland in young people, growth had been arrested, and a condition akin to myxœdema produced. The curvature of the bones he attributed to the very early stage at which the interference with growth took place; the earlier this commenced the more curved the bones, and *vice versâ*.—The second paper was by Dr. THOMAS BARLOW, who showed a specimen closely resembling that exhibited by him during the debate on rickets. In the long bones was seen the defective row-formation in the primordial cartilage, in consequence of which the process of ossification was rendered abnormal. The growth of the bones was arrested in length. The bones formed from membrane were well developed. The epiphyses of the long bones were relatively large, there was no proliferation of cartilage along the line of ossification, as in rickets; along the upper line of ossification was a fibrous layer spreading from the periosteum. There was no true beading of the ribs, as in rickets, but there were enlargements due to an inverting sheath of bone round the end of the costal cartilage. There was premature synostosis between the basioccipital, basisphenoid, and presphenoid bones, and the cartilage-formed part of the occipital bone was stunted; the membrane-formed bones of the skull were well developed. The cerebellar fossæ were practically effaced, and the growth of the cerebellum was therefore much arrested on the under surface of the brain. The under surface of the temporo-sphenoidal, temporo-occipital, and uncinate convolutions, were very deeply cleft by a fissure extending upwards and forwards into the temporo-sphenoidal lobe to near the posterior limb of the fissure of Sylvius. The fissure was symmetrical on the two sides. In regard to the nixene the heart showed funnel-shaped aortic and pulmonary orifices, a patent foramen ovale, and incomplete septum ventriculorum; there was no mitral orifice. The thyroid gland was normal, and there were no separate fat-masses in the neck. He (Dr. Barlow) did not deny the existence of fœtal rickets, but his contention was that these cases had nothing to do with rickets. He had seen instances of premature union of the frontal and parietals with the occiput in place of the more common basic form, sometimes. In the cases published by Dr. Fagge the limbs had not been so extremely stunted as in his own cases; and as to the absence of the thyroid, the case he showed that evening had a normal thyroid. In one of Dr. Fagge's cases, after death, a small goître had been found, when the thyroid had been supposed to be absent. Fat-masses in the neck were not constant, though there was often an increase of subcutaneous fat. The histology of the long bones afforded scope for further investigation.—The third paper was read by Mr. SUTTON, who showed a specimen of sporadic cretinism. Whereas the head of a fœtus at term ought to measure one-fourth of the whole height, in this case it measured about one-third (total heigth, 20 inches; head, 6½ inches; trunk, 9 inches; lower limbs, 4½ inches); the upper limbs, instead of reaching as low as the middle of the femur, extended very little below the umbilicus. The skin of the limb was transversely wrinkled, and there was an universal excess of subcutaneous fat. The thyroid gland was twice its usual size. The base of the skull was very short, owing to synostosis of the basilar suture. The squamous portion of the occipital bone was much bulged backwards; all those parts of the skull which arise in membrane were enormously exaggerated in extent, but the bony matter was very deficient, the vertex being chiefly formed of stout membrane. The ventricles of the brain were distended with fluid. The ribs were broad, and the heading of their shafts at the costo-cartilaginous junction was obvious. The scapulæ were thick and stunted, and the bones of both extremities had short thick shafts and large terminal cartilages; the ossa innominata were thick and stunted. Sections made the epiphysial regions show, on microscopical examination, an absence of the rows of cells constantly seen where hyaline cartilage is undergoing conversion into bone, and the presence instead of a line of fibrous tissue continuous with the periosteum. Throughout the skeleton, there was an overgrowth of membrane bone, and a lack of cartilage-metamorphosis. It seemed as though membrane and cartilage, instead of harmoniously working together to form bone, had broken alliance with each other, and pursued their own course to each other's detriment. —The PRESIDENT said he was greatly interested in the subject raised.—Dr. GOODHART showed photographs of a child, nine years old, the subject of sporadic cretinism.—Dr. MAHOMED mentioned three cases which had been under his care. One patient was a stunted but intelligent girl, with thick limbs and enlarged epiphyses. The rest of the family were healthy. Two other children, sisters, also under his care, presented a condition just like that of the first case. The cases seemed to belong to the same group of cases of sporadic cretinism, though not properly described by that term.

Fibroid Disease of the Heart.—Dr. HALE WHITE read a paper on fibroid disease of the heart, in which he reminded the Society that it was just ten years since the late Dr. Hilton Fagge read his exhaustive paper on this subject. During this period, nine cases had occurred at Guy's, in which the only cause for sudden death was this condition of the heart. Dr. Hale White related a typical case, in which a man was seen by a student to fall down in the Borough; he was at once brought to Guy's, and, on admission, it was found that he was dead. At the *post mortem* examination, the only cause for his death was the fibroid disease of the wall of his heart, and this was probably syphilitic, as other evidences, such as old iritis and fibroid testicle were present. Specimens from this case were shown under the microscope. The great importance of fibroid disease of the heart as a cause for unexpected death was pointed out, and, inasmuch as nine cases had happened at Guy's Hospital, it might be taken that Dr. Fagge's prophecy that this would turn out to be a common cause of sudden death was proved. With regard to syphilis, this was present in four out of the nine cases, so that we must now look upon sudden death as one of the complications of this disease. In the remaining five cases, there was nothing to show what was the cause of the fibroid disease, nor were there any symptoms to point to it during life; in fact, in most cases it was definitely stated that, at the time of death, the patients were in the best of health.

Carcinoma of Œsophagus.—Mr. BENTON showed a specimen of hard carcinoma of the œsophagus. The patient was a man of intemperate habits, and, fourteen months before his death, he began to suffer from dysphagia, and a stricture of the œsophagus was diagnosed after examination. The patient was always able to take sufficient food, and derived considerable comfort from nutrient suppositories.—Mr. BUTLIN, who had made the necropsy and examined the growth, said that it was a hard, spheroidal celled, carcinoma, which had infiltrated the walls of the œsophagus. The ulceration was very much less than in epithelioma. The case ran a rapid course, and affected the glands and the pericardium.—Mr. CLEMENT LUCAS asked what was the immediate cause of death.—Mr. A. BOWLBY referred to a case which had recently died in St. Bartholomew's Hospital with carcinoma of the œsophagus. There was a large foul slough, and the patient in this case died of septicæmia.—Mr. BUTLIN said the patient appeared to die, as patients often did after gastrostomy, of inanition.

Tumour of the Bladder.—Sir HENRY THOMPSON said that this was the sixteenth specimen of tumour of the bladder which he had removed within recent years. It was possible, he thought, to generalise a little from the facts already accumulated. He was now inclined to think that these tumours were more common than he had at first supposed. The tumour in this case was large, of cauliflower-shape, and springing by a broad base from the opposite face and right side of the bladder. It was removed by two applications of the forceps. The patient was aged 44. When first seen, in 1881, he gave a six years' history of bleeding. The average duration of hæmaturia in these cases was five to eight years before it becomes severe. Gradually the patient's health began to give way, and he was operated on last November. A recurrence was apt to occur unless the whole was removed. Of his cases, ten or eleven might be classed as villous or papillomatous growths. In some cases the history began with some distinct source of local irritation. In two cases there had been calculus. Dr. Heneage Gibbes, who had examined the growth exhibited to the Society, had reported that the groundwork of the growth was loose fibrous tissue, with filiform processes covered by stratified epithelioma; the deeper parts contained muscular tissue. In eleven out of sixteen cases in which he had operated, the structure was homologous with that of the coats of the bladder. Two others were instances of epithelioma, and two others were infiltrations of a doubtful, but probably malignant, character. Whenever anything giving rise to the suspicion of carcinomatous growth could be made out by examination, he avoided operation. In his two earliest cases, two years and a half ago, there had been no recurrence. It was impossible to suppose that the whole of the tumour was removed, so that the whole recurrence must be due to cicatricial changes at the base of the growth.—Mr. BUTLIN said that about one and a half years ago he had examined a tumour removed from the bladder of a young woman. It was of the same nature as that now exhibited by Sir Henry Thompson, consisting of a fibrous base with epithelial covering. The growth in this case did recur, as a number of soft vascular senile growths, which presented a well marked structure of round-celled sarcoma. —The PRESIDENT thought that the cases of tumour in the bladder were less rare than had been generally supposed. He had three under his own care during the last year, and he believed that his colleague, Mr. Henry Morris, had the same number. Of his own cases, in one, the growths were multiple (epithelioma), in another case the growth was a papilloma, but too extensively attached to be removed; in the third case, the growths was also a multiple papilloma, and in this case also the operation failed.

Calculus Impacted in a Sac in the Bladder.—Sir **Henry Thompson** said that in the whole of his experience he had only seen four cases of calculus impacted in a sacculus. In this case the patient was a woman, aged 42; she had suffered for a year and a half from vesical trouble. About two inches from the external orifice, at the base of the bladder projecting from the surface, was a tumour, the size of a chestnut. No aperture of any kind could be seen. Three other examples of sacculated calculi, removed by operation by Sir Henry Thompson, were exhibited to illustrate the subject, two from males, one from a female, in all, four cases.—Mr. **Black** related a case of calculus impacted in the ureter, and suggested that this might be the explanation of Sir Henry Thompson's case.—Mr. **Thomas Smith** referred to a case of stone in each ureter, and adopted the suggestion made by Mr. Black.—Mr. **Clement Lucas** referred to a case recorded in Mr. Reginald Harrison's book. He thought Mr. Black's suggestion very probable.—Sir **Henry Thompson** could not agree. When calculus was impacted in the ureter, characteristic symptoms were almost always present; enlargement of the ureter, hydronephrosis, and a long train of symptoms. He was confident that none of his cases were instances of impacted stone in the ureter, with which he was quite familar.—Mr. **Thomas Smith** said that, in his case, there were no such symptoms as Sir Henry Thompson referred to; stones might be impacted in the ureter without causing hydronephrosis.—Mr. **Black** said there was no hydronephrosis in the case he referred to.—Sir **Henry Thompson** said that he must adhere to his diagnosis in his own four cases.

Card Specimens,—The **President** showed two drawings of Rodent Cancer of the Face.—Dr. **Lediard** exhibited a specimen of the Epithelioma of the Heel occurring after injury.—Dr. **Hale White** showed an Infiltrating Tumour of the Bladder.—Mr. **Bowlby** showed a Dermoid Cyst of the Finger.

Living Specimen.—Mr. **Stoker** showed a Black Tongue. The patient first noticed it about three years ago.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, January 9th, 1884.

Henry Gervis, M.D., President, in the Chair.

The late Mr. B. R. Wheatley.—The **President** announced to the Society the death (which had taken place that day) of Mr. B. R. Wheatley, who had acted as their Assistant Secretary from the foundation of the Society till about two years ago. A vote of condolence with the relatives of the late Mr. Wheatley was moved by Dr. **Matthews Duncan**, seconded by Dr. **Playfair**, supported by Dr. **Priestley**, and carried.

Hysterectomy.—Mr. **Knowsley Thornton** showed an enlarged uterus, surrounded by multiple fibroids, the right ovary and tube attached, the stump of a large fibro-cystic tumour of uterus (also shown), and a partly calcified fibroid of the size of a fœtal head, which had to be enucleated in order to apply the *serre-nœud*. The parts came from a single woman aged 55, from whom, on account of excessive hæmorrhage and rapid growth of the tumour, they were successfully removed.

Hæmatosalpinx.—Mr. **Knowsley Thornton** also showed the ovaries and tubes removed from a married lady aged 29. She had suffered from repeated hæmorrhages, which followed a severe emotional shock; and tumours were discovered to the left and right of the uterus. These were removed, and proved to be the tubes, full of tar-like blood, and firmly adherent. There was also an ovarian cyst, with commencing papillomatous growth. After removal of the diseased parts, the discharge gradually ceased, and the patient did well. Mr. Thornton thought the case either one of tubal pregnancy, or of hæmorrhage the result of emotional shock, the blood being prevented from escaping.

Pelvic Hæmatocele from Malignant Disease of Peritoneum.—Dr. **Playfair** exhibited this specimen, taken from a girl of 16, from whom he had removed an ovarian tumour in April 1883. At the end of November, she was admitted into King's College Hospital, with symptoms and signs of a retro-peritoneal hæmatocele, so large as to compress and obstruct the bowel. This was first aspirated, then freely incised and drained, with immediate but temporary relief to symptoms. On necropsy, the peritoneum was found studded with masses of soft cancer, one of which had ruptured and caused the hæmorrhage. No trace of the ovariotomy ligature could be found. He had not seen recorded a case of hæmatocele from such a source. He believed its association with the ovariotomy to be only that of coincidence.

Observations on Puerperal Temperatures.—This paper, by Mr. E. S. **Tait**, was read. The patients observed were in the General Lying-in Hospital; 60 were primiparæ and 65 multiparæ. The day, after delivery, on which the highest temperature most often occurred, was the third, then the fourth, then the second. In 25 cases the highest temperature occurred during the second week, often from nervous causes. Lacerations of the perinæum did not appear to affect the day of highest temperature. Mechanical interference during labour did not seem to affect the result. The average temperature was lower in those cases in which there was no tear, than in those in which deep lacerations had occurred. In primiparæ the temperature appeared to be raised by labial tears, deep perineal tears, and the use of forceps; but in multiparæ no such effect could be traced. Slight perineal tears seemed to scarcely affect the temperature. The introduction of the carbolised hand into the uterus during the third stage did not affect the average temperature. In six cases there were urticarious or erythematous rashes which did not affect the temperature. The temperature was highest in the latter part of the day, lowest in the early morning. When the 10 P.M. temperature was higher than that at 6 P.M. there was often inflammation present. The temperature frequently rose without any physical cause to account for it; and in such cases it was often found that something had happened to disturb the patient's nervous system, such as fright, bad news, etc. Accounts were given of instances of such "nervous temperatures" as they might be called.—Dr. **Routh** said that, in disease, the temperature might be as much as three degrees hotter in the vagina than in the axilla. Unless, therefore, the temperature, in the puerperal state, were taken in each part, error might follow.—Dr. **John Williams** thought that Mr. Tait had established two facts—that high temperatures were more common when the perinæum had been deeply torn, and that high temperatures were associated with nervous conditions during the puerperal state. It was frequently said that tears of the cervix were causes of fever. He (Dr. Williams) thought they were rarely so. The relation of fever to fœtid discharge was important. In many cases the fœtor came on after the fever and not before it, and might therefore be inferred to be its result and not its cause.—Dr. **Galabin** thought it would be of interest to compare, if possible, the temperatures observed in private practice with those of hospital patients. His own impression was that the range of temperature was not so high as that observed by Mr. Tait. He doubted whether, in cases of rise of temperature apparently from nervous causes, such causes were always unmixed. It might be combined with some septic disturbance. He related a case in illustration.—Dr. **Graily Hewitt** thought the facts brought forward as to rise of temperature from emotional conditions most important. He mentioned a case in illustration. He suggested that it was probably due to temporary relaxation of the uterus, and consequent absorption of septic matter. All that he had ever seen favoured the idea that the septic material was absorbed before the fever began.—Dr. **Daly** thought that fœtid discharge preceded and caused fever. This was proved by the effect of treatment. He thought the range of temperature was, as a rule, higher in hospital than in private practice.—Dr. **Playfair** had many times observed in private practice cases of high temperature in which he was satisfied that Mr. Tait's explanation, that it was due to emotional disturbance, was the true one. It was important to distinguish this from the more serious pyrexia due to septic mischief. In the latter an initial rigor was rarely, if ever, absent. Nervous high temperatures were not confined to the puerperal state, and temporary high temperatures might be produced in the puerperal state by other than nervous causes. He knew of no facts to justify Dr. Williams's theory of the relation between fœtid discharge and pyrexia.—Dr. **Godson** mentioned a case of pyrexia due to an emotional cause. He considered it exceptional for rise of temperature from such cause to be preceded by a rigor.—Dr. **Priestley** said the records, in the paper, of pyrexia demonstrated to be due to emotional causes, showed the importance of shielding the puerperal woman not only from physical, but also from mental disturbance. They also showed that high temperature was but a unit among other symptoms, and, unless accompanied by rigor, abdominal tenderness, or other signs, did not invariably indicate danger.—Dr. **Matthews Duncan** called attention to the value of a regularly constructed chart, against isolated observations. He was sure that, in private practice, as great variations of temperature occurred as in hospitals. All his ideas were unfavourable to the reception of the doctrine that the fever caused the putridity of discharge. Putridity was not an essential part of the worst kind of infecting material. Infection by putridity began with the taking in of the poison, and ceased within a few hours after stoppage of the supply. This was sapræmia, without septicæmia.—Dr. CHAMPNEYS said that, about the third day, on which the milk, the bowels, and surgical injuries, combined to raise the temperature, diagnosis was very difficult, often impossible. Pelvic inflammation, which was often quite ephemeral, could not be excluded without vaginal examination; which had been made in the cases recorded in the paper. The evidence he had, although small in amount, of cases in which regular and frequent observations were made, showed that the range of temperature in private practice was as high as that in hospitals. The proof that nervous temperatures were not septic was, that they only lasted a few hours, and that no infection of other patients took place. The mortality in good lying-in hospitals was becoming less than that in private practice. Fœtor of discharges was useful as a means of attracting attention.—Dr. WYNN WILLIAMS said that, if septic matter came into contact with a wound, and was absorbed, it was followed by rigors with diminished temperature.—The PRESIDENT said that, from his experience in private practice, and from observations made in the St. Thomas's Hospital maternity charity, he believed the average temperature in private practice was not so high as that in Mr. Tait's cases. He could quite understand that, in the class of cases in which infection was brought from without, offensive discharge due to necrotic endometritis might follow, and not precede, the fever. —Mr. TAIT said that the observations of higher temperatures in hospital than in private patients he thought due to the greater frequency and regularity with which the temperature was taken in the former class of cases. Dr. Hewitt's explanation of the "nervous temperatures" he thought was negatived by the great rapidity of the rise and fall of the temperature in these cases. In many of them, the patient looked and felt well, so that the rise of temperature would have passed unnoticed had it not been for the diligent use of the thermometer.

MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 28TH, 1884.

SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S., President, in the Chair.

Serpent-poison.—After the transaction of the usual formal business, Mr. J. C. WORDSWORTH took the chair, and Sir JOSEPH FAYRER read a paper on Serpent-poison, which was published at page 205 of last week's JOURNAL. The paper was illustrated by diagrams, drawings, models of teeth, by preparations of the skulls of various poisonous snakes, as well as by specimens of entire snakes. At the conclusion of the paper, Dr. Garson assisted Sir Joseph Fayrer in the demonstration of the various preparations, which were mostly from the Museum of the Royal College of Surgeons.—Dr. WARING inquired whether any injurious effects followed the swallowing of the poison. It was commonly said to be harmless when so introduced.—Dr. THOROWGOOD had seen one case of snake-poisoning. The patient had been bitten by a cobra in the Zoological Gardens, and death was in this case clearly due to asphyxia. He related an anecdote of Mr. Frank Buckland, who had dissected an animal immediately after it had been killed by the bite of a serpent. With the penknife he had used for this purpose, he, in a fit of absence, shortly afterwards pared his nails. Although no blood was drawn, he was seized with extreme faintness on leaving the gardens. He hurried to the nearest chemist's, drank off a very large quantity of sal volatile, and quickly recovered. This story seemed to show that, where the dose of the poison was very small, the prompt use of an antidote might be of great use.—Dr. SANSOM thought that, as the effect of permanganate of potash on bacteria was very feeble, the activity of its action on snake-poison showed that that poison belonged to the alkaloidal class, or at least that it was certainly not an organised poison.—Mr. WALTER PYE asked Sir Joseph Fayrer whether he had been able to make out any difference in the action of the poison of the colubrine and tho viperine snakes. He had recently read in an Italian journal a series of experiments which seemed to show that there was a considerable difference between them. Dr. NORMAN CHEVERS had long thought that one of the most remarkable facts with regard to this subject was that poisonous snakes could not poison themselves, nor any of their near congeners; he suggested that in the fluids of the snake itself there might be an antidote to its own poison. In India it was often a question whether death was due to snake-bite or to homicide; the late Dr. Woodford had pointed out that, on reflecting the skin over the bite, the tissues were seen to be infiltrated by a semi-solid exudation like thin currant jelly. He exhibited a photograph given him by Mr. Vincent Richards, demonstrating the manner in which a snake was held when it was desired to obtain some of the poison.—Dr. MAIR said that when he was acting as coroner of Madras, he had to deal with an average of two or three cases of death from snake-bite every week, and he also had the opportunity of seeing many cases during life; he was able fully to confirm the description of the symptoms given by Sir Joseph Fayrer. The most rapid case he had ever seen was in a lad, aged 15, who died in forty-five minutes in spite of active treatment. He believed that Dr. Short had found no advantage from the use of permanganate of potash or of ammonia, but that the poison might be introduced into the stomach with impunity. Hence it seemed as if the gastric juice was able to destroy the poison. It was popularly said that the mongoose when bitten by the cobra never died; was this true? —Dr. PAUL read notes of a case of snake-bite in the person of a man, aged 40, who, after severe symptoms had set in, recovered under treatment by potash.—Sir JOSEPH FAYRER, in reply, said that he had convincing evidence that cobra-poison, when absorbed through the mucous membrane, produced its deadly effect. He had first come upon the fact by introducing a minute quantity of the poison into the conjunctival sac of a dog's eye; the animal died in about an hour. The introduction of the poison into the crop of birds was followed by death, unless the crop were very full of food. The fact was that, if a man sucked a serpent-wound, very little of the poison was sucked out, and what little might enter the mouth was immediately ejected. With regard to any difference between the colubrine and the viperine poisons we were still, he thought, very much in the dark. Very little was known of the chemistry of the poisons; both seemed to kill by their action on the respiratory centres, but, after death from viperine poison, the blood was found fluid, while after death from colubrine it was clotted. A good deal, however, seemed to depend on the amount of the poison injected by the serpent, as well as on other, at present unknown, conditions; for instance, occasionally cobra-poison had been found to be innocuous. There was no truth in the story that the mongoose was able to resist the poison of a serpent; it was a very quick nimble animal, and could carry on a long fight with a serpent, but if bitten by the poison-fang it died at once.

A vote of thanks to Sir Joseph Fayrer for his interesting paper was moved by Dr. BRODIE SEWELL, seconded by Dr. FARQUHARSON, M.P., and carried by acclamation.

REVIEWS AND NOTICES.

LECTURES ON DISEASES OF THE NERVOUS SYSTEM. Delivered at Guy's Hospital. By SAMUEL WILKS, M.D., F.R.S. Second Edition. Pp. 602. London: J. and A. Churchill. 1883.

A TREATISE ON THE DISEASES OF THE NERVOUS SYSTEM. By JAMES ROSS, M.D., LL.D., Senior Assistant-Physician to the Manchester Royal Infirmary. Illustrated with lithographs, photographs, and 330 woodcuts. Second Edition. Two volumes. Pp. 2,070. London: J. and A. Churchill. 1883.

TWO more dissimilar books on the same subject, and each of them good, could hardly be discovered in the range of modern medical literature than those which stand at the head of this article, and new editions of which have appeared about the same time. Dr. WILKS'S volume retains the form of lectures, more or less as they were originally delivered; and relates, in a pleasant and instructive way, the personal experience of an accomplished and shrewd observer, who watches the varying phases of medical opinion from a trusted standpoint of his own, and rejoices occasionally in a quiet chuckle over the enthusiastic vagaries of some of his younger contemporaries. To encyclopædic knowledge he does not pretend, his reading being select and limited; yet every statement that is given is well poised, and affords evidence of having passed through the crucible of a singularly keen and unprejudiced brain before it was delivered. The student, therefore, who is well acquainted with the contents of this volume, will enter the practice of his profession with a good store of knowledge to draw upon, but to which he will have to be careful to add, as time goes on, from reading as well as from personal experience, for fear of being left somewhat behindhand, more especially in his diagnosis, which Dr. Wilks has rather left out in the cold.

The form of lectures necessitates, as a rule, a desultory way of treating the different subjects which come under consideration. Thus cortical paralysis, which has been a favourite study with neurologists during the last five or six years, is dismissed with a few cursory remarks. Locomotor ataxy is treated in a somewhat loose and superficial fashion; and here a curious error occurs in calling Burdach's columns the "columns of Bouchard." This cannot be a misprint, and must arise from a slight confusion regarding two observers, one of whom, a German, did his chief work in the early part of the present century, and was then *facile princeps* amongst anatomists and physiologists; while the other, a contemporary Frenchman, is a pupil of Charcot's, and chiefly known for his researches on miliary aneurysms of the cerebral arterioles. Again, the section on diseases of the peripheral nerves contains only the barest outline of the subject. On the other hand, what could be better and more brilliant than the lectures on hysteria, hypochondriasis, and epilepsy, which are not only most delightful reading, but also show a truly philosophical insight into some of the quaintest and most obscure phases of human nature and maladies. Even in its least satisfactory parts, however, the book is always interesting, showing on every page the strong individuality of the author, of whom the profession has long been proud.

Very different from this is the book of Dr. Ross. In the first place, it contains about three times as much matter as that of Dr. Wilks; and it has the great advantage of being profusely illustrated with all kinds of diagrams, lithographs, and photographs. Some of these are original, while others are borrowed from the works, chiefly, of German and French writers. Dr. Ross's treatise gives a complete and accurate account of the present state of neurology, for which the work of all the best contemporary writers has been laid under contribution. A great advantage of the present edition over the first is that literary references have been very fully given, thus facilitating the further study of any given part to those readers who want more information. Finally, the arrangement of the subject-matter is most systematic and orderly, and the index copious, so that one is enabled at a glance to find whatever he may happen to want. The author shows himself to be intimately acquainted with the subject on which he writes; yet we confess that, in spite of all the qualities which we have enumerated, his book, as a literary production, leaves us chilly, and does not confer anything like the amount of intellectual pleasure derived from the perusal of Dr. Wilks's volume. If we may use a simile, Dr. Ross marshals his facts like a regiment of well-drilled soldiers; not a garter-button is wanting, as General Lebœuf remarked on a memorable occasion; guns, boots, straps—everything is there. Yet many will prefer walking with Dr. Wilks as a guide through all the varied scenery of woodland, brook, glen, and waterfall. This, however, must ultimately be a matter of taste; and, perhaps, the best practical lesson to be drawn from our remarks will be, that the reader should procure both works which we have just endeavoured to characterise, and which complement one another in many ways.

CLINICAL LECTURES ON MENTAL DISEASES. By T. S. CLOUSTON, M.D., F.R.C.P.E. London: J. and A. Churchill. 1883.

IT is remarkable that, while we have had extensive treatises and manuals of insanity, there has been a scarcity of works on mental diseases from a strictly clinical point of view, although it must not be overlooked that the works referred to contain a large number of cases illustrative of the treatise. Still a want has been felt, and that want has been supplied in an able and graphic manner by Dr. **CLOUSTON**, who has an unmistakably clear mode of imparting knowledge. His class is to be congratulated on having so incisive and earnest a teacher.

The matter is conveyed in a fresh and informal manner. Dr. Clouston knows what he means, and knows how to communicate his knowledge to others. It is really surprising how comparatively few have this faculty.

We are especially pleased with the free outspoken way in which the author speaks of questions which have given rise to heated discussion. Take, for instance, moral insanity. He does not speak as if he were in a witness-box, scared by some loud-spoken barrister, but as a man of science to men of science. It has been too much the fashion of writers on insanity to allow themselves to be trammeled by legal utterances. They seem to be under a constant nervous horror of what the lawyers will think or say about them. They lose their character of physicians in that of apologists. They make the well meant but hopeless attempt to trim clinical facts down to the level of what they think will pass muster in a court of law, or square with the dicta of the bench, or the declamatory assertions of the bar. This mode of proceeding has been the curse of psychological medicine. Hence a case of acute rheumatism stands a much better chance of being reported according to the actual symptoms, than some cases of insanity. Into the latter the temptation arises to import, quite unconsciously no doubt, the theoretical opinions of the reporter. If, for example, it be a case of emotional madness, and if he believe that such never exists, pure and simple, he does not fail to discover some symptom of intellectual disorder, just as a pathologist, with a preconceived idea that he will find atrophy of the cerebral constructions at a particular necropsy, will have no difficulty whatever in discerning one or more attenuated gyri and gaping sulci. Dr. Clouston does not appear to us to labour under the tendency to hedge of which we complain. He is bold enough to say that he has really seen patients labouring under moral insanity with his own eyes. He writes:

"Have we any examples where, from disease, a man who had up to that time been moral and conscientious, and obeyed in his conduct the laws and the social observances, had lost his moral sense, while he retained his intelligence and reasoning power, having no mental exaltation or depression, and, in consequence of that diseased moral condition, spoke and acted immorally? Further, comes the question—can he, when the diseased condition is cured or recovered from, regain his former morality in feeling and conduct? I have no hesitation whatever in answering both questions affirmatively, because I have seen such cases. It is not a question of theory, but of fact." (P. 347-8.)

Again:

"Do we meet with children so constituted that they cannot be educated in morality on account of an innate brain-deficiency, rendering them incapable of knowing the difference between right and wrong, of following the one and avoiding the other, of practising checks on inclination, of exercising self-control or obedience to the laws of God and man, of any love and cultivation of the good, or any dislike of evil? Such moral idiots I, like others, have met with frequently. Persons with this disease, and persons with this want of development, we say, labour under moral insanity." (P. 348.)

Dr. Clouston gives several cases in illustration.

We cannot but think that this plain speaking, and this thoroughly scientific way of treating such vexed questions, will go far to introduce a healthier tone of discussing them. Truly "it is not a question of theory but of fact." Dr. Clouston's position would be strengthened did he not, in his wish to be fair, exclude cases of moral insanity in which there was mental exaltation; an uncalled for concession, as it appears to us. Exaltation without exalted delusions may be a well-marked phase of moral insanity.

Under the head of Homicidal Mania, Dr. Clouston does not doubt that "it may occur as an uncomplicated impulse, and accompanied by depression or exaltation of mind, and it then stands as one of the varieties of impulsive insanity. . . . Homicidal impulses are often spoken of by lawyers, publicists, and ignorant persons as if it were a thing that did not really exist, but has been set up by the doctors to enable real criminals to escape justice." A case follows which, as the author observes, "is either a tissue of lies, or the thing, homicidal impulse, exists." (P. 330.)

There are many passages in this work we should like to quote, as those referring to ephemeral or transitory insanity, suicidal impulse, or in which the author speaks in accordance with the facts of nature, without trimming, and without hesitation, but our space compels us to withold them.

The book is illustrated by some excellent plates, chiefly bearing on the pathology of mental disease.

We have only to speak in terms of praise of Dr. Clouston's volume as a clinical work, the more interesting as it is presented to the reader, in the main, on the lines of the much abused classification of the late Dr. Skae, in regard to whom, as a teacher, the author has proved himself to be a most loyal pupil and able expositor.

A MANUAL OF PSYCHOLOGICAL MEDICINE AND ALLIED NERVOUS DISEASES. By EDWARD C. MANN, M.D. Philadelphia: Blakiston and Co. London: J. and A. Churchill. 1883.

FORBEARANCE has its limits. We have endeavoured to bear complacently the oppressive weight of psychological literature with which the American medical press has recently burdened us; and now our back is in danger of being broken, we cannot say by the last straw, but by the huge tome whose title heads this notice, consisting of seven hundred pages, save one, of closely printed matter. The author of such a work inevitably challenges the reviewer to say whether the quality is equal to the quantity, and we confess that our reply cannot be in the affirmative. The writer tells us that he is "only too conscious of his own defects in this field of research:" but we do not see very clearly the proof of excessive sensitiveness in the manual before us. Indeed, as a manual, it must entirely fail, we think, to meet the requirements of either student or general practitioner purchasing it as a guide to practice. Long disquisitions on questions which excite much difference of opinion, as those of expert-testimony and the true test of criminal responsibility, are out of place in a text-book; as are, for other reasons, chapters on the insane and asylums in the "Middle States" of America, and on the codification of the Common Law as to insanity. Nor can we conceive that the reader will gratefully recognise the judgment and discrimination of the author in presenting him with more than twelve consecutive pages of matter extracted from the writings of the late Dr. Forbes Winslow. Mr. Skey's observations on hysteria, which are, no doubt, very graphic and interesting, are transferred entire, and occupy twenty pages. From Dr. Russell Reynolds are quotations extending over the same number of pages. Nearly two hundred pages consist of quotations of inordinate length from these and other writers, being about one-third of the whole volume, apart from the appendix, which is mainly occupied with a contribution from Mr. William J. Mann (the author's brother), describing the laws in the various States of the Union relative to the care and custody of the insane. This forms a very useful abstract of the American lunacy laws in these respects, although unnecessarily swelling the bulk of what purports to be a manual, and is only of interest to a few in this country. We close this work, as we opened it, with a painful sense of the infraction of the wise injunction, "Ne quid nimis."

ELEMENTS OF PHARMACY, MATERIA MEDICA, AND THERAPEUTICS. By **WILLIAM WHITLA**, M.D., Physician to the Belfast Royal Hospital. Second edition. London: Henry Renshaw. 1884.

IT is with much pleasure that we record the appearance of a second edition of this useful and practical little work on materia medica, therapeutics, and the allied subjects. The first edition was published in December, 1881, and was exhausted in a few months. In the present issue, considerable alterations and improvements have been effected, almost every page bearing evidence of careful revision. For example, it was said of pharmacology, in the introduction to the first edition, that "to this word we no longer assign the old significance which it bore as a mere synonym of materia medica. It now implies the science of the action of remedies, and it accordingly deals with the modifications produced in healthy conditions by the operation of substances capable of producing modifications." In the new edition, it is added that: "it constitutes the chief basis of the application of remedies in disease, is closely allied to therapeutics, and may be regarded as the connecting link between materia medica and the art of medicine."

Part IV, on Non-officinal Remedies, has been entirely rewritten, and in its present form constitutes one of the most valuable features of the work. It is well up to the times, and the information is in the main reliable and accurate. Thus, of kairin, the new antipyretic, it is stated that it is an artificial alkaloid which may be regarded as the hydrochlorate of oxy-chinolin-ethyl. "In doses of half a gramme repeated every hour, it has been found to reduce temperature in a surprising way; the pulse falls with the temperature, and the excretion of nitrogenous and phosphatic substances is lessened. The drug undergoes rapid change in the blood, and appears in its altered state in the urine, which it stains a deep green colour." A good account is given of resorcin, although it would be as well to point out that it is not devoid of toxic properties, and that, in a case recorded by a well known London physician, a single dose of two drachms nearly proved fatal. Apomorphia receives due attention; but sufficient stress is not laid on the necessity for administering it hypodermically when the emetic effect is desired. The recommendation that it should always be freshly prepared is likely to convey a wrong impression, and it must be remembered that it has been shown by Murrell and other recent observers that a one-in-fifty solution will retain its properties unimpaired for twelve months or more, even if exposed to the light. Cascara sagrada is spoken of as a remedy for chronic constipation; and it is stated, on the authority of Dr. Carter, that it evacuates the whole of the intestinal canal. The use of chaulmoogra oil as a remedy for phthisis is briefly referred to, and it is stated that it should be rubbed into the chest and abdomen, although the quantity to be employed is not indicated. The value of picrotoxine in the night-sweating of phthisis is mentioned; and we are glad to see that the dose is correctly given. Speaking of abrus precatorius, or jumble-beads, the author says: "Recent experiments by Warden of Calcutta show that the seeds are very poisonous." On reference to the original paper by Professor Warden, reprinted from the *Indian Medical Gazette*, we find he says: "Drury states that the seeds are innocuous if swallowed whole, but dangerous in a powdered state; but he remarks, regarding the latter point, that there must be some mistake, as they form an article of food in Egypt, though considered hard and indigestible. Dr. Center, Chemical Examiner, Punjab, in his Annual Report for 1873, mentions that he administered the powdered seeds to dogs, in doses varying from one-quarter to an ounce, the result being only mild vomiting. Dr. M. Thomson also records evidence of a similar character. The Gunchi-seed, even when finely ground, does not seem to be a poison when given by the mouth. I have repeatedly given it to dogs in as large doses as two or three drachms, but with no ill effect. My experiments made on cats also indicate the inert nature of the seeds when introduced into the stomach." The fact is, that the seeds produce toxic effects only when powdered and given subcutaneously—a fact well known to the Chamar or Skinner caste, who employ them for making "suis" for the destruction of cattle, as described in a recent number of the JOURNAL.

The uses of nitro-glycerine are correctly given, but more stress should be laid on the fact that, for the successful treatment of angina pectoris and allied diseases, the full physiological action of the drug should be induced.

The present edition is a great improvement on its predecessor, and reflects much credit on the author.

THE REFRACTION OF THE EYE: A MANUAL FOR STUDENTS. By **GUSTAVUS HARTRIDGE**, F.R.C.S., Assistant-Surgeon to the Royal Westminster Ophthalmic Hospital. With Eighty-seven Illustrations. London: J. and A. Churchill. 1883.

THE importance of recognising disorders of refraction cannot be too strongly impressed upon students. Many practitioners of no small experience are still deficient in the kind of knowledge requisite for saving the eyesight of their patients. They may have learnt certain laws relating to cause and effect in ophthalmic matters, and may suspect or even feel sure that red eyes and aching about the orbits imply defective accommodation, yet they are averse to causing alarm by offering to make an ophthalmoscopic examination of a patient's eye. Even when an exploration of this kind is advised and carried into effect, they dread hurting the patient's feelings by steadfastly insisting that suitable spectacles must be worn. We have heard of a surgeon declaring that he has, after careful examination, discovered that a patient is hypermetropic to the extent of three or four dioptres; yet, yielding to the patient's prejudices, he has been led to believe that the defect is entirely due to constitutional debility, and has prescribed not spectacles, but quinine or cod-liver oil. In hospital practice, where the patient is well under control, this reluctance to insist on the only proper remedy is less prevalent; and this is most fortunate, as young clerks, sempstresses, and others, are thereby enabled to continue in their vocation, and to avoid the grave moral and physical results of enforced absence from work. In private practice, the fear and vanity of a patient are ever great stumbling-blocks to the practitioner in the performance of his duty, and the result is not rarely disastrous.

All works, therefore, which, like that at present under consideration, state briefly and clearly the main facts with which practitioners and students should be acquainted in order to enable them to diagnose and to treat errors of refraction correctly, are deserving of commendation, and still supply a want; provided, of course, that they are carefully and accurately prepared by competent authors: and this is the case with regard to Mr. HARTRIDGE'S manual. Without detracting from similar works, like that of Mr. Brudenell Carter and others, we may say *The Refraction of the Eye* is an excellent publication. The author most rightly begins with a chapter on optics, for a very large number of well educated students are, we believe, almost entirely ignorant of that science; and this chapter takes the place of a recapitulation of anatomical details which any person fit to have a man's eyesight committed to his charge should know before studying eye-diseases.

After some chapters on retinoscopy, and other diagnostic methods, follows the portion devoted to the main subject of the work—hypermetropia, myopia, astigmatism, and similar defects. Mr. Hartridge insists, even more strenuously than former authors, on the importance of recognising hypermetropia by external symptoms, and of considering their significance. Referring to the redness of the eyelids and to the hyperæmic conjunctivæ, and their troublesome effects, he adds, "how much more injurious must be the changes which are liable to take place in the interior of the eyeball from prolonged hyperæmia!"

This work is freely illustrated with numerous diagrams, and the author has, in our opinion, avoided as much as possible the crowding of his pages with figures. Symbols and elementary calculations are unavoidable in a manual on accommodation; but it cannot be denied that an almost total absence of the mathematical instinct is not rare in many men who study medicine and desire to understand refraction. Such persons will not find a less abstruse work on that subject than *The Refraction of the Eye*, which we cordially recommend, both for its own merits and for the importance of the principles which it maintains.

OPIUM-SMOKING AND OPIUM-EATING: THEIR TREATMENT AND CURE. By GEORGE SHEARER, M.D., F.L.S. Liverpool, 1883.

THE nucleus of this treatise was a prize-essay on "The Medical Means of Counteracting the Effects of Opium-Smoking in China, with suggestions as to the best method of conducting opium-refuges;" and in offering to the profession, in this more extended form, the results of his personal experience of opium-smokers in China, and of his exhaustive study of all that has been recently written on the subject, Dr. SHEARER has supplied a want that has been much felt. Important questions of religion, morality, and politics are, in this country at least, intimately mixed up with a discussion on opium which, although it sometimes slumbers, never dies out. The result is that there is a great deal of desultory writing on opium, of more or less interest and importance, which becomes lost to the student who wishes to ascertain what is really known and believed in regard to the effects of the drug when it is taken habitually. The author has been most painstaking in bringing together and in analysing these varied contributions; and although the general and economical aspects of the subject are fully represented in his pages, we are glad to find that medical reports and testimony receive the greatest share of his attention.

In his little book of 150 pages, Dr. Shearer has given an excellent and very impartial summary of nearly everything that has been recently written about the action of opium; and as he at one time resided in China, and had large experience of opium-smokers at Hankow and Kinkiang, his opinions deserve attention and respect. We are interested, therefore, in finding that it is his opinion, beyond all question, that opium-smoking is far less detrimental to the health than opium-eating, and that the effects are by no means proportionate to the quantities employed. "It is the most wasteful method of employing the drug." The reason of this is stated to be that "a considerable, if not the chief part, of the narcotic principles are not volatisable by the heat of the opium-pipe."

It has been often alleged that opium is a prophylactic against malaria. The author, after quoting various writers with reference to this important point, states as his own conviction, that "there is really no proof whatever that opium possesses any prophylactic virtue against the ague." That there is evidence in favour of the usefulness of opium during the actual attack is already sufficiently well known, but the action is merely palliative. The neuralgic and rheumatic pains from which fever-stricken patients amongst the Chinese suffer so much are soothed by the opium-pipe, but the cause is not removed; and the deterioration of the general health, which Dr. Shearer shows by accumulated evidence to follow in many cases of opium-smoking as well as of opium-eating, renders a radical cure more improbable.

The question has been recently discussed as to whether, in the case of the opium or morphia debauchee who wishes to break off his enslaving habit, the withdrawal should be sudden or gradual. Dr. Shearer believes that immediate renunciation is demanded. The first and "essential element in the cure of the opium-habit is to insist on the sudden immediate withdrawal of the drug.......The risk of collapse from sudden privation is wholly imaginary; and, though involving sharper suffering at first, it becomes every day easier to bear (specially good and sustaining nourishment being taken in the meantime), and is thus really the kindest and most efficient method of curing the patient."

Dr. Shearer enters fully into the treatment of the distress caused by giving up the narcotic, and gives valuable suggestions regarding its treatment by various drugs. Apart from its value as a contribution to the scientific aspects of a still very obscure subject, Dr. Shearer has produced a very entertaining and readable book, which will, we hope, receive a wide circulation.

TYPHOID FEVER IN VICTORIA. By JAMES W. BARRETT, M.B., Ch.B. (Melbourne University).

THIS is, we understand, the author's first literary venture, and is, moreover, the first production by a medical graduate of Melbourne University.

The first thing which strikes one on a perusal of the pamphlet is the apparent inexperience of the writer as a scientific investigator. We do not deny that he is correct in his statements, some of them extraordinary enough; but we think that many of the conclusions at which he arrives are based more on assumption than proof. Dr. BARRETT fails just where he should be strongest, and that is, in giving to each factor its true relative scientific value.

In the first chapter, the author endeavours to prove the identity of all the forms of continued fever existing in Victoria. Though scarcely successful in so far as actual proof is concerned, he corroborates, in the main, the opinions expressed by other writers with regard to the probable identity of typhoid and so-called simple continued fever. The writer next discusses the relations of diarrhœal affections to typhoid fever, and has been at great pains to draw up reliable statistical tables in support of his view; seasonal prevalence and climatic conditions are also carefully dealt with, and are in accordance with generally received opinions; with regard to the question of age, however, Dr. Barrett's figures are in marked contrast to the returns of the Metropolitan Fever Asylums, for example. Admitting that enteric fever is essentially a disease of adolescence, he finds that "it is much more prevalent relatively in advanced years than is generally supposed." This view is scarcely in consonance with generally accepted pathological doctrines on the subject. We think that more attention might, with advantage, have been bestowed on the etiology and prevention, perhaps two of the most important points in connection with the disease, especially as the author feels it his duty to point out to Victorians "the means by which they can banish this scourge."

The work abounds in interesting statistical tables, and there are, besides, some carefully prepared charts illustrating diagrammatically various salient points in connection with the disease.

That Dr. Barrett has thought for himself is evident to anyone who reads his essay; but we think that better results would be obtained by greater experience and more extended personal observation.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NASAL RESPIRATOR.

I DESIRE to turn attention to a little invention of mine, a "nasal respirator." A small screen turns up by the front, so as to admit of medicated respiration. When worn, the mouth is to be kept closed, then all the air respired will pass through the respirator. Not so with the oral, as the nose cannot thus be closed. Should the wearer meet a friend, it is not necessary to remove it while talking, and even then part of the air respired will necessarily pass through the respirator. The colour of the covering and the shape—being a seeming elongation of the nose—make it less unsightly than the oral ones ordinarily in use. In catarrh of the nose, and acute affections of the respiratory organs, this little instrument will, I believe, be found invaluable; and, being very portable, it will be found equally valuable to parties leaving heated rooms or large assemblies. Contact with the nose is so direct that there is little, if any, room for the lodgment of impure air. I send a large size. I have them made in three sizes; the price will be moderate, about 2s. 6d. each.—Your obedient servant, JOHN MARTIN.

RUSSIAN FEMALE MEDICAL STUDENTS.—A letter from St. Petersburg states that the female medical students have been compelled to take up their residence in a large boarding establishment provided by the authorities, under the superintendence of Princess Shakafskoy, instead of being free as heretofore to live where they please. They are required to be at home before nine o'clock every evening, and to pay ten roubles per month for their board and lodging.

FOUR hundred and fifty-nine students matriculated at the University of Zurich this winter; fifty-one of these students were women, of whom thirty-eight entered for the medical classes.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 9th, 1884.

ENDEMIC CHOLERA IN EGYPT.

SURGEON-GENERAL HUNTER has yet one more report to issue before his mission to Egypt is concluded. It will deal with the sanitary future of Alexandria. An exact comparison between the frightful mortality from cholera in Cairo and the lesser mortality in Alexandria is not yet possible, as the official returns have not been published by the Conseil de Santé at Cairo. The sanitary reforms which Mr. Clifford Lloyd has attempted to initiate in Cairo have, unfortunately, met with so much opposition from this body, that it has been dissolved. In Alexandria, it may be hoped that Dr. Hunter's suggestions will receive the support of the European residents. The epidemic touched Alexandria with a light hand. For this, the city is indebted to the efforts of its two successive Extraordinary Sanitary Commissions, to the purity of its water-supply, to the exodus of many of its inhabitants during the rebellion, and to the large open spaces left by the conflagrations. But distinct evidence has come to light, showing that not only in Alexandria, but also throughout Egypt, cases of cholera occurred, both after the epidemic and before it, in sufficient numbers to justify the assertion that cholera is endemic in Egypt. After the epidemic had quite subsided in Alexandria, the disease again broke out on October 18th. That it should be endemic is scarcely to be wondered at. Only a portion of the city is sewered, and the dwelling-rooms are the only ventilating shafts free from obstruction. The sewers discharge their contents to the windward of the city, on the beach of a tideless sea; and the cemeteries reek with the smell of the dead. Yet the foremost sanitary authority of France flatters its inhabitants with the comfortable theory of "acquired immunity," and the idea is already abroad that sanitary reform can be dispensed with.

If cholera can be recognised by a certain group of symptoms, then, with the same certainty with which districts in India are mapped out as cholera-areas, must Egypt be pronounced an infected district. The country has been surveyed by medical officers accustomed to such work in India; their reports have been corroborated by resident practitioners; and a brief statement of the result is given by Dr. Hunter in his last Report to Earl Granville, the substance of which appears in another column. No one can read the facts communicated by Drs. Dutrieux, Haddad, De Castro, Mackie, Sonsino, and many others, without admitting that cholera, in the guise of cholera nostras, choleriform diarrhœa, sporadic cholera, etc., has been endemic both in Upper and Lower Egypt since the epidemic of 1865. Indeed, Dr. Patterson, now of Constantinople, but practising in Alexandria and Cairo from 1855 to 1868, shows that the disease was endemic even previously to 1865. Several well marked cases of endemic cholera came under his notice every year during his residence in Egypt. "They were conveniently classed as cholera nostras, but were in no way to be distinguished from so-called Asiatic cholera. The symptoms were rice-water purging, cramps, leaden hue of skin, cold clammy perspiration, pinched features, sunken eyes, and the characteristic dark areolæ, husky voice, pronounced collapse, and perfect intelligence, followed, in non-fatal cases, by reactionary fever." It is needless to multiply instances. The evidence is circumstantial, and the argument proven beyond cavil, that cholera existed both in Alexandria and throughout Egypt, not only months before the outbreak at Damietta on the 22nd June, but even years before that time. The disease is linked to the soil, to the polluted water-courses, and to the vaporous air. Yet any suggestion of sanitary reform is certain to meet with opposition. It has been denied that cholera is endemic in Egypt, and the most absurd theories have been propounded to account for its importation. Go to New Orleans during an outbreak of yellow fever, and you find the inhabitants gravely stating that the disease has been imported from the West Indies. Sail to the West Indian islands, and you find the authorities speculating whether their fever is imported from New Orleans or from Savannah. Probably not a single Egyptian sanitary authority will be induced to admit the correctness of Dr. Hunter's observations. The hypothesis of Dr. Flood and of Dr. Mahé, that the disease was imported by the stoker of the *Timor*, though the vessel was free from cholera during the whole voyage, and the stoker did not arrive in Damietta until two days after the official announcement of its existence there, is still maintained. Compare the suggestions submitted to the British Government for the prevention of cholera in Egypt with the suggestions submitted to the French Government for the same purpose. Dr. Hunter advises that pollution of the rivers and canals should be prevented, that public latrines should be introduced into towns and villages, and that a system of sewerage should be introduced into towns and villages suitable to their several conditions. An inquiry into the condition of cemeteries should be made, with a view to a better method of disposal of the dead without invading the religious prejudices of the people. And, finally, the defective system of registration, and the total absence of all sanitary regulations, is pointed out. M. Mahé's suggestions are that the sanitary officials should be independent of Government supervision, that a penal sanitary code should be instituted, that another large lazaretto should be established in the Red Sea, and that the sanitary taxes in Egyptian ports should be remodelled to the pattern of those in—Turkish ports!

More quarantine and more *cordons sanitaires* are positively all the remedies that occur to M. Mahé to prevent the recurrence of cholera in Egypt. He says not a word in favour of sanitary reform. He was content with the condition of Damietta, which had been officially reported as the type of a filthy city. Although the contagiousness of cholera has been amply disproved in India, in England, and in Egypt, he thinks that captains of vessels in quarantine at Port Said may introduce the disease while taking their evening walk. The two reports should be bound together and presented to the various European Governments. We are convinced that the sanitary reforms proposed by the English sanitarian would meet with general approval.

PAYING PATIENTS AT GUY'S HOSPITAL.

THE adoption by another of our endowed hospitals of the system of payment for the relief afforded by it, is a matter which will, no doubt, be regarded by different minds in different aspects. Hospital administration has of late become one of the topics of general conversation and concern; and there are many of us within—yes, and outside the medical profession, who have each his [illegible] which seems to be the one remedy for the admitted evils which have crept into the administration of charities such as these. But while we have been, and are, discussing what can be done to improve the application of relief to the suffering, who will always be needing it, time has been pressing, and St. Thomas's Hospital has established its Home, and now Guy's has followed suit with another experiment, that of taking a small sum for the medicine that is supplied from all such out-patients as can afford it; and also of admitting as in-patients, into the general wards, a few sick persons at a sum just sufficient to pay for their maintenance. As we stated recently, under new regulations, each out-patient at Guy's Hospital will, for the future, be charged threepence each time he receives medicine, and the paying in-patient will contribute one guinea each week. We should probably all readily admit that sentiment induces the feeling that it were better that the endowed hospitals, at any rate, should contrive, as heretofore, to dispense their favours gratuitously until some unexceptional scheme is agreed upon by which to remedy the entire hospital-relief of the metropolis; but, there being no immediate prospect of such a happy consummation, common sense is compelled to recognise the fact that an institution like Guy's Hospital, with an immense field of work, which cannot be discontinued without serious loss to the poor, yet with its revenues much diminished, from no fault in its management, but owing to the fact that its property is a landed and chiefly agricultural one, must, if it is to continue its work, obtain money by some means or other. We cannot refuse to admit, if the times render it impossible for institutions like these to dispense their benefits absolutely gratuitously, that it is better for the poor recipients of its relief that they should receive aid at as cheap a rate as possible, rather than not at all, or in so curtailed a sphere as to necessitate great waste in the disproportionate expenditure upon the maintenance of an establishment which, in but few cases, could be cut down.

We believe, then, that—at any rate, for the present, and without prejudging what in the future may be determined upon as the best principle of carrying out hospital relief—some system of payment is necessary; and it is only a question what is the best way to achieve the object aimed at; or, as regards particular institutions, is the plan adopted a fairly good or a vicious one? We must confess that the cry, of which a good deal has been heard of late, that the hospitals are for the poor, in the sense that they must therefore be worked on absolutely gratuitous principles, does not commend itself to our judgment as being in harmony with the most enlightened opinion of the day. For the poor, of course, they are intended, and to them they must ever be devoted; but the times have changed since the days of Rahere and Guy, and poverty, so far as its relation to skilled medical relief is concerned, may well be considered to have shifted its level. The lowest strata of society have now their palatial workhouse infirmaries, and a Poor-law system of medical relief, which was never more systematic, is at their door; and there is no small ground for the contention that the hospital now administers to the wants, and legitimately so, of those not absolutely paupers. If so, then it affords relief to a class that can afford to pay something, and there can be no hardship in taxing the patients to that extent. Any system of this kind must, of course, be carefully guarded from abuse; for example, no patient should be sent away without relief, on his first attendance, on account of inability to pay. It should be impressed upon the public frequenting the hospital that the charge is to defray the cost of medicine only; and we are inclined to think that the charge should never go—probably, it never could go, if it is to succeed—beyond the prime cost of the drugs supplied; and we are further inclined to attach much importance to some plan of limiting the numbers, where payment is enforced. When all that apply are seen and prescribed for, provided they pay the required charge, there is some risk, as has been suggested, that the patients may lose their sense of the benefits conferred by the skilled advice. Where the number of selected for treatment is strictly limited, and all others are turned away, the privilege of attendance, notwithstanding the payment, is sufficiently obvious to command respect.

All these points appear to have received careful consideration by the authorities at Guy's Hospital, and the new departure to have been made as unexceptionable as possible; and, as an experiment, necessary under the circumstances, it deserves success. At the same time, we shall not commit ourselves to the opinion that this, or any other, way is the best method of obtaining the necessary funds. No doubt, many other ways of meeting the difficulty can be found, and there is much to be said for the plan advocated by Mr. Burdett, of a vigorous canvass of the workshops and manufactories in the neighbourhood in which a hospital is situated, and from which perforce it must draw most of its supplies and receive its greatest drain. Such a scheme would take time to develop, but it is one which deserves the most careful consideration, as it bears on the face of it the promise of success.

As regards the payment by in-patients, there are great, and we believe fatal, objections to any such plan as a home set apart from the rest of the hospital. It curtails the number of beds available for clinical instruction, and in many other ways is not to be recommended, except it be as a financial success. The governors of Guy's Hospital are probably well advised in not adopting any such scheme. The plan favoured by them is far preferable, but we have heard that it has already been tried at St. Thomas's, and not found very successful. It is easy to see that, where a few patients in a ward pay for their maintenance and the majority do not, while the regulations for both classes are the same, there is a likelihood of the scheme failing.

Here again we are inclined to somewhat radical opinions. The times have changed, and, with other really model institutions supported by the rates, there is less necessity now than in former days for an absolutely free service, and it is difficult to see any crushing objection to making a small charge upon all patients who seek admission. In some of the hospitals a charge is made of one shilling a day for patients admitted from the parish, and there must be surely no insuperable difficulties in applying this rule to all patients, with exceptions, and thus affording a permanent and appreciable addition to the resources of the hospitals, and of doing away with the risk of success which naturally attaches to such a scheme as that now sanctioned by the process at Guy's Hospital.

STIMULANTS FOR COLD WEATHER.

THE power of enabling the body to resist the influence of cold, which is the inherent property of all nutritious food, is known to be possessed by drinks, according to the measure of their fitness to produce and to maintain, without after-depression, a moderate stimulation of the nervous system. Some of them, no doubt, possess sufficient body to evolve a considerable measure of heat from chemical transformation of their component particles alone—notably cocoa; but this factor is, in the case of most such liquids, an insignificant assistant to that other faculty of exciting nervous energy, with all its resultant influences on the circulation, to which we have referred. It would only be in keeping with the common law of all physical actions that, the more gradual and regular this excitation is, the greater should be its permanence, and the less sudden its decline; and it is so. It is this continuance of effect, taken with its moderation, which constitutes the distinguishing feature and the greater value of warm beverages in which the active principle of tea, under one or other name, is found, over those which owe their exhilarating qualities to alcohol. Philosophical investigation has confirmed the teaching of practical experience that the stimulating glow imparted by the latter is but transient, and is quickly followed, if the draught be not repeated, by a stage of depression, which, in its turn, invites and enhances the chill which it is intended to prevent. Temperature is depressed; and so is function, muscular and nervous; and work, on the whole, is less efficiently performed than when no spirituous liquid is taken. In few circumstances, and only in its sparing use, is such an agent advisable. The maintenance of the body-heat can only be included among these in the imaginary case in which other heat-producers are not obtainable, and where alcohol, in small measured and repeated doses medicinally given, must of necessity take their place, or where a diffusible stimulant of swift action is required, in order to gain time for the administration of other remedies to one whose vital power is nearly exhausted.

It is now coming to be generally acknowledged that, wherever possible, preference should be given to tea, coffee, or cocoa, for this purpose. Though variations exist in the digestibility of these several commodities, they possess in nearly equal measure the property of maintaining warmth. There are not many persons who cannot indulge with freedom in tea of medium strength, prepared by simple infusion. Medium strength is, unfortunately, a point of much divergence of opinion; but the difference does not arise so much from the quantity of the leaf which is used, as from the method of its preparation. The true mean will best be realised by those who are content to adopt the somewhat tedious, but effectual, method of infusion with boiling water merely, and to abandon the time-honoured heresy of afterwards roasting the tea-pot before a fire. This practice, which is commonest in humble homes, is well known to medical men as a cause of chronic dyspepsia; and is, therefore, calculated to bring the good name of tea itself, most unjustly, into disrepute. The addition of a pinch of bicarbonate of soda to the water of the infusion will improve the flavour, and increase somewhat the digestibility of tea. Coffee, prepared in the French manner, strong, and diluted with an equal quantity of boiling milk; and cocoa, boiled, of about the consistency of thin milk, will not derange any but the most delicate stomach. In certain idiosyncrasies, the bile-secretion is persistently deficient. This condition is not, on the whole, common, and occurs chiefly in persons of the nervous type. It may, of course, exist in others as a consequence of disease. It forms probably the only constitutional barrier to the use of coffee or cocoa, properly prepared; and is, after all, not a decisive contra-indication. Any person may, however, lose the benefit he ought to gain from the use of these drinks, from want of skill, or from carelessness in their decoction, and that this want exists is but too evident. Particularly in the case of cocoa, the tendency is to make a mixture so thick and strong, that even the certain advantages of prolonged and thorough boiling will not suffice to overcome that heaviness which results from the ingestion of so much actual nutriment in the form of the fatty matter which it contains. If cocoa be made thin, the same amount of nourishment, the same result in heat, will be gained; and a greater absolute bulk of liquid will be consumed with comfort, and without any consequent dyspepsia. Moreover, both it and coffee may be used for long periods without interruption, if only this propensity to overdo their strength be held in check; and the same is true in an even greater degree of tea Is it necessary to add that the efficacy of all three, in promoting warmth, is much greater if they be taken hot than if cold? Hot water by itself is no mean stimulant, and it certainly aids by its presence the beneficial action of the non-spirituous restoratives. We already see in many places signs of a gradual evolution of opinion, which promises to result in a practical admission, on the part of the public mind, of the principles we are advocating, as general as that which already prevails among authorities on hygiene in our own profession.

THE CAPILLARY PULSE.

In a dissertation recently presented to the Paris Medical Faculty, and commented upon in the *Gazette Hebdomadaire de Médecine et de Chirurgie* (December 14th, 1883), M. A. Ruault draws attention to the physiological and clinical characters of the visible capillary pulse. It is well known that, under normal circumstances, the flow of blood, which is intermittent in the arteries, becomes apparently continuous in the capillaries. It has, however, been proved by Frank, Fick, Mosso, and others, that the volume of every organ is slightly increased during each contraction of the heart. This physiological capillary pulse can be felt easily in the hand or foot when these are compressed with a tight glove or shoe. In certain cases the pulsations become visible, especially in the subungual tissue of the fingers and on the skin of the forehead; but they may be observed also on the inner surface of the lower lip, in the fundus of the eye, and on the skin of the abdomen, thighs, and hands. A physiological pulsation can often be elicited and seen in the pulp of the fingers by pressing them gently against a decanter full of water, and looking at them through the fluid and glass. This experiment succeeds best when there is some temporary cardiac excitement; for example, during digestion. Another method, described by M. Gautier, consists in freezing a finger with an ice-bag. When the finger begins to thaw, subungual pulsations become visible, and last some hours. Lebert was the first to notice capillary pulsations, on the cheek of a patient suffering from aneurysm of the aorta. Quincke, in 1868, and Becker, in 1871, published papers on the subject; while M. Gripat showed that subungual pulsations were most marked in cases of aortic lesions. An English practitioner then had the idea of studying the capillary pulse on the red patch which appears on the skin of the forehead after it has been rubbed with the finger. Alternations of redness and pallor become visible on the border of the patch. The patient must be placed at some distance from the observer, and in a good light. Under some abnormal circumstances, the capillary pulse becomes very apparent and nearly constant. This is especially the case in compensated aortic regurgitation; there are then hypertrophy and dilatation of the heart, diminution of elasticity of the arteries (with or without atheroma), and spasmodic contraction of the capillary vessels. All these conditions, as will be seen hereafter, are favourable to the appearance of capillary pulsations. The pulsation may be useful for diagnostic purposes when there is considerable dyspnœa, and when pulmonary *râles* or pericardiac friction-sounds prevent a satisfactory examination of the heart. Dr. Tapret is said to have diagnosed an aortic lesion in one of his friends by simply noticing capillary pulsations on the red mark left on his forehead after he had taken off his hat.

It must be said, however, that the capillary pulse cannot be considered as quite characteristic of aortic regurgitation. M. Ruault has seen it in three cases of interstitial nephritis with arterio-sclerosis, in two cases of arterial atheroma, and in two of chlorosis; but, in all these, the pulsations were less marked than in aortic regurgitation. M. Legroux has observed several cases of well-marked aortic regurgitation where no capillary pulse could be detected. On the other hand, he has seen it appear, and last several days, in a case of extreme anæmia from uterine hæmorrhage, and in typhoid fever, when the temperature was high; also in atheroma of the arteries without aortic lesion, in general paralysis, chronic lead-poisoning, and tabes. M. de Brun has observed a case of hemiplegia from arterial thrombosis in the brain, in which there were subungual pulsations on the sound side only. Basing himself on some experiments of Marey and Frank, M. Ruault emits the opinion that the capillary pulse can only occur when the elasticity of the capillaries is diminished; a spasmodic contraction of the arterial walls can counterbalance, and even annihilate, the effects of their elasticity. It has been proved by Frank that in compensated aortic regurgitation the arterial pressure is increased, and that the capillaries are in a state of permanent spasmodic contraction; their lumen and their elasticity are both diminished, while the systole of the heart is abnormally strong. Under these circumstances, the flow of blood becomes markedly intermittent in the capillaries. This theory is supported by the fact that, in two patients of Dr. Tapret's, the capillary pulse disappeared for a time after an injection of morphia. On the other hand, M. Ruault's theory does not explain the occurrence of the capillary pulse in anæmia and typhoid fever, so that farther observations are called for, and promise to lead to interesting results.

THE discussion on Surgeon-Major Godwin's paper on "Antiseptic Surgery, and its application to Field Service," read last month at the Military Medical Society, Woolwich, will take place on February 15th, at 8.30, at the Commissariat and Transport Barracks, Woolwich.

THE joint committee of the Society of Arts and the Royal College of Physicians have awarded the Swiney Prize to Professor Sheldon Amos, M.A., for his work, entitled, *A Systematic View of the Science of Jurisprudence.* The prize, which consists of a goblet, value £100, containing gold coin to the same amount, is presented every fifth anniversary of Dr. Swiney's death.

AT the next meeting of the Clinical Society of London, to-night, Friday, February 8th, 1884, the following papers will be read:—Mr. A. Pearce Gould, "On Obliterative Arteritis accompanied by Gangrene." Dr. Haddon, "On Obliterative Arteritis ending in recovery." Dr. Burney Yeo, "On a Case of Pyrexial Syphilis." Dr. Mansell-Moullin, "On Thrombosis of the Vena Cava." Living specimen, Acne Varioliformis, by Dr. Stephen Mackenzie.

DR. E. SYMES THOMPSON will deliver a course of lectures at Gresham College, Basinghall Street, E.C., on February 12th, 13th, 14th, and 15th, on the International Health Exhibition of 1884. The lectures will deal respectively with The Aim and Scope of Health Exhibitions, Health in the Home, Health on the Battle-Field, and Health Restoration in Hospital and Sick-Room. The lectures commence each evening at six, and are free to the public.

A DEMONSTRATION, attended by three thousand people, was held at Bradford on February 4th, to protest against overpressure in elementary schools. Lord Stanley of Alderley, who presided, said the system of payment by results had turned teachers into overseers of slaves, bound to extract all labour from them in order to earn the grant. Mr. Stanley Leighton, M.P., condemned the new code, and said he did not know how many educational murders would be perpetrated before the department would give heed to the matter. Resolutions were passed declaring that the present system acted injuriously upon the health, and ought to be modified.

DR. C. THEODORE WILLIAMS.

WE are happy to be able to report a great improvement in the condition of Dr. C. T. Williams at Cannes. After repeated remissions and returns of fever during several days from last report, the temperature fell to normal on Saturday, February 2nd, with several hours of perspiration. This is about the twenty-first day from the commencement of continued high temperature. The abdominal pains have subsided. He is still very weak; but, as he bears light nourishment well, and has good sleep, there is reason to hope that he is in fair way to convalescence.

OPEN SPACES.

MR. BRYCE, M.P., will again raise the question of the proposed Paddington Park by a motion to prevent the Ecclesiastical Commissioners from leasing the land until the promised municipal authority of London has had an opportunity of coming to a decision. Any person who is inclined to give assistance to the project for enlarging Hampstead Heath, is requested to communicate with Mr. C. E. Maurice, honorary secretary of the Open Spaces Committee of the Kyrle Society, Sydney Cottage, Rosslyn Hill, Hampstead.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.

THE annual meeting of this Association was held on January 31st, 1884. The reports of the committee showed the continued prosperity, with a steady increase of members and funds. The following gentlemen were elected office-bearers and members of committee for the year 1884.—*President:* D. Lloyd Roberts, M.D. *Vice-Presidents:* G. Bowring, Esq.; C. J. Cullingworth, M.D.; F. H. Walmsley, Esq.; S. Woodcock, M.D. *Treasurer:* Joseph Stone, M.D. *Secretaries:* A. Wahltuch, M.D.; J. Broadbent, Esq. *Committee:* H. Ashby, M.D.; W. H. Barlow, M.D.; S. Buckley, M.B.; F. H. Collins, M.D.; A. M. Edge, M.D.; J. Foster, Esq.; C. E. Glascott, M.D.; W. J. Mallett, M.D.; E. Meacham, Esq.; F. M. Pierce, M.D.; W. Walter, M.D.; J. Westmorland, Esq.

ROYAL COLLEGE OF SURGEONS.

PROFESSOR PARKER, F.R.S., commenced his course of nine lectures on Mammalian Descent, in the theatre of the College, on Monday last. The following is the programme; viz.: I. February 4th, Introductory; II. February 6th, on Monotremes; III. February 8th, on Marsupials; IV. February 11th, on Edentates; V. February 13th, on Insectivores; VI. February 15th, on Insectivores (continued); VII. February 18th, on Insectivores (concluded); VIII. February 20th, on the remaining Orders of the Mammalia; IX. February 22nd, on Man—Conclusion.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

A COMMUNICATION will be made by the President at the meeting of the Royal Medical and Chirurgical Society, on Tuesday next, from Dr. Straus, of Paris, chief of the French Scientific Commission sent to Egypt to investigate the cholera. Dr. Straus's microscopical specimens will be on view half an hour before the meeting, and Professor Marshall's communications will be made at about 9.30, after the discussion of Dr. Broadbent's paper.

A FASTING ATAXIC.

IT appears from a statement, which we owe to the courtesy of Mr Charles Carey, of Bromsgrove, that there is, in the workhouse of that union, a man whose power of sustaining life for a considerable period without food is very remarkable. The man is named Hunt, and he is suffering from locomotor ataxy, with marked brain-symptoms, and complete loss of vision. He said that he was "ordered not to eat anything by his Heavenly Father," and for thirty-five days he took no food, with the exception of a small piece of toast on the sixth day of his fast, and drank no liquid except water. During this period, he did not show any signs of unusual weakness, he was able to sit up in bed, his movements were quick and prompt, his voice loud, and his manner abrupt; he has been invalided for about three years, and is unable to stand. Lately he has modified the rigour of his fast, and has consented to take milk and eggs.

THE CASE OF HYDROPHOBIA AT HORWICH.

IN the BRITISH MEDICAL JOURNAL of January 26th, page 180, we felt called upon to make some remarks on the impropriety of a coroner criticising the mode of treatment adopted by medical men, in a case which has subsequently become the subject of an inquest. As to the justice of the general principle, we entertain no doubt; and we rejoice to learn that Mr. William Hardy, the coroner whose remarks at an inquest called forth our comment, did not intend to make any injurious reflection upon the gentleman who had charge of the case of hydrophobia at Horwich. Mr. Hardy is, we are assured by a respected medical correspondent, "incapable in either his private or public capacity of slighting the profession, being discourteous, unreasonable, or inconsistent." We are also quite ready to believe that he would not knowingly hurt the feelings of the profession generally, or excite distrust of any individual member. "But evil is wrought by want of thought as well as want of heart." A correspondent, who was present at the inquest, has obligingly sent us the following report of Mr. Hardy's remarks: "He did not pretend to possess any special knowledge as to what treatment should be adopted in such cases, but he thought the solution of nitrate of silver was preferable to the solid; because, he said, it seemed to him that it was more capable of chasing the virus throughout the wound than the solid, and he gave the following reason for his taking that view. He had been informed, he said, the night before, by a medical friend of his of considerable standing, that Dr. Fisher, a gentleman residing in the neighbourhood of Wigan, but not now practising, had, during his sixty-five years' professional career, dressed scores and scores of cases of dog-bites, and he had never known one of the cases result in hydrophobia; and this he ascribed to his having always used the solution instead of the solid nitrate of silver."

SURGEON-GENERAL HUNTER AND THE FOREIGN OFFICE.

THE following letter was received by Surgeon-General Hunter, and is published in the Parliamentary paper:—"Foreign Office, January 15th, 1884. Sir,—I am directed by Earl Granville to acknowledge the receipt, on the 12th ultimo, of your general report relating to your recent mission to Egypt. In returning to you his lordship's thanks for the above communication, I am to take this opportunity of expressing to you Lord Granville's satisfaction at the energetic manner in which you executed your mission, and his appreciation of the great attention which you gave to the nature of the cholera epidemic and to all sanitary questions in Egypt, as well as the valuable information contained in the able and complete reports which you have furnished on the subject. Lord Granville does not doubt that these papers will contribute materially to the scientific knowledge of the character of the disease, and will claim a careful perusal by all those who take an interest in this important subject. —I am, etc., EDMOND FITZMAURICE."

A LEGISLATIVE REDUCTIO AD ABSURDUM.

OPPOSITION to the passing of the Dentist's Act, by members of the profession of medicine, was disarmed by the statement that their rights and privileges would not be interfered with by the Act. This statement seemed to be confirmed by Clause V of the Dentists' Act, which provides that no person shall recover fees for dental operations, unless he be registered under the Act, or is a legally qualified medical practitioner. We understand, however, that a gentleman holding the diplomas of M.R.C.S.Eng. and L.R.C.P.Lond., who applied to the Executive Committee of the Medical Council at its last meeting, to be registered in the *Dentists' Register*, as holding the above qualifications, and as having practised dentistry in 1867, was refused registration. Now, under Clause III of the Dentists' Act, no one can use the title of "Dentist," or "Dental Practitioner," unless he is registered under the Dentist's Act; and, in consequence, this anomalous state of things is brought about, that this gentleman cannot practise his profession as a dentist, though possessed of two qualifications, of which either one or the other would be regarded as indication of "a higher degree of knowledge than is required to obtain a certificate of fitness under the Act" (*i.e.* Dentists' Act). This decision of the Medical Council, or rather of its Executive Committee, amounts to this, that a registered Member of the Royal College of Surgeons may not call himself a "Surgeon Dentist," or "Dental Surgeon;" although a "Registered Dentist," who, perhaps before the Act came into operation, was merely a chemist who added the business of tooth-drawing to his more legitimate duties, does so call himself with impunity. This is a *reductio ad absurdum*, and brings into prominence, very clearly, one of the many points in which the Dentists' Act needs amendment.

THE QUEEN'S SPEECH.

THE promise, in the Queen's Speech, of legislation on questions of social improvement, is of a very barren kind; and it must be confessed that there was some justification for Lord Salisbury's satire on the vague language in which the few measures foreshadowed are referred to in the speech. The Rivers Conservancy Bill, which has done duty for three sessions, now drops out of the programme; but the County Government Bill, and the London Municipal Bill, both of which have been promised twice before, reappear in a different setting, and with, it is to be hoped, a better chance of consideration. The prominence given to the enlargement of the franchise, and the announcement already made that it is to take precedence of other Government business, forbid any very strong hope that either of the two other Bills mentioned can receive adequate consideration. And if, as appears from the somewhat obscure language of the speech, London municipal organisation is only to form part of a large and comprehensive reform of local government, to "embrace all that relates locally to the greater efficiency of administration, to the alleviation of burdens by improved arrangements, and to the enlargement of the powers of ratepayers through the representative system," Sir Charles Dilke's recent prophecy, that we shall all be citizens of the greater London before the year is out, appears very bold indeed. The speech may be read, however, to mean that London is to be the test case for legislation as to local government, and that other Bills "of the same class" are to follow if there be time to consider them, which is certainly most unlikely. If this be the intention, it is worth while to point out that the municipal organisation of London must of necessity be *sui generis*. As we have said repeatedly, the problem of the local administration of a place containing four millions of people is without a parallel in the history of the world. The machinery proper for such a place would probably need abundant modification before it could be adapted to the wants of less complex organisations; and, as we understand the speech, it is the local government of counties that the Government desire to reform. The absence from the speech of any mention of the Medical Bill is to be regretted, but need not, happily, be taken to mean that such a Bill will not be introduced at the proper time, and be properly piloted through the House. There are other matters, such as the Compulsory Notification of Infectious Diseases Bill, and the Bill for the Proper Regulation of Dairies and Milkshops, which may be expected to claim the attention of the House, and about which the Government will doubtless declare themselves before long. Looking, however, to the prospects of the session, it will obviously be necessary to use all diligence in order to prevent medical and sanitary matters from being smothered out of existence by the stress of other business.

DEATH IN THE PRIMER.

A BOY at West Bromwich, aged 12, has just committed suicide, to which, it is said, he has been driven by fears that he might not pass the sixth standard examination; and, coincidently with the announcement of this fact, there is made public the melancholy story of a little girl at Kingswinford, in Staffordshire, named Sophia Raybould, who died last November, under what must certainly be designated suspicious circumstances. On the 8th of that month, she was seen sitting in the corner of her school-room crying, and evidently very unwell; and, being at once sent home by a kind and considerate teacher, she died early next morning. During the whole course of her short and sharp illness, she raved about her school work, and cried unceasingly, and almost with her last breath, "I can't do it! I can't do it!" Mr. James Bradley, who attended the child during her illness, certified that her death resulted from meningitis and convulsions; and added to his certificate an expression of opinion that the present system of cramming children is most injurious, and the statement that he had seen cases similar to that of this unhappy little girl. The case was promptly brought to the knowledge of Mr. Mundella and his Board, and we are bound to say that their mode of dealing with it has been most unsatisfactory. It was reported to them on the 9th of November, 1883, and no deliverance regarding it seems to have been given until the 26th of January, 1884, when the Local Government Board, having consulted their medical officer—whose name is not mentioned—and it need scarcely be pointed out that they have several medical officers—and, ignoring Mr. Bradley's plain statement, suggest that Sophia Raybould died from uræmia and kidney-disease after scarlatina. A candid admission on the part of the Local Government Board that this was a case in which school-work had proved lamentably injurious would have done less to shake public confidence in the educational system they administer than the course they have adopted, which shows them to be blind partisans, bent on defending that system at all hazards. Medical men, and even the lay public, will not be slow to understand that Mr. Bradley, an independent practitioner of high standing, who saw and treated Sophia Raybould during her illness, is much more likely to know the true cause of her death than a Government official in London, who has formed his opinion on documentary evidence, and whose clinical acquaintance with disease is probably of the most meagre description. Supposing that Sophia Raybould did labour under dropsy as a sequel of scarlatina, that fact does not in the slightest degree invalidate Mr. Bradley's diagnosis of meningitis and convulsions; indeed, it rather favours it, for it is an established fact, which the medical officer of the Local Government Board seems to have forgotten, that children convalescing from acute diseases are peculiarly liable to tubercular meningitis, and that in them the disease runs an unusually rapid course. And whether of independent origin, or succeeding on another malady, tubercular meningitis presents a group of symptoms which no one but a tyro could mistake. A man of Mr. Bradley's experience would be guided by such symptoms to a correct conclusion without the assistance of a *post mortem* examination, which the medical authorities at the Local Government Board seem to think essential to any diagnosis of disease. But, even without Mr. Bradley's convincing testimony, there need not have been much doubt as to the origin of Sophia Raybould's fatal illness. She broke down at her tasks, which she found oppressive; and knowing, better than any one else could do, the starting-point of her sufferings, she raved in her delirium about her school work, and uttered piteous cries of futile protest. It is clear that, being weak and debilitated after scarlet fever, this little martyr, six years old, was driven into school when she ought to have been resting at home, and was there plied with brain-work, which induced functional hyperæmia, merging rapidly into congestion and meningitis, which killed even in its first stage. Mr. David Clark, who reported Sophia Raybould's case to the Local Government Board, may well say, "Mr. Mundella may discredit the statement, may ignore inspectors after twenty years' experience, may deny the existence of a single case of high pressure, but facts are against him." It is believed by many that the medical profession is fast accumulating an array of facts bearing on this question of educational overpressure, and that it will not be possible to evade nor explain them away. Mr. Pridgin Teale, in his pamphlet on *Hurry and Worry*, contends that this is a case in which doctors must hasten to the rescue of the helpless and oppressed, and put a stop to these "scenes of torture and misery," of which Mr. David Clark asserts he and his fellow-schoolmasters are daily the unwilling witnesses.

BOG-MOSS AN IMPROVEMENT ON COTTON-WOOL.

IT may be remembered that some time ago the virtues of dried black peat, as an antiseptic application to wounds, were highly extolled by Dr. Neuber of Kiel. Various theories were started to account for this antiseptic action. From recent observations, it would seem that it is due, at least in part, to the extraordinary power of absorption possessed by the bog-moss of which, as is well known, peat is almost entirely composed. Bog-moss (*sphagnum*) has a peculiar structure, the leaves consisting in considerable part of large colourless cells, from which the contents have disappeared; these empty cells communicate with a series of similar cells arranged in layers on the stem. It is owing to this capillary network that the bog-moss is able to raise the water of the bogs, in which it grows in large quantity, to the topmost leaves, through a height, sometimes, of several feet. There are several species of *sphagnum*, but all are closely allied in structure and function. Carefully gathered and thoroughly dried, bog-moss forms a soft, highly absorbent material, very suitable, it is said, when made into pads, for use in cases where copious discharge would otherwise necessitate frequent change of dressing, since it can absorb eight times its original weight of fluid without becoming too moist. Though not an antiseptic dressing, it might conceivably be of great use when antiseptics cannot be obtained. In war, for instance, a large pad of this soft absorbent material might furnish an excellent first dressing. The only point to be attended to in its preparation seems to be that it must be dried at a low temperature, so as not to destroy the peculiar structure upon which its absorbent power depends.

FEVER AND SMALL-POX IN LONDON.

AT the last meeting of the Metropolitan Asylums Board, a communication was read from the Local Government Board, authorising the purchase of the Chaseville Park Estate, Winchmore Hill, as a site for a convalescent fever hospital, at the sum of £13,870. The contract for the purchase of the estate, therefore, now becomes valid and absolute. The purchase-money is to be borrowed, and the repayment to extend over a course of years, so that the prime cost may fall as lightly as possible upon the ratepayers. The returns of the fever asylums showed a decrease during the past fortnight as compared with the previous fortnight. The returns from the small-pox hospitals, however, showed a steady increase of this disease in parts of the metropolis on the north side of the Thames allocated to the Eastern Asylum. This asylum being full, persons residing in Hackney had had to be sent into the asylums on the south side of the river. The committee considered that the ship *Atlas* should be immediately prepared to relieve the Eastern Asylum, that it should be reopened to receive convalescent and other patients whom the medical officers certified fit to be sent from the hospitals in London. This arrangement would give more room for the treatment of the more severe cases at Homerton. It was objectionable that cases belonging to one district should be taken to a hospital in another district; it would be far better that they should be received into the ship which had been provided for the common use of the whole metropolis. Preparations for the reopening of the ship had been made, and patients could be received there at twenty-four hours' notice. After some discussion, the report of the committee was adopted. It was stated that, during the previous fortnight, thirty-five acute cases had been admitted to the Homerton Hospital, where on Saturday last eighty-three patients still remained under treatment.

SIR SPENCER WELLS IN ITALY.

SIR SPENCER WELLS, making a short holiday in Italy, has been received by our Italian brethren at Rome and Naples in a manner which must be highly gratifying to British surgeons. At Rome, he was introduced to the students by Professor Mazzoni, and received with southern enthusiasm. At Naples (as we learn from a number of the *Corrière del Mattino* of January 27th), he was publicly addressed at the Anatomico-Pathological Institute of the Clinical Hospital, before a crowded assembly of students, by Professors Schrön and D'Antona, acknowledging the services he had rendered to the surgery of the whole world, and wishing him long life and prosperity. In reply, Sir Spencer addressed the professors and students in Italian, responding to their cordial welcome, and expressing his hope that some of those present, now students, would hereafter deserve and receive from the future surgeons of Great Britain as gratifying a reception as he had the pleasure of acknowledging from his Italian brethren. One of the Italian students then replied in English, expressing extremely well the thanks of the students to their visitor.

RESEARCHES UPON INFECTIOUS STOMATITIS AND NOMA.

A GRANT from the Research Fund of the British Medical Association was accorded to Mr. Alfred Lingard in August last for the above purpose, and he requests us to state that he will be very glad to hear of any case of noma which he could visit, either in London or in any part of the country. Communications should be addressed to Mr. Alfred Lingard, 49, Lambeth Palace Road, S.E.

WITHOUT MICRO-ORGANISM, NO SUPPURATION.

THE relation of the micro-organisms found in pus with the process of suppuration itself have been carefully investigated during the last two years, and several important papers have been published on the subject, especially in Germany. The experiments consisted generally in subcutaneous injections of sterilised irritating fluids, or in the introduction under the skin of aseptic solid bodies. The results, however, have been contradictory. M. Straus, from experiments made in M. Pasteur's laboratory, has arrived at the opinion that the introduction of irritating substances under the skin causes suppuration when micro-organisms have gained access at the same time, but that simple plastic inflammation is set up when all precautions have been taken to exclude them.

CIDER AS A PREVENTATIVE OF STONE.

M. DENIS-DUMONT has examined the statistics of the Caen Hospital, and found that in fifty-nine years only four cases of stone in the bladder were admitted. In one, the nucleus was a foreign body; and in two, the patients drank wine, and not cider, which is the ordinary beverage in Normandy. An inquiry made at Bayeux, Falaise, and in the departments of the Manche and Orne, showed that stone in the bladder was extremely rare where the use of cider was the rule. Meat being cheap and abundant in Normandy, the rarity of stone cannot be ascribed to the use of a food containing less nitrogenous substances than in other countries. The remarkable diuretic properties of cider, which M. Denis-Dumont has found useful in gravel, obesity, and some forms of gastritis, are considered to afford an explanation of this remarkable freedom from calculus.

ST. JOHN AMBULANCE ASSOCIATION.

A MEETING of the Central Executive Committee was held on January 30th at St. John's Gate, Mr. John Furley presiding. The Bishop of Rangoon (Dr. Strachan), and Dr. T. F. Pedley, resident health-officer, were elected honorary members of the Association in recognition of their efforts for the promotion of classes in British Burmah. It was reported that several meetings had been held during the month, the most notable being at Wigan, when 523 certificates were presented by Lord Crawford; additional interest arising from the fact that several of the recipients rendered very valuable assistance at the fatal accident, caused by the fall of a railway-bridge, at Coppull, a few days later. Meetings had also been held at Bowes Green, Guernsey, Stockport, St. Anne's-on-Sea, and Cork; and public meetings to form a centre were held on January 25th and 26th in Dundee. It was stated that St. Vincent had now to be added to the places in the West Indies where centres had been established by Lady Brassey. Votes of condolence on their recent bereavement, were passed to the Duke of Westminster, K.G., president of the Chester Centre, and to the Marchioness of Hertford, the late marquis having been president of the Leamington Centre, and one of the most zealous supporters of ambulance work in Warwickshire. The Earl of Strathmore has accepted the presidency of a centre at Dundee. Sir Edward Perrott presented certificates to the Erith female and police classes on Saturday afternoon.

BRITISH MEDICAL BENEVOLENT FUND.

THE annual general meeting of subscribers to this Fund was held on January 15th, at 34, Seymour Street, Portman Square, the house of the Treasurer, Dr. Broadbent; Dr. G. C. Jonson taking the chair, in the unavoidable absence of the President, Sir George Burrows The financial statement was submitted, and the annual report of the Committee read by the Treasurer, from which it appeared that the donations during the year 1883 amounted to £542 6s. 5d., and the subscriptions to £1,376 6s. 4d., making a total of £1,918 12s. 9d. The disbursements during the year had been—in grants, £2,229, nearly £100 more than in any previous year; in annuities, £1,062; making a total of £3,291; and the entire expense of collecting and distributing this large sum amounted only to £141, not 4½ per cent., including the printing and postage of the report, and also the postage and other expenses connected with the distribution of over £2,000 by Dr. Jonson, Chairman of Committee, in weekly or monthly instalments—a peculiar characteristic of this Fund. At the last meeting of the year, the balance at the bankers was entirely exhausted, and every farthing at the command of the Committee voted away. During the year, grants were made to 190 applicants, after careful inquiry, ranging from one of £3, to enable an assistant to take a situation, to one of £24 in monthly instalments of £4, by means of which the use of his furniture was secured to an aged practitioner. The Committee again wish to point out that, although large sums are sent up by the various Honorary Local Secretaries, it is a fact that those parts of the country from which the most urgent appeals come, do not contribute to an equal extent with others from which the appeals are neither so frequent nor so urgent; showing a want of more Honorary Local Secretaries to the Fund. Dr. Milson and Mr. Kiallmark joined the Committee; and Dr. G. C. Jonson and Sir Edwin Saunders were elected Vice-Presidents of the Fund.

A REDISCOVERY IN ANÆSTHETICS.

M. PAUL BERT has been making experiments in anæsthesia with a mixture of chloroform-vapour and air, and has communicated to the French Academy of Sciences the results. He used an anæsthetic vapour composed of eight grammes of chloroform volatised in 100 litres of air, and claims several advantages for this new method of producing anæsthesia during surgical operations. To all English surgeons and anæsthetists who are at all conversant with the history of the production of anæsthesia in this country during the last quarter of a century, it will be at once evident that M. Gambetta's ex-minister has been travelling over exactly the same ground as that which was completely explored fully five-and-twenty years ago by the late Mr. J. T. Clover. It was satisfactorily determined, during the dozen years or more that Mr. Clover's apparatus and bag were in common use, that that exact method of administering choloroform was far safer than the other modes usually employed. The proportion of chloroform-vapour to air was slightly less in the older English than in the new French apparatus; but chloroform has, for some nine or ten years past, been practically superseded here by other still safer anæsthetising agents, such as nitrous oxide gas, ether, or the mixture of alcohol, chloroform, and ether. Of the advantages possessed by these anæsthetic agents in many cases over chloroform, however skilfully and exactly it may be administered, our French neighbours may (if they travel at M. Bert's rate of progress) possibly become aware at the dawn of the twentieth century.

THE HOSPITALS ASSOCIATION.

AN influential meeting was held at the Mansion House on February 1st, with the view of forming a Hospitals Association. The Lord Mayor presided. The title of the Association is rather indefinite, but there can be no doubt about its object. It is the most recent advance of the hospital reformers. It originated directly out of the

Conference on Hospital Management, which was held in June last, and at that Conference all the principal reforms which have been advocated during the last ten or fifteen years were put prominently forward. The objects of the Association were stated to be: (1) to facilitate the consideration and discussion of matters connected with hospital management, and, where advisable, to take measures to further the decisions arrived at; and (2) to afford opportunities for the acquisition of a knowledge of hospital administration, both lay and medical. There seems to be little or no hope of obtaining a Royal Commission of Inquiry into the medical charities; and the Association will now endeavour to effect, by private enterprise, what the Government was asked to do by an official inquiry. And indeed the Association may in the end be able to effect more than a Royal Commission could have done, for its action will be continuous, and if it proceeds cautiously and wisely, it will, ere long, secure the good opinion of the public, and then its recommendations will carry with them more weight than those of a Commission, for they will be the result both of inquiry and of experience. At the Mansion House meeting the first resolution, proposing the formation of the Association, was moved by Sir T. Fowell Buxton, seconded by Sir Rutherford Alcock, and supported by Mr. T. Holmes. The second resolution, to the effect, "That the preliminary arrangements connected with the establishment of the Association, including the appointment of the first Council, be entrusted to the Provisional Committee," was moved by Earl Stanhope, and seconded by Dr. Farquharson, M.P. It is evident that the Association starts under very favourable auspices. There is a general agreement of opinion that important changes ought to be introduced into our system of medical charity. The managers of hospitals are ready to consider these changes, and public opinion will support the Association in recommending them. Under these circumstances we believe that the Association has a useful career before it, and we shall be interested in observing the steps it takes in order to advance measures of reform which are important to the public, the medical profession, and the sick poor.

AMERICAN RETALIATION.

ALTHOUGH it has been proved, beyond the possibility of doubt, that ordinary cooking is a certain protection against the ill effects of trichinous pork; and that, with a few quite insignificant exceptions, those people only have suffered who, like the Germans and Swedes, are in the habit of consuming bacon and ham in the raw state; and moreover, that, while the disease is very general among the Russian and German animals, no single case has been shown to have been caused by the use of American meat, several of the continental states, as France, Germany, Italy, and Austria, have been induced, by the agitation set up by interested traders, on the pretext of regard for the public health, to prohibit importation from the United States. Our Transatlantic cousins have hit on a means of revenging themselves; and have introduced into Congress a Bill to stop the importation of wines, liqueurs, etc., from all countries imposing restrictions on their trade in hams, etc., so long as these restrictions remain in force. At the same time, the authorities at Chicago have determined on establishing a body of inspectors; but it is very doubtful whether much real security can be thus given, since not fewer than four million pigs are slaughtered there annually, at the rate of 1,400 per hour.

THE ARTISANS' DWELLINGS QUESTION AT HULL.

THE interest which is being excited in London over the question of the homes of the poor has fortunately extended to most of our large towns, in several of which meetings have been held to discuss the question, and to stimulate the local authorities to greater vigilance in exercising their powers of repression and regulation. A most enthusiastic and in every way satisfactory meeting of this kind was held at Hull on Friday last, under the presidency of the Mayor, when papers were read by a number of local philanthropists, bringing home to the people of our great eastern port the urgent need for action which exists in their midst. Amongst those who spoke at this interesting conference were two of the Hull medical men, Alderman King, M.D., and Mr. R. H. Bourchier Nicholson, who were able to speak from personal experience of the misery and suffering which arise from the terribly unsanitary condition in which so many of the poor are housed. It is to be hoped that the meeting will not stop at passing resolutions, but will use such systematic pressure on the local authorities as to cause the fever-dens of the place to be rooted out without delay.

DANGERS OF DELUSIONAL INSANITY EXEMPLIFIED.

ANOTHER illustration of the risks run by the community by dangerous lunatics being allowed to be at large occurred last week. A man named William C. Donne threatened to shoot the Prince of Wales at Bristol, on the occasion of his recent visit there, and was taken into custody. He had come from Ross, to make purchases for his farm, and was rational enough, unless the Prince were mentioned. He would then become excited, and maintain that His Royal Highness possessed certain extraordinary powers as the head of the Freemasons, to whom he professed to belong. He also had a delusion about the Prince mesmerising a horse, and thereby causing it to lose the race, and injuring him. He resolved, in consequence, to shoot his imaginary enemy, and fortunately made no secret of his design. At first, no one supposed him to be in earnest; but when he proceeded, not only to write threatening letters, in which he requested an interview with the Prince of Wales, but bought a rifle, his proceedings were communicated to the police, and Donne was arrested. A six-chambered revolver and a gun were found in his possession. Papers on his person showed that he laboured under other wild delusions. Great precautions were taken at Bristol for the Prince's safety. The prisoner was examined in gaol by two medical men, and he was found to be an unquestionable lunatic. Every one is to be congratulated on the unfortunate man's intentions having been prevented in time; but we strongly suspect that his mental aberration had shown itself for a longer period than appears from the newspapers, and that he ought to have been placed under proper medical treatment a considerable time before. It is to be hoped that the public, which is so ready to find fault with the early deprivation of a lunatic's liberty, will see, from such cases as Donne's, the risks run by allowing men labouring under delusions of persecution to go at large.

KAIRIN.

IN the *Centralb. für die Med. Wiss.*, 1883, No. 50, are summarised L. von Hoffer's observations on the action of kairin muriate in the reduction of temperature. It was given in pleurisy, pericarditis, pneumonia, typhoid, intermittent fever, acute rheumatism, and tuberculosis. The judgment is not a favourable one, the drug being regarded as uncertain in its action. In one case of intermittent fever, the attacks were prevented; in another, they were only postponed some hours. The action of the drug was equally inconstant in pneumonia; and von Hoffer could not endorse Filehne's encomium; on the contrary, the patients were much disturbed by the strong rigors and sweats. As to tuberculosis, the drug was contra-indicated, since the temperature was only temporarily lowered by it, and rose still higher than before after its discontinuance, with the addition of profuse sweats, increased chilliness, rigors, and collapse. In only two of the typhoid cases was there a favourable influence upon the temperature and the general fever-course. Von Hoffer repeats the observations of others, that, even after continued administration of kairin, the temperature often rose, on leaving it off, as high as, or higher than, before, and in many cases it remained somewhat lower, or alternated. The rigors often accompanied a sudden rise of temperature, but they also appeared when the temperature was high, if the kairin were given at regular intervals. As to sweating, it occurred not only during lowering of the fever, but often during the whole duration of the exhibition of the drug. Amongst other disagreeable effects are cyanosis, even after fifteen grains only; and a burning sensation in the nose and forehead, not constant. A bad effect on the digestive tract was never observed. The author recommends caution in using kairin upon feeble subjects.

OBSTETRICAL SOCIETY OF LONDON.

AT the annual meeting for the election of officers for 1884, held on Wednesday, February 6th, the following Fellows of the Society were elected. *Honorary President:* Arthur Farre, M.D., F.R.S. *President:* Henry Gervis, M.D. *Vice-Presidents:* John Brunton, M.D.; Frederick Henry Daly, M.D.; Alfred Lewis Galabin, M.A., M.D.; Clement Godson, M.D.; Edward Malins, M.D. (Birmingham); J. Lucas Worship (Sevenoaks). *Treasurer:* John Baptiste Potter, M.D. *Honorary Secretaries:* George Ernest Herman, M.B.; Francis Henry Champneys, M.A., M.B. *Honorary Librarian:* John Knowsley Thornton, M.B., C.M. *Chairman of the Board for the Examination of Midwives:* John Williams, M.D. *Other members of Council:* James H. Aveling, M.D.; George Paddock Bate, M.D.; Peter Lodwick Burchell, M.B.; T. Edmondstoune Charles, M.D. (Cannes); Robert Cory, M.D.; Charles James Cullingworth, M.D. (Manchester); Alban Doran; John T. Griffith, M.D.; James Hickinbotham, M.D. (Birmingham); Henry Thomas Lanchester, M.D. (Croydon); Henry M. Madge, M.D.; Gustavus C. P. Murray, M.D.; William S. Playfair, M.D.; George Roper, M.D.; David Elphinstone Seton, M.D.; William Heath Strange, M.D.; John Wallace, M.D. (Liverpool); James Hopkins Walters (Reading). Drs. Duncan and Godson exhibited apparatus for the nursing of premature children, by the maintenance of artificial heat; and the proceedings terminated by the address of the President, Dr. Gervis.

CHOLERA NEWS.

IT is stated that none of the Egyptian pilgrims were attacked by cholera at Mecca during the late pilgrimage. The first victims attacked were Turkish soldiers of the guard, at Muna, where the disease was first observed. No cholera was observed in Mecca during the sojourn of the pilgrims there before proceeding to Muna for the sacrifice, but on their return from Muna to Mecca, the disease showed itself also at the latter place. No cases of cholera nor "suspected cases" were observed at Camaran amongst the Indian or other pilgrims, who performed quarantine there before being allowed to disembark at Jedda to proceed to Mecca. The unsanitary condition of Mecca and Muna, at the time of the sacrifice, is reported to have been, as usual, bad beyond description. The present increase in mortality from cholera in the town of Bombay is attributed to interruption of the water-supply, by an accident to the main conduit, necessitating recourse for some time to the water of wells and tanks. The cases are reported by the health-officer to have occurred in quarters of the town where the wells were particularly objectionable. The Egyptian Quarantine Board, however, regard it as a fresh epidemic outbreak, and have imposed quarantine, their *ne plus ultra* of security, though many of the members must be intelligent enough to know that it is like putting up an iron grating to keep out mosquitoes, that it only prevents the employment of better and more efficacious means.

THE SALE OF DRUGS AND THE PHARMACY ACT.

THAT the Pharmacy Act requires urgently amending we have often pointed out in these columns, and latterly a case of poisoning from an Indian tincture, largely used by the public in some of the large towns in Lancashire for diarrhœa, has occurred in St. Helen's. The deputy coroner, Mr. Wm. Hardy, made some strong and wise comments on the sale of drugs (Indian tinctures and other mixtures) by shopkeepers, who are ignorant of their contents. He also ordered an analysis in this case to be made by Dr. Brown, the county analyst, who, by his report, showed that the Indian tincture not only contained an irritant, but 30 per cent. of methylated spirit. Where are the excise authorities? A medical man must not use for internal use methylated tinctures, yet a drysalter may make a poisonous compound containing methylated spirit, and sell it wholesale to shopkeepers who retail it to the public. Mr. Hardy, who is energetic and conscientious in his investigations, is to be commended for the full inquiry in this case, and for his well chosen remarks on this traffic to the jury, who, at the conclusion of the inquiry, had the mother who had purchased the tincture, and the shopkeeper who sold it, censured by the coroner. They further desired a presentment to be made, "that they thought all shopkeepers ought to be absolutely prohibited by law from selling Indian tincture; and if in this case the law relating to the Inland Revenue had been broken by the manufacturer of this Indian tincture, they hoped steps would be at once taken by the proper authority to enforce the penalty fixed by law."

THE CHARGES AGAINST THE MEDICAL DEPARTMENT IN EGYPT.

WE were pleased to see that a letter from Brigade-Surgeon O'Leary was published in the *Times* of January 31st, dealing with the charges brought against him, by Major-General Sir D. C. Drury-Lowe, before Lord Morley's Committee, and reported in that paper on May 21st, 1883. Dr. O'Leary's letter appears to us to show that these charges were entirely unfounded, and we have had the opportunity of inspecting the original documents referred to in the letter. With regard to the statement that Dr. O'Leary "invalided himself," he has been able to produce the most ample evidence, including the medical certificate of Surgeon-Major Ramsay, and the telegraphic order from Sir James Hanbury, the Surgeon-General of the Force in Egypt, that this charge is without the shadow of a foundation. Further, the charge that thirty men, applying for medicine to him, at the field-hospital, were refused, is shown to be a complete misstatement; for Dr. O'Leary was not the medical officer of the field-hospital, but the Principal Medical Officer of the Cavalry Division; his duties were purely administrative; and it is perfectly clear, from the evidence he has collected, that no such thing ever happened. It is a matter of the very greatest regret that a paper, occupying the position of the *Times*, should have published Sir D. C. Drury-Lowe's evidence before Lord Morley's Committee, and have suppressed that of Dr. O'Leary; and we are glad to see that, somewhat tardily, that officer's vindication has been published. It would have been more graceful had it been done earlier, when, in June 1883, the attention of the *Times* was first called to the injustice of the one-sided statement published. We trust that Sir D. C. Drury-Lowe will now see that he is called upon to retract the injurious charges he made, and apologise for giving them currency. We are also glad to see that the *Globe* has expressed regret at not having published Dr. O'Leary's evidence in connection with that of Sir D. C. Drury-Lowe.

SCOTLAND.

THE Aberdeen University Temperance Society held its annual *conversazione* in Marischal College, on Saturday evening. There was a large attendance of students and their friends, under the presidency of Professor Struthers.

ABERDEEN society has been agitated by the doings of Mr. Stuart Cumberland, the so-called "thought-reader." The exhibitions on this subject were similar to those which are done elsewhere, and by many other individuals. The whole affair resolves itself into "muscle-reading."

THE TAY WHALE.

THE Tay whale was brought to Aberdeen last week, and has been visited by many thousand spectators. Professor Struthers delivered a lecture on whales in general, and his Tay friend in particular. Thus the public curiosity to see so large a monster has been tempered with a scientific exposition of the "points" of the whale. The animal is to be exhibited in Glasgow and other large towns. An amusing cartoon has been published, showing the Professor of Anatomy seated on the back of the whale carving his way into its rudimentary hind limbs with a large flensing knife, while other professors are disposed in humorous and characteristic fashion.

GLASGOW UNIVERSITY CONVERSAZIONE.

THE formal opening of the Bate Hall and of the Randolph Buildings of the Glasgow University, took place on the evening of February 1st, when a *conversazione* was given by the principal and professors. A large and brilliant assemblage were present, including representatives of the educational institutions of the city, and of various public bodies. All of the rooms were illuminated by the electric light, the clearness and softness of which served to bring out fully the fine proportions and chaste ornamentation of the newly-built halls, the completion of which has materially added to the architectural beauties of the university buildings.

THE RECENT STORM IN SCOTLAND.

PROFESSOR GRANT, of the Glasgow Observatory, has published the meteorological results derived during the recent storm from the self-recording instruments under his charge. From these we gather that a greater force of wind has been registered on several occasions during the last two or three years; but one of the most remarkable facts of the storm was the succession of fierce gusts by which it was distinguished. Another and still more striking fact was the extraordinary fall of the barometer, the lowest depression of the mercury being 27.427. No such depression as this has at any time been recorded at the Glasgow Observatory. From other parts of Scotland still lower readings are recorded, and this was especially so on Ben Nevis, where the occupants of the observatory felt the full force of the gale, and where the mercury fell to twenty-six inches.

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IRELAND.

EARL SPENCER has, we understand, on the recommendation of the Governors of the District Lunatic Asylum, Omagh, and the Inspectors of Lunatic Asylums, sanctioned a good service pay of £100 per annum to Dr. George E. Carre, the resident medical superintendent.

LISTOWEL WORKHOUSE.

THE guardians of this Union, who recently elected Dr. John T. Dillon medical officer to the workhouse in the place of Dr. Fitzmaurice, who resigned, have received a communication from the Local Government Board in reference to the appointment. It appears that Dr. Dillon paid a sum of money to Dr. Fitzmaurice to vacate the post in his favour, and this matter coming to the ears of the Local Government Board, they refused to sanction his appointment. The Guardians, however, showed a disposition to countenance such a traffic in appointments in their Union, and again reelected Dr. Dillon after the facts of the case were made known to them. The Local Government Board, in their last communication, state that they deem it to be a matter of the utmost importance that such transactions shall be prevented by every possible means, and that persons endeavouring to enter the Poor Law service should not be allowed to succeed in any attempt they may make to do so by means of monetary dealings with the occupants of office. They again refuse to sanction the appointment of Dr. Dillon, and request the Guardians to elect someone else to the vacant office.

SOUTH CHARITABLE INFIRMARY, CORK.

LAST week the annual dinner of this institution took place, and was attended by about thirty-five medical practitioners, all of whom are at present, or had formerly been, connected with the Infirmary. The toast of the evening, "The South Charitable Infirmary and County Hospital," was proposed by the chairman, Dr. W. C. Townsend, senior physician to the hospital. In doing so he detailed the history of the institution, which had been 125 years in existence. He had been connected with it for nearly thirty years, and could recall the names of many men of eminence, who had either been members of the staff, or who, as students, had received their professional education in its wards. Previous to his time the records of the hospital were adorned with the names of such men as Lloyd, Bull, Woodroofe, Howe, Fletcher, and many others whose names are still familiar to the citizens of Cork; whilst within his own recollection, men no less distinguished in the field of science, such as the late Drs. Tanner and Gregg, gave their valuable services to the Institution. A pleasant re-union was brought to a close at a late hour.

THE ANNUAL MEETING OF THE DUBLIN BRANCH.

THE seventh annual meeting of this Branch, which took place on the 31st ult., in the King and Queen's College of Physicians, passed off most successfully. The attendance was very large, and included a large number of officers of the Army Medical Department, attracted, doubtless, by an important resolution as regards their department submitted to the meeting. The address of the new President, Dr. Edward Hamilton, was most thoughtful and able, and was given in a style that elicited warm encomiums. An extremely complimentary vote of thanks to Dr. George F. Duffey, upon his resignation of the post of Honorary Secretary of the Branch, was proposed by the ex-President, Dr. Banks, seconded by the Registrar-General, Dr. Grimshaw, and carried by acclamation. Over fifty members and guests, among whom were Dr. Lyons, M.P., and Dr. Cameron, M.P., sat down to the annual dinner in the college-hall in the evening.

PRESENTATION TO PROFESSOR MACALISTER.

ON Thursday, January 31st, in the anatomical theatre, Trinity College, Dublin, a handsome silver dessert service was presented to Alexander Macalister, M.D., F.R.S., by his former pupils, on the occasion of his leaving to occupy the Chair of Anatomy in the University of Cambridge. When it became generally known last July that Dr. Macalister was to leave Trinity College, a meeting of his old pupils was held, but it was then determined, as most of the students had left town, to postpone further action till October, and then to summon a general meeting of the pupils of the school. Accordingly, at a meeting held on October 31st, a committee was appointed to collect subscriptions, and make all the necessary arrangements, Mr. Greenwood Pim being the chairman, and Mr. Edgar Hogben and Dr. John Barton the honorary secretaries. Advantage was taken of Dr. Macalister's presence in Dublin last week to make the presentation. This took place in the old anatomical theatre, where he long and successfully presided as Professor of Anatomy. Dr. Macalister, on entering, met with a reception that can truly be described as most enthusiastic. Mr. Pim presented the testimonial, and Professor Macalister, in a pleasant and humorous speech, expressed his thanks and gratitude, and wound up by saying how much he regretted not being able to carry all his old pupils to Cambridge along with him.

CHOLERA IN EGYPT.

THE MISSION OF SURGEON-GENERAL HUNTER.

FINAL REPORT.

ON September 22nd, 1883, we published (p. 597 *et seq.*) an analysis of the second report by Surgeon-General Hunter forwarded to Earl Granville (from Cairo) on August 20th. We have now before us Dr. Hunter's final report, dated London, December 11th, and issued on the 29th ultimo as a Parliamentary paper. The delay in the preparation of this report has been due to the necessity of waiting for further official information on the march of the cholera epidemic and the resulting mortality; the Conseil de Santé at Cairo exhibited a disinclination to close their report so long as it was known that cholera existed in Alexandria and other places. "Should such be the reason for the delay," adds Dr. Hunter, "I much fear, unless I am greatly mistaken in the correctness of my views on the origin of cholera in Egypt, that the report of the Conseil is not likely to be received for an indefinite period."

Dr. Hunter, in continuation of his earlier report, describes the sanitary condition of Alexandria, characterising it as "deplorable." There are no public latrines; a portion only of the city is sewered, and the sewers are unventilated. To windward of the city, thirteen public sewers, exclusive of many private drain-pipes, are constantly discharging their contents on the beach of a tideless sea. The house-connections of the privies with the sewers are free, as was shown very clearly, when the Extraordinary Sanitary Commission, after cleansing the main sewer of the city which had become choked up, burnt sulphur therein in order to disinfect it; the sulphurous gases, the products of the combustion, readily found an entrance into the houses and created much alarm amongst the residents, who imagined that they were visited by "el-hawa-el-asfar" (the yellow air, or cholera) in person. This afforded excellent proof that the house-connections were the ventilators of the sewers. The ventilators of these sewers had been closed about five years before. This Sanitary Commission is highly commended by Dr. Hunter for the excellent work which it accomplished.

Alexandria, with a population (according to the last census) of 217,972, lost during the epidemic from cholera about 850 souls up to October 31st. On August 18th the death-rate reached its maximum of fifty-one, and after slight fluctuations declined. Up to the date of the report, December 1st, the disease continued to cling to the city, but the daily death-rate was low—about two daily. The date of the appearance of cholera at Alexandria in 1865 and in 1883, showed a difference of only three weeks. In 1865, the first case occurred on June 12th, and in 1883 on July 3rd; further, the outbreak in both epidemics took place in the village of Karmoose, in the quarter known as No. 4, which is the most unhealthy part of the city. These facts lend support to Dr. Cunningham's statement, that "the cholera appears in the same place on or about the same date in different years." (Memorandum on Cholera in Egypt, dated July 9th, 1882.) As to the cause of the comparative immunity enjoyed in Alexandria during the last epidemic, it is pointed out that the population of the city had been greatly diminished for some weeks during the recent rebellion, that extensive areas, amounting to more than 100,000 square mètres (about twelve hundred thousand square yards, or twenty-four and a half acres), had been destroyed by incendiaries, that the city had a pure water-supply, and that it had been thoroughly cleansed by the two Sanitary Commissions.

Dr. Hunter, after emphasising the fact that he is to be held responsible for the statement that cholera had existed for years antecedent to the outbreak at Damietta, and that Drs. Dutrieux, Sonsino, Ambron, and Sierra, by whose statements he was in part led to that conclusion, are not, as had been supposed by some, in any way committed to that opinion, details the facts with regard to a number of "choleriform cases," which have already appeared in our columns in the report of his address before the Epidemiological Society (BRITISH MEDICAL JOURNAL, 1884, vol. i, pp. 93, 94, and 95), and a large quotation is made from an article which appeared in the JOURNAL on August 11th. Dr. Hunter then proceeds to discuss the germ-theory as applied to cholera. He says: "A cholera-germ is supposed to be a microscopic organism, capable of being imported from the country of its birth, "the Valley of the Ganges," to other and distant countries in various ways, as in or on the person of individuals, by cargo on board ships, etc., and that, on being so imported into a country, provided a suitable soil-condition or conditions exist, it will develop and propagate itself, and from time to time manifest its presence by outbreaks of the disease which have wrought such sad and terrible destruction among populations. The more advanced advocates of this theory state, moreover, that fresh outbreaks in European countries require for their production fresh importation of germs from India, as the soil of Europe is not propitious to their cultivation and existence. They consequently always look for fresh cases of importation from India to account for any epidemic visiting a country, and refuse to accept evidence of the existence of the disease unless it can be so traced. A germ has never yet been proved to exist in connection with cholera. Its existence is assumed, partly because certain micro-organisms have been found in connection with certain maladies of an infectious or contagious character, and which have been pronounced by those who lend support to the germ-theory of disease to stand in a causal relation to them. Dr. Hunter considers that the investigations of Dr. Timothy Lewis and Dr. Douglas Cunningham "did not afford any evidence in favour of the existence of a specific poison contained in cholera-excreta peculiar to them alone, and giving rise to special phenomena." Drs. Lewis and Cunningham consider "they have a most important practical bearing on sanitation, seeing that they point most distinctly to the influence of decomposing organic matters in the production of intestinal lesions." The negative results arrived at by these able and competent microscopists left the field open for other observers; and the French Government, and subsequently that of Germany, each despatched scientific missions to Egypt, during the recent epidemic, to make special investigations. Though it has not been publicly allowed, there is but little room to doubt that the officers of the French Mission have failed to discover any specific organism in connection with the disease, thus confirming the results arrived at by Drs. Lewis and Cunningham. The German Mission, at the head of which is Dr. Koch, is said, on the other hand, to have been more successful; and to have discovered the cholera-germ, a bacterioid body, having a rod- or stave-like formation, and consequently a bacillus. Dr. Koch, however, in his report, dated Alexandria, September 17th, 1883, is much more cautious in his remarks, and definitely states that he looks upon the experiments hitherto conducted as merely of an initiatory character, and expressly states that it is not to be assumed that these micro-organisms are the actual causes of the disease, and suggests that further observation may show that they are mere concomitants. The writer of an article on this subject, in the BRITISH MEDICAL JOURNAL of October 27th, 1883, states: "For ourselves, judging from the evidence after very careful perusal of the text, we are inclined to fall in with the latter view, and even to add that thus far sufficient data have not been adduced to warrant our assuming that a specific kind of micro-organism has been discovered in cholera." Dr. Hunter next quotes Dr. Goodeve (Reynolds's *Syst. of Med.*, vol. i), Surgeon-General J. M. Cunningham, Pettenkofer, and M. Jules Guérin, in favour of his contention that cholera is not contagious. "In Calcutta," he continues, "it has been the practice for many years past to treat all cases of cholera in the general wards of the hospitals: no source of danger to other patients under treatment was contemplated, nor did any danger ever arise. The practice was only discontinued in the General Hospital on a building in the grounds becoming vacant, into which the cholera-patients were placed; more as a matter of convenience, however, than for any other reason. My personal experience of cholera in India is in accordance with the opinions above expressed. The professorial staff, a large body of students and attendants of Grant Medical College and the attached hospital, Jamsetjee Jejeebhoy, Bombay, who were more or less in frequent communication with cases of cholera, and many of whom were also engaged from time to time in performing *post mortem* examinations, appeared to enjoy comparative immunity from the disease, without any special precautions being taken. Experience gained during the recent epidemic in Egypt confirms still further these facts. It was no uncommon thing to hear from medical officers and others that their clothing and person had been covered with the discharges from cholera-patients, which had been allowed to become dry; yet no evil results followed. Circumstances to which I need not here more particularly refer rendered it necessary that the British officers serving with the Egyptian army should attend the cholera sick, wash their bodies after death according to Moslem usage, and afterwards bury them; and yet in no single instance, if I am correctly informed, did they contract the disease. It appears that the attendants on the cholera-sick in the several hospitals in Egypt suffered but slightly, except those of the British Army Hospital at Cairo. The attendants in the hospitals of the British army consisted of sisters and men of the Army Hospital Corps. Among the former, not one was attacked; while among the latter 24 per cent contracted the disease. The explanation of such a marked disparity in the number of attacks, not only as between the sisters and the men of the Army Hospital Corps, but also in regard to the numbers attacked in other hospitals, is to be found in fear, one of the most potent factors in the causation of cholera in individuals. That fear, with other causes, had much to do with the high percentage of attacks among the men of the Army Hospital Corps, is, I believe, not much a matter for doubt. I might multiply instances in proof that cholera does not spread from the sick to the healthy, but feel it to be unnecessary."

The first report of the outbreak of the epidemic at Damietta was made on June 22nd. It did not, as usually stated, take "a southerly course down the Damietta branch of the Nile to Cairo, and then a northerly course up the Rosetta branch to Alexandria, but rather an erratic course, following no particular route either by water or by rail, and appearing in distant places on one and the same day. Thus, it was at Alexandria, extreme north-west, and at Chisbin, north-east, about twenty miles south of Damietta, on July 1st; at Ismailia, in the extreme east, and at Kafr Zayat, in the west, on July 23rd, so demonstrating that its production and diffusion were the result of some general influence, and independent of any traffic-routes, and confirming, in a remarkable manner, the views I have enunciated of the existence of the cholera-poison in numerous centres antecedent to the outbreak at Damietta. It has become almost a matter of common observation in India, that even when cholera is severe in a district, it is generally confined to a small proportion of the villages. This has been amply confirmed in Egypt."

The history of *cordons* in Egypt is the history of *cordons* and quarantine in India. It was impracticable to isolate "the infected place" from the rest of the country. The *cordons*, although carried out as humanely as practicable, were intolerable, and it is notorious that people found ready means of passage through their lines. The appearance of cholera in the rear of the *cordons* rendered their retention ridiculous, and they were consequently, one after the other, withdrawn. *Cordons*, which are adopted on all occasions in Egypt, with the view of carrying out the theoretical idea of stopping human intercourse, have created so much suffering among the people, that they are regarded with horror and detestation. The feeling is universal among the fellaheen, and leads them to conceal sickness and hide their dead, lest a *cordon* should be placed around their village.

The report next proceeds to give a sketch of Egypt and of the habits of the Egyptians, such as has already appeared in these pages (BRITISH MEDICAL JOURNAL, 1884, vol. i, p. 91). Chemical and microscopical examination of the water at Damietta showed that in July it was undergoing putrefactive changes. The results of a chemical and microscopical examination of the water at Cairo by M. Albert Ismalun, the director of the Khedivial Laboratory, are given in an annex (No. 15), from which it will be seen that it likewise, in July last, contained living organisms in considerable numbers, and among them bacterioid bodies, and had more the character of pond-water than of that taken from a running stream. This polluted water was drunk by the people unfiltered, and to this circumstance, and also the fact of the poorer classes having freely indulged in the practice of eating the flesh of the cattle which had died of typhus, must be ascribed the prevalence of bowel-disorders in the country.

For the various reasons above named, viz.: (1) density of population, (2) polluted soil, (3) impure air, (4) impure water, (5) eating diseased meat, (6) prevalence of bowel-disorders and of endemic cholera also, the state of health of the people was such as to render them specially noxious to any epidemic influence; and, were it not for the out-door life which the fellaheen lead, it is probable the recent cholera-outbreak would not have been so long delayed.

Although cholera attacks the strong as well as the weakly, yet experience proves that the debilitated and cachectic are peculiarly predisposed to its influence. This is well illustrated by what occurred among the British troops at Ramleh. "Of the fourteen attacked," writes Deputy Surgeon-General Fox, "eleven were sick in hospital of enteric fever, dysentery, and diarrhœa, and the remainder were in poor health and debilitated."

Dr. Hunter then reviews the meteorological circumstances of the times (see BRITISH MEDICAL JOURNAL, 1884, vol. i, pp. 95 and 96); and the letter from Dr. Kirker, R.N., there published, forms Enclosure 1 in No. 2 of the Report.

He next goes on to point out that some explanation of the fact that the same places were attacked at about the same time in 1865 and 1883 may be found in the observation that the outbreaks "corresponded to a Nile about its minimum level, and their cessation to a Nile advancing towards its maximum." That the arrest of the epidemics is due to the inundations, there is not, he thinks, much room for doubt; the water cleanses the soil from its organic impurities; the enormous volume of water and the powerful current carry the accumulated filth of the preceding nine months to sea, and so effectually dispose of it.

On the subject of quarantine, he writes: "If there be any truth in the opinion which I have expressed on the causation and nature of cholera, the worthlessness of quarantine, and the medical inspection regulations issued by the Local Government Board for the prevention of the spread of the disease, will be apparent. It is not by such means as these that its introduction into a country can be arrested. Though quarantine be adhered to with singular tenacity by many countries, yet it is a satisfaction to know that many epidemiologists, both English and foreign, have come to consider it as useless to protect a country from an invasion of the disease. England takes the lead in opposing quarantine, it is said, because she is actuated by selfish motives with regard to her commerce. A more fallacious statement was never promulgated. England is supported in her action by the opinion of a large body of scientific men, British and foreign, who have made cholera their study, and are fully competent to deal with its problems.

"It has also been stated, in order to discredit the action of England on this important international question, that 'her theories are one thing, her practice is another'; and those who make this assertion, point to the quarantine set in force at Cyprus, Malta, and Gibraltar, in justification of their opinions."

The explanation is simple enough. "Those places were placed in quarantine to obviate quarantine, probably, of a more rigid character being set in force against them by other countries. While England is thus acting in accordance with the majority of scientific opinion, it is Italy who steadily sets her face against the opinion of her own delegate (Dr. Semmola), as expressed at the Vienna conference in 1874, and insists on a rigid quarantine against all vessels arriving from India and Egypt.

"The theory which brought quarantine into operation is found more and more impracticable of execution with the requisite rigour, in these days of rapid and constant communication between the east and the west. The method resorted to of confining the healthy and the sick together in lazarettos is opposed to modern teaching and experience; and, instead of acting as intended in repressing disease, tends to develop and foster it. A system which puts restrictions on personal liberty, induces physical and moral distress, and seriously embarrasses trade, without fulfilling the object for which it was instituted, ceases to have a *raison d'être*, and ought to be abolished. Accepting the view of a specific entity in connection with cholera, the methods which are adopted for its destruction under the existing system of quarantine are irreconcilable with modern experiment and investigation. To destroy a germ requires, it is said, a heat of about 250° Fahr.; and, for the destruction of its spore, a much higher degree of heat is required. Moreover, one part of a fluid containing bacilli, mixed with one part of a five per cent. watery solution of carbolic acid, and allowed to stand for fifteen minutes, will, it is believed, reproduce themselves, and yet a person is supposed to be disinfected after he has been momentarily exposed to the fumes of a little chlorine gas. Thus a false sense of security is engendered, highly dangerous to the individual himself, and to the community at large.

"The way in which quarantine rules were applied during the year by the International Quarantine Board at Alexandria was so capricious as to be ridiculous had not such highly important interests been involved. Under an impulsive alarm of the sudden increase of cholera at Bombay, the Board, on the 14th May, 1883, declared that place infected, and it was only after urgent remonstrance of their action being premature and injurious that, on the 1st June, the Board decided to remove the quarantine on all vessels leaving Bombay after the 13th of that month; that is to say, the Board instituted quarantine against Bombay when all the while Egypt was infinitely more infected with cholera than Bombay. But more than this, while the cholera-epidemic was raging in Egypt, on the 22nd July quarantine was reimposed against all arrivals from Bombay." The opinions of the Board are, he considers, warped by considerations other than those which should govern their deliberations.

As the reasons which brought the Board into existence have ceased, he thinks that there are no longer grounds for its retention.

If, then, cordons and quarantine, and a system of medical inspection, be useless to prevent the spread of cholera, it may be asked on what means would Dr. Hunter rely? His answer is, "On sanitation, on pure soil, pure water, wholesome food, and on cleanliness of persons and of houses—cleanliness in every form and shape. If the enormous sums of money which quarantine has cost this country had been applied to sanitation, it is scarcely too much to state that cholera might have been stamped out of Europe and India, and have become a memory of the past." He then briefly indicates conditions which urgently demand attention:—

"1. Prevention of the pollution of the rivers and canals.

"2. The introduction of public latrines into towns and villages.

"3. The introduction of a system of sewerage into the cities and towns applicable to their several conditions. (A system suitable to Alexandria would be inapplicable to Cairo, and still more so to a town like Damietta.)

"4. An inquiry into the condition of the cemeteries, with a view to a more carefully regulated and better method of disposal of the dead, without invading the religious prejudices of the people.

"5. The introduction of an improved system of registration and of vital statistics.

"6. The institution of sanitary laws.

"These propositions cover an enormous area, and could only satisfactorily be dealt with on the spot. A Commission has, I am informed, been appointed to inquire into the sanitary needs of the country. Its constitution I am unacquainted with, but no Commission for the purpose can be considered complete unless it has among its members a sanitary officer and a sanitary engineer. Experts only can be competent to deal with the numerous problems which must almost constantly arise in the course of the inquiry. That such experts are necessary is evidenced in 'the Report of the Commission sent to Alexandria to examine into the cause of the late Outbreak of Cholera there,' dated the 5th November, 1883, and forwarded under cover of Sir Evelyn Baring's despatch, dated Cairo, the 26th November, 1883. The Commission does good work in drawing attention to numerous grossly unsanitary conditions which prevail, but their report should be much farther reaching than this. It fails in that it omits to draw attention to the faulty construction of the sewers, the absence of any breaks in the house-connections, the polluted condition of the foreshore, and other nuisances of an equally dangerous character which are inimical to the public health. The truth is, the members of the Commission, while devoting their attention to matters of conservancy, have lost sight of nuisances which, being hidden from view, are thus more dangerous to the public health. It is painful to find how speedily the lesson taught by the recent epidemic has been lost on the Conseil de Santé and its officials."

He considers that the Board showed its incompetency in the way in which it dealt with the epidemic, and contends that, "the retention of the existing Board merely tends to throw discredit on the Egyptian Government, whose true interests lie in replacing it by an executive which would render efficient service." Dr. Hunter concludes by observing that the results of sanitation in the Presidency of Bombay are very striking. The city itself, once regarded as the grave of Europeans, now shows a death-rate of only 27.87 per thousand in 1881, whereas the death-rate of Cairo for 1881 was 39.67, and for 1882, 46.98. The cholera-mortality in the Island of Bombay, in the seventeen years from 1848 to 1864, was 37,454, while in the succeeding seventeen years (1864 to 1880), after much sanitary work had been done, it was only about 11,000; and this in spite of the latter period including the famine, when the city was crowded with starving refugees; and in spite also of a more perfect system of registration affording a more accurate enumeration of deaths.

The report is accompanied by fifteen Annexes.

THE EGYPTIAN GOVERNMENT RAILWAYS HALF-YEARLY REPORT.

THE following are extracts from the remarks on cholera appended to Dr. Grant Bey's Half-yearly Medical Report on the Egyptian Government Railways for the six months ending December 16th, 1883.

An epidemic of true cholera, such as is prevalent in India, broke out suddenly at Damietta, on June 22nd, 1883. This was verified by a commission of medical men sent by the Government to Damietta on June 24th. I was a member of that Commission. The disease spread rapidly from town to town, following the tracks of communication, more markedly, however, by river and railway. An attempt was made to confine the disease to the different towns where it appeared, partly by isolating the towns infected, and partly by isolating individual houses. Under the pressing circumstances of the case, whatever measures were decided on had to be carried out quickly; hence, no doubt, some inconvenience was experienced by those confined within the *cordons sanitaires*, because the whole machinery of communication was suddenly thrown out of order, and it took some time before arrangements could be made for passing food, etc., through the *cordons*.

I am not in a position to assert that the *cordon sanitaire* was the proper measure to adopt, because of the impossibility of making it perfect. I would only make this remark, that, in 1865, a cholera-epidemic commenced at Alexandria on June 11th, and reached Cairo on the 17th of the same month (*i.e.*, after six days). No sanitary measures of any kind were then adopted, and, at the end of the epidemic, 60,000 deaths were registered from cholera alone. This time, the epidemic commenced at Damietta on June 22nd, but it did not reach Cairo till July 15th (*i.e.*, after 23 days), although Alexandria and Damietta may well be compared together as being in daily railway communication with Cairo. The conclusion to be drawn from this is that even imperfect *cordons* retard the progress of the malady; thus giving time for other towns to make sanitary preparations for the approaching disease.

Notwithstanding, however, the amount of energy displayed in burning down the filthy quarters of towns, in establishing *cordons sanitaires*, in the free use of disinfectants, and in employing extra English and Indian experience, the sum total of the deaths from cholera during the epidemic amounts to upwards of 56,000.

It follows from this that everything in the country was more or less upset for nearly two months, with the result of obtaining a mortality of 4,000 less than the epidemic of 1865, when trade was not in any way interfered with by sanitary measures. This is a scientific victory, but gained at a fearful cost to the State. Probably before another epidemic of this kind occurs again, methods of stamping out the disease will be discovered that will permit of free intercourse between infected and non-infected places without endangering the public health. In the meantime, however, science cannot be blamed for suggesting measures that ought to be successful (if properly executed), even in an unsanitary and half-civilised country, while an epidemic is raging; and, in such a country, the measures to be adopted to prevent the spread of an epidemic must necessarily be different from those that are perfectly applicable to a country in a good sanitary condition.

If the propositions of the much maligned Sanitary Board had been executed by the Government that retains the executive power in its own hands, I do not hesitate to say that the last epidemic spark would have fallen comparatively harmlessly on the clean and well-ordered towns and villages of Egypt. As it so happens, however, it has fallen on nothing but explosive material, which is in overabundance throughout the length and breadth of the land. The different routes followed by this epidemic clearly prove that the germ of the disease, whatever the nature of it may be, is not carried by the wind as a living active agent, else we should have had the malady invading Cairo long before it made its appearance there; for the wind was steadily, day by day, blowing directly from Damietta towards Cairo. We find, however, that, before the malady reached Cairo, it had gone as far east as Port Said and as far west as Alexandria; and it actually broke out at Geezeh before it came to Cairo, and at Siout before it showed itself at Benisouef. This militates against the lines of communication, and especially the railway, which transfers infected persons and things in a remarkably short space of time from one district to another. The important question, therefore, comes to be, whether some sanitary measure might not be carried out successfully, that would permit of the running of trains as usual without being prejudical to the public health. I have hinted above that such measures have already been submitted, from time to time, for the approval of the Government, by the Sanitary Board; but, whether approved or not approved, the Government has not carried them into effect.

One significant fact may here be mentioned, that, after the Alexandrians had almost exhausted the usual vocabulary of words for denouncing the *cordons* as long as the disease kept at a respectable distance from them, they speedily shut themselves up (even against the counsel of the Sanitary Board) from having any communication with the rest of Egypt when the cholera broke out at Damanhour. Thus, for a time, the trains did not enter Alexandria, so that there were two centres of government, one at Alexandria and one at Cairo, the one being often at conflict with the other from insufficient knowledge of each other's situation, or from being misinformed and misled. This, however, did not prevent energetic measures from being carried out against the disease by the railway authorities. At the beginning of July, Mr. Timmerman caused an abundance of disinfectants to be sent to the different stations, with directions how to use them. On July 8th, I examined into the sanitary condition of the Cairo station, the Boulak workshops, and the town telegraph-office and outhouses; and I had to make a special report on the last. On July 9th, I sent a long communication to the Board, describing more particularly the different disinfectants, and laying down rules for their most effective use, besides giving general sanitary instructions. On July 14th, when the malady was raging at Geezeh, at our very doors, by the request of the Board I drew up with considerable pains more elaborate instructions about cholera, and indicated the remedies that should be used, viz.:

1st. "A mixture," of which the following is the composition, and the instructions for use: ℞ Tincturæ opii ʒss; spiritûs camphoræ ʒss; tincturæ capsici ʒss; chloroformi ʒiss; spiritum vini rectificatum ad ℥iiss. *Signetur.*—For the premonitory diarrhœa of cholera, twenty drops for an adult and five drops for a child in half a wineglass of water or camomile-tea every hour or every two hours, etc., till diarrhœa ceases; but if vomiting or cramps set in, then leave off the mixture, and give the "Anticholérique selon Pasteur," of which the following is the composition and mode of administration. ℞ Hydrargyri bichloridi gr. ij; spiritûs chloroformi ʒx; spiritûs camphoræ ʒv; tincturæ lavandulæ co. ʒss; spiritum rectificatum ad ℥ij. M. *Signetur.*—To be used when diarrhœa cannot be checked, and vomiting or cramps commence; a teaspoonful (ʒj) to an adult, and thirty drops to a child, in camomile-tea, every quarter of of an hour, every half-hour, every hour, etc., according to urgency of symptoms.

These instructions were approved by the Board, and were printed and sent to all the stations, with a supply of the medicines, which anyone could intelligently administer with the printed instructions before him.

On July 15th, the epidemic reached Cairo, and its suburb Boulak was devastated by it. Out of 1,800 men employed at the Boulak railway workshops, fifty-nine died of cholera. Many others who were attacked, recovered after the prompt use of the remedies, and most of those who died did not take the medicine.

Dr. Grant Bey quotes at length a letter received from M. Choisy, an intelligent observer, though not a medical man, who gives it as his opinion that the "Anticholérique selon Pasteur" saved many lives, and that, if all the *employés* at Boulak had taken it in time, not one would have succumbed.

"My own personal experience," Dr. Grant Bey continues, "both in the railway and in private practice, confirms me in the view that cholera is caused by a living organism, and that corrosive sublimate is the best remedy yet discovered as an anticholeraic. From the different departments of the railway-service, no fewer than sixty-eight *employés* came under my personal medical care for cholera. Of these, fifteen died, being a death-rate of only 22 per cent. Now we learn from the statistics published by the Indian Army Medical Department for 1881, that the number of admissions for cholera in Bengal was 159, of whom 116 died, being a death-rate of 72 per cent.

"In private practice in India, the cholera death-rate is given as 66 per cent. This proves that the cholera medicine used in the railway-service had a very beneficial effect, notwithstanding that the administration of it was frequently left in non-professional hands.

"At Boulak, I went from house to house, visiting the choleraic cases, and giving the medicine (of which I had always a good supply in my carriage) with my own hands. The poor natives would crowd round my carriage, some with choleraic children in their arms, others to take medicines for those sick in their houses, which were too far away for me to visit. Their demands were listened to, and, as far as possible, attended to, in the midst of those howling the death-wail for their departed friends."

"There cannot be," Dr. Grant Bey proceeds to observe, "the shadow of a doubt that the cholera was brought to Boulak from an infected district, for in my medical register there is rather a decrease than an increase of the diseases allied to cholera up to July 15th, when the epidemic manifested itself in Cairo and Boulak; and the death-rate from general diseases was also lower than the death-rate of the previous year at the same time. This, I understand, was also true of Damietta up to June 22nd, when the cholera suddenly declared itself there, clearly proving that, wherever the malady came from originally, it was certainly imported into Damietta, a town that proves to be the rendezvous of thousands of Arab firemen, whose sole business is to get employed on steamers sailing between Port Said and India, and who, whether there be quarantine or not, on their return voyage are allowed to go on shore, or do so by stealth at No. 3 kilomètre station, which is in direct communication with Damietta by ferry-boats.

"A good example of the transmissibility of the disease by human intercourse, and of the immunity of a town from a second attack during the course of the same epidemic, is furnished by the following narrative. Several native merchants from a village called Courette, in the Siout district, Upper Egypt, about 300 miles from Alexandria, spent fifteen days in Alexandria on business while there were still some cases of cholera there, but long after the epidemic had ceased in other parts of the country. Their voyage home was by boat, and it occupied about sixteen days. On the way they touched at many of the towns; and one of their number, who had died of cholera on board the boat, was buried at a village named Fuah. But not till they reached Courette (a village that had, up till then, escaped the cholera), did the germ they brought with them find a congenial virgin soil for propagating itself, when a slight epidemic raged there for several days and then died out.

"My railway medical registers, being very accurately kept, have proved to be of considerable value in deciding for the non-endemicity of cholera in Egypt.

"From the beginning of the year 1878 up to July 15th, 1883, I had registered 85 cases of diarrhœa, and 219 of dysentery, not one of which was fatal. In 1878 there were two cases of cholerine (purging and vomiting with cramps) in Arabs at the Boulak railway-works, but they were only a few days off duty on account of it. In July, 1882, while at Alexandria, whither I had to flee on account of the rebellion, but where I continued to fulfil my duties as senior surgeon to the administration of railways, telegraphs, and Port of Alexandria, I treated the French driver, Bohn Louis, for an attack of cholerine, which soon passed off, so that he was able to resume duty after two days. During this period of nearly six years, I had 6,475 of the *employés* ill, and under treatment for different ailments; but while diarrhœa and dysentery were not at all uncommon amongst them, it is evident that they cannot be called fatal maladies, at any rate, as far as railway *employés* are concerned, seeing that there is not a single case registered as having had a fatal termination. There having been only two cases of cholerine at Boulak in August, 1878, and no more cases there (having similar symptoms) till July 15th, 1883, when epidemic cholera broke out, is sufficient proof that cholera is not endemic in Egypt; for, if it were, we should be having cases at Boulak every day, as it affords as good a nidus for the malady as any town in Egypt, and is inhabited by just the class of people who are most likely to be affected by any endemic disease.

"Dengue fever may now be said to have become endemic in Egypt, as it has been more or less prevalent at Cairo since the epidemic of it in 1880, and I hear of its existence in other towns of the Delta. This favours the opinion that cholera also may become endemic after some epidemic of it. It certainly has not been endemic since the epidemic of 1865, else I should have had some knowledge of it, and cases must have appeared in my medical register; and the fact that I have registered two cases of cholerine in 1878, is a proof that I have drawn a distinction between such cases and ordinary diarrhœa.

"The use of corrosive sublimate as an anticholeraic came quite naturally to me, as I have been administering it with marked success for some years past in the gastro-enteritis of teething children (of course in very minute doses, one-fiftieth of a grain or even less). This treatment was not all original, as I had seen it recommended (if I mistake not) in the BRITISH MEDICAL JOURNAL several years ago; and remembering some very successful cases of cholera I had treated here during the epidemic of 1865, with frequently repeated small doses of calomel without salivating the patients, I reasoned with myself whether a portion of the calomel may not have been converted into the bichloride through the action of the gastric juice, which contains free hydrochloric acid, and whether it was not in reality this transformation that led to such happy results.

"I hope others will be encouraged to try it, and then give the profession the results of their experience as to the efficacy or non-efficacy of the drug in the treatment of cholera."

Tables extracted from medical register of Egyptian railways and telegraphs, extending from January 1st., 1878, to October 31st, 1883. Dr. Grant Bey's division, about three thousand *employés*, nearly two thousand of whom are engaged at the railway works, Boulak, and for the most part live at Boulak. They are all of the male sex, and above puberty. The other one thousand are distributed over lower Egypt.

Condensed Table from January 1878, *to October* 31*st*, 1883.

Years.	Diarrhœa.	Dysentery.	Typhoid.	Dengue.	Cholerine.	Cholera.	Total No. of Patients.
1878	15	30	7	0	2	0	794
1879	19	34	7	0	0	0	1169
1880	19	43	6	336	0	0	1462
1881 (nine months)	9	31	5	146	0	0	873
[1]1882	11	54	18	97	1	0	985
1883 (ten months)	24	31	27	218	0	68	1192

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[1] From June 5th to August 20th, Dr. Grant Bey was in Alexandria, having been obliged to leave Cairo on account of the rebellion.

Detailed Table for the year 1883 *up to October* 31*st.*—1192 *patients.*

	Diarrhœa.	Dysentery.	Typhoid.	Dengue.	Cholera.
January	2	8	4	10	0
February	2	1	1	15	0
March	1	3	1	18	0
April	2	3	2	24	0
May	2	4	4	21	0
June	0	3	1	36	0
July	3	5	1	47	35[2]
August	2	1	2	18	27
September	5	2	1	12	3
October	5	1	7	7	0
Totals	24	31	27	218	65

[2] The first case of cholera amongst the railway *employés* in my section occurred at Boulak on July 16th, and, as will be seen by the above tables, there was no unusual number of cases of diarrhœa and dysentery preceding the onset of cholera to indicate that an epidemic was brewing on the spot. There can be no doubt, therefore, that cholera was brought to Cairo from an infected district.

Notes.

I. In the above tables, extending over nearly six years, there are 97 cases of diarrhœa, and 223 cases of dysentery, amongst 6,175 patients, but not one of these is registered as fatal; on the contrary, they all average only a few days off duty. It must, however, be noted that all these cases are, as a rule, uncomplicated, the most serious complication in any case being hæmorrhoids. When diarrhœa or dysentery has set in as a secondary and fatal symptom, the cause of death has been registered under the primary disease. Hence, in abscess of the liver terminating by a fatal dysentery, or in phthisis ending by a fatal diarrhœa, the cause of death is assigned to abscess of the liver, or to phthisis, as the case may be. The ordinary uncomplicated diarrhœas and dysenteries amongst the grown-up population of Egypt cannot, therefore, be considered very fatal.

II. From January 1st, 1878, to July 15th, 1883, a period of five years and a half, there were only three cases registered as cholerine (*i.e.*, purging and vomiting with cramps) amongst six thousand sick *employés*, most of whom, being of the lowest class, would be the first to be affected by any endemic disease. Two of these cases happened at Boulak, in August 1878. Both were Arabs, and the one was unfit for duty four days, while the other was off duty only one day. The third case was a French driver, not, however, at Cairo, but at Alexandria. He was ill only a few hours, and resumed duty after two days.

MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

A MEETING of the provisional Executive Committee of the Medical Sickness, Annuity, and Life Assurance Society, was held at 38, Wimpole Street, on Thursday, January 31st. There were present, Mr. S. W. Sibley (London); Mr. J. Bain Sincock (Bridgwater); Dr. T. M. Dolan (Halifax); Mr. E. Noble Smith (London); Surgeon-Major Evatt, M.D. (Woolwich); Mr. Major Greenwood (London); Mr. M. R. J. Behrendt (Birmingham); Mr. Radley, Secretary (*pro tem.*).

In the absence of Mr. Ernest Hart (provisional chairman) Mr. J. Bain Sincock (a vice-chairman) was elected to take the chair.

Letters were received from Dr. W. Ord, Dr. W. Clibborn, Dr. Brierley, Mr. W. W. Hardwicke, Mr. Malcolm Morris, Mr. Ravenhill, and Mr. Brindley James, expressive of regret at their inability to attend.

The minutes of the last meeting were confirmed.

In reporting the progress of the movement, the Secretary stated that during the first week 128 applications for membership had been received, and up to the time of the meeting this number had increased to 175. The amount received during the first week was £81 15s. 4d. The opinion was expressed by the meeting that this was a highly satisfactory beginning.

Dr. Dolan considered that the premiums should be paid in advance—on members joining—the interest of which would benefit the Society. This was done in the case of several societies with which he was acquainted.—The Chairman thought this would be undesirable in the present preliminary stage of the Society's operations. The Secretary stated that all the societies of the kind, with which he was acquainted, carried out the principle which this Society had adopted, and did not take any premiums until the first quarter. There would be no sick benefits for the first six months, and no benefits in the case of assurance for twelve months. The Society would be formally established on March 1st, and the first quarterly payments would be due on May 31st. The Society would accordingly have practically six months' pay in advance before they were called upon to pay anything.—Mr. Dolan said undoubtedly the plan they had adopted would tend to render the Society more popular.

The Secretary said it would be difficult to make any alteration at the present time, but the question might be raised at their meeting, which would be held simultaneously with the general annual meeting of the British Medical Association.

The Secretary called the attention of the meeting to the advertisement, which had been inserted, by the wish of their chairman, in the BRITISH MEDICAL JOURNAL of Januray 19th, and which had met with such a liberal response. Mr. E. Noble Smith had taken an active part in drawing up the questions to be answered by applicants, and these had been carefully and finally revised by their chairman. The rules which had appeared in the BRITISH MEDICAL JOURNAL, in small type, it was thought desirable should be reprinted, for distribution, in a larger and more easily readable type; this had been done, and copies were handed round to the members present.

The Secretary reported that three further sums had been received towards the Preliminary Expenses Fund, which had been handed over to Mr. Hart, as it was necessary that this fund should be kept distinct from the general fund.

Mr. Major Greenwood suggested that a similar form to that prepared for the members of the Association should be prepared for circulation among those of the medical profession, who were not members of the British Medical Association. It was not, he thought, sufficiently understood that the Society was open to *any* medical man practising.

A letter was read from Mr. Watt (Hovingham), in which he expressed his dissent from the rule which allowed no payment to a sick member until he had been ill a fortnight.—Surgeon-Major Evatt agreed that fourteen days was a long time to wait before obtaining sick-pay.—Mr. Major Greenwood thought in London it would not be considered so.—Mr. Behrendt said personally he had never felt any difficulty in getting help when he wanted it, nor did he think any disadvantage would be felt in towns where there were two or three other medical men living; but he thought that some difficulty might arise in country districts, such as those to which Mr. Watt referred, where a medical man could not be ill a week without being compelled to seek assistance from his friends, or, failing them, be compelled to obtain the services of a *locum tenens.* He had once suggested to Mr. Hart the advisability of having paid *locum tenentes*, who would also act as certifiers of cases of illness; but this might be somewhat difficult to carry out.—The Secretary said that, if it were deemed advisable to alter the time from fourteen days to a week, the rule, he thought, might be altered before the sick-pay commenced.—Mr. Noble Smith said probably they would, later on, be in possession of facts on which to base an opinion on the matter. He certainly thought the limit should be a week.—Mr. Greenwood thought such an alteration would undoubtedly be a great advantage, if the society could bear the expense.—The Secretary stated that Mr. Neison was of opinion that it would not materially increase the expense.

It was proposed by Mr. Noble Smith, and seconded by Dr. Dolan, that the Secretary be requested to see Mr. Neison on the subject, and obtain his opinion on the matter.—A resolution was passed to this effect.

The Secretary reported that applications for membership had been received from two medical practitioners, who had since asked to be struck off the list, and desired that their entrance-fees might be returned to them. This raised the question, whether, in such cases, the money should be returned.

The question was discussed, and it was thought that it would be a dangerous precedent, and one which could not be entertained. The Secretary was desired to communicate this view of the meeting to the gentlemen in question, with an expression of their regret that there should have been any misunderstanding on their part.

The Secretary further reported that two letters had been received from gentlemen who had, at some previous time, forwarded half-guinea subscriptions to the Preliminary Expenses Fund, and who now desired that these might be received as their entrance-fees on joining the Society.

This question was discussed at some length, and there was a strong feeling that, when the Society was sufficiently rich, every person who had contributed for the Preliminary Fund should have the amount returned to him. It was, however, deemed impossible to interfere with the Preliminary Expenses Fund in the absence of their chairman, in whose hands this fund rested; the further consideration of the subject was accordingly postponed, and the Secretary was desired to communicate this decision to the gentlemen in question.

The question of the admission of members between 49 and 55, which was discussed at the last meeting, when a resolution was passed authorising the Secretary to obtain Mr. Neison's opinion on the subject, was brought before the meeting. The Secretary reported that he had seen Mr Neison, who was of opinion that, with the necessarily high rates for any age beyond 49, very few would be likely to seek admission, and recommended that no special table should be drawn up, as any such table would be likely to be unsatisfactory; but rates might be quoted in special cases for sick pay and assurance only.—The Chairman was of opinion that no member should be admitted beyond the limit of 49 who had not undergone a medical examination. It was proposed, seconded, and carried that persons between the ages of 49 and 55 last birthday, be admitted for sick-pay and assurance only.

The Secretary produced a number of applications for membership, in which the answers furnished were such as to require careful consideration and medical opinion. Each case was separately discussed by the meeting, and the Secretary was instructed in respect to them. The question of increased rates in dealing with particular cases was discussed, and it was unanimously decided that it would be better to reject such applications than to accept risky lives at increased rates.

Dr. Dolan proposed that a subcommittee be appointed, to whom all forms of application should be submitted. This proposition was agreed to, and a subcommittee appointed, with power to ask for a medical examination where the replies were of such a nature as clearly to define this course to be necessary. Where the replies were such as to call for medical discussion, it was decided that they should be brought before a meeting of the Provisional Executive Committee.

The Secretary was instructed to open an account at the Union Bank, Argyll Place, Regent Street, and to pay all sums received on behalf of the Society to that account.

Mr. Sibley was unanimously appointed an Honorary Treasurer, to act with Mr. Malcolm Morris.

It was decided that the offices of the Society should be, *pro tem.*, at 26, Wynne Road, Brixton, S.W., and that all communications for the Society should be addressed to the Secretary at this address.

PHYSIOLOGY AT OXFORD.

AT a convocation held in the Sheldonian Theatre at Oxford on Tuesday, February 5th, at 2 P.M., a decree was submitted to the house to empower the curators of the university chest to raise a sum not exceeding ten thousand (£10,000) pounds, by the sale of Three per Cent. Stock, for the purpose of defraying the cost of the erection of laboratory, working-rooms, and lecture-rooms for the Waynflete Professor of Physiology, Dr. Burdon Sanderson. Considerable opposition was expected to this decree, as a circular had been widely distributed amongst those who were supposed to be in opposition to the practice of vivisection, calling upon them to show by their votes their determination not to permit experimental researches to be carried on at Oxford. It is to be regretted that the circulars were not sent to those who were known to be in favour of the foundation of a true physiological school at Oxford, since many were ignorant of the opposition which was being organised until Saturday last, three days before the question was to be decided. The professor himself was not aware of it until Saturday evening. Dr. Acland, foreseeing the danger which threatened the new school, wrote a letter to the *Times*, which was published on Monday morning; and many of the Oxford graduates, resident in London, received on the same day an urgent request from Dr. Burdon Sanderson, asking them to support him. The circulars, which had been issued by the antivivisection party, as they style themselves, were undated, unsigned, and contained the usual sensational extracts, the most emphasised of which afterwards appeared to be incorrectly stated, and, as it was printed, untrue.

The proceedings, which took place in the theatre, in consequence of the large number of voters present, were opened by the formal submission of the decree to the house; but before a division was taken, the Dean of Christchurch rose to speak in favour of the decree, and remonstrated strongly against the manner in which the opposition had been organised, saying that he had not received any of the papers which had been so freely circulated, and that little or no opportunity had been given to those in favour of it for making arrangements to be present in convocation. He was followed by Mr. E. A. Freeman, whose speech was energetic but rambling, and exhausted the patience of his audience, so that, amidst loud cries of "Divide," he wound up with a peroration condemning the use of the new schools for the fooleries of a ballroom, or the museum for the horrors of a torture-chamber. The Warden of Keble College then expressed his regret at the attitude which, he thought, scientific men were inclined to take up, of refusing to explain their motives to those who were ignorant of them; but he thought that the decree should not be rejected, since, if it were not passed, a severe and unmerited blow would be dealt to science in Oxford.

Dr. Acland began by saying that the circular, which had not been sent to him, was misleading in the extreme. It was headed "Vivisection at Oxford," as though the whole aim of physiological teaching at Oxford consisted in the infliction of unheard of and terrible cruelties, such as had been dwelt on by Mr. Freeman; and he then proceeded, amidst expression of great enthusiasm, to show that not only was the circular misleading, but even untrue, since the cruelties described in such eloquent words by Mr. Freeman were performed, not on the living dog, as he had stated, but on a dead frog. A storm of cheers and hisses then arose; and, when the Blue-book, from which the statements had been taken, was produced, it was found to agree with the circular in question: on which Dr. Burdon Sanderson was called upon to explain the discrepancy, and he stated simply that the words were not original, but were incorrectly copied from a previous report, and that it was true that they did not refer to the experiments to which they were appended, but did refer to experiments on a dead frog. This was the signal for a fresh burst of cheering. Dr. Acland then showed that, as regards the laboratory, only one room was to be devoted to research involving experiments on live animals; and that the professor, instead of desiring to perform cruel experiments for the "pleasure and amusement" of his pupils, had not a certificate under the Act to enable him to do so. The speaker continued by an appeal to his hearers, as learned, humane, and religious men, to consider before they voted in what position they were placed; he asked them to reflect on the suffering and disease caused by a neglect of those natural laws which it was the work of Dr. Burdon Sanderson to investigate, making special reference to his researches on the bacillus of tubercle; and he concluded by saying: "I will use no hard words. Would that the anonymous committee, before it had spread these misleading statements you have read, had learnt their lesson better, and taken a large view of the world of our duty and of true humanity!"

The end of the speech was received with prolonged applause; and, before it had subsided, Dr. Pope rose, but his remarks were for the most part inaudible.

Lastly, Mr. E. Nicholson, the Bodleian Librarian, who is generally credited with being one of the chief supporters of the opposition, came forward. His defence of his position was very inadequate to convince his audience, or to justify the position which he has taken up; in fact, he produced considerable irritation, and was greeted with marked expressions of disapproval. The latter part of his remarks were disjointed, and were almost inaudible.

The question was then put, and when the counting had taken place, the announcement that "the placets have it" was received with loud applause; when the numbers, 188 for, 149 against, were declared, there was a prolonged outburst of cheering. This was followed by three cheers for Dr. Burdon Sanderson, who was received in the most cordial manner throughout; and then the meeting terminated.

It will be remembered that, on the last occasion when the question of the physiological laboratory was brought before Convocation, there was only a majority of three votes; so that the present result is a complete answer to those who have "frequently stated the narrow majority would, on any subsequent occasion, be turned into a minority." The building and equipment of the laboratories will be proceeded with at once.

FEVER IN THE PUERPERAL STATE.

FEVER, in puerperal women, is a condition which every one recognises, but no one understands; and though it is the fashion now-a-days to profess ignorance on every subject, in none is such a profession more honest than in this. Yet there are more men interested to discover the cause and cure of this than of any other sickness, and the inquiry which the Collective Investigation Committee sends out in to-day's number of this JOURNAL will be both welcome and deserving of the best support that can be given it. The form is simple and easy to fill up; but it embraces a wide field, for the committee, though desirous of obtaining the utmost possible amount of information, is well aware that men busy in general practice cannot make elaborate notes.

The first question is on the predisposing causes. Habits of drink and squalor; ill-health during pregnancy, either mental, as depression, or bodily, such as venereal disease or albuminuria; and local conditions, whether the result of old mischief in the pelvis, or severe injuries in the recent labour, are all said to render women liable to the attack, and it is to some men doubtful whether bad lacerations in unhealthy women may not of themselves take on malignant inflammation, and the poison of the fever be begotten in the patient's system, unconnected with contagion from without. There will be useful hints gained from the replies to this first question; but the second and third will, if well answered, be of the highest value. Puerperal fever differs from all other diseases in this, that its claim to be considered a separate disease at all is disputed by some of the best writers, who base their objections both on the causes which excite it, and on the symptoms which it shows. It has been traced to at least three different families of infection—specific fevers, septic poison, and sewage-matter. Instances are told of its arising from contact with typhus, scarlet fever, measles, and smallpox; and, while some believe that all the scarlatinal cases are really cases of septicæmia with a rash, others hold that many are called puerperal which are really specific fevers. Facts would be of the greatest importance which should bear on this point, either by showing that another person caught a specific fever from what seemed a case of puerperal pyrexia, or that the course of a specific fever was modified when occurring in the puerperal state.

Septic poison, again—the sort of poison, that is, which produces erysipelas, diffuse cellulitis, or pyæmia, in a surgical wound, for a more exact definition is yet impossible—is the favourite cause with some medical writers. Of this kind are those attacks which have been traced to overcrowding in hospitals, and to infection from a case of these diseases, or from a dead body, especially where death was caused by any illness of the same character. Sore-throat or pneumonia, occurring in the same house, may again suggest endemic poison. Thirdly, sewage-poison, foul smells, bad drains, ashpits, and other sorts of filth, have been often held to blame, and, since a recent royal instance, have come still more prominently into notice. With this diversity of cause, varying symptoms would be but natural; and the leading points of difference are put in the *third* question of the form. Some say that a rash of peculiar position and character marks a distinct pyæmic variety; while others maintain that many of these cases are scarlatina—modified, perhaps, by the puerperal condition. Sore-throat raises the suspicion both of scarlatina and diphtheria; and the presence or absence of membrane will, in this connection, be of great importance. In certain cases, severe abdominal symptoms show the presence of general peritonitis; others, again, occur where the stress of the disease is confined within the pelvis; and it sometimes happens that several patients are thought to have mere local non-infecting peritonitis, until the series is closed by an unmistakable attack of puerperal fever, and the doctor learns too late the real character of the former cases. The local inflammations elsewhere include that of the breasts (whose condition is always important), phlebitis, and the scattered abscesses, pneumonia, pleurisy, pericarditis, and suppurating joints of pyæmia. The womb is often large and tender, and frequently appears, on *post mortem* examination, to have been the starting-point of infective inflammation. Lastly, the history of the symptoms will not only be itself of interest, but, since the disease is one in which treatments the most diverse have without doubt found a great success, should throw much light on that most pressing question, What plans are best adapted to the several types of the attack?

After looking through this form, it cannot but be felt that a better opportunity and a fitter subject for collecting the general opinion of medical men has seldom been offered. There is not a question which does not aim at points on which the ablest differ, nor one which is not in the power of the busiest to answer; and it is to be confidently hoped that the returns may make a turning-point in the history of the disease.

THE ROGERS TESTIMONIAL.

THE following additional subscriptions to the fund for a testimonial to Dr. Joseph Rogers have been received. It should be understood that the subscription to this fund is not confined to Poor-law medical officers. The Treasurer is Mr. J. Wickham Barnes, 3, Bolt Court, Fleet Street, E.C.; and subscriptions are received by the Editor of the BRITISH MEDICAL JOURNAL.

Twelfth List.—James Cornwall, Esq., Fairford, £1 1s.; D. B. Balding, Esq., Royston, £1 1s.; A. A. Jackson, Esq., Birmingham, £1 1s.; W. Pearse, Esq., St. Judye, Bodmin, £1 1s.; M. Partridge, Esq., Coventry, 10s. 6d.; John Davies, Esq., New North Road, 10s. 6d.; F. Haward, Esq., Halesworth, 10s.; Dr. J. Woodman, Exeter, 5s.

The following resolution was passed at the meeting of the Midland Branch, on January 10th, 1884:

"That this meeting of the Midland Branch of the British Medical Association desires to express its sympathy with Dr. Rogers in the contest which he has had with the guardians of the Westminster Union; and, at the same time, to congratulate him upon the somewhat tardy justice which has recently been meted out to him by the Local Government Board in reinstating him in his position as medical officer of the union."

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A SPECIAL meeting of the Council will be held in the Council Room of Exeter Hall, Strand, London, on Thursday, the 14th instant, at two o'clock in the afternoon, to consider the arrangements of the annual meeting. FRANCIS FOWKE, *General Secretary.*

161A, Strand, February 7th, 1884.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 20th, June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
V. Syphilis, acquired.
V*a*. „ inherited.
VI. Acute Gout.

URGENT.—*The Committee propose to publish a final report on Acute Pneumonia as soon as possible. Cases are therefore urgently needed. Cards will be received until further notice.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
September, 1883. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the Railway Hotel, Stafford, on Thursday, February 28th, at half past three o'clock in the afternoon.—VINCENT JACKSON, Secretary.—January 28th, 1884.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this district will take place on Friday, March 28th, at Woolwich; Sir James Hanbury, K.C.B., A.M.D., in the chair. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary of the district, A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than February 28th. Further particulars will be duly announced.—A. W. NANKIVELL, Honorary Secretary. January 29th, 1884.

BORDER COUNTIES BRANCH.—The spring meeting will be held at the Central Hotel, Carlisle, on Friday, February 22nd. Business to commence at 6 P.M. Dinner or supper will be provided for members and visitors at 8 P.M. The Secretaries will be glad to receive notices of communications, papers, and morbid specimens, without delay.—H. A. LEDIARD, Carlisle; J. SMITH, Dumfries.

THAMES VALLEY BRANCH.—The next meeting will be held at the Griffin Hotel, Kingston-on-Thames, on Wednesday, February 27th.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE third ordinary meeting of the session was held at the Grand Pump Room Hotel, Bath, on Thursday evening, January 24th; E. A. Crossman, Esq., president, in the chair. There were also present thirty-three members and three visitors.

Communications.—The following communications were made.

1. Mr. Waugh described an Unusual Complication in a Case of Labour. Dr. Swayne, Dr. Skerritt, and Mr. Lawrence made observations on the case.

2. Mr. Gaine related a Case of Necrosis of the Lower Jaw, with Removal of the Sequestrum, and showed the patient with an Artificial Substitute. The case was discussed by Mr. Hay, Dr. Spender, Dr. Skerritt, and Mr. Scott.

3. Mr. Russell, in the absence of Dr. Fox, brought forward a Case of Double Facial Paralysis, and exhibited the patient.

4. Mr. Lowe related a Case of Death from Puncture of the Aorta, and showed the specimen.

NORTH OF IRELAND BRANCH: GENERAL MEETING.

A GENERAL meeting of this Branch was held in County Court House, Omagh, on January 24th, and was numerously attended. Several important papers were read, and interesting patients and pathological specimens were exhibited to the meeting.

The members afterwards lunched together in the White Hart Hotel.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.

THE third meeting of the South London District was held in the Court Room, Guy's Hospital, on January 23rd. Dr. C. J. HARE, President of the Branch, was in the Chair.

Papers.—The following papers were read.

1. Dr. P. H. Pye-Smith read a paper on a Fatal Case of Chronic Poisoning by Lead. Dr. T. Stevenson followed with remarks on the general subject. A good debate ensued, in which the Chairman, Messrs. Nelson Hardy, L. E. W. Stephens, R. S. Pyle, and Drs. Dickson, and J. A. P. Price took part. Dr. Pye-Smith replied.

2. Dr. W. B. Hadden read a paper on Some Clinical and Pathological Points in Cerebellar Disease. Drs. T. Taylor, Pye-Smith and Pill took part in the discussion which ensued. The paper was illustrated by preparations from the museum of St. Thomas's Hospital.

SPECIAL CORRESPONDENCE.

THE RIVIERA.

The Season on the Riviera.—Meteorological Phenomena.—Mentone and Dr. Bennet.—The Fulfilment of the Mission of English Civilisation.—The English Quarter in the Towns of the Riviera.

MR. ERNEST HART writes from Mentone:—

The season has been singularly bright and sunny this year, and visitors to the Riviera since Christmas have enjoyed all the pleasures of summer weather, under circumstances and with surroundings which cannot fail to stir the most languid imagination and please the dullest mind. The skies have been decked with the most brilliant colours at sunrise and sunset; the after-glow, of which so much has been written by puzzled astronomers this year, has presented to the inhabitants of the Riviera pictures of unrivalled beauty, touched in with pencils of coloured light, such as no painter can see without mingled feelings of delight and despair. The day is heralded by gorgeous pictures in the sky, forerunners of the dawn, in which all the subtlest and most delicate, as well as the most brilliant colours of the palette, are represented in tones of transparent light; and the sunsets are followed by still more marvellous panoramas of gloriously coloured landscape, spreading over sky, sea, and mountain. Throughout the day the air is filled with a radiance of gracious sunlight, in which flowers, plants, and men, are alike privileged to bask, in secure enjoyment; for neither wind nor dust—the two enemies of perfect natural enjoyment of life in the Riviera—have this year marred the outdoor-life, in which many fugitives from the wild winds, dark skies, and changeable temperature of England, here find renewed health and vigour. The cooling influence of the sea, which laps these Mediterranean shores, the purifying and sheltering screen of mountains, which keeps back the north wind, save the protected exiles of Mentone from the enervating influence of too much heat, and from the cutting blasts of cold currents from the icy north. Its groves of olives, its luxuriant lemon trees, its palms, bananas, and caroba trees, testify to the absence of frosts; the clustering roses, the mimosas, laden with sprays of golden blossom, the primroses, daisies, and violets, remind us of the beauties of our temperate zone. The air is fresh and cool; the temperature of the room, since my sojurn here, rarely rises much above 70° in the day, or falls much below 60° in the night. The calcareous soil forbids the fear of dampness, and every rock affords at once a shelter and a seat. The rippling sea, flowing into land-locked harbours, invites to boating; tennis is possible from early morn to dewy eve, when a sufficient area of flat ground is available, and, in Mentone, this is not often. Villas are numerous, and hotels clean, moderate, and arranged to meet English opinion of health and comfort. "Jennings" rules supreme; and the old abominations labelled "cabinets," may now be entered without fear and loathing.

More and more the Riviera is becoming a resort of the weary seeking repose, of the lovers of sunshine, of winter holiday-makers, of the worshippers of the sun. The healthy are learning from the experience of the sick; and the invalid population is already in the minority. Of all the towns of the Riviera, Mentone is the most sheltered; its vegetation is the most perfect; its site, surroundings, and arrangements are most carefully adapted for the invalid; and it will always secure a large proportion of those who seek sunshine, repose, and protection from the north winds. The place owes its present prosperity, and its very being as a health-resort, to Dr. Henry Bennet, who is as much the author of modern Mentone as Lord Brougham of modern Cannes. Driven from London practice long years ago by the access of phthisical symptoms, he found health for himself in a little village, which, after a diligent exploration of the whole Riviera, was marked out, by its physical, botanical, and meteorological conditions, as the most sheltered and the most highly favoured by natural advantages. With admirable intelligence and clear sighted appreciation of the conditions necessary for the healthiest life on a Mediterranean shore, he worked his way from place to place, noting the soil, the exposure, the shelter of mountains, the prevailing winds and currents, the size and vigour of those trees and flowering shrubs which most resent frosts and cutting winds, and diagnosed a health-resort as he would the constitution of a patient. His patience, his originality, and his honesty have been rewarded, not only by the restoration of health, but by the creation of a city, and the inauguration of a new period and a new method in the treatment of large classes of disease. His vigorous and novel appeal to temperate climate, to out-door life in winter under the ordinary temperature of an English summer; his sturdy rejection of old theories of medication and semitropical baking and stewing, as the only remedies for phthisis, have made a new era in treatment, of which all classes and nations of invalids have now their full share. The "new exodus" to the South in winter is now an old story; but only the first pages are as yet turned. The pleasures of a winter holiday in the Riviera are known yet only to a small minority of those who wearily plod through dull, foggy, and icy months of labour, rendered heavier by failing health and spirits, and spiritless and half valueless by jaded and threadbare tediousness of unremitting toil in sunless surroundings.

The gospel of winter holidays in sunny climates is one which will be preached to willing ears, and year after year Englishmen will learn to prize more and more the beauty of English summers and of winters in the Riviera. To leave England in all its autumn beauty, and to return to its dreary and chill winter, is to invert the natural order of healthful holiday-making. From May till the end of October there is no climate or country in the world which can surpass Great Britain for beauty and healthfulness. In the winter we may wisely follow the swallows, and seek the shore of the Mediterranean, where the skies are eternally blue, where the orange groves spread their golden glories, where the sun does not veil itself, and where Nature smiles through winter with benignant grace.

To speak, however, only of Mentone, it is right to say that the Mentonese are not wise in their generation. Naturally confined in area by the screen of mountains rising behind it, it was their part to secure space and shelter by the sea-shore. This, in their greed and want of public spirit, they have failed to do. Twice they have had the opportunity of securing a public park at small expense, twice they have rejected the offer. They have allowed the sea-promenade to be curtailed, and have done next to nothing to adorn or beautify it. They had the offer of a lovely garden for public use, and they positively refused it unless the generous donor, Dr. Bennet, would undertake also to endow it, so as to free them from all future cost of maintenance. Such greed and short-sighted folly seem incredible, but a Mentonese town council is not a shade better than a London vestry. The drainage-question threatens also to be a serious one; and, looking to the character of the soil and the number of "dumb wells," or cesspools sunk into it, I would not advise any who values security from intestinal disturbance to drink "fresh water." Mineral water or home-made lemonade is the only safe beverage of the kind. Siphons of aerated waters are especially to be feared, for their sources of supply are of the most suspicious kind. Only "slop water" is supposed to be emptied into the sea by the pipes which run into it close to the shore: but of the validity of this hypothesis at Mentone, the evidence of the nose does not afford confirmatory testimony, and at Cannes the sea-shore literally stinks in front of some of the most splendid villas, and just where the views are most entrancing, and the walks most picturesque.

There is a bad practice, also, of heating the hotels by dry hot air passed into the passages; this is productive of sore throats and bronchitis to those who are delicate, and who pass from the artificially heated air of the corridors out into the cool bracing sea-air of the balconies. At the Hôtel des Anglais, where Dr. Bennet lays down hygienic law with Draconic but intelligent severity, and in the villas of his patients, this is not allowed, and the windows are kept open in the day. I have never heard of anyone who did not feel the benefit of this intelligent and pleasant practice. The English are taking possession more and more, from year to year, of the most favoured parts of the Riviera; and, in the best hotels, nothing but the English tongue is heard. They have brought with them their frank good sense, their activity, their love of fresh air and outdoor life and athletic games, their habits of personal cleanliness, their insistance on the sanitary decencies of construction and practice. It is possible now, in all the larger and newer towns of the Riviera, to find cleanly and airy rooms, carpeted staircases, capacious wash-basins, baths, corridors duly ventilated, "cabinets" tiled or marbled and with copious water-supply, linen frequently changed, and beds free from vermin of any sort. For outdoor life, there are tennis-courts, rowing and sailing boats, and riding-horses. The cowardly business of pigeon-shooting is, I am sorry to say, still eagerly pursued by a small minority of the idle community, especially of those with gambling propensities; but I am glad to be told that the proportion of Englishmen taking part in it is steadily diminishing.

The streets in the "English quarters" are free from the pestiferous smells which denote the usual indecencies and filthiness of a Continental population, even of the higher class. And the English mission of physical civilisation is being fulfilled rapidly and unconsciously; for the power of good is great, and examples teach silently, even better than much preaching. The present state of the English quarters of the Riviera is more eloquent than much writing, and the French and Italians have already learnt much of physical godliness by mere force of unconscious imitation.

CORRESPONDENCE.

THE PROVIDENT SYSTEM.

SIR,—Your correspondent, Dr. Robert Lee, is in error when he says, or seems to imply, that a medical officer to a provident dispensary "supplies medicines and pays a visit for fivepence." My experience is wholly in connection with the Manchester system, and the medical officers have nothing to do with the supply of medicine beyond prescribing for their patients what medicine they think necessary; and a dispenser is attached to each dispensary, whose duty it is to make up the prescriptions and look after the drugs. This is one reason why I approve of the provident system as it is practised here—that the medical men are free from all the drudgery of dispensing and from the responsibility of procuring drugs.

In my communication to the *Glasgow Medical Journal* it is seen, as you have correctly stated, that the average payment per visit is less than fivepence. It must not be lost sight of, however, that the consultations are taken along with the visits in order to get at the average payment for each consultation or visit. Fivepence a visit is small remuneration indeed, but it does not appear quite so paltry when paid for a consultation as well. A visit necessarily takes up some time; a consultation not so much. I find that the average time required for a consultation is three minutes or less, so that one can get through twenty patients in an hour. This is made possible on account of many of the [illegible] being [illegible] ailments, and many more chronic cases who have frequently been before, and, therefore, no prolonged investigations into signs and symptoms are necessary. In numbers, the consultations considerably preponderate over the visits—4,748 of the latter represent 7,348 of the former. The medical men receive only half of the subscriptions; the other half goes towards the expenses of management. Thus the members not only pay twice as much as the medical men receive, but also pay one penny every time they get medicine; and from the aggregate number of prescriptions dispensed, it is found that, for every time a patient sees a medical man, he comes twice for medicine. Therefore, the payments of members represent about one shilling for every consultation and visit. When this is possible with such a sickly constituency as the provident dispensaries have at present, it seems to me that the system only requires careful nursing and guidance, the medical officers co-operating with the promoters of the dispensaries, to make the system not only workable, but far and away more satisfactory to the doctor than the custom that prevails at present of attending the working classes, employing a collector to gather in the money in such instalments as he can. This collector-system entails dispensing, much book-keeeping, and other annoyances, which contrast unfavourably with the purely professional work of the medical officer to a provident dispensary. The class that the provident system is meant to reach are those that cannot pay medical bills, but yet are, or ought to be, above being the recipients of pure charity, and can be taught to help themselves by making small and regular payments to provide against debt, instead of contracting the debt and then struggling to get out of it.

Dr. Lee's concluding remark "that provident dispensaries, conducted in the best manner, must fail," is, I think, not in harmony with the experience already gained. There is a provident dispensary in Coventry which has existed over fifty years, and is now in an apparently flourishing condition. From the report for the year ending March 25th, 1882, I see that the three medical officers then connected with the institution received between them, in nearly equal proportions, over one thousand pounds; and the report of the medical officers to this dispensary gives no hint of dissatisfaction, but is written in a vein of all-round praise.

Pendleton, February 2nd, 1884. A. STEWART.

SHOT-SILK RETINA.

SIR,—Mr. Benson's remarks on my note on this subject demand some reply. He takes exception to my statements on several points. I plead guilty to one of his charges, viz., that I was not aware that Mr. Nettleship had already described shot-silk retina, till my paper had appeared in the JOURNAL. I admit, therefore, that I was incorrect in describing "shot-silk" retina as an "undescribed" appearance. In explanation, I may say that Mr. Nettleship and myself, as colleagues at the same hospital, most probably talked over cases of the kind, and that he or I, or both of us, may have used the term "shot-silk" in alluding to this appearance, before any description had been in print. To Mr. Nettleship, in any case, I have much pleasure in according the priority of description, and should have done so at the time of writing my paper, had I been aware of the facts.

Mr. Benson is probably correct in stating that the appearance in question is one with which ophthalmologists are familar. But familiarity with a phenomenon does not necessarily imply a power of correctly interpreting its meaning. It may even breed an opposite tendency. I trust, therefore, that it will not be out of place to inquire as to the meaning of "shot-silk" retina. I hoped that my paper might evoke evidence on two questions: 1. Whether it is a survival of a fœtal condition, and 2. Whether it is a pathological condition. Mr. Benson's remarks seem to tend towards the former opinion, to which I am myself also inclined. Whether the appearance be rare or frequent, must depend to some extent on the observer. If he note down slight or doubtful cases, his numbers will be large. If, on the other hand, he note only decided and unmistakable cases they will, I think, be few. We may, in this way, perhaps, explain the discrepancy in the results of Mr. Benson's and my own investigations. I brought forward a few well-marked cases. It is very possible that I may have overlooked a number of slight or doubtful cases. But, making every allowance for this possible source of discrepancy, I must confess to some surprise that so large a percentage as 69 should have been found among deaf-mute children and youths. If this is to be taken as the ordinary percentage in young, but otherwise unselected, eyes, then "shot-silk" retina must be the rule rather than the exception, and the 31 per cent. without this appearance must be the exceptional cases. How is this to be explained?

Afterwards, Mr. Benson states that he should expect to find one case in every six children examined, but if the percentage among the deaf-mutes is to be taken as the normal percentage in children generally, we ought to find about four out of every six eyes examined with the "shot-silk" appearance. With a view to arriving at a clear understanding of the matter, I would suggest that a number of children of a few weeks or months old should be examined, and that the percentage of "shot-silk" retinas thus obtained should be compared with that obtained from an equal number of persons of various ages. The results thus obtained would go far to clearing up the question as to whether the condition depends upon a survival of a fœtal state of the retina, and as to its becoming gradually less marked in advanced life. I did not intend in my "Note" to imply that "shot-silk" retina occurs only with hypermetropia. Having ophthalmoscopically examined a number of children with squint, who also were the subjects of hypermetropia, I, as it were accidentally, obtained a larger number of cases from this class than from any other. But with so small a number of cases I did not, of course, intend to give the results any sort of statistical value.—I am, sir, yours obediently, W. SPENCER WATSON.

A CASE OF HYDROPHOBIA.

SIR,—I notice in the JOURNAL of January 26th some remarks on a case of hydrophobia at Horwich, Lancashire. As I happen to be the medical man who cauterised the wound, and subsequently attended the case when hydrophobia supervened, perhaps a slight history of the case from me may not be out of place. I ought to have sent an account of the case to the JOURNAL before this, but unfortunately I have not had time to do so.

In the first place, allow me to correct an error in your report; the boy was not bitten in the hip, but in the lip. On October 27th, 1883, I was summoned to attend C. E., aged 6 years, who, it was stated, had been bitten by a mad dog. As I was from home at the time, a messenger had to travel about three miles before I could be found. Consequently, about two hours elapsed between the infliction of the bite and my seeing the boy. On my arrival home, the boy was brought at once to the surgery, and I observed that he was suffering from a lacerated wound of the left upper lip, extending into the angle of the mouth. The parts were very much swollen, owing to the father industriously sucking the wound for half an hour.

I cauterised the wound freely with a pointed stick of nitrate of silver, taking care to apply the caustic to every ramification of the wound; in fact, the application was so extensive, that I expressed an opinion to the father that he must not be surprised if some portion of the lip came away. I also told him that I had not much confidence in the efficacy of the remedy, on account of the length of time that had elapsed since the part was bitten. Poultices were applied for four or five days, and the wound gradually healed; the boy did not suffer in health, and attended school as usual. No one seemed to be able to tell anything about the condition of the dog; it was immediately destroyed and buried by the police. The boy's relations were particularly cautioned about letting him know anything about mad dogs.

On December 15th, I was again sent for to see C. E., and found him suffering from sore-throat; there was distinct enlargement and redness of the left tonsil, with feverishness; he could swallow, but complained of pain during the act. I immediately suspected the terrible nature of the malady, and gave him large doses of bromide of potassium. The following day, he presented the usual characteristic symptoms of hydrophobia, viz., cramps of thoracic and pharyngeal muscles, great dread of fluids, the so-called "hydrophobic slaver," restlessness, and alternate demonstrations of anger and affection. The symptoms were much aggravated on offering him drink. With great difficulty he could manage to eat grapes, and he was encouraged to do so; but, after December 17th, he could swallow nothing. He died on December 20th from exhaustion.

I treated the case at first with bromide of potassium, as before mentioned, then with hypodermic injections of morphia; afterwards with 30-grain doses of chloral-hydrate *per rectum*, and given as often as the violence of the paroxysms seemed to need it; this drug palliated the severity of the symptoms, and produced sound sleep, sometimes as long as five hours, so that, during the last three days of the illness, the distressing symptoms which contribute so largely to the sensational literature of the subject were considerably in abeyance. The boy was conscious almost to the last. I observed no toxic effect from the chloral; and, should a similar case come under my care, I would rely on this method of treatment, but with rather a more liberal administration of brandy *per rectum*. Of course, nutritive enemata formed an important aid in endeavouring to keep up the strength.

In compliance with the wishes of the parents and relations of the patient, no consultation was held.

The coroner's remarks at the inquest about solid and liquid nitrate of silver may have originated from a perusal of the subject in Quain's *Medical Dictionary*. This work states that, if some considerable time has elapsed from the infliction of the bite, probably liquid caustics are preferable; it is obvious to anyone that the situation of the wound (the mouth) influenced me to use the solid nitrate of silver.

I am pleased to see you have dealt so effectually with the criticisms of the coroner. I made reference to them in my report to the local board, a copy of which report I enclose. The suggestions for prevention of canine madness I obtained from a letter in your valuable JOURNAL two years ago.—I am, sir, yours faithfully,

GEORGE H. WHITAKER, L.R.C.S., L.R.C.P.ED.

Horwich, near Bolton-le-Moors, Lancashire,
January 29th, 1884.

MEDICAL REFORM.

SIR,—With reference to "A General Practitioner's" letter in the JOURNAL of January 26th, until pharmaceutists are put upon a similar footing with registered medical practitioners, it would scarcely be fair play to stop cross-counter practice without prohibiting the general practitioner from keeping open shop and dispensing his own medicines. I think, for the safety of the community, the former body should be exclusively charged with the custody of all poisons; and as this would entail great responsibility they, I think, would stand in need of every protection which registration should afford, quite as much as the general practitioner.—Faithfully yours,

UNION.

ERGOTINE.

SIR,—With reference to Dr. Atkinson's letter in the BRITISH MEDICAL JOURNAL of January 26th, on the subject of the action of ergotine, it is clear that his contention for the possible alternative of a peripheral nervous mechanism is a just one. It was to meet this possible alternative that the last paragraph in the paper of Dr. Ringer and myself was written. We there state as follows. "In how far we are justified in our conclusion that ergotine does act directly on the vessels, or, more strictly stated, does act independently of the central nervous system, we must leave to be decided by means of the experiments themselves."

Since we had definitely eliminated the central nervous system, there would have been no need to qualify the simple statement that ergotine did act directly on the vessels by the above stricter statement, but for our clearly recognising the possibility of a peripheral nervous mechanism. It was the establishment of peripheral action that we had in view. Its further analysis is a problem of extreme complexity. I am, sir, your obedient servant,

62, Guildford Street, W.C. HARRINGTON SAINSBURY.

MULLEIN IN PHTHISIS.

SIR,—In your issue of the 19th ultimo (p. 138), "Experientia Docet" asks me to inform him where the leaves of the mullein plant can be obtained, their price, and the quantity required for treating a case of pretubercular phthisis. This letter, being in your small print correspondence, escaped my attention while perusing that number.

The mullein can be had in Dublin from John Evans, 49, Dawson Street; and its price is about five shillings per fourteen pounds. It can also be had in Covent Garden, London, W.C.; and it is extensively advertised in the Irish newspapers by growers in all parts of this country. The purchaser should take care that he gets the great mullein (verbascum thapsus), which can be distinguished from the other mulleins (which are comparatively useless) by its thick mucilaginous and woolly leaves; as these other mulleins are frequently supplied by design, or as often by ignorance. When the great mullein leaves are very young, they bear strong resemblance to young foxglove leaves.

The quantity of mullein is three ounces of the green leaves, which should be boiled for ten minutes in a pint of new milk. This should be strained, slightly sweetened with lump-sugar, and drunk warm. This quantity should be taken twice or three times a day, and is liked by the patients. There is no doubt of its efficacy as a curative in the earlier, and a palliative in the later, stages of pulmonary consumption; and I have a number of new cases, with weighings proving this, which I trust later to present in a very abbreviated form in your columns. The green mullein leaves can be had nearly all the year round, and are very superior to the dried; and it is hardly necessary to add that fresh mullein leaves should be used for each milk-decoction.—I am, sir, yours, etc.

F. J. B. QUINLAN, M.D., M.R.I.A., F.K.Q.C.P.I.

29, Lower Fitzwilliam Street, Dublin, February 4th, 1884.

THE LATE SURGEON-MAJOR R. JACKSON, A.M.D.

SIR,—Anent the late obituary notice of this medical officer, perhaps the following may be of interest. Not long ago, when walking with a friend in London, we met a gentleman, a civilian, not long home from India. The name of a mutual friend was mentioned, and this gentleman said he (the mutual friend) had nearly lost his life not long before, as he was out shooting in the jungle with the late Dr. Jackson, when they were attacked by hornets; and that poor Jackson had behaved in a most courageous manner, by pulling off his own coat to protect his friend from the hornet-stings; and that this action was the cause of his getting much stung himself, in doing what the gentleman expressed as "one of the pluckiest things he ever heard of in his life." It may, therefore, in justice to the memory of this gallant man, be well to let the facts be known to the profession, as another example of the noble and unselfish manner in which some of its members do their duty in that state of life to which it has pleased Providence to call them.—I am, sir, yours faithfully, SURGEON-MAJOR, A.M.D.

MILITARY AND NAVAL MEDICAL SERVICES.

THE ARMY MEDICAL SCHOOL.

THE winter session of the Army Medical School was brought to a close on Monday, the 4th instant, when the names of the surgeons on probation, who had been recommended for commissions in Her Majesty's Army and Indian medical services, were announced, and the prizes awarded to those who had been successful at the competitive examinations in the respective departments of study, were distributed by His Serene Highness Prince Edward of Saxe-Weimar, the general commanding the southern district. The meeting took place in the lecture-room of the Royal Victoria Hospital at Netley, and a large number of visitors, including many ladies, were present on the occasion. The Prince was accompanied by Princess Edward of Saxe-Weimar, and various members of his staff, including Lieutenant-Colonel Lascelles, the Assistant Quartermaster General, and Surgeon-General J. Lamprey, principal medical officer of the southern district, together with Captain Lord A. C. Seymour, and Lieutenant W. H. R. Darby, his aides-de-camp. There were also present the Director-General of the Army Medical Department and Mrs. Crawford, Sir Charles Pearson, K.C.M.G., commandant of the Royal Victoria Hospital, and Lady Pearson, the Hon. Mrs. Eliot Yorke, Surgeon-General Murray, M.D., principal medical officer at Netley, the officers of the hospital and their ladies, the professors of the Army Medical School, and numerous visitors. Both the area from which the prizes were distributed and the benches usually occupied by the surgeons on probation, were crowded, and the varied colours of the dresses of the ladies, mingled with the military uniforms, gave the assemblage a very bright and animated aspect. We print elsewhere a list of the surgeons of the two services who were declared fit to receive commissions, together with the names of the successful competitors for the prizes given on the occasion.

The Prince, after he had handed the prizes, delivered an address, in which he took a general survey of the objects of the school, and of the part it had taken in preparing the young medical officers for discharging the special duties which devolved on them in the military service. He expressed his conviction that the officers and men of all ranks of the army, had largely benefited from the knowledge which had thus been disseminated. His Serene Highness finally addressed some special remarks to the surgeons who were about to be commissioned, on the importance of their position and functions in the army and in India, and concluded by some kindly words which were well calculated to encourage them on commencing their military career.

The Director-General, Dr. Crawford, also addressed a few observations to the surgeons who had just passed through the school, and who, he said, were doubly honoured on this occasion, first, by the kindness of His Serene Highness in coming all the way from Portsmouth to give them the prizes and address them as he had done, and, secondly, by the presence of so many ladies. He told them, as one result of his observations during forty years' experience in the Army Medical Department, that if, in their future professional practice, they succeeded in gaining the good opinion of the ladies, and of the wives of the soldiers, and in securing their confidence as to the professional treatment of their families, they would have little to fear in any other quarter. The Director-General observed it was very important that general officers, and that the combatant officers of the army at large, should take an interest in the work and professional reputation of the medical department of the army; that such visits as His Serene Highness commanding the southern district, and other military officers, had paid them on the present occasion, and that other distinguished officers had paid previously on similar occasions, in connection with the Army Medical School, were highly encouraging, and beneficial to the medical service; and he expressed his own acknowledgments and the acknowledgments of all the officers of his department, for them. Dr. Crawford, before sitting down, said he had noticed that no special prize had been given in the pathological department of the school; and he added that he should have much pleasure in following the example of Sir Joseph Fayrer on a previous occasion, by sending one to Mr. Bradshaw, who stood highest on the present list in that branch of study.

At the close of the proceedings, the officers of the Army Medical Department at Netley entertained Prince Edward, the ladies, and other visitors, at luncheon, in the mess-room of the officers' quarters.

BRITISH MEDICAL SERVICE.—List of surgeons on probation in the Medical Department of the British Army who were successful at both the London and Netley examinations. The marks shown are those which were gained at the London examination; the order of position of these gentlemen is not affected by the marks gained at the Netley examination.

	Marks.		Marks.
[1] 1. O. G. D. Bradshaw	2410	11. F. S. Heuston	2100
2. M. Kelly	2375	12. R. J. A. Durant	2055
[2] 3. H. H. Pinching	2355	13. G. F. Gubbin	2030
4. R. J. Geddes	2350	14. J. P. Myles	1980
5. W. Kelly	2185	15. R. Lesly	1975
6. D. V. O'Connell	2170	16. H. P. Birch	1975
7. A. Dodd	2140	17. M. O'D. Braddell	1880
[3] 8. G. Wilson	2121	18. J. J. C. Donnet	1870
9. J. M. Reid	2105	19. H. M. Sloggett	1845
10. T. B. Winter	2105	20. C. S. Robinson	1755

[1] Gained the Martin Memorial Gold Medal.

[2] Gained the Parkes Memorial Bronze Medal.

[3] Gained the Montefiore second Prize.

INDIAN MEDICAL SERVICE.—List of surgeons on probation in Her Majesty's Indian Medical Service who were successful at both the London and Netley examinations. The final positions of these gentlemen are determined by the marks gained in London added to those gained at Netley, and the combined numbers are accordingly shown in the list which follows. February 4th, 1884.

	Marks		Marks
[1] 1. J. J. Pratt	5284	4. C. J. Sarkies	4606
2. R. Shore	4870	5. H. Thomson	4150
3. W. B. Bannerman	4765		

[1] Gained the Herbert Prize of £20, with the Montefiore Medal and Prize of twenty guineas.

ARMY MEDICAL PROMOTIONS.

SIR,—Will you kindly insert these few lines, so as, if possible, to draw some attention to the very hopeless prospects of promotion of all surgeons-major. That the present block in promotion to the rank of brigade-surgeon is a very substantial grievance, and one likely soon to be prejudicial to energy and professional efficiency, cannot, I think, be denied.

The surgeons-major are a body of some importance in the service; and their hopeless prospects of advancement are clearly shown in Dr. Balean's excellent tables. It is sincerely to be hoped that something may be done in their interests, and that the matter may be discussed when army medical reform comes before Parliament. I remain, truly yours, SURGEON-MAJOR.

OBITUARY.

PERCY EDWARD SHEARMAN, L.R.C.P.Lond., M.R.C.S.E.

THE death of Percy Edward Shearman ought not to be allowed to pass without some word from us expressive of the great grief with which all who knew him will have heard that the long and gallant fight he made against a dire disease has ended. As a student at University College, he was remarkable for the untiring energy with which he devoted himself to the prescribed course of study. He acted for some time as one of the junior demonstrators of anatomy, and passed the first examination for the diploma of Fellow of the Royal College of Surgeons. As house surgeon at University College Hospital to Mr. Christopher Heath, and as clinical assistant at the Hospital for Consumption and Diseases of the Chest, Brompton, he showed the same diligence and ceaseless application to his duties as had marked the earlier stages of his career; and his friends were anticipating that he would take his degree at the University of London with high distinction, when his health rapidly began to fail, and symptoms, at first of laryngeal, and subsequently of pulmonary phthisis, developed. He made a voyage to Australia, but without much benefit; and, shortly after his return, he went to Davos-am-Platz, where he died at the early age of 26, leaving behind him the name of a blameless courageous gentleman.

Mr. Shearman was the son of the late Dr. C. J. Shearman of Sheffield, who also died at an early age, and the grandson of the late Dr. E. J. Shearman, F.R.S., of Rotherham.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Tuesday, February 5th.

Notices.—The following notices were given: Mr. BARCLAY: To call attention, on Tuesday, Feb. 19, to the administration of the Contagious Diseases (Animals) Acts; and to move that a Select Committee be appointed to inquire into the working of the Contagious Diseases (Animals) Acts, 1869 and 1878, and to report specially what further steps should be taken to prevent the introduction of contagious diseases from abroad, and whether the provisions for exterminating disease and preventing its spread in this country can be simplified and made more effectual.—Sir JAMES LAWRENCE: To call attention, on an early day, to the necessity of extending the provisions of the Common Lodging-Houses Acts to houses occupied by several families of the labouring classes.—Sir JOSEPH PEASE: To move, on an early day, that, in the opinion of this House, it is inexpedient to continue those enactments which enforce the accumulation of penalties in cases of the non-compliance with the laws relating to compulsory vaccination.

Wednesday, February 6th.

New Bills.—The following Bills were read a first time:—A Bill to restrict the Sale of Patent Medicines, by Mr. Warton and Dr. Farquharson; to be read a second time on March 26th.—A Bill to provide for the Regulation of Cremation and other modes of Disposal of the Dead, by Dr. Cameron, Sir Lyon Playfair, and Dr. Farquharson; to be read a second time on April 30th.—A Bill to amend the Cruelty to Animals Acts, by Mr. Anderson, Sir Frederick Milbank, Mr. Samuel Morley, Mr. Cochrane-Patrick, Mr. Jacob Bright, Mr. Passmore Edwards, and Mr. Buchanan; to be read a second time on February 27th.—A Bill to repeal the Compulsory Clauses of the Vaccination Acts, by Mr. P. A. Taylor, Mr. Blennerhassett, Mr. Burt, Mr. Hopwood, and Sir Wilfrid Lawson; to be read a second time on July 16th.—A Bill to amend the Law relating to the Care of Lunatics in Ireland, by Sir Thomas M'Clure, Lord Arthur Hill, Mr. Thomas Lea, Mr. Greer, Mr. Findlater, and Dr. Lyons; to be read a second time on May 7th.—A Bill for the Sanitary Inspection of Dwelling-Houses, by Mr. Monckton, Marquis of Stafford, Mr. H. T. Davenport, and Mr. Henry H. Fowler; to be read a second time on May 21st.—A Bill for preventing the Erection of Buildings on Disused Burial-Grounds, by Mr. Hollond, Mr. Bryce, and Mr. Pell; to be read a second time on March 12th.—A Bill to alter and amend the Law relating to Private Lunatic Asylums in Ireland, and to make other and more suitable provision for paying Patients, by Mr. William Corbet, Mr. Blake, Mr. Dillwyn, Mr. Dawson, and Mr. Richard Power

MEDICO-LEGAL AND MEDICO-ETHICAL.

CORONERS AND MEDICAL EVIDENCE

SIR,—*Apropos* of remarks on coroners and medical evidence made in this JOURNAL, I will tell you how things are managed in a certain large district. The coroner acts always on the advice of the local superintendent of police. If a case occur in the practice of a certain medical man, an inquest is always held; the medical man is called, and the fee is paid. If a case occur in the practices of any of his neighbours, no inquest is held in 85 per cent.; an inquest without medical evidence in 14 per cent.; and the normal inquest with medical evidence in 1 per cent. The nature of the case appears to be immaterial.—Yours truly, EXPERIENCE.

*** It is difficult to understand the principle upon which the coroner acts in deciding the cases upon which he intends to hold inquests; and it is still more difficult to express an opinion upon the conduct of the coroner without knowing the exact details concerning the nature of the cases in which he declines to hold inquests. If the coroner fail in his duty show partiality, or neglect to hold inquests when they should be held, twelve freeholders can petition the Lord Chancellor to inquire into the proceedings of the coroner. In fact, any one can lay a complaint before the Home Secretary, who, as a rule, causes an official inquiry.

CHARGES FOR CERTIFICATES OF DEATH.

"ETIQUETTE," who is often requested to fill up certificates of death for assurance societies and clubs, inquires whether it is professional to charge for these certificates? and, if so, how much? and to whom should the claim be made?

*** There is not, so far as we are aware, any definite rule or tariff relative to medical certificates of death, so as to entitle the legal representatives of a deceased person to money from life-assurance companies or club or other death-funds. The fees vary, we believe, from 3s. 6d. to £1 1s., according to the class in life of the recipient, modified by the amount of the policy and the nature of the certifying document required in the respective cases. In the case, however, of a really poor person, and the recipient of a small sum only, the fee may well be remitted. The executors, administrators, or other legal representatives of the deceased, are the parties to whom application should be made for payment of the fee.

As a general rule, such certificates may, we think, be fairly charged in accordance with the principle laid down under the heading of "Letters of Advice" in the Medico-Chirurgical Tariffs, issued by the late Shropshir Ethical Branch.

USE OF POST-CARDS IN APPLICATION FOR PAYMENT.

A MEMBER.—There is nothing illegal in using post-cards; but one must take care what is written on them, as anything that appears there is open for every one to see, and, if it be too strong, the writer might be exposed to proceedings for libel.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.—During the week ending the 2nd instant, 5,723 births and 3,448 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 8,762,354 persons. The annual rate of mortality per 1,000 persons living in these towns, which had steadily declined in the four preceding weeks of this year from 22.2 to 20.3 per 1,000, rose to 20.5 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow: Derby, 13.1; Cardiff, 13.4; Leicester, 14.9; Birkenhead, 16.1; Norwich, 16.7; Huddersfield, 17.0; Hull, 17.3; Preston, 17.3; Halifax, 17.7; Bradford, 18.4; Bristol, 18.6; Liverpool, 19.2; Blackburn, 19.4; Plymouth, 19.4; Salford, 19.6; Sheffield, 20.3; Nottingham, 20.6; London, 20.7; Birmingham, 20.9; Bolton, 21.5; Portsmouth, 21.6; Brighton, 23.1; Wolverhampton, 23.3; Manchester, 23.9; Newcastle-upon-Tyne, 24.1; Leeds, 24.9; Sunderland, 25.8; and Oldham, 28.1. The average death-rate in the twenty-seven provincial towns did not exceed 20.4, and was, therefore, slightly lower than the rate recorded in London. The 3,448 deaths from all causes registered last week in the twenty-eight towns included 419 which were referred to the principal zymotic diseases, against 460 and 418 in the two preceding weeks; of these, 126 resulted from whooping-cough, 101 from scarlet fever, 75 from measles, 38 from "fever" (principally enteric), 36 from diphtheria, and 14 from small-pox. These 419 deaths were equal to 12.2 per cent. of the total deaths, and to an annual rate of 2.5 per 1,000. This zymotic rate was equal to 2.5 in London, and corresponded with that in the twenty-seven provincial towns, among which it ranged from 0.0 in Norwich, Huddersfield, and Halifax, to 3.8 in Bolton, 4.5 in Salford, and 5.9 in Leeds. The fatal cases of whooping-cough, which had risen from 99 to 130 in the three previous weeks, declined to 127 last week, and caused the highest proportional fatality in Newcastle-upon-Tyne, Manchester, and Bolton. The deaths from scarlet fever, which in the three preceding weeks had been 117, 108, and 97, rose again last week to 101; this disease caused the highest rates of mortality in Sheffield and Leeds. The fatal cases of measles showed a further decline from the numbers returned in recent weeks, and were fewer than in any week since the end of October last; this disease was proportionally most fatal in Derby and Salford. The deaths referred to different forms of fever, which had been 61 and 48 in the two previous weeks, further declined to 38, a lower number than has been recorded in any week since July 1883. The 36 deaths from diphtheria in the twenty-eight towns last week, included 23 in London, 3 in Leeds, 3 in Hull, and 2 in Birmingham. The 14 deaths from small-pox in these towns exceeded by 10 the exceptionally small number in the preceding week; 7 were returned in Birmingham, 3 in Liverpool, 2 in Sunderland, 1 in London, and 1 in Wolverhampton. The death-rate from diseases of the respiratory organs, judged by the metropolitan returns, still continues very much below the average; the 367 deaths referred to these diseases in London last week showed a slight increase upon those in the preceding week, but were no fewer than 281 below the average, and equal to an annual rate of 4.8 per 1,000. The causes of 82, or 2.4 per cent., of the 3,448 deaths registered last week in these twenty-eight towns, were not certified either by medical practitioners or by coroners. In London, the proportion of uncertified deaths did not exceed 1.3 per cent.; while in the provincial towns it averaged 3.3 per cent., and showed the largest excess in Birkenhead, Salford, Halifax, and Oldham.

HEALTH OF SCOTCH TOWNS.—In eight of the principal Scotch towns, having an estimated aggregate population of 1,254,607 persons, 797 births and 540 deaths were registered during the week ending the 2nd inst. The annual rate of mortality, which in the two preceding weeks had been 22.0 and 20.1 per 1,000, rose last week to 22.4, which exceeded by 1.9 the average rate for the same period in the twenty-eight large English towns. Among these eight Scotch towns, the death-rate was equal to 16.3 in Dundee, 20.0 in Greenock, 21.1 in Leith, 21.4 in Paisley, 21.8 in Perth, 22.8 in Edinburgh, 23.5 in Glasgow, and 27.6 in Aberdeen. The 540 deaths registered in these towns last week included 67 which resulted from the principal zymotic diseases, showing a further decline from those returned in the two preceding weeks; of these, 21 were referred to whooping-cough, 20 to diarrhœal diseases, 8 to measles, 7 to "fever," 6 to diphtheria, 5 to scarlet fever, and not one to small-pox. These 67 zymotic deaths were equal to 12.4 per cent. of the total deaths, and to a death-rate of 2.8 per 1,000, which slightly exceeded the average zymotic death-rate recorded last week in the twenty-eight English towns. No deaths from any of these diseases were returned in Perth or Dundee, while they caused the highest death-rates in Glasgow, Edinburgh, and Paisley. The deaths referred to whooping-cough, which had increased in the three preceding weeks from 13 to 23, were 21 last week, of which 15 occurred in Glasgow, and 3 in Edinburgh. Of the 8 fatal cases of measles, which showed a decline of 6 from those returned in the previous week, 6 were registered in Edinburgh, and 2 in Paisley. The 7 deaths referred to different forms of fever corresponded with the number in the preceding week, and included 4 in Glasgow, and 2 in Edinburgh. The fatal cases of diphtheria and scarlet fever showed a further marked decline from recent weekly numbers. The rate of mortality from diseases of the respiratory organs in these Scotch towns continues to be much below the average, and was last week equal to an annual rate of 4.6 per 1,000. Of the 540 deaths registered last week in these towns, as many as 91, or nearly 17 per cent., were uncertified

HEALTH OF IRISH TOWNS.—In the week ending February 2nd the number of deaths in the sixteen principal town districts of Ireland (including Dublin) was 459. The average annual death-rate was 27.8 per 1,000 of the population, the respective rates for the several districts being as follow, ranging in order from the lowest to the highest:—Kilkenny, 8.5; Dundalk, 8.7; Newry, 14.0; Lisburn, 14.5; Armagh, 15.5; Sligo, 19.2; Lurgan, 25.7; Belfast, 25.9; Londonderry, 26.7; Dublin, 28.7; Waterford, 32.4; Cork, 33.1; Drogheda, 33.8; Limerick, 35.1; Galway, 37.0; Wexford, 38.5. The deaths from the principal zymotic diseases in the 16 districts were equal to an annual rate of 2.1 per 1,000, the rates varying from 0.0 in Galway, Newry, Drogheda, Wexford, Dundalk, Sligo, Lisburn, and Lurgan, to 6.9 in Waterford; the 11 deaths from all causes registered in the last-named district comprising 1 from scarlatina, 1 from whooping-cough, and 1 from enteric fever. Among the 108 deaths from all causes registered in Belfast are 3 from scarlatina, 2 from whooping-cough, and 2 from diarrhœa; and among the 26 deaths from all causes in Limerick are 1 from measles, 2 from whooping-cough, and 1 from diphtheria. Three deaths from scarlatina were registered in Londonderry. Another death from whooping-cough was registered in Armagh.

PUBLIC VACCINATION.

SIR,—I should be glad to obtain reliable information under the following circumstances.

1. I am a public vaccinator. I have to attend twice a year at three stations, two of them ten miles from my house, and the third eight miles. I am paid three shillings per case all round. I wish to know whether the guardians can legally pay more than three shillings for every case successfully vaccinated at the more distant station.

2. I have two separate and distinct contracts with the board of guardians, one as district medical officer, and the other as public vaccinator. I wish to know whether, in the event of my resigning the appointment of public vaccinator, the board could compel me to resign the other appointment also?—I am, sir, faithfully yours, VACCINATOR.

*** 1. Three shillings is the usual fee paid for vaccination performed under contract with the guardians at places several miles distant from the residence of the public vaccinator; but there is nothing to prevent the guardians from paying more if they choose, and if the Local Government Board will sanction the increased fee. Three shillings is the minimum fee allowed by Section 6 of the Vaccination Act of 1867 for vaccinations done at stations more than two miles from the vaccinator's residence.

2. No; the two appointments are quite distinct, and are held under different conditions. An appointment as public vaccinator can be terminated at any time on 28 days' notice, but an appointment as district medical officer is—unless there are special conditions in the agreement—a permanent one.

DUTIES OF MEDICAL OFFICERS OF HEALTH AS TO BAKEHOUSES.

SIR,—Can you inform me of the nature of the duties which a medical officer of health has to perform with regard to retail bakehouses under the Factory and Workshop Act of 1883? I mean, what book is published on this new branch of a medical officer's duties?

I should like to know, too, if a rural sanitary authority ought not to increase the pay of a medical officer on giving him these new duties to perform.—I am, etc., MEDICUS.

*** See answer to a similar inquiry on page 87 of the JOURNAL for January 12th last. A book just published by Knight and Co., on *The Sanitary Regulation of Bakehouses*, will be found to contain all necessary information on the subject. We can quite understand that a conscientious fulfilment of the duties imposed upon a medical officer of health by the Act of last session would, at any rate in towns, involve a serious addition to his work; but, as regards extra pay, much would depend on the terms of his agreement with the local authorities.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—Admitted Members, January 31st, 1884.

Acland, Theodore Dyke, M.D Oxford, 79, Lambeth Palace Road.
Barrs, Alfred George, M.D.Edinburgh, Leeds.
Beatson, William Burns, M.D St. Andrew's, Bath.
Branfoot, Henry Seymour, M.B London, Brighton.
Buxton, Dudley Wilmot, M.D London, 99, Gower Street.
Campbell, Harry, M.B London, 40, Keppel Street.
Hebbert, Charles Alfred, L.R.C.P., Westminster Hospital.
Smith, Robert Percy, M.D,London, St. Thomas's Hospital.

Admitted Licentiates.

Appleford, Stephen Herbert, 16, Finsbury Circus.
Armitage, Edward Harris, 23, Brook Street.
Beale, Charles Edward, 84, Cambridge Street.
Blaxland, Walter, 126, Victoria Park Road.
Blower, Bernard, 119, Shaw Street, Liverpool.
Branthwaite, Robert Welsh, Macclesfield.
Brown, Edwin Harold, Northampton.
Burroughs, Leopold, Manor Villa, Lee.
Chadwick, James Morley, Heywood, Manchester.
Croft, Edward Octavius, 16, Mornington Road.
Cummings, Harold Lytton, Dulwich.
Dowsing, Herbert Leopold, Hull.
Dyer, Sidney Reginald, Huntingdon.
Edwards, William Lloyd, 47, Spurstowe Road.
Gooding, Matthew Richard, 67, Oakley Square.
Graham, George Herbert, Thicket Road.
Graham, William, M.B.Toronto, 86, Fleet Street.
Green, Edwin Corner, 3, Telford Avenue.
Harris, John William, 11, St. Thomas's Terrace.
Hart, Arthur Herbert, Edgbaston, Birmingham.
Hingston, Richard, Liskeard.
Hubbard, Frederick Edmund, Canterbury.
Hudson, Charles Leopold, Middlesex Hospital.
Julyan, Francis Hervey, 11, All Saints Road.
Knowles, Henry, Chapel Allerton, Leeds.
Littlewood, Harry, 22, Rutland Street.
Loring, Jonathan Brown, M.D.Montreal, 58, Doughty Street.
McConochie, Samuel Watson, M.B Toronto, 75, Bancroft Road.
McDonnell, William Campbell, Park House, Stoke Newington.
Maitland, Alfred Derwent, 19, Chester Place.
Manders, Neville, Marlborough.
Maurice, William James, Ipswich.
Mills, Robert, Middlesex Hospital.
Minns, Allan Glaisyer, Thetford.
Muirhead, Michael Alexander, 37, Trinity Square.
Neale, John Hendley, Leicester.
Nuttall, Charles Dilley, 48, Bernard Street.
Orchard, Alfred, Ashby de la Zouch.
Parry, Herbert Lloyd, 24, Canonbury Park North.
Read, George More, Sydney.
Ross, Ebenezer Fairfax, 11, Duke Street, Portland Place.
Rowland, John Jones, Aberystwith.

Scutt, Tom, Bere Regis.
Sharples, William Henry, Castleton, Manchester.
Sharpley, Edward, Louth.
Sheldrake, Edwin Nodin, 28, Albion Street.
Simoens, Joseph Auspicio, 24, Woburn Place.
Spong, William, Chelsham Road.
Starr, William Henderson, 8, Roseford Terrace.
Sutton, Henry Martyn, 59, Lambeth Palace Road.
Thompson, Charles Herbert, 85, Lambeth Palace Road.
Tilley, William James, 28, Shepherd's Bush Green.
Tomson, Walter Bolton, St. Thomas's Hospital.
Trevor, Edward Tull, 18, Queen's Gardens.
Trott, Dudley Cox, Caius College, Cambridge.
Udale, Joseph James, 112, Uxbridge Road.
Walton, Francis Fielder, Hull.
Weller, Charles Joseph, 67, Coleshill Street.
White, Ernest Alfred, Leeds.
Williams, Montagu William, Hackney Road.
Withers, John Sheldon, Manchester.
Woods, Edward Robinson, M.B.Toronto, 75, Bancroft Road.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following gentlemen, having undergone the necessary examinations for the diploma, were admitted of the College at a meeting of the Court of Examiners on the 24th ultimo, viz.:

Messrs. C. E. Adams, Carno, Montgomeryshire; T. G. Styam, M.A.Cantab., Eastbourne Terrace, W.; W. T. H. Spicer, B.A.Cantab., Saffron Walden; E. T. Power, Denmark Hill; C. E. Robbs, B.A.Cantab., Powys Square; T. H. R. Crowle, Campden Hill Road; W. P. Davis, Ebury Street, S.W.; James Harvey, Leicester; G. H. H. Fuller, New Shoreham; A. J. Carter, Harleyford Road, S.E.; E. A. Hughes, Bentinck Street; G. H. Johnson, Wath-on-Dearne, Yorkshire; M. R. Gooding, L.R.C.P.Lond., Oakley Square; and W. C. McDonnell, L.R.C.P.Lond., Stoke Newington.

Four candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for three months, four for six months, and one for nine months.

The following gentlemen passed on the 25th ultimo, viz.:

Messrs. D. G. Edwards, Denbigh; George Wale, Carshalton; H. E. Edlin, Manchester; G. C. Hawkins, Teignmouth; E. F. Ross, L.R.C.P.Lond. Sydney, N.S.W.; J. W. Barrett, M.B.Melb., Melbourne; Mudalitamby Eleyatamby, L.R.C.P.Ed., Colombo; A. W. Thomas, L.S.A., Clapham Common; J. F. G. Dill, M.B.Cantab., Lower Belgrave Street; Hugh Webb, Buckingham Palace Road; W. F. C. Rogers, Falmouth; Robert Taylor, Mendlesham, Suffolk; and E. R. W. C. Carroll, Wokingham.

Five candidates passed the examination in Surgery, and, when qualified in Medicine, will be admitted members of the College; and seven candidates, having failed to acquit themselves to the satisfaction of the Court, were referred to their studies for six months, and three for three months.

The following gentlemen passed on the 28th ultimo, viz.:

Messrs. C. E. Evans, Bristol; James B. Woolby, L.R.C.P.Lond., Halesworth; Edward B. Townsend, L.R.C.P.Ed., Colchester Street, N.W.; John H. Gostling, Halesworth; William Habgood, L.S.A., Wimborne; Henry Bird, L.S.A., Brampton; William Carnelley, Fallowfield; William Growse, Brentwood; Richard Samut, L.S.A., Malta; Charles L. Hudson, L.S.A., Bungay; Thomas Wholey, L.R.C.P.Lond., Gainsborough; Edward J. Lewis, B.A.Cantab., L.S.A., Llandovery; William H. L. Marriner, L.S.A., Gunterstone Road, W.; Frederick A. Warner, Kensington; James H. Lilley, M.A. and M.B.Cantab., Atherstone; John F. Vince, L.S.A., Birmingham; and Herbert W. Pilgrim, L.S.A., St. Augustine's Road, N.W.

Four candidates were approved in Surgery, and, when qualified in Medicine, will be admitted members of the College; one candidate was referred for nine months, five for six months, and three for three months.

The following gentlemen passed on the 29th ultimo, viz.:

Messrs. Christopher R. Benson, L.S.A., Clifton; Francis H. Julyan, L.R.C.P. Lond., Queen's Park, W.; Harold L. Cummings, L.R.C.P.Lond., Dulwich; Herbert Edgelow, Cambridge Street, Pimlico; Herbert L. Parry, L.R.C.P. Lond., Canonbury Park, N.; John Holroyde, L.S.A., Ripponden, Yorkshire; Martin S. Whish, L.S.A., Granby Street, N.W.; Frederick D. Irvin, L.S.A., Longridge, near Preston; Charles N. Foley, L.S.A., Denbigh Place, S.W.; Charles E. Bean, L.S.A., Shepherd's Bush; John C. Smith, L.S.A., St. John's Wood; John H. Crocker, L.S.A., Gunnislake, Devon; and Charles D. Nuttall, L.R.C.P.Lond., Leicester.

Three candidates were approved in Surgery, and, when qualified in Medicine, will be admitted members of the College; and seven were referred for six months, and two for three months.

The following gentlemen passed on the 30th ultimo, viz.:

Messrs. Charles F. Clarke, L.S.A., Plumstead; Thomas E. Gordon, M.B.Durh., Swansea; Tom Scutt, L.R.C.P.Lond., Wareham; Edward A. Opie, M.B.Durham, Plymouth; Hugh Stott, L.S.A., Uxbridge Road; Allan G. Minns, L.R.C.P.Lond., Stretford; Arthur H. Dodd, L.S.A., Petherton Road, N.; Alfred G. Webster, Huddersfield; Robert Mills, L.S.A., Northampton; William Rowlands, L.K.Q.C.P.I., Liverpool; Alexander Stables, M.B.Ed., Nairne, N.B.; Edward H. Armitage, L.R.C.P.Lond., Brook Street, W.

Eight candidates, having failed to acquit themselves to the satisfaction of the Court, were referred to their professional studies for six months.

One hundred and ninety-one candidates presented themselves for the examination just completed, as compared with 175 at the corresponding period of last year; of this number, 20 were referred to their professional studies for three months, 59 for six months, and 2 for the extended period of nine months, making a total of 81 referred candidates.

UNIVERSITY OF CAMBRIDGE. The undermentioned candidates have kept the Act as required for the degree of Bachelor of Medicine.

G. E. Crallan, M.A., Emmanuel College; S. T. Salter, B.A., Emmanuel College; J. H. Lilley, B.A., St. John's College; R. D. Brinton, B.A., Downing College.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 31st.

Barton, Henry Thomas, Bonner Road, Victoria Park, E.
Carr, Thomas, Melbourne Square, Brixton, S.W.
Druitt, Arthur Barthold, Lambeth Road, S.E.
Freeland, Ernest Harding, The Middlesex Hospital.
Gimblett, Wm. Henry, Devonport Road, Shepherd's Bush.
Hamilton, Henry Thomas, Chilham, Kent.
Low, Chas. Wm., Great Plumstead.
Roberts, George Augustus Edward, Twyford, near Winchester.
Simmons, Harold, Tiverton.
Tatham, Charles John Willmer, Dollington, Sussex.
Wilkinson, Clement John, Gladstone Street, Southwark.
Willan, Leonard James, Benthal Road, Stoke Newington.

MEDICAL VACANCIES.

The following vacancies are announced:

ARMAGH UNION.—Medical Officer, Richhill Dispensary. Salary, £140, and fees. Applications to James Best, Honorary Secretary, up to February 25th.

BOSCOMBE PROVIDENT INFIRMARY, Bournemouth.—Resident Medical Officer. Salary, £60 per annum. Applications by February 11th.

CHORLEY DISPENSARY.—House-Surgeon and Apothecary. Salary, £130 per annum. Applications by February 20th.

CITY OF ELY DISPENSARY.—Surgeon-in-Ordinary and Dispenser. Salary, £60 and £20 per annum. Applications to the Rev. K. H. Smith by February 16th.

GENERAL HOSPITAL, Birmingham.—Resident Medical Officer. Salary, £130 per annum. Applications by February 28th.

HANTS COUNTY LUNATIC ASYLUM.—Junior Assistant Medical Officer. Salary, £120 per annum. Applications by February 15th.

HEARTS OF OAK BENEFIT SOCIETY.—Consulting Physician. Applications by February 16th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by February 16th.

HOSPITAL FOR WOMEN, Soho Square.—Two In-patient Clinical Assistants Applications to the Registrar.

JERSEY GENERAL DISPENSARY.—Medical Officer. Salary, £120 per annum. Applications by May 1st.

MANCHESTER ROYAL INFIRMARY.—Second House-Physician. Applications to the Chairman of the Medical Board at once.

MANCHESTER ROYAL INFIRMARY.—Fourth House-Surgeon. Applications to the Chairman of the Medical Board at once.

NOTTINGHAM BOROUGH ASYLUM.—Assistant Medical Officer. Salary, £100 per annum. Applications by February 16th.

OWENS COLLEGE, Manchester.—Demonstrator and Assistant-Lecturer in Pathology. Applications by February 14th.

ROYAL FREE HOSPITAL, Gray's Inn Road.—Senior Resident Medical Officer. Salary, £104 per annum. Applications by February 27th.

THE HOSPITAL FOR WOMEN, Soho Square, W.—Assistant-Physician and Assistant-Surgeon. Applications by March 1st.

MEDICAL APPOINTMENTS.

APTHORP, F. W., M.R.C.S., L.R.C.P., appointed Medical Officer and Public Vaccinator to the Manhood District of the Westhampnett Union, *vice* Thomas Dutton, M.D., M.R.C.P., resigned.

APTHORP, F. W., M.R.C.S., L.R.C.P., appointed Surgeon to Courts "Star" and "Manhood," Ancient Order of Foresters, *vice* Thomas Dutton, M.D., M.R.C.P., resigned.

CUMMINS, W. A., M.D., appointed Medical Officer to the Workhouse of the Cork Union, *vice* J. Wall, M.D., deceased.

GRIFFITH, W. S. A., M.R.C.P., F.R.C.S., appointed Physician to Out-Patients, Samaritan Free Hospital.

GRINDON, Francis J., M.R.C.S., L.S.A., appointed Medical Officer and Public Vaccinator to the Olney District of the Newport Pagnell Union, *vice* F. W. D. M'Gachen, L.F.P.S.E., resigned.

HUDSON, Charles Leopold, L.R.C.P., M.R.C.S., L.S.A., appointed Resident Physician's Assistant to the Middlesex Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcements.

DEATH.

THOMSON.—On the 29th ultimo, at his residence, Montrose House, Oldham, Alexander Thom Thomson, F.R.C.S., J.P., in his sixty-fourth year.

OPERATION DAYS AT THE HOSPITALS.

MONDAY..........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY..........St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY....St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY........St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY............King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY........St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. Tu., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu., F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu., F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Mr. Thomas Bryant: The Treatment of Irreducible Hernia, and an Improved Method of Adapting a Truss in Hernia [illegible]. Mr. Jonathan Hutchinson, F.R.S.: On Lupus Disease of the Nose, [illegible] [illegible] [illegible] [illegible] Mr. N. C. Smith: A Case of Congenital [illegible].

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. W. H. Broadbent: On [illegible]. A [illegible] from Dr. Straus of Paris, Chief of the French Scientific Commission sent to Egypt [illegible]. Dr. [illegible] The Parkes Museum, [illegible] Lecture, by J. P. Seddon, F.R.I.B.A., on the Ventilation of Houses.

WEDNESDAY.—Epidemiological Society, 8 P.M. Discussion of Surgeon-General Hunter's paper on the Origin of the Cholera Epidemic of 1883 in Egypt.—Royal Microscopical Society, King's College, 8 P.M. Annual Meeting.

FRIDAY.—Medical Society of Charing Cross Hospital, 8 P.M. Mr. C. F. Clarke will read a paper on Skin Diseases in Children. Dr. Alfred Sangster will take the chair.—Military Medical Society, Woolwich, 8.30 P.M. Discussion on Surgeon-Major Godwin's paper on Antiseptic Surgery.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE HIND FUND.

THE following additional subscriptions have been received and paid to the account of the "Hind Fund" at Messrs. Coutts's Bank:

Harvey, J. D'Arcy, Esq., Staff Surgeon R.N.	£1 1 0
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REMOVAL OF HAIRS FROM THE UPPER LIP.

SIR,—In reply to the question of "Sigma" in the JOURNAL of January 19th, allow me to recommend a persevering pulling out of the hairs. A young lady to whom I gave this advice, twelve months ago, freed her lip completely in the course of a day or two, without pain worth mentioning. For some weeks, she found it necessary, in order to keep the lip perfectly free, to pull out the small fresh hairs about twice a week, but the growth soon became less active, and at present a very much less frequent attention suffices. The idea that a thicker and thicker crop will constantly spring up appears to be the reverse of the fact. A knowledge of the efficacy of this very simple remedy would save many women from much distress of mind. I may add that fingers are better than forceps, for they cause less pain. I enclose my card. I am, etc.,

A MEMBER.

PUZZLED, who also asks for a formula for a reliable depilatory, will find a further reply to his question at page 756 of the second volume of the JOURNAL for 1883.

MULLEIN LEAVES.

SIR,—Mullein leaves can be obtained in any quantity in any waste piece of ground, by letting one plant stand and go to seed on it, and it will always yield a large crop ever after. I had an assistant who had used them largely in America, and he used to grow them, dry the leaves, and give them away to phthisical people, to make into tea for drinking, [illegible] a case of tuberculosis. Mullein leaves given in this way are useful in chronic bronchitis and similar chest affections. It grows wild in most parts of England, and is commonly called Aaron's rod. I am, etc.,

Nayland, Colchester, January 2[illegible]th, 1884. H. D. PALMER.

A COMPETITOR.—Only two essays were sent in; the following is the subject for the next Jacksonian Prize, viz., The Surgical Treatment of Uterine Tumours, both Innocent and Malignant.

DISEASES OF THE TRANSVAAL.

DR. COSGRAVE of Dublin will be greatly obliged to any brother member who will give him information as to the sicknesses that are most common in the Transvaal, and as to the medicines (both kind and quantity) that two intending emigrants should take with them.

SPES would be glad of any information, through the columns of the JOURNAL, on medical practice in Australia, Tasmania, or New Zealand. He has Dr. Hardwicke's book.

A QUESTION OF TREATMENT.

A YOUNG PRACTITIONER would feel obliged by hints on the treatment of the following case. J. McN., aged [illegible], [illegible] suffered much for the past two years from [illegible], and weakened nervous system. The latter [illegible] [illegible] [illegible] [illegible] [illegible] little effect. [illegible] Should it be persevered with [illegible]?

A SUBSCRIBER asks whether there is any work published [illegible] [illegible].

[illegible]

M.A. (Cantab.).—With the [illegible] [illegible] [illegible] the degree of the Edinburgh University [illegible] as a guarantee of sound medical education, was certainly not without foundation.

THE REGULATIONS OF THE UNIVERSITY OF DURHAM.

SIR,—In the list recently published in the JOURNAL of the University of Durham examinations in medicine, conducted at Newcastle on Tyne, I notice that only three practitioners of the required age and standing in the profession presented themselves as candidates for the M.D. degree.

Since the special examination was first instituted, the number of candidates has never been large; and during the last twelve months, there is a decided falling off, as compared with the two previous years. The regulation which requires all candidates to be above the age of forty, in addition to that of fifteen years' standing as medical practitioners, is vexatious, of no practical good, and operates unfairly upon those gentlemen who have had the misfortune to obtain their qualifications and commence their professional career at an age which brings the fifteen years' service to a conclusion before reaching the required forty years. To them, the question of further waiting may be, and in one case which came under my observation last year has been, of vital importance.

The University has recently reduced the period of residence required of present students to twelve months, and I submit that many practitioners of fifteen years' standing, who are now engaged in the hard and laborious duties of their profession, would gladly avail themselves of the special examination if the clause relating to forty years of age were removed.—I am, sir, yours faithfully,
M.R.C.S.

DR. HARRIS.—There are 1,166 Fellows of the Royal College of Surgeons, including 593 who obtained the distinction after examination.

PORTRAIT OF DR. EDWARD JENNER

SIR,—I have to thank Dr. Bampton for his letter on the above subject in your issue of January 5th. His description of the portrait belonging to the Plymouth Medical Society so entirely agrees with my proof engraving of Dr. Jenner, that there can be no doubt as to its being the original from which it was engraved.

Dr. Bampton says this picture was painted by *H.* Northcote, R.A., a local artist. I think there must be some mistake here. Surely *James* Northcote (also a Devonshire artist) was the only R.A. of that name.

The portrait of Jenner in the National Portrait Gallery is inscribed on the frame as by "Northcote;" no initial of Christian name is given, nor are the letters R.A. added; and, strange to say, there is no catalogue whatever of the pictures in this valuable collection, to give any information about them or their painters.—I am, sir, faithfully yours,
ED. HART VINEN, M.D.

17, Chepstow Villas, Bayswater.

MR. MAKUNA is referred to vol. ii of the BRITISH MEDICAL JOURNAL for 1883, page 706.

MEDICAL SPEAKING TUBE.

SIR,—Connecting tube best made of ordinary gas-pipe, lead, ⅜ inch will answer, but, better, ½ or ¾ inch. This tube may be branched to one or more rooms, *e.g.*, into the principal's and assistant's bedrooms, by which principal, assistant, and patient can readily talk together. Mouth-pieces may be bought ready-made, gutta-percha, vulcanite, or wood, with whistles or without, attached to flexible pipe, or fixed to the wall or end of the lead pipe. India-rubber inch piping, covered with cloth and with mouthpiece tied in, is convenient for the bedside, hung over a hook within reach of the bed.—I am, etc.,
E. H. ROL.

Patricroft, January 27th, 1884.

MRS. ROBERTS DUDLEY'S question would more properly take the form of an advertisement.

CORONERS' COURTS AND THE PUBLIC.

F. F.—The coroner's court is an open one, and any British subject has a right to be present at the proceedings; and no one, except by order of the coroner, can refuse admittance to the court. The coroner has power, like any other judge, to order the court to be cleared should he deem it desirable to do so; but he would rarely exercise this power except for some special reason. We should advise "F. F." to acquaint the coroner with the facts mentioned; he, doubtless, being unaware of the conduct of the police-officer.

INDIA desires to be informed what is the best thing to put into a tooth to destroy the nerve. The quantity and mode of application should be mentioned.

TINEA VERSICOLOR.

A MEMBER (Egypt) asks for suggestions as to the treatment of a severe case of tinea versicolor. The patient has had the disease since August 1882, and, at the present time, it extends all over the trunk. He has been treated with sulphurous acid, corrosive sublimate, iodine, and hyposulphite of soda, locally, but as yet with no avail.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Willoughby, London; Mr. G. E. Carr, Omagh; Dr. Cosgrave, Dublin; Sir Edmund Lechmere, London; Mr. A. Stewart, Pendleton; Mr. C. L. Spurway, Rome; Mr. J. D. Harris, Exeter; Mr. Ernest H. Buckell, Chichester; Mr. L. Humphry, Cambridge; Mr. S. Charles, Blakeney; Dr. Norman Kerr, London; Dr. Joseph Pollard, London; Mr. J. W. Hayward, Whitstable; Dr. A. Emrys-Jones, Manchester; Mr. Berry, Wigan; Dr. J. Thorburn, Manchester; Dr. A. Wahltuch, Manchester; Mr. W. Sedgwick, London; Mr. H. B. Runnalls, Saltash; Dr. Styrap, Shrewsbury; Mr. C. W. Cathcart, Edinburgh; Mr. R. H. B. Nicholson, Hull; Rusticus; Mr. C. Riminton, Sandhurst; Mr. G. Biggs, London; Mr. Caldwell, Birmingham; Dr. Arlidge, Stoke-upon-Trent; Mr. F. C. Banks, London; Our Paris Correspondent; Dr. Robert Bell, Glasgow; Dr. Gayton, Haverstock Hill; The Secretary of the Local Government Board; Mr. H. E. Donning, London; Dr. Kaeser, London; Mr. Roberts Dudley, Stalybridge; Dr. Danford Thomas, London; Dr. Renner, Sierra Leone; Messrs. Arnold and Sons, London; The Secretary of the Sanitary Commission, Punjab; Dr. E. H. Jacob, Leeds; Dr. D. Newman, Glasgow; The Secretary of the Balloon Society; Mr. Eberle, Liverpool; Mr. F. Broadbent, Collingham; Dr. D. Campbell Black, Glasgow; Dr. G. E. Paget, Cambridge; Messrs. J. B. Lippincott and Co., London; Mr. G. Walpole, London; Mr. P. Q. Karkeek, Torquay; Mr. C. S. Redmond, Gateshead; Mr. J. Aspinall, Hindley, near Wigan; Dr. Mallins, Walton, Norfolk; Dr. Loewe, Berlin; Mr. C. H. Golding-Bird, London; Messrs. J. Robinson and Co., Norwich; Dr. Crichton Browne, London; Dr. George Thomson, Oldham; Mr. F. Hewitt Oliver, Maidstone; The Editor of the *Christian Million*; Mr. G. F. Hentsch, London; Mr. H. R. Ruckley, High Wycombe; Mr. R. Thompson, Johnstown; Mr. W. F. Phillips, Andover; Mr. W. Berry, Wigan; Mr. W. A. Thompson, Ampthill; Dr. R. Shingleton Smith, Clifton; Mr. James West, London; Mr. T. M. Stone, London; The Secretary of the Parkes Museum; Mr. Richard G. H. Scott, Bath; Mr. B. B. Rawlings, London; The Secretary of the Royal Hospital for Consumption, Ventnor; Dr. J. M. Redmond, Dublin; Dr. R. Bruce Low, Helmsley; Mr. Mark H. Judge, London; Our Aberdeen Correspondent; Our Glasgow Correspondent; Mr. E. Kilburn, Ventnor; Mr. W. J. Walsham, London; Mrs. White, Cork; Dr. Clifford Allbutt, Leeds; Mr. C. Carey, Bromsgrove; Dr. Suckling, Birmingham; Mr. Thomas Fuller, New Shoreham; Mr. H. Trueman Wood, London; Mr. Septimus Farmer, Hayle; Mr. H. A. Smith, Ealing; Mr. B. G. Morirson, London; Mr. T. A. Dodd, Newcastle-on-Tyne; Mr. James Bradley, Pensnett, near Dudley; Dr. Fairlie Clarke, Southborough; Mr. M. D. Makuna, Ystrad Rhondda; Mr. W. Spencer Watson, London; Sir W. Smart, London; Messrs. Juggaard and Galschiot, Paris; Mr. Robert Settle, Bolton; Mr. E. Martyn, Westgate, Mansfield; Mr. P. Fraser, Leyland, near Preston; Mr. H. E. Paxon, Newcastle-under-Lyne; The Secretary of the Society of Arts; Mr. T. Taylor, Brotton; Dr. Kinkead, Galway; Mr. Blamey, Penryn, Cornwall; Dr. Seymour S. Sharkey, London; The Editor of the *Science Monthly*; Mr. F. W. Porter, London; Dr. Imlach, Liverpool; Mr. H. A. Lediard, Carlisle; Dr. George Henty, London; Mr. N. E. Davis, Sherborne; Mr. James Farquhar, Harrogate; Miss Hibbs, Sheffield; Mr. John Brown, Burnley; Dr. George Shearer, Liverpool; Dr. Glascott, Manchester; Mr. Johnson Smith, Greenwich, etc.

BOOKS, ETC., RECEIVED.

Elements of Practical Medicine. By Dr. A. H. Carter. Second Edition. London: H. K. Lewis. 1883.

Note-book for *Post-Mortem* Examinations. By Byrom Bramwell, M.D. Edinburgh: Maclachlan and Stewart. 1883.

Census of England and Wales. Vol. III. London: Eyre and Spottiswoode. 1883.

Baldness and Greyness; their Etiology, Pathology, and Treatment. By Tom Robinson, M.D. London: H. Kimpton. 1883.

Report of the Chapter of the Order of St. John of Jerusalem. London: Harrison and Son. 1883.

Diseases of the Bladder, Prostate Gland, and Urethra. By F. J. Gant. Fifth Edition. London: Baillière, Tindall and Cox. 1883.

The Diseases of Children. By Armand Semple. London: Baillière, Tindall and Cox. 1883.

Voice, Song, and Speech. By Lennox Browne, F.R.C.P. London: Sampson Low and Co. 1883.

Poisons; Their Effects and Detection. By A. W. Blyth. London: Charles Griffin and Co. 1883.

Transactions of the Obstetrical Society of Edinburgh. Edinburgh: Oliver and Boyd. 1883.

Annals of Cholera from the Earliest Periods to the Year 1817. By J. Macpherson, M.D. London: H. K. Lewis. 1884.

The Evolution of Morbid Germs; A Contribution to Transcendental Pathology. By Kenneth W. Millican, B.A.Cantab., M.R.C.S. London: H. K. Lewis. 1883.

Handbook of Geographical and Historical Pathology. By Dr. August Hirsch. Vol. I. Acute Infective Diseases. Translated from the second German Edition. By Charles Creighton, M.D. London: New Sydenham Society. 1883.

On Sterility in Woman; Being the Gulstonian Lectures. By J. Matthews Duncan, M.D. London: J. and A. Churchill. 1883.

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LECTURES
ON
THE PHYSIOLOGY AND PATHOLOGY OF MENSTRUATION.

Delivered at St. Mary's Hospital Medical School.

By ALFRED WILTSHIRE, M.D., F.R.C.P.Lond.,
Joint Lecturer on Obstetric Medicine; Physician-Accoucheur to Out-Patients;
Physician for the Diseases of Women to the West London Hospital;
formerly Medical Inspector to Her Majesty's Privy Council, etc.

Let us now turn to the systemic phenomena of menstruation. These will be found to embrace a wider range than is generally supposed, comprising the vascular, glandular, and nervous systems; the viscera, skin, etc.

The changes in the *vascular system* are important; they are manifested in the veins, arteries, heart, and blood; and collectively constitute what I have (Lettsomian Lectures) spoken of as the "Vascular Rhythm" of menstruation.

The venous changes are ordinarily most conspicuous. It is a matter of common observation that menstruating women show darkness under the eyes, duskiness of the countenance, and generally a duller hue of their skin. This is mainly due to fulness of the veins and venules. This venous turgescence is the analogue and prototype of that seen in pregnancy, only that it is more fleeting; usually abating markedly after the establishment of the flow. Bordeu noticed the "flux variqueux."

The venous changes are appreciable by sight and touch, while those occurring in the arterial system can be measured and graphically demonstrated by the sphygmograph. This instrument shows increase of arterial tension, arising gradually three, or more days, before the flow is installed, then subsiding rapidly; the flow, indeed, would seem to herald the end of the menstrual act, but, from its remarkable nature, has arrested, almost exclusively, attention. There are, then, attending menstruation, though manifested in varying degrees, tightening up of the arteries and distension of the veins, which, having attained their acme, abate somewhat rapidly. Menstrual tension is the analogue and prototype of like arterial tension during pregnancy. This increase in arterial tension has received corroboration from the observations of the Barnes's, father and son, Putnam Jacobi and others; and I regard it as, in a more or less marked degree, a constant concomitant of œstromenstruation.

The force and rhythm of the heart's beats vary with the stage of menstruation. Rabuteau is confirmed by Hennig, as to the retardation of the pulse; while Depaul and Guéniot state that the heart seems to beat with greater force and frequency. These statements are not discrepant; they apply to different stages, varying considerably with different individuals, but distinct enough. The blood-changes accompanying menstruation are replete with interest. The condition of the blood-cells, as revealed by the microscope, is significant and interesting; and we have evidence available through the observations and researches of investigators, whose statements are in singular unison. All are agreed that, on the approach of a menstrual period, there is a decrease in the number of red corpuscles, and a relative increase of the white corpuscles; and as this change may be observed even before the flow sets in, it is attributable rather to an alteration in the process of hæmatosis than to loss in the flow.

The researches of M. Hayem on microcythæmia, and on the characters of the blood in the newly born, throw light upon this point. M. Hayem says that the smallest red corpuscles, or microcytes, are very rare in healthy adult men, while they are constantly present in the newly born, and in women at the period of menstruation. They represent an immature stage of the red corpuscles; and, as a rule, are only met with when a new crop of red cells is being produced. If pathological causes impede their development, they remain small and accumulate in the blood, and this explains their abundance in certain anæmias. These small globules always appear when there is an active production of new elements; they characterise a blood in process of evolution or reparation, and are young globules incompletely developed. The observations of Rindfleisch are confirmatory of Hayem's views. Dr. Gowers has recorded "A case of Anæmia observed with the Hæmacytometer," in which fluctuation in the number and characters of the blood-cells was observed at the menstrual periods. Dr. Gowers says: "On each occasion, menstruation was attended by a considerable diminution in the number of the red corpuscles. It marked chiefly the first few days of the menstrual period, a rise occurring during the latter part. In one instance, at least, the fall in the corpuscles distinctly preceded the establishment of the menstrual flow—a fact which is in harmony with the pale appearance sometimes observable before menstruation actually begins. This would suggest that the diminution in their number is not due merely to their loss in the flow, but rather to an associated interference with the process of blood-formation." He also observed much granular material in this case. Moleschott's observations also confirm my view that there is a modification in the composition of the blood at the periods. Dr. Gowers, in discussing the pathology of splenic leucocythæmia, quotes Moleschott, respecting the normal condition of the blood as showing a relative increase of the white corpuscles during the catamenia. There is probably an increase in the amount of fibrin at the onset of menstruation, and my observations lead me to infer that this slight hyperinosis coincides with the transient rise of temperature, and, as in febrile states, with an augmentation of white corpuscles. Another point still requiring elucidation, but of much promise, is the relation of the hæmoglobin-value of the red cells to the sanguineousness of the flow, between which and the evolution of the mammalian blood-corpuscles there seems to be some correlation. According to Quinquaud, destruction of hæmoglobin goes on during pregnancy, varying with accidental conditions; and I believe an analogous change occurs during menstruation, sometimes even becoming excessive. Le Canu found the crassamentum diminished during menstruation.

The evidence adduced suggests that the blood undergoes an appreciable nutritive change at every period. There is a resemblance to fœtal blood in respect of hæmatoblasts; and it would seem as if the periodical production of new blood-cells, similar to those in the newly born, led to a renewal of this vital tissue; a developmental impulse being periodically infused into it by the œstromenstrual act.

Scanzoni has observed that the periodical ripening of an ovule excites vascular disturbance; and M. Cauchois has remarked on the increased tension at the periods, in a paper communicated to the Société de Biologie. Some observations of M. Raynaud on symmetrical gangrene are interesting in this connection. Cases of what may be termed necrogenic anæmia occur chiefly in young women at the menstrual periods; it would seem to be an exaggerated stage of the condition known as digiti mortui. Virchow's statement that contraction of arterioles may proceed to complete obliteration of the lumen of the vessel is noteworthy in this connexion. Pouchet observed vascular plethora, and remarks: "Cabanis, who has well appreciated this state of periodical plethora, states that he has even sometimes seen it continue many years in certain women after the cessation of the catamenial flux."

The next systemic feature of menstruation for our study has reference to *temperature*. My own investigations justify the inference that the onset of the period may be accompanied by a slight elevation of temperature, a fall ensuing when the flow is established. Rabuteau says the temperature falls *during* menstruation; and Fricke and Oppenheim have made confirmatory observations on the temperature of the vagina and uterus before and during the periods. Berthier (*Des Névroses Menstruelles*) says: "According to Henning, the axillary temperature rises and falls in the four or five days preceding menstruation; then rises anew on the day of the appearance of blood, and redescends at the time of its cessation, to return to the normal." (*Arch. für Gynæk.*) Wunderlich agrees with Ogle that women are probably a trifle warmer than men; and he admits that they are liable to febrile disturbance about the time of the catamenia, without any special pathological process being either indicated or induced; but he thinks that normal menstruation in healthy women has, as a rule, no influence upon the general temperature of the body. But women, like children, exhibit great mobility of temperature in disease. Speaking of the lower animals, Mr. Fleming says: "The excitement of the generative apparatus reacts on the whole system, and produces a kind of fever or irritability in the animal; its sensibility is increased; the appetite is more or less in abeyance, or capricious; and usually there is thirst." I am indebted to my friend Dr. Langdon Down for valuable confirmatory evidence herein, as well as in relation to menstruation generally in idiots.

The *nervous system* evinces its implication in many ways. Changes in the mental condition of menstruating women are manifested by alteration in temper, usually in the direction of greater irritability. Among idiots greater waywardness, restlessness, [illegible], [illegible]tiveness, and destructiveness are observed; very like what occurs in the lower animals. The conduct of [illegible] is suggestive. Those acquainted with asylum-work are familiar with the alterations in the mental state of many women at their periods; and it is noteworthy that these are not [illegible] of a [illegible] character. Nervous [illegible] are apt to [illegible] at the periods, and I have met with cases of menstrual epilepsy, one recently at St. Mary's Hospital, in which fits and suicidal tendencies occurred only in the premenstrual stage. Menstrual asthma is not unknown; and migraine and certain neuralgic and other nervous disorders are notoriously frequent at the periods.

Periodical melancholia, associated only with the catamenia, has been witnessed many times. Maudsley remarks that, in women prone to hysterical insanity, "outbursts of temper become almost outbreaks of mania, particularly at the menstrual periods;" and Laycock says, "but it should be observed that all mental alteratives act more powerfully on women at the menstrual period, and during or just after delivery, than at other times."

Mental excitement is often strongly marked in the lower animals at the breeding season. Mr. Bartlett, the able superintendent of the Zoological Gardens, says: "I believe the brain is greatly influenced by this condition, for under the pressure many females, wild at other times, allow themselves to be handled as though they were quite unaware of surrounding circumstances. Female elephants, however, otherwise perfectly tame and manageable, become furious and dangerous at the periods of sexual excitement." The "tetchiness" of women at their periods is so well known, that allowance is (or ought to be) made for their infirmities at this season. Some are conscious of a decided increase in their mental powers just before the periods, mostly in the direction of augmented perception, a faculty as peculiarly a feminine attribute as is judgment of the opposite sex.

Mention has been made of changes in the hue of the *skin* from increased venosity; but there are other phenomena apparent in the dermal tissues. Not only is the complexion duller, but there is a decided increase in the pigmentation of dermal structures. In many women the hair darkens, as in pregnancy, it may become moist and adhesive, and shedding may occur. Freckles—especially observable in the xanthochroic—deepen in colour, and so do the areolæ of the nipples, as Laycock pointed out. There is often a material increase in amount, as well as alteration in quality, of the sweat and odorous secretions. In some this is so marked as to become oppressive and annoying, on which account women are apt to resort to the lavish use of perfumes. The odour exhaled by certain menstruants is so significant, that other persons can detect their condition. In some persons, menstruation is ushered in by profuse and offensive sweating, especially of the feet and axillæ. Besides increased action of the normal functions of the skin, we find a marked proneness in women to eruptions at their periods, so that many know that a period is heralded when a customary eruption occurs, *e.g.*, acne, eczema, etc.

These manifestations of activity in the ectoderm are analogous to similar changes occurring in the lower creatures. In monkeys certain pigmented parts become much more highly coloured at the periods, as in the rhesus and mandrill: and other mammalia show like changes. The elephant, during "must," develops two cutaneous glands under the eyes, which exhale an odorous secretion. In birds, reptiles, and fishes, similar changes occur. The brilliancy of plumage during courtship is marked in the birds, and they subsequently become dull and moult. It is so with reptiles and fishes, whose colours are much brighter periodically; it is so with insects and with flowers. Laycock, Darwin, and Herbert Spencer have all commented on these facts. Mr. Spencer says (*Biology*, vol. ii, p. 253): "This seems as fit a place as any for noting the fact that the greater part of what we call beauty in the organic world, is in some way dependent on the sexual relation. It is not only so with the colours and odours of flowers; it is so, too, with the brilliant plumage of birds, and with the songs of birds, both of which, in Mr. Darwin's view, are due to sexual selection; and it is probable that the colours of the more conspicuous insects are, in part, similarly determined. The remarkable circumstance is, that these characteristics, which have originated by furthering the production of the best offspring, while they are naturally those which render the organisms possessing them attractive to one another, directly or indirectly, should also be those which are so generally attractive to us, those without which the fields and woods would lose half their charm. It is interesting, too, to observe how the conception of human beauty is, in a considerable degree, thus originated; and the trite observation, that the element of beauty, which grows out of the sexual relation, is so predominant in æsthetic products, in music, in the drama, in fiction, in poetry, gains a new meaning when we see how deep down in organic nature their connection extends."

In association with these ectodermic phenomena are analogous changes occurring in the endoderm, or mucous lining. Thus, diarrhœa is not uncommon, though many have constipation; and it is curious that women who pass membranous shreds from the bowel, are more liable to do so near their "periods" than during the interval. They may even pass casts of small portions of the tube. These membranous exfoliations occur with greater frequency in women than in men. Mr. Whitehead (*Mucous Diseases*) says: "Of one hundred cases, four only occurred in males." Mucous flux from the stomach may occur, with pyrosis, vomiting, flatulence, hunger, inappetence, etc. Coryza, sneezing, and bronchial catarrh, accompany every period in some, who say their "courses begin with a cold."

These phenomena suggest increased activity (proliferation) in the epithelial structures, followed by shedding, and present analogies with the moult in lower creatures. The corresponding changes which take place in the uterus have already been referred to.

Mr. Whitehead (*Mucous Diseases*) says: "Membranous dysmenorrhœa frequently occurs with women suffering from this disease." The discharges of membrane and mucus occur periodically. Courty shows that Huchard, Labadie-Lagrave, Gautier, Heyfelder and others share this view.

Turning to the *glandular system*, we find equal evidence of implication. Without interrupting our subject, I would here remind you of a fact to which your attention has already been directed, namely, the intimate relations that exist throughout the animal world between the renal excretory and the reproductive organs. Even in man these organs are in close association, and have a common efferent duct.

The *kidneys*, then, are organs meriting attention in these relations, and the condition of the urine shows that their function is altered. Many women experience urinary disturbance at the periods. Some have scanty thick urine, others an abundance of limpid water; and nearly all complain of irritability of the bladder.

Rabuteau has shown that there is a diminution of twenty per cent. in the excretion of urea during menstruation. Change in the quality of the renal excretion is not the only evidence of implication of the kidney. The organs have been known to exhibit appreciable alteration in their size, and there are grounds for attributing this to fluxionary hyperæmia.

An interesting corroboration herein is afforded by Dr. William Roberts in his article on "Movable Kidneys" in Reynolds' *System of Medicine*, where he says, respecting its etiology, "Becquet (*Arch. Gén.*, 1865) has enunciated a novel theory to explain the liability of women to mobility of the kidneys. He says: 'On the breaking forth of the menstrual flux, the kidneys are associated in the congestion of the generative organs, and become swelled. This fact, less rare than is usually supposed, perhaps even physiological, does it not explain the renal pain so often felt at the menstrual periods, especially in women who are subject to dysmenorrhagia? Thus swelled and rendered heavier, the kidney, and especially the right kidney, strains the feeble attachments which retain it, and tends to start out of its place. Soon the congestion subsides, and the organ returns to its original position; a second congestion displaces it further, and a third still more. The kidney, becoming each time heavier from the incompleteness of the resolution, comes to occupy a lower position; and then gradually and at length, but not without suffering, breaks loose, and floats in the abdominal cavity.'

"In a case under the observation of the writer, the displaced and movable kidney seems to become larger two days before the catamenia appear. It becomes sensitive to the touch, and at times somewhat painful, even without being touched; and in a case observed by Dr. Ritchie, and cited by the writer, an opportunity was afforded of watching the condition of the kidney during two menstrual periods, when its size was seen to be increased by fully one half, and it was much more sensitive to the touch. These facts, so far as they go, lend an air of feasibility to the theory of Becquet." Péan also mentions Becquet's case, and states that Martineau (*Thèse*) relates another, and that M. Peter also published one in his edition of Trousseau's *Lectures*, while Courty's statements are corroborative, as also are those of Newman, Sawyer, and others.

Menstruation may form a kind of test of renal integrity, inadequacy being betrayed at first only at the periods.[1] Thus Dr. W. Roberts mentions a case in which paroxysms of uræmic convulsions coincided with the catamenial periods, and I have seen corroborative instances myself, mostly in women at the change of life.

Menstrual jaundice has been observed, *i.e.*, jaundice occurring only in association with menstruation. Senator has recorded instances, attributable, apparently, to hepatic hyperæmia and consequent catarrh. Thierfelder and Ponfick discuss the subject also, and so does Fasbender.

In addition to catarrhal hyperæmia, it seems probable that some cases may be due to blood-change, and form one variety of hæmatic jaundice.

The relations of this subject are extremely interesting, and it seems probable that, with advancing knowledge, we may find further evidence of the powerful influence exerted by the liver on the formation and destruction of the blood.

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[1] I am indebted to Dr. [illegible] for a striking illustration of this kind.

Thierfelder (*Hyperæmia of the Liver, Von Ziemssen*, vol. ix, p. 63, says: "There are often manifested at the menstrual epochs symptoms of hepatic congestion, occurring either in place of the uterine flow, or immediately preceding it, or after it has ceased sooner or more abruptly than usual. Here there occurs manifestly a determination of blood to the liver, which, it is extremely probable, is connected with the excitation of the nerves referable to the maturing ovum, induced by a reflex mechanism like that involved in the afflux to the genital organs. We cannot always in such cases demonstrate the presence of influences which, as is shown by experience, may tend to produce disturbance in the latter organs, such as sudden chills, violent mental emotions, etc.; and even when such influences are present, it remains almost always inexplicable why the reflex process, which in the genital organs is either not at all or only to a slight degree operative, is transferred directly to the liver. Equally obscure is the mode of origin of those forms of hepatic congestion which occasionally make their appearance during the climacteric years, and afford evidence of their etiological relation to the menopause, not only by their simultaneous occurrence, but also by the circumstance that they temporarily disappear, or at least become modified, as often as menstruation again recurs."

With reference to the spleen, I have the impression that it is susceptible of fluxionary hyperæmia. The relations of this organ to the function of hæmatosis, though obscure, are replete with interest. It accords with my observations of splenic disease, that certain forms may be productive of menstrual derangement.

Lastly, there is the system of *lymphatic, or absorbent, glands*. This is active during menstruation. Observation has assured me that there is increased aptitude for the absorption of poisonous effluvia at these times; and has led me to believe that there is greater susceptibility towards infectious diseases.

The annexed passage from an article on "Periodicity," by Dr. Laycock, supports the view, long since formulated by me, that menstruating women are more liable to be affected by poisonous effluvia and emanations at their periods than during the intermenstrual epochs. Laycock's law is that there are in all persons, male as well as female, "critical days" in health, and that at such times their receptivity to disease is increased, a less healthy state of the system at large being induced, whereby their resisting power is lowered. This is obvious enough in women at their "monthly periods;" but, that being a multiple of an hebdomadal period, Laycock suggests that at each constituent multiple, or every seven days, the liability, though not so great, is still the subject of some augmentation. He says: "According to my previous statements, depression of the system takes place at the critical days of health, and consequently an exanthem, or other fever depending on a poison, is more likely to appear on these days than on any other; and, by parity of reasoning, the symptoms are most likely to be violent (when the disease has once broken out), or, in other words, a paroxysm to appear, on the same days; consequently, the critical days of health and the critical days of the fever will be identical."

But we must not lose sight of the possibility that a menstruating woman may poison a lying-in patient upon whom she is in attendance. This may occur when the emanations, cutaneous and other, from the menstruant are of an offensive and acrid character.

Active and capable monthly nurses are preferable to the elderly women, who have long usurped this branch of nursing; but they should be cleanly, healthy, sound, and wholesome women, with no menstrual taint about them.

Dr. Tilt quotes a case in which an otherwise apparently well fitted wet-nurse caused an erysipelatous eruption to appear on the baby she suckled every month at the time of her menstruation. The eruption ceased permanently when the child was weaned.

The *thyroid body* undergoes enlargement. In some women, it enlarges perceptibly at each catamenial period. Laycock quotes Reid as mentioning that, "the custom of the ancients of measuring the bride's neck the day after marriage, is still followed in Germany." It is noteworthy that goitrous tumours seldom arise before puberty, and that they display exacerbation during menstruation, and sometimes during gestation, though diminution may follow conception. In exophthalmic goitre, the concurrent vascular commotion is intensified when the superadded tension of menstruation comes into play. This has been remarked by Trousseau (*Clin. Med.*), according to whom there are intimate relations between menstruation and exophthalmos. He says: "Most of the women who have Graves's disease, suffer from amenorrhœa also. In the beginning, menstruation is only disturbed, but is after a time completely suppressed, and hopes of a favourable issue are not to be entertained until this function is perfectly re-established. This is an important prognostic sign." The vaso-motor derangements are here very pronounced.

The *salivary glands* may show increased activity. Perhaps there is some alteration in the saliva, for complaints are occasionally made of an altered taste in the mouth, especially of acidity. The lacrymal glands usually secrete more tears towards the catamenial periods, women being then more emotional and lacrymose; but dryness of the eyes and nose is occasionally complained of.

The *breasts*, which are sexual glands, also display increased activity. They become fuller, harder, tenderer, and slightly painful. The veins are fuller and more visible; the nipple more erectile; the areolæ darker. Kölliker has observed like symptoms. Some breasts secrete a little milk at these times. In this connection, an observation of Dr. Barnes is interesting. He says that he has observed that colostrum-globules were reproduced at every menstrual epoch in women who were suckling.

The facts laid before you surely justify the inference that menstruation consists in a profound nutritional wave affecting the whole body, and that it is not solely confined to the pelvic viscera, though the latter are customarily the channels whereby the prominent features of the function are ordinarily made manifest.

Briefly summarised, the leading phenomena of menstruation show singular analogies with those of pregnancy and parturition; the cardiovascular changes mimic those characteristic of pregnancy; the alteration in the blood is proto-typical; so are the pigmentary changes; and the dehiscence of epithelial structures is a miniature moult foreshadowing that which follows parturition when the completer genesial cycle has been accomplished.

The birth of the ovule is a parturition in miniature; there are rhythmic uterine contractions, decidual shedding, and expulsion of blood. The breasts denote their readiness to share in the reproductive act. The exaltation of function in the nervous system, and the activity of the glandular system, are alike significant. Even in its remotest fibres, the organism feels and displays the systemic commotion attendant upon the reproductive act; it is a nutritional wave affecting every fibre of the organism.

You may remember that, at the outset, I alluded to the probability that a law of periodicity governed the reproductive function in all creatures. Its operations have been remarked, but have not yet been fully demonstrated. Difficulties encompass its elucidation; but I believe that observation and research, by eventually clearing up the obscurities now surrounding it, will afford a scientific basis for future study.

If, by directing attention to the subject, I can enlist the observation and reflection of others more competent, I shall be content; for, as H. Spencer well remarks (*Principles of Biology*, vol. i, p. 408): "Not directly, but by successive approximations, do mankind reach correct conclusions; and those who first think in the right direction, loose as may be their reasonings, and wide of the mark as their inferences may be, yield indispensable aid by framing provisional conceptions, and giving a bent to inquiry."

And Laycock says, referring to the subject of periodicity: "The axiom that the whole is equal to the sum of all its parts is universally true, whatever the parts may be; and there is really no reason for despairing that we shall ever attain to a knowledge of the whole alluded to (a knowledge which must necessarily be derived from the knowledge of its parts), because those parts are microscopically small to the intellect. The boundaries of astronomical science have been pushed from small and obscure beginnings into the infinite in space, time, and number; and who can tell but that Providence may so assist the humble inquirer into nature, that science shall be extended to the infinite in littleness? And so, ultimately, man may be able to look down, by the light of philosophy, upon the varied phenomena of terrestrial life—their multifarious combinations and complexities, their cycles and epicycles—as he looks into the planetary world, and see nothing but order and simplicity where now there appears inextricable confusion. Assuredly the direction of this summit of clear perception is obvious. The road to it only wants hewing and digging, and diligently working at."

I have already brought under your notice some facts showing that the lower animals exhibit a seasonal aptitude for procreation, and that this, at any rate in the wild state, is most observable in warm seasons when food begins to be more abundant, so that it has long been remarked that the spring is the season of love. Domestication, by providing artificial warmth and food, interferes [illegible]; but still the periodical influence, [illegible], is not lost, for we observe a markedly greater tendency to breed in warm than in cold seasons. [illegible] Spencer (*Biology*) says: "Again [illegible] generative activity [illegible] an average correspondence with the annual return of a warmer season, which, did it stand alone, might be taken as evidence that a diminished cost of heat-maintenance leads to such a surplus as makes reproduction possible. But then this periodic rise of temperature is habitually accompanied by an increase in the quantity of food—a factor of equal or greater importance." There is, then, in a state of nature, periodically greater aptitude, recurring at long intervals, and which may be called seasonal. This is imitated by women, particularly by those who menstruate only in summer, or quarterly. It would seem probable that, in remote times, mankind bred chiefly in the spring or warmer months, as the lower non-domesticated animals now do. But civilisation, operating on man's ancestors as domestication now does upon the lower animals, by providing warmth and increasing the supply of food, has also promoted the fertility of the human species, and rendered man capable of reproduction at all times and seasons; the normal rhythm thus being broken somewhat in its relations to externals, *e.g.*, seasons; but still preserving traces of its origin, and tending to revert, when unhindered, to its normal equilibrium. With kindred thoughts in my mind, I cherished the conviction that women were more prone to conceive, and consequently to give birth, at certain seasons than at others; and thought that possibly inquiry might show some law pervading this proclivity. The data available in one's immediate circle showed that, in large families, the birth-months tended to group themselves at certain seasons, while in other months there were few or no births. The birthdays of our Royal Family illustrate this. My inquiries into the comparative physiology of menstruation and reproduction lead me to infer that the law governing the epochs of reproduction is mainly the appanage of the female sex, if not a quality peculiarly pertaining to it. But it is questionable whether or not the birth-months of a given family may not sometimes follow the paternal rather than the maternal type. That of the mother certainly seems to predominate, as might be expected, seeing that probably most women have seasonal aptitudes for procreation. Still, something may depend upon the *vis*, and perhaps the age, of the father, and obviously on the time of marriage.

Similar views have excited the minds of others. Thus Lombard, in his great work on *Climatologie Médicale*, says the subject has been studied by Villermé (*De la distribution par mois des conceptions et des naissances de l'homme*), and by Boudin. It results that the epoch most favourable to conception is the spring-time and the beginning of summer; the least favourable, the end of summer and beginning of autumn. These epochs are retarded in cold countries, and hastened in hot countries. If it be exact to attribute the annual march of conceptions to solar periodicity, their augmentation with the return of spring-time, and their diminution with autumn, the converse should take place in the southern hemisphere, where the seasons are reversed, and this is found to be the case. Lombard thinks the following physiological law is justified by the researches that have been made: "Plethora augments the number of conceptions, whilst anæmia diminishes the activity of the organs of reproduction."

Laycock asks: "Do the spring and autumn influence the reproductive organs of man? The Greeks were of opinion that it did. Oribasius, in his *Synopsis*, quotes from Rufus to the effect that the sexual feeling is most strong in spring, and least ardent in autumn; and Aetius makes the same quotation. This, also, at the present day is the popular opinion, and appears to be founded in fact; for M. Quetelet states, as the result of extensive statistical inquiries, that, in woman, most conceptions take place in May, and fewest in October.'

In the *Archiv für Gynäk*, Band xv, Heft 2, s. 220, 1879, is an article by Cohnstein, "Ueber die Prädilectionszeiten der Schwangerschaft." After discussing the different causes to which abortions are attributable, he explains how a fact in his practice, without perceptible cause, led him to this question, Has not each woman an epoch in the year when she is most susceptible of conceiving? and, consequently, ought not one to reject the opinion generally admitted, that woman offers the same disposition to become pregnant at each epoch of the year? He examined the *Almanach de Gotha* for 1879, where he found that, in 521 families of two or more children of different ages, the days of confinement fell 298 times in the same month, representing 52 per cent. of cases. But, as the duration of pregnancy is not absolute, and that with the same woman, the author admits that he must consider as corresponding to the same epoch two deliveries, of which the days are not more than two or three weeks apart. Regarded thus, to the preceding 298 cases must be added 121 cases where the days of confinement, though not belonging to the same month, correspond to a like epoch of pregnancy.

Extending his previous researches, Cohnstein procured statistics of Heidelberg and eighteen communes, which gave in round numbers five thousand families of two or more children of different ages; and the comparison of the days of confinement on the list confirmed the idea that there must be admitted for each individual epochs of predilection for pregnancy. Thus, for example, taking account of families having more than two children, he established that 62 times per cent. all the days of delivery fell in the same season for the same woman, and 48 times per cent. in two or three consecutive months.

We have evidence, then, of rhythmicity, cyclicity, or periodicity.

Further inquiry shows that all the reproductive processes—œstro-menstruation, incubation, gestation, and parturition—are carried on in periods that are multiples or submultiples of weeks; monthly periodicity being especially characteristic of the processes in the human species and in the higher mammals. How is this hebdomadal periodicity constituted? Dr. Graves (*Clin. Lect.*, 2nd ed., 1864, p. 271), speaking of intermittent fevers, says: "As the average period of day and night respectively is twelve hours, in the same manner equivalent spaces of time seem to be destined for the successive and alternating revolutions of the living system. It would be extremely interesting to consider what influence their adoption might have in our calculations concerning the crisis of continued fevers. We would not, then, count three days and a half, but seven half days; we would not say seven days, but fourteen half days. If this method were adopted, many of the apparently anomalous critical effects and critical terminations in continued fevers, would, I have no doubt, become strictly conformable to some regular law of periodicity. To arrive at a knowledge of this law would be of the greatest importance, and would tend much to render our knowledge of fevers more accurate, and our treatment more efficacious. Those who entirely deny the critical period must be either very superficial observers, or very indifferent practitioners."

This twelve-hour period, be it observed, is a tidal period, the importance of which in initiating and infusing the impress of rhythmicity on the animal world has been ably indicated by Mr. Darwin.

Darwin (*Descent of Man*, p. 8) says: "Man is subject, like other mammals, birds, and even insects (as Dr. Laycock had already shown), to that mysterious law, which causes certain normal processes, such as gestation, as well as the maturation and duration of various diseases, to follow lunar periods." Laycock had already shown this.

Again (*ibid*, p. 161): "In the lunar or weekly recurrent periods of some of our functions, we apparently still retain traces of our primordial birthplace, a shore washed by the tides;" and (p. 164): "The most ancient progenitors in the kingdom of the vertebrata, at which we are able to obtain an obscure glance, apparently consisted of a group of marine animals, resembling the larvæ of existing Ascidians. The inhabitants of the seashore must be greatly affected by the tides; animals living either about the *mean* high-water mark, or about the *mean* low-water mark, pass through a complete cycle of tidal changes in a fortnight. Consequently, their food-supply will undergo marked changes week by week. The vital functions of such animals, living under these conditions for many generations, can hardly fail to run their course in regular weekly periods. Now, it is a mysterious fact that, in the higher and now terrestrial vertebrata, as well as in other classes, many normal and abnormal processes have one or more whole weeks as their periods. This would be rendered intelligible if the vertebrata are descended from an animal allied to the existing tidal Ascidians. Many instances of such periodic processes might be given, as the gestation of mammals, the duration of fevers, etc. The hatching of eggs affords also a good example; for, according to Mr. Bartlett, the eggs of the pigeon are hatched in two weeks; those of the fowl in three; those of the duck in four; those of the goose in five; and those of the ostrich in seven weeks. As far as we can judge, a recurrent period, if approximately of the right duration for any process or function, would not, when once gained, be liable to change; consequently, it might be thus transmitted through almost any number of generations. But, if the function changed, the period would have to change, and would be apt to change almost abruptly by a whole week. This conclusion, if sound, is highly remarkable; for the period of gestation in each mammal, and the hatching of each bird's eggs, and many other vital processes, thus betray to us the primordial birthplace of these animals."

Schroeder (von Ziemssen's *Cyclop.*, vol. x), quoting from Krieger's work *Die Menstruation*, says: "Krieger frankly declares, in his painstaking work, that, because menstruation is a crisis, and all crises occur at periods of seven days, or are divisible by seven, so every menstruation is pathological which does not adhere to the twenty-eight day type." It would be more accurate, perhaps, to say, some multiple of the seven-day type.

Rhythmicity is built up in our earliest fibres, and dominates our lives in a fashion but little recognised. We breathe rhythmically; our hearts beat rhythmically; we eat, drink, and sleep rhythmically; and, in short, all the chief functions of our organisms are carried on rhythmically. It is one of the essentials of that condition of moving equilibrium without which existence would be impossible. All evolution tends towards equilibrium. As Spencer says (*Data of Ethics*, p. 72): "This truth is clearly disclosed on observing how those physiological rhythms which vaguely show themselves when organisation begins, become more regular, as well as more various in their kind, as organisation advances. Periodicity is but feebly marked in the actions, inner and outer, of the rudest types. When life is low, there is passive dependence on the accidents of the environment; and this entails great irregularities in the vital processes.......Much higher up, we still find very imperfect periodicities, as in the inferior molluscs, which, though possessed of vascular systems, have no proper circulation, but merely a slow movement of the crude blood, now in one direction through the vessels, and then, after a pause, in the opposite direction. Only with well-developed structures do there come a rhythmical pulse and a rhythm of the respiratory actions. And then in birds and mammals, along with great rapidity and regularity in these essential rhythms, and along with a consequently great vital activity, and therefore great expenditure, comparative regularity in the rhythm of the alimentary actions is established, as well as in the rhythm of activity and rest; since rapid waste, to which rapid pulsation and respiration are instrumental, necessitates tolerably regular supplies of nutriment, as well as recurring intervals of sleep, during which repair may overtake waste."

Primarily rhythmicity operates through, and depends upon, nutritional changes; and we have seen that such changes largely influence our organisms. Laycock, who has written on a general law of vital periodicity, says, in his work on the *Nervous Diseases of Women*, in a summary: "First, that at hebdomadal periods, or their multiples, a change occurs in the system of all animals; and that at puberty, and at each menstrual period subsequently, the sexual organs of the female share in this change in common with the whole system; the phenomena resulting being those of menstruation; and that, consequently, the flow of the catamenia is no more than a local effect of the general cause. Second, that the system of all animals undergoes changes about the vernal and autumnal equinoxes, and probably about the summer solstice, in which the generative organs and their dependencies partake; and that these changes modify in mankind all diseases, but those more particularly connected with the reproductive functions."

Darwin (*Descent of Man*, p. 161) says: "In the lunar or weekly recurrent periods of some of our functions we apparently still retain traces of our primordial birth-place, a shore washed by the tides."

Laycock (*Lancet*, vol i, 1842-3), having shown that hebdomadal periodicity pervades the animal world from insects up to man, observes: "The facts I have briefly glanced at are general facts, and cannot happen day after day in so many millions of animals of every kind, from the larva or ovum of a minute insect up to man, at definite periods, from a mere chance or coincidence; and although temperature, food, domestication, and other modifying circumstances, may and do interrupt the regularity with which the various processes I have alluded to are conducted, yet upon the whole it is, I think, impossible to come to any less general conclusion than this, that, in animals, changes occur every 3½, 7, 14, 21, or 28 days, or at some definite number of weeks."

Evidence is not wanting, then, to show that the periods of gestation, incubation, and œstro-menstruation are made up of periods that are multiples of weeks, and that these seven-day periods are likewise constituted by twelve-hour periods, multiples of which twice seven make our weeks. The twelve-hour period is a tidal period, which periodically undergoes fluctuations—high tides and low tides—a complete cycle of tidal changes being gone through in a fortnight, as Darwin has shown. He also has stated (*Descent of Man*, p. 8): "Man is subject, like other mammals, birds, and even insects, to that mysterious law, which causes certain normal processes, such as gestation, as well as the maturation and duration of various diseases, to follow lunar periods."

The changes that arise are fundamentally nutritional; and this relation furnishes the key to the processes that are so influenced. It is through subtle changes in nutrition, worked out in obedience to the laws of periodicity, that the reproductive function operates.*

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* The whole subject of Menstruation, its Evolution, Physiology, and Pathology, [illegible]

A Liniment for Rheumatism.—The *Quarterly Therapeutic Review* says methyl salicylate (oil of wintergreen), mixed with an equal quantity of olive oil or linimentum saponis, applied externally to inflamed joints affected by acute rheumatism, affords instant relief; and, having a pleasant odour, its use is very agreeable.

AN ADDRESS
ON
THOUGHTS ON EDUCATION.

Delivered at the Seventh Annual Meeting of the Dublin Branch, January 31st, 1884.

By EDWARD HAMILTON, M.D. Dublin, Late President R.C.S.I.,
President of the Branch.

My first duty, gentlemen, is to thank you for the honour you have done me in electing me your President. When I recall to mind the names of those who have preceded me in this chair, I feel the distinction a very high one, and prize it very greatly. Like most such positions of honour, it carries with it a penalty which presses on yourselves as well as on me. I am obliged to make a speech of some kind or other, and you are condemned to listen to it. Thinking over what I should say to you, I tried to find if there was any subject on which I could speak to you with any degree of authority, resulting from unusual opportunity of observation, or from experience more extended than may fall to the lot of my hearers.

Having spent some of my early life in school-work, amid the active energies of teaching, and having of necessity watched with some interest the phases which this important department of our professional life has undergone, I feel that any opinions I may express will have at least the weight due to maturity, and be the outcome of prolonged and anxious thought.

I am, however, met by the difficulty that the subject has been worn threadbare, and has been already discussed by some of the ablest and most thoughtful amongst us; but we cannot regard it as exhausted when we consider its gravity, as it concerns not only our own profession, but every individual who has life to be jeopardised or health to be impaired by ignorance or incompetence.

Viewing the entire system of education at the present time, three conditions arrest the attention: the great increase in the number of subjects which constitute the sum total of a liberal education; the briefness of the time in which they have to be acquired; the expansion of the examination-system and so-called judgment by results.

Steam and electricity having fused the nations of the world into one great family, modern languages, formerly accomplishments, are now a necessity, and have displaced, in a great measure, the so-called dead languages. They must, however, be chiefly colloquial, and cannot supply the culture and intellectual training which is afforded by the study of the ancient classics—mental callisthenics, as they have well been called. Again, our social progress has rendered necessary a knowledge of all branches of physical science. Hence, if we look into the schools, we do not now find the overgrown head form toiling over ponderous volumes of Greek and Latin classics, preparing for the overweighted entrance-examination. The youth at fifteen is now an undergraduate, and at two-and-twenty will have completed his professional course and stepped into the arena equipped for the battle of life. In this rapid race of education, how little opportunity is afforded for the formation of individual character, or the development of reason and personal judgment! Memory, the mere faculty of retaining communicated knowledge, is the rope of sand on which modern education hangs; it is the fetish which our teachers worship; the philosopher's stone which can turn everything to gold. Memory—a valuable gift no doubt, and well worth cultivating—I cannot regard, with Mr. Stokes, as the total of man's faculties. By simple memory, our horses stop at the doors where we are wont to visit in our daily rounds. By simple memory the child in its nursery will in a few months learn its mother tongue, a feat far surpassing anything which it can attain in maturer years.

It is, I believe, now very generally admitted that the flippant answerers at competitive examinations fail in administrative capacity, when hard facts have to be dealt with by common sense, unaided by books or the tips of the tutor, looking to results alone. And here we may pause to inquire is State interference in this direction wise or equitable? Does not result fees offer a direct inducement to teachers to take up the quick and brilliant boy, who, by mere power of memory, can win money for them, and neglect the dull and heavy boy, the boy who most needs the teacher's care? I have no hesitation in saying that the honest cultivation of one of these is a greater triumph of scholastic skill, a nobler work of humanity for the public good, than cramming a hundred prize-winners. The dull boys form the majority of those who have to be taught, and they should not be unjustly sacrificed in order to realise the dreams and theories of modern statesmen.

Education comprises two essential elements, teaching and training. Deficiency in either of these will render it weak, illusory, and valueless.

The vital error of the existing system is the desire to cram the head with detached fragments of learning without the least effort to train the intellect. This may be seen in the number of so-called Student's Aids—the dumpy Vade-Mecums, as Arthur Jacob used to call them. They swarm and crawl over the fair fields of scientific literature like the frogs of the Egyptian plague. Day after day the student is required to hunt up and collect so many musty dates, so many trite quotations, the crotchets of this or that examiner, to fold them carefully up, ticket them, and store them in the pigeon-holes of his memory, like so many pawnbroker's pledges, until they are called for by the potentate, who, by a few set questions, is supposed to gauge the national intellect, and place standards on what he is pleased to call knowledge. We are told that knowledge is power; but here is knowledge which is absolute weakness, for the mind has not been strengthened by training.

Let us briefly consider what training is, and what is its educational value. A city man, walking over the heather with his country cousin, is asked by him, "Do you see that hare beyond there?" "No, I cannot." "Don't you see it by the clump of furze?" "I see the clump of furze, but see no hare." This man may be a Cuvier, an Owen, or a Huxley; he may be perfect master of the natural history of the *Rodentia*; he may have at his fingers' ends the anatomy of the *Lepus timidus*, from the fur on its back to the marrow of its bones; he may have as good, nay better eyes than his companion, yet here is an object in the field of his vision, actually impressed on his retina, and he cannot perceive it, and why? Because he is not trained. Again, put a rifle in the hands of a man for the first time; he may have an intimate knowledge of the mechanism of the lock and other parts of the weapon; he may be learned in the chemical symbols and expansive properties of explosive substances; he may express, in an algebraic formula, the laws which govern the course of projectiles, but he cannot make the bullet strike the mark, and why? Simply because he is not trained.

Training developes observation and accuracy. The artisan, however skilled by training, cannot execute a perfect work of art without constant observation. At each stage, he must see that it is true to the plan, that it is an accurate model of the original design. Hence the inestimable value of training in our profession. No two faculties of the human mind are so essential to the man who would practise medicine or surgery as observation and accuracy; no amount of book-teaching can develop them; they can be acquired by training, and by training only.

It is much to be regretted that, in our public schools, more attention is not now paid to training in physical science, not as a matter of severe study, but as a pleasing recreation and relief from school-work. I can remember, and many who hear me can remember, how attractive these subjects were made by a clever Irishman, Surgeon Lover, as he wished to be styled; how pleasantly he imparted the fundamental truths of science, and developed in the fresh and youthful mind a taste for the hidden wonders of nature. What valuable aid his training gave to the profounder studies of maturer years! His mantle has not fallen on a worthy successor, and his teaching is a thing of the past. I would be sorry, however, to see this idea strained as it has been lately, by some who would have little children's heads stuffed with abstruse physiology, as evidenced by a child being asked the other day to describe the *ossicula auditûs*—mere pedantry—the result of publishing written questions—a system which serves no purpose except to ventilate the crotchets of examiners. Had training found more place in the schools of the working classes of Ireland, a stronger and healthier tone of mind would have prevailed. The little learning would not have been the dangerous thing which it has proved itself to be; statements would not be accepted by our people as true, simply because they appeared in the newspapers or other prints; they would be sifted by sound and independent judgment, criticised by reason and reflection, and we would have been spared much social and political obliquity.

So in the sister island, more training and less teaching would render unnecessary the cruel tyranny of the School Board, teaching to death the sickly brains of poor famishing children. Passing in my holiday through a cathedral town in England, I strayed into the court-house where the Mayor was sitting. A wretched little child was prosecuted by the School Board, and sentenced to a long term of imprisonment. When the punishment was declared, the poor child looked dazed, and the mother, with a shriek at the thought of separation, fell fainting on the floor. The spectators were of the roughest, but many a coat-sleeve was raised to glistening eyes. I turned sick at heart from the scene, and thought to myself how that child, that mother, must execrate the very name of school. They who can present teaching in no more lovable form than a prison and a rod of iron, have nothing in unison with the training of children.

We are, however, here more interested in medical education, especially as it exists in Dublin. A review of its history presents two great epochs, which we may distinguish as the apprentice-system and the lecture-system, and these two epochs differed materially in the emphasis laid on the two elements of education. Under the apprentice-system, we had training with very little teaching; under the lecture-system, we have teaching with little or no training. In the earlier epoch, books were few, the best being in Latin and Greek; knowledge was therefore more demonstrated than taught, more communicated than learned; men of extensive reading or literary attainments were few. They were the great teachers to whom apprentices flocked for instruction. The great increase in the number of candidates seeking admission to the profession rendered this system inadequate to supply their wants; it became impossible that any single master could control and supervise the training of so many students, and do them even a share of justice. Hence, the opening of a new era—the lecture-system. Apprentices, properly so called, ceased to exist.

The colleges ordained, as the means of medical education, a cumbersome system of lectures, which, by the piling on of speciality after speciality, has at length reached such a height, that the fabric has well nigh toppled over by its own weight; and more lectures were demanded than there was time to attend, and, in truth and honesty, they were not attended. The certificate represented neither teaching nor training, but was simply a large sheet of paper indicating the receipt of so many guineas, according to a scale fixed by the combined schools.

But the colleges failed to insist on any definite order or plan in their educational requirements. Everything was left to the discretion, or rather the indiscretion, of the student; a chaotic mass of work was thrown upon him to accomplish in any way which his caprice might suggest, the result being that his education was crude and unsound. Men received the licence to practise who were unfit to be trusted with human life. The public services were the first to take the alarm; they refused any longer to accept the diplomas of the colleges; they established examination-tests of their own; and supplemented even these by a special course of training before the candidate was permitted to take up his appointment, or enter on its duties.

It may be interesting to note the history of efforts to reform surgical education in Ireland. As early as 1847, an attempt was made to establish some kind of method, and to subdivide the cumbersome examination so as to have some approach to training. The student was permitted to pass part of his examination at the end of his third year, part at the end of his fourth year, and to be submitted to one day only, at the final trial for letters testimonial. The examinations held under this plan appear to have been conducted with undue severity; a large proportion of the candidates were rejected; the system caused trouble to the grinders, who accordingly denounced it, and it fell through. It appeared to decay; but it was the living germ of our present system dropped into the soil, and destined to bear good fruit in the future.

In 1870, a second attempt was made by the party of progress to improve the education of the student, and to place it on a sounder basis; and after much deliberation—a storm of opposition from without and obstruction from within—a scheme was propounded which seemed a step in advance, and likely to promote the cause of systematic training on the plan of sessional examinations. This reform was shipwrecked like the last, by too high a standard of examination; two-thirds of the young candidates were rejected; the grinders denounced it; the Council of the day had not the courage to make it compulsory, and it also fell through.

In 1880, a third attempt was made in this direction; and, after months of tedious discussion, obstruction, and delay, the existing scheme of sessional examination was established. I have no hesitation in declaring that the present century has not produced any movement so beneficial to the cause of sound education; it has conferred inestimable benefit on the student, as well as on parents and guardians. The advantages to the student are manifest: the entire plan of his education is now laid down in methodical order, he is obliged to pass from stage to stage, so that the entire fabric of his mental training is placed on a solid and enduring foundation. Having passed his first examination, a feeling of self-respect urges him to further effort for another success; he cannot idle, for the date of his second examination is definitely fixed, and is fast approaching. There is no time to listen to the siren voice of procrastination—so delusive, so destructive to youthful energy.

Each session has its allotted work, and must bear its own fruit. The chronic fire-worshipper, the bane of our dissecting-rooms, will have no place in nature, as he cannot survive a second session. Again, the student is relieved of subjects in which he has attained a competent knowledge, and can devote his undivided attention to the more important departments of science, which are more directly relevant to the practice of his profession. It is to be regretted that this principle of exemption has not been even more fully carried out in our new scheme.

To the parent and guardian, it affords satisfactory protection. He can know that his alumnus has to undergo certain examinations at regular stated periods: he can see that the name of his boy does not appear in the published pass-lists along with his class-fellows, and he can ask the reason why it is so: he can be warned in time by repeated failure that his goose is no swan, that he is totally unfitted for the profession, and, before he has thrown his money and time away, may find some occupation more congenial to his tastes. This reform will thus tend to mitigate an evil which is at this moment crying loudly for redress. I understand that it is in contemplation, in order to remedy this disappointment and loss, to utilise in London a preliminary medical school, in which the aptitude of candidates for the profession may be tested before they fruitlessly invest their money and lose their time attending the regular classes. Again, money entrusted for lecture-fees cannot be now squandered in dissipation, and payment deferred until the day of reckoning comes, when the school-secretary presents his heavy demand for arrears.

Like its predecessors, this great improvement was ridiculed and derided in the class-rooms of Dublin; but the sustaining principle of truth which pervaded all these efforts at reform, surmounted all difficulties. Like the advancing tide, each receding wave returned with renewed impulse, with fresh energy, and, carrying before it every obstacle, triumphed at last as truth alone can triumph. The scheme, of course, has some defects which time and experience will rectify.

The entire system of lectures demands sweeping and thorough reformation. Respect for so-called vested interest, and the preponderating influence of teachers in our legislative councils, have too long propped this cumbersome institution of days gone by. It is simply impossible that students can derive benefit from the enormous amount of attendance on lectures exacted from them, to the exclusion of practical work. The Rev. E. Thring, in a remarkable book on teaching, has compared the modern system to a man pumping water with all his energy over a series of kettles, one or two of them have the lids carefully removed, and they are quickly filled; one or two have the lids partially removed, and a little water enters; but six-tenths of the kettles have the covers fastened down, so that, although they are plentifully splashed outside, no water can possibly enter, unless by chance a drop or two be projected into the spout from adjacent kettles. If this be, as I believe it is, a true picture of lay teaching, drawn by the pen of a working teacher, is it not a perfect photograph of our system of medical teaching? A great deal of spouting, a great deal of splashing and incessant pumping over kettles with the lids on. Training would see that the covers were carefully removed, and that the kettles were so disposed that the greatest quantity of water would enter the greatest number of kettles.

The redundancy of lectures must be cut away by the pruning knife of reform; it is only a question of time. Lectures were a valuable means of instruction when books were few, meagre, and imperfect; when industrious research and extensive reading were confined within a narrow circle. Under such conditions, systematic lectures, and even the reiteration of them, were a necessity; but we live under very different circumstances. Year after year, fresh books, new editions, teem from the press, week after week, the latest advances in medical science are recorded, so that the student, in the still quietude of his own room, can master most of each subject, and work at it until he does master it, with better results than if he learned it from the most eloquent lecturer. Lectures cannot now be [illegible] reading, and to be of any use at all must serve some other purpose.

[illegible] lectures of set [illegible] cannot [illegible] the [illegible] which a teacher owes [illegible] that they see [illegible] and that they learn. [illegible] the truths of science may no longer be conveyed [illegible] mere abstract propositions; they must be made evident to all the senses. Much jealousy has long existed between the lecturer and the grinder; but, however unwilling he may be, the lecturer must adopt the method which the grinder finds so useful.

Catechetical instruction is a valuable aid to education, and, if adopted regularly and systematically throughout the study, as a part of the lecture-system, would render unnecessary the [illegible] system of cram, and would at once indicate whether pupil and teacher were both doing their work efficiently.

The necessity for this thoroughness entails changes which are being spontaneously developed. The sciences auxiliary to medicine have become so extended, that he who would teach them efficiently must devote his entire life to them. The day is past when two or three hours, snatched from a busy life of active practice, will suffice for the onerous duties of a teacher of anatomy, physiology, or chemistry, as they must now be taught. He who takes up the duty of a teacher must hope, and may fairly demand, to live by teaching, but he must be contented to seek some of his reward in the pleasure of pursuing his favourite study. The State in Ireland will give him no help; there are no State-endowed professorships to encourage scientific work, although there are State laws to cramp and retard it; no fat sinecures for his declining years. Even our colleges do not encourage scientific progress as they should, by promoting well paid lectures on the higher branches of medicine and surgery. Recent events should warn us that existing conditions are fast bringing about a dearth of teaching power in Dublin. This must eventually be provided for by judicious concentration.

There are departments in which all the students in this city would not provide a class yielding sufficient emolument for a single lecturer, now distributed among five at least, if such departments are to be worked properly and brought up to the standard of knowledge of the present day. We may apply to the whole of our lecture-system the advice of the Prince of Denmark: "Reform it altogether."

REMARKS

ON

TREATMENT OF IRREDUCIBLE HERNIA AND AN IMPROVED METHOD OF ADAPTING A TRUSS IN ALL FORMS OF HERNIA.

Read before a Meeting of the Medical Society of London.

By THOMAS BRYANT, F.R.C.S.,

Senior Surgeon to Guy's Hospital.

I WISH to draw your attention this evening to the subject of irreducible hernia, and more particularly with reference to its treatment, for I have reason to think that surgeons, as [illegible] this condition of hernia as irremediable [illegible] as well as too prone to resign its palliative [illegible] mechanists.

I need hardly add that neither the [illegible] meets with my support; for I [illegible] I trust I can show you, that many cases of [illegible] can be made reducible by treatment, and [illegible] irreducible hernia, including [illegible] guinal, can be fitted with a truss which supplies the three desiderata of such an instrument, and gives protection [illegible] its increase, and is comfortable to the [illegible] greatly to make the hernia reducible.

And, first of all, with respect to the [illegible] ducible hernia, under what circumstances [illegible] when possible, by what means [illegible]

With reference to the possibility of [illegible] I [illegible] fairly assume that every case of hernia is capable of redu[illegible] in other words, that all herniæ can [illegible]

[illegible]

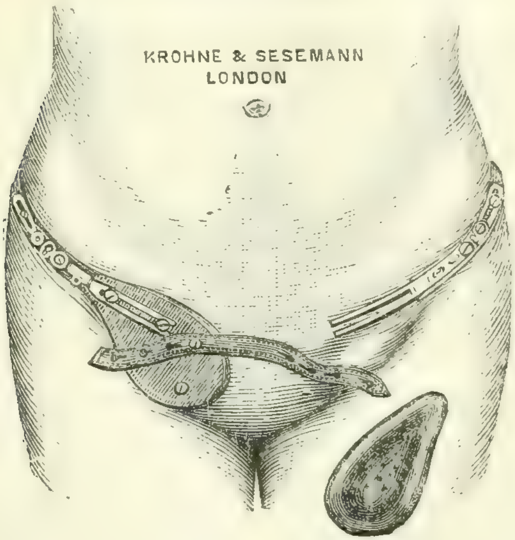
[illegible]

be in the omentum is likewise absorbed. Altogether, the hernial contents are diminished. This treatment, to be effectual, should be persisted in for days, and in some cases for weeks, and under it a good result may, with some confidence, be anticipated.

I have had many cases in which success followed the rigid adoption of these means, and some failures; but where the latter occurred I have always felt it was from a want of confidence in the result, and, as a consequence, a carelessness or half-heartedness in the application of the practice. Success has, however, often come to me by persistency and attention, soon after despair of obtaining it has almost induced me to abandon the attempt. I have, by the steady persistency of these means, continued from a few days up to nine weeks, brought about the reduction of herniæ which had been down from five up to twelve weeks; and I think it will be admitted that, where success followed the practice, it was worth the trouble; for it is to be remembered that it was brought about by means that in no way endangered life, and at the worst were only wearisome.

The point, however, to which I want more particularly to draw your attention is the second, which refers to the truss which is required for an irreducible hernia; for I feel confident that I shall obtain the support of all my medical and surgical brethren, when I say that if our present trusses for reducible hernia are not all that we should wish, we have not at present a single truss for an irreducible hernia which can be praised, or even passed as efficient.

How far the one I am now about to introduce to your notice will meet with your support, I know not; but I may say that I have used it in a sufficient number of cases—two dozen, at least—to test its value, and that in all it has proved a success; indeed, I am induced to think, from the principle upon which the truss is formed being sound, and at the same time simple, that it is the only one upon which an efficient truss for an irreducible hernia can be expected to succeed; and I believe it to be of equal benefit for a reducible.



The practice is like in kind to that which has been laid down for rendering an irreducible hernia reducible, but it differs in degree; for the object I have in view in these truly irreducible herniæ is, to render them as small as it is possible to get them by rest, diet, and the local application of cold.

Having attained this point, I take a plaster-of-Paris "mould" of this hernia, and the parts around its neck, and from this mould make a "cast." Upon the "cast" I have a metal plate of tin or copper moulded, and covered with wash-leather, and when this has been efficiently made, I have a pad which accurately fits the hernia—whether umbilical, femoral, or inguinal—and this pad has only to be fixed to a spring or belt, to make the instrument complete.

The pad, being a mould of the hernia, forms a most efficient protection to it; and, touching as it does every point of the protrusion, it fairly guarantees no increase in its size; for a like reason, the truss keeps its place, and is really comfortable to the wearer, since it presses equally,

To illustrate these points more clearly, I have induced Mr. Krohne, of 8, Duke Street, Manchester Square, to have two of the casts of the groins of two of my patients with irreducible hernia grafted on to a cast of the pelvis, etc., of a female figure (*vide* Plate), on the right side of which the hollow part made in the way described is fitted; on the left it has been removed from the spring, and so placed that you can see and examine it. In both the fit is perfect. Indeed, I could give you abundant testimony of the value of these trusses, but one will suffice. It was sent me in a letter, dated September 6th, 1883, from a medical friend who has had a personal experience of the instrument.

"Mrs. A. has had an irreducible umbilical hernia for many years, about the size of a closed hand. She has worn umbilical trusses, belts, and air-pads, of all kinds, but none of them gave her the necessary support, and the hernia constantly slipped out under the pad, causing much pain, and preventing her from walking. Acting on your suggestion, I kept her in bed for a few days, and, when the hernia had gone back as much as it would, I took a mould of the tumour and sent it to Krohne, who made from it a metal case, lined with wash-leather, which fits the hernia. This is attached to an ordinary umbilical belt. Mrs. A. has never before been so comfortable, is able to walk well, and she says the hernia is smaller.

"In another case," writes my medical friend, "the benefit was even greater. Mrs. F., a large flabby woman, had also an umbilical hernia. It was the largest I had ever seen, and could not be covered by both hands spread over it. The pressure of the belt had caused abrasion between the over-lapping hernia and the skin. She was confined to her room, and had not been downstairs for weeks. I kept her in bed, both to diminish the bulk of the tumour and to allow the skin to heal, and then took a mould in plaster-of-Paris, and sent it to Krohne's, as in the other case, and a moulded metal pad was returned to her. I saw her a few days ago walking. She says she is quite comfortable, and that the tumour is smaller.

"There is a little knack in taking this cast. I snip off all the hairs likely to be in the way, so that they should not adhere to the plaster, and oil the tumour. I send to a dentist for the plaster, as the commoner kind cracks and makes a mess.—Yours truly,

"Sutton, Surrey." "JOHN WILTON."

The late Mr. Millikin, of St. Thomas's Street, was the first maker who carried out these suggestions for me about twenty years ago, and it was for a man who had a hernia with an undescended testicle, in which protection was required as much as support. The result was so satisfactory that I have followed the practice ever since. As a mode of adapting a truss for a reducible hernia, I have good reason to believe that a like practice is of equal service. I have employed it in a dozen cases with marked success, and I have done so in patients who had found it impossible to be fitted otherwise with comfort. And can this be a matter of surprise when we know that every groin has its own special shape, and that a pad which is well adapted to one is not suitable to another?

I maintain, therefore, that in all cases of irreducible hernia, this method of adapting a truss should be followed where it can be, and that, in all cases of reducible umbilical, femoral, and inguinal hernia, the only perfect truss is one in which the pad has been moulded on a cast of the seat of hernia of the individual sufferer.

For the public generally, this perfect instrument cannot probably be made, but for those who want comfort with efficiency, it is strongly to be advised.

In London and the large towns, there will never be any difficulty in obtaining a cast of the affected part. In country practice, our medical friends must learn to make the mould, if not the cast, themselves, when any good instrument-maker can readily make the metal moulded truss-pad, and fix it to the spring which is to hold the pad *in situ*.

When plaster is not at hand for the mould, a piece of gutta-percha, dipped into hot water and softened, may be used for the purpose; and it is possible that this method may prove to be the most useful, since a hard mould is secured by this method which is not likely to break.

I need hardly add that the practice advocated in these papers is applicable to other cases than hernia. I have already used it in examples of spina bifida, and for the protection of outgrowths; but I believe its general applicability to surgical cases will be at once acknowledged.

AN EXACTING PUBLIC.—A provision dealer, at Wimbledon, was recently, at the Wandsworth Police Court, fined £10 and 12s. 6d. costs for selling as butter a yellow fatty material which contained only 15 per cent. of butter. As the "butter" was sold at 1s. 2d. a pound, and as, at the highest known retail price 2½ ounces, 15 per cent., of real butter would only cost 3¾d., the profits of this kind of trading must be considerable, for 13½ ounces of butterine do not cost more than fourpence at a liberal calculation. The defence was that "the public would have the price," and that it was not sold as butter. Unfortunately for him, the dealer had forgotten to say so.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

PROCEEDINGS OF SECTIONS.

RUPTURE OF THE HEART.

Read in the Section of Medicine.

By J. A. MACKENZIE, M.B., Farnworth, Bolton.

THE case upon which the few remarks in this paper are based I met with in the practice of Mr. John Deighton of Cambridge, and I am indebted to that gentleman for permission to make use of the following facts.

J. V., aged 75, of Cambridge, whilst at dinner, appeared to strain very much in endeavouring to swallow a tough piece of meat; and, it being thought he was choking, a messenger was at once dispatched for a surgeon, but, before the arrival of medical aid, death had taken place, the patient, in fact, according to the statements of his friends, not living many seconds after he appeared to strain in swallowing. By order of the coroner for the borough of Cambridge, I made a *post mortem* examination of the body, at which Mr. Deighton was present. The body presented a fairly well-nourished appearance. The mouth and upper parts of the air-passages were examined, but no trace of any foreign body could be discovered. The existence of a distinct and well-marked arcus senilis was noted. Upon opening the cavity of the thorax, we came upon the pericardium distended into a globular tumour, and presenting a bluish discoloration, as from something shining through the walls of the sac, rendered transparent by distension.

When the pericardium was opened, the cause of death at once became evident, for the great distension of the pericardial sac was due to the presence of an enormous clot, and a considerable quantity of serum. The clot was most accurately moulded upon the heart and commencement of the great blood-vessels. The clot and serum were carefully removed, when the rupture shown in the accompanying specimen revealed itself. The heart was pale and flabby, and presented all the appearances of fatty degeneration. There was no trace of any valvular disease, and, with the exception of one or two very small atheromatous patches, the large vessels were quite healthy. There was considerable atheroma, however, of the coronary arteries. The examination of the interior of the heart showed the existence of yellowish softened patches distributed at irregular intervals over its surface, and in the left ventricle, where the rupture had occurred, these extended deeply into its substance.

Microscopical examination of a section of one of these patches revealed extensive fatty degeneration; in fact, in a section taken from near the site of the rupture, all trace of muscular fibre had disappeared. The other viscera were examined and found to be healthy.

The comparatively small number of these cases that I had seen recorded, together with the improbability that, as a general practitioner, I should ever again have the opportunity of seeing *post mortem* so rare a lesion, induced me to make these rough notes at the time, and, since then, to embody in a short paper the following remarks on ruptures of the heart.

Leaving out altogether the question of direct wounds of the heart, I will speak only of what have been classified as traumatic and spontaneous ruptures (of the heart); and, in order to be able clearly to refer my case to its proper class, it will be necessary briefly to draw attention to the causes, exciting and predisposing, and to the mechanism by which both kinds of ruptures are produced.

In the normal state, the resistance of the walls of the cardiac cavities is evidently much superior to the tension of the blood-current; but this relation, essential to the efficiency of the circulation and to the continuity of the heart-walls, may be disturbed in two ways.

1. Assuming the heart-walls to be sound, the tension of the blood-current is suddenly increased by some force acting from without, and the cardiac parieties, unable to withstand the shock, give way. This is the mechanism of the production of traumatic ruptures, which are found in practice to have been caused by some great violence which imposes a sudden restraint upon the respiration and circulation. A kick from a horse upon the chest, the passing of a wagon wheel over the body, the falling of a heavy log of wood upon the chest, are recorded instances of the means by which the force indicated above has been applied.

2. Before the introduction of the use of the microscope, it was believed that spontaneous rupture could take place without previous alteration or degeneration of the heart-walls; but at the present time the occurrence of spontaneous rupture unassociated with any degenerative change is denied by all authorities. The mechanism of the production of spontaneous rupture differs from that of traumatic in this. In traumatic rupture it is the heightened tension of the blood-current induced by external violence which leads to the solution of continuity; whereas, in spontaneous rupture, the tension of the current remains the same, but the heart-walls, enfeebled by fatty or other degenerative change (brown atrophy), do not offer the normal resistance to the flow of blood, and rupture may take place in consequence of some effort in which the muscles of respiration, etc., are concerned.

The predisposing causes are fatty degeneration of the heart, brown atrophy, disease of coronary arteries, syphilis, probably from the production of gummatous tumours in the heart-substance, and myocarditis, with its subsequent softening.

The exciting causes were very marked in some of the recorded cases; whilst in others there appears to have been a total absence of any circumstance which could be put down as an exciting cause. I have found the following exciting causes recorded:—Shock of a cold bath, fit of passion, efforts at defæcation, vomiting, epileptic fit, and, adding my own case, the effort put forth in swallowing a tough piece of meat.

The question of age seems to have an important bearing upon the causation, for I find that the mean age in a series of forty-eight observations was sixty-five years. The influence of sex does not appear to be very great, though as a matter of fact rupture has been ascertained to have occurred oftener in men than in women. The commonest seat of spontaneous rupture is the left ventricle; the right, upon which we generally find traumatic ruptures situated, appearing to be less liable to the spontaneous lesion.

From these facts regarding the causation and pathology of rupture of the heart, there does not seem to be much difficulty in classifying my case as one of spontaneous rupture of a heart, enfeebled by fatty degeneration and impairment of nutrition, consequent upon atheroma of the coronary arteries, and the advanced age of the subject. Unfortunately, there is not much opportunity in these cases for the exercise of diagnostic acumen, death nearly always taking place before the arrival of medical aid. If seen immediately, a case in which the rupture was not very extensive might be mistaken for angina pectoris. In short, the extreme rarity of these cases, and the rapidly fatal termination, precluding, as it does, any attempt at treatment, make them of more pathological interest than practical clinical importance. Medico-legally, traumatic rupture following a blow, or supposed blow, upon the chest, might be of interest.

In conclusion, I am of opinion that if there were more *post mortem* examinations, in cases of sudden death, we should probably find that many of those cases vaguely called "heart-disease," would turn out to be rupture of the heart or of aneurysms. Apart from other considerations, I think it would be a great benefit to the medical profession, from an educational point of view, if coroners ordered more *post mortem* examinations; as these are, in the majority of instances, the only opportunities that a general practitioner has of renewing his acquaintance with anatomy; and, though it is only really medical anatomy, still an occasional renewance of acquaintance with the exact relative positions of the viscera and large blood-vessels, not to mention the importance of being able to note morbid changes in these organs and their relations, cannot fail to give valuable help to men who have neither the time nor the opportunity for dissection.

As an instance, I may mention that in the town of Cambridge where I noticed that *post mortem* examinations in coroners' cases were very frequent, during a residence of about a year, I came across two most interesting cases amongst the six or eight which fell to my share. One of these is the subject of the present paper, and the other was sudden death following the bursting of a large aneurysm of the arch of the aorta. Had there been no *post mortem* examination, in all probability both these cases would have been put down as death from "heart-disease."

WAR-WOUNDS.—From a calculation based on the statistics furnished by the Crimean, the Dano-Prussian, the Austro-Prussian, and the Franco-Prussian wars, it would appear that the proportion of wounds received in different parts of the body is as follows: in the head 14.65 per cent.; in the trunk, 18.17 per cent.; in the upper extremities, 30.19; in the lower extremities, 36.91. The statistics only apply to cases which have lived long enough to receive surgical treatment, and this will account for the very low percentage of wounds of the head, and the same remark applies in hardly less degree to wounds of the trunk.

HOW TO MAKE OUR OWN HOUSES SANITARY: WITH PERSONAL EXPERIENCES.

Read in the Section of Public Medicine.

By FREDERICK W. LOWNDES, M.R.C.S.Eng.

THE importance of a knowledge of sanitary details to every householder has been shown in a most convincing manner by recent events. Even royal householders have been compelled to set the example, and to learn the laws of sanitation in a very practical manner; the results of inspection showing that both Marlborough and Bagshot Houses were very deficient in their drainage-arrangements. Moreover, the authorities of one of our largest public schools were obliged to descend from their classical and mathematical heights to learn, among other sanitary details, that it was not desirable to have a tank containing the fecal accumulations of sixty or seventy boys in close juxtaposition to the source whence drinking-water was obtained. Householders of a less exalted class have also learned, from bitter experience, that they cannot trust to architects, builders, plumbers, or even to sanitary inspectors; but that, if they would have healthy homes, they must first learn how a house may be made healthy, and then see for themselves that the necessary requirements are fully carried out. If this be true of householders in general, how much more forcibly does it apply to those who are also medical practitioners? For not only does it behove each of us to set an example in his own house of thorough sanitation, but also to be able to advise those who may consult us on this matter as to their own homes, even to the minutest detail. In a word, it may be asked of us, "Who shall teach the teacher?" and the best answer will be, "Every householder his own sanitary inspector." As my own experiences as a householder may possibly be of both use and interest to associates, especially those who are lodgers and not householders, I will give them.

My first experience was in a house very near this building, which had the attractions of good accommodation, with a low rental. I was assured that it was perfectly healthy, but I was soon undeceived in a very sharp and disagreeable manner. Hardly had I entered and taken possession, when a back flow occurred in the water-closet, ruining all the new paint and whitewash of the room underneath, and producing other consequences which may be imagined. On seeking the cause, it was soon apparent. The water-closet was one of the old D-trap form; the soil-pipe, formed principally of lead, was so flattened in parts, that a finger could not have been passed. Nor was this all. In high winds, the most sickening effluvia pervaded the kitchen (which was a cellar one) and the rest of the basement. This I found to be due partly to defective sink-traps of the kind known as "bell-traps," removable at the pleasure of the servant; and partly to an old disused, but not properly closed, drain. These defects were all remedied, but other circumstances induced me to remove, after a tenancy of rather more than twelve months.

My next house had been tenanted by a well known associate, who was himself only a yearly tenant, and therefore not responsible for its sanitary defects. Shortly after taking possession, the landlord laid down new drains at great expense, besides converting the privy in the back yard into a water-closet; and, as a set-off against all this, raising the rent. How and where the sewage had been previously disposed of, I never knew, and hardly liked to inquire. It is enough to say that the drainage must have been most defective. I remained in that house for ten years, and it only required one or two slight alterations to make it perfectly sanitary in all respects.

My third house was the one which I now occupy, and hope to do for many years to come. It had been previously tenanted by a surgeon, who was also its owner for many years, and was built at a period when sanitary science was unknown. My predecessor assured me that when he first occupied it there was no water-closet in it whatever, only a privy in the back yard, which he converted into a water-closet; he also put in the house a water-closet, which was in the cellar close to the back yard; and, though inconveniently situated, it had the advantage of a very short soil-pipe. There were no drains under the house, nor any soil-pipe except this one. I, being this time my own landlord, at once had an interceptor constructed in the back yard, with a ventilating shaft carried up to the roof of the house. Into this interceptor all the various soil and wet trap pipes were emptied; one inch above the water-level, while it overflowed by a fall of fourteen feet into the main sewer. The kitchen sink-pipe was also conducted into one of the wet traps in the back yard. It being desirable to have another water-closet in a more convenient situation, one was chosen close to the outer wall of the house, so that the soil-pipe might pass at once through the wall and be carried outside the house. As I was informed that the basin known as Jennings's patent was objected to by our sanitary authorities as causing waste of water, I procured a wash-out basin without pan, and with a flush of six gallons of water. It was continuous with a bend-pipe of porcelain, which joined the iron soil-pipe, the latter being continued up to the roof in an air-shaft. The other closets were altered and improved. The result of all these arrangements, which are perfectly simple and within the reach of almost any householder, is, that no sewer-gas ever does, or ever can, enter the house.

The advice which I would, as a result of this experience, offer my younger brethren who are about to become householders, is briefly this.

1. Before taking a house, see for yourself that it is properly drained into a main sewer.

2. If possible, have some interceptor between your house and the main sewer. The smallest back yard, court, or garden will suffice for this.

3. Have all soil-pipes carried outside the house, if possible, with ventilating shafts of the same calibre. If no interceptor can be had, this becomes absolutely necessary.

4. Let all sink, bath, and other waste pipes empty themselves into a wet trap, care being taken that the ends of pipes are not too near the grid of the trap, and are so fixed that nothing except fresh air can ascend.

5. Should the basin of the water-closet be of the old kind, with opening pan at the bottom, have it removed, and a proper wash-out basin placed in its stead, with a water-supply sufficient to flush it thoroughly each time it is used. Any expense and trouble caused in securing this will be amply recompensed. I maintain that a water-closet should no longer be a foul-smelling, ill-ventilated den, but as sweet and well-ventilated an apartment as can be secured for the purpose.

Fresh air, pure and filtered water, are such obvious requisites to health that I need only name them. There is one other matter which has given me much anxiety—I mean the disposal of vegetable refuse. Whether it be better to burn this or to bury it in cinder-heaps, is a question I hope to hear discussed, and satisfactorily answered here; for, unless decaying vegetable matters can be rendered thoroughly harmless by an ample supply of cinders, our dry ashpits must become nearly, if not quite, as dangerous as the privy of old days.

I had written the preceding, when I read, in the BRITISH MEDICAL JOURNAL, of July 7th, an excellent article, entitled "The Home as a Sanitary Unit," an extract from which will serve as a very appropriate conclusion to this paper. It will also serve, I trust, as a sufficient apology for the very elementary and almost obvious propositions I have made; and for so patiently listening to them, I must heartily thank you.

"No class," says the writer of the article, "have done so much for sanitation as the medical profession; and, indeed, it is mainly by their efforts, aided immediately in mechanical matters by the gentlemen who describe themselves as sanitary engineers, that the progress has been effected in public and private sanitation, which has resulted in the annual saving of many thousands of lives. This addition, we have lately been told, on the highest authority, amounts to a gain of two years added to every individual life, in relation only to the progress of the last ten years. It must, however, always be remembered, and this is a lesson which medical men—who are largely occupied in the homes of the people, as well as being public advisers of local communities—can enforce better than any other persons, that it is to the work of the individual, and to private initiative, that we must look for the major part of the further victories yet to be won. The State can do much in the way of regulation and assistance; but it is for the householder, for the capitalist, for the philanthropist, for the working man, each in his own class and in his own capacity, to realise the vast importance of helping himself and helping his neighbour in this great work."

A SYSTEM OF SCHOOL-SEATS.

Read in the Section of Public Medicine.

By E. C. SNELLEN, M.D.,

Professor in the University of Utrecht.

THE increase of myopia is a question which has greatly occupied the attention of oculists. We have sought for the cause of its development during the period of youth, in the arrangement of schools. It has been said that the increase of myopia is a proof of the amount of mental development and school-life of a nation. It would be nearer the truth to say, that myopia is a proof of want of care in the proper construction of the schools. As a principal fault, we regard the bad posture of the pupils. Oculists admit that constant stooping forward of the head is the most effective factor in the increase of myopia. The question of the improvement of the posture of the scholar involves in the first place the question of the seats. The oculist is thus led from the cause to the cure of the defect, and is so brought into the department of the hygienist. I thank the President of this Section for allowing me to direct your attention to the question of the claims of school-seats. I must beg most impressively your indulgence—the more as I have to speak a language foreign to me. We consider English a language full of beauty and richness, but also full of difficulties for a stranger.

In the first place, we have to regard the size and the measurements of the school-seats. It is absolutely impossible that a tall and a short boy will both sit equally well on the same seat, and at the same desk. It is just as unlikely as that the same clothes would fit the same pupils. Yet in many schools we find desks and seats of the same size for all. In some regulations of school-boards, I found the seats adapted according to the age of the pupils, but it is plain that the question depends not upon age, but height. The answer how the seat and desk are to be constructed, is only to be obtained by measurement. For this purpose, I constructed an appropriate seat for measurement, the different parts of which can be altered at will. With this, we measured the pupils at several schools. We found, as might be expected, that the different individuals—pathological cases being excepted—grow regularly; that is to say, all parts are proportional to the whole. Thus we require school-seats in a series of regular progression, of which all parts increase proportionally to each other. From experiments on the amount of digression which may be allowed for each shape, I found that a fair proportion was $\frac{11}{10}$. If we commence with the very smallest size of a pupil of one metre, and multiply each time by $\frac{11}{10}$, we get by eight multiplications the size of two metres. The lowest and the highest numbers are exceptionally required, so we want generally six numbers of seats, of which, as a rule, two are required in each class, with a very few of lower or higher numbers.

In taking the measurements of the pupils in the sitting position, I chose, as a starting point, the posterior aspect of the knee-joint. The average distance from the knee to the foot is found to be two-sevenths of the whole height. Thus, the height of the smallest seat has to be two-sevenths of our measure. The distance from the knee to the back we found equal to the former measure, but by preference we do not use the whole length of the thighs to sit on. The pressure on the more superficial arteries behind the knee would impede the circulation; and so 75 per cent. of its height may be taken for the depth of the seat. For the required relative height from the table to the seat I found—I confine myself here to the account of the results—60 per cent. of the height of the seat. Thus, by multiplying these numbers each time by $\frac{11}{10}$ we get a naturally progressing series of measurements. I first gave the desk the same progressive dimensions, but this was objectionable because it exaggerated the principle. The books and slates, as used in the schools, do not grow or increase as regularly as the size of the scholars; consequently we adopted only two dimensions of desks.

Next to the dimensions of the school-seats comes the relative distance between desk and seat. A different posture is required for reading and for writing. For reading, it is desirable that the positive distance from desk to seat be 25 per cent. of the height of the seat. This allows the scholar to move freely, and also to stand up between the desk and seat. For writing, however, the desk must come much closer, so that there be even a negative distance, the edge of the desk may extend over the seat. Dr. Schildbach and Mr. Kunze, in Germany, have been the first to show the advantages and the necessity of a movable desk. They have introduced a desk which can be shifted up or down. Others have replaced this by desks provided with a flap that folds over, and so admits a different inclination for reading and for writing. Both methods find, on the Continent, their warm defenders and opponents. I myself have suggested another form of desk, which, I think, will answer all requirements. The top of my desk consists of two parts provided with two sets of hinges; by drawing up, the two lids are inclined opposite to each other, the inner edge of the table-top is retained behind an elevated border, which permits having a table without a border for writing, and with one for reading.

But the change of distance acquired by this method is not quite sufficient. It is therefore to be combined with another arrangement, which, at the same time, provides for a demand which has been lately put forward. For this, I beg to bring you again to the oculist's dominion.

Both eyes, used for binocular vision, are tired if they have continually to converge to an object which is near, and not straight before the face. In most schools, it is the rule to force the children to put the copy-books at the right-hand side, and parallel to the edge of the table. The effect of this must be that the pupil gets a tendency to turn his head sideways, and to adopt a slanting posture, in order to bring both eyes at an equal distance from the object, and to produce a more symmetrical convergence of both eyes. It is more and more generally admitted that the copy-book should lie with an inclination to the left, just in front of the body.

Proceeding from these considerations, I have made my desk to turn to the left on an axis, applied at the nearest right-hand corner of the desk. This brings the desk nearer to the body at the left-hand side, and allows the left elbow to get the required rest, whilst it permits free movement to the right hand. At the same time, it remains parallel to the edge of the table.

There are other questions regarding shape and construction of the different parts of seats and desks; but they seem to me of secondary value. The form of school-furniture will vary in different countries and different places, according to local want and desire. But I think it is of great consequence that the appreciation of the value of the right sizes and dimensions, and of the relation between desk and seat, should be generally acknowledged.

INJURY TO HEALTH FROM THE PRESENT SYSTEM OF PUBLIC EDUCATION.

Read in the Section of Public Medicine.

By JOHNSON MARTIN, L.F.P.S.Glasg., and L.S.A.Lond.,
Medical Officer of Health to the Bolton Rural District.

THE subject I have chosen to discuss with you, is one of vital importance to the life, health, and prosperity, of the greater portion of the people of this and of every country in the civilised world. At present there is a mania for excessive education in books, to the exclusion of learning the ordinary duties of everyday life. This applies particularly to girls being able to make their present and future homes comfortable and clean, or miserable and dirty. For several years, I have been frequently consulted, by parents whose children were suffering from the excessive strain put on the brain and nervous system, by the present mode of education. In consequence of this I considered it a duty, as medical officer of health to the Bolton rural sanitary authority, to make the following remarks in my annual report for 1882. "It is very important that children who have a capacity for education in the higher branches of knowledge, should have every opportunity of gaining such knowledge, and that the State should assist. It is also very necessary that a child or young person be at school five or six hours a day. But I often see children whose health is injured by over study or brain-work. Such children might very properly be excused what teachers call home-work, to enable them to assist their parents or guardians. At the same time, it would make them more healthy and more fitted to the wants of the country." I wrote the above to bring the subject before the public, with a hope that steps would be taken to impress upon the Government the absolute necessity there is that a less rigid, and a less injurious, and harrassing, course of education ought to be adopted.

It is my opinion, and the opinion of many medical gentlemen who have spoken to me on the subject, that the present system of cramming will not produce any talent or any advancement in science or art, but that it will and does depress, enervate, make dyspeptic, and stunt the growth of many who would otherwise be strong and healthy. There are, and will be, those whom no amount of teaching would make fit for any other than manual labour, and an allowance ought to be made in every school for these in the examinations. A fair knowledge of reading, writing, and arithmetic to be the standard for those who were always intended by nature to work under the superintendence of others. It is perfectly impossible for the pupil-teachers, or even the senior teachers (except in few instances), to carry out the work they are expected to do, without serious injury to their health. A dull, [illegible] and irritable state of the body, with disease of the heart and brain, will follow, and many of them will die of [illegible], or be so injured in health as to unfit them for their [illegible] duties [illegible] tion, and by this means be made wholly [illegible]. [illegible] of men and women so important to the well-being of the [illegible] ought to have their health taken into consideration.

It is no new thing I have [illegible]. The ancients knew that too much [illegible]. Henry VIII knew the sympathy there [illegible] stomach. When he dismissed Wolsey [illegible] "Read over this, and after this, and then [illegible] appetite you may." The king knew well [illegible] effect upon the brain of Wolsey, [illegible] appetite.

I will not take up your [illegible] of

cases (which I could do), but will briefly name one which came under my notice last month, and two now under my care.

The father of a little girl, in giving me the reason of her illness, said: "These teachers and school board officers will kill my girl; she is at her lessons as soon as she gets out of bed, then at school, and when she comes home at night she has so many lessons to learn that she cannot eat, and is going as thin as a lath."

I have now under my care a little girl, who has not been able to attend school since last summer; her parents are intelligent and industrious, and are anxious the little girl should go to school; but she was so pressed with her lessons last year, that she broke down in health, talked about her lessons in the night, and was subject to vomiting frequently. I ordered her to have rest. She knows she is getting behind others at school, and is anxious to go; yet, when her parents speak of her going, the vomiting comes on again, as well as the sleeplessness. I have another, a dull little girl, under my care, who suffers in a similar manner.

A CASE OF EMBOLISM(?) OF THE CENTRAL ARTERY OF THE RETINA CONNECTED WITH FACIAL ERYSIPELAS.

Read in the Section of Ophthalmology.

By A. EMRYS-JONES, M.D.,

Surgeon to the Manchester Royal Eye Hospital.

On March 6th, 1882, I saw Mrs. V., in consultation with my friend Dr. Fiddes of Urmston, who had been attending her for the past three weeks, first of all for a very painful pimple on the chin, which, after poulticing for a few days, suppurated. On February 7th, the abscess was opened, and this was followed, in three days, by erysipelas, which extended at first to the left side, and afterwards to the right side of the face. When I saw her, both eyelids were much swollen, and very puffy; fluctuation could be detected in the right lower eyelid. The conjunctiva and cornea of the left eye were normal. In the right eye, the conjunctiva was deeply injected and chemosed, the cornea was intact; there was no intolerance of light; the pupil was active; she had no perception of light. The abscess was freely opened, and a great quantity of pus escaped; it was evidently already burrowing down to the orbit. Several smaller abscesses had to be opened, and ultimately the suppurative process subsided, and the eyeball was retained intact. Ophthalmoscopic examination at the time revealed the typical appearances of embolism of the central artery, viz., thready shrunken vessels, pale optic nerve, a hazy white appearance around the disc, and well marked cherry-red spot at the macula lutea. I saw her again last April, and found no eversion of the lower lid. Ophthalmoscopically, I detected well marked atrophy of the optic nerve.

I am not aware of any cases where the appearances of embolism have been observed at the time, unless the slight reference to a case made by Stellwag von Carion means this.

I think it most probable that, in this case, the optic nerve must have been compressed by the effusion into the orbit, and a thrombosis had followed. It has been stated that mere stretching of the optic nerve will cause atrophy, or that a retrobulbar neuritis occurs, followed by abundant secretion of morbid product, and consequently a contraction of the space and lessening of the calibre of the vessels.

OBSTETRIC MEMORANDA.

SUSPENDED ANIMATION.

In reference to Dr. Norry's interesting memorandum, in the British Medical Journal of January 26th, page 162, under the above heading, I remember having had a case, about twelve years ago (which I reported at the time), at the Limerick Lying-in Hospital, in which I persevered for four hours in all manner of restorative tactics, on a newly born full-term infant, which I had delivered by version, ultimately succeeding in permanently establishing the heart's action, the child being alive two years later. In this case, cold water sprinkling and "artificial respiration" (raising and depressing the arms, and rolling from side to side) produced no effect, the child not gasping till I forced my own breath, by the mouth to mouth process, into its lungs, while the arms were being raised, and expelled the same by depressing the arms against the chest-walls. These tactics had to be kept up, as I have said, for four hours, as, during that time, the infant relapsed about a dozen times, each "term of life" becoming longer till it finally took to breathing regularly and looked about it. I shall look with great interest for replies from some of our more experienced brethren to Dr. Norry's question: How long (whether in a hurry or at leisure) ought we to try to restore what is apparently a corpse?

John J. Marshall, L.R.C.S.I., Lamberhurst, Kent.

HOUR-GLASS CONTRACTION OF THE UTERUS.

I was called to a primipara on January 6th; the case progressed favourably, though slowly, until the head was close upon the perinæum; when the pains became feeble, the head ceased to advance, and the patient began to show signs of exhaustion. I gave three half-drachm doses of the liquid extract of ergot at intervals of a quarter of an hour, and applied a binder to the abdomen, to exert pressure during the pains, but to no purpose. I then applied the short forceps, and extracted the head in a quarter of an hour, the body following in a short space of time. After waiting for twenty minutes, the patient had a slight pain, accompanied by the usual amount of discharge. I made a vaginal examination, and found that the placenta was still in the uterus, which was well contracted. I waited half an hour longer, employing pressure on the uterus at intervals, there being an absence of pains; but the placenta did not descend. I then passed my hand into the vagina, and inserted two fingers into the cavity of the uterus. There was no constriction at the os. I found that the lower part of the placenta was detached, but I was unable to draw it down by gentle traction. I then passed my hand into the cavity of the uterus, when I came upon a constriction, which firmly nipped the placenta about its middle. In about ten minutes, I was able to get my fingers, one after the other, through the constriction, which gradually gave way. I then passed my fingers over the upper edge of the placenta, drew it down, and extracted it, the uterus contracting firmly on my hand as I withdrew it. No hæmorrhage followed, and the case did well. I used no traction on the umbilical cord, and no undue friction of the uterus, and so am at a loss to account for the placenta being caught in the constriction, half being in the upper, and half in the lower cavity of the uterus. I have frequently employed ergot in the same way previously to using the forceps, but have never found it cause any irregular contraction of the uterus.

Alfred James, Biggleswade.

CLINICAL MEMORANDA.

PROGNOSIS IN HEART-DISEASE.

Dr. Broadbent's interesting lecture in the Journal of January 26th reminds me of the important fact that, as a man grows older, he begins to find, in medical experience, that there are not a few singular exceptions to what, in earlier life, he may have considered as absolute rules. Dogmatic assertion is accepted without question by ingenuous youth, while, at the same time, it is rather a characteristic of an imperfectly cultured mind than of philosophical attainment. Accurate prognosis in all serious diseases is a matter of the highest importance, and in a very special manner in cases of cardiac affections. I recently examined a case which has made a lasting impression upon me, the particulars of which are as follow. W. J., now about twenty-eight years of age, was well known to me as a boy, and has been under my constant observation since the age of sixteen or thereby. About this time I discovered that he had a distinct double aortic *bruit*—a condition of things diagnosed also by my friend, Professor Simpson, of this city, who had also been consulted. About five years ago, he resolved upon marriage; and, my opinion being asked as to the expediency of this step, I advised against it. The patient for the past five years had no special treatment for this affection, and he continued in such good health that his condition was dismissed entirely from his mind. He is now the father of three children; since his marriage, I have never had occasion to treat him for his heart-affection; and, on carefully examining him a few days ago, to my great surprise, I found that not a trace of the *bruit* remained. Very different is another case, which recently terminated fatally, and which I have been in the habit of seeing at least about three or four times yearly. P. S., a gentleman of middle age, suffered from a marked double aortic *bruit*, accompanied with more or less dyspnœa. Being of an excitable disposition, he was warned against every form of mental excitement, and taking undue exercise. He left his house one morning recently in his usual health, mounted a scaffolding at a new building in which he was interested; after which he proceeded to take an accustomed walk; he was seen to stumble, and was carried home dead. J. McN., a middle-aged gentleman, in extensive commercial business in one of the principal English towns, who had lived freely, and had undergone a good deal of excitement, came under my notice in November last. His heart's action was feeble, and intermittent; there was a considerable amount of ascites, so that he could hardly button his trousers; and his legs were greatly swollen from the knees downwards. The diagnosis was fatty heart. The patient showed me prescriptions which he received in England, regarding which I expressed to him the opinion that the ingredients were the best possible, but that the doses seemed to me very small and useless. I prescribed powerful diuretics, in large doses; they acted admirably on the kidneys. In about three weeks, the effused fluid entirely disappeared, and he became a different man entirely; and, at the present moment, he is engaged in a responsible position, doing his work to the entire satisfaction of himself and others. I am hopeful that, if the tendency to dropsy can be kept down in this case, the heart will serve all the purposes required of it for a considerable time yet to come. I do not enter into any explanation of such cases; I merely adduce them as puzzling types of cases which not unfrequently come under observation.

D. Campbell Black, M.D., Glasgow.

SUPPRESSION OF URINE IN PERFORATION OF STOMACH FROM GASTRIC ULCER.

In the instructive case which has been lately reported by Mr. Arthur Campbell (British Medical Journal, February 2nd, 1884), the suppression of urine which, as usual in such cases, occurred during the post-perforation stage of the disease, seems to have been looked upon as antagonistic to the use of opium; and it has, in consequence, been suggested, in his concluding remarks, that "perhaps an earlier discontinuance of morphia might have been advantageous when the suppression of urine was so great." It is now many years since I pointed out, in an early work on *The Nature of Cholera as a Guide to Treatment* (1856), that the suppression of urine in these cases is similar to that which has been observed during choleraic collapse; and a large amount of evidence on the same subject was, later on, adduced in my paper "On some Analogies of Cholera, in which Suppression of Urine is not accompanied by Symptoms of Uræmic Poisoning" (*Medico-Chirurgical Transactions*, 1868), which was accepted as satisfactory by the late Dr. Hilton Fagge (1869), and by other writers on the subject. The duration of the suppression of urine in many cases which, as regards the resulting collapse, are strictly analogous to those of perforation of the stomach, is often very prolonged; and Dr. Hilton Fagge, in his paper of the above date, has referred to a case of strangulated hernia, observed by Mr. Davies-Colley, in which it was stated that a woman "had passed urine only once in the five days before her admission." In like manner, when there has been perforation of the duodenum, or upper portion of the small intestine, by a worm, the resulting collapse has been usually, and I may add, so far as my own acquaintance with the literature of the subject is concerned, always, associated with suppression of urine during life, and an empty and a contracted state of the bladder after death. The absence of any symptoms indicative of uræmic poisoning is mainly, if not altogether, due to the formation of urea, and probably also of the other constituents of the urine, being checked or suspended; so that what is commonly referred to in these cases as suppression of urine is, strictly speaking, not suppression, but arrest of organic function, in consequence of which not only is the bladder empty, but the kidneys have not even been called upon to act; and this condition of the system, so far as the secretion of the urine is concerned, closely accords with what has been recognised in connection with the pathology of choleraic collapse. In conclusion, therefore, it may be urged that large doses of opium may be, as they have hitherto been, not only recommended, but also freely administered, in cases of perforation, as most likely to prolong life; and that there are on record two, although necessarily not absolutely certain, cases of perforation of the stomach, in which recovery occurred after opium had been very freely given.

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Upper Baker Street.

ULCERATION OF BOWELS, WITH COPIOUS HÆMORRHAGE, CURED BY CASTOR-OIL.

Miss G., aged 28, was first seen on March 22nd, 1883. She had been suffering since the beginning of March from diarrhœa, accompanied by hæmorrhage. Her father, mother, one sister, and one brother, are living and healthy. One brother died, at adult age, of phthisis. She was looking plump and well nourished, and had no pain. The tongue was clean, but red. Nothing abnormal could be made out on abdominal palpation. The heart and lungs were sound. There was no cough. The urine was normal. The rectum was slightly dilated. She had internal piles, which had bled occasionally, but not to any extent. She had always been regular and healthy. She had, since the beginning of March, been passing daily two or three loose motions, containing shreds of mucus and dark clots of blood. Temperature (morning), 101.3° Fahr.; pulse, 120. Between March 22nd and May 9th, the diarrhœa steadily increased in severity, and the blood changed from dark clots to a bright arterial colour. At the latter date, the motions consisted apparently of little else than blood and mucus, and the bowels were acting ten or twelve times in the twenty-four hours. There was at times troublesome vomiting and steady loss of flesh, but never during the course of the illness any pain, other than that arising from bed-sores and from the patient's general weakness. The most careful examination, as well as the character of the motions, showed that the blood did not come from the internal piles, or from the lower part of the bowel. The temperature ran an irregular zigzag course, rising at times as high as 103.4° Fahr. The pulse seldom varied, and was nearly always soft, compressible, 120 to the minute. There was never any tympanitis.

During this period (seven weeks prior to May 9th), she was seen in consultation by Dr. Ogle, Dr. Bird, and the late Dr. Hilton Fagge, all of whom concurred in the diagnosis. Opium, belladonna, bismuth, cerium, logwood, nitrate of silver, etc., were found utterly useless. Suppositories and injections of various kinds were tried without avail. By May 9th, she was reduced to a very emaciated condition, and was too weak to turn in bed. Food was taken with great difficulty, owing to the constant vomiting, and the patient's condition appeared almost hopeless. On May 9th, she was seen by Dr. Gibson of Newcastle, at whose suggestion drachm-doses of castor-oil each day were tried. Within twenty-four hours after taking the first dose, she passed a fæculent motion. The castor-oil was repeated eight times up to May 20th, and after this, only occasionally. The temperature fell in forty-eight hours from 103° Fahr. to 99° Fahr., and never rose again above 100° Fahr. The diarrhœa rapidly abated, the stools becoming fæculent and healthy. No blood was passed after May 18th. The patient rapidly regained flesh and strength, and, although bearing traces of the severe illness and physiological starvation which she had undergone, was able to go to the sea-side in July. In September, a slight relapse took place, but was easily cured by the same treatment; since that time, the patient has remained in good health.

Hildyard Rogers, M.R.C.S.

THERAPEUTIC MEMORANDA.

KAIRIN IN TYPHOID FEVER.

The following results of the action of kairin in the treatment of typhoid fever will be of interest to those who have perused the review published in the Journal of January 12th, 1884.

A male patient, twenty-two years of age, on the twenty-sixth day of his illness, had the following temperatures after a dose of ten grains of kairin, given at twelve o'clock noon; at 12.15, temperature 103°; at 12.30, 103°; at 12.45, 102.6°; at 1, 102.2°; at 1.15, 101.1°; at 1.30, 100°; at 1.45, 98.6°; at 2, 98°. Two hours later, the effect of the kairin had passed away, and the temperature had risen to 102.2°; but no further dose of the drug was given till twelve midnight, when the following result was observed: at 12, temperature 103.5°; at 12.15, 102.4°; at 12.30, 101.6°; at 12.45, 101°; at 1, 100.2°; at 1.15, 100°; at 1.30, 29.4°; at 1.45, 99.4°; at 2, 99.1°; at 4, 98°. Again the effect of the drug had come to an end, and the temperature ran up quickly, reaching 101.2° at six o'clock, but not reaching the 103° line till after ten. At twelve noon, a third dose of ten grains was given, with the following result: at 12, temperature 103.4°; at 12.30, 102.6°; at 12.45, 102.8°; at 1, 102.2°; at 1.15, 101°; at 1.30, 99.8°; at 1.45, 99.2°; at 2, 98°; at 2.15, 97.6°. In the course of the following four hours, the temperature again rose to 103°, when a large antipyretic dose of forty grains of quinine was given, and the result observed was as follows: at 8 p.m., temperature 103°; at 10, 102.4°; at 12 night, 101.1°; at 2 a.m., 98.8°; at 6, 99.6°; at 10, 100.4°; at 12 noon, 96°; at 2 p.m., 96°; at 4 p.m., 97°; at 6, 99°; at 8, 101°; at 12 night, 101.8°. This was the highest point reached, and the patient was thereafter considered convalescent. The kairin had been given to this patient in doses of ten grains, on twelve occasions during the thirty days of his pyrexia; and, in addition, quinine had been given four times. No baths had been administered, as it was intended that the kairin should be tested fairly, in alternation with the quinine, and instead of the bath, which would otherwise have been given whenever the thermometer indicated a body-temperature of 103° in the axilla. The heart's action had been weak from an early date in the process, and digitalis was taken in doses of ten minims every few hours, in combination with nitromuriatic acid and nux vomica. No stimulants were given, with the exception of two ounces of brandy on one occasion only.

This case gives full confirmation to the statements made by Dr. Filehne, that we have in kairin a powerful antipyretic, which will, in the course of from two to four hours, reduce the temperature to the normal line, and with perfect safety to the patient. The quickness of its action gives it a great superiority over quinine, when a rapid effect is desired. On the other hand, its effect is far more evanescent, and the rapidity of rise of temperature, after the effect of the dose has ceased, is remarkable. No disagreeable results were observed to follow the use of the drug; the heart's action, which had been weak before, was no weaker; the urine did not present any abnormal modifications of colour, and at no time did it contain albumen.

The experience of this case would tend to the conclusion that we have in this new antipyretic, kairin, a most valuable drug, which will perform quite safely, quickly, and pleasantly, the office which has hitherto been effected by nothing else than the disagreeable and troublesome necessity, the cold bath.

R. SHINGLETON SMITH, M.D., Clifton.

IODIDE OF POTASSIUM.

I SEE that the use of iodide of potassium, as an antigalactagogue, is being discussed in the JOURNAL as a new thing. I think it well to say that I have used it during nearly all my professional career, and that it has been constantly employed at Guy's Hospital ever since my attachment to it, both in the wards and in the maternity charity. At the same time, I do not claim originality in its use; though to whom I was indebted for the suggestion I have no recollection. I have generally combined with it the external application of extract of belladonna, mixed with a small portion of glycerine, and also administered a saline purge, and always with the best results.

J. BRAXTON HICKS.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

MANCHESTER ROYAL INFIRMARY.

THREE CASES OF POPLITEAL ANEURYSM.

(Under the care of Mr. F. HEATH.)

[Reported, with Remarks, by BILTON POLLARD, B.S., F.R.C.S., Resident Surgical Officer.]

THE treatment of aneurysms is beset with many difficulties at all times, due to the varing characters of the aneurysms themselves, their pressure-effects on the accompanying vein, and on the surrounding collateral vessels, as well as to the state of the vascular system generally, both as regards the dilatability of the walls of the arteries, and the blood-pressure within them. On the due relationship of the two last factors depends, in great measure, the success or otherwise of ligature of the femoral artery in popliteal aneurysm; and it is only by a careful estimation of the various conditions above indicated that we shall arrive at the most advantageous method of treatment in any individual case.

The following cases and remarks bear on some of these points, and particularly so as touching on the question of the rival claims of previous compression and immediate ligature of the femoral artery in the treatment of popliteal aneurysms. They also offer a few points of slight interest in connection with the method of ligature which was adopted in them.

CASE I. *Compression for Fourteen Days; Ligature of Femoral Artery; Cure.*—H. A., aged 34, married, was admitted on May 14th, 1883. He stated that he first noticed a swelling behind his left knee about the end of April 1883, though he had suffered pain in the knee for several weeks previously, and had observed that his left leg was somewhat swollen. There was no history of local injury to the knee, and no history of syphilis. There was a pulsating swelling, about the size of a large orange, in the left popliteal space. The swelling was distinctly circumscribed, and the pulsations expansile; a loud and harsh systolic *bruit* was audible in the tumour. Pressure on the femoral artery at once arrested the pulsation in the aneurysm, which was then found to be soft-walled, and capable of considerable diminution on pressure.

The patient was kept in bed, and the femoral artery compressed at the brim of the pelvis by means of a bag of shot. After this pressure had been used for about a week, it was noted that the pulsation was less distinct, and the sac of the aneurysm harder, though slightly larger. However, there was no material improvement. After fourteen days of this treatment, it was decided to tie the femoral artery. Accordingly, a double ligature was placed on the vessel at the apex of Scarpa's triangle, but the artery was not divided between the ligatures. The carbolic spray was used during the operation, and the dressing was applied in accordance with Listerian principles. The whole limb was then enveloped in a thick wadding-bandage, and the warmth of the limb maintained by hot bricks. Five days after the operation, the foot was quite warm; a faint pulsation was detected in the posterior tibial artery. The patient continued to do well, and by the fourteenth day the wound had quite healed. The temperature had never risen above 99° Fahr., and the only discomfort the patient had experienced was tingling, and slight pain in the leg on the day following the operation. The aneurysm was still soft, but quite free from pulsation, though pulsation in the posterior tibial artery had been well marked for some days. The aneurysm gradually became harder and smaller; the patient got up for the first time on July 2nd, and was discharged on July 7th.

He was again seen on October 2nd; he was quite well, but there was still a firm hard lump in the popliteal space, with a medium-sized artery pulsating along the middle of it.

CASE II. *Rest in Bed for Nine Days; Ligature of the Femoral Artery; Gangrene; Amputation of Thigh; Secondary Hæmorrhage from Stump; Recovery.*—G. J., a married soldier, aged 40, was admitted on June 14th, 1883. The patient, who was at that time a sergeant in the Lancashire Fusiliers, was, on May 19th, marking for volunteer shooting during the whole day; he had no recollection of any blow or strain, but on the evening of that day, his right knee felt stiff; on May 22nd, he had pain about the knee, and noticed a swelling about the size of a hen's egg behind the joint. There was a family as well as a personal history of rheumatism, but none of syphilis; the patient had seen much hard service abroad. When admitted, the patient complained of much pain in the right leg, and below the knee it was very œdematous. In the right popliteal space, there was an aneurysm, having the size and shape of a cocoa-nut. The skin over it was healthy, though tense; the temperature of the affected limb was the same as that of the other, and pulsation was well marked in the posterior tibial artery, but only faintly so in the dorsal artery of the foot. The other arteries appeared healthy, and the urine normal. The patient was kept in bed with the limb elevated, but, as the œdema continued, a Brodie's bandage was applied to the leg. The œdema of the leg still remained unchanged; and, as the pain in the leg continued to be very severe, it was determined to ligature the femoral artery without trying the effect of compression. The artery was tied, just as in the other cases, on June 23rd (nine days after admission). On the following day, the foot and leg were very pale and insensitive. On June 25th, the foot was cold, and there was purple discoloration on the dorsum; there was loss of sensation as high as the upper third, and there was no spontaneous pain. By the following day the discoloration had spread upwards nearly as high as the knee, and the limb was cold and insensitive; amputation was, therefore, performed at the junction of the lower and middle thirds of the thigh. There was nothing but a considerably febrile temperature to note till July 8th, when severe secondary hæmorrhage took place from the stump. The flaps were opened up and the clots turned out, but, as no definite bleeding points were discovered, they were resutured, and sponge-pressure applied to the stump. There was no further bleeding, and the patient gradually recovered from the loss of blood, but the stump healed slowly. The incision made for tying the femoral artery healed by first intention, except where the drainage was placed. The patient was discharged on August 11th. Dissection of the limb removed showed that the popliteal vein was tightly stretched over the most prominent part of the aneurysm.

CASE III. *Compression of Femoral Artery for Three Weeks: Ligature of Femoral: Gangrene of Leg: Amputation of Thigh: Recovery.*—P. F., aged 43, married, was admitted on July 3rd, 1883. He stated that about nine months previously he fell and hurt his knee, that he suffered pain about the knee for a week or two, but noticed nothing further for some seven months; that he had then slight pain and numbness about the knee, which was soon followed by the appearance of a lump behind the knee, and general swelling of the leg. He continued at work for another month, during which time the pain and swelling in the ham increased.

At the time of his admission, there was a soft, thin-walled, fusiform swelling, about the size of a lemon, situated in the left popliteal space. The tumour had all the signs of an aneurysm. The patient complained of pain and numbness in the leg, there was œdema of the foot and the lower part of the leg, and the veins were slightly enlarged. The pulsation in the tibials was fairly well marked; the urine was healthy, the family and personal history was good, and there was no history nor evidence of syphilis.

The man was kept in bed, but no other treatment was applied at first. By July 6th the swelling of the leg had disappeared, and on that day pressure on the femoral artery, by means of a bag of shot (weight 7lbs), was begun, and continued during twenty hours each day for three days, but by that time the skin was sore, so digital pressure, maintained by the patient himelf, was alternated with the shot-bag during the day. By July 19th, thirteen days after compression was commenced, the aneurysm was firmer, smaller, and the pulsation in it was not so strong; but, as no further improvement resulted from the shot-bag treatment, it was decided to ligature the femoral artery on July 27th. The artery was tied just as in the other cases, the wound was treated antiseptically (Lister), and the limb well wrapped up in thick woollen bandages. The patient took the chloroform very badly, his pulse being so very feeble that the chloroformist suggested the likelihood of gangrene occurring.

On the following day, there was no sensation in the limb below the knee, and the foot and the lower half of the leg were cold; there was purple discoloration between the first and second toes, and at the anterior part of the sole of the foot; there was no pain in the limb, and no swelling of it. The temperature was 99° Fahr. The purple discoloration spread upwards in a somewhat irregular line, remaining stationary about the middle of the leg for twenty-four hours; but on August 1st, four days after ligature of the artery, it had commenced to spread again, and it was therefore determined to amputate at the junction of the middle and lower thirds of the thigh. The subsequent course of the case was very satisfactory, and by August 10th the stump was practically healed.

REMARKS BY MR. BILTON POLLARD. The chief point which arrests the attention in these cases is that, notwithstanding the successful ligature of the artery, the result was so unfavourable in two of them; that gangrene followed the ligature in these two was clearly due to a deficiency of blood-pressure as compared with the resistance to be overcome in the collateral vessels.

The treatment adopted was not identical in each case. In the first case, compression, by means of a bag of shot, was applied to the femoral artery for fourteen days, with no material improvement in the aneurysm, although the pulsation in the sac was arrested during fourteen to sixteen hours in the twenty-four. The femoral artery was then tied; pulsation was detected in the posterior tibial artery five days afterwards, and the aneurysm was cured. In the second case, the patient was kept at rest in bed for nine days, but no compression was employed; the femoral artery was then ligatured, and gangrene of the leg at once followed. In the third case, the patient was kept at rest in bed for three days, and then compression, by means of a bag of shot, was applied during three weeks, but by no means so thoroughly as in the first case. The femoral artery was then tied, and gangrene appeared on the following day.

The second case was certainly the most unfavourable of the three, for this aneurysm was the largest, and interfered seriously with the return of blood from the limb; so that it is impossible, with any fairness, to attribute the unfavourable result to the immediate ligaturing of the vessel which was practised in this case; and particularly is this so when we consider that the result was equally unfortunate in the third case, although compression had in it been applied for some three weeks before the artery was tied. There is, however, this point of importance in connection with the first and third cases; in the first case, we had to do with a strongly acting heart, which would be well able to raise the blood-pressure in the arterial system sufficiently to open up the collateral circulation, whilst, in the third, we had to do with a feebly acting heart, which was severely taxed by the anæsthetic, and which did not thoroughly recover itself for some time afterwards.

These cases certainly do not much assist us in deciding between previous compression and immediate ligature in the treatment of popliteal aneurysm; but they show us that, in cases where the femoral artery is most successfully tied, gangrene of the limb is a termination to be carefully borne in mind and combated by any means that are not hurtful to the aneurysm. So far as obviating gangrene is concerned, it would appear that previous compression can act only for good, whilst, as regards the aneurysm, it is difficult to imagine it harmful; it is certain that a number of cases are cured by that alone, as happened in one recently under Mr. Whitehead's care at the Manchester Royal Infirmary, where the patient cured himself by the unaided pressure of his own finger. In cases not cured by the compression, it is conceivable that it may do harm 1) by opening up the collateral circulation so freely that pulsation returns in the sac after the artery is tied; 2) by wearing out the powers of the patient; 3) by causing matting together of the tissues, and so rendering the ligature of the vessel more difficult, and possibly increasing the chances of subsequent gangrene, on account of interference with the vein. As to how far the first danger is more theoretical than practical, I am unable to say; the second may be easily obviated by desisting from the compression if it be badly borne; whilst the third need not occur if the compression be made, as is usually the case, at the brim of the pelvis, and the artery tied at the apex of Scarpa's triangle. If previous compression be in any way likely to favour gangrene, it must be either by direct interference with the vein, or by so increasing the difficulty of ligature as to subject the vein to injury at that time; in either case, the gangrene would be likely to be of the moist variety; in the case above recorded, in which compression was tried previously to the ligature, the gangrene which occurred was dry.

From the above considerations, it would appear that the gangrene, which occurred in the third case, did so notwithstanding the beneficial effects of compression, rather than as the result of any injurious influence of it.

The ligature of the femoral artery was performed alike in each case; the vessel was exposed at the apex of Scarpa's triangle, and the sheath only separated sufficiently to allow the aneurysm-needle to be passed; the loop of the ligature was cut from the eye of the needle, so as to leave two ligatures beneath the vessel; these were tied as far apart as the small opening into the sheath of the vessel would allow, *i.e.*, about one-eighth of an inch. The ligature used was a moderately fine chromicised catgut one; the artery was not divided between the two ligatures; a small piece of India-rubber drainage-tube was placed beneath the edge of the sartorius muscle, and a superficial drain of a few strands of silkworm-gut was placed all along the wound, and the edges of the latter brought together with sutures. In each case, the wound healed by first intention, except where the drains were placed. The disturbance of the vessel was extremely slight; in fact, no more than when a single ligature is skilfully applied.

When the single ligature is used in the ordinary manner, there is a slight separation of the vessel from its sheath, and in the centre of that separated portion the ligature is placed. Now any interference with the vascular supply to the vessel, resulting from the separation of the sheath and from the ligature of the artery, would obviously be greatest in the portion of the vessel immediately on the distal side of the ligature, for the vasa vasorum entering that part of the external coat of the artery from the sheath have been separated, and any circulation through vessels already in the external coat is interrupted by the ligature itself. May it not be that in these considerations we have an important part of the explanation why secondary hæmorrhage more frequently occurs from the distal side of the ligature?

In the method of applying the double ligature here described, each ligature is tied as closely as possible to the uninjured sheath, whilst the portion of the vessel from which the sheath is separated is between them, and consequently it is of little importance whether it give way or not at that situation. The artery was not divided between the ligatures, and consequently the circulation through the bridge of separated sheath was no further interfered with than need be. The double ligature was used in these cases by Mr. Heath, in order to obtain a further security in the event of one of them slipping. However advantageous they may be from this point of view, the method appears to me to offer the additional advantages above indicated.

Important as it may be to tie the vessel skilfully and well, it is undoubtedly, if anything, more important to secure the rapid healing of the wound; for, if the parts around the ligature be consolidated whilst the latter is still secure, there is little fear of hæmorrhage later on. The attainment of this end was, in the cases here recorded, achieved under Lister's antiseptic treatment.

NORTHAMPTON GENERAL INFIRMARY.

SURGICAL CASES.

(Under the care of Mr. KIRBY SMITH.)

[The following notes were taken by Mr. [illegible], House-Surgeon.]

CASE I. *[illegible]*. M. R., aged 42, was admitted on September 9th, 1882. She was a married woman, and had had seven children, who were all living and healthy. She first noticed a hard lump at the lower part of the right breast twelve months before admission; she was [illegible] at that time. As it did not increase much in size, she took little notice of it. In April 1882, she was confined, [illegible] to the lump in the breast. The [illegible] to suckle the infant [illegible] the other breast supplied [illegible] during the day.

When she was admitted, both breasts contained milk. At the lower edge of the right breast was a hard lump, of the size of a horse chestnut, close beneath and adherent to the skin, which was inflamed; the upper part of the breast was harder than natural, the hardness imperceptibly diminishing in the upper part of the breast, which was healthy, and secreting milk. A slightly enlarged gland could be felt in the axilla.

September 19th. The patient was put under the influence of ether, and two curved incisions, including a large area, were made. The tumour was of large size, and involved the great pectoral muscle, part of which was removed. All suspicious tissue was dissected out except the axillary gland, which was not accessible. The bleeding was free; all vessels were twisted; the flaps came into accurate apposition with a little pressure, and were sewn up. The wound was dressed with carbolic oil (1 in 20).

The tumour was evidently scirrhous, and had the shape of two chestnuts joined together; it was dense, and of almost stony hardness, of a pale colour, except at one point, which corresponded with the inflamed patch of skin, and was red and soft, and evidently beginning to break down. The deep part of the tumour had invaded the great pectoral muscle; it contained red juice, and was softer, and beginning to degenerate. Beneath the nipple was some gland-tissue, infiltrated with round hard nodules, varying in size from a pin's head to a pea; the ducts were loaded with milk. She bore the operation well, and made uniform progress towards recovery. The febrile disturbance was slight. The ends of the wound united by first intention, and the deeper parts healed rapidly by granulation, the discharge having free exit, without the necessity of drainage-tubes. The same simple dressing—carbolic oil—was used from beginning to end; and, in three weeks from the time of operation, the patient was well enough to leave her bed. The wound was almost healed in another week, and she was discharged.

CASE II. *Rodent Ulcer: Excision.*—J. C., aged 56, a labourer, was admitted on October 15th, 1881. He had always had good health; but, for seven years, he had had a small ulcer on the right side of the face, which had frequently been treated with caustics; it was severely wounded by the branch of a tree two years before admission, and had since grown more rapidly. Situate on the right side of the face, below the malar bone, and in front of the ear, was an ulcer of the size of a crown-piece; above and behind, the edges were infiltrated and thickened; the surface was clean, and of a bright red colour; it was somewhat conical in shape, the centre being deeper than the edges. Behind it, and over the edge of the jaw, was an enlarged and hardened gland; no other glands were enlarged.

October 18th. The patient being under the influence of ether, the ulcer was freely dissected out; the bleeding was profuse, and with difficulty controlled; torsion and ligature were combined; the fibres of the masseter muscle were exposed. He became collapsed, before the completion of the operation, from the loss of blood. Two hours afterwards, the hands were cold, and the pulse was weak and slow. The mouth was drawn to the left side immediately after the operation.

October 21st. The dressings were removed; there had been no bleeding. The wound was dressed with simple oil on lint.

October 24th. The pulse was regular; the appetite good; and he slept well. The discharge was profuse and healthy, and the wound showed signs of commencing granulation.

October 27th. The surface was covered with healthy granulations; the edges were blue, level with the skin, showing a fine pellicle of fresh skin. The face continued drawn to the left side.

On November 5th, he was discharged.

On November 19th, he came as an out-patient. The ulcer was healing, and had diminished to about the size of a sixpence. He did not again attend, and it was concluded that he was cured.

CASE III. *Rickety Deformity: Osteotomy.*—R. G., aged 4, was admitted on April 15th. She was a pallid child, with slight cephalic enlargement. The wrists and ankles, as well as the costal articulations, were well-marked examples of rickety deformity; the legs were bowed, and the tibiæ deformed and twisted inwards at the lower ends to such an extent as to render her unable to walk. As she sat in bed, the soles of the feet were directed towards each other.

April 28th. The patient was put under the influence of chloroform; both tibiæ were divided with the chisel, and broken; the legs were put straight, and kept so with a single outside splint. Antiseptic precautions were used.

May 2nd. The right leg was doing well; there was no swelling or redness of the wound.

May 12th. Both legs were dressed; there was no swelling or tension about the wound on the right side, but the discharge was somewhat fœtid and bloody. On the left side there was no redness of the skin, but there was a slight sero-sanguineous discharge. There was no constitutional disturbance.

May 15th. Both legs were dressed; the position was good.

May 17th. The antiseptic dressings were discontinued.

June 15th. There was firm union in both legs, and she could walk. Owing to the deformity of the legs, consisting in a bowing of the tibiæ in their whole length, and the inward displacement of the knees, she walked with a waddling movement; the deformity of the feet, however, was corrected, and the soles touched the floor in walking.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 8TH, 1884.

Sir ANDREW CLARK, Bart., M.D., LL.D., F.R.C.P., President, in the Chair.

Living Specimens.—Dr. F. C. Turner exhibited a specimen of Keloid, Developed on the Chest; Dr. S. Mackenzie, one of Acne Varioliformis; Mr. A. P. Gould, one of Gummata of the Skin of the Neck: and Dr. J. K. Fowler, one of Symmetrical Deformity of the Hands.

Spreading and Obliterative Arteritis.—Mr. PEARCE GOULD related the history of a case of this disease, and exhibited the patient. He was a lad, aged 19, in whose family and personal history there was nothing to throw light upon the cause of the disease. The illness began in May, 1883, when the man noticed the fingers of his right hand becoming dark in colour; when warm, the hand was of a deep red colour; when cold, it became first blue, and then dead white, and there was then a sickening pain in it. After three weeks he rested from his work (in a brick-yard) for three weeks; but again, after working for a month, the hand became worse, and he had to rest for a month. He then thought himself well, but, on resuming work, "the pain went" into his forearm and elbow, and since then he had been unable to work. He was admitted into the London Temperance Hospital on October 31st. The right forearm and hand were colder than the left—somewhat wasted; while the hand was warm he could wash with it, and it quickly became cold and painful; the pain was always worse at night. The brachial artery in its whole course was harder than the left, and less affected by the pulse, which ceased in it just above the elbow-joint. The radial artery was felt as a prominent hard pulseless cord; there was no pulse in the ulnar artery. The other arteries of the body appeared normal. There was a small patch of dry gangrene on each of the first, third, and fourth digits. The heart-sounds were normal, except that there was accentuation of the second sound over the aortic cartilage. The urine was normal; temperature, normal. For about a fortnight there was no notable change, but then the pain increased, first at night, and then by day, until it became so severe that the patient writhed in agony, which was only partially subdued by repeated hypodermic injections of morphia and draughts of chloral and bromide of potassium. Concurrently with this, the pulse in the brachial artery faded away, until the vessel formed a hard pulseless cord as high as one inch below the teres major tendon. On November 23rd, the right subclavian artery was noticed to be very prominent above the clavicle, and the heart's action was excited. In December, the pain lessened; and by December 17th was but slight, while the prominence of the subclavian artery was diminished. Now he was quite free from pain, and expressed himself as quite well. Nearly the whole of the last joints of the thumb and of the right ring-finger had mummified, and were nearly detached. The limb was considerably wasted; the radial artery had so shrunk as to be scarcely perceptible, but was quite pulseless; the brachial artery was still felt as a firm pulseless cord to within an inch of its origin. Mr. Gould stated that at no time had there been any œdema of the part, or any loss of sensation, the only paræsthesia being intense pain, particularly complained of in the parts which afterwards became gangrenous. The temperature was normal on the patient's admission to hospital, but on November 26th was found to be pyrexial, and it continued so, ranging between 99° and 101°, until December 18th, when it finally returned to the normal; on one occasion, the temperature rose to 101.8°. Mr. Gould remarked that the history and progress of the case plainly indicated that the disease was a progressive obliteration of the arteries of the right upper limb, probably starting in the hand and spreading almost up to the axilla. There was no source of embolism discoverable, and the slow progression, the marked induration of the vessels before pulsation was lost, was sufficient to exclude simple thrombosis, especially in the arteries of the upper limb of a lad of this age. He believed that the disease was a primary inflammation of the arterial coats—arteritis obliterans—such as that described by Friedlander, and examined very carefully in one case by Winiwarter. Jaksch and others had reported similar cases, and the disease strongly resembled that described by Heubner in the cerebral arteries in syphilis. The present case, however, was especially noteworthy as occurring at an earlier age than any before recorded, and affecting the upper rather than the lower limb. There was no history or evidence of syphilis in his patient, and Mr. Gould was unable to fasten on the cause of the affection. It was important to notice the very small amount of gangrene that resulted from so extensive an obliteration of the main arteries of the part.

Obliterative Arteritis.—Dr. W. B. HADDEN read notes of a case. An unmarried woman, aged 35, was admitted, under Dr. Bristowe, at St. Thomas's Hospital, on February 22nd, 1882. There was nothing of importance in the family history, and no reason to suspect syphilis. The patient had been accustomed to sleep with an invalid child, and her arm, which was placed around the child, used to hang outside the bedclothes. Six months before admission she had severe pain in the right arm, shooting down the hand; and two months before admission, the tips of the first and second fingers were hard and cracked. On admission, she was a healthy, well-nourished woman, without any visceral disease. She complained of constant pain, but occasionally shooting, in the thumb and first and second fingers of the right hand. The fingers were pale and cold, and on the tip of each there was a flat irregular corn. The thumb was pale, cold, and stiff; its tip was hard and thick. There was no pulsation in the radial and ulnar arteries, and the former was hard and tender. Pulsation was felt in the arteries at the bend of the elbow. Subsequently, pulsation could not be felt in the lower part of the axillary, and there was tenderness along the whole brachial. The hand and arm became very cold, and the fingers livid. Surface-temperatures were taken, and it was found that the right upper extremity was much colder than the left. Later, the tenderness in the course of the arteries became more excessive, and the absence of pulsation extended higher into the axillary artery. The skin over the ends of the thumb and first three fingers became gangrenous, and was separated. Finally, pulsation returned in the brachial as far as the end of the elbow. Six months later, the patient wrote to say that she was quite well, but that there was no pulse at the wrist. Prolonged pressure on the arteries seemed to be the exciting cause, just as sometimes it produced neuritis. The favourable termination, as in paralysis, was worthy of note.

Dr. MAHOMED trusted that the authors would continue to observe the progress of the two patients under their care. He (Dr. Mahomed) had experienced a similar case which terminated fatally. It was that of a man under Dr. Moxon's care, who suffered from attacks of pain down one arm, accompanied by angina pectoris. Thrill and *bruit* were distinguished in the subclavian artery, and aneurysm was suggested as a cause; but Dr. Moxon's opinion was that it was a case of arteritis. This was shown to be the case by *post mortem* examination of the body. Moreover, the pulse-tracing was not that of aneurysm, although at the time it was taken, 14 years ago, the information obtainable in this connection was very much less than existed at the present time. Dr. Mahomed considered that Mr. Gould's case might terminate in angina, or in some grave aortic disease.—Mr. BRYANT observed that it was difficult to find explanation of the origin of arteritis. Might not Mr. Gould's case have originated in thrombosis? The bony growth described might possibly be an extra rib, and, by producing irritation of the artery arching over it, set up conditions favourable to thrombosis. Dr. Hadden's case lent support to the view that local pressure might induce these results.—Mr. CRIPPS congratulated Mr. Gould on the excellence of his paper, but objected to the method of arriving at diagnosis which it described. Endarteritis was not sufficiently evidenced by it. In one case that he examined, he had found a prominent bony mass on both sides of the last cervical vertebra, by which forward pressure was caused on the subclavian artery. Obliteration of distant small vessels was thus favoured by deposition in them of fibrin, owing to pressure on the main trunk. The occurrence of such result at a particular age would be determined by sudden increase of growth in the bony mass, as instanced in a case under treatment at St. Bartholomew's Hospital, in which aneurysm was caused in a young man by exostosis. Clotting would, Mr. Cripps thought, commence in the finer vessels and spread upward to the larger ones.—Mr. HUTCHINSON briefly recorded three cases of arteritis not due to atheroma. The first was attributed to syphilitic origin. The little and ring-fingers of the patient became blue, though not actually gangrenous, and were very painful. In the second, undoubted arteritis occurred in an old gentleman upwards of eighty years of age. His first complaint was that he could not endure the pressure of a hat without discomfort. Both temporal arteries were hard, red, pulseless, and tender. Absolute obliteration of these vessels ensued, and the patient quite recovered. No suspicion of syphilis was entertained in this case, but it was evidently one of senile change, assisted by pressure of the hat-brim. In the third case, that of a man about sixty years old, a slight burn on the fingers was followed by gangrene of the hand, resulting, probably, from arterial obliteration, and, passing gradually up from the periphery, as in Mr. Gould's patient, finally implicated the axillary trunk, and amputation of the shoulder-joint was resorted to. No bleeding took place from the vessel, which was obliterated by a clot of fibrin. The vessels were extremely tortuous, but contained no calcareous deposit. In this case it could not be precisely stated whether arteritis or periarteritis existed, but obliteration of the smaller vessels first took place, and then spread up the limb. It had not been proved that inflammation within the vessel occurred in Mr. Gould's case. Thrombosis might have succeeded to pressure on the artery above, and it was extremely interesting to observe how disease did not set in at the seat of such pressure, but at a situation distant therefrom. Mr. Hutchinson expressed a cordial admiration for the excellence of Mr. Gould's paper. —Dr. MONEY remarked that he had recently found many evidences of arteritis in the vessels of a spinal cord taken from the body of a patient subject to lead-palsy, and he suggested that lead might possibly cause such changes as were under discussion.—Mr. MORGAN said that the case he had reported to the Society three or four years ago, and which had been referred to in the paper, differed from Mr. Gould's in the uncertainty whether it really could be correctly called one of arteritis rather than of periarteritis. The patient was a man, in whom the disease proceeded downwards to peripheral distribution. It resembled Mr. Gould's case in no particular scarcely. The pain, preceded by gangrene, described in Mr. Gould's case, might possibly have been caused by pressure of the osteoid mass on contiguous nerves.—Mr. GOULD replied that pain was experienced in his case before commencement of gangrene; though inflammation was the main element for consideration, it was possible that thrombosis might attend it. By careful examination of the bony mass in the neck, he had convinced himself that it was symmetrical, and as it could not thus affect one side alone, he was unable to assign to it the part several speakers ascribed to it. Neither could he understand how pressure at a single point could influence the changes apparent below, especially as the affected vessel had since receded from the prominent position it formerly occupied. He still regarded the case as one of arteritis, and thanked Mr. Bryant for pointing out that this affection was not induced in subjects of aneurysm, in whom compression of an artery was resorted to for purpose of cure. He had specially excluded from consideration cases which were attributable to syphilis and atheroma, and by reason of the age and condition of the arterial system in Mr. Hutchinson's patients, he concluded that they bore no resemblance to his own.—Dr. HADDEN said that no bony growth had been observed in his case, and he hoped to have further opportunities of examining it.

Pyrexial Syphilis.—Dr. BURNEY YEO gave particulars of this case. The patient was admitted into King's College Hospital on October 10th, 1883, with symptoms of pyrexia—high temperature, with great diurnal fluctuations, twice reaching 105° Fahr., and four times 104° Fahr., and averaging in the evening for three weeks from 103° to 104°. The daily oscillations were often more than 6° Fahr. The other symptoms were pains in the limbs and trunk, headache, thirst, sleeplessness, great debility, and rapid emaciation. Between a fortnight and three weeks after his admission, symptoms appeared, chiefly on the back and legs, resembling imperfectly developed variolous pustules without the areola. Considerable doubt as to the nature of the case was at first felt, but after he had been in the hospital three weeks, he confessed to one of Dr. Yeo's clerks that he had venereal sores on the penis. Antisyphilitic treatment was attended by a rapid fall of temperature to normal, rapid improvement of nutrition, and recovery of strength, and rapid drying up of the pustular eruptions. He left the hospital on December 20th, having been for some time quite free from symptoms of any kind. The chief peculiarities of this case were: 1, the great and continued elevation of temperature, and its great daily oscillations; 2, the early appearance of the pyrexia, within twenty-five to thirty days of the exposure to infection; 3, the absence of any definite relation between the temperature and the eruption, which was not fully developed till three or four weeks after the onset of fever; 4, the occurrence of profound constitutional affection without any [illegible] induration about the local sores. Dr. Yeo, in conclusion, called attention to the opinions expressed by Sir William Gull, Sir James Paget, Mr. Hutchinson, and others, in the debate on syphilis at the Pathological Society, and referred to [illegible] observations on the pyrexia of syphilis. He also pointed out the important pathological analogies and practical suggestions to which a case like this gave rise. Dr.

MACLAGAN said that thanks were due to Dr. Yeo for bringing forward this case, such instances of pyrexial syphilis being very infrequent. For the reason, however, that vesicular eruptions were so unusual in syphilitic subjects, it might be that Dr. Yeo had erred in calling his case one of syphilis. In typhoid, pyrexial symptoms were sometimes alone present, without any bowel-complications. He inclined to regard syphilis as an accident in Dr. Yeo's case, which was probably one of blood-poisoning or typhoid fever.—The PRESIDENT instanced a case in proof of the belief, which he fully entertained, that vesicular eruptions occasionally occurred in syphilitic patients.—Mr. HUTCHINSON did not consider there could be any doubt that Dr. Yeo's case was one of syphilitic pyrexia; such cases were not very uncommon, and sometimes pyrexia and severe illness were accompaniments of early stages of the disease. He did not think there was any absurdity in styling the eruption a syphilitic variola, and many patients found admission to a small-pox hospital by reason of presenting such a rash. A private case in point had recently occurred within his own experience. Was the syphilitic eruption exactly like variola? He did not feel quite certain that Dr. Burney Yeo had obtained the exact date at which his patient was infected; still, though the period of inoculation was a short one, it was not improbable that it might be truly stated.—Dr. DUCKWORTH said he had seen many cases of syphilitic fever, chiefly among women.—Mr. M. BAKER suggested whether the case was possibly not one of syphilis, the sores not being indurated, nor the glands much enlarged, and the eruptions not having been diagnosed as syphilitic.—Dr. COUPLAND inquired whether the fever might not have had a septic origin from the neglected ulcers which had been found on the penis.—Dr. TONGE-SMITH narrated the history of a case admitted to the London Fever Hospital, in which an eruption was thought to be erythema nodosum. The temperature of the patient fluctuated between high and normal; but at length, enlarged inguinal glands being observed, together with falling away of hair, etc., suspicions of syphilis were entertained, and mercury administered, with resulting cure.—Dr. STRUGNELL detailed the account of a similar case observed at the Small-pox Hospital.—Dr. BURNEY YEO, in reply to Sir Andrew Clark, said that no sweating occurred in his case. The similarity between the temperature-chart it presented and that of typhoid fever had been recognised, but it was not possible to entertain the theory of the case being one of typhoid. Dr. Duffin diagnosed it as febrile syphilis, and the patient himself had afforded the information that he had become infected. Septic fever had also been thought of, but excluded, as an explanation of the symptoms.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 11TH, 1884.

Sir JOSEPH FAYRER, K.C.S.I., M.D., F.R.S., President, in the Chair.

Treatment of Irreducible Hernia.—A paper on this subject was read by Mr. THOMAS BRYANT, which will be found in full at page 307. —Mr. A. PEARCE GOULD suggested that in hernia which was partially reducible, the effectiveness of the truss might be increased by some special adaptation of pressure over the inguinal canal.—Mr. FRANCIS MASON enquired whether the hernia could be cured by this means. After a few words from the PRESIDENT, Mr. THOMAS BRYANT said the pad, as he used it, had a rigid border, and, so far as could be, did fulfil the condition referred to by Mr. Gould.

On Lupus, with special reference to certain Rare Forms.—A long and elaborate paper on this subject was read by Mr. JONATHAN HUTCHINSON. He desired, he said, to enlarge somewhat the scope of the term lupus. It was customary to recognise but two forms of lupus, lupus vulgaris, and lupus erythematosus; and some authorities questioned the advisability of bringing even these two forms into close juxtaposition. He, however, thought that not only these two forms, but some other processes ought also to be classed with lupus. Not long ago, the class of cases now concluded under the term rodent ulcer, were spoken of as lupus. Lupus might be defined as a slow, creeping, and inflammatory form of new growth, which effects only the skin and mucous membranes. The histology of lupus as a disease of the corium was now well established; the histological changes that had been recognised were all products and not causes; so that it was necessary to define lupus by its clinical features. When the lupus-process was once established, we had to deal with an infective connective tissue-growth which spread by continuity of tissue. In lupus vulgaris, multiplicity was the exception; but the process had so much infective vigour that it was constantly spreading at the border, and had little tendency to spontaneous cure. Though lupus erythematosus differed very distinctly from lupus vulgaris when typical cases were compared, yet there were aberrant cases which filled up the gap. For instance, lupus vulgaris might be multiple. Further, lupus vulgaris varied much, according to the situation which it affected. On the hands and feet the cellular tissue was more involved, and the resulting scar often led to considerable deformity. There was a form of disease in which acne was mixed with lupus; this occurred in lupus of the nose, and the acne-pustules were liable to take on a lupoid condition. Dr. Tilbury Fox had described this condition under the name disseminated follicular lupus. He applied the term eczema-lupus to a condition where the infiltrated skin wept like eczema, but where the disease was very intractable, and, when it receded, left scar-tissue. It was quite uninfluenced by ordinary treatment. The disease, he thought, often began as an eczema, and subsequently took on the lupus-process. He next referred to a peculiar lupoid affection of the hands, which led to extreme deformity, owing in part to arrest of growth, and in part to interstitial absorption of bones. This was brought about by a diseased process which affected the cellular tissue, and also the skin, which had a red, glazed, thin, scar-like appearance. To this condition he applied the term lupus mutilans. He had applied the term lupus marginatus to a malady in which there was a very superficial lupoid process. The patches spread very slowly by a papular margin, and, when they passed away, left a scar. That the term lupus erythematosus ought not to be applied to these cases, appeared to be shown by the fact that the patches were not symmetrical, nor was there any erythema. Mr. Hutchinson passed on to the consideration of the disease to which he applied the term lupus lymphaticus. He had now met with three cases. It consisted essentially of lymph-warts, attended by a certain amount of cell-growth. The disease spread very slowly, and remained for years with very little change. The disease was also attended by the formation of little vascular tufts, but was not in the least symmetrical. Lastly, he said that he thought there was good ground for regarding Kaposi's disease as "a family form of lupus," by which he meant a disease which manifested itself in several members of the same family. The history of these patients was this. The child was born with a healthy skin, but of such a delicate texture that it could not bear ordinary exposure to air and sun. The skin inflamed in a peculiar way, ulcerated, and remained ever afterwards diseased. The disease occurred on the face, the backs of the hands, and, if they were exposed, on the legs. The most remarkable feature of the disease was that, later on, great fungous masses of granulation sprang up, which had the structure of epithelial cancer, but which did not affect the lymphatic glands, but caused the death of the patient by the number of the growths occurring on different parts of the surface of the body, and not by infection of internal organs. He believed the disease was a modified form of lupus erythematosus. [The paper was copiously illustrated by many admirable water-colour drawings.]—Dr. RADCLIFFE CROCKER did not think that Kaposi's disease could be classed with lupus. He felt it impossible to discuss so elaborate a paper as Mr. Hutchinson's, which had evidently been for him a labour of love, without having first carefully studied it.—After Mr. STARTIN had made some remarks, the PRESIDENT thanked Mr. Hutchinson for his valuable paper.

Thermostatic Nurse.—Dr. CLEMENT GODSON exhibited before the meeting a *couveuse*, or "nest," for infants requiring an uniform warm temperature. The apparatus, which had room for two cradles, was made by Messrs. Hearson, of Regent Street, and the temperature was regulated automatically, in the same manner as in the incubator made by the same firm.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 8TH, 1884.

GEORGE P. FIELD, M.R.C.S., President, in the Chair.

President's Address.—Upon taking the chair for the first time as President, Mr. GEORGE P. FIELD addressed a few words to the meeting, congratulating the Society, not only on its successful career in the past, but on its present prosperity, shown by the number of its members and the sustained fulness of its meetings, and especially on the promise of its increasing usefulness in the future, of which no better proof could be given than the titles of the papers to be read at the ensuing meetings during the session. For much of this success the Society was indebted to the untiring zeal of the Honorary Secretaries, Dr. W. H. Lamb, whose labours had just come to an end, and Mr. J. Ernest Lane.

Subperiosteal Hæmorrhage in Infantile Scurvy.—Mr. EDMUND OWEN recorded a case of infantile scurvy, the patient, a girl of twenty months, having recently been under his care at St. Mary's Hospital. She was anæmic and of leaden hue, and lay moaning in bed; her right lower extremity was immensely swollen from superiosteal hæmorrhage around the femur; the skin was white, tense, œdematous, and glistening, it was never reddened or hot. The gums were swollen, spongy, and bleeding; the ribs were beaded, and the radii enlarged at the carpal ends. The mother had died of phthisis, and the infant had been brought up on condensed milk and the various patent foods—a typical scurvy-diet—with none of that valuable antiscorbutic, fresh cow's milk. The treatment comprised warmth, cod-liver oil inunctions, fresh cow's milk, and water, the sweetened juice of fresh oranges and vegetables, together with elevation and compression of the limb. The surface of the femur, explored with a fine cannula and trocar, was found extensively stripped of its periosteum, but there was no suppuration. At once the patient began to improve, and in four weeks its convalescence was completely established, the effused blood being entirely absorbed. Mr. Owen expressed surprise at such cases being rarely recorded in London, where many hand-fed children subsisted on a scurvy-diet. Possibly, some genuine cases of infantile scurvy were overlooked by the practitioner, because the gums did not happen to be spongy; or, again, as had been suggested by Dr. Cheadle, the scorbutic origin of certain spongy gums might not be recognised because the other signs of scurvy were absent. The characteristic symptoms of scurvy did not always go hand-in-hand. The report ended with a strongly adverse criticism of the general employment of condensed milk and of the speciously advertised artificial foods, without an adequate supply of fresh milk. Infants often refused cow's milk because it was not sufficiently diluted.—Dr. **Buzzard**, from his experience of scurvy in the Crimean war, expressed the opinion that association with rickets was by no means necessary for the production of such a condition as that described by Mr. Owen. He had seen many instances of periosteal hæmorrhage occurring, along the front of the tibia, for example, and on the inferior maxilla, in men suffering from scurvy alone. Nothing could be more important than the observations of Dr. Barlow, Dr. Cheadle, and others, upon the condition found in improperly fed children. Although usual sponginess of the gums was no necessary symptom of scurvy, he thought it might be absent in about 20 per cent. of the cases, even when the other features were very strongly marked. Another diagnostic point of great importance was the presence of ecchymoses, often overlooked, or attributed to accidental bruises. The recognition and appropriate treatment of scorbutic affections rescued a patient from grave peril, and ensured a recovery remarkably rapid and complete.—Dr. **Cheadle** had studied the disease in seven children, his observations having been the first to draw attention to the subject. He attributed the malady to the use of artificial foods, which lacked the fresh vegetable quality, and were generally deficient in nitrogen. This evil should be met, in cases where cow's milk was not tolerated, by raw meat, meat-juice, and potato-mash. He had, however, seen a case of infantile scurvy recover completely under the exclusive use of Swiss milk. He endorsed Dr. Buzzard's remarks concerning spongy gums; but, in his experience, bruises were not often observed.—Dr. **Symes Thompson** alluded to the causation of pulmonary hæmorrhage from a scorbutic tendency, and gave an instance in point.—Mr. **John Morgan** pointed out that the subperiosteal hæmorrhages showed no tendency to suppuration in scurvy, and submitted that the hæmorrhagic affection might involve the medullary cavity of bone as well as the surface.—Mr. **Pepper** suggested that effusions of blood such as were displayed in the specimens exhibited were not unfrequently the artificial result of injections performed after death. It should be borne in mind, in diagnosing rickets, that beading of the ribs occurred normally at their pleural surface. In his reply, Mr. **Owen** stated that he had failed to discover in rickets that tenderness of the bones which Sir William Jenner had described.

Deformities of the Fingers and Toes.—Mr. **Noble Smith** reviewed the following subjects: 1. Congenital hypertrophy of fingers and toes; 2, deficiencies of digits; 3, rudimentary digits; 4, intra-uterine amputations, etc., by the pressure of the umbilical cord or of fine membranous bands; 5, budding of digits at the extremity of a stump; 6, double hand; 7, supernumerary digits; 8, cleft thumb; 9, union of the fingers at the tips; 10, web-formation; 11, permanent contraction of fingers. The etiology and the surgical treatment of many of these conditions were discussed; and illustrative drawings were circulated.—In the ensuing discussion, Dr. J. Thompson and Mr. Pepper referred to the subject of maternal impressions, and Mr. Noble Smith replied.

ALDERSHOT MILITARY MEDICAL SOCIETY.[1]

Monday, December 3rd, 1883.

Brigade-Surgeon Warren, A.M.D., in the Chair.

The Medical Department of an Army Corps in England and in India, with Suggestions as to Militia and Volunteer Aid.—Surgeon-Major **Evatt** (Woolwich) read a paper on this subject, illustrating his remarks with diagrams exhibiting the relation of the medical to the fighting units in the field, and tables showing the relative strength of the English and Indian field-hospital establishments. Speaking of the necessity that combatant officers should study the organisation of the medical service, he said that every general officer commanding a district was still absolutely responsible for the efficiency of the medical service within his command. While the combatant officers claimed the supreme control of the army, they had duties as well as rights; and one of the duties was to inquire into and aid the medical service in its struggle after efficiency. He said that, in the present day, rapid movements were the rule in war, and the army that could move most readily was the most effective. The sick or wounded soldier was of all things the heaviest incumbrance a military commander could have. Our new system, modelled mainly on the German, aimed at freeing the front of the army from all sick and wounded men. Such freeing of the fighting line meant, above all things, efficient hospitals, to which the wounded and sick could be sent while the effective troops pursued the enemy. The tendency, then, of this change was to place four-fifths of the medical service in the rear, and to diminish the medical force in the front. The large hospitals in the rear of an army could never be regimental, they must be army hospitals; and it was at teaching men how to work these war-hospitals that unification aimed. Further, in our old regimental system there was no effective organisation for the removal of the wounded. Even up to 1867, the Director-General, the Chief of the Transport, and the Chief Purveyor, were disputing as to who should be responsible. It was now known that the medical department was responsible, and the bearer-company was developed for this important work. No battalion-surgeon could carry with him on to the battle-field the equipment for giving stimulants and performing operations during a battle. He could give primary aid, but the central dressing-station must be a divisional organisation. As to the field-hospitals, the staff allowed to work them was so completely below the necessary number, that efficient work could hardly be expected; and the want of men to supply water, to act as sanitary pioneers and as washermen, paralysed good work. No general officer, nor any army surgeon, had yet seen a field-hospital pitched and equipped for work in England. These hospitals were all stored away in Woolwich Arsenal. Dr. Evatt finally pointed out the need of a medical militia, organised as a militia battalion of the Army Hospital Corps, and the desirability of providing bearer-companies and field-hospitals for the Volunteer force, and felt sure that, if these organisations were properly worked, a reserve of men for war could be obtained. At present, the Army Hospital Corps was so weak that it was impossible for it to be efficient in the field in any large war.—On the motion of the **Honorary Secretary**, the discussion on the paper was postponed.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

Tuesday, February 12th.

McCall Anderson, M.D., President, in the Chair.

Discussion on Albuminuria, its Pathology and Clinical Significance.

Dr. Newman remarked that, in the brief time at his disposal, it was not possible for him to discuss the whole pathology of albuminuria. He would therefore content himself by bringing under the consideration of the meeting one or two points in connection with the relationship of albuminuria to the morbid structural changes in the kidney. The questions which presented themselves most prominently for discussion appeared to him to be—1, why did the urine not normally contain albumen? and 2, what were the renal changes associated with the presence of albumen in the urine, and how did they explain its absence from the urine in health, and its presence in diseases of the kidney. After describing the normal structure of the kidney, and the physical conditions concerned in the secretion of urine, he drew attention to the circumstance that, in certain diseases, the lymphatic spaces in the kidney became enlarged (parenchymatous nephritis), while in others they were occupied and obliterated by inflammatory products (interstitial nephritis). After enumerating the various theories which had been advanced to explain the physiological secretion of urine, he supported the idea that, along with the other constituents of the urine, albumen filtered through the glomeruli, but was reabsorbed by the tubal epithelium, when the kidney was healthy; but when the nutrition of the epithelium had been interfered with, and its function impaired, the albumen, which would otherwise have been absorbed, appeared in the urine. He illustrated his remarks by describing two cases, one of interstitial nephritis, the other a case of parenchymatous nephritis, and showed why in the former the quantity of urine was large and the amount of albumen small, whereas in the latter the opposite condition obtained. The polyuria was explained by the fact that in interstitial nephritis the lymphatics were obliterated and the capillaries were separated from the tubules by inflammatory new formation. These circumstances interfered with the reabsorption of the watery constituents, while the degenerative changes in the epithelium commonly associated with this disease permitted a certain portion of the albumen to pass. The diminished elimination of urine in parenchymatous nephritis was explained by the circumstances that in this disease the lymphatics were enlarged, the epithelium desquamated, and the capillaries were in close proximity to the urine containing the tubules, so that osmosis towards the vascular and lymphatic systems was facilitated. The principal causes of albuminuria, resulting from organic lesions of the kidney, appeared to be—(1) increased tension of the blood in the glomeruli, from whatever cause it might arise, whether from increased afferent pressure or undue efferent (capillary or venous) resistance; (2) inflammatory and degenerative changes in the renal epithelium; the first causing an increase in the escape of albumen from the blood, and the second interfering with the proper reabsorption by the uriniferous tubules. These facts, together with the circumstance that inflammatory exudation might escape into the tubules, either from their own walls or from Bowman's capsules, when the Malpighian bodies were the seat of acute inflammation, accounted for most cases of albuminuria, where the kidneys were the seat of structural changes.

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[1] The publication of the proceedings of the meeting now reported has been delayed in consequence of the illness of the Secretary of the Society.

Dr. **William Roberts**, of Manchester, said that the gentlemen present would not expect anything of a systematic nature from him, and he would therefore pick out a few points suitable for discussion, without heeding the importance of the matter he omitted. Albuminuria was found associated with degenerative changes of the kidney, with pressure on the abdominal veins, and with febrile affections, but it was also met with it in perfectly healthy persons, and this class of cases should be more inquired into. He would like to refer to two points in connection with the albuminuria of Bright's disease. 1. When albuminous urine was added, drop by drop, to a large quantity of water, a milky trail followed each drop, and at last the whole fluid became opalescent. This opalescence disappeared on the addition of an acid or alkali, and was probably due to the presence of globulin or paraglobulin. 2. The second point had a relationship to prognosis, viz., that albuminuria, associated with hypertrophy of the left ventricle, was usually permanent. He drew attention, however, to a case which was a notable exception to this rule. He afterwards discussed physiological albuminuria in its various aspects, and gave an outline of the usual course of events in such cases, referring briefly to several which differed considerably from the type he had described. He believed that in a large majority of individuals there was a normal insensible albuminuria, which was only to be appreciated by the most delicate methods of testing, and regarded the so-called cases of physiological albuminuria as an exaggeration of this condition. Leube had found albuminuria in 16 per cent. of healthy soldiers examined, and Saundby in 18 per cent. of the patients presenting themselves at the Birmingham Dispensary. He did not propose to go into the mechanism of the albuminuria in these cases, as it was not to be regarded as different from that in the graver sorts, but there was need of inquiry in order to separate and group them, and to find whether different kinds of albumen were present. He concluded his remarks by a short reference to the various methods which had been recently advanced for the more delicate detection of the presence of albumen in urine, and stated his belief that the older methods, by heat with acetic acid, and by nitric acid, were more to be relied upon, if carefully carried out, than any of the former. He also stated in detail his opinion that picric acid might give a reaction, due to the presence of mucus, where no albumen was present.

Dr. D. J. **Hamilton**, of Aberdeen, drew attention to the fact that it had been accepted that the capillaries of the kidney, unlike those in other parts of the body, had the power of resisting the passage of albumen through their walls. He stated that Ludwig had advanced the theory that albumen did pass through the glomerulus, but that most physiologists had refused to accept this view. Heidenhain advanced the theory that the epithelium of the glomerulus had the power of preventing the escape of albumen into the tubules, although it passed from the vessels forming the Malpighian tuft. It was believed by the supporters of this view that the lymphatics surrounding the glomerulus carried away the albumen which had thus transuded. But Dr. Hamilton did not commit himself to any of these views. Heidenhain supposed that in cases of physiological albuminuria the nutrition of this membrane was interfered with by a poison. In cases of albuminuria in valvular disease of the heart the usually received opinion was that the albuminuria arose from retardation of the circulation in the venous system. Cohnheim, however, considered that anæmia, by causing malnutrition, encouraged the appearance of albumen in the urine. Dr. Hamilton recited a number of experiments, both in favour of and against this theory, and came to the conclusion that the older opinion was probably the correct one. He then discussed some physical experiments performed by Runeberg, to show that the quantity of albumen which filtered through an animal under pressure had a direct ratio to the pressure employed, up to a certain point, which point being exceeded, the percentage of albumen in the filtrate diminished rather than increased, and that, on again lowering the pressure, the amount of albumen increased. In conclusion, Dr. Hamilton referred at some length to the explanation of certain of the complications of Bright's disease, which he regarded as probably being due to some alteration in the specific gravity of the blood-serum.

The discussion will be continued on Tuesday, February 19th, by Professors Gairdner and Greenfield, Drs. Mahomed, Mortimer Granville, and others. All members of the medical profession are invited to be present.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

January 24th, 1884.

H. F. Banham, M.D., President, in the Chair.

Abdominal Tumour.—Mr. E. **Skinner** introduced again the boy with abdominal tumour, shown before the Society on November 22nd, 1883. The tumour had much increased in size.

Pyloric Cancer.—Mr. C. **Atkin** exhibited a specimen of cancer of the pylorus.

Tumour of Pons Varolii.—Dr. **Banham** showed a brain having a tumour situated in the left half of the pons Varolii, and spoke of the difficulties which often beset the diagnosis of cases of cerebral tumour. At the same time, he pointed out that the paralysis of the limbs of the right side, of the right side of the tongue, the left side of the face (the upper branches of the facial nerve being also involved, so that the patient could not close the left eye), and of the left external rectus, had rendered it possible to localise with more than ordinary certainty the exact situation of the lesion in this case.

Scirrhus of Iliac Fossa and Internal Organs.—Dr. **Thomas** exhibited some morbid specimens from a patient who had died at the Sheffield Public Hospital. They were a scirrhous tumour in the right iliac fossa, implicating a portion of bowel; scirrhus of the peritoneum, liver (implicating the common duct), lumbar glands, diaphragm, and lower part of the right lung. Sections of the same, prepared by Dr. White, the house-surgeon, were also shown. Dr. Thomas drew attention to the fact that palpation in this case afforded no aid to diagnosis, and that this case showed that malignant disease extends by contiguity of structure, as it had evidently extended from the pleural surface of the diaphragm to the base of the right lung.

Writing and Reading in Schools.—Mr. **Simeon Snell**, in introducing this subject, referred to the influence of school-life on the causation of myopia, and alluded to the importance of adopting methods which would keep the pupils at a good distance from their tasks. The ordinary slates in common use had for long been deemed unsatisfactory, from the little contrast between their surfaces and the pencil-markings, very different from that existing between the pen-and-ink marks on white paper. Allusion was made to the experiments in schools at Zurich, under Professor Horner, of the substitution of white paper and ink for the ordinary slates. Moreover, Cohn of Breslau had devised non-shining slates, made of white composition, on which marks were made with ordinary lead or specially prepared black pencils; these marks were easily rubbed out. Specimens of these slates were exhibited, and their employment recommended; and Mr. Snell stated that he had hopes that in one large school in Sheffield they would be adopted. Reference was next briefly made to the printing of books, and allusion made to the very valuable and interesting articles in the *Annales d'Oculistique*, some short time since, on the Physiology of Reading, by Javal. This observer had discovered the important fact that, in reading, the eye travelled along the upper part of the line, the lower being more indistinctly seen. Examples of printing illustrating this were exhibited.

Gangrenous Enteritis.—Mr. C. **Atkin** read a paper on a case of gangrenous enteritis, making some remarks on enterectomy and enteroraphy. The case was as follows. A painter, aged 30, was seized, four weeks before admission into the infirmary, with pain in the abdomen and continuous vomiting. The case was thought to be one of colic, and treated with enemata and purgatives; but no motion or flatus ever passed from him. When first seen at the infirmary, he was extremely emaciated. There was no hernia, nor had he ever had one; no hardness along the colon or rectum; no stricture to be detected *per anum.* An enema could be distinctly heard with the stethoscope ascending and traversing the colon. A consultation being held, Mr. Favell determined to give the man a chance, however small, of being relieved by operation. Abdominal section was performed, and a loop of bowel was found to be gangrenous. As the man was moribund, it was decided to do no more, and the wound was closed. At the necropsy, next day, the bowels were first carefully examined *in situ.* No internal hernia, band, or twist, was to be found. They were then removed, and carefully examined inch by inch. No hard fæces, diverticula, or stricture were visible. The heart was healthy; but his arteries were diseased, and the kidney showed commencing granular changes. Mr. Atkin then commented on the rarity of localised death of a loop of bowel arising *de novo;* and, after enumerating various causes, came to the conclusion that it was probably due to the state of the arteries, a branch probably becoming thrombosed. Allusion was made to the unusual duration of the case, and to the equivocal character that the first symptoms must have presented. The question of treatment was then gone into; and, it being assumed that abdominal section would have been performed had the case been seen earlier, the point what to do with the gangrenous bowel was discussed. Summaries of the cases of Kœberlé, Czerny, Schede, Sutton, Meusel, and Prati were read, and the different methods of suturing the bowel mentioned. The author then showed that stricture of the bowel never resulted, because union took place by the first intention; that the spur formed by the involution of the mucous coat was no impediment to the passage of fæcal contents; and that there was no danger of the sutures being burst open by flatus. The special clamps invented by Mr. Treves and Mr. Stanmore Bishop were mentioned, but were stated to be unnecessary, as several cases had done well without them, notably the recent one of Mr. Banks.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, JANUARY 4TH, 1884.

G. M. HUMPHRY, M.D., F.R.S., President, in the Chair.

Protrusion of the Eyeball.—Mr. GRAY (Newmarket) brought this patient before the Society. He was 52 years old, and by occupation a carpenter. His mother died at 80, being paralysed for thirty-five years. In June, 1879, he was attacked with severe neuralgic pain in the sternum and both sides of the chest, and recovered in about a week. Seven months afterwards he had a second attack, the suffering being very intense. He was sick also, and brought up much blood on several occasions. The left leg became swollen and painful, and soon he became paralysed on the right side, with loss of speech, the attack lasting only three hours. The pain continued with great severity for three or four months, and every kind of remedy was tried without any success. In March, 1883, he first complained of obscure pain around the right orbit, and the pupil was much dilated. Shortly after this the eyeball began to protrude, and this increased.—Mr. BALDING (Royston) related a case occurring in a boy, of extreme protrusion of the eyeball accompanied by mania, and followed by complete recovery.—Dr. SMITH (Newport) thought it might be a case of multiple growths affecting the brain. The PRESIDENT considered the protrusion most likely to be due to some malignant growth at the back of the orbit. He could not account for the attack of paralysis and pain.

Dislocation of Knee-joint. Dr. RANSOM described this case. An elderly man twisted his knee by a fall of ten feet into a cellar through a trap door. The leg was flexed, and the tibia was displaced outwards from the femur, and the internal condyle of the latter could be felt on the inner side of the joint. The ligaments appeared to be torn through. The dislocation was easily reduced by extension and rotation, and the limb was afterwards fixed in splints, and ice kept constantly applied to the joint. The man recovered with an useful joint.—Mr. CARVER showed a patient who had been under his care some years ago at Addenbrooke's Hospital with dislocation of the knee-joint. There had been great difficulty in reducing the dislocation, and keeping it in position. The movements of the knee after recovery were not quite as good as before.

Retention of Urine in Fœtus, causing Difficulty in Delivery.—The PRESIDENT showed a specimen which had been presented to the Museum many years ago by Dr. Goodwin. The description written with it was as follows: "Greatly distended bladder, with pelves and calices of kidneys also dilated. Urethra and ureters pervious. From a fœtus born at full time. The mother had been [illegible] during the latter period of pregnancy. There was a large quantity of amniotic fluid. The enlarged abdomen of the fœtus impeded delivery, and rendered forcible traction necessary. There was a quart of fluid in the peritoneal cavity, and a pint in the bladder." Dr. Humphry remarked on the rarity of this specimen. The cause of the distended urinary apparatus was very obscure. The child was a female, and no obstruction could be found. Physiologically, there was little known for certain about the secretion of the kidneys in the fœtus, at what time they began to secrete, and what became of their secretion or of the nitrogenous elements in intra-uterine life. Evidence seemed to be clear that the bladder of newly born children often contained urine, but how long before birth it was secreted was not known. The question arose, in this case, whether the condition might have been caused by an abnormal increase in secretion of urine, or by some difficulty in disposing of it when formed. The amniotic fluid was found to be in excess, and was considered to be in part an excretion from the fœtus.

Typhoid Fever Complicated by Nephritis.—Mr. MILNES read the notes of this case. A nurse, who had been nursing cases of typhoid fever, was admitted into Addenbrooke's Hospital suffering from high fever and pain across the loins; her urine was scanty, thick and bloody, highly albuminous, and contained casts. There was no dropsy. She said she thought she had caught cold during a catamenial period a week before, and ever since had suffered from langour, feverishness, and pain across the loins. Five days after admission, a copious eruption of typhoid spots appeared, and for several days there was moderate diarrhœa. The fever ran a rather short course, and the albumen gradually disappeared from the urine.

Intussusception of the Bowel in a Child.—Dr. SMITH (Newport) showed this specimen removed from a child, nine months old, which died a few minutes after it was first seen. The history was acute, four days before death vomiting commenced, and was continuous, becoming fæculent. The bowels were obstructed, and some bloody mucus passed. The *post mortem* examination showed that intussusception of the small intestine had taken place for some distance, commencing at the ileo-cæcal valve.

REVIEWS AND NOTICES.

THE DURATION OF LIFE IN DUNDEE, AND THE CONDITIONS WHICH INFLUENCE IT. An Address. By A. M. ANDERSON, M.D., Medical Officer of Health for Dundee. 1883.

THIS address was given to a mixed audience of ladies and gentlemen, and was well suited to its purpose, bringing out forcibly, as it does, some prominent facts relating to town-mortality and its unsanitary causes. It demonstrates very forcibly that the duration of life in Dundee falls far short of what it should, and might be, were the town placed in a proper sanitary condition.

In densely populated, and in manufacturing and commercial cities generally, the most prominent factor in the rate of mortality is the waste of child-life. Dundee offers a painful example of this circumstance. The death-rate among children under five years of age averages 67.63, whilst the general average, at all ages, is only 22.56. This fact comes out also in another shape, when the mean age at death in that town is compared with that of a rural population, *e.g.*, of Northumberland. Thus, whilst in the latter district the mean age of all who die, both old and young, is nearly sixteen years more than in Dundee, yet, when children are excluded and only adults above twenty are taken, the advantage of the country over the town reaches only eight years.

Deaths among children under five constitute 42.5 per cent. of the entire mortality of the burgh; whereas, were these reduced to the ratio of deaths of the whole population, they would be two-thirds less.

Considering that Dr. ANDERSON stood in the position of a preacher of sanitary reform, and, as such, had to arouse the consciences of his audience to its vast importance; to enkindle, in short, an enthusiasm in their minds in favour of his teaching, he may be excused for having represented infant-mortality as normally on the same level with that of adults, and reducible, by sanitary measures, to the same ratio. Yet no medical man would agree with it as a matter of fact, that infant-life is no more subject to disease and death than mature life. This being so, we must anticipate always a higher rate of mortality among children than among adults, and this in spite of all practicable sanitary measures. We prefix the qualifying word practicable, because sanitarians, in their zeal, sometimes indulge in rather visionary projects, considering the circumstances of the world, and of the social order and condition in which we live, and fail to give a distinct and complete statement of what they would enforce as sanitary measures. But if we turn to those unsanitary conditions to be removed, we are brought into contact with not a few which seem inseparable from our position as citizens of a country in which manufacture and commerce are essential elements.

Dr. Anderson has instituted a comparative examination of the expectancy of life among the citizens of Dundee, divided into four classes: (1) gentry, professional men, merchants and employers of labour; (2) tradesmen, shopkeepers, and similar persons; (3) workers in mills, [illegible] and clerks; and (4) all other wage-earning persons. Thus, whilst the mean age at death of all who died above twenty years of age was 52.34 years, it was, in Class 1, 64.54; in Class 2, 51.37; in Class 3, 49.68; and in Class 4, 53.61. These figures show how heavy the mortality is of the people employed in factories, exceeding, in fact, that even of the ill-defined class of labourers, who, as far as wages and the conditions of existence are concerned, may be supposed to be less favourably placed than the mechanics.

Much could be written by way of comment upon the several facts so well brought out by the writer of this address; but this is not the place for so doing. We will, therefore, content ourselves by observing that the state of the habitations of the working-classes in Dundee, offers, in a high degree, an explanation of the heavy death-rate of the working-classes, and of the propagation of zymotic diseases among them. A very patent practical deduction from the state of things revealed is, the necessity of means of isolation where zymotic disorders make their appearance. The experience of Glasgow is quoted to show what may be done by isolation; thus, in that city, after the opening of a properly constructed fever-hospital, the deaths from fever were reduced from 20.24 per 10,000 to 7.09 per 10,000.

In continuation of his arguments for sanitary improvements in Dundee, Dr. Anderson notes the results of his own investigations into the state of the sewerage, and of the drainage of the houses, and is able to show how directly typhoid fever and diphtheria were traceable to defects in those matters.

He is very hard—but, in our opinion, rightly so—upon the plumbers, and advocates their being licensed by the local authorities, their supervision by a competent town officer, and their liability to punishment, as guilty of misdemeanour, for badness of work. A similiar liability he would attach to the builders of houses for any defects dangerous to health in their construction. Here we must conclude our examination of this instructive address.

COFFEE AND TEA. A Lecture. By G. V. POORE, M.D. London: H. K. Lewis. 1883.

THIS is one of the many good practical lectures which have been given at the Parkes Museum; and we are pleased that Dr. POORE, who is Vice-Chairman of Council of the Museum, has issued his very interesting remarks in pamphlet-form. The lecture contains a large amount of information, very pleasantly conveyed, and should be in the hands of all who value their Mocha; not that that particular district of Arabia now furnishes the chief supply of coffee; it is largely surpassed in production by almost every one of the coffee-exporting countries of each hemisphere. Dr. Poore begins his lecture by a reference to the almost universal use amongst mankind of the alkaloid-containing luxuries, tea, coffee, cocoa, and tobacco. He then compares and contrasts tea and coffee as beverages, and devotes the last three-fourths of his remarks to coffee, as he believes there is a real need of instruction in the matter of this most valuable article of diet. He traces the history of coffee from its earliest use amongst the Turks, and its introduction into London in 1650, to the present day, and shows that its consumption in Great Britain is unfortunately declining, whilst that of tea is yearly increasing. He describes the various kinds of coffee, and their prices, and shows that the berry improves with age for fifteen or twenty years, if kept in a dry place. He describes the microscopical and chemical characters of the seed, its caffeine and essential oil, and the changes it undergoes from roasting, which are chiefly in the development of its aroma, and its being rendered brittle and pulverisable. Just after roasting, coffee is at its best, and, from that moment, begins to lose its aroma, which is due to a highly volatile body that is quickly dissipated. As Dr. Poore says: "Those who wish to enjoy really good coffee must have it fresh roasted. On the Continent, in every well regulated household, the daily supply of coffee is roasted every morning. In England, this is rarely done. There should be no difficulty about it……Why should not a dairyman combine coffee-roasting with his business, and leave at our doors with the morning milk a supply of fresh roasted coffee for the day's consumption?" He then speaks of the grinding or pounding of the berry, and then comes to the making of coffee, for which purpose two ounces of coffee should be used for each pint of water; and the author insists upon the other points to which attention must be given to insure a really good cup. He shows its value to the labouring classes and others, and notices that Great Britain consumes less coffee per head of population than any other civilised country of the world. The reason of its diminishing consumption here, Dr. Poore thinks, is to be found in the wholesale adulteration of coffee, which is systematically encouraged by the Government. He speaks of the valueless substitutes which are foisted upon the public with ground coffee, and sold at it's own price. This roasted rubbish should no longer be allowed to appear as coffee, and injure digestion, if it do nothing worse. Coffee should be as carefully protected from adulteration as is tea. The fight against this crying evil seems certainly to be a work which the temperance party might well take in hand, and in the doing of which they might expect help from all other classes of the community, whilst the supply of pure coffee would tend powerfully to increase temperate habits among the masses.

REPORTS AND ANALYSES

AND

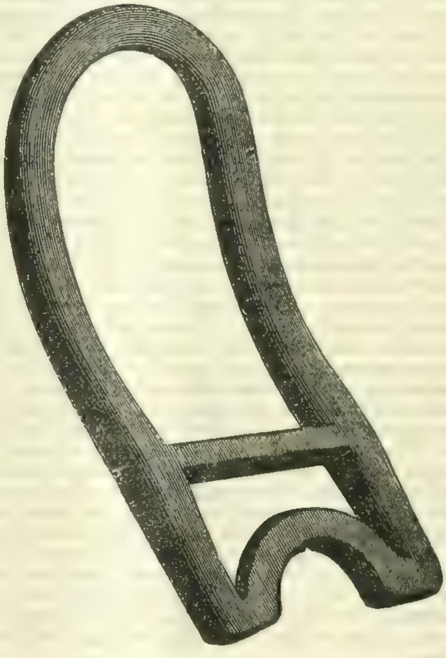
DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW FORM OF HODGE'S PESSARY.

SIR,—I beg to bring before the notice of the profession a new shape of Hodge's pessary, which will, I hope, be more satisfactory in application than those already in use.

The accompanying sketch represents the instrument, which has the following advantages. When *in situ*, the two shoulders pass forward to occupy the two small *culs-de-sac* at each side of the urethra, permitting the instrument to rest against the bone behind the symphysis pubis, which is now the real point of support. The pessary of the old shape rested against the urethra, which permitted it to slide forward across the mouth of the vagina. Further, the complete protection this shape gives to the urethra is evident, as it arches round and underneath it. Again, the urethra being central and occupying the hollow space, prevents displacement of the instrument to either side, which frequently happens after insertion of pessaries of the old shape. It is impossible for one round object (front of the old pessary) resting against another round object (the urethra) to retain its position, as it would naturally slip off to either side.



Another improvement is that the crossbar is placed on the upper part of the instrument, so as to catch the cervix uteri higher up, as in cases of retroversion. Another feature is the inclination of the semicircular notch, serving to further relieve pressure on the urethra.

Messrs. Grattan and Co., of this town, have made the instrument for me in four different sizes, and I have found it to answer my expectations fully.—I am, sir, yours faithfully,

Belfast, January, 1884. WM. AICKIN, M.D.

VACCINATION.—The Local Government Board have awarded to Dr. W. F. Sheard, Public Vaccinator of the Putney District, a grant of £13 5s. for efficient vaccination. This is his second grant.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 16th, 1884.

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THE MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

THE progress made during three weeks appears to place the ultimate success of this Society beyond doubt, and to prove that the desires expressed for its establishment were not the mere outcome of theoretical approval. During this short time over 230 proposals for membership have been received; and the largeness and varied nature of the assurances chosen, indicate at once a general approval of the system, and confidence in the proposed mode of carrying out the work. Fortunately, too, the membership is by no means of a local or sectional character; proposals having been received from near and remote parts of England, from Scotland, Wales, Ireland, and the Channel Islands. As the Society may fairly be expected to extend itself by the influence of its members, such widely spread support is likely to be a source of strength in the future. But in proportion to the growth and importance of the Society, it is probable there will be criticism of its work, and keen examination of its bases. This is already evidenced by the reception of a large number of letters, unanimous in general commendation and approval, and containing further suggestions for perfecting and improving the work. Among these are some expressing doubt as to the wisdom of admitting candidates without medical examination, even for a short time at the foundation. It is by no means, however, to be assumed that all attempt at selection or supervision has been abandoned. The forms of proposal are being carefully and skilfully considered, and the Committee have not in any sense surrendered the right to call for further proof of health, when deemed necessary.

Another point raised, is the effect of the provision that there shall be no sickness-pay for illnesses of less than a fortnight's duration. It seems pretty certain that this would press hardly on many members, and the facts recorded on the proposal-forms go to show that it would have operated in restraint of its usefulness had the Society been in existence in the past. This, coupled with the fact that the rule was framed rather as an additional than a necessary safeguard, and that its relaxation would in no way touch the security of the rates, renders it more than probable that the members will be invited to reduce the minimum to a week, when the rules are finally submitted. Naturally the rates adopted have attracted criticism, but by no means of an unanimous character; some correspondents thinking them unnecessarily high, while others doubt their sufficiency. On the latter score, it is extremely unlikely that there will be any cause for uneasiness; while, if the former view be correct, the fact will soon be demonstrated, and it will be the duty of the members, and their elected representatives, to deal equitably with any ascertained surplus. The tables are founded on the assumption of the repetition of certain sickness-experiences which have been carefully tabulated and recorded at every separate year of life, and it will be one of the most important and interesting duties of the executive to see that the real experience is from the first exactly recorded and tested and compared with this assumption. It would be a misfortune if any sense of a trading contract should grow up: there can be no property in the reserves but that of the members, and if too much is being paid, the extra amount is not definitely parted with, but invested. It is necessary, however, to exercise great caution in forming opinions of the probable sickness-rate. Doubtless the frequent short sicknesses common in industrial societies are not likely to occur; but to set against this there is the danger of complete breakdown, or long periods of enforced rest, the too frequent result of fighting against nature, and devotion to duty. It must be borne in mind that the sickness-pay is never reduced below one-half the full rate, and is continued when necessary for an indefinite period. This is a sound and advisable system, and the risk thus incurred must be remembered in connection with the possible immunity from short sicknesses. At all events, safety should be a first condition at the commencement, and this has been the policy adopted; if over-caution have produced a pessimistic result, the remedy will be speedily possible; meanwhile, and until the unknown has become the certain, it is necessary to wait patiently for the development of facts. In the one direction in which the funds of the Society might be diverted from their legitimate purposes—that of expenses for management—there is no reason for misgiving. No appointment of an expensive nature has been made, and no heavy charges incurred; nor is there any intention to pledge the Society to any extensive working expenses until the members have been consulted; when the time comes, it will be found that the stipulated 10 per cent. of the premiums will be ample for efficient management. A special characteristic of societies of this nature, as distinguished from trading companies, is the ease and readiness with which the rules can be adapted to meet the suggestions of those who apply their thought and knowledge to the subject; it is, therefore, to be hoped the interest now so evidently evoked will be fully maintained, and that not only a numerical and financial success may be achieved, but that discussion and interchange of opinions may contribute to render the Society as nearly perfect as possible.

THE PROPOSED ROYAL COMMISSION ON THE HOUSING OF THE POOR.

AFTER the recent Circular of the Local Government Board, which seemed to show that, at that time at least, the Board did not consider any fresh legislation necessary, the announcement that the Government will probably accept Lord Salisbury's motion for a Royal Commission to inquire into the housing of the poor may have come to many as a surprise. Further consideration, however, will, we think, show that this course may be after all the wisest one to follow. The question has been, for the time at least, lifted out of the region of party politics; and for this, if for no other reason, we may congratulate ourselves on the decision of the Government. If those who believe that no further legislation is necessary (and, as we have already said, it has been broadly hinted that the authorities of the Local Government Board are among this number) be right, then the time occupied by the Commission in its inquiries need not be time lost, since it need not interfere with the application of existing remedies. If, on the other hand, those be right who believe that further legislation is necessary, then nothing but good can arise from a thorough sifting and examination of evidence such as can only be effected by a Royal Commission. Theories that read very well in a magazine article, and statements that pass as accurate on a popular platform, will not always bear the severe scrutiny of a Royal Commission; and one of the first necessities which will confront that now about to be appointed will be to define to some extent the scope of its inquiry.

All men are in their mental processes more or less the slaves of set forms of words, and are inclined to label, as it were, every difficult subject with a phrase. Once formed, though the subject to which it was applied may change, the phrase remains, until the discrepancy between fact and word becomes so glaring that common sense is revolted, and mankind consents to a relabelling. A writer in the current number of the *Nineteenth Century* states as an incontrovertible fact that, if returns were made, either of the increased health due to the skill of medical men or sanitarians, or of the pleasures due to the greater knowledge of the thoughts and acts of other men, it would be shown that neither length of days nor pleasure falls to the lot of the poor. Is this statement true? Is it an over-statement, or is it made about a section only of "the poor?"

It may at once be frankly admitted that mere increased density of population in urban areas must tend to diminish the general standard of health, and the general average of mental and physical happiness, unless each community, as it increases, places itself under efficient laws and regulations directed towards obviating these evil effects of crowding. That by obedience to wise sanitary laws the excessive urban mortality is in process of diminution, has been shown by various observations; but the following facts place the matter in a very clear light. The death-rate in urban districts in 1873 was 23 per 1,000, against 18.4 in the rural districts; in 1883 the death-rate in the rural districts had fallen to 17.7, and in the urban districts to 20.8. The urban death-rate is, therefore, seen to be declining more rapidly than the rural. Such facts as these ought to be remembered, when we are told that the advance of sanitary science has done nothing to give length of days to the poor. Sanitary science may well be proud to reflect that this improvement has been effected in spite of a disproportionate increase in the urban population.

The aggregation of people in urban areas has increased at a stupendous rate during the last two generations; the population of London almost doubled itself in the forty-one years before 1881, and during the last ten years of that period the population of several large towns, of Leeds, Sheffield, Bradford, Nottingham, Hull, and Leicester has increased still more rapidly. The urban population bears a larger proportion to the rural than ever before; taking cognisance of London alone, one out of every seven persons in England and Wales lives in London. When the census was first taken in 1801, the population of England and Wales was a little less than eight millions, nine hundred thousand; the population at the present day massed in the twenty-eight largest towns of England and Wales may be estimated, if we calculate correctly, at rather less than eight millions, eight hundred thousand. We shall be well within the mark if we say that, out of every three persons living in England and Wales, one lives in a large town. No wonder that the question of house-accommodation in urban districts has become pressing. We are thankful for every hint towards its solution, and a valuable contribution may be found in a very able address delivered at the Parkes Museum on the last day of January by Mr. H. A. Darbishire, the architect to the Peabody Trustees. While some people have been indifferent to the wants of the poorer classes, caring, like Gallio, for none of these things, and others have been theorising and evolving from their inner consciousness perfect systems for "housing the poor," those who have had the administration of the wise provisions of the Trust created by the most far-seeing of modern philanthropists have been making great experiments, and at last, after many years of trial and not a little disappointment, have arrived at certain results of the greatest interest and importance. We rejoice to see Mr. Darbishire contending for the absolute necessity of a working classification of the poorer classes, as a preliminary to any useful attempt to solve the difficulty of finding house-room in large centres of population. There was a time when even the skilled artisan was ever on the brink of absolute poverty; but the general advance in intelligence, and in the power of earning and appreciating the comforts of life, has not left the skilled artisan behind; there are many of that class who are actually as well off, and, therefore, relatively much better off, than the poorer members of the learned professions. In the eyes of many amateur philanthropists a dirty shirt, or a paint-bespattered coat are the outward and visible signs of a poor man, and the skilled labourer is classed with the incapable or the improvident in one great class which has been labelled "poor."

Now the experience of the Peabody Trustees on this head, as given by Mr. Darbishire and Sir Curtis Lampson, at the Parkes Museum, is important; they have found it possible to build dwellings for that section of the working classes whose average weekly wages are twenty-three shillings—with, be it observed, an upper limit of thirty shillings—and to obtain four per cent. on the capital expended. That this has been done without unduly pressing on the resources of the class appears to be proved by two facts: first, that there are many more applications for room in new buildings than can be met, and secondly that, though the weekly receipts are considerably over £1,000 a week, the bad debts do not amount to £100 a year. The industrious artisan or labourer, therefore, can be well-housed without the introduction of the eleemosynary principle; and that he can also be healthily housed seems to be pretty conclusively proved by the fact that the death-rate in the Peabody Buildings is 2 per 1,000 below that of the whole of London. It would seem therefore that the "doctors and sanitarians," working on the lines laid down and with the means supplied by Mr. Peabody, have succeeded in giving length of days to a certain appreciable section of the working class. But our greatest debt to the Peabody Trust is that it has provided the means for costly experiments, and has finally established the vastly important fact that capital can be invested in the provision of dwellings for the working classes on a sound commercial basis.

The most difficult part of the question, and one towards the solution of which we may yet hope to receive further assistance, is reached when, in a class below this, we find the poor who are so poor as to be, with more or less frequency, in want of the necessaries of life; to this class alone the phrase "the poor" is properly applied. It consists in part of unfortunate persons who have from various causes descended to it, and of those to the manner born. It is in the direction of assisting the unfortunate members of this class, that charity finds its proper sphere; for the other section of this class, as lawless as they are improvident, as ignorant as they are dirty, the provision of model dwellings would be at present entirely useless, unless accompanied by a system of inspection of the most minute and ceaseless kind. Give them, it has been said, "a palace, and they will make it a pigstye in a day." They will tear down the gas-fittings, and wrench away the rain water-pipes, and the apparatus of the water-supply, and, having exchanged them for bad gin, will return home to wreck the woodwork and to smash every pane of glass in the windows. That this is not an overloaded statement, can be verified by anyone who has read the reports of some recent cases in the police-courts, or who will take the trouble to walk through certain districts which it would not be difficult to indicate in London or some other large town. Many, nay most, of the houses in which they dwell, are in bad repair, are old houses built for a richer class, and utterly unfit for use as tenement-houses. Such houses, once converted into tenement-houses, quickly become very undesirable habitations; and the especial hardship lies in this, that the diligent artisan is compelled, by the absence of any adequate provision of house-room of the healthy, well arranged, and well managed kind, such as the Peabody Trust supplies, to live in these same tenement-houses, where the door is open all night, and where any ruffian may enter and steal, and where the vilest of the vile can ply their iniquitous trades. That a more efficient system of inspection of tenement-houses is urgently needed is maintained by many of those who are, from motives of philanthropy, or from duty, brought into close relation with the working class, and it is called for by the respectable section of that class itself. The common lodging-houses under efficient inspection, have been transformed from dens of filth, iniquity, and disease, into abodes of comparative cleanliness, and, if not of virtue, at least of outward respectability. It is useless to say that the working class ought to live in the suburbs. Everybody cannot live in the suburbs; the skilled artisan, with his nine hours of work a day, and an income of little under a hundred a year, may do so, but it is not reasonable to expect an ordinary labourer with his small wages, and his long hours, to spend either time or money in railway journeys into the suburbs. Why should not tenement-houses be registered and inspected, as common lodging-houses are registered and inspected?

This is a question which, as we have said, is being asked by many who are well acquainted with tenement-houses, and with the widely different grades, now crudely classed together, who inhabit them. We are glad to see that there is a good probability that this proposal may be fully discussed in Parliament this session. Sir Trevor Lawrence, one of the members for Mid-Surrey, gave notice on the first day of the session that he would, at an early date, call attention to the necessity of extending the provisions of the Common Lodging-House Acts to tenement-houses. The local authorities of the metropolis have been empowered by the recent action of the Local Government Board to make regulations with respect to houses let in lodgings or occupied by members of more than one family, and we trust that public opinion may be stirred up to support, or if necessary to compel, the local authorities to make these regulations as stringent as possible.

BETTING AND DISEASE.

Lecturing at Wakefield on the 4th instant, on "The Gospel of Recreation", Dr. Crichton Browne took occasion to condemn, in strong terms, those amusements which depend on betting for their interest and attraction, and which are, he argued, equally injurious to morals and to health. "The element of chance or uncertainty," he said, "which, as Sir James Paget has pointed out, enters into so many recreative pursuits, is in itself harmless, but becomes pernicious whenever it is wedded to greed or craft, as it invariably is when money or money's worth is made to depend on it. But, unhappily, the chance element in recreation has a sort of natural tendency to unite itself with greed or craft. No one can look around him to-day, without perceiving on how large a scale this union has taken place. There may have been times when reckless gaming and high play were more prevalent than they are today amongst the affluent classes in this country; but it may be questioned whether there ever was a time when betting was as wide-spread as it now is amongst the masses of the people. The multiplication and enormous scale of sporting papers which are, for the most part, subservient to betting transactions, the admission of the latest news as to the odds into even high-class journals, the revelations of the Stock Exchange, and the whispers of the clubs, all testify to the extensive diffusion of a vice that is peculiarly insidious and demoralising; insidious, because it comes to us gilded with pleasure and in our moments of relaxation; demoralising, because with parasitic growth it saps a man's better nature, and is very difficult to extirpate when once it has taken a firm hold. In its effects on the health of those who practice it, betting resembles the most deleterious kinds of mental occupation. It involves a great deal of that emotional disturbance, which is the dangerous element in brain-work, and which is really the measure of the degree in which that work shortens life and impairs vigour. The pleasurable excitement which draws men into it is analogous to the charm of tippling, and the frenzy that seizes those who are completely abandoned to it is a species of madness. To call a pursuit that is attended with such risks a recreation is a sad misnomer. Medical men know well that gambling is responsible for numerous cases of dyspepsia, sleeplessness, and nervousness, of heart-disease and diabetes, and of paralysis and apoplexy; and our lunatic asylums are never without melancholy examples of its influence in inducing insanity in some of its most painful and least hopeful forms. That it often leads to drunkenness and ends in suicide, is even popularly recognised. Our low public-houses are the haunts of sots who have wrecked their happiness at skittles, and a rashly importunate pistol-shot now and again gives piquancy to the life at Monte Carlo. Knowing what they do of its pathological affinities, medical men cannot see without concern the growing tendency of city men to resort to gambling—mild gambling, perhaps, but still gambling—as a solace and relief after business is over. In railway-carriages, on their way to Brighton or elsewhere, in their homes or clubs in the evening, games of chance absorb their attention, and instead of being a solace and relief, become really a continuation and aggravation of the worries of the day. They do not, as all genuine recreations should, transfer pressure from one group of nerve-centres to another, but, under a thin disguise, maintain the same kind of cerebral activity that has been demanded during long hours in the counting house or office. Instead of building up, they cause wear and tear; instead of refreshing, they fatigue; instead of soothing, they irritate. No wonder that City men, who thus recreate themselves, are irrascible, morose, or despondent. Perhaps one of the best ways of realising the effects of any vice or habit, is to make a study of the faces of those who are addicted to it. The most villainous and degraded faces in our population are to be found, as we should naturally expect, in prisons; and, respecting these, Mr. Francis Galton has said that he cannot turn over a bundle of photographic portraits of criminals, without being overcome by a sense of aversion and disgust, such is their ugliness.

" But the next best place to a prison, in which to see the English physiognomy at its coarsest and worst, is the platform of a London railway-station, on the day of a suburban race-meeting, when the special trains are just starting. There may be seen a pushing, chaffing crowd of betting men, or bookmakers, and their dupes, with rascality stamped on their features in a way that cannot be matched in any other spontaneous assemblage of their countrymen. In almost every face may be discerned cruelty and greed, in many be recognised a hideous mixture of imbecility with low cunning, and in a few may be caught glimpses of infra-human or mere animal rapacity. There may be seen faces that are congenitally and radically bad, and with them others that bear the faded traces of better things almost blurred out, perhaps by the blotches of dissipation, and the hard lines carved by this soul-destroying vice. The rapidity with which gambling deteriorates the moral nature and destroys self-respect, is a strong reason for not tolerating the slightest dalliance with it. In that fascinating book published lately, *The Life of Bulwer Lord Lytton*, in which a gifted son tells the story of a gifted father's earlier days, there is an instructive illustration of the quick corrosion that gambling causes in the heart and mind, and also of the reaction set up in a strong nature by the timely discovery of its pernicious effects. Bulwer Lytton, when in Paris as a youth, had gone to one of the gaming-houses that were in fashion at the time, and had played far more heavily than he could afford, and won largely. The day was dawning when he reached his rooms. His writing-table stood on a console in front of the mirror, and, pausing over it to lock up his winnings, he was startled and shocked by the reflection of his own face in the glass behind it. The expression of his countenance was not merely haggard; it was sinister. He had risked far more than he could afford to lose, his luck had been extraordinary; his gains were great. But the ignoble emotions of the night had left their lingering traces on his face, and as he caught sight of his own features still working and gleaming with a vicious excitement, he, for the first time, despised himself. It was then he formed a resolution that, be the circumstances of his future life what they might, no inducement whether of need or greed, should tempt him to become a gambler. He kept his resolution. To few, however, is given strength of mind like that of Bulwer Lytton to form and help so good a resolution and to turn peremptorily from a seductive temptation; and the records of our police-courts afford lamentable proof that betting is the high-road to crime and humiliation of City clerks who go wrong. Ninety per cent. are ruined through having engaged in betting; and there are few sadder stories than that often told at the Mansion House, or Guildhall, of the promising youth, sent up from his country-home to push his fortunes in the great metropolis, who has been drawn into betting, and has drifted on through excitement, anxiety, and desperation, until he has embezzled his master's money. One of the indirect evils of betting is that it prevents large numbers of persons from participating in sports that are in themselves innocent, but have become objectionable from their association with it. The time seems to have arrived when, from no puritanical prejudices, but with a firm scientific conviction of the mischief that accrues from it, betting should be put down, being attacked first in its fashionable strongholds on the turf and the card-table, and ultimately, if need be, in its humbler resorts, where it hinges on carrier-pigeons or pitch-and-toss."

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Mr. CHRISTOPHER HEATH is preparing a Surgical Dictionary, to be published by Messrs. Smith, Elder, and Co., of Waterloo-place. The work will not be illustrated.

THE annual dinner of the Hunterian Society will be held this evening (Friday, February 15th) at the Albion Tavern, Aldersgate Street, at 6.30 P.M.

IT is announced that on the motion for the second reading of the Vaccination Acts (Compulsory Clauses Repeal) Bill, Dr. Cameron will propose as an amendment: "That, while it is inexpedient to abolish compulsory vaccination, our vaccination laws might with advantage be amended in other points of detail."

DR. WEBER-LIEL, teacher of aural surgery in the University of Berlin, has accepted the professorship of the same subject in the University of Jena. He will probably be remembered by some of our members as having been present at the meeting of the Association at Cork in 1879, where he read a paper on Intratympanic Injections, which was published in the BRITISH MEDICAL JOURNAL.

A PAPER will be read at the Society of Medical Officers of Health, 1, Adam Street, Adelphi, London, W.C., this day (Friday, February 15th), at 8 P.M., entitled "Remarks on the Examination of Water for Sanitary Purposes," by C. E. Cassal, F.I.C., F.C.S., and B. A. Whitelegge, M.D., B.Sc., S. Sc. Cert. Cam.

GENERAL MEDICAL COUNCIL.

THE General Medical Council has been summoned to meet at 2 P.M. on Tuesday, March 25th. The Executive Committee has been summoned for March 24th. The English Branch Council will meet on the morning of March 25th.

PRIZES FOR TEMPERANCE DRINKS.

A PROJECT is on foot for the offering of a prize, or prizes, for a cheap and palatable non-intoxicating beverage, under the auspices of a committee comprising the Earl of Lichfield, Viscountess Ossington, the Hon. Mrs. Meynell Ingram, Dr. Norman Kerr, Mr. S. Morley, M.P., Mr. Stafford Howard, M.P., Prebendary Grier, and others. It is hoped that funds will be provided sufficient to offer two handsome prizes of £700 and £300 respectively. A well known analyst has been consulted, and has reported favourably on the test-conditions to be fulfilled by each competing beverage.

ROYAL METEOROLOGICAL SOCIETY.

THE Council of the Royal Meteorological Society have arranged to hold at 25, Great George Street, S.W., by permission of the president and council of the Institution of Civil Engineers, on the evening of March 19th next, an exhibition of thermometers. The Council is anxious to obtain as large a collection as possible of such instruments, and will be glad to show any new meteorological apparatus invented or first constructed since last March, as well as photographs and drawings possessing meteorological interest.

THE BACILLUS BERIBERICUS.

AT a meeting of the Académie de Médecine, Paris, held on January 29th, M. Rochard gave an account of Dr. de Lacerda's researches on beri-beri. A small quantity of blood, taken from the fingers of five patients, was introduced into glass vessels containing sterilised broth. After twenty-four hours, the broth was found to have lost its transparency, and numerous micro-organisms could be detected in it. The same bacilli were found, later on, in the blood itself. Dr. de Lacerda then examined the rice eaten by one of his patients, and discovered in some of the grains micro-organisms, which could not be distinguished from those seen in the blood.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE quarterly meeting of this Association was held at Bethlem Hospital on Tuesday, February 5th, Dr. Orange presiding. At the commencement of the proceedings, allusion was made to the death of Dr. Parsey, Medical Superintendent of the Warwickshire County Asylum, and one of the former presidents of the Association, and a resolution of condolence with his family was passed. Dr. Savage read a paper on Constant Watching in Suicidal Cases, which was followed by papers by Dr. Gasquet on some of the Mental Symptoms of Ordinary Brain-Diseases, and by Dr. H. Major, on the Results of the Collective Record of the Causation of Insanity. Considerable discussion arose on each of the papers.

ELECTROPUNCTURE IN ANEURYSM OF THE AORTA.

AN interesting observation, by M. Dujardin-Beaumetz, is reported in the *Bull. Génér. de Thérap.* for January 15th. The patient, a man aged 37, had noticed, two months before the operation, a swelling in front of the sternum. The tumour, when first seen by the author, occupied the upper part of the thorax, on the left side of the sternum, and measured seven centimètres in breadth and five in height. The patient suffered very much from dyspnœa and cough. Iodide of potassium having remained without effect, an iron needle, communicating with the positive pole of a Trouvé's battery of eight cells, was introduced into the tumour, and the negative pole was placed on the left side of the thorax. The operation lasted ten minutes. Five days later, a considerable amelioration was noticed, and a second operation was then performed with three needles. After some days, the operation was again repeated a third and fourth time. One month after the first operation, the patient felt very much relieved; the cough and dyspnœa had disappeared; the tumour was harder and smaller; and the pulsations were less distinct. Unfortunately, a fifth operation was performed five weeks after the first; but the next day the tumour was found soft, and increasing in size very rapidly. The patient died twelve days after the last operation, but no *post mortem* examination could be made.

EDUCATION OF THE POOR.

IN lately opening a bazaar on behalf of the Hanley Sick-Nursing Institution, Mr. W. D. Spanton, surgeon to the North Staffordshire Infirmary, after commenting on the good work done by the institution, called attention to the prevalent want of knowledge as to the domestic management of the sick. "Among the working-people, and, indeed, a large class of other persons well informed, possibly, in other respects, there was a strange and lamentable ignorance of the ordinary management of invalids; and it was pitiable enough to see the hopeless attempt to perform the simplest but most necessary duties which many such persons made. It occurred to him that, if the School Boards wished to do the young women of the rising generation a good turn, they could not possibly enact a wiser thing than to teach them some of the rudiments of the management of the sick and injured, in place of the ridiculous headwork which some had to go through. Let a girl be taught to make a poultice, to prepare broth or beef-tea fit to drink, without wasting half of it; to feed a sick child, to bathe an aching head; in fact, let her be instructed in some of those qualities, without which no woman was fit to fulfil her social duties, or to occupy her proper domestic sphere in the world. If this were done, there would be less need than there existed now for mission-nurses, although the necessity for some such work must remain, to a certain extent, as long as the world lasted." These remarks were endorsed by the Archdeacon of Stoke-on-Trent, Sir L. T. Stamer, who said that "he should be glad if the hint thrown out by Mr. Spanton was carried out, by which the education of the girls might be enlarged and improved, by bringing in some elementary notions of how to help in times of sickness. The subject was well worth the consideration, not only of School Boards, but of that great department which governs School Boards."

THE GERMAN MEDICAL CONGRESS.

The third German Medical Congress (Congress für Innere Medicin) will be held in Berlin, under the presidency of Professor Frerichs, from April 21st to 24th. The following subjects have been selected for discussion. *First day:* Genuine Pneumonia, its anatomy, pathology, symptoms, and treatment (reporters, Dr. Jürgensen of Tubingen and Dr. A. Fränkel of Berlin. *Second day:* Poliomyelitis and Neuritis (reporters, Dr. Leyden of Berlin and Dr. Schultze of Heidelberg.) *Third day:* Nervous Dyspepsia (reporters, Dr. Leube of Erlangen and Dr. Ewald of Berlin). The following contributions have also been promised: Dr. Hermann Weber of London, on the Hygiene of Schools in England, with special reference to infectious diseases; Dr. Rosenthal of Erlangen, on Reflexes; Dr. Goltz of Strassburg, on the Localisation of the Functions of the Cerebrum; Dr. Pfeiffer of Weimar, on Vaccination; Dr. Seagen of Carlsbad, on Diabetes; Dr. Rossbach of Jena, the Report of the Commission on the Treatment of Infectious Diseases, and on a New Therapeutic Action of Naphthalin.

CREMATION.

In addressing the jury, at the opening of the winter assizes at Cardiff, on the singular charge against the self-styled "Druid," Mr. Price of Llantrissant, Lord Justice Stephen discussed at great length the subject of disposal of the dead in ancient Europe. His lordship, after stating that the funeral pyre and the urn was the almost universal mode adopted amongst the Græco-Roman and Celtic races, then pointed out that this method fell into disfavour after the introduction of Christianity, for certain reasons associated with pious sentiment; he made, however, the important statement that there is absolutely no law against cremation in this country. To burn a body does not, on the whole, appear to be illegal; but, if done in such a manner as to cause a nuisance, it is of necessity an indictable offence. No doubt there has been a great prejudice against cremation amongst the English people from the beginning of their history, and the same is the case, as a rule, in Wales, Scotland, and Ireland. The absence of any law against this method of disposing of the dead, is probably owing to the fact that the legislators of the past never expected that any person would desire or attempt to cremate the remains of a relative or friend. It is an interesting and important fact that so high an authority as Lord Justice Stephen has declared that no obsolete law can render illegal the practice of cremation, which is at the present day strongly advocated by many leading Englishmen, and which, as urban populations tend to increase, may some day become a social necessity.

WESTON'S WALK.

On Wednesday week, Weston walked from Bury to Halifax (23 miles), at which place he finished the remaining 27 miles in an enclosed space. Next day, he continued his task in the same place. On the Friday, he went on to Leeds amid heavy rain, walking in the Grand Assembly Rooms there most of that day and all Saturday. On the latter day, he finished 3,500 miles at 10 P.M., though his heel had been troublesome all day, having thus accomplished 1,500 miles further than had previously been done on any long-distance walk. On Monday last, Weston began to walk to the southward from Leeds, the most northerly point he had reached, taking Sheffield as the first stage in his return to London. By a mistake, he walked 52 miles instead of 50 during the day. On Tuesday morning, a boil had developed above the left thigh, the constant friction producing considerable irritation; but, notwithstanding, he walked his 50 miles steadily, with a morning interval of seventy minutes, and another rest for dinner of exactly the same duration. At ten o'clock, he completed 3,600 miles. In spite of all the discomfort from his heel, and other causes, Weston seemed on Tuesday night nothing the worse for his continuous strain, and gave every promise of a successful accomplishment of his unrivalled undertaking.

THE AUSTRO-HUNGARIAN ARMY MEDICAL SERVICE.

The reforms proposed by Dr. Hoor in the medical department of the Austro-Hungarian army, and adopted by the Minister of War, invest army medical officers with the rank of combatants, with whom they are put on the same footing. The army hospital surgeons exercise supreme authority in the hospitals. The minister also undertakes that they should only change quarters on unavoidable occasions, and allows them every facility for practising. The number of army surgeons will be increased from 852 to 970, and a military medical academy for 300 pupils will be immediately organised. The scholastic curriculum is to cover five years.

SMALL-POX IN BIRMINGHAM.

The epidemic of small-pox in Birmingham, which has been going on since the summer, is now at its height. It is most prevalent on the north side of the town, in All Saints' Ward, and in the district of Aston Manor, which is continuous with this side of Birmingham. The published returns assure us of the steady increase in the number of cases brought under the notice of the local authorities; but we shall certainly not err if we suppose that at least as many more are not reported. The following return of cases is in the borough of Birmingham only:

Small-pox.

Weeks ending	No. reported.	No. removed.	No. of Deaths
Dec. 15th	31	33	3
,, 22nd	41	38	3
,, 29th	29	28	3
Jan. 5th	45	39	7
,, 12th	42	42	3
,, 19th	25	24	4
,, 26th	48	49	4
Feb. 2nd	57	43	5
Total	318	296	32

Revaccination has been all along urged upon the people, and is now being effected at the rate of nearly one hundred daily. But it required the influence of something very like a panic to induce the adoption of this precautionary measure, which is now too late to prevent a very lamentable loss of life, of health and strength, and consequent happiness, among the poorer classes, who have been almost the sole sufferers. For this unwillingness on the part of the people to avail themselves of the protection afforded by revaccination, there is no doubt we must chiefly blame the antivaccination agitation.

ISLE OF WIGHT SANATORIUM.

We recently expressed our wishes for the success of the projected Isle of Wight Sanatorium. We would now mention that it is intended to utilise the neighbouring strong aluminated chalybeate waters of the sand-rock. This belongs to a class of chalybeates that is too powerful for indiscriminate use, and is not so popular as weaker and pleasanter waters. Nevertheless, the spring has done good service in former days in convalescence, and in cases of chronic debility, of diarrhœa, and of some passive uterine affections. We have the clearest evidence of this in the expressed opinion of men of eminence in their day, as Dr. Saunders, the author of the well known work on Mineral Waters, Sir James Clark, Dr. Lempriere, and others. The water was given in small doses, and often combined with a carminative, such as tincture of cardamoms. The chalybeate, like many others, has been for a long time out of fashion; but we see no reason why it should not again be useful, when administered under medical superintendence, and we think it ought to be considered an addition to the resources of the Sanatorium.

PERILOUS PERFORMANCES.

AT a recent performance at Leicester, a painful sensation was caused at the Skating Rink by "Captain" Austin, a performer, shooting his wife in the head with a rifle, in front of a vast multitude of spectators. "Captain" Austin, who is a noted shot, fired at a potato on his wife's forehead in the ordinary position with success. He next attempted to shoot a potato while lying on his back, and, to the horror of the spectators, as soon as the rifle was fired, the woman uttered a scream and fell on the stage, the blood streaming from her forehead. The audience sprang to their feet, while Austin rushed to his wife and carried her into the retiring-room. Newspaper reports often furnish us with accounts of "accidents" of this kind. Their frequency serves to show that there still exists amongst us a widespread popular demand for the adventitious interest of peril to limb and life, to give zest to the appreciation of feats of strength and skill. So long as the demand exists, the supply is likely to be forthcoming. An improved civilisation may be expected to diffuse a taste for higher enjoyments. In the meantime, is it not someone's duty to see that perilous performances, like that to which we draw attention, are effectually prevented?

THE HABITUAL DRUNKARDS' ACT.

BY the 25th clause it was made an offence against the Act for any person, without the authority of the licensee or medical officer, except in case of urgent necessity, to supply any intoxicant or narcotic to any patient detained in a retreat. As it was contended that this prohibition extended no further than the grounds comprised within the licence, and did not prohibit publicans selling or giving liquor to the inmates in neighbouring publichouses, the Home Secretary has issued an additional model rule settling the disputed points. By this new rule it is an offence against the Act for a patient to enter a publichouse without leave, and an offence also for a publican to supply a patient with intoxicating drink either within or without the boundaries of the retreat. A second new rule guards against another source of danger, the taking of alcohol on the plea of health. This rule lays down that a patient shall not take any intoxicating liquor, or narcotic or stimulant drug, without special written authority from the medical attendant. This stringent provision will prove of considerable service in safeguarding the patient when he is allowed outside the premises.

QUEEN'S COLLEGE, BIRMINGHAM.

ON Thursday, February 7th, the flourishing Queen's College Medical Society held a *conversazione*, which was a brilliant success. The spacious dining-hall, library, and examination-hall of the College were thrown *en suite* for the occasion, and tastefully decorated with shrubs and pictures. About a hundred practitioners and students assembled, under the presidency of Mr. Hugh Thomas. Some admirable musical performances were given by members of the Society. Two excellent addresses were delivered; one by Dr. Sawyer, on "Some Points in our Professional Progress and Prospects," and another by Mr. Bartleet, entitled "Mens sana in corpore sano." Dr. Sawyer sustained the proposition that the science and art of medicine have made more real progress within the last twenty-five years than in any other like period of their history, and instanced our advances in clinical thermometry, opthalmoscopy, laryngoscopy, and therapeutics. Mr. Bartleet discoursed upon the hygiene and amusements of the medical student, and gave some excellent advice upon these subjects.

DISUSED BURIAL GROUNDS.

SEVERAL proposals have recently been on foot to sell disused burial grounds as building sites. This practice cannot be too strongly condemned, and it is satisfactory to find that the Metropolitan Board of Works, at least, is fully alive to its duties in this matter. The clerk of the Board has written what must, on the whole, be considered a satisfactory statement to Lord Brabazon. He says, "the Board's action in the matter must, of course, be within the limits of the powers conferred upon it by Parliament. These powers are contained in the 16th Section of the Metropolis Management and Building Acts Amendment Act, 1878, under which the Board is authorised to make by-laws with respect to the foundations of buildings. The Board's by-law prohibits the erection of any house or building upon any site, or portion of any site, which shall have been filled up or covered with any material impregnated or mixed with any fæcal, animal, or vegetable matter. The enforcement of this by-law is part of the duty of the district surveyors."

HOSPITALS AND PAUPERISM.

THE occurrence of Hospital Sunday in Liverpool gives the *Birkenhead News* an opportunity of expressing its opinions upon hospitals and pauperism, a subject which is of great importance at the present time, when there is an earnest desire to trace out, and, as far as possible, to remove, the causes of pauperism. "It is certain," says the *Birkenhead News*, "that our system of medical charity is on its trial. There is throughout the country a growing conviction that the enormous sums raised to support our hospitals and free dispensaries are misapplied to a very considerable extent, their misdirection resulting in the practical pauperisation of a considerable part of the community. A section of our population, and by no means a small one, seems to deem it unnecessary to make any provision for the illness of themselves or their families. They know that when they are stricken down they will probably be able to obtain from some subscriber to a medical charity a 'recommendation-form' which will be their passport to where they may get medical aid of the highest class; and that lulls them into a dangerous do-nothingness.......The conviction is growing that the working classes, speaking generally, have the ability, if they will only adopt the proper method, of providing for their own sicknesses, and that they ought to do so." Recently, at Liverpool, the Rev. Charles Beard expressed himself with much force on the evils incidental to the merely charitable system, the imperative necessity of which, however, he recognised. After referring to the ease with which a hospital could be established and obtain support, he said, "There was always a natural temptation in any institution of this kind to do as much business as it could, without any distinct reference to the necessity of the business being done, and it was possible that there might be a great deal more of medical charity than was necessary, that it fell upon the wrong heads, and that a process of pauperisation of a painful and distressing kind might be going on in the name of the highest social principles and the widest Christian kindness. He believed the principle might very well be laid down that the proper cases to receive medical charity would be those cases of accident, and subtle and chronic disease, which were better treated in the hospital than elsewhere; and also the principle that every working man in the receipt of moderately good wages ought to consider it his business to provide for what he might call the ordinary medical exigencies of his household, just in the same way as it was his business to provide for rent and daily bread." Having thus preached in favour of the grand principle of self-help, he proceeded to show how those to whom he referred might help themselves. Very significantly, he singled out the excellent plan which has been adopted in Birkenhead, though he did not refer to that borough by name. "The system of notes of recommendation was a farce, and was simply a cover for inefficiency and something like fraud. This difficulty would be met by the system which had been adopted in many other and smaller towns in this country, but which they had been hitherto powerless to introduce in Liverpool—the system of a provident dispensary."

VOLUNTEER MEDICAL ORGANISATION.

A DEPUTATION, headed by Surgeon-General Hunter, was introduced to the Marquess of Hartington, on Wednesday last, to urge the desirability of embodying a medical corps, consisting of the same class as form the present combatant volunteers, to supply the want of a corps capable of working the divisional bearer-companies and the field-hospital. This medical corps, it was urged, might stand in the same relation to the volunteer forces as the Medical Department and the Army Hospital Corps hold to the regular army. It was proposed to form a complete bearer-company in connection with each of the Medical Schools; but not merely for those in the school. The deputation was favourably received, and the Marquess of Hartington said that it was desirable that the scheme should be elaborated, and submitted for the consideration of the War Office and the Army Medical Department. Until this had been done he would hardly like to commit himself definitely. He could only say that it would afford him much gratification if the details could be satisfactorily and fully worked out, and in that case he thought they might count on receiving every assistance from the War Department and the military authorities.

THE BERLIN POLYCLINIC.

THIS institution, situated at No. 3, Ziegelstrasse, Berlin, has recently celebrated its first anniversary. During the first year of its existence, it was visited by more than two hundred medical men, amongst whom have been many foreigners. There are opportunities in this new medical school for the acquisition of different branches of special medicine, amongst which are the following: ophthalmology, neuropathology, and electro-therapeutics, laryngoscopy, otology, rhinology, dermatology, syphilidology, histology, bacterioscopy, and forensic chemistry. These specialities are taught in monthly courses. Three laboratories are attached to the institution, one each for chemistry, histology, and bacterioscopy. The director is Dr. Ludwig Loewe.

THE NEW EGYPTIAN MEDICAL AND SANITARY DEPARTMENT.

WE understand that Hassan Mahmoud Pasha, at present President of the Quarantine Board at Alexandria, is to be the head of the new Medical and Sanitary Department. As is the case in other departments of the present Ministry, he will have an Englishman as under-secretary, upon whom the chief part of the work of the department will fall. It is rumoured that Dr. Sandwith, who was formerly connected with the Victoria Hospital, at Cairo, may be selected for this appointment.

GERMAN CHOLERA COMMISSION.

A TELEGRAM from Berlin, dated February 13th, announces that the German Cholera Commission has sent a fifth report from Calcutta, dated January 5th. It is reported that Dr. Koch has really discovered a special cholera bacillus. The Commission was further occupied with the investigation into the causes of the great decrease in cholera-mortality in Calcutta, where the percentage of deaths per thousand has diminished from ten to three. This diminution is attributed to the improvement of the water-supply.

CHOLERA IN INDIA.

THERE were 22 deaths from cholera in Bombay during the week ending January 23rd. Nineteen of the deaths occurred amongst Hindus and three amongst Mahomedans. In the mofussil districts there is slight cholera in parts of Kolaba and Kaladgi.

LEAD-POISONING AT OVER-DARWEN.

WE understand that the report which has recently been current to the effect that about forty persons in Over-Darwen, were suffering from lead-poisoning, due to some pollution of the water-supply of the town, is incorrect. The number of cases of lead-poisoning which have been reported does not exceed eighteen, and in some of the cases the diagnosis is exceedingly doubtful. The subject is under investigation, and no accurate conclusion can be arrived at until the water-supply has been examined by experts, and the investigation has been completed in every part.

PROVISION AGAINST RAILWAY ACCIDENTS IN GERMANY.

THE Secretary of State at the head of the Imperial Post-Office at Berlin, has recently made arrangements for the post-office officials of all grades going through a course of instruction in ambulance-work. The first course of instruction began on November 5th last, in one of the large halls in the General Post-office. These courses are being continued four times a week from 4 P.M. to 5 P.M. It is hoped that by these means not only the post-office servants who travel in the railway post-vans, but that the post-office telegraphists at the railway-stations, as well as the letter-carriers, will gradually all be prepared to render trained assistance on the occurrence of railway-accidents. A strong accident-box, containing all the most essential material for affording first surgical aid, arranged in partitions, with short and appropriate directions for their use, has been arranged by Professor Esmarch, and the Secretary of State has ordered that every Post-office railway-wagon, and each railway-station, shall gradually be furnished with one of these accident-boxes ready for use. The box contains antiseptic dressing for wounds, materials suitable for application in scalds and burns, splints for fractures, restoratives for cases of syncope and shock, together with a few ordinary surgical appliances. The example which has been set—and which indeed was started several years ago—in Germany, making provision for the relief of persons who may be injured in accidents, is one which might be imitated with much advantage in our own country.

SIR WILLIAM GUYER HUNTER, K.C.M.G.

IN seconding a vote of thanks, at the conclusion of the discussion on cholera at the Epidemiological Society on Wednesday last, Sir Joseph Fayrer stated that Her Majesty had graciously signified her intention to confer the dignity of Knight Commander of the Order of St. Michael and St. George on Surgeon-General Hunter. The announcement was received with loud applause; and Sir William Guyer Hunter may be well assured that the news that this well merited honour is about to be conferred on him will be received, not only by the service of which he is so distinguished a member, but also by the profession at large, both in this country and in India, with as much pleasure as was manifested by his colleagues of the Epidemiological Society. Dr. Hunter received his medical education at Aberdeen, and at Charing Cross Hospital, and obtained his first diploma from the College of Surgeons in 1849. He entered the Indian Medical Service in 1850, and proceeded to the Bombay Presidency. He took part in the second Burmese War, in 1853, and was in India throughout the period of the Mutiny; after these events he came to this country on sick leave, and on his return to India entered on civil duty, and was soon afterwards attached to the Grant Medical College, Bombay. For the greater part of his career in India he remained attached to this College, eventually rising to the position of Principal of the College, Professor of Medicine, and Senior Physician to the Hospital. He was selected, under the new rule for ability and merit, and appointed on the administrative staff with the rank of Deputy Surgeon-General; after occupying this position for six months, he was appointed Surgeon-General, a post which he held for two and a half years. When the last alterations were made in the organisation of the Indian Medical Department, Dr. Hunter took advantage of the option given to officers, and retired on a full pension about three years ago. Dr. Hunter is an M.D. Aberdeen, a Fellow of the Royal College of Physicians of London, and of the Royal College of Surgeons, Edinburgh; he several times received the thanks of the Government of India, and shortly before his retirement was made honorary surgeon to the Queen.

THE HOUSING OF THE POOR IN BIRMINGHAM.

IN the course of an inquest, recently held in Birmingham, on the body of a woman named Glover, who was burnt to death through falling down from a ricketty ladder, while carrying a paraffin lamp, it transpired that the ladder formed the only approach to the poor victim's bedroom. The coroner observed that, "if an accident like this did not startle those to whom the town had entrusted the care of this great community to more vigilance with regard to their wretched homes, he did not know what would." Yet the implied censure on the town authorities seems scarcely just, as the local papers have lately contained lengthy reports of the proceedings of a Committee of the Town Council, appointed to consider and report upon this very question. Birmingham was one of the first towns to avail itself of the powers afforded by the Artisans' Dwellings Act, passed by the late Government; and its Town Council is prosecuting, with zeal and ability, an extensive improvement scheme. The real difficulty that stands in the way of providing good and cheap houses for the poor is the price of land. What is wanted is compulsory power for the municipal authorities to purchase land at its present value. The moment it is believed that land is wanted for any public purpose, its price goes up three, four, and five hundred per cent., so that all public works and needed improvements are made at a ruinous cost to the community; while the very class to whose selfish greed the evils complained of are mostly due, are enriched at the permanent expense of the ratepayers. The Birmingham inquiry is not yet concluded, but is eliciting many curious facts. A large part of the worst property in the town appears to belong to certain charitable trusts, and in one case the rents from these most wretched houses go to support certain almshouses. Apparently eighteenth century charity only concerned itself with what is called the "decent poor," and regarded the unwashed multitude as hopelessly bad, or barely human. It needed the tambourines of the Salvation Army to awaken Churchmen and Dissenters alike to the fact that there are some millions in this country who are beneath the sphere of influence of either church or chapel; while the multitude of ragged children, who have never been inside a school, is too often forgotten in these days of nominally compulsory education. The question of the housing of the poor will, no doubt, be made a prominent subject for discussion at the forthcoming meeting of the Social Science Association in Birmingham next September, when the information obtained in the present inquiry will afford a basis for coming to conclusions which may guide future action in the matter.

HULL PRISON.

"THE Thieves' Litany" has, from a very ancient date, contained the petition: "From Hell, Hull, and Halifax, good Lord deliver us," and the criminal classes of to-day may still fervently repeat that prayer, at least as far as Hull is concerned, where the prison seems, if we may trust the evidence given at the inquest on the body of Daniel Ackroyd, on the 4th instant, to be a veritable pandemonium. We have no intention of commenting on the case of Ackroyd, in so far as it affects the two men who are now awaiting their trial for manslaughter on the coroner's commitment, and who, some persons will think, might without impropriety have been sent for trial on the capital charge; but the undisputed facts of the case bearing on the treatment which Ackroyd received in Her Majesty's prison at Hull call for immediate notice. It seems that this man was sent to the prison in a sound bodily condition on the 15th of January, and that he was discharged from it on the 25th of the same month with bruises all over his body, five fractured ribs, and effusion into the pleural cavity, from the effects of which he died within a few hours of his admission to the Borough Lunatic Asylum, to which he was sent on being discharged from prison, it being found that his mind was disordered. He was subjected to two medical examinations immediately before leaving the prison, but the fractured ribs were not reported. These facts constitute a grave imputation on the management of the prison. It is all very well for the coroner to remark that no blame attached to the governor or the warders, but the public will probably come to the conclusion that it ought to be impossible for a prisoner to receive such a serious injury as the fracture of five ribs in a well-constituted gaol and be discharged without its being detected. The system, admittedly pursued at Hull, of placing an insane prisoner under the care of other prisoners without constant supervision by a warder, is indefensible. They will also probably conclude that the medical examinations which overlooked such an injury must have been of a perfunctory description, and that the coroner's jury were justified in finding that there had been some want of care on the part of Dr. Bernard, the surgeon to the prison. But there are other questions which will have to be asked and answered about the case of this wretched man Ackroyd. Why was he sent to prison at all? It appears that his mind was disordered at the time when he was committed. Is it customary at Hull to send lunatics to prison? Then his offence was not a serious one; some persons would scarcely think it an offence at all, for it consisted merely in obtaining food under the pangs of hunger without paying for it. The story told by his widow was grimly pathetic. "He had been in prison for six weeks," she said, "and came home on January 14th. I had no food to give him when he came out of prison, and so the next morning he went into a coffee-house and got some things without paying for them, and was given into custody." The plague-wind which Mr. Ruskin tells us has been blowing over England for the last twenty years has evidently produced a very black plague-spot at Hull, a spot that requires separate and vigorous treatment. An inquiry should be ordered without delay into the management of the Hull Prison; an inquiry conducted, not by the Prison Commissioners or Visiting Justices, whose administration and supervision are impugned, but by thoroughly independent persons. Fortunately, Parliament is now sitting, so that there can be no hushing up of this deplorable case.

SOUAKIM.

THE following particulars with regard to the situation and sanitary state of Souakim will be of interest at the present moment. The town, which has a population of about 5,000 inhabitants, is the chief seaport of the Southern Soudan. It consists of the town proper, situated on an island, and a detached portion on the mainland, with which the island is connected by means of a long narrow causeway. Malarial fevers prevail in and about the town, but eye-diseases are not common. A great many of the natives present vertical scars, running close to the eyes, produced in early youth, and believed by them to prevent, as well as to cure, eye-diseases. The water-supply is derived from wells in and about the town, and there is also a large reservoir in the vicinity, which is filled by rain during the rainy season. The quality of this water is stated to be fairly good, but it requires to be filtered before it can be used. When the hot weather sets in, there will almost certainly be a great deal of sickness, unless prompt measures are taken to improve the sanitary arrangements of the town. At present they are exceedingly bad; pools of stagnant foul water, giving rise to offensive smells, even in the cold season, are to be seen in every direction, and the water derived from the wells is, without doubt, liable to contamination. During the cold season the thermometer varies from 67° to 82°, according to the direction of the wind, but the hot season may be expected to set in within a few weeks.

THE CASE OF POISONING AT WANDSWORTH PRISON.

THE adjourned inquiry by Mr. Hull, the Surrey coroner, into the death of a prisoner, whose case we have already reported, has been brought to an abortive conclusion, and an open verdict has been returned. No satisfactory evidence was adduced as to how the poison was administered. The deceased was, however, a dealer in drugs, and was proved to have lumps of arsenic in his house.

THE DISCUSSION ON CHOLERA AT THE EPIDEMIOLOGICAL SOCIETY.

THE discussion at the Epidemiological Society, on Wednesday evening, on the cholera epidemic in Egypt, hardly came up to the expectations which had been formed. Want of time, in fact, compelled it to be brought to a conclusion before it had been well begun; and we regret especially that none of the younger men who were sent out to Egypt from this country last year were able for this reason to speak. Sir

William Smart and Dr. Thrupp endorsed the views brought forward by Dr. Hunter, while Dr. Scriven and Dr. Longhurst criticised some of the evidence on which the theory of the endemicity of cholera in Egypt has been rested; no notable accession to our knowledge is, however, to be recorded. The subject is, we understand, to be raised again at a future meeting of the Society.

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SCOTLAND.

ANOTHER death is reported from football, a young man having died at Helensburgh from lockjaw, following an injury to a finger received during the game.

SIMULTANEOUSLY with the sad announcement of the death of the universally esteemed Emeritus Professor of Botany in the University of Edinburgh, comes intimation of the fact that his son, Professor Isaac Bayley Balfour, has been elected to the chair of Botany in the University of Oxford. This creates a vacancy in the Botanical Chair of the University of Glasgow.

PAUPERISM IN SCOTLAND.

FROM the comparative statement of pauperism in Scotland, just issued by the Board of supervision, there seems to be a decided decrease in the registered and casual poor for the last year. In January of last year the total number was 100,153, of whom 63,992 were adults, and 36,161 dependents, while in January of this year the total was 96,655, 62,096 being adults, and 34,559 dependents. The above figures show a percentage of paupers to population of 2.63 and 2.51 respectively. From an examination of the returns, the decrease appears chiefly to be among the registered poor, that among the casual poor being comparatively small.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

A SPECIAL series of meetings for the discussion on Albuminuria, its Pathology and Clinical Significance, has been arranged, the first of which was held on the evening of Tuesday last, February 12th, when Professor McCall Anderson, President of the Society, occupied the chair. A large number of medical men of Glasgow and the west of Scotland, as well as visitors from a distance, attended the meeting. An abstract of the discussion is given on page 319. It will be continued on February 19th.

THE SANITARY CONDITIONS OF BAKEHOUSES.

ON January 1st, of the present year, the provisions of the Factory and Workshop Act of last year came into force, and the Board of Supervision has very properly issued a memorandum to the different local authorities, pointing out that the clauses of the new Act apply to bakehouses, and that steps must be taken to see that these buildings comply with all the necessary sanitary requirements. The plan of procedure advised by the Board is, that the local authority shall instruct their medical officer, either personally, or by an authorised assistant, to visit and report on the various bakehouses within each district. In this way it is thought that these very important provisions of the new Act will be most efficiently carried out.

THE LIABILITIES OF LANDLORDS FOR BAD DRAINAGE.

IN a recent number of the JOURNAL, we drew attention to the fact that in the Glasgow Sheriff Court damages had been obtained by a tenant against his landlord for the ill-consequences arising from defective drainage of the house. This case has been followed by another one at Dumbarton, where a similar action has been raised and tried in the court there, the plaintiff suing for damages, in consequence of a bad state of drainage and of the sanitary arrangements of the house, whereby the health of the inmates suffered. Some of the items claimed were disallowed on some legal ground, but the important point is, that the judge made an order in favour of the plaintiff for payment of the medical expenses incurred, as there was no doubt in his mind that plaintiff's children had suffered from the effects of the bad drainage. As we observed previously, we believe that cases such as this will be productive, ultimately, of much good to the community generally.

EDINBURGH UNIVERSITY COURT.

IT was agreed at a meeting of the Edinburgh University Court held recently, and presided over by the Rector, Sir Stafford Northcote, to add to the Ordnance No. 5, Edinburgh No. 2, the following regulations regarding graduation in medicine. 5. "That he has attended for at least three months the practice of a midwifery hospital, or that he has attended at least six cases of labour under the superintendence of a registered medical practitioner." 6. "That he has attended, during courses of not less than fifty hours, instruction-classes of practical pathology and practical physiology in the University of Edinburgh, or in a university or school of medicine recognised by Subsections 2 and 4 of Section vi of Ordnance No. 8, Edinburgh No. 3; or upon classes thereof conducted by a teacher recognised by the University Court under the said Subsection 4." At the same meeting, Dr. Henry D. Littlejohn was appointed an examiner in medical jurisprudence for five years, the reappointment to be made annually. It was resolved to recognise Mr. H. E. Clark, F.F.P.S. Glasgow, as a teacher whose course of instruction in practical anatomy, and lectures on anatomy, should qualify for graduation in medicine in Edinburgh University.

ROYAL DISPENSARY, EDINBURGH.

THE directors and managers of the Edinburgh Royal Dispensary and Vaccine Institution held their annual meeting recently. The report by the manager stated that the efficiency of the Royal dispensary, as one of the great public charities of Edinburgh, had been thoroughly maintained, and that the large number of 8,958 patients from the city and neighbourhood had been treated under its auspices during the past year. It was to be regretted that the expenditure exceeded the income by £15 8s., but the managers felt sure they had only to make known this fact to ensure greater liberality. The report by the medical officers stated "that of the 8,958 patients above referred to, 5,903 attended personally at the dispensary, where they had their cases investigated, and medicine and advice supplied them, while 2,153 cases were visited at their own homes. This is an increase of 345 over those visited last year, and 963 more than were visited in 1881. In the midwifery department, 236 poor women had had attendance at their homes during their confinements, while others had sought advice for the diseases peculiar to women. The number of vaccinations have slightly decreased, being 25 fewer than last year." On the motion of Dr. Peel Ritchie, Dr. Littlejohn was appointed consulting surgeon of the institution; and the election of Drs. Dyce Fraser, Alex. Black, and Francis Caird to the medical staff was confirmed; and Drs. Sinclair and Wilson were re-elected medical officers. The Lord Provost, who presided, in moving the adoption of the report, mentioned that the institution, which had been one of great usefulness, had been in existence for more than a century.

BRITISH ASSOCIATION IN ABERDEEN.

A LARGE and representative meeting has lately been held in Aberdeen, the Lord Provost presiding, to make arrangements for the reception of the British Association in 1885. Three local secretaries were appointed, and an *interim* local executive committee was nominated, amongst other things to raise a guarantee fund, and otherwise to make general arrangements for the meeting; also, to communicate with the Council of the Association in reference to the arrangement of departments and sections, the appointment of a president and vice-president of the meeting, presidents and vice-presidents of departments, and chairmen and vice-chairmen of sections, and to make such suggestions in reference thereto as they may think proper, to frame lists of the local committee, and of the local executive committee of the meeting.

and of local committees and secretaries of each department and section, and to report on these several matters to the interim committee. To anyone who is acquainted with the matter, it will be obvious that some of the duties ascribed to this committee do not belong to any local committee. A local committee has nothing to do with the appointment of secretaries of sections and so forth. It is plain, therefore, that the framer and proposer of the resolutions must have been labouring under some mistake. Everything will be done to make the meeting in Aberdeen a thoroughly successful one.

GLASGOW SCIENCE LECTURES.

Following on Professor Cleland's lecture on the "Terminal Forms of Animal Life," we have to notice another, given, under the auspices of the same association, by Dr. Dallinger of Sheffield, and entitled "A Microscopist's Notes on Some Lowly Living Forms, and the Biological Lesson they Teach." In a most instructive and interesting address, the lecturer traced the life-history of bacteria, monads, and various other minute organisms, illustrating his remarks by a series of beautiful microscopical illustrations, projected on a screen by means of the oxyhydrogen lantern. From the tenour of his lecture it is quite clear that Dr. Dallinger has no belief in such a thing as spontaneous generation, and, on this occasion, he further contended that there was no such thing as heterogenesis, any evidence that might be brought forward in support of such a theory being due to imperfect and incorrect observation. To his mind there is in the lowest and least forms of life, in the smallest and minutest organic structure on the surface of the globe, a perfection of adaptive contrivance which aimed directly at the continuation of the form, whatever that form might be. A hearty vote of thanks was awarded Dr. Dallinger for his clear and able defence of the reign of law as seen in the animal world.

THE PROMOTION OF TEMPERANCE.

There is no subject upon which there is more diversity of opinion than the best means of promoting temperance in the use of alcoholic drinks, but nothing could have been more appropriate and more likely to help on the good work, than the general adoption of the advice recently given by Mr. Salt, of Burton-on-Trent, at the annual dinner of the Scottish Wine and Spirit Merchant's Benevolent Association. In his remarks he urged the importance, in the first place, of everyone connected with the trade doing all in their power to provide as pure and wholesome an article of consumption as possible; and, next, he called upon all those connected with the retailing of alcoholic drinks, to do all that they could to check intemperance. Such sentiments as these, coming from such a quarter, will, if carried out, work a change for the good in the directions where it is needed, and will help to allay that strong feeling which has of late sprung up in the country against a perfectly legitimate branch of trade, which can have no sympathy with drunkenness, and should aim at encouraging the spread of moderation and temperance in the use of alcohol.

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IRELAND.

It is proposed to hold a bazaar and fancy fair towards the close of the year in Belfast, for the benefit of the Royal Hospital.

THE DUBLIN HOSPITAL SUNDAY FUND.

The tenth annual meeting of the supporters of this fund was held last week, Mr. Ion Trant Hamilton, M.P., in the chair. The Registrar-General, Dr. Grimshaw, as one of the Honorary Secretaries, read the annual report, from which we learn the increasing popularity and continued success of the fund. In 1883, collections were made in thirteen more places than in the former year, and the largest number since the fund was established in 1874, in which year the number was 149, or nearly 100 less than it is now, after ten years of continuous work. The total amount contributed by congregations and individuals, including £56 9s. 6d. realised by the annual football match, organised by Mr. J. M. Peter, between the students of the Dublin hospitals and the County Dublin, amounted to £4,212 19s., which shows an increase of £19 2s. 2d. on the amount collected in the previous year. The increased support awarded to the fund will be seen by the following statement, which sets forth the number of collections and the amount contributed in each year since the foundation of the charity: 1874, 149, £3,306 3s. 2d.; 1875, 195, £3,619 12s. 4d.; 1876, 213. £3,873 9s. 3d.; 1877, 234, £4,106 14s. 6d.; 1878, 230, £4,300 18s. 11d.; 1879, 232, £4,329 18s.; 1880, 229, £4,050 7s. 9d.; 1881, 232, £4,066 8s. 7d.; 1882, 232, £4,193 16s. 10d.; 1883, 245, £4,212 19s. in all, £40,060 8s. 4d. Thus a sum averaging about £4,000 a-year has been added to the incomes of the Dublin hospitals. There are now in all sixteen hospitals participating in the fund, and of these thirteen were in full work before the institution of Hospital Sunday in Dublin. In 1873, the annual subscriptions and donations to these hospitals amounted to £9,011 9s. 1d. In 1882 (the last for which returns are available), they amounted to £10,252 6s. 5d., showing the substantial increase of over £1,000, and this in spite of the fact that three other hospitals had been founded in the meantime, which in 1882 received subscriptions to the amount of £1,364 5s. 11d. A remarkable fact connected with this increase is, that the eight hospitals which supported the fund from its commencement show a total rise in their annual subscriptions and donations between 1873 and 1882 from £4,021 18s. 11d. to £5,621 18s. 4d., or an increase of £1,599 19s. 5d. There were four hospitals which joined in a committee to oppose the fund in 1874, and refused for some time to accept a share of its proceeds. These hospitals show a fall in their subscriptions and donations from £4,636 2s. 8d. in 1873 to £4,493 0s. 7d. in 1882. It is right, however, to state that this fall is owing almost altogether to a decrease in the annual subscriptions to the Convalescent Home. Again, if we consider the work done by the thirteen hospitals referred to above, we find that in 1873, prior to the establishment of the fund, these thirteen hospitals treated 10,782 patients; in 1882, they treated 11,445, or 663 more. In 1873 they contained 1,067 beds; in 1882, 1,206 beds, or 159 more. The daily average number of beds occupied in 1873 was 607.83; in 1882, it was 658.69, showing an increase of 50.86. Besides these thirteen hospitals, three others have been added, which treated 277 patients in 1882, and had a daily average of 46 beds occupied throughout the year. The total amount to the credit of the fund for the year 1883 was £4,396 0s. 4d., including a balance from the previous year of £166 8s. 6d., and £16 12s. 10d. interest allowed by the bankers. The working expenses for the year amounted to £262 9s. 9d., being 6.22 per cent. on the total collected only. The adoption of the report was moved by the President of the King and Queen's College of Physicians, who referred, in the course of his speech, to the great good also done by the fund in the improvement of the nursing in the hospitals participating in the fund, and the encouragement thereby given to the formation of training institutions for nurses, to the great benefit of the public at large.

THE BOWER AND KEATES INDEMNITY FUND.

The Committee have received a cheque for one guinea from Francis Willis, M.D., M.R.C.P.L., Asheville, North Carolina, U.S.A., which was sent before the list was closed. All sums received since January 26th have been returned.

Erratum.—In the final list, in the issue of February 2nd, for "B. Harvey, Esq.," read "B. Harris, Esq."

F. A. Mahomed, } *Hon. Secs.*
R. W. Burnet, }

Hospital Saturday Fund.—At the first meeting this year of the Board of Delegates of this fund, held on February 9th, at the central office, it was stated that the names of 116 delegates qualified to act on the Board of Delegates, and representing an aggregate constituency of 20,000 workmen, had been received.

METROPOLITAN SEWAGE DISCHARGE.

THE first report of the Royal Commission on Metropolitan Sewage Discharge was issued as a Blue-book February 6th. It fills sixty-eight pages. The original commission was appointed on June 22nd, 1882, its members being Lord Bramwell, Sir John Coode, Professor A. W. Williamson, F.R.S., Dr. de Chaumont, F.R.S., Dr. Thomas Stevenson, and Mr. James Abernethy, F.R.S.Edin. By a supplementary commission, dated November 1st, 1882, two additional commissioners were appointed, namely, Sir P. B. Maxwell and Colonel C. B. Ewart, R.E. Their instructions embraced three distinct subjects of inquiry: (1 The system under which sewage is discharged into the Thames by the Metropolitan Board of Works; (2) whether any evil effects result therefrom; and (3) in that case, what measures can be applied for remedying and preventing the same. The commissioners determined to limit the inquiry, in the first instance, to the first two of these subjects, leaving the third to be dealt with subsequently. It is the result of their inquiries, in regard to these two subjects, that is now made public. Of the three "parts" into which the report is divided, the first is a concise "historical notice in regard to the drainage of London" from 1531, when the celebrated "Bill of Sewers" received the signature of Henry VIII, down to the year in which this Royal Commission was appointed. This "Historical Notice" is a most instructive and valuable review, which will, in the future, serve a very useful purpose as a work of reference. The second part is a review of the system under which sewage is discharged into the Thames by the Metropolitan Board. With the majority of the facts contained in this part, those who have paid any attention to the subject are already familiar, at least, in their general outline. Great benefit, it is admitted, has arisen from the main drainage works; they have removed an offensive and deleterious element from the most populous part of London; and granting that some evils may be caused, as the Commission thinks is the case, yet these are not of a nature to be compared with those that have been removed. The most novel subject dealt with is the question of the amount of upward-trend brought about by the tidal oscillation re-inforced by the "mixing action." Sir Joseph Bazalgette has stated in evidence that "a substance, in suspension, works up the river about one mile a day at each high-water as the springs strengthen, and down the river, two miles a day, as they fall off." For the purposes of the present inquiry, a number of experiments were made with floats, from which it appeared that the maximum range of oscillation was eighteen miles (at spring tides), and the minimum seven (at neap tides). One float was carried up from the northern outfall to between Putney and Hammersmith, (twenty miles), and another to between Hammersmith and Chiswick (twenty-one or twenty-two miles). From this it is concluded that sewage may be carried, by the tidal oscillation alone, into the heart of the metropolis and much beyond it, and the experiments further show that this may occur at whatever time of tide the sewage is discharged. It is pointed out that the float-experiments give no trustworthy information as to the gradual displacement or progress downwards of the sewage by the constant influx of fresh water, but this is neither so large nor so constant as might be supposed. As the sewage descends the river, its progress, due to this cause, becomes slower and slower; and it is calculated that in mean seasons, it would require about 150 days to travel from the outfalls to the sea. But it is the "mixing action," the mixing of the sea-water with the river-water, and of sewage with both, due partly to the process of diffusion, and partly to various causes of agitation, which has the most remarkable influence on the distribution of the sewage in the river. The proof of the mixing action of the sea and river-water, and, at the same time, the means of its quantitative determination, are furnished by the amount of chlorine found in the water, and it is argued that there is every reason to believe that the same kind of action goes on between the sewage and the rest of the fluid in the river, and that, therefore, the "chlorine-test" ought to afford a means of determining the extent of the mixing action. It must, in the first place, however, be remembered that the sewage is not discharged into pure water, and therefore diluted in the relative proportion of the quantity of sewage and the quantity of water flowing by the outfalls, but into water already contaminated by the accumulation of successive discharges of sewage on previous days. The "mixing action" does, on the whole, considerably facilitate the permanent progress of sewage out of the river. Instead of the two-thirds of a mile displacement, due to the fresh water alone, the mixing action is stated to produce a permanent displacement of eight-tenths of a mile a day. In dry weather, the sewage discharged at the outfalls gets out to sea after about thirty days' oscillation up and down. In one respect, however, the mixing action is less beneficial, namely, that the combination of sewage with sea-water produces compounds which are more offensive than when the intermixture takes place with fresh water. In the third part of the report, the contention of the Metropolitan Board that the sewage, during its oscillation and mixing, becomes so quickly oxidised and purified as to lose, almost immediately, all its offensive qualities and to become innocuous, is dealt with. The Royal Commissioners, however, believe that the constant presence of a large mass of water containing a vast quantity of sewage, is a danger to public health which demands attention, more especially as the evil must increase with the growth of population. The nett result of the complex processes at work, the oxidation of sewage, its consumption by minute forms of animal life, and the reoxygenation of the river of vegetable life, and by absorption of oxygen, is that, in cold weather and in cool wet summers, the pollution of the river-water exists but does not increase, but that during hot dry weather the pollution increases, and that the river then becomes a nuisance, more or less great, and within greater or less limits. On the whole, therefore, the general tendency of the report may be said to be unfavourable to the contention of the Metropolitan Board of Works. They summarise as follows the general conclusions at which they have arrived.

"1. That the works of the Metropolitan Board for the purpose of carrying the sewage of London to the respective outfalls at Barking Creek and Crossness have been executed in a highly creditable manner, and have been of great benefit to the metropolis.

"2. That the storm-overflows allow the occasional discharge into the river within the metropolis of considerable quantities of solid fæcal matter accumulated in some of the sewers; but this has not caused, under present circumstances, serious damage or offence.

"3. That the sewage from the northern outfall is discharged partly over the foreshore, and not, as was originally intended, 'through submerged pipes terminating below low-water mark,' this arrangement increasing the risk of nuisance from the discharge.

"4. That the discharge of the sewage in its crude state during the whole year, without any attempt to render it less offensive by separating the solids or otherwise, is at variance with the original intention, and with the understanding in Parliament when the Act of 1858 was passed.

"5. That the discharge from the main outfalls becomes very widely distributed by the motions of the water both up and down the river, being traced in dry seasons through the metropolis and almost as high as Teddington, and that it oscillates for a long period before getting finally out to sea.

"6. That the dilution of the sewage by the land and sea water, aided by the agitation produced by the various motions in the river, effects a partial purification of the sewage by oxidation; and that this purification is carried further by the action of animal and vegetable organisms.

"7. That the sewage which becomes distributed to the higher and to the lower portions of the river thus gradually loses its offensive properties. The limits above and below the outfalls where this purification becomes efficient vary with the meteorological conditions, but it may be stated that in general above Greenwich and below Greenhithe the river does not afford ground for serious complaint.

"8. That between these limits the effects of the sewage-discharge are more or less apparent at all times.

"9. That in dry seasons the dilution of the sewage is scanty and ineffective, especially at neap tides.

"10. That it does not appear that hitherto the sewage-discharge has had any seriously prejudicial effect on the general healthiness of the neighbouring districts; but that there is evidence of certain evil effects of a minor kind on the health of persons employed on the river, and that there may reasonably be anxiety on the subject for the future.

"11. That in hot and dry weather there is serious nuisance and inconvenience, extending to a considerable distance both below and above the outfalls, from the foul state of the water consequent on the sewage-discharge. The smell is very offensive, and the water is at times unusable.

"12. That foul mud, partly composed of sewage-matter, accumulates at Erith and elsewhere, and adheres to nets, anchors, and other objects dropped into it.

"13. The sand dredged near the outfalls, which used to be obtained in a pure state, is now found to be so much contaminated with sewage-matter as to be unsaleable, compelling the dredgers to go further away.

"14. That for these reasons the river is not at times in the state in which such an important [illegible] a city, ought to be.

"15. That in consequence of the sewage-discharge, fish have disappeared from the Thames for a distance of some fifteen miles below the outfalls, and for a considerable distance above them.

"16. That there is some evidence that wells in the neighbourhood of the Thames are affected by the water in the river, and although there is no proof of actual injury due to the sewage, that anxiety may be felt on that point.

"17. That there is no evidence of any evil results to the navigation of the river by deposits from the sewage-discharge, but that this discharge adds largely to the quantity of detritus in the river, and so must increase the tendency to deposit.

"18. That the evils and dangers are likely to increase with the increase of population in the districts drained.

"19. That it is desirable we should inquire further 'what measures can be applied for remedying or preventing' the evils and dangers resulting from the sewage-discharge.

"20. That before we proceed to this further branch of our inquiry, we should allow some time for the consideration of this our first report, and of the remedies which may be suggested for the evils we have pointed out.

"All which we humbly certify to your Majesty, under our hands and seals.

"BRAMWELL. "F. S. B. F. DE CHAUMONT.
"JOHN COODE. "THOMAS STEVENSON.
"C. B. EWART. "JAMES ABERNETHY.
"ALEX. W. WILLIAMSON.
"WILLIAM POLE, Secretary, January 31st, 1884."

Owing to his absence from England, the report was not signed by Sir P. Benson Maxwell, who, however, expressed his entire concurrence in the report.

ARTISAN AND LABOURERS' DWELLINGS.

MR. H. A. DARBISHIRE, architect to the Peabody Trust, delivered a lecture on Artisan and Labourers' Dwellings at the Parkes Museum of Hygiene. The chair was taken by Captain DOUGLAS GALTON, C.B., Chairman of Council.

The lecturer began by insisting upon the need of a judicious classification of the poor. Applying his remarks to the industrial poor alone, he pointed out how variety of habits, occupation, and what might be termed social rank, complicated the difficulties of the problem. The habits of those who were accustomed to live amid unsanitary conditions could not be changed in a moment. It could not be expected that the denizens of slums would appreciate all at once the conveniences of decent living. The kind of dwellings which would suit various sections of the industrial poor were discussed and described in detail. He allowed that the objection to the "block" system might have some weight if sites were plentiful in the metropolis; but so long as ground was limited, and the cost of it artificially high, so long would it be necessary to utilise every foot of space—at least, so far as was consistent with health. The interest which model dwellings yielded was 3½ per cent., not enough, he feared, to attract commercial enterprise.

The CHAIRMAN believed that if they were to remodel London they could not do better probably than follow in the steps of the Peabody Trustees. In London there was a large number of dwellings which had been built for the richer classes, but had since been converted into dwellings for the lower classes and the very poor. If people chose to live in communities, they must submit to certain laws and regulations, which would be quite unnecessary to lonely dwellers in the open country. No man had a right to do anything in his house injurious to his neighbour, and, therefore, the community had a right to require both that the houses occupied should be in a thoroughly satisfactory condition, whatever be the class that occupied them, and that the occupiers of houses should conform themselves to regulations. He hoped legislation would not be wanting in this direction. He should much like to see a company started on the basis of selling dwellings (on payment of instalments) to the working classes, so that each man should become the proprietor of his own house if he chose to do so.

In the course of a general discussion, Sir CURTIS LAMPSON, Bart., one of the Peabody Trustees, admitted that the body had made mistakes, but they had profited by experience. At present the trustees had over 800 dwellings, for which the weekly receipts exceeded £1,000. How anxious people were to get these dwellings was shown in the fact that bad debts did not amount to £100 a year. Constant supervision was required to prevent the tendency to the evil of overcrowding. He was so impressed with the importance of the economy of space in London that, if he had the power, he would not allow two-story houses to be built, but would make a greater elevation obligatory. The Artisans' Dwellings Act he characterised as a failure.

After some remarks from Mr. S. FORD, of Bermondsey, Mr. MARK JUDGE moved a recommendation to the Council of the Parkes Museum to appoint a committee of medical men, architects, and sanitary engineers to make an investigation of the whole subject. This was seconded by Dr. RUTHERFORD, and carried, after some observations from Mr. DICKENS, an ex-vestryman of Kensington; and Dr. POORE, Vice-Chairman of the Council, dwelt on the great overcrowding in the Soho district, which was aggravated by the fact that the houses had not been built for the occupation of the poor.

CENTENARY OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

A BANQUET in commemoration of this occasion was given by the President of the College, Mr. W. I. Wheeler, on Monday last, in the Albert Hall of the College. The Lord Lieutenant honoured the President with his company, and in addition to the Council, Professors, and Examiners of the College, a number of distinguished guests were invited to meet his Excellency. These included the Lord Chancellor of Ireland, the Lord Chief Justice, and several of the judges and members of the Irish bar; Lord Clarina, Sir Arthur Phayre, K.C.M.G., Sir Robert Jackson, C.B.; Sir Thomas Jones, President of the Royal Hibernian Academy; Mr. Brooks, M.P., the Governor of the Apothecaries' Hall, the Principal Medical Officer for Ireland, etc. About one hundred guests sat down to dinner, all the arrangements connected with which were excellent. The after-dinner speeches were brief, and above the average on similar occasions.

The President, in returning thanks for the toast of his health, which was given in very complimentary terms by his Excellency, and most enthusiastically received by the company, gave an interesting review of the circumstances that led to the foundation of the College, and its career during the past century. He pointed out that, although they had met to celebrate the one hundredth anniversary of the College, yet it had commenced its career of usefulness long precedent to its incorporation as a chartered institution, as about the year 1446 Henry VI granted a charter of incorporation for the promotion and exercise of the art of surgery; and it was worthy of note that even at that remote period Ireland foreshadowed the surgical repute which she had since maintained, by the fact that in this incorporation she had anticipated both England and Scotland, as it was not until 1461 that England obtained a similar corporate recognition, while Scotland did not receive any recognition until 1501. In 1576 Queen Elizabeth granted a charter to a company of chirurgeons, under the title of the "Guild of St. Mary Magdalene," which body held possession of surgery in Ireland for nearly two centuries. In 1756 the Government established the county infirmaries of Ireland; and he (Mr. Wheeler) hoped that [those admirable institutions, which had done so much good for more than a hundred and twenty years, would continue to receive the support of the Government. The fitness of all the infirmary surgeons was tested by an examining-board, formed and arranged by the Government. That board discharged its duties until 1786, when they were handed over to this College—two years after the granting of the charter of February 11th, 1784. From this his Excellency would observe that, in the very first years of the centenary which they were now celebrating, the Government reposed confidence in the College, and from that early period, when its public duties first commenced, it had been continuously and efficiently engaged in providing for the surgical wants, not only of Ireland, but of Her Majesty's naval and military services.

The President also referred to the establishment of the school of anatomy and surgery in connection with the College, and to the educational work performed by it; and alleged that the College had voluntarily, and at much sacrifice of its financial interests, occupied a foremost place amongst the licensing institutions of the kingdom, by the zeal for advancement which it had manifested, and by the improvements in systems of education and examination which it had initiated, and in which it had forestalled other institutions.

Alluding to the Medical Acts Amendment Bill, the President remarked that the College had expressed itself as most willing to aid in any movement having for its object improvement in the system of surgical education and examination, and they had given substantial proofs in their past history of their readiness to effect those improvements even without the compulsion of Acts of Parliament. But they could not forget that their first duty lay towards the protection of that great institution the interests of which had been confided to them; and it was their duty to see that such changes should be effected without unnecessary violence to the constitution of this College, and the principles upon which for a hundred years it had been efficiently administered.

THE CASE OF THE LATE MR. TOWER.

Renewed public attention has been directed to this startling tragedy by an announcement, in a usually well informed evening newspaper, that the authorities were now convinced that a mistaken conclusion had been too hastily arrived at that a foul murder had been committed, that the police have been censured, that an endeavour was being made to quash the verdict of the coroner's jury, and that Mr. Bond's conclusions as to the cause of the death of Mr. Tower have been severely criticised by several leading members of the medical profession. This statement has been denied, and the latter part of it may be met with the remark that the medical press has almost entirely refrained from making any comments of importance on the case. Under those circumstances, it may be well to set out in detail Mr. Bond's evidence as to the results of his *post mortem* examination, in which he was assisted by Mr. White, and the conclusions arrived at by those gentlemen.

Mr. Bond is reported to have said at the inquest on Mr. Tower:

"The body was that of a well grown, fairly muscular man. Rigor mortis was still present, and there was no sign of decomposition. The face was red and suffused, and the mucous membrane of the lips was purple. There was a slight abrasion of the upper lip, as if it had been pressed against the teeth. Frothy mucus, slightly tinged with blood, issued from the nose. There was a small lacerated wound on the tip of the nose, evidently done during life or immediately after death. There was no fracture of the nasal bones. There was an abrasion on the lobe of the left ear; and this abrasion also appeared as if done during life. The eyelids were closed, and there was no protrusion of the eyeballs. There was no congestion of the mucous membrane of the eyes, which were natural. The legs were partly flexed at the knee-joints, and the hands were partly clenched. Around the front of the neck there was a white mark, not depressed, with a red rim of congestion above and below, half an inch wide. It extended three and a half inches back on the right, and four on the left. On the left side there was also a depression at the extemity of the mark, as if by a knot, and red in the centre. The line on the neck was on a level with the lower part of the cartilaginous larynx, and it sloped slightly upwards at the back. The cellular tissue under the white line was bloodless and of a light colour, with a rim of congestion above and below the white mark. This condition of the neck indicated, in my opinion, that pressure had been made during life, or immediately after death, by a soft thick ligature, like a handkerchief. There were no other external marks of injury, even on the chest. The skin of the chest was somewhat mottled or spotted. The scalp was exceedingly vascular, but there was no suffused blood under it, and no signs of a blow on the head. The membranes of the brain were intensely congested, and especially so the veins. On removing the skull-cap, eight ounces of black fluid blood escaped. There was considerable arterial congestion of the brain, but no fluid in the ventricles. There was no injury or fracture of the skull, and the substance of the brain was healthy. The nose and mouth were full of frothy mucus. The back of the tongue was slightly congested, and the epiglottis was of a brick-red colour from congestion. The mucous membrane of the larynx was congested throughout. The surface of the lungs was much mottled, and very crepitant on pressure. There were light-coloured patches scattered all over the surface of the lungs. These patches disappeared on pressure with the finger. They were caused by air-bubbles from ruptured air-cells beneath the pleura. This condition is very marked, and is found after death from strangulation. The lungs were much congested throughout, and full of frothy mucus. There was no water in the lungs, and they were different from the lungs of persons who had been drowned. There was slight congestion of the bronchial mucous membrane, and extravasation of blood into the lung-substance; and there was no lung-disease. There was about a drachm of clear fluid in the pericardium. The left ventricle was contracted and nearly empty; the right relaxed, and nearly empty; but the pulmonary vessels were gorged with blood. The mitral valve was thickened with adherent nodules of old lymph; but the heart was otherwise empty. The stomach contained about eleven fluid ounces of semi-transparent liquid, mixed with nearly digested food. There were no weeds or mud in the stomach. The stomach-contents smelt strongly of alcohol. The stomach itself was quite healthy. The kidneys and other abdominal organs were healthy.

"My opinion is, that death was caused by homicidal strangulation or homicidal suffocation. The intense congestion of the brain indicates a slow death and violent struggling. The crepitant condition of the lungs, in my opinion, was quite different from the appearances in death from drowning. There was no sign of any blow to account for insensibility. Two or three persons must have been engaged in causing the death. I should think, from the condition of the heart, that the deceased would probably have fainted after a struggle. I am not able to say that the marks indicate that the pressure of the handkerchief was alone sufficient to cause death; but I am sure that the constriction of the neck, combined with pressure over the mouth and chest, would produce prolonged insensibility. Indeed, the constriction of the neck alone would do that, and if the deceased were then thrown into the water in this condition, he would, no doubt, die of suffocation without the usual symptoms of drowning. I do not think it at all possible that the death could have been the result of suicide. The immediate cause of death was suffocation or strangulation."

That death was the result of asphyxia there can be no doubt; and that this asphyxia resulted, at all events in great part, from the application of the ligature, appears to be equally clear. The handkerchief tied round the neck when the body was found in the water had been removed by Mr. White before the necropsy was made by Mr. Bond. It was tied behind in three tight knots. The evidence as to the degree of tightness of the ligature itself is wanting. More than one knot is, nevertheless, consistent with suicide. Beck relates the case of a female suicide, who tied a handkerchief round her neck from behind forwards, made a knot in front, returned the ends, and made a second knot at the back of the neck. Tardieu also relates, second-hand, the case of a girl, who, spite of a maimed right hand, passed a handkerchief two-and-a-half times round her neck, and then fastened it on the left side in two knots, the first knot being the tighter of the two; and the fatal pressure must have been exerted before the second knot was tied. Hence the suicidal theory is not, as we believe, altogether excluded by the results of the *post mortem* examination. It is remarkable that there was an absence of all signs of violence, except the two inconsiderable abrasions on the lip and ear. In such a case, the circumstantial evidence is all important. The footsteps are of very doubtful value in a spot over which many people have passed. The missing watch may afford a clue; but it is within the bounds of possibility that it might have been picked up and carried off by some innocent passer by, who subsequently, when a hue-and-cry was raised, might be afraid to produce it. An earring, picked up near the spot where the body was found, may or may not have an important bearing upon the case. It is difficult for anyone who has not had the advantages which Messrs. Bond and White had of making an actual examination of the body and its surroundings, to form an accurate judgment of the case. No doubt these gentlemen will, at some future time, give the profession a full account of their observations. Meantime, until some more definite steps are taken by the police, all right-minded men must suspend their judgment, and not hastily condemn so experienced an expert as the assistant-surgeon to the police for expressing a very positive opinion as to the question of suicide or homicide.

A HOSPITAL WITH CIRCULAR WARDS.

For some time past, an attempt has been made to raise the funds needed to provide hospital accommodation for the town and district of Burnley, Lancashire. The population exceeds one hundred thousand persons. In addition to the sum of £1,500 as the nucleus of an endowment fund, the committee have succeeded in obtaining subscriptions to the building fund to the extent of £12,600; and a site of two acres in extent has been generously given, along with a handsome subscription of £1,000, by the executors of Colonel Hargreaves. Towards the building fund, over £3,000 has been paid in by the working classes within a period of nine months, the result of systematic collections at the mills and workshops every four weeks. These collections the committee have suspended for the present, owing to the disturbed state of the cotton-trade throughout the whole district; but they hope to be able to resume them before long.

The plans approved of by the committee provide for the erection of a hospital with one-story pavilion-wards of the circular form, as suggested by Professor Marshall, President of the Royal College of Surgeons. Two of these wards are to be built at present, with an internal diameter of 60 feet, for the accommodation of twenty beds each.

The architects, Messrs. W. Waddington and Son, of Burnley and Manchester, have designed a sun-room, or day-room, on the top of each ward, with a promenade 12 feet wide all round it. Access to the roof is given by a gently sloping spiral staircase, enclosing the smoke and extraction flues, and occupying a closed-in space in the centre of the ward, 16 feet in diameter. There is thus left for the ward itself an annular space 22 feet in width.

The height of the wall at the eaves is 15 feet, and at the inner portion 16 feet. The roof is formed of concrete supported on iron girders. The linear wall-space of the ward is 189 feet, giving an average wall-space per bed, excluding doors, of about 8 feet 4 inches. The floor-space is 132 square feet, and the cubic space 1,560 cubic feet, per bed. Windows are placed between each bed, extending from 2½ feet from the floor to within about a foot of the ceiling; and ample provision is made for ventilation, both at the floor-level and at a height of about 7 feet. From the inner part of the ceiling, and also from the floor, ventilating outlets are led to an extraction-shaft, which encircles the smoke-flues.

The walls of all the wards, water-closets, and bath-rooms, are to be of glazed bricks or tiles. The floors of the wards are to be of oak, bees'-waxed and polished. Separated from each ward by a cross-ventilated corridor are the bath-room and water-closets. Connecting the circular ward with the main corridor is a well-ventilated passage, on either side of which is a single-bedded separation-ward; and between these wards and the circular ward are the nurse's rooms and the ward-scullery.

A subway is provided from the cellar-floor of the administration-block to the wards; in this, all pipes will be laid, and along it coal, foul linen, cinders, and sweepings, may be conveyed. Provision is made on the site for the addition of four other wards, similar in size to those described, and also for a children's ward for fourteen beds. This is intended to be 40 feet in diameter, to have no central staircase or sun-room, and to have a dome-shaped ceiling.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN ordinary meeting of the Council of the Royal College of Surgeons of England was held on Thursday, the 14th inst. The minutes of the ordinary council, held last month, were read and confirmed. A report was read from the Committee on the Mode of Election to the Council, which was carried. It was as follows. "The first and second reports of the Committee, dated the 30th of October and the 27th of December, 1883, respectively, having been approved and adopted by the Council, the Committee met on this date to consider the following resolution of the Council of the 10th of January last, viz.: That Section 14 of the Charter of the 7th Victoria, pages xxxviii and xxxix of the Calendar, relating to substitute members of the Council, be referred to the consideration of the Committee on the Mode of Election to the Council, and on other matters relating to the Charters and By-laws of the College, with directions to report thereon to the Council, and having considered the same, adopted the following as their third report to the Council, viz.: The Committee, having fully considered Section 14 of the Charter of the 7th Victoria, relating to substitute members of the Council, are of opinion that it is inexpedient that any alteration should be made therein." Mr. Erichsen moved the following resolution, which was seconded by Mr. Cadge, and carried unanimously: "That, in accordance with Section XVIII of By-laws, the President be requested to convene a meeting of the Fellows and Members of the College, to report to the Fellows and Members the alterations in the charters proposed by the Council, and to receive from them any suggestion or recommendation with respect to these or any other alterations in the Charters which they may have to offer for the consideration of the Council." The presidents and vice-presidents were requested to make, and report to the next meeting of the Council, the necessary arrangements for the meeting, which will probably be held about March 27th. The President, Professor John Marshall, F.R.S., was elected to represent the College at the Tercentenary Celebration of the University of Edinburgh in April, and at the International Medical Congress at Copenhagen in August.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 20th, June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th 1881.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pueumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
V. Syphilis, acquired.
V*a*. ,, inherited.
VI. Acute Gout.

URGENT.—*The Committee needs 150 more cases of Pneumonia, and hopes that they will be sent in as soon as possible.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
September, 1883. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH. Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

STAFFORDSHIRE BRANCH. The second general meeting of the present session will be held at the Railway Hotel, Stafford, on Thursday, February 28th, at half-past three o'clock in the afternoon.—VINCENT JACKSON, Secretary. January 28th, 1884.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT. The next meeting of this district will take place on Friday, March 28th, at Woolwich; Sir James Hanbury, K.C.B., A.M.D., in the chair. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary of the district, A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than February 29th. Further particulars will be duly announced.—A. W. NANKIVELL, Honorary Secretary. January 29th, 1884.

THAMES VALLEY BRANCH.—The next meeting will be held at the Griffin Hotel, Kingston-on-Thames, on Wednesday, February 27th.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting of the above District will be held on Thursday evening, February 21st, at the Hackney Town Hall. The chair will be taken at half-past eight o'clock. Dr. Herman will read a paper on Prolapse of the Pelvic Floor. The Honorary Secretary will call the attention of the members to the benefits of the "Medical Sickness, Annuity, and Life-Assurance Society," and invite suggestions to extend, if possible, its usefulness.—FREDERICK WALLACE, Honorary Secretary.

BORDER COUNTIES BRANCH.—The next meeting will be held at the Central Hotel, Carlisle, on Friday, February 22nd. The chair will be taken at 6 P.M. Dr. Angus Macdonald, of Edinburgh, will open a discussion on Puerperal Pyrexias and Dr. Taylor, of Penrith, will be presented with an address on the occasion of his retiring from practice. Dinner at 8.30 P.M., 5s. per head, exclusive of wine.—H. A. LEDIARD, Carlisle; J. SMITH, Dumfries. N.B.—It is particularly requested that members and visitors will give early notice to Dr. Lediard of their intention to be present, in order that the dinner arrangements may be adequate.

DUBLIN BRANCH: ANNUAL MEETING.

THE seventh annual general meeting of this Branch was held on Thursday, January 31st, in the King and Queen's College of Physicians; Dr. BANKS, Regius Professor of Physic in the University of Dublin, Physician in Ordinary to the Queen in Ireland, and President of the Branch, in the chair. There was a large attendance of members, including the President of the College of Physicians, the President of the Irish Medical Association, the Vice-President of the College of Surgeons, and the Governor of the Apothecaries' Hall, etc.

Report of Council.—The honorary secretary, Dr. George F. DUFFEY, read the following report.

"In presenting the seventh annual report, the Council of your Branch have the satisfaction of announcing its continued prosperity and usefulness. During the past year thirty-six gentlemen were elected members of the British Medical Association by the Council of the Branch, and 22 members were elected into the Branch. Owing, however, to several members of the Branch having left Dublin, and in consequence also of a few—five—resignations, the number of members now on the roll of the Branch, viz., 185, shows an increase of three only, as compared with last year.

"At the last annual general meeting, the outgoing Council submitted a *precis* on the 'Report of Her Majesty's Commissioners appointed to inquire into the Grant of Medical Degrees,' together with some remarks thereon; and in the seventh paragraph of their annual report, the Council stated that, as a result of the views it had expressed in the special report above referred to, it could not advise the Branch to accede to the request of the Medical Reform Committee of the parent Association to memorialise the Government to introduce a Medical Acts Amendment Bill, based on the report of the Royal Commissioners. On the motion for the adoption of the annual report, exception was taken to these views of the Council, and, after an animated debate, which was twice adjourned, the following amendment, moved by Dr. Atthill and seconded by Dr. Jacob, was carried on a division: 'That the annual report of the Council be received and adopted, except the 7th paragraph, which, together with the annexed report on the subject, is referred to the incoming Council for reconsideration, with a recommendation that the policy of the parent Association in reference to medical reform shall be, in principle, supported by the Branch.' As a result of the adoption of this resolution, five of the members of the Council elected at the last annual meeting resigned their seats. Although the opinions held by these members upon the subject of the medical reform were not in accordance with those of the majority of the Branch, your Council has experienced a loss, by their withdrawal, of some of its former most experienced and active members.

"During the past year your Council held eight meetings, the attendances at which is shown on the balloting paper. At its first meeting, after careful consideration of the resolution adopted by the annual meeting, it was resolved to withdraw the paragraph, No. 7, referred to in that resolution, from the annual report of the outgoing Council, as well as their remarks on the report of the Royal Commissioners, also mentioned in the same resolution.

"The Council had under their consideration, at several of their earlier meetings, the Medical Acts Amendment Bill. Bearing in view the resolution adopted by the last annual general meeting, the Council felt justified in expressing its approval of the general principles of the Bill, as containing much that met the wishes of a majority of the members of the Branch and of the medical profession. At the same time the Council was of opinion that the Bill, as it was introduced into the House of Lords, required amendments in several particulars. The Council accordingly drew up a report upon the Bill, indicating what, in its opinion, these points were. A copy of the report was sent to every member of the Branch, as well as to the chairman of the Parliamentary Bills Committee of the Association, and to a number of other persons interested in the subject. The Council also forwarded a petition for presentation to the House of Lords, not in favour of the Bill as introduced into their lordships' House, but praying that the provision therein made for improvement in the examination of candidates for the medical profession, and for the introduction of representatives elected by the registered medical practitioners residing in the United Kingdom of Great Britain and Ireland into the Medical Council, might become law.

"With regard to the amendments made in Committee of the House of Lords on the Bill, especially the amendment whereby one of the three representatives of the King and Queen's College of Physicians, as originally proposed by the Bill, was removed, thus giving the University representatives a majority on the Medical Board for Ireland, the following resolution was unanimously adopted, and a copy thereof was sent to a large number of peers, as well as brought personally under the notice of several of those members of their lordships' House who took part in the debate and voted on the subject.

> "'That the President and Council of the Dublin Branch of the British Medical Association, emphatically and respectfully protest against any of the Irish medical authorities having a greater number of representatives than another on the Medical Board for Ireland, as laid down in Clause 9, Subclause 5, of the Medical Acts Amendment (H.L.) Bill, as amended in Committee; inasmuch as the representatives of different bodies on a board having the distribution of moneys should be, in the opinion of this Council, equally balanced.'

"This Branch having taken the initiative four years ago in bringing the subject of the notification of infectious disease before the public and the profession in Ireland, your Council was gratified at receiving recently an invitation from the Dublin Sanitary Association to join it and other bodies in a deputation to the Chief Secretary, to press on him the importance of Government introducing a Bill for this object, on the lines of the Bill suggested by the Council of the Branch, and by the Committee of Council of the Irish Medical Association. This recognition by a lay association of the plan of notification of infectious disease to the sanitary authority not being made compulsory on the medical attendant, while, at the same time, it was left optional with him to notify if he should think fit, shows the advance that has been made in educating public opinion on this important matter. The views put forward by the deputation were cordially received by the Chief Secretary, who expressed his approval of the proposal, and the intention of the Government not to do anything in the matter until it was fully satisfied as to the views held by the majority of the profession upon the subject. Your Council, in April last, petitioned against the English Bill introduced by Mr. Hastings for the compulsory notification of infectious diseases by the medical attendant.

"Your president and several members of the Council had also the pleasure last week of joining officially in a deputation to the Chief Secretary in support of the Union Officers Superannuation (Ireland) Bill, and in bringing the claims of the hardly worked and badly paid dispensary medical officers to [illegible] pension, under the notice of the Government, and urging the reintroduction of the Bill at as early a period as possible in the approaching session of Parliament.

"Your Council observes with pleasure the accession to this Branch and to the Association of a large number of officers of the Army Medical Department. The British Medical Association has done good service for this important part of the profession; and your Council feel assured that, by availing themselves of the organisation afforded by this and other Branches of the Association, and by thus also bringing their department into more intimate relationship with their unequivocally 'noncombatant' professional brethren, mutual advantage will result. A resolution with reference to certain hardships at present affecting the Army Medical Department will be submitted to the meeting.

"Your honorary secretary and treasurer, Dr. George F. Duffey—who, as Honorary Secretary for the Association in Ireland, interested himself, in conjunction with the president-elect and other members of the Council, in forming this Branch in 1877—does not seek re-election this year as Branch Secretary, in consequence of the increasing demands upon his time. The Council have had much satisfaction in the nomination of so efficient a successor to Dr. Duffey as they believe Dr. Richard Hayes will prove.

"In order to obviate any inconvenience that might arise from voidance of posts among the officers and council in the interval between annual meetings of the Branch, the following addition to By-law VII is proposed by the Council: 'All interim vacancies may be filled by the Council.'

"The accounts of the Branch up to the 29th instant have been audited by Dr. E. H. Bennett, and show a balance in favour of the Branch of £18 1s. 1d.

"The thanks of the Branch and of the Council are again eminently due to the President and Fellows of this College, for their courteous permission to hold our meetings within its walls."

The adoption of the report was moved by the Vice-President of the Royal College of Surgeons in Ireland, Dr. E. H. **Bennett**, who referred to the regret felt at the withdrawal of Dr. Duffey from the post of Honorary Secretary, and to the efficient manner in which he had performed the duties of the office.

Dr. **Atthill**, in seconding the motion, said he did not approve of the Medical Acts Amendment Bill introduced last year, and if such a Bill were again introduced he would oppose it. He trusted that both those who agreed with and those who differed from him last year would unite, if a Bill should be introduced this year, in endeavouring to see that it contained a moderate amount of reform, and was calculated to prevent the anomalies and disgraces which at present existed in the profession, and at the same time would protect their old and respected corporations.

Dr. **Kidd** said that he was glad to hear Dr. Atthill's statement, but regretted that the Council had expressed its approval of the principle of the Bill, which he believed to be necessarily ruinous to the medical corporations.

Dr. **Jacob**, President of the Irish Medical Association, did not agree with this observation. He warmly approved the effort at reform the Bill contained, but he as strongly dissented from certain portions of it which dealt unjustly with the licensing bodies.

Dr. **Kidd** said he was just as warm an advocate of reform as Dr. Jacob and Dr. Atthill; but he objected to revolutionary Bills.

The resolution was put, and carried unanimously.

Army Medical Department. In the unavoidable absence, through indisposition, of the President of the Royal College of Surgeons, Mr. Wheeler, who was in charge of the resolution, the President of the Irish Medical Association, Dr. **Jacob**, moved: "That this Branch observes with regret the great block in promotion which at present exists in the senior ranks of the Army Medical Department, and the extremely short period of home service that is now enjoyed by surgeons-major, and requests the Council of the Branch to take such steps as it may deem advisable, to direct the attention of the Government to these points." Dr. Jacob pointed out that, at the time of the Crimean War and the subsequent Indian Mutiny, a large number of young medical men had joined the Army Medical Department. The gentlemen who entered the service then had now come to the condition of being surgeons-major of high standing and of long service; and the complaint they had to make was that the upper ranks of the military medical service, into which they had reasonably expected by this time to have been promoted, had become so blocked by the continuance therein of surgeons-general and deputy surgeons-general, that there was not the slightest probability of those junior officers receiving the position to which their length of service now entitled them. In a year or two there would be about two hundred of those gentlemen without hope of promotion to the administrative ranks of the army service. It was indispensable, in the interests of both the public and the Army Medical Service, that this matter should be grappled with. He did not say how this block was to be removed; but it appeared to him that the only way in which it could be done was by offering inducements to the existing officers to retire. The resolution he moved had been framed with the purpose of not setting out any method of dealing with this matter. It was proposed that it should be left to the Council of the Branch to consider and take advice from those acquainted with the organisation of the Army Medical Department as to what action, if any, should be taken.

Dr. EDWARD HAMILTON, president-elect, in seconding the resolution, said this was not a shadowy but a real grievance, and one which, if allowed to continue, would damage the entire army medical service. The great inducement to enter that service was the certainty which had hitherto prevailed that, if men did their work faithfully, efficiently, and conscientiously, they would be rewarded with good positions. If that hope were to be taken away from them, he for one would use his influence to prevent young men from entering the army. The question was one which involved status, pay, and retiring allowance. It was objectionable that men advanced in life should be obliged to remain in executive spheres when they could not be expected to retain the firmness of nerve, decision, and steadiness of eye and hand that they possessed in their youth. There was no doubt that of late years the Government had done a great deal for the Army Medical Department, and they were entitled to due credit for it.

Surgeon-Major J. B. HAMILTON, A.M.D., said the present administration of the army had nothing to say to the block that was complained of. It was the result of an emergency that occurred thirty years ago.

Brigade-Surgeon ROE thought it might be better not to press the resolution, as the state of things which led to the grievance complained of would probably be only temporary.

Dr. JACOB said it would do no harm to refer the matter to the Council.

The resolution was unanimously agreed to.

Officers and Council.—The result of the ballot for officers and Council was announced to be the following. *President*—Edward Hamilton, M.D. *President-Elect*—Lombe Atthill, M.D. *Vice Presidents*—E. H. Bennett, M.D., and T. W. Grimshaw, M.D. *Council*—J. K. Barton, M.D.; John T. Banks, M.D.; J. H. Chapman, F.K.Q.C.P.; A. H. Corley, M.D.; George F. Duffey, M.D.; Samuel Gordon, M.D.; Surgeon-Major J. B. Hamilton, M.D., A.M.D.; Robert M'Donnell, M.D., F.R.S.; E. D. Mapother, M.D.; J. W. Moore, M.D., Pres. K.Q.C.P.; Walter G. Smith, M.D. *Representative on the Council of the Association*—George F. Duffey, M.D. *Honorary Secretary and Treasurer*—Richard A. Hayes, M.D., 56, Merrion Square.

The newly elected president, Dr. HAMILTON, then took the chair amid applause.

Vote of Thanks to Out-going President.—On the motion of the President of the College of Physicians, seconded by Dr. KIDD, a vote of thanks was passed to the outgoing president, Dr. Banks.

President's Address.—The PRESIDENT then delivered an address, entitled "Thoughts on Education." It is published on page 305.

Vote of Thanks to Dr. Duffey.—Dr. BANKS moved, and Dr. GRIMSHAW seconded, a vote of thanks to Dr. Duffey, for his services to the Branch while he had held the office of Honorary Secretary and Treasurer. The resolution was carried by acclamation, and Dr. Duffey having replied, the proceedings of the annual meeting terminated.

Annual Dinner.—In the evening the annual dinner took place at the College of Physicians. The President occupied the chair, and among those present were Dr. Lyons, M.P.; General Darby Griffiths, C.B.; Dr. Banks; Dr. Robert M'Donnell; Dr. Cameron, M.P., Glasgow; the Registrar-General; the President of the College of Physicians; the Vice-President of the College of Surgeons; Sir John Barrington, D.L.; the Principal Medical Officer for Ireland; the President of the Irish Medical Association; the Medical Commissioner of the Local Government Board, etc. Covers were laid for fifty-five; and after dinner an admirable selection of music was given in the interval between the toasts.

METROPOLITAN COUNTIES BRANCH: WEST MIDDLESEX DISTRICT.

THE first meeting of this District was held at the Horbury School Rooms, Notting Hill, on the evening of January 30th. Dr. C. J. HARE, President of the Branch, was in the chair, and made a few introductory remarks.

Communications.—The following communications were made:

1. Dr. J. Braxton Hicks read a short paper, illustrating, by three cases, the assistance which the Diagnosis of Abnormal Conditions in Pregnancy derives by the knowledge of the Intermittent Contractions of the Uterus. Two cases were complicated with tumours in the uterine walls; in the third, an almost transverse position of the uterus, complicated with hæmorrhage at the fourth month, required elucidation; and the exact relationship of the several parts was clearly established by the observation of the changes in the density of the uterine walls. At the commencement of the paper, a short retrospect was given of the papers read by the author on the subject. A discussion followed, in which the President, Dr. Cleveland, Dr. Hemming, and others took part.

2. Dr. Herringham gave an address on the object of the Collective Investigation Committee.

3. Dr. Braxton Hicks exhibited two kinds of Bed Lifts, and explained their mode of use.

4. Dr. Cleveland mentioned the occurrence of three Cases of Typhoid Fever at St. John's Wood, which he had clearly traced to the use of milk from a particular dairy in the neighbourhood.

5. The President mentioned the Case of a Gentleman, at present under his care, with attacks of *petit mal*, whose pulse came down to 17, and afterwards to 13½ in the minute.

6. Dr. Braxton Hicks also mentioned a Case of a Gentleman, the subject of a street accident, whose pulse was reduced to 8 in the minute, during the three weeks he survived.

Votes of thanks were unanimously accorded to Dr. Braxton Hicks, and to Dr. Herringham.

In consequence of the unavoidable absence of Mr. Malcolm Morris, the reading of his paper on Alopecia was deferred till a future meeting.

Vote of Thanks. On the motion of Mr. J. Merriman, seconded by Dr. E. H. Vinen, a vote of thanks to the President, Dr. Hare, for presiding, and also for his admirable address at the annual meeting, was passed unanimously.

SPECIAL CORRESPONDENCE.

LETTERS FROM THE RIVIERA.

II. CANNES.

Situation, Climate, and Meteorology. Bouille-a-baisse. — Native Merits and Acquired Defects. Promenades and Pleasures. The Cannes of the Future. —Open Spaces. – The Neglected Classes.

MR. ERNEST HART writes from Cannes:—.

Cannes is the garden-city of the Riviera. Facing southward, encircled by a triple rampart of Alps and hills, occupying a picturesquely undulating and hilly area, extending about four miles across the seaboard, and running two miles back to the mountains, Cannes, with its suburbs and adjacent villages, may boast of a situation and extent of ground which no other city of the Riviera can rival. It is sheltered between the east and west-south-west points from all the winds that blow round by the north. Its sandy soil, its granite and calcareous rocks, its fir-clad hills, are throughout the winter warm and dry. Its winter day-temperature ranges generally from an average of 65° to 59°, and is alike remarkable for its mildness and equality; the clearness and purity of the atmosphere, the gentle heat of the winter sun, rarely veiled by clouds, and unobstructed by dampness or fogs, invite the invalid and the holiday-maker to continuous life in the open air, from early morning till sunset. From November till May, the weather and the temperature remind the English visitor of a season of perpetual May-time. It is rarely too hot for riding or walking, at any hour of the day; invalids are bidden to protect the head by umbrellas and sunshades, but I have not at any time during the day found the sunshine overpowering or needed the protection from the "darts of Phœbus" which I was rhapsodically warned to provide. The Cannois have not always been wise in their generation, or they would have protected their seashore from the encroachment of the railway, which has been allowed to cut off all access to the sands on the western side of the town, as far as La Bocca. This is a misfortune for those who love to roam on the shore and to skirt the ocean in their walk. Two miles of what might have been the loveliest promenade of the Riviera are thus rendered unavailable, except to those who, like myself, would rather plough through heavy sand, cross forbidden "side ways," climb embankments, and trespass, of malice aforethought, over paths forbidden "by authority", than lose the pleasures of a sea-side ramble along a shore which is laved by the blue Mediterranean, and in full view of the purple chain of the Esterels, of which the tints are ever changing, and to which the grand parasol pines of La Bocca furnish a foreground of solemn beauty. The eastern shore has been embanked, and a good esplanade made, by private enterprise chiefly, and the promenade of La Croisette is the only marine walk of Cannes. Here, however, villas have been allowed to be brought down too near the edge of the sea. The road is rendered uninteresting by a series of walls, and the proximity of the rail. Its beauties are all seaward. These, however, cannot be taken away; and a walk or drive along the esplanade, a visit to the "Gardens of Hesperides," and a fish-breakfast at The Reserve, may be counted among the golden experiences of a winter holiday, while the drive is for invalids a precious daily resource. These gardens, the property of an orange-grower, who makes a handsome profit by his delightful industry, are among the marvels of the Riviera. Many thousands of orange-trees, planted in masses, are at this moment laden with their golden fruit, watched with commercial care, watered from streams of the Siagne, the leaves refreshed by cleansing artificial showers. Orange-groves may be seen here in such perfection of foliage, and fruit in such wealth of abundance, as can hardly be conceived by those who have only seen the orange-orchards, or groves, of the ordinary hillsides and valleys of the Riviera, or even in Corfu or Egypt. I have not yet visited the orange-groves of Sicily, but nowhere have I ever yet seen such an ideal picture of abundant beauty of leaf and fruit as in these gardens. At the Reserve—an oyster-park and marine fish-pond—you can select your bivalves, crustaceans, and fish from the sea, and they are dressed for table forthwith by a highly expert *chef*.

I have had something to say in the pages of the JOURNAL at different times on dietetic questions; and, as theoretical dietetics need to be crowned with precise gastronomic indications, if they are to flower into practice, I have ventured into the regions of more or less scientific gastronomy in the papers of the "Doctor in the Kitchen," which I have often promised to numerous correspondents and expectant publishers to reproduce and extend, without having yet found the time or opportunity even to commence the realisation of the promise. Let me be pardoned by more serious spirits if, in the course of this winter holiday, and in the current of disjointed gossip, I add now a word of digression on the subject of a local method of cooking fish, prevailing more or less throughout Provence, which I highly commend as scientifically well conceived and gastronomically excellent. "Bouille-à-baisse" is a name of fame, celebrated in verse and in prose, and the subject of much dissertation by learned "*professeurs de la bouche*." There are many and diverse recipes for preparing it, and *bouille-à-baisse*, though one in name, differs in its composition according to local tradition, and is by town cooks transformed in various shapes. Its essential idea is the boiling of fish in oil; this is the basis of a physiologically excellent aliment, and in this way a nutritive and toothsome preparation is effected of many coarse kinds of sea-fish otherwise but little palatable. Of frying fish in olive-oil I have already spoken. It is a mode of dressing fish much neglected by the ordinary population. Boiling fish in oil is in England unknown, and, if introduced, would add a valuable resource to our too limited means of utilising the cheaper products of the harvest of the sea. It is, moreover, in the form of *bouille-à-baisse*, worthy the attention of the cosmopolitan epicures. I shall add, therefore, to the existing store of recipes, my own, based upon my performances as *chef* at recent marine picnics to *Iles Lerins.* Into a large flat glazed pipkin pour enough oil to cover the bottom of the pan, slice three small onions and fry them in it for about ten minutes; add more oil, and throw in two pounds of rough fish cut into pieces (on this occasion, I used rouscasses, a small Mediterranean fish, pieces of conger eel, and a small spiny lobster), some orange-peel, bay-leaves, a dose of garlic, pepper and salt; use, in all, half a pint of olive-oil, and add now a quart of water. Let it boil briskly for half an hour, colouring the whole with saffron. Serve the fish separately, and pour the liquor into a separate tureen, in which has been placed a couple of fried rolls cut into slices. The *cuisine* was made in the open air and over a wood fire. It was a great success, and was highly approved of by the ladies as well as the gentlemen of the party.

To return "to our *moutons*." The outdoor life of Cannes is the chief element in its health-giving powers. I know of many cases here in which invalids confined throughout the winter to their houses in London by asthma, chronic bronchitis, or caseous pneumonia, have been able to spend their days in walks through the pine-woods, drives by the seashore, and afternoons in the garden. Cannes is a city of gardens; its 500 villas are mostly embowered in foliage; there are many hundreds of palms flourishing here even in exposed situations, in some gardens the banana ripens. Last year M. Dognin gathered some hundreds of ripe bananas. In the gardens of the Chateau Thorenc, that of Duc de Vallambrosa, of the Duc de Rochefoucauld, of Isola Bella, and everywhere in sheltered positions, the most surprising success is had in growing out-doors strictly tropical plants. The varieties of elevation and shelter are such, and the extent of ground available so great, that the invalid may, under medical guidance, choose for his residence a villa of mountain character, sheltered among the pines; a marine residence under the immediate influence of exhalations from the sea, or a more sheltered and completely inland corner in a valley. There are forty-two recognised promenades and excursions from Cannes enumerated in Dr. de Valcourt's excellent guide, none without interest, and many of them of romantic beauty. The doctors live in peace and amity, and are justly influential and respected; the English community find here a staff of English medical men of recognised eminence, and many of them deeply versed, by the necessities of personal health in the past, in all the inner details of invalid experience, and the narrow paths to convalescence. It must be a pleasant thing to be a successful medical man at Cannes; the natural aids to success furnished by its climate and soil, the excellent organisation of the means to healthy occupation and enjoyment, are never-failing aids to medical skill.

Cannes owes almost everything to Englishmen; from Lord Brougham to Dr. Frank and Dr. Charles, it has found in them "the pioneers to progress," the wisest, most public spirited, and far-sighted advisers. Would that it had listened to them earlier, and followed their counsels more wisely and with less delay! Lord Brougham found Cannes a fishing village; he left it a city of villas, palaces, and gardens. But the public authorities have not yet learned their interest and their duty in following the enlightened and well advised policy of imposing upon themselves present sacrifices to ensure the sanitary development and the adornment of their town and its suburbs. A good water-supply has been secured. But the drainage of the town is still non-existent as a system. The western side of the town is still afflicted with foul stenches in various directions. In some parts of the road, the very ground seems to be impregnated with filth, and in the evening, especially towards and after sunset, the air of some of the public highways is redolent of stinks of indescribable abomination. Along open channels by the road side, and meandering through the public way towards the sandy shore, are little streams of sewage. Nor is this the only polluted quarter. In front of some of the finest villas on the Marine Esplanade, the chief drive of many invalids, and a resort of fashion, the seashore is defiled with abominations, and often stinks aloud. The cesspool system, or no system, prevails, and is carried out without any of the contrivances and regulations as to frequent emptying by pneumatic methods which alleviate its worst defects. There is no real drainage through many parts of the town which it would be easy to drain, and Captain Galton's excellent recommendations on this head have not yet been carried out. I am told that it is intended that they shall be. But when? Meantime, gross irregularities and cruel offences against health and decency are permitted to go on with impunity. I was walking this week in a delightful garden, belonging to an eminent physician, who has retired here to pass the later years of his honoured and useful life. In part of the extensive grounds lies a wooded ravine, a delightful retreat of wild sylvan beauty, fragrant with the balsamic pines, the eucalyptus, the flowering verbascum, the mimosa, and the tree-heath. Through it runs a stream which descends the mountain-side, but, unluckily, the "purling rivulet" passes also through the grounds of a great hotel, situated higher on the hill, and the huge cesspool of this hotel, with its long accumulated filth, was, shameful to say, allowed a short time since to pour its contents into the brook, and thus for many weeks to convert it into an open and foully polluted drain of the most dangerous and nauseating character. This unspeakable outrage calls loudly for redress. I mention it here, because it illustrates in the strongest way the worst features of a form of barbarous atrocity which still disgraces the sanitation of Cannes, which has done immeasurable harm in the past to the town, and which may at any moment become a source of danger, as it is an ever impending cause of disgust. It may be hoped that it will not be long before Cannes will free itself from this reproach. I insist on it here in warm language, because this is the one reform imperatively necessary to place Cannes foremost among the delightful health resorts of this privileged coast.

I leave Cannes with regret; as a place in which one might linger with increasing refreshment from the singular beauties of its scenery, the rich endowments of its climate, and courteous kindness of so many of its chief residents, of which only want of time, and a desire to see more and further, prevents our more fully and longer enjoying. One final word of warning. Cannes has vast space for expansion, and is growing apace; but the possessors of Aladdin's lamp should think of parks and public gardens as well as boulevards and palatial villas. Too much brick and mortar may be fatal to the future attractions of the city, however profitable for the time to mere land speculators. The sea-shore has been largely confiscated; the hills are scarred in every direction with ugly gashes, scarring their timbered heights, and indicating intended boulevards, and land to sell, provided with [illegible] well-curbed roads." I see little provision for open spaces, little indication of public spirit in providing large relics of wood and garden for the popular use, to refresh what a few decades threaten to convert into a wilderness of brick. An "Open Spaces" Society might do much for Cannes; and if prefects, mayors, and councils were wise for future generations as in their own, they would acquire for public use, as quickly as possible, what the speculating freehold land-societies, whose boards everywhere, for miles around, meet the eye, evidently intend to sacrifice as prey to the builder. Cannes, to its reproach be it said, is the city of the rich; the gardens are the gardens of wealth, and visitors must, above all things, be *bien mis.* In the outskirts of the town are much drunkenness and squalor, but they are kept out of sight, and, I fear, out of mind. Need this be so, even in "a city of pleasure," ruled by hotel-keepers, and peopled by migrating invalids?

MANCHESTER.

Royal Eye Hospital.—Pendlebury Hospital.—Medlock Street Provident Dispensary.—Lectures on Vivisection and Dress of Women and Children.—Edinburgh University Club Annual Dinner.—International Health Exhibition.—St. Mary's Hospital. Consumption Hospital.

THE annual meeting of the Royal Eye Hospital was held on January 29th, presided over by the Mayor of Manchester. During the year, 14,502 out-patients were attended to against 12,961 in 1882, and 1,213 in-patients against 1,265 in the past year. This slight decrease is accounted for by the fact that the medical officers have been obliged to exercise greater care in admission, to prevent overcrowding. The cases of accidents treated were 2,090, against 1,905 in 1882. The new hospital in Nelson Street, now in course of erection, will, it is expected, be ready for occupation by the end of this year. Towards the sum of £20,000, which will be required for building, furnishing, etc., about £9,000 have been already subscribed. It is gratifying to learn that, in response to a special appeal made to the co-operative associations in the district for support to the hospital, the substantial sum of £170 has been added to its annual income. The total income for the year was £3,171, and the expenditure £2,486, leaving a balance of £685 in hand. The cost for medicine and dispensing was only 4½d. per patient, and the cost for board per in-patient each week was 5s. 2½d. It is to be regretted that the students do not avail themselves more fully of this rich field for study.

At the annual meeting of the Pendlebury Hospital held on January 29th, the annual report for 1883 was presented. The number of patients admitted to the dispensary was 7,602 against 6,916 in 1882; of these, 1,050 were received into the hospital, and 804 were made home-patients. The admissions during the year were 1,110, against 985 in 1882. Of these, 230 were admitted to the Borchardt (fever) ward, against 194 in the preceding year. The high mortality of 9.5 per cent. was to be accounted for partly by the severe type of scarlet fever under treatment during the year. Deep sorrow was expressed at the loss by death of Dr. Borchardt, who served the institution faithfully for thirty years, and also at the deaths of two lady probationers consequent upon disease contracted in the discharge of their duties. The income for the year was £7,554, and the expenditure £7,224. The executors of the late Mr. T. Agnew had paid to the credit of the institution £4,000 free of duty, out of which £1,000 had been appropriated to furnish an "Agnew Cot." The medical report stated that it was interesting to note that chorea was, according to their statistics, a more common disease than it was 10 or 12 years ago. In answer to the question whether the increased prevalence of this disease was due in part to over-pressure in our elementary schools, the report states that over-strain of the nervous system was unquestionably one of the causes of this affection, and several such cases had been observed during the year. Five hours a day, five days a week, at school was not too much for a healthy child, yet for the dull, the nervous, the convalescent from acute disease, even this amount of work, especially when hard-pressed to make up for lost time, or to appear well at the examination, might lead to a serious break-down of health and even more serious results. On account of the large number of cases of children suffering from diseases of the spine and joints, a renewed plea was made for sea-side hospital accommodation.

The ninth annual report of the Medlock Street Provident Dispensary was presented lately, in which it was stated that the institution continues self-supporting. The balance of profit for the year, after paying all expenses, was £25 9s. 7d. The amount received by the medical staff during the year was £199 13s. 2d. The total number of paying patients on the books on the 31st December last was 1,878 against 1,836 in the preceding year. On the 25th ult. Dr. Scott, of Ardwick Green, delivered a lecture on vivisection, in the school-room of the Upper Brook Street Free Christian Church. He showed that the practice of experimental physiology was only a branch of the great study of physiology, and that it had never been disfigured in England by the so-called barbarities of the continental school, which were repudiated by all English inquirers. He showed that in a hundred ways men inflicted pain on the lower animals for the benefit or pleasure of mankind, and he maintained that in physiological inquiry no charge of cruelty could be substantiated, as the term cruelty indicated a motive which was quite absent in the minds of experimenters. He said that the advancement of physiology must go on and keep pace with surrounding sciences, and that this advancement is a matter of paramount importance, seeing that upon a correct appreciation of the truths of physiology will rest in future ages the principles by which men will so regulate their lives as to best develop the faculties of their nature, and confer the greatest benefit on their fellow creatures.

Dr. Maccall recently delivered a lecture on the dress of women and children, to ladies only. He spoke strongly in favour of wearing woollen garments next the skin, and against the prevalent idea of "hardening" children through undue exposure; against superfluous skirts, tight-lacing, and high heels. There was infinite scope for variety in fashion, within the limits of good taste and artistic beauty on the one hand and hygienic principles on the other; and dress-reform to be acceptable should combine both. After the lecture there was an exhibition of hygienic dress, which proved so successful that there is to be a repetition for three days.

On the 31st ult. the annual dinner of the Edinburgh University Club was held at the Queen's Hotel, where a brilliant gathering had assembled, including nearly all the members of the club and many of the professors of Owens College, to welcome the guest of the evening, Sir Joseph Lister, Bart., whose reception was most cordial and enthusiastic. Dr. Thorburn, the president, reviewed Sir Joseph's scientific and professional services, and said the honour recently conferred upon him was only the accomplishment of what the medical profession had long expected. Dr. Deas, of Macclesfield, Dr. McLennan, of Widnes, and Dr. Henry Simpson, sang several songs. Altogether a most pleasant evening was spent.

An influential local committee has been formed in Manchester to co-operate with the committee of the International Health Exhibition in London. Amongst the medical members are Drs. Ransome, Samelson, Leigh, and Emrys-Jones.

The annual meeting of St. Mary's Hospital was held on the 4th inst. The report stated that 15,529 patients have been attended to during the year as compared with 15,916 in 1882. The financial statement shewed that the year was begun with a balance in hand of £196, but at the end there was a deficiency of £68. There had been an increase of £81 in subscriptions and legacies, but a decrease of £1,400 in donations. The Chairman (Canon Bentley) stated that an increase of £500 at least in the annual income was necessary before the whole accomodation was utilised. It was also stated that, owing to the environment of the hospital and its imperfect construction and adaptation, judged by the present high standard of sanitary knowledge, the advisability of its reconstruction or removal would have to be considered at no very distant date by the Board.

The Committee of the Manchester Consumption Hospital have purchased an eligible house at Bowdon for their new hospital. Upwards of £12,000 were required to purchase, furnish, and endow the building, and towards this sum subscriptions amounting to £5,000 have already been promised. Mrs. Langworthy, of Eccles New Road, has sent a cheque for £500 towards the fund. The appointment of Professor Gamgee to the staff will meet with general approbation.

CORRESPONDENCE.

PORRO'S OPERATION.

SIR,—Dr. H. Fehling, of Stuttgart, informs me that he performed his fifth operation on January 26th last in a case of rickety pelvis. The method adopted was precisely the same as in his fourth case, reported by me in the BRITISH MEDICAL JOURNAL of January 26th. Both mother and child are well. Dr. Fehling has now operated five times with four recoveries, the same result as obtained by Professor Porro.

I have received from Dr. Savage, of Birmingham, the account of an utero-ovarian amputation performed by him during the sixth month of pregnacy, on September 15th, 1883, the patient recovering. This account was read before the Midland Medical Society on October 10th, 1883. In his paper, Dr. Savage states his belief that Mr. Knowsley Thornton's patient died in from one to three weeks after the operation. This is incorrect; she recovered from the operation, as recorded in my tables, and returned home, but died about two months subsequently from some unknown cause.

Dr. Savage speaks of his two operations as the only successful "Porro's operations" in Great Britain. My case appears to have escaped his notice altogether. He says: "Neither of my cases was at the full term of pregnancy, and I can easily understand this being alleged as a reason for the recoveries, as being more likely to be expected than if performed at the full period. The same must also be said of Mr. Thornton's case. I do not think that it would be an argument of any value." Further on he says: "It may be a question whether, seeing that the mother's life is the first to consider, and that the operation by the longer incision is easier, and perhaps safer, we may not sometimes, when we have a choice of time for operating, disregard the child, and operate, say, at the sixth or seventh month. This I did in my second case." This appears to be a direct contradiction of his previously expressed opinion; and, as it advocates a disregard of the life of the child, it unquestionably detracts considerably from the value of Porro's operation. Dr. Savage's were not Porro's operations, and are not included in my table as such, for the very reason that they were performed before the fœtus had reached a viable period. Porro's operation is particularly directed towards saving the life of the child as well as that of the mother. "When we have a choice of time for operating" it has been shown that Porro's operation, properly performed, is in the great majority of cases successful. I have not advocated Müller's method—the larger incision—because I believe the smaller incision offers no disadvantages worth considering (except where the fœtus is known beforehand to be putrid), and a small incision is always preferable to a larger one. But to advocate that the life of the child shall be voluntarily sacrificed, in order to have a small incision instead of a larger one, is obviously showing a total disregard for one of the great principles which render Porro's operation such an advance in obstetric surgery. Dr. Savage has proved himself so skilful and so successful an operator, that I entertain no doubt that, had he waited until near the completion of pregnancy, he would, as many others have done, have had the gratification of having saved not only the life of the mother, but also that of her child—surely not an insignificant triumph.—Yours faithfully, CLEMENT GODSON.

February 12th, 1884.

CAPILLARY PULSATION.

SIR,—I see in the JOURNAL of February 9th a leading article on capillary pulsation, in which it is mentioned that an English practitioner, whose name is not given, had the idea of studying the capillary pulse on the red patch, or rather streak, which appears on the forehead when the finger nail is drawn sharply across.

It may perhaps be interesting to your readers to know that the physician thus mentioned is Dr. Dreschfeld of Manchester, who showed me the phenomenon of capillary pulsation several years ago. He informs me that he was not the original observer, but found it described in Gerhardt's *Auscultation and Percussion*, 3rd Ed. Tübingen, 1876, p. 69. The phenomenon which Dr. Dreschfeld had shown to me I showed to Dr. Waller, who, in his turn, showed it to Dr. Déjerine, under whose direction M. Rualt, the author of the thesis which you discuss in your article, worked.—Yours faithfully,

T. LAUDER BRUNTON.

TREATMENT OF CARIES OF THE SPINE.

SIR,—After reading Mr. Noble Smith's letter in your issue of February 2nd, I desire to record that, after a patient trial of the plaster-of-Paris jacket ever since its introduction, I am as much as ever a believer in its efficacy. I can say, equally with Mr. Noble Smith, that I too have seen cases which have quite failed in the hands of surgeons of repute, but never in the hands of the practitioner who has troubled himself to master the somewhat minute and difficult details of the process of application of the jacket, attention to which is absolutely necessary to ensure success.

I can equally agree that the enthusiasm attendant upon the first introduction of the jacket has subsided in this country; and I will go further, and state as a fact the inference that I think Mr. Noble Smith intends his readers to draw from his words—viz., that the jacket is not used nearly as much as it was, and that there is a growing feeling against it. But this is not because Sayre's jacket is inefficient. When first brought out, nothing was to resist the charm of the plaster jacket; and every case, without selection, was at once "put up." The jacket was the cure, and for a time other more important therapeutic means seemed forgotten. Reaction, of course, set in; a host of cases had received no benefit; and the treatment, in certain quarters, was at once condemned.

Now came the instrument-makers' opportunity. First, they attempted the application of the jacket themselves, with results still further detrimental to its good name; and then the treatment of spinal cases passing from their hands into those of the lawful practitioner, movable jackets of more attractive but less efficient material than plaster were soon introduced—jackets that a surgeon could not apply himself.

Ignorant of the real advantages of the entire Sayre's jacket, the public quickly took to a movable and lighter instrument of felt, and the well meant but mistaken acquiescence of practitioners in the whims of their patients soon debarred them from doing all that they might have accomplished for their cases.

Far too much, in my opinion, is made of the "support" treatment of spinal caries; for, whilst in some cases nothing can be more suitable, in others it is even harmful. I feel far more satisfied if I have brought a case to a successful issue by moderate support (if any), by careful attention to the host of so-called minor details of health and domestic regimen—with, it may be, the employment of some purely surgical measure besides—than I am with one of which I can only say that a dozen jackets cured it.

If once the idea could but gain ground that Sayre's jacket was not an universal panacea, but only one of many means (and that often a minor one) all tending to one good end; that the movable jacket, of felt or other material, was also in its way, when properly chosen, very good, there would be less ink shed over the question of plaster *v.* felt; each would get its due; and patients would then consult the profession rather than the instrument-maker and bone-setter, whose aid they now, as I know, often preferably seek to facing the chances of a wholesale and indiscriminate immuring in plaster-of-Paris.—I am, sir, yours faithfully, C. HILTON GOLDING-BIRD.

13, St. Thomas's Street, S.E.

SIR,—Mr. Noble Smith may be correct in supposing that some of the enthusiasm excited by Sayre's suggestion of the plaster-of-Paris jacket has died out, for this enthusiasm appeared at one time to have made some practitioners fancy that the introduction of the jacket meant the treatment of Pott's disease of the spine otherwise than in accordance with the general principles of surgery. The enthusiasm of those surgeons who saw in the plaster jacket a simple, novel, and efficient means of keeping the diseased bones and joints free from pressure and at rest, in a position favourable to recovery, remains unabated; and they, I believe, continue to use it with excellent results.

In my experience, a patient with Pott's disease should first be laid in bed until the temperature falls and the pain is relieved (the period may be days or weeks). He should then be cased in a plaster jacket, applied in the recumbent posture, and allowed to move about freely, such constitutional treatment being adopted as reason may dictate. I do not find that the objections urged against the plaster jacket interfere with its great practical utility.—Yours obediently,

THOS. JAS. WALKER, Surgeon to the Peterborough Infirmary.

MILITARY AND NAVAL MEDICAL SERVICES.

VOLUNTEER BEARER-DETACHMENTS.

ACTING SURGEON wishes to know how he is to set about forming an ambulance-corps in connection with the volunteer battalion to which he is surgeon? He has the regulation book, but wants to know whether he ought previously to put himself in communication with any central society of volunteer officers, and he further inquires to whom he must address himself in order to get the men examined at the end of the course.

*** We presume our correspondent refers to the formation of a regimental bearer detachment in connection with his regiment. It is wrong to apply the word "corps" to such a detachment. The word "corps" would rightly apply to the divisional bearer-company, and not to regimental bearers.

Our correspondent should, first of all, apply to his commanding officer for permission to form a class. This granted, four men per company at least should form the class. The surgeon should apply to the Secretary, Volunteer Ambulance Association, 6, Whitehall Yard, London, for a syllabus, and should then follow its instructions. When trained, the class is examined by an army medical officer, who reports to the principal medical officer of the district, and the passed men receive permission to wear the Red Cross badge.

We think the district principal medical officer of the Army Medical Department should have the syllabus and should arrange the course of instruction without reference to the head-quarter office, but this has not yet been arranged. The whole system of the Volunteer Medical Service needs being fully taken in hand and developed.

THE experiment of the direct lighting of one of the District Railway trains by electricity is pronounced to have been a success.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

The Chair of Botany.—The Professorship of Botany has been filled up by the election of Dr. Isaac Bayley Balfour, Regius Professor of Botany in the University of Glasgow. Dr. Balfour is the son of (we regret to say, the late) Professor Balfour, of Edinburgh, who died early this week. Graduating finally as a Doctor of Medicine, and gold medallist at Edinburgh, having previously taken the degree of Doctor of Science with first-class honours, he spent two years on the continent, with a view of acquiring a knowledge of the best methods of morphological and physiological research, under Professors De Bary and Sachs. For some years, he assisted his father, the Regius Professors of Medicine and Botany in the University of Edinburgh, in conducting classes, alike in the lecture-room, in the laboratory, in the herbarium, and in practical field work. For four years he was assistant to the Regius Professor of Natural History in the University of Edinburgh, and for six years lecturer on botany at the Royal Veterinary College there. In 1879 he was appointed Crown Professor of Botany in the University of Glasgow, where he has had the charge of a large herbarium and garden, appointed by the Royal Society in 1874, as botanist and zoologist to the expedition to Rodriguez, to observe the transit of Venus. He published the botanical results of his expedition in the *Philosophical Transactions.* In 1880 he made a scientific exploration of the island of Socotra, the report on the botany of which is now in course of publication by the Royal Society of Edinburgh. Under the new statutes of the college, Professor Balfour becomes a Fellow of Magdalen College so long as he holds the Professorship. We may congratulate the University and College on such a valuable addition to the scientific staff of Oxford professors.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, February 7th.

Poisonous Patent Medicines.—Mr. **Mundella**, in reply to Mr. Warton, said the attention of the Privy Council had been called to the recent case of death through the use of a patent medicine known as "Holt's Specific for Whooping Cough," and to similar cases. A Bill was now under consideration, which would be introduced very shortly into the House of Lords, dealing with the whole subject.

Monday, February 11th.

Surgeon Wheeler and the Crown.—Mr. **Healy** asked the Solicitor-General for Ireland by whose advice was Surgeon Wheeler's demand against the Government (for attendance on a wounded landlord) resisted; whether it was deposed in evidence that the Government were willing to pay him £700, while his claim was £1,147 18s.; whether the Government employed the Attorney-General, the Solicitor-General, and Mr. Dodd (instructed by Mr. Lane Joynt) to resist his claim before a jury; if he could state what amount was marked on the briefs of the Government lawyers, and how much they obtained as "refreshers;" whether it was the fact that the Government ultimately admitted in court the full claim of Surgeon Wheeler, that the case was withdrawn from the jury, that they had to pay in addition to their own costs the costs of three opposing Queen's counsel; and if he could state how much the taxed costs of the plaintiff amounted to, and how much the suit had cost the Government altogether, beyond the £1,147 18s. originally claimed, which they subsequently admitted in court was due to Surgeon Wheeler.—The **Solicitor-General** for **Ireland** said the demand was resisted on the advice of the then Attorney-General and Solicitor-General for Ireland. The Government considered the claim too large, but were willing to pay £700 on foot of it. The Government employed the counsel named in the question. It had never been usual to state the amounts marked on the briefs of Crown lawyers, and he could not state the amounts. The Government defended the action on the faith of a memorandum of terms which had been handed to Surgeon Wheeler by direction of the late Mr. Burke, who was afterwards assassinated. After the trial had been commenced, Mr. Wheeler stated that he had had a conversation with Mr. Hamilton, in which the amount of the fees was agreed upon. Mr. Hamilton, when appealed to, although he could recollect the conversation, would not undertake to swear what occurred. Hence the Government admitted the claim, and, as a matter of course, had to bear the costs of both sides. The taxed costs amounted to £208 14s. 7d., and the suit would cost the Government, as he was informed, about £400, in addition to the £1,147 18s.—Mr. **Healy** gave notice that on the estimates he would move to reduce the salary of the hon. and learned gentleman by £400.—The **Solicitor-General** for **Ireland**, whose rising produced general laughter, said he did not receive any of the £400.

Criminal Information Against Medical Men.—Sir T. **Lawrence** asked the Secretary of State for the Home Department whether it was by his authority or under his instructions, or, if not, by whose authority or under whose instructions, that the Public Prosecutor appeared at the Lambeth police-court on September 11th, 1883, to support a criminal information against two medical men, Dr. Bower and Mr. Keates, for the manslaughter of a child by the improper performance of the operation of tracheotomy, and by criminal negligence connected therewith; whether the medical officer of the Treasury, or any other medical adviser, was consulted before the Public Prosecutor was instructed to appear to support the charge; what were the circumstances which were held to justify the intervention of the Public Prosecutor in the case; whether he was aware that the magistrate before whom the charge was heard dismissed it without hearing the witnesses or the counsel for the defence, with the remark that it was "persecution rather than prosecution"; and whether it was the intention of the Treasury to recompense Dr. Bower and Mr. Keates for the injury they had suffered from the appearance of the Public Prosecutor against them, and for the heavy expenses they had thereby been put to.—The **Attorney General** said this matter did not come within the cognisance of the Home Secretary. The director of public prosecutions acted entirely upon his own responsibility, merely instructing a solicitor to see that the facts on both sides were elicited. He had acted perfectly rightly.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE NURSING OF CHARING CROSS HOSPITAL.

The nursing at the Charing Cross Hospital has for the last sixteen years been performed under a contract by the St. John's House and Sisterhood. This arrangement worked, on the whole, to the mutual advantage of the Hospital and St. John's House; and, in spite of some occasional friction, the medical officers of the hospital were unwilling to terminate the agreement. After the occurrence of the differences at King's College Hospital last summer between the authorities of that institution and St. John's House, which resulted in the withdrawal of the sister-in-charge, all the other sisters of St. John's House, both at King's College Hospital and at Charing Cross Hospital, sent in their resignations. The terms on which they would consent to stay were so preposterous, that the Council of the House could not accept them. The Council thus deserted have, however, since carried on the nursing as before at Charing Cross Hospital. No fault has been found with the manner in which the new sisters and nurses have performed their work, and the feeling of the medical staff on this point is unanimous, as shown in the following resolution, which was passed at a meeting held last week to ascertain the individual opinions of that body. "The medical and surgical officers having been requested by the Weekly Board to report on the manner in which the present sisters and nurses have discharged their duties in the hospital during the past five months, beg to report that the hospital has been nursed during this time by an adequate staff of highly trained, skilful, and attentive nurses; that the results, both in the medical and surgical wards, have been eminently satisfactory, and that the patients have been kindly and humanely treated." Acting on this report, the Council, on February 6th, passed a resolution by a large majority, thanking the present sisters and nurses. In November last, notwithstanding the well-understood feeling of the medical officers, a resolution was passed by a small majority of the Council of the Hospital, giving notice to St. John's House of a determination of the agreement between the two bodies on June 24th next. This was mainly brought about by the energetic action of the Treasurer of the Hospital, Mr. R. Few, who has warmly espoused the cause of the late sisters, and has severed his connection with St. John's House, to whose Council he had for many years belonged. At the annual meeting of the governors and subscribers to the Hospital, which was called for Wednesday last, it was decided to ascertain the opinion of a majority of the governors, whether the notice given to St. John's House shall still hold good, or whether the excellent nursing by St. John's House shall be continued as at present. The only alternative which presented itself under the circumstances, and which the treasurer was earnestly striving to bring about, was to delegate the nursing to the ladies who deserted St. John's House and the Charing Cross Hospital in July last. The medical staff naturally felt most strongly that their work would be greatly hampered, and their position compromised by such a course.

The annual meeting was largely attended. The Duke of Buccleuch presided, and the following resolution was adopted:—"That it is desirable for the greater efficiency, that its nursing be entrusted, as heretofore, to the Council of St. John's House; and that it, therefore, be our instruction to the Council this day elected to take steps for securing that desirable result with the least avoidable delay." We are pleased to know that this vexed question may consequently be considered to be settled for the present, in accordance with the views of the members of the medical staff.

MEDICO-LEGAL AND MEDICO-ETHICAL.

THE USE OF LOBELIA.

TRIAL OF A HERBALIST FOR MANSLAUGHTER.

ON Thursday, January 31st, at the Old Bailey, before Mr. Justice Watkin Williams, James Wallis, a herbalist, was charged with manslaughter for causing the death of Matilda Sainsbury by administering lobelia. Mr. Poland and Mr. Mead prosecuted on behalf of the Public Prosecutor; the prisoner was defended by Mr. Montagu Williams and Mr. Lyons. It appeared that on December 10th last a man named Bull went to the prisoner's shop, and stated that his landlady (the deceased) was ill, that she had been under medical attendance for three months without any good result; that she was very weak, and not able to get out; that she was "choked with phlegm." The prisoner thereupon gave her, with other medicines, a bottle containing an acetic solution of lobelia, and a label representing the dose to be a teaspoonful to two tablespoonfuls, and stating that she might take the whole bottle full and it would do her no harm. The deceased took about a tablespoonful and a half of the mixture, and died shortly afterwards. A coroner's inquest was held, and the prisoner was now charged on the coroner's inquisition.

Mr. J. LL. WHITMARSH said he was called in to see the deceased when she had been dead about half an hour. She was cold and clammy, and covered with cold sweat, and the pupils were dilated. On subsequently making a *post mortem* examination he found in the right lung adhesions to the walls of the chest. She appeared to be suffering from bronchitis; the left lung was very much contracted and diseased, and there were adhesions; the brain was congested at the posterior portion; the inner coats of the stomach and also the bowels were inflamed. The woman died from an irritant poison, which acted as a depressant on the heart's action, causing syncope. Lobelia was an Indian tobacco, a herb; about thirty grains of the seed would be [illegible]. Twenty-eight grains would be a dangerous dose. If it did not act as an emetic it would act as a depressant on the heart's action, bringing on faintness. The appearances of the corpse were consistent with that death. In cross-examination a number of extracts were read from Dr. Skelton's book, from Stephens's *Medical Reform*, Dr. Kinglake's book, and Beach's *Materia Medica*, but the witness persisted that, unless its effects were watched, lobelia would be a very dangerous drug. The immediate cause of death in this case was syncope. Lobelia was not in the prohibited list in the Poisons Act. Extracts were read from Taylor on *Poisons*, condemning lobelia as a dangerous poison, with which witness agreed.

Dr. THOMAS STEVENSON, Lecturer in Medical Jurisprudence at Guy's Hospital, deposed to examining and analysing a portion of the stomach of deceased, sealed in a jar by the previous witness, together with the remainder of the contents of the bottle. The latter consisted of an acetic solution of lobelia. The whole bottle would contain about 2½ fluid ounces; the deceased had apparently taken about [illegible], or 28 grains. The amount given, the mode of death, and the state of the stomach were consistent with death by lobelia. The stomach was reddened and congested; if deceased had lived longer it might have gone on to inflammation. It appeared as if some irritant had been given, and lobelia was an irritant. The acetic acid in which the lobelia was dissolved would also act as an irritant. He [illegible] that the death was due to [illegible]. Two tablespoonfuls of lobelia would not be a proper dose; there would be no [illegible] [illegible]. It was a matter of common medical knowledge that [illegible] deaths had resulted from the use of lobelia. It was stated on very high authority many years ago that thousands of deaths had [illegible] up to that time in America from it. It was well recognised among medical men as a very potent medicine, and a poison. If lobelia were given at all, it was essential that the patient should be watched, [illegible] if it did not cause vomiting, there was great danger [illegible] [illegible] depressant action [illegible] [illegible] had not himself witnessed any death by lobelia poisoning. Whatever authorities were quoted to him he should retain his opinion that 28 grains was a dangerous dose.

The police inspector who arrested the prisoner gave the following statement made by the latter at that time: "True, I sent her lobelia; but it is a lie to say it killed her, or that it is poison. My wife has taken double the quantity. That fool of a doctor who gave evidence yesterday knows nothing about it: the medical science of this country is a fraud. She died of her ailments. God made the world, and supplied it with herbs for every complaint; but those fools of doctors do not know how to use them—I do. They are enemies of mine."

For the defence the following witnesses were called:

Mr. THOMAS STOWELL, of Brighton, said that during thirty years' practice he had used and prescribed lobelia inflata, and he utterly denied that it was a poison. It was an invaluable medicine. To a very delicate child, in a dangerous condition, a teaspoonful in the form of syrup could be given beneficially every three hours. To produce emesis he had given three-drachm doses. Lobelia was an expectorant, a sudorific, a tonic, and the most valuable emetic known to the medical profession. When the Poisons Bill was before the House of Commons, experiments were made with this drug upon guinea-pigs, but those animals refused to be killed by it; they got fat on it. In witness's opinion the accused died of fatal syncope, caused by general exhaustion, arising from long-continued disease, having nothing to do with lobelia. In cross-examination, extracts from Taylor on *Poisons*, and other authorities, were put before the witness, but he stated they were all prejudiced, being mostly copied from American writers who had spite against herbalists. Even if emesis were not produced, there would be no danger: it would pass away through the bowels as a gentle aperient. Some of his patients kept lobelia in the house just as constantly as castor-oil. In different constitutions it would have various effects, but in no case would lobelia be dangerous.

Mr. CHAS. LAKIN, practising at Leicester, generally confirmed the previous witness. There might be a dangerous dose of lobelia, just as there might be such a quantity of common salt taken as to cause inflammation; but, generally speaking, lobelia was a valuable emetic, and 28 grains was not a dangerous dose. He had known a patient take one tablespoonful, or 240 grains, at a dose—that was his mother; it had a beneficial effect. Some people required more than others to produce emesis. In his practice he had not noticed that, if emesis were not produced by lobelia, it had a depressent effect on the heart's action.

Mr. WILLIAM HENRY BLUNT, a wholesale and retail herbalist of Birmingham, said that he had sold large quantities of lobelia, and did not consider it dangerous to life. One morning before breakfast he accidentally took nearly a large teacupful of the acid tincture of lobelia. It had no effect on him whatever, except that it acted on the bowels.

Mr. GEORGE STEPHENS, of Bristol, said he had been acquainted with lobelia for upwards of forty years, and had himself taken it as an emetic; he had usually taken 60 grains at a dose.

Mr. GEORGE BLACK, a medical botanist and herbalist, of Birmingham, said that for the past twenty-six years he had sold lobelia to hundreds of people, and had frequently taken it himself. He had taken a drachm of the herb every ten minutes until he had taken an ounce.

Mr. GEORGE BROWN, of Rochdale, "an American physician, practising the herbal system of medicine," said he had had large experience in the properties of lobelia, and had himself taken it. He had taken as much as three drachms to cause emesis. If lobelia failed to act as an emetic it would "pass off neutral." Witness had no university qualification, but had passed the Eclectic Medical School, Cincinnati.

Mr. HENRY PEARSON, student in medical botany, deposed to having taken 960 minims of lobelia.

At this stage his lordship remarked that the evidence for the defence seemed to be very strong. Here were a number of men who had actually taken lobelia, and were hale and hearty still.

The learned counsel on each side having addressed the jury,

His lordship summed up the case. In order to convict the prisoner of manslaughter, the jury must be satisfied that he was guilty of [illegible] and negligence, and disregard of [illegible] [illegible] [illegible] life and safety. [illegible] [illegible] [illegible] It was simply a question of [illegible] [illegible] [illegible] [illegible]

[illegible] Not Guilty, [illegible] dispensed drugs.

DECEASED PATIENTS' DEBTS.

SIR,--Would you advise me what steps to take under the following conditions?

Mr. S. was a patient of mine for the last seven or eight years. He died a year or two ago, leaving a widow, whom I also attended up to her death during the last year. He was possessed of sufficient freehold property to support him without employment. He was an honest man, and I believe his wife was also. After his death, she continued to reside in the same house. Her age was great, her health very bad. She died, however, suddenly, one night, much to my surprise.

Her legal advisers hold the estate, and refuse to pay any of her bills, for, they say, she had no real estate, her husband simply having left her a life-interest in the property, which, at her death, passes to collateral descendants. From these heirs, I think it would be more difficult to wrest payment than butter from the throat of the proverbial dog.

The solicitors apply the same rule to every debt of the deceased, even the funeral expenses, which were rather heavy. The woman must have died with surplus money, for she was a person of very frugal habits.

I should be very pleased to answer any further questions, if you will explain what legal action I might successfully take in this matter. Yours sincerely,

R. C. C.

*** If the deceased left any property of her own, either real or personal, it is liable for her debts, and the executors or administrators of her estate may be sued for them. If no one have been appointed executor or administrator, a creditor may take out letters of administration, and then would be bound to pay the debts rateably as far as the property will go. We cannot advise further in the matter; but, if the claim be large enough to be worth fighting for, it would be well to consult a solicitor.

POOR-LAW MEDICAL OFFICERS AND INFIRMARY APPOINTMENTS.

SIR,—I am one of the honorary medical officers to a provincial royal infirmary. A is one of my senior colleagues, and has been attached to the institution for many years; he has recently accepted the appointment of parochial medical officer under the Poor-law Board. Is it not very unusual that he should continue on the infirmary staff? and is there any reason compelling his resignation? There is nothing in the rules of the infirmary negativing his retention of office; although, a few years ago, the Committee rejected the candidature for the infirmary staff, of the late parochial medical officer, on the ground of his holding a parish appointment. I enclose my card, and am, sir, your obedient servant,

HON. MED. OFFICER.

*** In the true interest of the profession, it is, in our opinion, to be regretted that any of the medical or surgical staff of a public hospital or infirmary (cottage hospitals excepted) should hold parochial or club appointments; inasmuch as, irrespectively of being otherwise prejudicial, they are considered to detract from the status which hospital appointments are believed to confer on the respective staffs.

At the same time, it may be well to note that, in local dispensaries (in contradistinction to county hospitals and infirmaries, with their distinctive staffs of physicians and surgeons), in which the staffs are designated "medical officers," and who severally take charge of medical and surgical cases indiscriminately, such are not, as a rule, debarred from club and parish practice.

In the case alluded to by our correspondent, we think that, under the exceptional circumstances, and in the absence of any express "rule of the infirmary negativing retention of office," the better policy would be for the protesting members to make a courteous conciliatory representation to their colleague of the "unwritten law," which has heretofore governed the infirmary staff appointments, and of the important incident of "the Committee having, a few years ago, rejected the candidature of the late parochial medical officer, on the ground of his holding a parish appointment"; and, in the further event of his ignoring such intimation, it may then be well to transmit a copy of the protest, with any reply thereto, to the Committee of the Royal Infirmary, and leave the matter in their hands.

INCONSIDERATE RIVALRY.

THE following case has been submitted for comment.

For some years, E., M., and P., were the medical men in practice in a certain town. They worked harmoniously together, were always willing to do what they could for each other, and arranged their absences from the town so that one should remain to undertake anything that turned up in the practices of either. E. sold his practice to C., and from that time, in comparison with the former good feeling, all has been discord. P., who is the youngest of the three, a short time since had a sharp illness, for which M. attended him; getting better, P. went away for a week, leaving a qualified *locum tenens* in charge, and a registered pupil. The *locum tenens* was introduced to as many of the patients as possible. One of the patients whom P. was attending at the time he went away was a child with an abscess in the neck, which would require opening in a short time. P. had been the family doctor for some years. The day after P.'s departure, the *locum tenens* was introduced to the parents of the child by the pupil who had regularly visited it. The *locum tenens* considered the abscess should be opened, and informed the parents. They hesitated; one wishing it, the other not. Dr. S. said he would visit the same day in the evening, and open it, if they consented. In the afternoon, Dr. S. received a message by a child, to say that the parents had sent to Dr. C., who had seen the child, and opened the abscess. Dr. C. was informed by them, to P.'s certain knowledge, that they hesitated about allowing a stranger to open the abscess; and they explained that P. was gone away for some days.

Dr. C. made no communication to Dr. S., P.'s *locum tenens*, but continued to attend the case. On P.'s arrival home, he expected to receive a communication from C.; and, after some weeks, he wrote him on the subject, but received no explanation or answer. C. has, in consequence, visited another member of the family, and is now the medical attendant.

This is only one case out of many. A short time since, C. was called to an old lady, a patient of P., living close to C., under circumstances of great emergency; in fact, she died a few moments after C.'s arrival. In this case, no communication was made to P.; he found it out by accident. On writing to C. to ask about it, C. replied that he had not troubled to inquire who their own doctor was. Many months ago, also, a case occurred of an accident to a member of a family whom P. has attended for some years. P. was out of the town; C. attended the accident, and kept the case. M., who also attended the same accident, acted differently, for he handed over, the next morning, several cases to P. Is P. justified in refusing to meet C., both professionally and socially, after such conduct? C. was in partnership with E. for six months before E. left, so that he has known who were E.'s patients, and his practice is, perhaps, the best of all three.

*** Although the discourteous conduct of Dr. C., as related in our correspondent's letter, is to be regretted, we would not, for a moment advise the retaliatory course suggestively put with regard to P., but counsel him, whenever a professional or social meeting cannot be judiciously avoided, to adopt toward his opponent a generous and courteously dignified attitude, such as is engendered of true self-respect; in doing which, he may rest assured that, hard and difficult as the lesson may be, not only will the "still small voice within" approvingly assent, but it will tend eventually to enhance both his social and his professional position. At the same time, we can well sympathise with the lament over the breaking-up of the united professional brotherhood which seems to have existed in ...... prior to the unfortunate advent of C.

MR. JOHN BEVAN is fully entitled to send in his account; but, in doing so, it would be well to explain why the patient received extra attention.

MEDICAL ETIQUETTE.

W. F. F.—The consultant, under the circumstances related, was not justified in renewing his visits and prescribing, without communicating with, or the acquiescence of, the practitioner in charge of the case; and, in so doing, acted in contravention of the ethical rules of professional life.

In regard to "W. F. F.'s" other question, it would, in our opinion, have been both wise and prudent for the pre-engaged accoucheur to have visited the patient at once. At the same time, we think that the practitioner's knowledge of the fact that the lady-patient was the daughter of a professional brother will suffice to exonerate him from any intentional omission of duty.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.—In the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons, 6,230 births and 3,466 deaths were registered during the week ending the 9th instant. The annual rate of mortality per 1,000 persons living in these towns, which had been 20.3 and 20.5 in the two preceding weeks, further rose to 20.6 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow: Wolverhampton, 15.3; Bolton, 16.3; Bristol, 17.9; Derby, 17.9; Portsmouth, 18.8; Halifax, 19.1; Hull, 19.3; Blackburn, 19.4; London, 19.5; Sunderland, 19.5; Birmingham, 19.6; Nottingham, 20.3; Bradford, 20.4; Brighton, 20.8; Huddersfield, 21.2; Leeds, 21.4; Sheffield, 22.1; Plymouth, 22.1; Salford, 22.2; Liverpool, 23.3; Norwich, 23.7; Newcastle-upon-Tyne, 23.8; Leicester, 24.0; Cardiff, 24.0; Preston, 24.1; Birkenhead, 24.1; Oldham, 25.5; and Manchester, 27.9. In the twenty-seven provincial towns the death-rate last week averaged 21.6, and therefore exceeded by 2.1 per 1,000 the rate recorded in London. The 3,466 deaths from all causes registered in the twenty-eight towns last week, included 124 which resulted from whooping-cough, 94 from scarlet fever, 44 from "fever" (principally enteric), 35 from diarrhœa, 28 from diphtheria, and 21 from small-pox; in all, 399 deaths were referred to these principal zymotic diseases, equal to 11.5 per cent. of the total deaths, and to an annual rate of 2.4 per 1,000. This zymotic death-rate was equal to 2.4 in London, which slightly exceeded the average rate in the twenty-seven provincial towns, among which it ranged from 0.0 in Norwich, and 0.5 in Bradford, to 4.0 in Manchester and in Birkenhead, 4.1 in Newcastle-upon-Tyne, and 4.2 in Blackburn. The deaths referred to whooping-cough, which in the two previous weeks had been 130 and 126, further declined to 124 last week, and caused the highest rates of mortality in Huddersfield, Bolton, and Newcastle-upon-Tyne. The fatal cases of scarlet fever, which had been 97 and 101 in the two preceding weeks, declined to 94, and caused the highest proportional fatality in Leeds, Leicester, and Blackburn. The 53 deaths referred to measles showed a further marked decline from the numbers returned in the four previous weeks; the fatality of this disease was, however, excessive in Salford and Birkenhead. The fatal cases of fever, which had been 61,48, and 38 in three preceding weeks, rose again to 44 last week, and caused the highest death-rates in Newcastle-upon-Tyne and in Preston. The 35 deaths from diarrhœa exceeded those returned in any week of this year. The 28 fatal cases of diphtheria in the twenty-eight towns last week showed a decline of 8 from the number recorded in the preceding week, and included 19 in London, and 3 in Liverpool. The deaths from small-pox in these twenty-eight towns last week, which had been 4 and 14 in the two previous weeks, further rose to 21 last week, of which 9 occurred in Birmingham, 4 in London, 3 in Liverpool, 3 in Sunderland, 1 in Wolverhampton, and 1 in Manchester. The death-rate from diseases of the respiratory organs, judged by the metropolitan returns, was again much below the average; the deaths referred to these diseases in London, which had been 360 and 367 in the two previous weeks, fell to 347 last week; they were as many as 284 below the corrected average weekly number, and equal to an annual rate of 4.5 per 1,000. The causes of 80, or 2.3 per cent., of the 3,466 deaths registered last week in the twenty-eight towns were not certified, either by medical practitioners or by coroners. The proportion of uncertified deaths in London did not exceed 0.9 per cent., while it averaged 3.4 per cent. in the provincial towns, and showed the largest excess in Hull, Newcastle-upon-Tyne, Blackburn, and Halifax.

HEALTH OF SCOTCH TOWNS.—During the week ending Saturday, the 9th inst., 827 births and 597 deaths were registered in eight of the principal Scotch towns, having an estimated aggregate population of 1,254,607 persons. The annual rate of mortality, which had been 20.1 and 22.5 per 1,000 in the two preceding weeks, further rose last week to 24.7, which exceeded by so much as 4.1 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these eight Scotch towns, the death-rate was equal to 19.5 in Leith, 20.8 in Dundee, 22.1 in Edinburgh, 25.8 in Paisley, 26.1 in Aberdeen, 26.6 in Glasgow, 27.2 in Greenock, and 31.9 in Perth. The 575 deaths registered in these towns last week included 97 which were referred to the principal zymotic diseases, against 87, 74, and 67 in the three preceding weeks; of these, 23 resulted from diphtheria, 23 from whooping-cough, 15 from scarlet fever, 14 from "fever," 12 from measles, 10 from diarrhœal diseases, and not one from small-pox. These 97 deaths from zymotic diseases last week in these towns were equal to 16.2 per cent. of the total deaths, and to a rate of 4.0 per 1,000, which considerably exceeded the average zymotic death-rate recorded last week in the twenty-eight English towns. The lowest zymotic death-rates in the Scotch towns were 1.4 in Aberdeen and 1.7 in Perth; whereas the rate was equal to 5.5 in Glasgow, 5.1 in Edinburgh, and 7.2 in Greenock. The fatal cases of diphtheria, which in the three previous weeks had declined from 22 to 6, rose again last week to 23, and exceeded the number returned in any week since November last; no less than 7 occurred in Greenock, also 6 in Glasgow, and 3 in Edinburgh. The 23 deaths from whooping-cough exceeded by 2 the number in the preceding week, and included 12 in Glasgow and 6 in Edinburgh. The fatal cases of scarlet fever, which had steadily declined in the three previous weeks from 12 to 5, rose again to 15, of which 12 occurred in Glasgow and 3 in Edinburgh. The 14 deaths referred to different forms of fever also showed a marked increase upon recent weekly numbers, and included 7 in Edinburgh and 4 in Glasgow. Of the 12 fatal cases of measles, which exceeded by 4 the number in the preceding week, 6 were recorded in Edinburgh, where no fewer than 40 deaths from this disease have been registered since the beginning of the year. The mortality from diseases of the respiratory organs in these Scotch towns was again much below the average, and was equal to an annual rate of 4.5 per 1,000. Of the 597 deaths registered last week in these towns, as many as 82, or nearly 14 per cent., were uncertified.

HEALTH OF IRISH TOWNS.—During the week ending February 9th, there were 459 deaths in the sixteen principal town districts of Ireland. The average annual death-rate was 27.8 per 1,000 of the population, the respective rates for the several districts being as follow, ranging in order from the lowest to the highest: Armagh 10.3, Londonderry [illegible], Sligo 24.1, Belfast 24.2, Dundalk 26.2, Galway 26.9, Limerick 27.0, Cork 27.3, Lisburn 29.0, Dublin 29.5, Kilkenny 29.6, Lurgan 30.8, Wexford 34.2, Newry 35.1, Waterford 39.4, Drogheda 46.5. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.5 per 1,000, the rates varying from 0.0 in Galway, Newry, Kilkenny, Wexford, Sligo, Lisburn, Lurgan, and Armagh, to 11.6 in Waterford, the 17 deaths from all causes registered in [illegible] comprising 1 from [illegible] and 4 from [illegible]. Among the 161 deaths from all causes registered in Belfast were [illegible], 2 from whooping-cough, 1 from diphtheria, and 1 from [illegible] fever; and among the 12 deaths registered in Cork were 4 from measles, and 1 from scarlet fever. The 11 deaths registered in Londonderry comprised 1 from [illegible] and 2 from whooping-cough; and the [illegible] deaths in Limerick comprised 1 from whooping-cough and 2 from enteric fever.

HEALTH OF FOREIGN CITIES.—It appears from statistics published in the Registrar-General's return for the week ending the 9th instant, that the annual death-rate, according to the most recently received weekly return, was equal to 32.9 per 1,000 in Bombay, and to 46.7 in Madras. Cholera caused 19 deaths in Bombay and 25 in Madras, and 35 fatal cases of small-pox were also recorded in the latter city; "fever" mortality showed the largest excess in Bombay. According to the most recently received weekly returns, the average annual death-rate in twenty-one of the largest European cities was 27.6 per 1,000, and was no less than 7.0 above the mean rate last week in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 40.1, showing a further increase upon the rates in previous weeks; the 713 deaths included 40 from typhus and typhoid fever, and 14 from scarlet fever. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 24.0, ranging from 22.3 in Copenhagen, to 25.6 in Christiania; scarlet fever caused 3 deaths in Stockholm and 2 in Christiania. In Paris the death-rate was equal to 25.4 (5.9 above the rate in London), and the deaths included 16 from typhoid fever, and 59 from diphtheria and croup. The 188 deaths in Brussels, of which 8 resulted from small-pox, gave a death-rate of 23.3. In Geneva the rate was 27.3, and 3 of the 37 deaths resulted from whooping-cough. In the three principal Dutch cities—Amsterdam, Rotterdam, and The Hague—the mean death-rate was 26.7, the highest rate being 29.7 in Amsterdam, where 27 of the deaths were referred to diphtheria and croup; 4 of the 75 deaths in Rotterdam resulted from scarlet fever. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 26.6, and ranged from 22.2 and 25.3 in Berlin and Vienna, to 30.5 in Munich and 40.1 in Prague. Small-pox caused 34 deaths in Prague and 3 in Vienna; the mortality from diphtheria was greatest in Dresden, Berlin, and Hamburg. The death-rate averaged 29.1 in three of the principal Italian cities, and was equal to 28.1 in Rome, 28.2 in Turin, and 32.9 in Venice; malarial fever caused 10 deaths in Rome, and measles 11 in Turin and 6 in Rome. The usual return from Lisbon does not appear to have come to hand. In four of the largest American cities, the rate did not average more than 21.9, and ranged from 20.6 in Brooklyn to 23.4 in Baltimore. Typhoid fever caused 10 deaths in Philadelphia, and measles 11 in Baltimore; diphtheria was more or less fatally prevalent in each of these American cities.

INDIA AND THE COLONIES.

INDIA.

SMALL-POX NEAR BOMBAY.—The *Englishman's Overland Mail* reports that, during the last week of December and the early part of January, there was a severe epidemic of small-pox at Belgaum and in the district. A few cases occurred among the men of the two native regiments stationed there.

CHOLERA IN CONNECTION WITH THE AKHA EXPEDITION.—Cholera has broken out at Balipara-hat, near Tezpur, owing, it is said, to bad sanitary arrangements in connection with the troops told off for the Akha expedition.

THE *Times of India* states that the Government of India have refused to make any alteration in the rules of the Bengal Medical Retiring Fund, under which the annuities of £300 each offered annually in July to subscribers to that Fund, are considered to have been declined by any officer who does not intimate his intention to accept an annuity before the 31st October of the same year. Under these circumstances, any medical officer who, not having accepted the annuity before the prescribed date, wishes to retire from the service, will have to forego the annuity and wait until it is again offered in July of the following year.

CANADA.

MEDICAL SCHOOLS FOR WOMEN.—As the outcome of the difficulty between the male and female medical students in the Kingston Medical College last winter, two medical colleges for females have been inaugurated, one in Kingston and the other in Toronto. That they can both be well sustained at present is, says the [illegible], "[illegible] the question, and we hope shortly to see an amalgamation of the two institutions."

NEW HOME FOR CONSUMPTIVES.—It is reported that Lord Henry Somerset is about to establish, at Bournemouth, a home for young men suffering from phthisis. The majority of the beds are to be free, the institution being [illegible], but patients who are able to defray the cost of their own maintenance will also be admitted.

OBITUARY.

JOHN HUTTON BALFOUR, M.D., F.R.S., L.&E.

ON Monday, there passed away from us one who had occupied a prominent position in academic life, John Hutton Balfour, Emeritus Professor of Botany in the University of Edinburgh. He was born in 1808, and was educated at Edinburgh High School, Edinburgh University and St. Andrew's University. Of a strongly religious cast of mind, his studies seemed to tend to a theological rather than a scientific line of work; the study of botany, however, would seem to have determined his attention to the study of medicine, in the faculty of which it had, at that time, a prominent position. He entered upon the systematic pursuits of a medical curriculum by apprenticeship to the late Professor Sir George Ballingall, and by courses of instruction in the University College of Surgeons of Edinburgh. From the latter body he received his diploma in 1831, and from the former the degree of M.D. in 1832. During these two years he was one of the presidents of the Royal Medical Society. Subsequently he studied in Paris; in Edinburgh he was resident in the infirmary for some time, and also acted as a dispensary physician. Latterly he became partner in the practice of his former master, Sir George Ballingall. There is nothing particular to record of Dr. Balfour's career as a practitioner, except his conscientious attention to his duties. It was in 1836 that, along with the late Professor Edward Forbes and some other enthusiastic naturalists, he founded the Botanical Society of Edinburgh, a society which has since flourished and done much good work, and which has owed its success largely to the enthusiasm with which Dr. Balfour devoted himself to its interests. In 1838 he founded the Edinburgh Botanical Club. So strongly had Dr. Balfour attached himself to the subject of botany, that, in 1840, he conducted a course of lectures and demonstrations in botany as an extramural lecturer; and it spoke well for the ability of the lecturer and the enthusiasm of his pupils that, although this was an entirely voluntary course, it was attended by about fifty members. Owing to the translation of Dr. Hooker from Glasgow to Kew in 1841, a vacancy was created in the Chair of Botany in Glasgow University, and this was filled by the appointment to it of Dr. Balfour. Four years subsequently, through the death of Professor Graham, a similar vacancy occurred in the University of Edinburgh, and after a keen contest, Professor Balfour was elected to it by the Town Council. This Chair he occupied for thirty-four years, until failing health caused his retirement in 1878. During that time, the attendance on his course of lectures shared the same success as other classes, and rose latterly to over 400 in number; from first to last he must have instructed considerably over 7,000 pupils. His enthusiasm as a teacher caused him to plan and carry out many botanical excursions, and they formed a regular institution in his course. Hundreds of members of the profession will, this week, remember with saddened pleasure the Saturdays spent with the late Professor in the glens and on the hills of Scotland at a time when their cares were fewer, and their appreciation of the wholesome relaxation from the class-rooms and grinding of the session rendered keener by their rural surroundings. Professor Balfour did much to extend the knowledge of botany and the practical study of it by his contributions to the literature of the subject; he was author of a *Manual of Botany*, *Class Book of Botany*, *Elements of Botany*, *The Flora of Edinburgh*, a *Catalogue of British Plants*, *The Botanist's Companion*, and *The Plants of the Bible*. He was author of the article "Botany" in the *Encyclopædia Brittanica*.

Dr. Balfour enjoyed for many years the position of Regius Keeper of the Botanical Gardens, and was for thirty years Dean of the Faculty of Medicine. In this latter position he was in intimate relation with many hundreds who are now members of the profession, and who will remember him as an eminently just, if somewhat austere, man of business.

For many years Dr. Balfour was secretary of the Royal Society of Edinburgh, and lately he acted as assessor to the Edinburgh University Court. Dr. Balfour's services to science were recognised by the Universities of Edinburgh, Glasgow, and St. Andrew's, each of which created him LL.D. A prominent feature in Dr. Balfour's character was his devotion to religion; and of many societies of a religious character he was a consistent supporter.

Dr. Balfour will be mourned by a wide circle of friends and former pupils as a sincere friend, consistent Christian, and upright man. He is survived by four sons and four daughters. The newspapers published the day of his death announced the appointment of his second son, Professor Isaac Bayley Balfour, of Glasgow University, to the Sherardian Chair of Botany in Oxford University.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentleman passed the Examination in the Science and Practice of Medicine, and received a certificate to practise, on Thursday, February 7th, 1884.

Hillstead, Herbert John, Lewisham High Road, St. John's, S.E.

MEDICAL VACANCIES.

The following vacancies are announced.

ANDERSON'S COLLEGE DISPENSARY.—Two vacancies for Physicians to the Dispensary Staff, also one Physician for Diseases of Women and Children. Applications to D. Wilson, 42, Bath Street, Glasgow.

ARMAGH UNION. Medical Officer, Richhill Dispensary. Salary, 110*l.*, and fees. Applications to James Best, Honorary Secretary, up to February 25th.

BEDFORD GENERAL INFIRMARY AND FEVER HOSPITAL.—Resident Surgeon. Salary, 100*l.* per annum. Applications by February 28th.

CHORLEY DISPENSARY.—House-Surgeon and Apothecary. Salary, 1[illegible]0*l.* per annum. Applications by February 20th.

CITY OF ELY DISPENSARY. Surgeon-in-Ordinary and Dispenser. Salary, 60*l.* and 20*l.* per annum. Applications to the Rev. K. H. Smith, by February 16th.

GENERAL HOSPITAL, Birmingham. Resident Medical Officer. Salary, 130*l.* per annum. Applications by February 28th.

HEARTS OF OAK BENEFIT SOCIETY. Consulting Physician. Applications by February 16th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by February 16th.

HOSPITAL FOR WOMEN, Soho Square, W.—Assistant-Physician and Assistant-Surgeon. Applications by March 1st.

HOSPITAL FOR WOMEN, Soho Square, W. Administrator of Anæsthetics. Honorarium, 20 guineas. Applications by March 8th.

ISLANDS OF SANDAY AND NORTH RONALDSHAY, Orkney. Medical Officer. Salary, 60*l.* per annum. Applications by March 5th.

JERSEY GENERAL DISPENSARY.—Medical Officer. Salary, 120*l.* per annum. Applications by May 1st.

KENT AND CANTERBURY HOSPITAL.—Physician. Applications by March 22nd.

LIMERICK UNION.—Resident Medical Officer for Workhouse. Salary, 150*l.* per annum, to be increased 10*l.* yearly until 200*l.* be reached, with furnished apartments, coal, and light. Election on February 20th.

LISNASKEA UNION. Medical Officer, Maguiresbridge Dispensary. Salary, [illegible] and fees. Election on February 20th.

NOTTINGHAM BOROUGH ASYLUM.—Assistant Medical Officer. Salary, 100*l.* per annum. Applications by February 16th.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, St. Marylebone Road, W. Resident Medical Officer. Applications by February 23rd.

RADCLIFFE INFIRMARY, Oxford.—Dispenser. Salary, 100*l.* per annum. Applications by February 27th.

ROCHESTER AND DISTRICT FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, 200*l.* per annum. Applications by February 23rd.

ROYAL FREE HOSPITAL, Gray's Inn Road. Senior Resident Medical Officer. Salary, 104*l.* per annum. Applications by February 27th.

ROYAL SURREY COUNTY HOSPITAL, Guildford.—House-Surgeon. Salary, 75*l.* per annum. Applications by February 16th.

WONFORD HOUSE HOSPITAL FOR THE INSANE, near Exeter.—Resident Medical Superintendent. Salary, 500*l.* per annum. Applications by March 11th.

MEDICAL APPOINTMENTS.

ANGUS, J. A., M.R.C.S., appointed Medical Superintendent to the Hospital for Incurables, Newcastle-upon-Tyne.

EMERSON, P. H., M.R.C.S.E., appointed Sambrooke Medical Registrar to King's College Hospital, *vice* L. F. Silk, M.B., resigned.

FITCH, Richard A., M.R.C.S., L.R.C.P.Ed., appointed Resident Surgeon to the Birmingham General Dispensary.

GIBBES, Heneage, M.D., appointed Lecturer on Morbid Histology in the Medical School of the Westminster Hospital.

HARGREAVES, J. B., F.R.C.S., appointed Consulting Surgeon to the Imperial Union Accidental Assurance Company for the Leeds district.

LANE, W. Arbuthnot, M.S.Lond., F.R.C.S., appointed Assistant-Surgeon to the Hospital for Sick Children, Great Ormond Street.

SALTER, S. T., M.A., M.B.Cantab., appointed House-Surgeon to the Seamen's Hospital, Greenwich.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

LYON.—At Houghton-le-Spring, co. Durham, on the [illegible] instant, the wife of Walter Lyon, M.A., M.D., of a son.

MARRIAGE.

ALLAN—BROWNING.—On the 7th instant, at St. Stephen's, St. John's Wood, by the Rev. Dan Greatorex, B.D., vicar of St. Paul's, London Docks, assisted by the Rev. E. H. Nelson, M.A., vicar, Francis John Allan, M.D., to Ellen Mary, second daughter of the late Thomas Gaul Browning, Esq., A.I.C.E., Chief Surveyor of Marylebone.

OPERATION DAYS AT THE HOSPITALS.

MONDAY ..... St. Bartholomew's, 1.30 P.M. Metropolitan Free, 2 P.M. St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M. Royal Orthopædic, 2 P.M. —Hospital for Women, 2 P.M.

TUESDAY ..... St. Bartholomew's, 1.30 P.M. Guy's, 1.30 P.M. Westminster, 2 P.M. Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M. —Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M. St. Mary's, 1.30 P.M. Middlesex, 1 P.M. University College, 2 P.M. London, 2 P.M.—Royal London Ophthalmic, 11 A.M. Great Northern, 2 P.M. Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M. St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M. National Orthopædic, 10 A.M.

THURSDAY ....St. George's, 1 P.M. Central London Ophthalmic, 1 P.M. Charing Cross, 2 P.M. Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M. Royal Westminster Ophthalmic, 1.30 P.M. Hospital for Women, 2 P.M. London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M. Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M. Royal South London Ophthalmic, 2 P.M. Guy's, 1.30 P.M. St. Thomas's (Ophthalmic Department), 2 P.M. East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M. St. Thomas's, 1.30 P.M. Royal Free, 9 A.M. and 2 P.M. London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Papers embodying the results obtained in the London Hospitals by the Cold Bath Treatment of Enteric Fever will be read by Drs. Coupland, Bristowe, Cayley, and Frederick Taylor. The subject will be continued on February 25th. Mr. Fleming will show a Surgical Lamp-battery in the Library. Dr. Sansom will show specimens of Solid Liniments.

TUESDAY.—Pathological Society of London, 8.30 P.M. Dr. Angel Money: Spinal Cord from a Recent and Old Case of Infantile Palsy. Dr. Coxwell: Amyotrophic Lateral Sclerosis. Dr. Sainsbury: Malignant Disease of Mesentery. Dr. Norman Moore: Interstitial Disease of Ovary. Dr. Hobson: Secondary Nodules in Peritoneum in a Case of Ovarian Tumour. Mr. Watson Cheyne: Two Cases of Purpura Hæmorrhagica in which Organisms were present. Mr. Barwell: A Neoplasm affecting the Knee-joint. Mr. Lane: Fracture of Cartilage of the First Rib. Dr. Hale White: Insular Sclerosis. Mr. Dent: Deformity of Feet from Perforating Ulcer (living specimen). Mr. Shattock: Double Vena Cava, the left being the Larger (card).

WEDNESDAY.—Royal Meteorological Society, 7 P.M. Mr. Marriott: The Great Storm of January 26th, 1884. Professor Archibald: The Height of the Neutral Plane of Pressure and Depth of Monsoon Currents in India. Hon. F. A. Rollo Russell: On the Sunrises and Sunsets of November and December 1883, and January 1884.

THURSDAY.—Harveian Society of London, 8.30 P.M. Dr. W. H. Day: Case of Scarlet Fever in a Boy, followed by Nephritis, Convulsions, and Death; Temporary Relief by Wet Packing. Dr. Broadbent: Prognosis in Structural Diseases of the Heart.

FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Mansell-Moullin: A Case of Thrombosis of the Vena Cava. Mr. R. Clement Lucas: A Case of Charcot's Joint-disease. Mr. Noble Smith: A Case of Dislocation of one of the Semilunar Cartilages. Dr. Samuel West: A Case of Multiple Hepatic Abscesses in a Boy. The following living specimens will be exhibited: A Case of Excision of the Patella, by Mr. R. Clement Lucas; Anomalous Affection of Certain Bones and Joints, by Mr. W. Morrant Baker; A Case of Nodules on the Finger, by Mr. Godlee; Case of Pulmonary Regurgitation, by Dr. J. Kingston Fowler.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

A WIDOW who has been left with eight young children to educate, and who is possessed of very slender means with which to accomplish it, inquires if she could obtain help from this Society. We can refer her to the Honorary Secretary, Mr. J. B. Blackett, 28, Green Street, Grosvenor Square, W., but fear that her quest will be useless. This Society, which has now about 76,000*l.* invested, gives its assistance only to the widows and orphans of its own members. We would advise our correspondent to make application to Mr. Edward East, 18, Clifton Gardens, Maida Vale, W., Secretary to the British Medical Benevolent Fund, who may possibly be able to grant her some assistance.

CANVASSING FOR APPOINTMENTS IN THE DAILY PAPERS.

WE have received from Liverpool several letters from medical practitioners complaining of the manner in which canvassing for hospital appointments is carried on in that city. As long as this particularly objectionable method of seeking election for vacancies of this kind is rendered compulsory by the bad system of selecting condidates, which still finds favour with the authorities of most English hospitals, so long will aspirants for these appointments be compelled to have recourse to measures which are humiliating to the profession. We strongly deprecated the whole system in a leading article, last November, on canvassing at a metropolitan hospital, and made especial comment on the manifestoes which several candidates caused to be inserted in the daily papers.

THE HIND FUND.

WE are requested to state that this fund will be closed on Thursday, March 6th next, until which date subscriptions will be thankfully received by Dr. Richardson, F.R.S. (chairman), 25, Manchester Square; John Tweedy, Esq., F.R.C.S., 24, Harley Street, honorary treasurer; A. J. Pepper, Esq., F.R.C.S., 122, Gower Street; and Thomas Wakley, jun., Esq., L.R.C.P., 96, Redcliffe Gardens, honorary secretaries; or by Messrs. Coutts and Co., Strand. The following additional contributions have been received and paid to the account of the "Hind Fund" at Messrs. Coutts' Bank.

	£	s.	d.		£	s.	d.
Hutchinson, Jonathan, Esq. (additional donation) ..	5	5	0	Somer, James, Esq.	1	1	0
Muscroft, H., Esq.	0	10	0	Sylvester, Dr. C. J.	2	2	0
Rogers, T. Esq.	1	0	0	Thomas, Dr. Danford	1	1	0
				Weakes, Dr.	1	0	0

COMPLICATED PREGNANCY: A WARNING.

SIR,—The following being unique in my experience of twenty-three years, in a pretty extensive midwifery practice, I should like to ask, through the medium of the JOURNAL, if such cases have been frequently met with by others.

Some time since, I was called to see a woman who supposed herself to be pregnant, on account of not having menstruated for over four months. She complained of her unusual size, which was that of a woman at the full time. She had not felt the usual symptoms of quickening. Her bowels were constipated, and her urine was dark in colour and slightly turbid, though normal in quantity, and passed without difficulty or pain. I prescribed with a view to relieving the bowels and altering the character of the urine. As the symptoms were persistent a month after this, and as she had still not felt any signs of quickening, I requested her to go to bed, in order that I might examine her more particularly. I found the abdomen greatly distended with a [illegible] and [illegible] tumour, but could not feel anything like a pregnant uterus. [illegible] I found the os uteri very low down, and I did not detect a [illegible]. Probably I came to this conclusion too readily, through ascertaining that the abdominal tumour was extra-uterine. I made a diagnosis of [illegible], and sent the woman into the hospital to be operated upon. The surgeon there first tried to pass a catheter, which drew off between three and four quarts of urine, which was the secret of the tumour. Had I taken the precaution to pass a catheter, I should have been spared the humiliation of [illegible]; but as there was neither pain nor difficulty in connection with the bladder, I certainly did not suspect the [illegible] what it was.

I may say that the patient went to her full time, and had no other retention of urine. I enclose my card, and am, yours faithfully, FORCEPS.

TINEA VERSICOLOR.

SIR,—Let "Member (Egypt)" try the sulphide of calcium lotion, which is used in the army for the cure of scabies (see JOURNAL, February 9th, p. 260). I have found it uniformly successful in tinea versicolor. The first effect is to darken the growth, which, after a short time, and with scrubbing with soap and water, comes away. The cure requires a little time, and the remedy I proffer is undoubtedly disagreeable from its smell, but it is efficacious. I am, etc.

MEMBER.

IN reply to "A Member (Egypt)," Staff-Surgeon W. H. PUTSEY writes that, while serving in Egypt, he treated and cured a severe case of this disease, of many years' standing, by a single application of chrysophanic acid ointment (ʒj to ℥j). He strongly recommends "A Member" to give this remedy a trial.

MR. EDWARD HYNES (Nottingham) suggests the following. Moisten the affected parts with cold water, and then sprinkle over some chrysophanic acid. The disease generally, he says, disappears in a week or ten days under this treatment. After the application of the acid, the spots assume a deeper hue. He would like to hear of the further progress of the case.

MR. C. A. GRAY suggests that "A Member" should use a five per cent. ointment of oleate of mercury (Dr. Shoemaker's), with vaseline, as Bass's. Any local application in this affection is comparatively inert without the previous thorough use of the flesh-brush following a hot bath.

THE STAFF OF PROVIDENT DISPENSARIES.

IN reply to a communication received from a Member on January 26th, we may observe that the managers of a provident dispensary must be allowed to judge as to the number of medical officers whom it is advisable to appoint. We can hardly suppose that, at any dispensary in a populous district, all the medical men of the neighbourhood can, if they think fit, be placed on the staff. When a vacancy occurs, which the Committee intend to fill up, it will, no doubt, be made known in the usual way.

BOOKS ON MICRO-ORGANISMS.

PRACTITIONER asks us to mention works which give full information about the low forms of vegetable life affecting man.

*** Our correspondent is referred to the BRITISH MEDICAL JOURNAL for January 5th, p. 41. We may also mention the first volume of *Ziegler's Pathology*, translated by Mr. Mac Alister of Cambridge, which contains, perhaps, the most systematic account of the subject as yet published.

PRELIMINARY EDUCATION IN SCIENCE.

K., who is interested in a lad aged 17, who has passed the examination of the College of Preceptors (Second Class), inquires whether we can recommend any institution, school, or private tutor, in London or elsewhere, where the lad could work for a year at physics, geometry, mathematics, chemistry, and botany.

*** It is obviously impossible for us to recommend individual tutors, and "K.'s" best course will probably be to apply to the Warden at St. Bartholomew's or the London Hospital, or the Secretary of Guy's Hospital, or of King's College or University College. Classes in the subjects mentioned are held at all these schools, as well as at others; and the wardens or secretaries generally have lists of gentlemen living within easy reach who are willing to take pupils into their houses. At King's College, and at University Hall, Gordon Square (apply to the Principal), students are taken at an early age, and have the advantage of a certain amount of supervision. The preparatory school of the West London Hospital might meet the necessities of the case.

INFLUENCE OF THE OVARIES IN THE DETERMINATION OF SEX.

SIR,—Among the many theories regarding the determination of sex, is one broached or supported by Mr. Thomas Tuckey, that the right ovary is for males, and the left for females, *vide Digest*, Sec. 277 : 2. On the 5th instant, I delivered a lady of a male child upon whom left ovariotomy was performed in January 1883. Dr. Hamilton in the *Lancet*, page 191, records a case where two males were born after the removal of the right ovary, the patient having borne two female children previous to the operation. These cases refute the ovular theory.—Yours obediently,

RICHARD NEALE, M.D.Lond.

CONTINUOUS INHALATIONS OF ANTISEPTICS.

SIR,—What are the best formulæ for using these? Is a solution of carbolic acid (1 to 40) sufficiently strong? Yours,

PRACTITIONER.

SPASM OF CREMASTER MUSCLE AND RETRACTION OF TESTICLE.

M.R.C.S.E., L.S.A., asks for the best remedy for spasm of the cremaster muscle and retraction of the testicle. The condition has been present for about a week or ten days; the retraction does not cease. He has given the following. ℞ Potassæ bicarb. ʒij; tinct. hyoscyami ʒij; spir. chlorof. ʒij; decoct. pareiræ ad ℥viij. An eighth part to be taken three times a day. He has also given triticum repens, and has used warm bathing, with poppy-heads, and camphor-liniment, with belladonna.

COMMUNICATIONS, LETTERS, etc., have been received from :

Mr. L. A. Waddell, Calcutta; Dr. Norman Kerr, London; Our Glasgow Correspondent; Dr. Herman, London; Dr. Tripe, London; Mr. R. W. Jenkins, Fawley; Mr. Alfred James, Biggleswade; Mr. Power, Portsea; Dr. Bradbury, Cambridge; Mr. Rupert C. Chicken, Nottingham; Dr. Styrap, Shrewsbury; Mr. W. A. Lane, London; Mr. W. H. Spurgeon, Maryport; Dr. T. J. Walker, Peterborough; Dr. Fancourt Barnes, London; Our Paris Correspondent; Mr. J. J. Marsh, Manchester; Mr. L. H. Tosswill, Exeter; A Member; Mr. J. W. Sheridan, Stowmarket; Mr. W. W. Dunkley, Coventry; Mr. T. G. Gardiner, London; Mr. F. C. Crossle, Newry; Mr. J. B. Richardson, Torquay; Mr. D. C. Black, Glasgow; Mr. T. A. Mitchell, Catford; The General Register Office, Somerset House; Mr. S. S. Sargent, Eastbourne; Mr. F. Spencer, Chippenham; Mr. T. Clifford Smith, London; Our Dublin Correspondent; Dr. E. H. Vinen, London; Mr. S. Farrer, Slough; Dr. Hurdle, Darwen; Dr. A. Weith, St. Croix, Switzerland; Mr. N. W. Allt, London; Mr. M. Haydon, Newton Abbot; Dr. J. G. Parsons, Bristol; Dr. C. P. Coombs, Castle Cary; Mr. R. J. Godlee, London; Mr. J. C. Miller, London; Dr. C. F. Pollock, Hillhead; The Honorary Secretary of the Society of Medical Officers of Health; Dr. G. Hudson, Scarborough; Mr. Robert Thompson, Thurles; Dr. Mackey, Brighton; Dr. Mahomed, London; Messrs. C. Wright and Co., London; Dr. Strahan, Belfast; Mr. Shirley F. Murphy, London; Dr. Robert Rentoul, Liverpool; Mr. C. A. Gray, Glasgow; Mr. H. W. King, Chester; Dr. E. Firth, Norwich; Dr. Farquharson, London; Dr. Henry Rayner, Hanwell; Mr. E. B. Evans, Swansea; Our Manchester Correspondent; Mr. M. Marriott, London; The Secretary of the National Provident Institution; Mr. F. Wallace, London; Mr. A. H. Young, Manchester; Mr. Simeon Snell, Sheffield; Mr. B. Duke, London; Mr. E. Chapman, Oxford; Mr. F. Barnes, London; Dr. Clement Godson, London; Dr. T. Lauder Brunton, London; Mr. J. Cantlie, London; Dr. Saul, London; Dr. Ross, Plymouth; Dr. Sawyer, Birmingham; The Secretary of the International Food Exhibition; Mr. W. Dunnett Spanton, Hanley; Mr. A. H. F. Cameron, Liverpool; The Secretary of the Royal College of Surgeons, Edinburgh; Mr. J. W. Batherham, Wolverhampton; Dr. W. Ewart, London; Dr. Willoughby, London; Mr. W. H. Putsey, Derby; Mr. A. Macpherson, Chester; Dr. J. A. Lindsay, Belfast; The Secretary of the Harveian Society; Dr. Douglas, Tantallon, Bournemouth; Mr. Freeman, Bath; Dr. Brailey, London; Dr. McKellar, London; Dr. S. C. Smith, Halifax; Mr. Martin F. Bush, Bristol; Our Aberdeen Correspondent; Mr. R. A. Fitch, Birmingham; Mr. E. Walford, Ramsgate; Mr. Alexander Wheeler, Darlington; Dr. W. M. Campbell, Liverpool; Dr. Neale, London; Dr. Crichton Browne, London; Mr. A. W. Mayo Robson, Leeds; Mr. E. Hynes, Nottingham; Dr. Vincent D. Harris, London; Mr. R. W. Parker, London; Dr. Roger McNeill, Colonsay; Messrs. Feltham and Co., London; Dr. Joseph Rogers, London; Dr. Burns Gibson, London; Aspirans; Messrs. W. Hutchman and Co.; Mr. William Rae, Victoria, Australia; Dr. W. V. Black, Edinburgh; Professor Ewald, Berlin; Mr. J. B. Hargreaves, Armley; Mr. W. H. Harvey, London; Dr. W. J. Irvine, Nottingham; Mr. C. E. Walker, Hurworth-on-Tees; Dr. Sidney Davies, Cairo; Dr. Fairlie Clarke, Southborough; Mr. Walter Whitehead, Manchester, etc.

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ABSTRACT OF A LECTURE

ON

PERINEAL AND PENILE FISTULÆ: SCROTAL BISECTION.

By RICHARD DAVY, M.B., F.R.C.S.,
Surgeon to the Westminster Hospital.

GENTLEMEN,—During the last year, I have operated on two most severe and obstinate instances of penile and perineal fistulæ; the results gained have been so satisfactory, as to warrant me in directing your special attention to the surgical treatment of these miserable affections. I propose (1) to consider the subject of traumatic stricture of the urethra; (2) to briefly narrate the clinical facts; and (3) to offer some suggestions with regard to the operative treatment.

A man receives a severe blow on his perinæum: hæmaturia or retention of urine follows; the acute symptoms subside; but the injury mechanically stamps that urethra with the origination of stricture; and slowly, but surely, the calibre of the urethra diminishes. The osseous arch of the pubes, and the tense, unyielding, triangular ligament, favour the intensity of the blow by affording counter-resistance; and this is exemplified in some accidents by well marked comminuted fracture of the subpubic arch, associated with rupture of the membranous portion of the urethra. Let me pass over the tedious interval (it may be months or years) between the date of the accident and the formation of the traumatic stricture, and state merely that this interval represents the period of its growth; the man complains of increasing difficulty of micturition, straining, incontinence, and loss of energy, during the time that his urethra is becoming smaller at the point, and larger on the vesical side of the stricture; his bladder is becoming generally hypertrophied; and his kidneys hyperæmic; in consequence of the ponding back of the urinary excretion. By reason of the persistent strain on an originally bruised urethra, the mucous membrane gives way, and nature relieves herself by establishing one or more fistulous tracks; these are the result of urine leaking through the damaged pipe, and setting up irritation in the perineal and penile districts, gradually showing this infiltration by great general uneasiness and concomitant abscesses. So soon, however, as the skin breaks, the urine gushes through, and the banks of the sinus become gristly and indurated; thus fortifying the adjacent structures from further extravasation.

But, at this stage, pray consider the man's misery; his bed-linen wet by night, his shirt and trousers by day; his groin, thighs, and buttocks chafed; his never ceasing consciousness of not being as other men are; his own smell and that of his garments, nauseous to himself and repulsive to his neighbours! Would not any one of us feel life intolerable under these hard conditions? and would we not risk everything, and submit to anything that held out reasonable and welcome hope to such distress of mind and body? These patients have done so; and I will now, secondly, give you their short clinical histories.

CASE I. *Penile and Perineal Fistulæ: Traumatic Stricture of Urethra: External Urethrotomy and Bisection of the Scrotum: Recovery.* J. O., aged 44, blacksmith, residing in Cornwall, married, was admitted into Mark Ward, under my care, on October 19th, 1882. He had been a healthy, strong man. In 1870, when shoeing a colt, he was kicked in the scrotum and perinæum. Two weeks afterwards, he felt pain and urethral discomfort in micturition, and he noticed that his stream was diminishing in volume, and his propulsive power lessening; the act being accompanied by much straining, and occupying more and more of his time. These symptoms went on until 1879, when, after intense pain, two fistulæ opened anteriorly and posteriorly to his scrotum; the perineal fistula came first, and carried fully one-half of his urine. The penile fistula dribbled; and the natural channel conveyed about one-half *per meatum*. He was the subject of a right inguinal hernia, and had a patent left abdominal ring; both groins suffered severely from the straining, but the hernia was not originally caused by it. No instrument could be passed *per urethram*. His condition was desperate; and he was sent to London, as a last resource, on the recommendation of his clergyman. On October 24th, 1882, the man was placed under the influence of chloroform. A grooved director (almost straight) was passed down the urethra to the face of the stricture at the membranous part, and the knife was directed from the penile fistula, along the median line of the whole of the scrotum, until the director emerged at the perineal wound; the stricture was recognised and cut across, and a sound passed into the bladder from the perinæum. On withdrawing the director from the meatus, a No. 12 retentive catheter was passed from the meatus out at the perinæum, and again from the perinæum into the bladder, so as to ensure that the newly opened line was the channel occupied by the elastic instrument. This elastic instrument, or one like it, was retained in the bladder for nearly four weeks at a time, until January 9th, 1883, when the patient was quite well; all fistulæ closed, no scrotal pain nor discomfort. No. 12 sound was passed along the whole urethral tube. He had perfect control of urine by day and night.

On January 16th, 1883, he left Westminster to pursue his business in Cornwall as a blacksmith.

CASE II. *Stricture of Urethra: Traumatic Scrotal Fistula and Infiltration: Bisection of the Scrotum and External Urethrotomy: Recovery.*—John L., aged 38, married, a chairmaker, was admitted into Mark Ward, under my care, on August 22nd, 1883. In 1868, he fell off a rick, which he was thatching, and injured his perinæum by falling on some wood. He did not pay any particular attention to the accident, and thought it would pass off; but, for the last six years, he had found much straining and inconvenience during micturition; and, in the early part of July 1883, an abscess formed by his right erector penis muscle and scrotum, and was opened by Mr. Turner of High Wycombe. Mr. Hayden also saw him, and performed suprapubic puncture of the bladder, and caused his urine to pass through a catheter for a fortnight by the suprapubic aperture. As the urine persisted in traversing the scrotal fistula, he was sent to the Westminster Hospital. On August 27th, I bisected the whole scrotum, and laid the stricture open freely, but with much care; passed No. 10 red elastic catheter from the meatus into the bladder; and retained it *in situ* for a fortnight. The fistula entirely closed, and the wound healed most kindly; he left the hospital on October 4th, 1883, and passed the whole of the urine freely through its natural channel.

On October 27th, 1883, I again saw the patient, and, in every respect, he was sound and quite well.

Let me now offer some practical observations on the subject of operative treatment in these loathsome cases. The first object of the surgeon must be to restore to its normal calibre the channel of the urethra, and maintain such dilatation. In some cases, notably those under the care of Mr. Barnard Holt, such dilatation of the stricture has sufficed, also, for the cure of the fistulæ. When I acted as Surgical Registrar to this hospital, I had many opportunities of seeing fistulæ close, on the renovation of the urethra by immediate dilatation. In the event of the fistulæ remaining intractable and patent (excluding the operation of perineal section or external urethrotomy), the best course to pursue is to divert the stream of urine temporarily from the fistulous track (*vide Surgical Lectures*, subject viii, pages 58 and 59, "On Puncture of the Bladder *per Rectum*"), either by suprapubic aspiration, or by puncture *per rectum*, or by opening the urethra somewhere on the vesical side of the stricture. I have tried them all, and have even taken the pains to pump out the urine from the bladder for two or three days at a time, and to forbid any urine to be retained in the bladder, or to be expelled by involuntary spasm or change of posture. Some mechanical operation with this intention does certainly aid the chance of union, either with or without a plastic operation. Some of my cases have been very successful, others most annoying failures; and, had I my choice of only one operation for this class of cases, I should, from experience, choose "perineal section;" and I will now lay before you my reasons for preference.

1. The signal benefits gained from perineal and scrotal section in these two cases of stricture and fistulæ; respectively of twelve and fifteen years' duration from date of accident.

2. The reductions induced by watching how well and satisfactorily the wound for lithotomy unites in moderately healthy subjects, although no special means beyond care and cleanliness are adopted.

3. The free drainage granted right and left to the swamped tissues involved, and the marked softening and improvement of the gristly channels of urine. Moreover, by this simple but efficient free outlet, the maximum amount of rest is given to the divided stricture during micturition.

4. The total absence of interference on the part of the surgeon during recovery, thereby economising mental and physical suffering on the side of the patient.

5. No important structures are divided, [illegible] the urethra is [illegible] by [illegible] keeping in the [illegible] May 26th, 1882, Mr. Gould's [illegible]

By this scrotal extension of the perineal section, originated by that grand surgeon, Syme, there are [illegible] hitherto refractory, to be cured by our art. The operator challenges, in one continuous line, his patient's stubborn foes; and, by concentrated action, cuts his way through them all (fistulæ, sinuses, swamp, gristle, and stricture); and, quoting a parody which has been applied truthfully to allied conduct, he puts all his little troubles into one big one.

ABSTRACT OF AN ADDRESS

ON

ANTISEPTIC SURGERY IN ITS APPLICATION TO FIELD-SERVICE.

Read at a Meeting of the Woolwich Military Medical Society, February 15th, 1884.

By C. H. GODWIN, Surgeon-Major, A.M.D.

In the paper on "Antiseptic Surgery, and its Application to Field-Service," which I had the honour to read before the Society last month, I endeavoured to state that: inflammation is not necessary for healing wounds; inflammation of wounded tissue is due to a putrefactive fermentation of the discharges of the wound; putrefactive fermentation of the discharge of a wound is due to the development in it of micro-organisms, chiefly of the bacteria class.

Micro-organisms are brought into contact with wound-discharge either by dust, water, or air; but, if they are excluded, fermentation and subsequent inflammation, with its constitutional effects, will not ensue. Dust and water can be excluded, but air cannot be. To protect the wound from this (air), we must surround it by a germicide vapour, which will render the organism in it inert. Such vapour can be produced by using as dressings the materials already described, and, if the dressings are applied in the manner directed, no air will gain access to the wound except by passing through a vapour of the antiseptic used. The best and most efficacious of these dressings being undoubtedly that known and fully described at length at our last meeting as the Listerian method.

If our treatment be successful in maintaining the wound aseptic, the patient is saved, not only from hectic and the drain of a prolonged suppurative process, but also from all forms of infective disease, such as pyæmia, septicæmia, hospital gangrene, and erysipelas, and possibly, also, from the risk of secondary hæmorrhage.

I need not now do more than allude to the effects of infective disease consequent upon wounds in military hospitals in former campaigns. The history of all wars is full of it; and, as late as the Franco-German War, it quite paralysed the action of the surgeons. They, in the language of one, were afraid to operate, and so it has ever been where the sick and wounded have accumulated, and sufficient time has elapsed to give rise to the necessary conditions.

It is the knowledge of the mortality from this cause that drives army-surgeons to spare no time or trouble in finding out some method by which it may be in part or wholly averted. I also said that secondary hæmorrhage might be prevented by maintaining wounds aseptic. To this I will briefly allude. I said last month that a belief was gaining ground that secondary hæmorrhage, in suppurating wounds, was not usually due to failure of the ligature, or to insufficiency of clot in the ends of the artery, but to degenerative changes in the coats of the artery, due to pus making its way up the track of the vessel. Mr. Symonds and Dr. Goodhart both hold these views. Should this pathology be correct, it would follow that if we prevent suppuration we prevent the cause of secondary hæmorrhage, and again, in a surgical point of view, if called to a case of secondary hæmorrhage, in a suppurating wound, of what avail will it be to try and pick up the end of the artery, when probably the coats have given way elsewhere? We must realise the diseased condition of the walls of the vessel, and either deligate the artery high up, or the limb may have to be sacrificed.

How can we best carry out a line of treatment in our field hospitals that brings about such beneficent results?

First, I would answer, acquire a thorough grasp of this subject, which is embraced under the term "Listerism," in the daily practice of the treatment of wounds, and become practically acquainted with the different modes of carrying out aseptic and antiseptic treatment. Should the practical knowledge of these methods be first attempted on service, we can hardly hope for success, as that is a time when we can only carry out that which we are already familiar with, the daily pressure is too great for more.

What may be attained is seen by studying the writings of Professor Carl Reyher, who went in charge of an ambulance to the Caucasus in the late Russo-Turkish war, and whose figures are to be found quoted in Surgeon-General Longmore's works, in Mr. Cheyne's valuable book, and in the Military Medicine section of the *Transactions* of the International Medical Congress of 1881.

He says he had 81 cases of gunshot-wounds of the knee; 18 were treated antiseptically throughout, of whom 3 died and 15 recovered with mobile joints. In 40 cases which had been manipulated and operated upon in opposition to antiseptic principles, before coming under his care, 34 died, 6 recovered, 5 of whom lost their limbs. The remaining 23 cases were treated altogether without antiseptic precautions, and of these only one patient recovered.

Thus, in the cases in which Listerism was practised from the outset, the wound-openings being merely antiseptically occluded by an antiseptic compress until arrival of the patient at the field-hospital, the mortality was reduced to 16 per cent. In the cases treated partially only on antiseptic principles, the mortality was 85 per cent. In the 23 cases in which antiseptic treatment was not employed at all, the mortality was 95 per cent.

Dr. Bergmann, who crossed the Danube with the Russian army, had 15 cases of compound fracture of the knee-joint, of which 14 recovered, but 2 lost their limbs; but he found many difficulties; for instance, the Danube water collected for dissolving the carbolic acid was thick with sand and mud, and there was no time for boiling and filtering it. The spray-diffusers became choked and useless. In his most successful cases of gunshot fractures into the knee-joint, the first dressing on the battle-field consisted of wrapping the limb, after it had been washed with a solution of carbolic acid, in 10 per cent. salicylated wool thickly rolled round the wounded joint; a bandage confined this dressing close to the limb, which was finally immobilised in plaster-of-Paris. Many wounds thus closed by immediate occlusion were found to be healed on removal of the first dressing. He says, however, one highly important condition is attached to this, that no examination of the wound, by probe or finger, be made on the battlefield or dressing-station.

The testimony of surgeons who have practised antiseptic surgery in war on this point is uniform—namely, if the soldier is to be treated with any reasonable chance of success in the field-hospital, his wounds must not be manipulated by the surgeons in the front; under this term, I include the regimental and bearer-company assistance.

Reyher gave instructions that wounds were never to be examined at the front, either with fingers or instruments; nor was any attempt to be made to extract the bullet; the only exceptions being cases of injury to blood-vessels, and where the walls of a cavity were wounded, and there was a chance of a ball falling into it. For surgeons at the front, he says there is only one line of treatment—*to occlude the wound provisionally, to lay the wounded part in a suitable position on the litter, and to render it provisionally immovable.*

The dictum of Professor Nussbaum is, "that the fate of the wounded man lies in the hands of the surgeon who first attends him."

What better rules can be given for the surgeons at the front than those of Reyher? The least reflection shows at once that the hands and instruments of those in such a position must be dirty, and quite unfit to be brought into contact with any wound except where it is imperatively demanded, as in a case of hæmorrhage, compound fracture, mutilated limb, etc. A wound not requiring active surgical interference should be covered over with a dressing of some antiseptic material, which should be fastened on with only the requisite degree of tightness to ensure its keeping in position. Several suggestions for the nature of the first dressings have been made. I am inclined to think it does not very much matter which of the preparations is used, so long as it is light, dry, antiseptic, and therefore absorbent, as salicylated lint or cotton, boric lint or cotton, or absorbent cotton. I should prefer, however, a prepared cotton-wool, because, even if all the antiseptic had evaporated, it would still answer, acting as a mechanical filter. The field-dressing of Esmarch is excellent; but I suggest a fold of cotton-wool in place of his tampons, because, if the wound be not made by a bullet, but by a sabre or lance, the cotton dressing could then be used, whereas the tampon would be useless.

The dressing ought to be carried by the soldier, and it should be sewn under the flap of the coat. Soldiers have no room in their pockets for half they want to carry; and they are not likely to keep a packet of dressings in their only pocket, to the exclusion of tobacco and other things they value highly.

The wound having been occluded, the man must be sent to the field-hospital, when a proper and thorough examination will take place.

Esmarch says that the new bullets pass in quickly through the clothes, and may not carry into the wound any causes of putrefaction. Dr. Blair Brown gives, in his *Surgical Experiences in Zululand*, several instances of rifle-bullet tracks healing by first intention.

In cases, therefore, where the edges of the wound come in contact, and no bone is injured, and no clothing has been carried in, it would possibly suffice to cleanse well the surrounding skin, and, without more examination, then to occlude the wound by a full Listerian dressing, or with folds of salicylated wool. On the other hand, if the wound be gaping, foreign bodies carried in or bone injured, after the necessary operation, the nearer the dressing approaches the thorough Listerian gauze one, the greater the chance of the wound remaining aseptic.

As the treatment of these wounds requires the thorough washing out by an antiseptic lotion, I should like to see a syringe and flexible tube supplied to every field-hospital, as on service it would be impossible to spare catheters for this purpose, the supply of which is necessarily limited, and the demand for their legitimate use often imperative.

Many objections have been made to attempting the use of Listerian dressings, because of the difficulty of using a spray; if one can be used in field-hospitals, so much the better, but good results can be obtained without it.

Dr. P. Brun, of Tübingen, has abandoned the use of the spray since 1879, and has obtained results equally good as those with the spray; he uses irrigation in long operations. Billroth, of Vienna, has, for some time now, carried on the antiseptic treatment of wounds without the spray, and with excellent results. Volkmann, of Halle, has also discontinued it, and several of the distinguished ovariotomists of this country do not use it.

DEATHS FROM ANÆSTHETICS IN 1883.

By ERNEST H. JACOB, M.D.,

Physician to the Leeds Public Dispensary.

I FORWARD, as in former years, a list of the deaths from anæsthetics which have been reported in the public journals during the past year.

I.—*Deaths from Chloroform.*

No.	Place.	Sex and Age.	Operation.	Remarks.
1	Normanton	F.	Dressing sprain of ankle	–
2	Lasswade	M., 18	Amputation of finger	–
3	St. Mary's Hospital	M., 7	Opening abscess of knee	Died before the operation was performed.
4	Inverness	F.	Extraction of tooth	
5	Glasgow Western Infirmary		Excision of tongue	Death from asphyxia. *Post mortem*, organs healthy.
6	N. E. Hospital for Children	–	Abscess of ankle	
7	Bristol Infirmary	M., 54	Hernia	Asphyxia, copious vomiting, failure of pulse. Small quantity of food below rima glottidis.
8	St. Mary's Hospital	M., 39	Enucleation of eye	Death from syncope. Kidneys rather granular.
9	New Brighton	M., 45	Fractured femur	Death in an epileptic fit.
10	Liverpool	M., 40	Removal of tumour	Death by asphyxia. Organs healthy.
11	Belfast Royal Hospital	M.	Strabismus	—

II.—*Death from Chloroform and Ether.*

No.	Place.	Sex and Age.	Operation.	Remarks.
1	Bristol Infirmary	F., 45	Examination of abdomen.	"Breathing failed, face livid." Tubercular peritonitis; phthisis at right apex. Heart healthy.

III.—*Death from Nitrous Oxide.*

No.	Place.	Sex and Age.	Operation.	Remarks.
1	Dental Hospital London	M., 57	Extraction of teeth.	Death from syncope just before operation. Cancer of tongue; adhesion of left lung.

Remarks.—The list of deaths this year is remarkably small, and ether does not figure as a cause, except in one case, when given mixed with chloroform. The operations for which the anæsthetic was given were of the usual trivial nature, one case only (No. 7) being of any gravity, and in that the death may fairly be put down to the vomiting and consequent asphyxia by foreign matter in the trachea, rather than to the specific action of the anæsthetic. The fewness of the cases is a matter of sincere congratulation, if it be due to the greater adoption of ether as the usual anæsthetic agent, and the consequent disuse of chloroform. Deaths from the use of nitrous oxide are so rare, that we have almost got to look on it as absolutely without danger. In the case above mentioned, the patient appears to have died from syncope in the manner most usual in deaths from chloroform.

A CASE OF CHARCOT'S JOINT-DISEASE.

By THOMAS F. RAVEN, L.R.C.P., Broadstairs.

The following instance of tabes dorsalis presents features of interest. In recording the case, details of the more familiar symptoms will be omitted, for the sake of brevity; and the rarer aspects of the disease, only, will be referred to at any length.

B. W., aged 50, a mariner, comes of a healthy and long lived family. He has been the subject of locomotor ataxy for twenty-one years, almost all the characteristics of which disease he presents. He is ataxic both in the upper and the lower limbs. Muscular anæsthesia is well marked, and cutaneous insensibility is, by this time, universal, excepting that he can still feel in the face. He is almost completely blind, the glare of the ophthalmoscope, even, being hardly perceptible to him. The blue and glistening appearance of the optic discs, in a state of atrophy, is well shown. But the blood-supply to the retina appears sufficient. The left auditory nerve is also, in a less degree, implicated. All the reflexes of tendons and skin are wanting. Lately, he has been subject to profuse sweating.

The morbid condition of the joints is strongly marked. Both knee-joints are dislocated and disorganised. The displacement is very considerable in both, especially the right, but not complete in either. The right tibia is dislocated forwards upon the femur. The dislocation is reduced when the leg is flexed. There is also an unnatural lateral movement in the joint, the tibia being easily made to rock from side to side upon the femur. These movements are attended by a grating and grinding together of the articular ends of the bones, doubtless the result of destruction of cartilage. The left knee-joint presents the same appearances, but in a less degree, and on this side the tibia is displaced backwards. There is no abnormal amount of fluid in these joints; nor are they painful, tender, or swollen. The affection of the knee-joints began fifteen years ago. At first they were distended with fluid, the right knee especially; but, otherwise, neither joint has ever shown any sign of inflammatory action. The ankle-joints are thickened and stiffened. The ends of the tibiæ are clumsy and hamper the movements of the joints. The right shoulder-joint, on the other hand, seems to be abnormally loose. The hip-joints are unnaturally mobile, but neither femur is dislocated, nor is there any grating in the joints on movement. But the ligaments must be much strained and weakened. By reason of this state of the knees and hips, the patient can place himself in very unnatural postures. He can, without difficulty, twist his limbs in such a way that the heels are placed behind the head, and easily retained there. The bones have probably suffered from defective nourishment for many years. Fifteen years ago, when he could walk, B. W. broke one of his external malleoli by merely twisting the foot.

This condition of the joints and bones is especially interesting in not being associated with prominence of the *crises gastriques*. Dr. Buzzard has shown (BRITISH MEDICAL JOURNAL, March 5th, 1881) that these features of posterior sclerosis are frequently found together. But in the case under notice, gastric crises are very ill marked, if, indeed, they exist at all. The patient has, at times, attacks of looseness of the bowels, which can usually be referred to some article of diet, but there is never any vomiting or abdominal pain, nor does hunger follow upon the subsidence of the disturbance. The same author has also noted that laryngeal symptoms are coincident with Charcot's joint-disease in tabes. In this case, temporary interference with the functions of the larynx has twice occurred. On each occasion it was associated with a transient condition of hemiplegia, and for several hours the voice was lost, although speech was preserved.

As to the etiology of locomotor ataxy, the history of B. W.'s case affords negative and direct evidence. Ten years before his illness began, he received a heavy blow on the back from a falling tree. But no bad results followed. Ten years later he was exposed to wet and cold at sea, his back being especially chilled by the flapping of a wet tarpaulin over it. His first symptoms followed in a few days. He was married almost immediately afterwards, and this event was shortly followed by a change for the worse in his condition. He never had syphilis. It is somewhat remarkable that a man should retain any effective sexual power after seventeen years' severe suffering from locomotor ataxy; but, undoubtedly, although his virile powers have for many years deteriorated, B. W. begot a well formed child four years ago. A glass of strong brandy and water, it appears, must be partially credited with the parentage of the infant.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

PROCEEDINGS OF SECTIONS.

ON THE VARIETIES OF PHTHISIS, AND THE CURABILITY OF SOME IN CERTAIN STAGES.

Read in the Section of Medicine.

By W. R. THOMAS, M.D., M.R.C.P.,
Physician to the Sheffield Public Hospital and Dispensary; Lecturer on Medicine in the Sheffield Medical School.

PULMONARY phthisis annually carries away so many thousands from amongst us; oftentimes seems to choose for its victims those who are most useful in life, most delightful company, and most fair to look upon; and yet is a disease over which we often have but little control; that I feel sure I need not apologise for bringing the matter before your notice.

There are so many remedies and varieties of treatment recommended, and so highly extolled, that the young practitioner becomes confused, and hardly knows what mode of treatment to adopt. Some recommend cod-liver oil so highly, that he hardly thinks that any other treatment is required. Some speak well of the syrup of the hypophosphites. Remarkable cures are related of cases which have been sent long sea-voyages, as to Australia. Residence high above the level of the sea has done an immense amount of service to some. For many years, inhalation of such remedies as creasote has been highly recommended, and of late years this treatment has been looked upon as specific. Different inhalers have been used, by which the remedy can be applied for prolonged periods, if required, and thus made to act upon certain living organisms, it is said, in the lungs; and in this way, hosts of remedies have been well spoken of in the past as specific, and many have at last, after due trial, been thrown aside as useless.

Now all these remedies are recommended for the disease called phthisis, and a student or practitioner is apt to treat all cases of phthisis somewhat alike. One has the greatest confidence in the inhalation treatment, another in the cod-liver oil treatment, and so on.

I have the greatest confidence in recommending all these modes of treatment, and have seen the greatest benefit derived from each one; but I believe that there are several distinct and separate varieties of phthisis, that each case has to be treated on its own merits, and that, when these remedies fail, it may be that the case has not been a proper one for the mode of treatment adopted, which might have answered well in another and a different case.

At the Sheffield Public Hospital, I see a very large number of cases of phthisis annually, and certainly recognise three separate and distinct varieties of the disease, the variety depending upon the original cause; and I have found the recognition of these varieties of great importance in practice. My treatment to a certain extent has depended upon the class to which I believed the special case belonged, and I have been able to throw aside some medicines which I have hitherto considered indispensable in all cases of phthisis. These varieties are:

1. Those dependent upon the inhalations of particles which act as irritants upon the delicate membrane lining the tubes and ultimate air-cells of the lungs, and give rise to the presence of new material in the substance tubes, and air-cells, of the same, which is apt to undergo caseation and disintegration, and cause the formation of a vomica, the fever being dependent upon the local mischief originally;

2. Those dependent upon the non-disappearance of the products of inflammation, as after pneumonia, typhoid fever, and other diseases apt to be accompanied by pneumonia;

3. Those cases in which there is a distinct hereditary tendency to the disease.

Grinders, colliers, flax-dressers, stone-masons, and others, who, when following their daily occupations, are constantly inhaling particles of different materials, and also those who live in manufacturing or crowded districts, generally suffer from the first variety; and I have been astonished at the success of treatment in such cases, when the patient has been able to follow it up in its entirety.

Now, with regard to the treatment of such cases, I think that, when there are distinct signs and symptoms of incipient phthisis, and where the cause of the disease, *i.e.*, local irritation, is evident, it is a sure proof to us that the lungs will not permit such irritation without rebelling; and I think that we shall be taking the bull by the horns, and performing an act of justice to the patient, if we tell him or her that, if life is to be saved, the occupation must be given up, or that, when living in an atmosphere of dirt, removal is quite necessary.

I know that it is often difficult, perhaps impossible, for the patient to follow the advice of the medical men; as, if a man, he may have a wife and family dependent upon him, and may not, perhaps, be able to earn one fourth of his salary at any other trade; but I know I have seen some scores of good examples of real cure of phthisis in the first and second stages, and of partial cure in the third, when I feel positive that it has depended upon the removal of the cause, and that, without such removal, treatment would have been of little avail. I speak strongly on the subject, because I see clearly men and women courting death by living in such an atmosphere, and think, perhaps, that we are not positive enough in giving out directions.

In the treatment of this variety, as of the other two of this complaint, it is very necessary that strict directions should be given as to matters which the patient is too apt to look upon as not of great importance, viz.—exercise, ventilation, sponging, and diet.

The patient should have out-door exercise daily whenever the weather is favourable, both in winter and in summer, the amount depending upon the strength of the patient.

I find that sponging of a part, or the whole of the body, every morning rapidly in incipient cases, where the patient can bear it, is very useful, and, I believe, renders him or her less liable to, so frequently, catch cold.

As to diet, I find that female hospital patients almost live on tea and bread and butter, but very little of the latter. They have tea for breakfast, tea for dinner, tea for tea, and tea for every meal. I invariably stop this, and find that, when they take proper food, as bread, milk, meat, etc., properly chosen by the medical man, according to the powers of digestion of the stomach, improvement rapidly takes place.

As far as my experience goes, but little attention has hitherto been paid by architects to ventilation, especially when superintending the erection of cottage-houses. The atmosphere of the patient's room is often abominable, and must be loaded with all sorts of impurities, exhalations from the lungs and skin of the patient and friends, impure gases from gas-burning, which cannot fail to have an injurious influence upon the patient's health. I am in favour of having plenty of fresh air in the room by opening the window if necessary, and yet avoiding a draught; but in this, of course, one is guided by the state of the weather.

If the appetite fail, I know of no better tonic than gentian. Quinine in this complaint is a most valuable remedy; it certainly acts as a general and stomachic tonic, tends to check the fever, prevents waste, and checks the sweating better than any remedy I know.

How often we do meet with patients who tell us that they never have recovered since they had inflammation of the lungs, or some other acute disease, some months ago! Here we have not any irritant passing into the lung, but the presence of something in the lung and a general cachectic state of body to grapple with. I have seen many cases of this kind during the last few years, and many have recovered under the following treatment.

I have applied a good large blister over the part affected, administered chlorate of potash and bark internally, and given strict directions as to amount of exercise to be taken, ventilation, sponging, and diet, as in the preceding variety; and in many cases the patient has seemed to have been invigorated by the treatment, and the disease has disappeared.

Frequently I have seen a wonderful change has taken place as soon as the patient, if living in a town, has been removed to a part where the atmosphere is clear, and the weather permits, even in winter, the patient to go out daily. Unless, by recommending change again, exercise, and by attention to the details mentioned in the treatment of the first variety, an impetus can be given to increased nutrition, and that soon, there is danger of disintegration. These patients feel so depressed and disinclined for exertion, that we often have to use our best persuasive powers, and often are rewarded by success. The remedies mentioned before I have found valuable in these cases.

The most fatal cases are those of the third class, in which there is a distinct hereditary tendency to the disease. Unfortunately we do not, as often as we wish, have the opportunity of treating these cases in the very earliest stages; and it is in these stages, when the physical signs are hardly evident enough to satisfy us that there is disease present, that our teatment is of the greatest use.

My attention has frequently been directed to the chest by such symptoms as gradually increasing debility without evident cause, increased frequency of pulse continued for weeks, failing appetite with symptoms of dyspepsia; and often I have found audible signs of disease where the patient has not complained of any cough whatever. In other cases, when I have not been able to satisfy my ears, but felt sure, from the symptoms complained of, that mischief was brewing, the signs have at last often become evident. Whenever we meet with some of the early symptoms of phthisis in patients who have hereditary tendency to the disease, I think by far the safest plan is to treat the patient as if the lung-disease could be distinctly heard.

Now in this, the hereditary disease, I do not think that we have any specific remedy on which we can depend; but, at the same time, we have a mode of treating these cases which often, when I have hardly hoped for success, has proved very successful and satisfactory.

In treating this disease, I am afraid we are all apt to follow fashion, to prescribe remedies and modes of treatment at the time in vogue, and to forget the treatment which sound common sense, combined with a reasonable amount of medical knowledge, would dictate to us.

The patient should live in a part where the air is pure, neither too dry nor too moist, and where the climate permits out-door exercise to be taken. Hence, removal to some of the places celebrated for this climate, is often of marked benefit, simply because the patient can then take plenty of exercise.

If, in this class of case, the patient can take cod-liver oil, he certainly should; and I have certainly seen the remedy act wonderfully, as if it had a specific effect. It has relieved the cough, fattened and strengthened the patient. On the other hand, many patients cannot take it in any way, or at any time, without suffering in some way or other. They feel sickly, suffer from dyspepsia after it, are relaxed, or have their appetites spoilt by it.

I have tried the inhalation treatment extensively. Some patients say that they have derived benefit from the treatment, and cough has been relieved, the quantity of expectoration has diminished, and the general symptoms have improved. Others seem to derive no benefit whatever: the inhalation in these cases increases the cough, impairs the appetite, and makes the patient ill.

In this, as in the other two varieties, I attach the greatest importance to the amount of out-door exercise taken, or in-door if the former be impossible; to proper ventilation, to the climate, the sponging of the body, and the taking of suitable food; and, as internal remedies, have found quinine, iron, and some of the vegetable tonics the most useful.

The object I have had in bringing this matter before your notice has been to show that, in the first variety, we have a disease produced by local irritation only. The fever is secondary, and I feel sure that if we can only remove the cause we do much towards the cure. In the majority of cases in the first and second stages, attention to general health, together with the administration of a few well-chosen remedies, will often effect a cure, and sometimes even in the third stage.

In the second variety we have something more formidable to deal with; something present in the lung, and a cachectic state of body. Unless this be grappled with at once, the lung will be sure to break down. The best way of treating that body is to place it in an atmosphere of purity, to surround it with sights which afford food to the mind and divert from self, to compel it to take exercise, and thereby create necessity for food, promote healthy changes in the lungs as elsewhere, and to supply to the stomach that food which is most beneficial. In this way, cases which have been at a standstill for a long time, will often change for the better. In the third variety we have hereditary tendency to deal with, and must endeavour to treat it early; as in the later stages, owing to this tendency, it is a most serious disease to have to contend with; and in this class cod-liver oil, if it can be taken, acts beneficially; probably the inhalation treatment is also useful; but, above all, pure air, exercise, and good food are our best remedies.

ON ANTISEPTIC INHALATIONS.

Read in the Section of Medicine.

By SOLOMON C. SMITH, M.D.,

Surgeon to the Halifax Infirmary.

At the present day, when antiseptic inhalations in one form or another are frequently prescribed, and commonly used even without prescription, I think we ought to endeavour to arrive at some definite conclusion as to their mode of action, and as to the way in which they produce those beneficial effects which are commonly attributed to them.

The shortness of time makes it necessary to place some limit to the subject. I do not propose, therefore, to discuss the question whether or not these inhalations are beneficial. I think we shall, most of us, agree that, be their action what it may, we find that, while treated by an antiseptic atmosphere, patients often experience a considerable relief of cough, and often gain flesh and strength; so that we have come to understand that in certain cases these inhalations do good, and the question is, how do they do it?

The subject must also be limited by provisionally accepting the theory that many cases of bronchitis, especially those with bronchiectasis, become dangerous chiefly in consequence of septic processes, resulting from the growth of bacteria in their dead expectoration; and that phthisis arises from the development within the living tissues of the lung of crowds of bacilli, which, by setting up tuberculosis, a process consisting partly of irritative overgrowth, and partly decay, lead to the destruction of the lung.

The term antiseptic, in fact, presupposes the existence of some such septic processes as we now know to be caused by bacterial growth. It has long been thought possible, by inhalations of creasote, to limit decomposition in the expectoration; but, now that the investigations of many observers have shown the constant presence of certain bacteria in phthisical disease, the hope is that not only may antiseptic inhalations control septic processes in dead secretions, but that they may be destructive to those micro-organisms which are at the root of tubercular disease in living structures.

I inquire then, how do they act? What effect can an atmosphere, charged to the extent recommended, have upon these living micro-organisms? Can a respirator keep them out? if not, can any vapour which is fit for respiration destroy them? if not, can it in any other way influence their growth, or check their development, so as to prevent their ill effects?

The first of these three questions we must answer at once in the negative. Any one who takes the trouble to master the details necessary for the successful conduct of experiments on sterile solutions, will see at once the impossibility of keeping bacterial germs out of the body by any form of respirator which it is practically possible to wear; and surely we have no right to believe that the bacilli of tubercle are any easier to intercept than the bacteria of decomposition. If we allow that they exist, and that they cause disease, we must admit the almost universal distribution of these infective particles. Every day we must have in our midst within these isles, constantly warring against us, a great army of 150,000 sufferers from this one disease, consumption, scattering amongst us right and left its germs which, although harmless to the strong, are a perpetual menace, hovering about us ready to invade and breed in our enfeebled tissues, whenever, from disease or trouble, or unhealthy surroundings, our vitality is impaired; the enormous number of centres of infection explaining, as the occurrence of apparently isolated cases of phthisis proves, the wide distribution of the infective particles, and making us despair of success in keeping them out of the body. Can we then kill them if they gain access?

To kill bacteria is one thing, to kill germs is quite another. It has been proved that they can stand a short boiling, that they can be floated in air-bubbles through strong vitriol, that they can be washed with carbolic solution of any strength short of 5 per cent., without being killed, or losing their power of self-multiplication. Is it likely, then, that any vapour which could possibly be inhaled would be capable of destroying organisms which are so retentive of their vitality? I think it is quite obvious that all evidence shows that it is impossible, either to keep germs out of the body, or by antiseptics to kill them. What else, then, can inhalations do?

Several years ago, Professor Tyndall made a discovery which has an important bearing on this subject. While he was performing a series of experiments on the living matter in the atmosphere, it became necessary very frequently to prepare sterile solutions, and he was much troubled by the prolonged boiling which was necessary to destroy with any certainty their contained vitality.

But he found that if, instead of giving his solutions one long boil, he heated them several times for quite a short period, leaving them at the ordinary temperature in the intervals, he could quite readily devitalise them. This method he described as sterilisation by discontinuous heating. He discovered, in fact, that, however hard and resisting the germ may be, there is, in the life-history of every bacterium, a period when it is very soft, tender, and easily destroyed; and that, although he could not touch the germs themselves, he could kill them, [illegible] by repeated slight heatings, kill them [illegible] while they were too young to produce [illegible]; and that he [illegible] without [illegible] [illegible] any prolonged boiling. The [illegible] of this difference between germs and bacteria [illegible] explains [illegible] and enables one to understand how organic substances can often be protected from decomposition by the addition of very minute quantities of antiseptics, in proportions quite too small to be in any way considered germicidal.

The *modus operandi* is probably in all cases the same: the germ is allowed to hatch, the young is killed by an antiseptic far too weak to touch its parent, and thus the race dies out. Now, it seems to me that this is the explanation of the action of antiseptic inhalations. The materials which have been found most useful are not mere gases which intermingle with the inspired air and then pass out again with it, but are vapours, gaseous forms of soluble bodies which are deposited wherever their penetrating vapour comes into contact with water.

On every moist bronchial tube, on the walls of every cavity, and even in every congested spot in the lung, the inhaled carbolic vapour condenses and carbolises the tissues; and we are, I think, forced to believe that the benefits derived from the use of antiseptic inhalations are due to this infiltration of the lungs with antiseptic material rather than to any action upon the floating germs.

It must, however, be granted at once that this impregnation of the tissues never goes to any great extent, and the question arises whether so mild a dose can have any effect in preventing bacterial growth. There is plenty of evidence to show that antiseptic inhalations diminish the irritating qualities of the expectoration, and lessen the number of bacteria in it; but there is no proof at all that it can be rendered entirely free from bacteria by any amount of antiseptic vapour; in fact, all evidence goes the other way.

Now, it has often been assumed that, if we cannot stop the growth of micro-organism in fluids lying in the tubes and cavities, we certainly must not expect to check their development when embedded in the substance of the lung.

But the cases are different; the one is a question of dead matter, the other of living tissue. Decomposition of expectoration obeys the same laws as experiments in test-tubes; but the growth of bacilli in the living substance of the lung is resisted by the vitality of the tissues themselves. Life is the great antiseptic.

There are few points in which the difference between things living and things dead is more markedly shown than in the power live bodies possess of resisting, by virtue of their own vitality, the growth within themselves of those lower organic forms which, in dead tissues, readily take root and grow, and, by their development, rapidly reduce the lifeless elements to their lowest chemical affinities. For scores of years man's body resists decay, and then, when life departs, he rapidly swarms with myriads of bacteria; not that there is any chemical change making his body more suitable food for them, but because they are able at last to take possession, now that the resisting power of his vitality has departed.

As it is with the germs of decomposition, so it is with those of tuberculosis. When they attack the lung, they do not usually at first affect those parts which are most actively performing their functions; the very parts into which they are most freely carried by the air are least susceptible to their attacks; their active vitality is their protection; but, in the apices and parts injured by previous inflammations, they settle and breed disease. And, even when phthisis is well established, and when the air in the chest must be crowded with its germs, large portions of the lung remain for long untouched; showing, on the one hand, how great is the resistance to the disease inherent in the tissues themselves, and, on the other, giving a rough measure of the amount of help required from treatment. For, if the difference between a soil fit and one unfit for bacterial growth is to be measured, for example, by the difference between the functional activity and resulting vital resistance of an upper and a lower lobe of the lung, surely it is not unreasonable to hope that, by impregnating the pulmonary tissues with antiseptic material, which, we know, renders them less fitted for the cultivation of bacilli, we may be able to make up the lacking resistance, and so prevent the access of disease.

When we send a patient to Davos, to an atmosphere so rare that he has constantly to use the whole of his lung to get sufficient breath, instead of breathing with a portion only, as we mostly do, we really give to the whole lung the same functional activity, the same resisting power, which formerly belonged only to certain parts of it, and we know that the disease is often checked.

If, then, the tissues are so nearly able to hold their own, it ought to be possible, by adding the resistance of any antiseptic, to stop the progress of a disease which, according to the premises of our argument, is due to bacterial growth. This may all be mere theorising, but it leads to some very practical points.

First, the material used ought to be capable of absorption by moist surfaces; it should be a vapour, not a gas; and a dry vapour, not an atomised solution.

Second, as no attempt to filter or sterilise the air is required, all complex forms of respirator may be discarded The freest possible access of air should be allowed, the vapour being breathed with it as constantly as possible; so that the simplest and most open respirator is often the best, the mere diffusion of the vapour in the room sometimes being sufficient.

Thirdly, we must combine with the treatment by inhalation, all medicinal, dietetic, and hygienic measures which tend to improve the general condition of the patient, and thus increase his vital resistance.

It is worth bearing in mind that the view of the matter, which I have so imperfectly brought before your notice, shows the harmony and unity of purpose which exists among the various means which we make use of in the treatment of consumption.

If we accept the germ-theory of the origin of tuberculosis, all treatment, both local and general alike, must aim at preventing the growth of certain bacteria in the body; the struggle is between one great life and myriads of small ones; and while all general treatment tries, by providing healthy work, good food, and pure air, and by attention to all secretions, to improve man's condition, and make him so suitable to his surroundings, that he, being the fittest, shall survive; local treatment, on the other hand, endeavours to impregnate the lungs with substances so inimical to the development of microscopic forms of life, that the parasite, planted in a soil unsuited for it, beaten in the struggle, shall cease to grow.

ALEXANDER AND ADAMS'S OPERATION ON THE ROUND LIGAMENTS.

Read in the Section of Obstetric Medicine.

By HENRY A. LEDIARD, M.D.Ed., F.R.C.S.Eng.,
Surgeon to the Cumberland Infirmary, Carlisle.

In the *Medical Times and Gazette* for April 1st, 1882, I read with much interest an account, by Dr. Alexander, of Liverpool, of a method of treatment employed by him for the relief of prolapsed uterus; and I determined to put into practice, at the first opportunity, the operation, which seemed at first sight to have much to recommend its adoption. Amongst the lower classes, bad examples of procidentia uteri are met with frequently, and I have often experienced considerable difficulty in finding any instrument to give any kind of support, or that could be worn with comfort.

It was not until July 4th of this year that Dr. Adams's paper came to hand; and it is evident that full justice must be done to his independent planning of the operation upon the dead body, and demonstration of the anatomical practicability.

My own experience may be useful, although it is limited to operation upon four women, all of whom suffered from complete procidentia; and I will simply give a summary of their cases, inasmuch as a detailed account of each would be tedious and unnecessary. The ages were from thirty-three to fifty-three years; prolapse had existed from two to eight years, and pessaries were useless. The first case was operated upon on November 27th, 1882, when a prolonged search was made for the ligament on one side only, but without success, the wound taking nearly three months to cicatrise. It can be said with truth that little pain was caused, and no risk to life was in any way threatened, but the result was mortifying in the extreme, for, in spite of the rest in bed, the procidentia was as bad as ever. The case was, however, instructive, seeing that failure was, no doubt, due to fraying out the ligament instead of grasping it boldly; indeed, I came almost to the conclusion that there was no round ligament present. The tedious healing was accounted for partly by the handling the tissues had undergone, and partly by the patient being obese. I hope to induce her to allow me another trial upon the opposite ligament.

The second case was more encouraging, for the ligament on one side was quickly found, shortened, and stitched to the skin; but here again the wound was about two months before it was completely healed. She came for examination on June 22nd, the operation having been performed on January 1st. The cervix was two inches within the vagina. She "could go about much better," had "no bearing down pain," and no bladder-trouble;" and this gain was produced with shortening one ligament only.

The third case was somewhat remarkable; for, although the ligament was readily found on one side, yet, when search was made at the same time upon the other, no trace of any ligament appeared. Again slow healing followed with erythema and cellulitis of the abdominal wall, a high temperature, and dry tongue, etc., so that at the end of three months I was very glad to see the patient able to go out. The operation was performed on February 2nd, and on July 4th she came to show herself. The uterus had never come down since leaving the hospital, and the cervix was at least two inches up the vagina. Here again this result depended upon shortening one ligament only.

The fourth patient has had both ligaments shortened, an interval of three weeks intervening between the operations, the ligaments being stitched to the pillars of the ring as well as to the skin. She was undoubtedly the healthiest of those operated upon, and the wounds healed as, I take it, they ought to do, *i.e.*, in about three weeks. The result thus far promises well, for the uterus is well up the vagina; but, seeing that the ligaments were shortened on May 18th and June 11th only, it is too early to judge of the probable permanent result.

Such is a brief report of my experience of this simple operation, in the Cumberland Infirmary, and I trust that no surgeon will be deterred from practising it by reading the account of my two failures to find the ligament sought for. The operation is almost bloodless and painless; and I am not at all sure that a slow healing of the wounds, provided the ligament remains in the new position, is not advantageous—inasmuch as the patient is confined to bed and to rest, thereby affording sufficient time for the parts to consolidate before again being put on the stretch.

In one of my cases, ether was used, and some bronchitis followed. I certainly never expected that the result would have been a success, for coughing was about the last thing wished for.

The plan I have followed is to wind the ligament, when pulled out, round a piece of stick, and leave it like a pedicle projecting through the wound, to fall off naturally; so that a sort of stump can be seen in the cicatrising part, that is, if healing be primary. I unwound the ligament from the sticks in two instances. I found the band measured two and three inches respectively. In all cases, full antiseptic precautions were taken, and the subsequent dressing was Listerian until suppuration appeared. I do not think, however, that anything more than strict cleanliness and careful adjustment of the wound is necessary, together with sponge-pressure and a gauze bandage; whilst the sooner the ligament is found, the less handling will the tissues be subjected to, and the less disturbed will they be in consequence. Careful stitching of the ligament, both deeply and superficially, is no doubt most important for the lasting success of the operation; and Dr. Alexander's recommendations, as to the "method of retaining the ligaments in their new position," should be strictly adhered to. *(Liverpool Med. Chir. Journal*, p. 116, January 1883.)

In the last case operated upon, a sponge was placed in the vagina, and changed daily; it was retained without causing any discomfort, and was probably useful in steadying the uterus whilst healing went on; and I can imagine that, in cases where chloroform caused sickness, or ether setup bronchial irritation, such a practice might prove beneficial.

I note that Dr. Adams, in his paper already alluded to, mentions that the peritoneum does not follow the ligament "under the necessary traction;" but, in one of my operations, this membrane certainly did follow the ligament, but was easily stripped back with a finger; there would, however, be a risk of peritonitis were a funnel-like process of this membrane dragged along and transfixed with the needle. The surgeon will soon learn to pull with knowledge; for any violence would probably lead to rupture of the ligament, as well as injury to the peritoneum.

The spine of the pubic bone is undoubtedly the point to be aimed at, for near it will the ligament be found; and I fully endorse all that has been laid down by Dr. Alexander, as to grasping the fat which projects from the external ring with forceps, and pulling upon it until the ligament appears.

Finally, I am disposed to believe that this operation will receive all the recognition from surgeons that it deserves; and that, ere long, we shall hear of its performance, not only in this country, but elsewhere.

POSTSCRIPT. On July 27th, I shortened the round ligament on the left side of the patient on whom I first tried this operation and failed to find the ligament. On this occasion it was found without difficulty, and drawn out about two inches.

WATER FROM THE CHALK FOR LONDON. Though it is generally believed there is some connection between stone in the bladder and chalky water, the connection has never been satisfactorily explained. The Leatherhead and District Waterworks Company have sunk an artesian well, which yields, it is said, three million gallons "of pure and brilliant chalk-water of the finest quality" daily. This water is to be collected in a reservoir on the chalk hills, about 300 feet above the level of the Thames at London Bridge. It is suggested that this supply may eventually be of use for London. Should this suggestion be carried out, it will be an interesting pathological experiment on a gigantic scale.

CASE OF ORBITAL ABSCESS COMMUNICATING WITH THE BRAIN.

Read in the Section of Ophthalmology.

BY A. EMRYS-JONES, M.D.,
Surgeon to the Manchester Royal Eye Hospital.

A. D., a boy aged 2 years, first came under my care at the Eye Hospital on December 23rd, 1882, when his father gave the following history. Three months previously, he was playing with a tin-whistle, and he knocked it against the corner of the right eye; there was a good deal of bleeding at the time, and, although he had been under medical treatment since, he was not getting any better.

On examination, I found the right upper eyelid everted, with its mucous surface raw, and exhibiting numerous cicatrices, and discharging a considerable amount of muco-purulent matter. From the swollen and distorted condition of the eyelid, the cornea was almost hidden from view, but it was intact, and no other morbid appearances were noted at the time. Under a roller-bandage and pads, and occasional application of nitrate of silver solution (ten grains to the ounce of water), the discharge lessened, and he was allowed to leave the hospital on January 6th, 1883, with the eyelid much less swollen, and so less everted.

On February 3rd, 1883, he was readmitted. His aunt informed me he had frequently vomited his food since he was last seen; the right eyelid was still everted, and the eye was noticed to protrude in a downward direction. Having put him under chloroform, I cautiously proceeded to make an exploratory puncture with a grooved needle, which I pushed about an inch and a quarter upwards, in the direction of the tumour; the result was negative; but, while doing this, I noticed, for the first time, a distinct pulsation, and consequently desisted from further attempt.

On March 2nd, 1883, he was again anæsthetised, and carefully examined; my colleague Dr. Little kindly assisted in the examination, and all we could discover was a pulsating elastic tumour, possibly of an aneurysmal nature, pressing the eye downwards.

On May 21st, 1883, I received a telegram notifying the death of the child, from my friend Dr. Gray, of Dalton-on-Furness, who had attended the boy, and to whom I am indebted for the history of the patient's final illness, as well as for assistance in making the *post mortem* examination. A fortnight before his death, the boy had been quite comatose, moving his right arm up and down continually for the last few days, and quite paralysed on his left side. The last two days, the eye was pushed forwards and downwards to a much greater extent, and there was violent pulsation. Dr. Gray noticed some hypopyon, which, however, again disappeared, and this was accounted for by the presence of a corneal perforation. The temperature had never risen above 99°, and the eye receded immediately after death. It may be mentioned here that no ophthalmoscopic changes could be detected at any time.

On *post mortem* examination of the orbit and cranial cavity, I found the following appearances. Just above and behind the eyeball, and attached to it by numerous bands of organised fibrine, there was a pouch-like sac, with a very dense laminated wall, which freely communicated with the cranial cavity through a circular foramen in the orbital plate of the frontal bone, of about an inch in diameter; the margins of this opening of the sac were firmly adherent all round to the sharp edges of the said foramen. The sac was filled with pus, and, on examination of the cranial cavity, we found that the abscess had extended backwards into the brain, which contained fully a pint of pus in a cyst-like cavity in its anterior lobe.

REMARKS.—The case appeared interesting from the difficulty of the diagnosis. While the history of the injury pointed to an abscess, the failure of the exploratory puncture, the presence of pulsation, although unaccompanied by a distinct *bruit*, and the absence of fluctuation, led us to consider the tumour to be an aneurysmal one. I have no doubt now that the tin-whistle entered the orbit, and wounded the periosteum, and that this was followed by periostitis, ending in suppuration. The process must have been slow, to judge from the highly organised and laminated structure of the cyst-wall; and the absorption of the circular piece of the orbital plate must have occurred at an early period. This once accomplished, it is easy to understand the further growth of the abscess and the origin of the pulsation.

CARDIFF MEDICAL SOCIETY. At the annual meeting of the Cardiff Medical Society, the following office-bearers were appointed: *President*, C. T. Vachell, M.D.; *Vice-President*, C. E. Hardyman; *Committee*: D. Edgar Jones, A. P. Fiddian, M.B., Herbert Vacher, M.D., Albert Placn, M.B.; *Hon. Secretary and Treasurer*, T. Garrett Horder.

THE INFLUENCE OF MALARIOUS DISORDERS ON URETHRAL FEVER, WITH REMARKS ON THE TREATMENT OF STRICTURE.

By JOHN WARD COUSINS, M.D.Lond., F.R.C.S.,
Surgeon to the Royal Portsmouth Hospital

DURING the recent debate on urethral fever in the Medical Society of London, the President (Sir Joseph Fayrer), referred to the association which frequently exists between urethral fever and the paroxysmal fevers of malarious climates. He remarked "that the disease is uniformly more severe, and more probable to occur in malarious climates than in our comparatively temperate one;" and that "persons who have been under the influence of malaria, and have lived in malarious climates, are more liable to suffer from this condition than others." Now, the great practical value of these observations must be very evident to every surgeon who is called upon to treat patients labouring under disorders of the urinary organs, after a residence in a malarial and tropical climate. Many instances have occurred in my surgical practice, proving this association between urinary and malarious disorders, and the necessity of special care in the management of stricture of the urethra under these circumstances. After complete freedom from the disease for a long period of time, the mere passage of an instrument into the bladder is, sometimes, followed by an attack of paroxysmal fever, marked by rigors, elevation of temperature, sweating, and high-coloured urine. For example, not long ago, a gentleman consulted me for stricture who had suffered from several attacks of fever, some years before, during a residence in the northern districts of India. After many days' rest and preparation, I examined the stricture, and easily passed a soft instrument into the bladder. Within a few hours he had a well-marked fit of ague, and on my visit the following day, he said to me, "You have brought out a sharp attack of my old fever." The paroxysms occurred regularly for some days, and then subsided, with the aid of quinine, rest, and warm baths. As soon as he was convalescent, I sent him away, and in a month or two he returned to me much improved in health. With great caution I commenced again the surgical treatment, and soon cured the stricture without any reappearance of the old disorder.

The remarkable tendency of malarious fevers to impress a character of periodicity upon subsequent ailments has often been a matter of observation. Their characteristic features manifest a disposition to recurrence after a long series of years, under any shock or depression of the system. Sometimes, prolonged exposure to malarious influence issues in a morbid alteration of a great many organs and tissues; but, even when no trace of structural disease is discoverable, a deep impression is often stamped upon the nervous system. A special liability, however, to the recurrence of paroxysmal fever is observed in connection with disorders of the urinary organs. This is dependent upon the normal sensibility of these organs, and their intimate relation to the spinal and vaso-motor centres. The readiness with which direct stimulation upon them may induce constitutional disturbance, and their proneness to reflex irritation, are indications of their widely spread nervous associations. Now, to this susceptibility must be added the persistent effect of the malarious poison upon the nervous system. Its specific action has long passed away; still there remains behind a nervous instability, which permits a reflection of any impulse through the old tracts, and a reproduction of a disturbance—an exact counterpart of the former fever, attended with all its characteristic phenomena.

In many other nervous and neuralgic diseases, a persistent instability of some central or peripheral part of the nervous apparatus is often a well-marked feature, and many striking examples can be readily recalled, showing that morbid sensibility lingers long in channels once acutely disturbed, and that any sudden depression of the system is often sufficient to arouse long forgotten pains and morbid sensibilities.

One word more must be said as to the surgical treatment of malarious patients suffering from stricture of the urethra. It is always necessary in these cases to proceed with the greatest gentleness and caution. The risk of urethral fever is much greater than under ordinary circumstances, and this risk should be counteracted at the onset by suitable measures for improving the tone and vigour of the system. Great benefit results from tonics [illegible] quinine, combined with rest, [illegible], and warm baths.

As regards the surgical management, heroic measures, in my opinion, must be excluded, as both unsuitable and unsafe. Rapid dilatation and splitting are generally out of the question, and will surely [illegible] stamped with malarious periodicity. [illegible] must be made [illegible] slowly. The operation should always be performed in a warm room, and with the patient well protected with warm clothing. It is my practice to fill the urethra with warm oil, and always to use soft tapering dilators, introduced over a catgut or whalebone guide. The instruments should be very gently manipulated, without causing pain or any mechanical injury. We must always be satisfied with very slow progress, and, during the early stages of the treatment, it is often desirable to allow an interval of several days. With these simple precautions, I have generally found that the urethra soon becomes tolerant of mechanical interference.

TOXICOLOGICAL MEMORANDA.

CARBOLIC ACID POISONING IN A CHILD: RECOVERY.

DAVID G. W., aged two years, was brought to me at 1.30 A.M. on December 11th, 1883, by his father and mother; the father stating that, ten minutes previously, he had given the child carbolic acid from a cup in mistake for cold tea. Immediately the child had swallowed it, he cried out, and complained of pain about his mouth, throat, and stomach. The father then discovered his mistake, and immediately brought the child to me. At 1.30 A.M. (ten minutes after taking the poison), the child was quite senseless, with contracted pupils not responding to light, and insensitive conjunctivæ. The muscles over the whole body were relaxed. He was discharging a good deal of frothy mucus from the mouth. There was slight corrosion about the angles of the mouth. The whole body was cold. Temperature, 94.8° Fahr. I immediately poured three or four ounces of olive-oil down his throat, and gave him an emetic of sulphate of zinc, and ten minims of ether hypodermically. At 1.45 A.M., the emetic had not acted. Two drachms of brandy, diluted with olive-oil, were given. At 2 A.M., the pupils and conjunctivæ were unaltered; the pulse was clearly perceptible; the surface of the body cold and clammy. Temperature, 95.6° Fahr. Respirations 35, and stertorous. At 3.15 A.M., the respirations were 36, and irregular; for a few moments slow and laboured, then rapid and shallow. Pulse 130, and irregular. Two drachms of brandy were again given; after which he opened his eyes and cried lustily, then fell back exhausted and senseless. The feet, hands, and face were colder; friction was applied. At 3.30 A.M., there was a decided improvement; he had opened his eyes and looked round. The conjunctivæ were now sensible. Respirations 36, and laboured. There was external strabismus of the right eye. Pulse 92, and fuller. Temperature 96° Fahr. He cried lustily. At 4 A.M. the respirations were 37. He vomited; the vomited matter smelling faintly of the acid. At 4.15 A.M., the respirations were 40. The pupils and conjunctivæ were again insensible. Pulse 120, feeble and intermittent. The corrosions about the mouth and tongue were now well marked. He again vomited; the vomited matter smelt strongly of the acid, and contained brown streaks. Two drachms of brandy were repeated. At 4.30 A.M., the breathing was still hurried and laboured, but quieter. He frequently cried out, sat up, and opened his eyes, which now responded feebly. Pulse fuller and regular. I now ordered his removal home, with instructions to his parents to wrap him in warm blankets, with hot water-bottles to his hands and feet, and to give him nothing but milk and brandy. At 9 A.M., he had slept a good deal, and was in a warm glow. He now had distinct evidences of laryngitis; the breathing was hurried, and sometimes laborious. The face was blanched. He took brandy and milk well.

On December 12th, at 9 A.M., the cough was very troublesome. He cried out, and complained of pain about the throat, thorax, and epigastrium. He did not take nourishment so well. At 2 P.M., laryngitis was extending to the bronchial tubes of both lungs.

On December 13th, at 11 A.M., he had had a fair night, taking nourishment well; breathing was a little easier.

After this he went through a smart attack of bronchitis, from which, under appropriate treatment, he gradually recovered, and, on January 10th, 1884, was running about playing with other children.

The child appears to have swallowed at least half an ounce of McDougall's "Patent Sewage Carbolic Acid," which, I understand, is a crude acid containing about thirty per cent. of carbolic acid; the remainder being tar-oils. I am not aware of any case on record in which so large a dose was taken without a fatal result.

F. HEWITT OLIVER, Maidstone.

PRESENTATION. Dr. Gayton, who for thirteen years has been the medical superintendent of the Homerton and Eastern District Small-Pox Hospital, has been presented by the staff of that institution, on his appointment to the North-Western District Hospital, with a costly drawing-room clock and appendages, suitably inscribed.

SURGICAL MEMORANDA.

PISTOL-SHOT WOUND OF THE LIVER AND KIDNEY.

THE following condensed notes on a case of pistol-shot wound in the abdomen may be of interest to the profession. I was sent for by Dr. T. J. Aubin, who was first called to the case, and we attended together till the end. The victim, S. W., a man about 35 years of age, in good health, was shot by a bullet from a revolver, fired at a few feet distance, about 9 P.M. on November 6th, 1883. We saw him very shortly after the accident, and found him very pale, with slightly hurried breathing, lying on his right side on a sofa. The bullet-wound was in the centre of a line drawn from the posterior fold of the right axilla to the anterior superior spine of the right ilium. Hæmorrhage had been comparatively slight; not more than an ounce or so of blood had been lost; there was very slight oozing from the wound, which was round, with inverted edges. A probe could only be passed directly downwards, from one and a half to two inches. He complained of pain about two inches above the wound. On the 7th and 8th, the urine contained blood; afterwards it became clear. He died on November 11th, five days after the injury. The maximum temperature was 101.8° on November 7th, and 101.6° on the 10th. The pulse rose to 138 on the evening of the 8th; after which it varied from 120 to 128.

A *post mortem* examination was made forty-two hours after death. The bullet-wound was found to go directly downwards for an inch, and then abruptly to enter the abdominal cavity, between the ninth and tenth ribs, just grazing the top of the tenth rib. On opening the abdominal cavity, the peritoneum presented evidence of recent inflammation. The liver was of a very dark slate-colour; the peritoneum was adherent over the whole surface, and the organ itself in a state of acute inflammation. In the right lobe, towards its posterior aspect, and in a position corresponding with the entrance of the bullet into the abdomen, was a large sloughy hole, capable of admitting two fingers." The bowels adjacent to the liver were acutely inflamed, and adherent from recent adhesions. The right kidney was very much inflamed and disorganised, and had been pierced by the bullet just above its centre. The remaining organs were congested, but healthy. The bullet was found embedded in the right side of the body of the first lumbar vertebra. During the whole time, the patient was kept under the influence of morphia. He took beef-tea, iced milk, and calves'-foot jelly, freely, and was conscious to the last. The slight hæmorrhage, the comparatively low temperature, the absence of acute general peritonitis, and the duration of life five days, considering the extent of the injury to vital organs, are features worth noting.

ALFRED C. GODFRAY, M.B., C.M.Edin.,
La Motte Street, St. Heliers, Jersey.

CLINICAL MEMORANDA.

VIRULENT CASE OF SCARLATINA.

ON the afternoon of January 13th, I was called to see a boy, aged [illegible] years, who was in a convulsion. On arriving, I made every inquiry as to the previous history, but could gain nothing definite. The boy had been apparently quite healthy before he was seized with this convulsion; and I ordered the usual remedies, such as a bath, mustard poultice, and injection. After about half an hour, he had so far recovered as to enable me to leave him. I at once sent down a mixture containing bromide of potassium, and called again at 9 P.M., when I was informed that he had had three more convulsions. As scarlatina was very prevalent in the district at the time, I warned the parents, gave fresh instructions, and left. About 7 A.M. on the 14th, I was again called to see him, and on entering was told that, from the time I was first called to see him up to midnight, he had had no fewer than nine convulsions in all, and he was still in the ninth when I saw him in the morning. I ordered him another bath containing mustard, and, in about ten minutes after he was taken out, he was covered with scarlatina rash. He died, however, at a quarter past twelve at noon, never having come round from the convulsion. I think that this is a case worthy of report, owing to the large number of attacks of convulsions, and especially the length of the last, which continued for twelve hours.

JAMES J. MARSH,
Hon. Surgeon, Ardwick and Ancoats Hospital.

THE Duke of Buckingham and Chandos has been appointed President, and Baron Ferdinand de Rothschild a Vice-President, of the Buckinghamshire General Infirmary, Aylesbury, for the ensuing year.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

CASE OF ACUTE YELLOW ATROPHY OF THE LIVER.

(Under the care of Dr. CHURCH.)

[Reported by E. J. JENKINS, M.A., M.B.Oxon., late House-Physician, St. Bartholomew's Hospital.]

T. McA., aged 43, a builder, was admitted, in a comatose state, on April 27th, 1882. The following history was obtained from the patient's wife.

"He was a builder by trade, and always a strong and healthy man, but rather given to drink. He returned from his work on Saturday, April 22nd, to dinner; and it was noticed that his manner was peculiar, and that he had evidently been indulging too freely in stimulants; he, however, made a good meal, but afterwards laid himself down on the sofa, 'and moaned and groaned there for some hours as if in pain.' He passed a restless night, and on Sunday, April 23rd, ate nothing all day; took a dose of castor-oil and peppermint, after which his bowels were freely open. Before going to bed, he took some rum and water, but returned it almost immediately. On Monday night, he had continuous retching and vomiting. On Tuesday, feeling worse, he saw a 'doctor,' and was informed 'he had the yellow jaundice.'"

He remained in the same condition on April 26th, and vomited once in the evening. At 4 o'clock on the morning of April 27th, he "had a fit of violent delirium, during which the limbs became quite stiff; the teeth were ground together, and a considerable quantity of dark matter, like treacle, was vomited up." He was delirious all day, and was brought to the hospital at 4 P.M. When seen at the cab, he was violent, throwing his arms about, and making a great noise. When seen in the ward at 5 P.M., the patient was lying on his back, markedly, but not deeply, jaundiced; the pupils were widely dilated, but sensible to light; the breathing was stertorous, the cheeks were puffed out, the teeth clenched, and every now and then ground together; the gums and lips were remarkably parched and leathery, the tongue (so much as could be seen, for the mouth could not be opened) was dry and black; the limbs were rigid, so that they could not be flexed. The skin was light yellow, moist, and cold; no hæmorrhages had occurred. The pulse was 118, irregular, and easily compressible. The temperature taken in the rectum was [illegible]. The chest was well-formed, expansion was good, and the heart and lungs were normal. The area of dulness, due to the liver, was much diminished in extent; it commenced at the lower border of the seventh rib, in the nipple line, and of the ninth rib in the mid-axillary line. The organ could not be felt below the ribs. The abdomen was not distended; the spleen could not be felt. The bladder was distended, and two and a half pints of clear urine were drawn off by catheter. The reaction of the urine was acid; the specific gravity was 1020; it contained no albumen or sugar, but a small quantity of bile was present; examined by the microscope, nothing abnormal was detected; no leucin or tyrosin were discovered.

6.15 P.M. Ten grains of calomel passed with difficulty to the back of the tongue. The patient was now sweating profusely. The pupils were widely dilated, and insensible to light. The breathing was stertorous, forty-eight in the minute; the pulse was [illegible], fairly strong, but irregular. The temperature in rectum was [illegible]. Frequent spasms of short duration occurred, and all the limbs were in a state of rigid contraction; about four drachms of dark coffee-ground fluid were vomited. The vomited matter, examined by the microscope, was seen to contain blood-cells, and starch-granules. The patient swallowed some brandy and milk.

8.30 P.M. He was still comatose; the breathing was [illegible] and more stertorous and prolonged; the pulse was [illegible], and the temperature in the rectum [illegible]. Examination of the eyes by Mr. D'Arcy Power revealed nothing abnormal.

9.30 P.M. The pulse was [illegible]; the temperature [illegible]. An enema of castor-oil was given without effect. The patient's breathing gradually became quieter and weaker, and he died at [illegible] P.M. In the absence of any history of phosphorus-poisoning, and from the condition and symptoms of the case, the diagnosis of acute yellow atrophy of the liver was made during life.

The *post mortem* examination was made twelve hours after death

The body was that of a well nourished man ; the general jaundice was of a lemon-colour ; there were no petechiæ, and no anasarca ; brain and membranes normal. The lungs were œdematous, and there was some bile-stained fluid in both pleuræ. The spleen was large, dark coloured, and very friable. The kidneys were fatty, soft, and pale. The liver, which was very small, and concealed beneath the ribs, weighed two pounds. It was very soft, taking a deep impress from a stream of water poured on to it. The capsule was natural. The diminution in size affected all parts of the liver equally. The substance was mottled, very yellow spots being scattered over a groundwork of deep chocolate-coloured congestion. The portal canals appeared very numerous ; the lobules could be indistinctly seen. A little black bile escaped on opening the gall-bladder. Fresh scrapings of the liver were examined under the microscope ; very few normal liver-cells were seen, but much granular *débris* and fatty degeneration. Sections made from the liver after hardening presented the following appearances on microscopical examination : all trace of division of the liver-substance into lobules was destroyed, the only landmarks being the interlobular veins, a very few of which were left intact. Scarcely any liver-cells could be seen, and those that remained were granular, fatty, and shrunken. The bulk of a microscopic section was composed of a broken down mass of fatty granules, free nuclei, and blood-colouring matter in various stages of disintegration. There was, in addition, a considerable amount of granular *débris*, presenting no definite structure.

It will be seen from the above account that the patient was ailing only five days. He had premonitory symptoms of vomiting, pain in abdomen and insomnia, followed by jaundice and violent delirium, with great diminution of the liver-dulness, subnormal temperature, and well-marked *post mortem* and microscopical changes in the liver, the organ most affected in this rare and interesting disease.

QUEEN'S HOSPITAL, BIRMINGHAM.

ACUTE YELLOW ATROPHY OF THE LIVER.

(Under the care of Dr. C. W. SUCKLING.)

E. A., a girl, aged 17, was admitted on January 15th of this year, suffering from well marked jaundice and in a very feeble condition.

She had been ill, for about six weeks previously to admission, with "a cold," hoarseness, and cough, and had been jaundiced for three weeks. She had not been confined to bed, but was unable to work. She had been greatly depressed, sighing a great deal, and had had delusions and frequent vomiting since the onset of the jaundice. She had never been ill previously, and menstruation was regular. Her mother had been in an asylum for seven years ; there was no other family history of insanity or of any neurosis. No cause could be assigned for the present illness.

For three days before admission the patient's bowels had been confined. On admission, the skin and conjunctivæ were yellow, the jaundice being well marked ; the tongue was covered with white fur, and the bowels were confined. The examination of the lungs and heart gave no evidence of disease ; the liver-dulness was diminished ; absolute dulness commenced at the sixth rib and reached to a finger's breadth above the costal margin. There was tenderness over the epigastrium.

January 16th. The bowels were not open after an ounce and a half of compound senna mixture, nor after a simple enema, and a calomel pill (gr. 3) ; she vomited frequently.

January 17th. Frequent vomiting of green material continued. A large enema (three pints of soap and water with one ounce of castor-oil) was retained. The patient did not complain of any pain, lying quietly with her eyes closed, waking up only to vomit. She wandered a little towards the evening and had illusions. The upper limit of the liver-dulness was a quarter of an inch higher than it had been on the previous day ; the lower limit was about half an inch higher. Towards evening the patient became very drowsy, being awakened with difficulty.

January 18th. The patient was still in a drowsy condition, which passed into coma. The bowels were not open after two drops of croton-oil. No urine had been passed for thirty-six hours ; one pint was withdrawn by catheter. Liver-dulness had diminished to one finger's breadth in extent. The bowels were opened after elaterium (gr. $\frac{1}{10}$) ; the motion was dark. A vapour-bath was given and produced free sweating, and the patient was bled to twelve ounces without any good effect.

Throughout the illness the temperature remained low (98° Fahr.), but rose just before death to 101°. The pulse, which at first was slow (62), was, during the last two days, very quick (140). The urine was scanty, dark from bile-pigment, and contained mucus, but no albumen. There was no spontaneous deposit of leucin and tyrosin, but crystals of tyrosin were obtained on evaporation. There were no hæmorrhages. The patient died on January 18th.

Necropsy.—The whole body was markedly jaundiced. The lungs were congested, and there were old pleuritic adhesions on the left side. The heart was healthy. The liver was very small, weighing twenty-five ounces ; the surface was of a bright yellow colour, there being only a few patches where the normal liver-colour remained. On section, the liver was of a greenish-yellow colour, with patches of red, very soft and pliable, and the lobules were indistinguishable. The organ was very flabby, and the capsule wrinkled. Microscopically, fatty degeneration of the liver-cells, to a very marked extent, was observed, with pigment in places. Many liver-cells were observed to be distended with fat-globules, but no crystals of leucin or tyrosin could be found. The gall-bladder was empty and contracted, and the ducts patent. The kidneys were jaundiced; otherwise healthy. The spleen was not enlarged.

REMARKS BY DR. SUCKLING.—The points of interest in this case are (1) the intensity of the jaundice, which was so marked that it was at first thought to be obstructive, no motions being passed to settle the point ; (2) the spleen was not enlarged ; (3) the long duration of the disease, jaundice having existed for three weeks before the patient was admitted.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 12TH.

JOHN MARSHALL, F.R.S., President, in the Chair.

THE meeting was summoned at 8 P.M., instead of the customary hour of 8.30 P.M., in order to afford the Fellows the opportunity of examining ten microscopic preparations sent to the President by Dr. Straus of Paris, chief of the French Scientific Mission for the Investigation of the Cholera in Egypt, which were subsequently explained and discussed; and, at the same time, Dr. Thin exhibited a specimen of the Bacillus of Leprosy ; and Dr. Heneage Gibbes specimens of Bacillus Anthracis and Bacillus Tuberculosis, in which the organisms were most vividly shown.

On Alcoholic Poisoning. By W. H. BROADBENT, M.D.—A case occurring in a gentleman, aged 42, was related. He had developed a liking for wine in early manhood, and had gradually become inert and sedentary, spending most of his time in bed reading, and drinking port. In 1875, he was placed under the care of Mr. Harrison, of Shepherd's Bush Green, as a dipsomaniac. He never had pronounced delirium tremens, but had been wakeful and nervous, and, for some months before his final illness, had been failing in mental power. The paralysis came on very insidiously ; the arms had been noticed to be weak for a fortnight, but there had been no great interference with the use of his hands in holding his paper or conveying drink to the mouth, till within a few days of the first consultation between Mr. Harrison and Dr. Broadbent on April 3rd, 1883. At this time, the paralysis was chiefly manifest in the extensor muscles of the forearms, giving rise to double drop-wrist; but the flexors were also weak, and the muscles of the trunk were enfeebled, and, although all movements of the legs were freely effected in bed, he could not stand alone. The knee-jerk was lost, the sole-reflex marked. Sensation was unimpaired; the sphincters were not affected. A special peculiarity was, the pale puffy, purplish condition of the hands; while the feet, when hanging down, could be seen to swell. The urine contained neither albumen nor sugar. The pulse was frequent and small and weak, but regular. The first sound of the heart was short, and was followed immediately by the second at too brief an interval; there was no valvular murmur. A week later, the paralysis had so far increased, that the hands lying alongside the body could not be placed upon it, and the legs could not be drawn up in bed. There was also obvious paralysis of the diaphragm, which soon gave rise to respiratory distress and to difficulty of speaking. Next day, the lower ribs, which had previously expanded well, only moved upwards with inspiration, and death took place from asphyxia on April 11th. On *post mortem* examination of the spinal cord (which was all that was permitted), it was found to be remarkably pale, but its consistence was normal, and no change could be found on microscopical examination, which was carefully made by Mr. Silcock. Other cases, essentially similar, had been seen by Dr. Broadbent with the late Dr. Rhodes, of Weymouth, in a lady aged about 50 ; with Dr. Myrtle, of Harrogate, in a lady aged about 30; with Mr. G. Amos Duke, in the wife of an innkeeper; in a deserted mistress in St. Mary's Hospital; and in a gentleman, aged 39, with Mr. Wheeler, of Chiswick. In another case, seen with Dr. Morton, the later symptoms did not altogether correspond with those described. In all, alcohol had been taken in unusual excess, and Dr. Broadbent considered himself justified in considering it as the cause. Most of the patients were females of sedentary mode of life, and the case described was in a gentleman who scarcely ever went out, and spent most of his time in bed. It was thought probable that the absence of exercise was the determining cause of the alcohol affecting the spinal cord. The disease most resembled acute ascending spinal paralysis, differing chiefly in the order in which the different parts of the cord were attacked, the double wrist-drop at an early period being highly characteristic.—The **President**, in expressing his sense of the high value of the paper, remarked on the absence of all mention of a syphilitic history in the case Dr. Broadbent had detailed.—Dr. **Wilks** observed that it was very interesting to notice how alcohol, in different cases, selected different parts of the body for its attack; sometimes the liver only, sometimes the brain, sometimes the spinal cord. The reasons for such selection had yet to be sought. In chronic alcoholic poisoning, the brain was most often affected; a thorough sot was very generally a good-natured fool. In the same way, in cases of delirium tremens, the brain was, as a rule, found wasted, and its membranes thickened, but it was without further organic change. The effects on the spinal cord, he agreed with Dr. Broadbent, were more common in women than in men. He had seen cases where they were imbecile, wasted, and paralysed, and yet recovered, so that he could not think the organic change was very great. Three of his cases had shown symptoms exactly like those of the so-called lateral amyotrophic sclerosis; two died; one recovered slowly, after having had dropped wrist and contraction of the fingers, by treatment with galvanism and abstention from alcohol. He could not consider Dr. Broadbent's cases typical, strictly speaking, for the effects of alcohol, as of syphilis, might show themselves in any part of the spinal cord, and the symptoms varied accordingly.—Dr. **Buzzard** remarked that Dr. Wilks had published some interesting remarks on alcoholic paraplegia in 1872, which he had refrained from quoting, and that a part at least of the same subject had been brought before the Society as far back as 1868 by Dr. Reginald Thompson, in his paper on Paralysis of the Extensors, in which the cases related had all been in alcoholic subjects, though that fact was not put forward as the cause. He agreed with Dr. Wilks as to the multiple forms which alcoholic paralysis might take; there was sometimes extreme muscular wasting, sometimes contracture of the fingers followed by recovery. In all his cases, lancinating pains had often been present, and hyperalgesia also to an extent he had never seen in other cases; a touch sometimes caused agonising pain. The electrical reactions of the muscles were altered, the faradic excitability was abolished, but the response to galvanism was increased. From that it might, not without probability, be inferred that the trophic influence of the spinal cord was cut off from the muscles by disease either of the spinal cord, or of the nerve-trunks. In these points, the condition was like that of lead-poisoning; and he did not think it probable that the absence of exercise was the cause which determined the effect of the alcohol on the spinal cord. Lancereaux, writing in 1882, had said that he could find no change in the spinal cord or nerve-roots, but in the trunks of the radial and posterior tibial nerves some degenerative atrophy, like that which followed section of the nerve or destruction of the large cells in the anterior cornua of the spinal cord. Mr. de Watteville, in 1880, made a suggestion, which had been again brought forward by Professor Erb, that, in these cases, there was a dynamic change only in the cord, a temporary suspension of its function of trophic influence; and that, he thought, was a possible explanation. He had himself never seen a fatal case; there had been frequent recoveries, and some relapses. The electrical reactions were sufficient to distinguish the condition from acute ascending paralysis. The ophthalmoscope had been used in all his cases, and no optic neuritis discovered; that, so far as it went, was against the existence of a chronic inflammatory condition of the nervous tissues. The electrical reactions would at once distinguish them from the acute ascending paralysis of Landry.—Dr. T. **Barlow** could recall four cases of alcoholic paraplegia, of which one was fatal. They were all in females; all had hyperalgesia; two had contractures which recovered, and were not exactly like those of amyotrophic paralysis, but more resembled those cases where a group of muscles was paralysed and overpowered by those which normally balanced them. In three cases, both upper and lower limbs were paralysed; in none were there any optic changes. In the case which proved fatal, the result, he thought, might have been avoided if genuine abstention from alcohol could have been enforced, and if no chloral draughts had been given.—Dr. **O'Connor** was anxious to learn from Dr. Broadbent if he had found any connection in his cases with angina pectoris.—The **President** explained that Dr. Broadbent had been most unfortunately called away, but had asked him to make his most sincere apologies for his unavoidable absence.

Microscopic Preparations from Cases of Cholera.—These had been sent to the **President** by Dr. Straus, of Paris, chief of the French Scientific Mission for the Investigation of Cholera in Egypt. The President, in introducing these to notice, said that he had written to M. Pasteur asking him if he would be kind enough to furnish the Society with some specimens from what had been an important inquiry, but not hoping for any exhaustive paper on the subject. M. Pasteur had referred him to Dr. Straus, who had sent ten microscopic preparations with some explanatory notes, and these, after having been looked over and set up by Mr. Horsley, were on view that evening. For himself, he must confess the specimens wanted lucidity, and he could hardly expect that they would produce conviction that they contained a distinct cholera-organism. He read an extract from Dr. Straus's letter explaining that the preparations consisted: 1. Of two preparations of the rice-water stools of cholera patients, stained with gentian violet. There would be found in these an innumerable host of organisms of every kind, none of which presented anything very characteristic. 2. Of eight sections of the small intestine (principally of the ileum) made from specimens hardened in absolute alcohol. These sections had been stained with methylene blue, and were mounted in Canada balsam. One came from a patient who died on the fifth day of the attack; one was taken from a patient who died at the end of the second day; another from one who died thirty-six hours after the commencement of the disease; another from one who succumbed at the end of the third day; the two remaining ones from a patient who, having had marked typhoid reaction, died thirteen days after the first attack. Most of the necropsies were made immediately after death. The latest amongst those from which the specimens were taken, was made seven hours after death, an already late period in a country so hot as Egypt. Upon these sections there would be found: 1. A complete desquamation of the epithelial covering of the villi and of the intestinal mucous membrane; 2. In the substance of the mucous membrane, in the tissue of the villi, in the lumina of "Lieberkühn's follicles," and here and there, in the submucous tissue itself, various Schizomycetes stained with methylene blue. The greater number of these were bacilli, and amongst them there was one, which was the most frequently met with, short, thin, and straight, and which was probably that which M. Koch had likewise seen, which he compared with the bacillus of glanders, and which he believed to be the cholera-organism. "However, I dare not affirm," wrote Dr. Straus, "that this is the organism seen by M. Koch, for that observer has not given the technical method employed by him in order to stain his micro-organism; but, for my part, it is more than probable that this latter is the same as that which is found in such great numbers in my preparations." Besides this bacillus, however, there was to be met with in these preparations another larger one, also some short thick bacteria, and, furthermore, numerous micrococci, situated in the substance of the intestinal mucous membrane.—Mr. **Victor Horsley** had satisfied himself of the presence, in the specimens exhibited, of all the organisms described by Dr. Straus. The sections were not very thin, and the tissues were deeply stained, and consequently in some of the preparations they were not easily seen. The bacilli, which were of various kinds, were, in the intestine, limited to the mucous and submucous coats, and did not penetrate the muscular coat; the epithelium was seen to be desquamating. The most unusual forms were to be seen in the walls of Lieberkühn's crypts, and sometimes in the lumina. They were short and thin; although at first sight appearing to be long, they were seen, on careful examination, to be divided into two segments. None of the bacilli, however, were characteristic, and it seemed a very open question whether they could be regarded as the cause of the disease.—Mr. **Macnamara** read extracts from a letter which he had recently received from Dr. Koch, who had been working for the last two months at Calcutta. Dr. Koch, while admitting that all attempts to inoculate animals with cholera-matter had hitherto failed, believed that he was now in possession of distinct evidence that the disease was contracted through specific organisms, which he thought he had been able to isolate and cultivate. His investigations had led him completely to confirm the opinion expressed by Mr. Macnamara in 1868, that the disease was dependent on communication of micro-organisms. He (Dr. Koch) was not at liberty to give details at present, but the facts on which he based his opinion would be in due course published in the report to his own Government. Mr. Macnamara regretted that the English Government had not been impressed with the importance of scientific investigation of the cholera-epidemic in Egypt, and felt ashamed at the absence of English investigators. Recently our Foreign Secretary had gone out of his way to try to persuade the country that cholera was not a communicable disease. For himself, he believed it was quite contrary to experience that cholera could have been generated de novo in Egypt, although it might not be possible to prove that it had been imported.—Dr. **George**

THIN said that there was an important question on which it was possible for English workers to throw light: namely, as to the condition of the intestinal mucous membrane in men or animals dying from causes other than cholera. Simply to compile facts as to the appearances of that structure so many minutes or hours after death, recording how soon organisms developed, and what were their characteristics, would be a preliminary work of great value. It was a matter of extreme difficulty to determine whether bacilli were specific, or dependent on putrefactive changes, and it would seem as though no reliance was to be placed on their size or form. Till there was a definite notion what to expect in cases which were not cholera, it was impossible rightly to estimate the significance of organisms found in the intestinal mucous membrane of persons affected with that disease.—Sir JOSEPH FAYRER entirely disbelieved in the communicability of cholera. Without being so positive as Mr. Macnamara was in the opposite view, he could only say that no fact ever brought before his notice had suggested the shadow of an idea that cholera was communicated from person to person; and until it was proved that the micro-organisms described were capable of reproducing the disease by inoculation, he claimed to withhold belief in its communicability. As regarded Egypt, there was nothing to show that it spread by contagion, nor was there anything to prove that it was imported, but there was abundant evidence of unsanitary conditions such as were always found when the disease arose.—Dr. BUCHANAN, after careful perusal of Dr. Koch's cases, did not believe that he claimed to have found any specific cholera-germ. Koch had failed to discover organisms in the tissues generally and in the blood; but in the rice-water stools, and in the intestines, he had found plenty of structures such as he had seen in a variety of other diseases, and in artificially prepared infusions, which he merely called bacilli; and when discussing the question as to whether they stood in the relation of cause and effect, he apparently inclined to the belief that they were the effect. In Egypt, Dr. Koch found the epidemic coming to a close when he arrived, and the conditions not suited to the enquiry, and it was only since his investigations at Calcutta that he had spoken of having obtained positive evidence pointing to them as the cause.—Dr. LEWIS said he had frequently seen organisms, such as those contained in Dr. Straus's specimens, but he should hesitate very much in regarding any one of them as peculiar or characteristic of cholera. In his experience, there was nothing to show that cholera was a contagious disease; he had never observed that it was communicated from one person to another. He thought Dr. Thin's suggestion very much to the point. Years ago, he and Dr. Douglas Cunningham had found abundant organisms in healthy tissues, even when examined very shortly after death in a tropical climate, and this experience had made them very cautious regarding such organisms when found associated with disease. It had happened, that after months of patient research, some seemingly trivial event had sufficed to negative the tendency of a whole series of observations; and he considered that the hasty publication of conclusions, as the result of researches of this character, was to be deprecated. After death, it was not very uncommon to find the intestines of cholera-patients almost, if not quite, healthy in appearance, and he thought it ought not to be definitely assumed that cholera was primarily an intestinal disease.—Dr. MACLAGAN observed that a prominent feature in cases of cholera was the shedding of the intestinal epithelium; and it was known that, under any circumstances, when this took place bacteria were apt to be found. In the discussion, Sir Joseph Fayrer had used the words communicable and contagious as though they were synonymous. In his opinion, cholera was clearly communicable, though not contagious.—Sir JOSEPH FAYRER wished it to be distinctly understood that he did not believe that there was any material cholera-poison, which could be carried by clothing, or cargo, or anything of the kind.—Dr. HENEAGE GIBBES had examined, immediately after death, the liver of a pig affected with "purples," and had found numerous bacilli, which must have existed in the organ before death. The bacilli seen in Dr. Straus's specimens were very like those he had found in typhoid intestine. Organisms such as those occurring in the specimens of rice-water stools might be found in almost any putrefying fluid.—The PRESIDENT, in conclusion, proposed that the specimens of Dr. Straus should be referred to a small committee for more careful examination and report, and the proposal was agreed to.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 18TH, 1884.

SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S., President, in the Chair.

The Cold Bath Treatment of Enteric Fever.—DR. SIDNEY COUPLAND read a paper on this subject, based upon his experience at the Middlesex Hospital during the years 1879-1883 inclusive. Disclaiming any intention to discuss at length the *rationale* of the measure, which had been ably done by Dr. Cayley, to whom the author was under deep obligation both for example and precept, he pointed out that three lines of treatment were open to us in dealing with a specific fever—viz., the specific, the expectant, and the antipyretic. In spite of much advocacy of various remedies, specific treatment was yet to be discovered. Expectant treatment acted on the knowledge of the lesions and complication of the fever, and was directed to mitigate their severity. In so far as antipyretic measures were reserved for excessive rises in temperature, they fell under this head. But the strict antipyretic method recognised the fact that the action of continued pyrexia was harmful *per se*, and was directed to control this throughout its course. Its advocates believed that the systematic adoption of such measures would result in a greatly diminished mortality, and in very marked improvement in the mental and physical state of the patient during convalescence. Dr. Brand, of Stettin, for more than twenty years the consistent advocate of this treatment, went further, in declaring that the local lesions themselves are abated; and, indeed, that cold (when employed from the outset) acted specifically in arresting the typhoid process. Antipyretic treatment could be carried out by drugs, or by the application of cold to the surface of the body. Amongst drugs, quinine (in large doses), salicin and the salicylates, and kairin, were the most effective; but Dr. Coupland doubted the wisdom of relying solely upon such powerful medicinal agents. He then described briefly the three methods of cooling the body: (1) sponging; (2) compress; and (3) the bath. The last might be employed in various ways; but, mainly, he had found that a bath of 70° or 75°, for ten minutes, was more efficient than the graduated bath (90°, cooled to 75°), or the tepid (85°). As a rule, recourse was had to it when the temperature of the body reached 103°; whilst sponging and the compress, which were much less powerful in action were employed at 102°. Some patients disliked the measure so much that it was not advisable to press it; most, on the contrary, submitted to the temporary discomfort for the sake of the sense of comfort and ease which followed; some found it agreeable. The apparatus in use at the Middlesex Hospital, planned by Mr. Fardon, the resident medical officer, and constructed by Mr. Hawksley, to lift the patient in and out of the bath, was exhibited, and its action explained. The patient should be completely immersed, except the head and shoulders; and, on removal, should be very lightly covered with a sheet or coverlet. Charts contrasting the antipyretic effects of these three methods were shown. The object of the antipyretic treatment was not to meet the emergency of hyperpyrexia, but to safeguard the organism from the effects of continued fever; and the action of the cold lay not merely in abstraction of heat, but also probably in stimulating the "heat-controlling centre," and perhaps acting on the central nervous system generally. The author then proceeded to inquire more closely into the effect produced by the treatment. He pointed out the fallacy underlying all mortality-statistics, and quoted the figures furnished by the records of the Middlesex Hospital from 1867 to 1883 inclusive, giving 823 cases of enteric fever admitted, with 122 deaths, or 14.8 per cent. mortality, a rate which varied in each year, being as high as 28.8 per cent. in 1876, and as low as 2.5 per cent. in 1880. The mortality in the London hospitals from enteric fever, corresponded with this, viz., from 15 to 18 per cent. Statistics of Brand, Liebermeister, Mosler, Glenard, and Mayet were also quoted, contrasting the mortality before and since the adoption of the bath-treatment, giving a mean reduction of from about 20 to 8 per cent. Pushing the comparison further, and analysing the causes of death in enteric fever, Dr. Coupland pointed out that of the nine fatal cases treated at the Middlesex Hospital in 1873, four died from pulmonary congestion and other effects of high fever, and that, in three of these, treatment was commenced in the first week, whereas, in his present series of 89 cases, there was only one death from hyperpyrexia and pulmonary congestion, and that was in a case admitted in relapse. One patient who contracted the fever in hospital, died from perforation; but none of them admitted in the first week, and only one admitted in the second week (a case not bathed) died, also from perforation. Pursuing the same line of argument, he compared the total number of deaths from (*a*) "pyrexial causes;" (*b*) intestinal lesion; (*c*) intercurrent affections, and (*d*) sequelæ. Of 278 cases in the years 1873-78, and of 365 cases in the years 1879-83, the mortality-rate on each head was in the first period—(*a*) 8.7 per cent.; (*b*) 5 per cent.; (*c* and *d*) 2.5 per cent.; and in the second period—(*a*) 3.0 per cent.; (*b*) 9 per cent.; (*c* and *d*) 1.4 per cent. So that whilst of late years the mortality from pulmonary congestion, etc., had much decreased, that from intestinal complications had increased. He next proceeded to analyse the series of cases under his personal observation—89 in number—of all ages from three to 40; [illegible] being males; and tables showing the various antipyretic measures, and the dates of their employment were presented. Fifty-six were bathed: but in 26 of them, only from 1 to 5 baths were given: in 11, from 5 to 9 baths; in 16, from 10 to 19 baths; and three cases had 26, 29, and 48 baths respectively. The mortality on the whole number was 7.8 per cent.; on the bathed cases the severest) 8.9 per cent.; the not bathed, 6.0 per cent. A summary of the leading features of the 19 cases treated with more than 10 baths was given; and brief details of two cases related to explain the mode of treatment. Special attention was also directed to the facts of each of the seven fatal cases, which included four deaths from intestinal perforation, one from intestinal hæmorrhage, one from cardiac disease (long after defervescence), and one from hyperpyrexia. This last case was of especial interest, since the patient had passed through a mild primary attack of fever, and was admitted in the fourth week in a relapse of great severity, the temperature exceeding 105°. In spite of repeated bathing, sponging, administration of quinine, the fever could not be controlled, and the patient, a youth, aged 17, died on the tenth day of the relapse. The *post mortem* examination revealed great swelling of the spleen, fluidity of blood, blood-stained fluid in the serous sacs, intense pulmonary congestion, in addition to numerous recently swollen follicular intestinal glands, and a few denuded ulcers. In this case the treatment failed, partly on account of its late adoption, but partly because under no treatment do all cases of hyperprexia recover. As to the large relative proportion of deaths from intestinal lesions, Dr. Coupland doubted if these could be attributed to the use of the bath, depending as they did upon the severity of the local process. He showed how the degree varied in different epidemics, and how, in hospitals, many cases were admitted late in the disease, with the lesions far advanced. At the same time, it was well to be cautious in the disturbance of the patient when signs of severe local lesion were present. He then gave a brief summary of the debate at the Paris Academy of Medicine in the winter of 1882-83, when the bath treatment was very severely handled by MM. Dujardin-Beaumetz, Hardy, Germain Sée, and Peter. The catalogue of disasters which are attributed to it by these and other speakers was alarmingly large, and wholly irreconcilable with the results furnished to the Academy by M. Glenard of Lyons, and attested by twenty-two out of twenty-four hospital-physicians of that city, as well as with the facts of the cases observed by Dr. Coupland, who could come to no other conclusion than that those who condemned the treatment did so on insufficient grounds. The value of the antiseptic treatment was seen in allaying nervous symptoms, diminishing prostration, in obviating the dangers of death from pulmonary congestion and collapse; in improving the digestive and assimilative functions, and in leaving the patient in a condition far more favourable to rapid recovery. It did not appear to increase the liability to intestinal hæmorrhage or to perforation, which depend on the severity of the local lesions, and it reduces the mortality from the disease. The treatment must be commenced as early as possible, and continued, without intermission, so long as pyrexia lasts, in spite of pulmonary complication. If there were signs of grave intestinal lesion, then the compress, or sponging, were to be preferred to bathing. Hæmorrhage, peritonitis, extreme degrees of debility (especially in old subjects) and cardiac disease, contraindicated the bath; but the principle of the method should be carried out, if not by this then by other measures, and it should not be suffered to interfere with the dietetic management of the case.

Dr. J. S. BRISTOWE began a short critical paper by expressing the opinion that the statistical method in medical inquiry was never a trustworthy basis on which to rest our judgment. No doubt there were strong *a priori* arguments in favour of the cold bath-treatment, since pyrexia was in itself injurious; patients treated with cold baths, moreover, did seem to derive immediate benefit. But he questioned whether this was not transient, and too dearly purchased at the risk of inflammations of internal organs, which were largely due, under ordinary circumstances, to exposure of the surface to cold. It was necessary to weigh all the facts before accepting the results afforded by a consideration of statistics. From his own observation, he had never felt perfectly satisfied that the benefit to the patient was real, or tended to shorten his illness. Two cases which occurred in his wards at about the same time had made a great impression on his mind. The first patient was a young man, who had a severe attack, with a temperature of 105° Fahr. in the third week; the patient was apparently benefited by a cold bath, but somewhat suddenly died soon afterwards; and, at the necropsy, the lungs were very small, and slate-coloured, and in a state of almost complete collapse. He had never before seen a condition quite like this; but, shortly afterwards, he saw a second case, in which the lungs were in exactly the same condition; this case had also been treated with the cold bath. He would be glad to hear whether others who had used the bath had met with congestion and collapse of [illegible] and congestion and hæmorrhage from the bowels more frequently than formerly. The use of the cold bath-treatment had been to a great extent abandoned at St. Thomas's, and also, he believed, to a great extent, in other London hospitals. This would not have occurred had the results been really satisfactory.

Dr. FREDERICK TAYLOR contributed the results of the treatment of enteric fever by the application of cold as practised at Guy's Hospital. The method employed had been—(1) The bath at [illegible]; (2) sponging with ice-cold water; (3) the wet pack, with ice-cold water; (4) the application of ice-bags in the axillæ; (5) Leiter's coils of tubing for the continuous flow of water. As the cases were under different physicians, the treatment was not precisely the same in all instances; the majority were treated by the bath, but many cases had also sponging or other cold application, and in others the sponging or other method was alone used. The cases were considered together, because all these methods effected a decided reduction of temperature. As a rule, the temperature was taken every three hours, and the patient was bathed when the temperature was found to be 103° or more. In some cases, 104° was taken as the standard. In estimating the [illegible] of the treatment, the mortality, the complications, and sequelæ, including relapses, and the general effect upon the patient's immediate comfort, were considered. During the preceding ten years, 1874 to 1883, 440 cases of enteric fever had been treated at Guy's Hospital, of which 78 were fatal, giving a percentage of 17.7. The mortality varied from year to year, being low in [illegible] and 1876, very high in 1879 and 1880, and about the average in 1882 and 1883. Of these cases, 100 were submitted to some kind of cooling treatment, by bath, cold sponging, or ice-pack; [illegible] 27 were fatal. This greatly increased mortality was partly explained by the cases treated by cooling measures including a much larger proportion of severe cases. The influence of the bath on the cause of death did not seem to be very striking, the proportion of cases in which perforation and peritonitis occurred being very nearly the same in those treated by cold as in the total number of cases; but the proportion of deaths by hæmorrhage was somewhat greater. Against the large mortality amongst the bathed cases, it was important to notice that many cases were submitted to these measures very late in the illness, and many were only partially treated. The mortality in 49 cases treated on or before the tenth day was 20.4 per cent.; in 50 cases treated after the tenth day it was 30 per cent.; in 30 cases treated on or before the seventh day it was 16.6 per cent.; while in 69 cases treated after the seventh day it was 28.9 per cent. Then, again, of the fatal cases, in four-fifths the treatment was begun after the seventh day. As to the frequency of the baths, only 9 cases had as many as ten baths; of these 2 died, and only 12 had as many as ten cold spongings, [illegible] died. It was constantly observed that the effect of the bath was greater than that of sponging, and the relative mortality indicated the same. Of twenty-eight cases sponged, only six died, or [illegible] per cent.; of forty-five cases bathed, only nine died, or 20 per cent. Of these forty-five cases, the deaths occurred amongst those who had [illegible] baths; the eleven cases who had more than five baths all recovered. It was not found that the bath had any striking effect upon complications with the one exception of hæmorrhage, as [illegible] case. Thirteen cases had hæmorrhage, but in the majority of these it was obviously unconnected with the use of the bath. The bath did not appear to aggravate bronchitis, or increase the tendency to relapses, or lead to other complications. The immediate effect of the bath was to lessen delirium, induce sleep, and generally improve the condition of the patient for the time. Dr. Taylor concluded that, though the bare figures did not show to the advantage of the bath, it [illegible] that, in proportion as the patients came early under treatment and were thoroughly treated, the results were better. After some general remarks on the use of the bath, Dr. Taylor recorded a case which happened at the Evelina Hospital, in which occurred the [illegible] of pulmonary hæmorrhage, to which Dr. Coupland had drawn attention.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 19TH, 1884.

J. WHITAKER HULKE, F.R.S., President, in the Chair.

Recent and Old Case of Infantile Palsy.—Dr. [illegible] read notes and showed microscopic sections of the spinal cord of a recent and an old case of infantile palsy. The recent case was that of a female child, aged 2 years, who died sixteen weeks after the onset of paralysis of both legs. The old case was that of a [illegible] years, who died of diphtheria five years after the onset of palsy of the right leg. The [illegible] in this case, but did not pit on pressure; they felt cold and damp. The right lung of the second case was greatly wasted and considerably shortened, but was not œdematous. The microscopical appearances of the two cases presented some striking differences, but Dr. Money believed they were different stages in the progress of the same pathological affection. In the centre of the lumbar enlargement of the recent case, there was great engorgement of the vessels, which seemed blocked with blood. There was great infiltration of the anterior cornua with leucocytes, and the true nerve-cells could not be discriminated. He further observed that the disease was not confined to the anterior cornua, but spread away a little in all directions. The morbid appearances were not sharply bounded, but had ill-defined outlines. The old case showed almost complete absence of nerve-cells in the right half of the lumbar enlargement; and the anterior cornu was much wasted, being composed of a rather dense nucleated tissue, which stained deeply. The characters described in both the spinal cords were such as belonged to the mid-region of the disease. The changes became less marked, the further from the centre of the mischief. With regard to the pathology of the disease, he believed that the majority of cases were of vascular origin. Damage, not of a permanent kind, was done to the walls of the blood-vessels; and, in Cohnheim's view, all the phenomena of inflammation ensued on such mischief. Some cases might commence as hæmatomyelia, but he was inclined to think that where hæmorrhage did occur, this was but an accompaniment of the inflammation; for Cohnheim had shown that where the vascular damage was great, actual extravasation took place. It was also known that Charcot and Bouchard had said that hæmorrhage into the grey matter of the spinal cord was always secondary to myelitis. But Dr. Money considered that the hæmorrhage and inflammation were but concomitant phenomena, and the result of a pre-existing common cause.—The PRESIDENT observed that the paper raised many speculative points of great interest and importance.—Dr. SHARKEY thought that the grey matter had a more copious blood-supply than Dr. Money supposed; Dr. Rolleston had taught that the central nervous system was less liable to vascular disturbance than any other part of the body.—Dr. WILKS thought that the theory went against the doctrine he held and taught strongly that the parts of the body which were most active were best supplied with blood, and most liable to become diseased. Function and supply of blood went together. The specimens showed the acute process in the cord remarkably well.—Mr. R. W. PARKER asked how Dr. Money supposed the disease to originate; he thought it was difficult to explain the commencement of the disease in the arteries, even supposing that Dr. Money's theory was correct. He would agree that it was a change about the centres rather than in the large cells themselves, which, no doubt, were easily destroyed.—Dr. CARRINGTON observed that, from the injection-experiments he had made for Dr. Moxon, he had been led to conclude that the supply of the cord was not so regular and perfect as had been described.—Dr. ANGEL MONEY did not doubt that where function was highest, there supply was best; what he meant to point out was that the central parts of the cord were at the greatest disadvantage, not in the quantity of the blood-supply, but as to the pressure. Dr. Moxon's lectures had caused him to doubt whether the supply of the cord was at as great an advantage as was generally taught in text-books.

Amyotrophic Lateral Sclerosis.—Dr. COXWELL read notes of a case which had occurred under the care of Dr. Ramskill. The patient was an intelligent woman, aged 47; both arms were atrophied, semiflexed, and pronated; both legs were partially paralysed, but not much atrophied; the tongue was atrophied, and the face was expressionless; electrical examination gave evidence of nervous degeneration; death was apparently due to pharyngeal paralysis. The examination of the spinal cord after death showed that the lateral columns were small in comparison with other regions, and that the columns of Turck were also atrophied; the crossed pyramidal tracts were sclerosed. In the grey matter, there was a general condition of atrophy of the multipolar cells in the anterior cornua in the cervical and dorsal regions. The grey matter was unusually vascular. In the corpora quadrigemina and crura cerebri, there seemed to be no change, nor elsewhere within the cranium, except in the nucleus of the hypoglossal. The clinical and anatomical phenomena agreed with those recorded by Charcot.—Dr. ORMEROD thought that the succession of symptoms noticed in this case was important, and seemed to negative the idea that the sclerosis began in the lateral columns, and extended from them by continuity.—Dr. BEEVOR referred to a case, particulars of which he had published in *Brain*. The case described by Dr. Coxwell seemed to fall under Charcot's second class, to which he applied the name deuteropathic amyotrophic paralysis.—Dr. COXWELL said that it was impossible to determine, from the anatomical appearances, where the disease began.

Malignant Disease of the Mesentery.—Dr. HARRINGTON SAINSBURY showed a large mass of malignant disease removed from the body of a patient who had been ill for two months before his admission into the Royal Free Hospital. The growth was first noticed about a fortnight later. During the early part of the case, there was a continued pyrexia; after death, well marked peritonitis was found, and the peritoneal cavity contained a yellow grumous fluid; the new growth sprang from the mesentery. Death was apparently due to rupture of the growth, which contained a large cavity communicating with the gut. It was not possible to say where the tumour, which was a spindle-celled sarcoma, arose; malignant disease, arising in the connective tissue in front of the spine, seemed not to be very uncommon, but primary malignant disease of the mesentery had been exceedingly rarely described.—Mr. ALBAN DORAN asked whether ascites was present; the relations between ascites and malignant growths of the peritoneum and pelvic organs were extremely irregular. Peritoneal irritation, also, was extremely inconstant; in some cases, where the malignant disease was very slight in amount, peritonitis was marked, and in other cases it was entirely absent. Further, he inquired whether there was any pleuritic effusion.—Dr. HARRINGTON SAINSBURY briefly replied, stating that there was no ascites or pleuritic effusion.

Secondary Growths in Peritoneum in a Case of Ovarian Tumour.—Dr. J. M. HOBSON related the case of a woman who, soon after a confinement, presented symptoms of ascites, and evidence of malignant disease of the abdomen; the patient died two months after confinement. At the necropsy, a small cyst of the ovary, and numerous scattered tumours in relation with the peritoneum, were found. The growth seemed to belong to the same class as those described by Mr. Knowsley Thornton in the *Transactions* of the Society, and appeared to be connected with rupture of an ovarian cyst; he had met with the same perinuclear vacuolations as had been described by that writer.—Mr. ALBAN DORAN inquired whether the tumour was a glandular or papillomatous growth; rupture of either kind of tumour was a very serious event as regards dissemination; but where but few secondary peritoneal deposits had developed before the removal of the ovarian cyst, they appeared to undergo degeneration, or, at least, not to develop rapidly in most cases.

Two Cases of Idiopathic Purpura Hæmorrhagica in which Micro-Organisms were Found.—The first case which Mr. WATSON CHEYNE had examined for micro-organisms, was one which had been under the care of Dr. William Russell, of Carlisle, who, having entertained the opinion that purpura hæmorrhagica was a specific fever due to a specific poison, had sent him the organs for examination. The report of the appearances observed, will be found in the BRITISH MEDICAL JOURNAL, September 1st, 1883. In this case, which was a typical example of "idiopathic" purpura, on making sections of portions of the heart, he found extensive hæmorrhages immediately beneath the exocardium. Many of the capillaries at the deeper part of these hæmorrhages were blocked with bacilli, and, here and there, among the effused blood, a few colonies were found. The capillaries were not merely blocked, but their walls were distended and even ruptured; but the tissue in the vicinity was apparently quite healthy. The individual bacilli varied in length, but the average was about 1-7,700 inch. Some of the rods contained what appeared to be spores. In their reaction with the aniline dies they had no special character, but they were best demonstrated by methylene blue. From the size of the colonies and distension of the vessels, it was evident that bacilli had been growing in them for some time; and it also seemed clear, from the number of capillaries blocked, and the position of the plugs, that the hæmorrhages were due to this blocking of the vessels. The bacilli tended to grow in colonies. The second case he had examined had been under the care of Dr. Pye-Smith. An examination of the portion of lung sent to him showed two hæmorrhages in its substance, and between these two hæmorrhages a considerable number of the vessels contained colonies of micro-organisms; in some situations, the capillaries and some of the larger vessels were completely blocked by masses of micro-organism; the organisms were streptococci, forming very long chains coiled together, so as to form dense masses. The individual cocci measured 1-27,000th inch in diameter. The organism stained well with methylene blue. He had not found any free cocci, nor any short chains in the vessels at other parts of the lung, nor in the heart or tonsils, but, in the latter, some of the vessels were plugged with cocci. There was no evidence of inflammation about the colonies of micrococci. He summarised his observations thus: in these two cases of idiopathic purpura hæmorrhagica, micro-organisms had been found, and, in both cases, the hæmorrhages were evidently due to the plugging of the vessels by masses of these micro-organisms. The micro-organism in the two cases, however, was not the same, and differed in their mode of growth from most other organisms of the same classes, in that they formed colonies in the blood in the vessels; the bacilli, as yet described as growing in the blood, did not form plugs in the vessels, with the exception of the typhoid bacillus; bacillus anthracis might plug the vessels, but this was not its usual mode of growth. Streptococci also grew commonly in the tissues. The significance of the organisms as regards this group of diseases could only be made clear by a large number of microscopical observations, and by cultivation of the organism. There were two alternative views; we might have to do with an infective disease of which the essence was the entrance of certain specific organisms into the blood, and their growth there, or the primary affection might be something quite distinct from the micro-organism, but resulting in such a change in the fluids of the body that, of the innumerable organisms present in the mouth and intestinal tract, certain became able to penetrate into and live in the blood. It was desirable that similar microscopical examinations should be made in scurvy. —Dr. PYE-SMITH observed that the case which had been under his care was a typical instance of purpura hæmorrhagica. The blood was not examined for micro-organisms. The extreme facility with which the slightest violence, even such as could be caused by a common house-fly, could produce extravasation in these cases, seemed to show that the walls of the vessels were altered. Dr. ANGEL MONEY had examined the blood in a case of purpura hæmorrhagica without finding micro-organisms; but, in the testes, in one case, he thought he had found an organism. —Dr. STEPHEN MACKENZIE referred to the fact that purpura occurred under very varied conditions; in iodic purpura, for instance, it seemed impossible to suppose that, in the very short time that elapsed between the administration of the drug and the occurrence of the purpura, there could be time for a micro-organism to develop. —After Mr. BARWELL had made some remarks; Mr. WATSON CHEYNE observed that he had found the organisms more difficult to demonstrate than any others he had met with.

Living Specimens.—Mr. DENT showed a living specimen of Perforating Ulcer of the Foot.

Card-Specimens.—The PRESIDENT: Two drawings of cases of Cancer of the Breast. Mr. SHATTOCK: A cast of a Double Vena Cava, the left being the larger.

MILITARY MEDICAL SOCIETY, WOOLWICH.

FRIDAY, FEBRUARY 15TH, 1884.

Sir JAMES ARTHUR HANBURY, Deputy Surgeon-General, in the Chair.

ANTISEPTIC SURGERY IN ITS APPLICATION TO FIELD-SERVICE.

THE CHAIRMAN, in the course of some preliminary remarks, observed that, at the last meeting of the Society, a very interesting paper was read by Surgeon-Major Godwin on antiseptic surgery, and especially on its application to field-service. The time necessarily occupied in the reading of that paper left little margin for discussion; but the subject was regarded as of so much importance, that it was determined to set apart a special evening for its further consideration, and to invite others who had paid special attention to the subject to take part in the discussion. He rejoiced to see that the invitation had been generously responded to; the Society was honoured by the presence of the highest authorities on this subject in this kingdom—the father of the principle and the system which was about to be considered—Sir Joseph Lister. It was also a subject of congratulation that the Director-General of the Army Medical Department was present; on him devolved the serious responsibility of obtaining, or rather of endeavouring to obtain—for if an improvement cost money it could not always be obtained—for the soldier in the field the highest skill and the most approved appliances. The subject for consideration was a very important one, in whatever relations it was regarded; but it was especially important to the soldier in the field; and for this reason, that he of all men, by reason of his duties, and from the surroundings inseparably connected with them, was, when wounded, placed in the most unfavourable position for surgical treatment. The time—be the time long or short—employed in the field in preparing for a battle, meant for the soldier an amount of toil, hardship, exposure, and very often privation as regards food and water, which could scarcely be surpassed under any but very exceptional circumstances. As had been very well described in Professor Longmore's little work on *Gunshot Wounds*, his clothes, in which probably he had slept for days and nights, were saturated with perspiration and dirt. These were a few of the unfavourable conditions under which a soldier went into action; and it must be admitted, from a surgeon's point of view, and especially from Sir Joseph Lister's point of view, that they were probably as bad as they could well be. Therefore, it was all the more important that the greatest aid that science could give to control, arrest, or at any rate to minimise, these injurious effects and conditions, should be available. What was the best line of action to be pursued towards the wounded between the fighting line and the field-hospital, in order to secure satisfactory results from the very outset? That seemed to be the problem, the solution of which was of great importance to the soldier in the field and to the military surgeon. He was not thinking of European wars, where there were abundance of railways, towns, and villages; abundance of outside aid in the shape of volunteer ambulance corps, philanthropic societies of all kinds, and, in short, all the resources of civilisation, to fall back upon. Far otherwise was it in the wars in which this country had been engaged since the Crimea, in tropical or semi-tropical countries, more or less remote, against uncivilised or semi-civilised natives, where the means of transport were very small, the physical features of the country difficult, and the army had to be fed under very unfavourable conditions. In circumstances like these, no reliance could be placed on having field-hospitals where they were most required. The chief reliance must be placed, for a time at least, upon the dressing stations; and the dressing stations, for that reason, should be prepared to perform the functions of the first and second line of assistance, at all events for a time. This led up to a point that must be emphasised—namely, that the first line of assistance should be regarded as the sheet-anchor of medical organisation in the field, that is to say, the bearer-companies. If these bearer-companies, at present in their infancy, were to play the important part in war which he anticipated for them, they must remain as an organised body in peace, as much in evidence as any other organised unit of the British army. They should be composed of the flower of the corps, both officers and men, and the men should be good and expert dressers; they should be furnished with all the most modern appliances, medical and surgical, which could possibly be given; it was of paramount necessity that these appliances should be compressed into the smallest possible compass, and be in the most portable form. Prominent amongst these should be a simple modified form of Listerism, especially devised with a view of meeting the difficulties and contingencies incidental to the class of warfare in which we had been engaged for some time past, and were likely to be for some time to come. He had been struck by a forcible pasaage in Sir William Mac Cormac's book on *Antiseptic Surgery*. He said, as to first dressing places: "The most important duty will be the selection of fitting places for immediate treatment, and in a future war surgeons must be selected for this task, as upon their judgment will depend the lives of many men." This was a forcible and striking remark, coming from a man who had had varied experience in war—the importance of having first-class men in the first line of assistance. Officers of the Army Medical Department, who spent much of their time abroad, and had consequently very little opportunity of making observations upon this important subject, looked to those who spent a great portion of their active life in London, with its immeasurable opportunities, for advice and instruction.—Surgeon-Major GODWIN then read an abstract of his paper, which is published at page 350.

Dr. W. F. STEPHENSON said that he had been led to address the Society by a conversation he had had the honour of holding with the Director-General with reference to the question of dressing in the first line; having learned from him what he thought surgeons in the first line wanted, he had endeavoured, by means of a few experiments, to satisfy his requirements. To procure aseptic surgery in the first line was, of course, impossible. Aseptic precautions could not be taken beforehand; nothing further than antiseptic surgery would render this first aid in the fighting line. The materials at hand for this purpose were various. As fixed non-volatile antiseptics, salicylic acid for many purposes, and, to a small extent, boracic acid, might be taken as the types; eucalyptus was non-irritant, but was highly volatile, and, under certain climatic influences, would lose its power in a very short time; that was a matter of importance, seeing that, after being dealt with in the first line of aid, the wounded did not approach the field-hospital, in some cases, until after an interval of as much as forty-eight hours. Therefore, a highly volatile antiseptic for these purposes might fail under certain climatic conditions. Eucalyptus, however, was useful, especially on account of its non-irritant properties. He had had prepared an eucalyptus cream, which could be carried in an ordinary collapsing tube, such as was used for scent-fountains. These portable creams would be useful for anointing dirty fingers and instruments before use, and, furthermore, for pouring a quantity of this antiseptic into the wound. Carbolic acid was volatile, and, besides that, had other very valuable properties; it was antiseptic in a very high degree, and to a considerable extent astringent. Then came the question how these materials could be utilised for a perfect dressing for this first line of assistance. His first idea was with reference to absorbent pads; and the conclusion to which he came was that, if an absorbent material were saturated very highly with a more volatile antiseptic, the material absorbed from the wound into this tissue would be controlled by the fixed antiseptic, so that under no climatic influence would it decompose, and so convey putridity to the wound itself. The other problem was this, that the soldier slept in his clothes: he was often dirty by nature, his skin was dirty, and everything around his wound was dirty when he received it. In antiseptic surgery, it was necessary to bathe the wound and the surrounding parts with a septic destructive material. Therefore, if, on the surface of this absorbent material, saturated with a fixed antiseptic, a thin film were infused of one of these volatile antiseptics, eucalyptus or carbolic acid, soluble at the blood-temperature, by the mere application of this dressing, a bath of antiseptic vapour would surround and cleanse the wound and the skin round it. He showed samples of the manner in which he had attempted to carry this idea out; a piece of spongio-piline in which there were absorbed, and disposed equally all over the tissue, 120 grains of salicylic acid. Esmarch's tampon, though good in itself, was applicable only to bullet-wounds, it was not sufficiently big for any other purposes; but surgeons in the field had as many wounds of other classes to deal with as bullet-wounds—gashes from shells, bayonet or sabre cuts—which a simple tampon would not in any way deal with. A dressing for general use must be, so to say, a compound dressing; that is to say, a dressing divisible into units, which could be divided so as to suit a small bullet-wound, or to supply the necessities of a sabre-cut. The dressing he showed was divided into four-inch squares, or thereabouts, which would be a good size for covering the surface of a bullet-wound, and rendering antiseptic its surroundings. At first he had great difficulty in getting the salicylic acid equally distributed in the tissue. With a sewing machine he had caused to be made another kind of dressing: a quilted pad of salicylic wool, containing 10 per cent. of salicylic acid, and with the carbolic coating. for the purpose of bathing the wounded surface. This also was divisible into minute dressings for bullet-wounds, or could be used in larger pieces for sabre-cuts or shell-wounds. The salicylic wool absorbed any discharge from the wound, and rendered it perfectly aseptic. This dressing had the advantage of being very much cheaper than the spongio-piline. Having succeeded at last in getting the salicylic acid very well absorbed into the spongio-piline, he made what he would venture to call under these circumstances an unit of dressing, because it was suggested that one could not trust to the soldier to carry more than was sufficient, perhaps, for his own bullet-wound; he could not carry a sufficient supply of dressing to satisfy his wants if he had a limb shot away, and it was suggested that it would be better that the surgeon's orderly should be able to carry a sufficient supply for each surgeon's use. Four of these units would supply fifty dressings, which would be considered sufficient for each surgeon's use, at starting, in the field. Fifty dressings did not make a very large parcel, or one difficult for an orderly to carry. Each minute square contained ten grains of salicylic acid, and over the surface was plastered this antiseptic wax, which would not only cleanse all the surroundings of the wound and render them perfectly aseptic, but the vapour from the wax entering the wound would go far to destroy any germ that might have entered it at the time of the entry of the bullet. The packet also contained antiseptic bandages, which, being light and easily adjusted, would be better for binding on dressings of this sort. If these things were available for use, the prescriptions were at the service of the country. He wished to make no speciality of it in any way. Whatever he had done was for the benefit of the wounded soldier. The chemist who prepared some of these things, stated that if a hurried demand arose for these dressings, they could provide, in a couple of days, a thousand or two.

Sir JOSEPH LISTER spoke as follows: I accept, with much pleasure, the invitation which I received from you, sir, and from the rest of the members of this mess to attend on the present occasion, because I feel that the application of antiseptic principles to military surgery is in a more hopeful position now than at any former period, partly because a conviction of the truth and importance of antiseptic principles is more diffused than ever it was before, and partly because the antiseptic means at our disposal have increased, and some of these new means are more applicable to the purposes of military surgeons than those which we at first employed were. Both of these matters are of essential moment. It is essential that all the surgeons concerned in the treatment of wounded men should be imbued with the idea of the importance of antiseptic principles. It is of no use for the surgeon who first treats a wounded man to act antiseptically, if the one who follows him do not do so; nor, conversely, is it of any use for the surgeon in the field-hospital to be ever so good an antiseptic surgeon, if his predecessor have defiled the wound. Then, again, as to the other point, in civil practice we may go to any amount of expense almost in our materials; we may have our materials as bulky as we please; but in military practice it is, I conceive, essential that the materials should be cheap, and that they should be, so far as the first treatment of the wounded man is concerned, capable of being employed in small bulk. As regards the former of these matters, and, indeed, both, Dr. Reyher, to whose results Surgeon-Major Godwin has referred, was very well aware of their importance. Before I say anything further about Dr. Reyher, I am tempted to relate a small anecdote respecting him. He came to see me in Edinburgh. He afterwards told me he came from London saying to his friends there, "I go to Edinburgh, expecting to come back thinking as little of the value of antiseptic surgery as I think of it when I go." He went round my wards one single time; and as we walked through the passage afterwards, he said "I am astonished." He stayed some weeks after this, and not only became thoroughly impressed with the truth of the principle, of which what he first saw convinced him, but he became also thoroughly familiar with such details as we then had. Not very long afterwards he received an appointment in the Russo-Turkish war, and he was a good illustration of the saying, "Where there's a will there's a way," for he had transported, wherever he went, a machine for the preparation of the carbolic gauze, which, no doubt, if a man chose, might be still taken with an army in the same way as a cask of beef. It was somewhat cumbrous, but he took it, and had the gauze prepared daily for his use. He also took spray-producers, and performed all his operations under the spray. The results have been referred to by Surgeon-Major Godwin, and certainly they were most admirable. He was convinced of the importance of not permitting one man to defile a wound to be treated by a second. He wrote to me telling me of some of these results. He said he divided his cases into the *befingerte* and the *unbefingerte*, cases which had been fingered by somebody before him, and cases which nobody before him had fingered. He said he happened to have had fourteen cases of gunshot-wound of the knee-joint; seven were fingered cases, and seven unfingered. The seven fingered cases had all died except one; he was still living, but he was in high fever, and Dr. Reyher was afraid he might succumb. Of the unfingered cases, all were alive, and only one had had fever, but Dr. Reyher said he had also had a considerable portion of his face shot away; this could not be treated antiseptically, and the fever was so explained, and he said, "Are these not remarkable results?" So much for Reyher and his principle that, as Surgeon-Major Godwin has said, what should be done in the first instance should be simply the covering up of the wound with some antiseptic material, and as little fingering as possible. I feel sure that, if I were to say all I should like to say, I should occupy your time too long. I feel also that it is, to some extent, an impertinence in me to speak before military men at all, seeing that my practice has been entirely civil; but I should like to say a word or two with regard to simplifications of the treatment both in the field-hospital and at the front. First, as regards the field-hospital. Allusion has been made to the spray. I have long since held and taught that, of all the parts of the antiseptic system, the spray is the least important. It would not at all break my heart if I were told that I should never be allowed to use the spray again in my life; I am satisfied I could, by other means, get essentially the same results. Many German surgeons do not use the spray; therefore, the fact that the spray is an incumbrance is not, to my mind, an argument against the use of the antiseptic treatment by military surgeons. I do not desire that the spray should be used in military practice. I believe essentially the same results can be got without it; and, if the military surgeon is to conceive that he cannot carry out antiseptic treatment except with the spray, I believe he will be very greatly embarrassed. The spray-apparatus is likely to get out of order; he will be constantly called upon to operate in circumstances where the spray is interfered with, by draughts of air, and so on, in tents; and it is much more important for him to confine his attention to other matters than the spray. If, when the operation has been done, he wash the wound well with some reliable antiseptic solution, the chances are immeasurably great that he will get as good results as if he used the spray. That, then, is one point of simplification. Then, as to an antiseptic lotion, you are aware, doubtless, that corrosive sublimate has been shown to have very wonderful antiseptic properties. Corrosive sublimate, at the same time, is an exceedingly cheap substance; it costs wholesale only about two shillings a pound, and an exceedingly small quantity is sufficient as an antiseptic lotion—one part to a thousand parts of water. This, it seems to me, is a very important matter. It is very much cheaper than such carbolic acid as is fitted for satisfactory use; I do not refer to the crude impure kinds, which are not satisfactory. Corrosive sublimate has been used in connection with what has been termed wood-wool, a curious term, no doubt—that is, a soft material, made by tearing up pine-wood into a sort of wooly substance. The corrosive sublimate in this wood-wool, the wood-wool itself being excessively cheap, is used in the proportion of a half per cent. of the weight of the wood-wool, with an equal part of glycerine. The objection to this wood-wool is its bulk; for, if it is to be used satisfactorily, the small proportion of the corrosive sublimate renders it necessary that it must be used in a large mass, otherwise the corrosive sublimate would be washed out prematurely by the discharges. I am at present engaged in some experiments with a view of seeing whether corrosive sublimate could not be used in a more manageable form; and I may mention here what I have never mentioned publicly before, which, as far as I know, is a new fact in chemistry—that corrosive sublimate turns out to be wonderfully soluble in glycerine. It is soluble in one and a half times its weight of glycerine in the cold. It takes sixteen parts of cold water to dissolve corrosive sublimate; it takes several parts of spirits of wine; but glycerine dissolves it with remarkable avidity; and I believe that in fact will lie the key to the application of corrosive sublimate in a more compact form, and therefore more convenient for military service than the wood-wool. It is, perhaps, foolish of me to mention this, except that I wish to refer to that point of solubility in glycerine in another aspect directly; but meanwhile, if the wood-wool have been proved to be efficacious with the corrosive sublimate, there is this, I think, that may be borne in mind by military surgeons: that, if they have rags in abundance (rags are really the same thing as wood-wool—the same chemical substance, highly absorbent as the wood-wool is), rags answer in the same bulk as the wood-wool. If you have a mass of old sheeting or any sort of old rags at your disposal, if you dissolve corrosive sublimate with an equal part of glycerine in two hundred parts of water, steep the rags in this, and then hang them up to dry, you will have a dressing which can be certainly very easily prepared, and which, as the experience with wood-wool shows, I feel confident must prove efficacious if used in sufficient mass. Then as to the dealing with the wounded in the first instance, I have already expressed my perfect concurrence with Dr. Reyher, that the less that is done in the way of handling the wound the better, because the surgeon must be under great difficulties dealing with a number of men together, and without his hospital appliances. Nevertheless, as has been stated, there are circumstances in which he must interfere, circumstances particularly of hæmorrhage: he must tie a bleeding vessel. Now, as to the antiseptic solution which he should use, I believe he will find the solubility of corrosive sublimate in glycerine very valuable. Corrosive sublimate, as I have said, is soluble in one and a half parts of glycerine; one drachm then of this solution will prepare a watery solution of corrosive sublimate (1 to 1,000) to the amount of one and a half pints, so that it will be in this way extremely portable. Corrosive sublimate is somewhat difficult to dissolve in water, except by aid of heat; but if you have it first dissolved in the glycerine, pour a little of this into water and diffuse it, you will have your antiseptic solution for washing sponges, the hands, and so forth, very easily prepared. I trust that the surgeon will always have an aseptic sponge; and this he can also do by means of corrosive sublimate more easily than with carbolic acid, simply from the fact that corrosive sublimate is not volatile. If sponges be purified with carbolic acid, and kept for a considerable time, the carbolic acid will leave them, and you cannot be sure that they are pure; but if you have them purified with the 1 to 1000 sublimate solution, you will be sure they are pure, whether they have been kept for a week or a year. Then, as to the material with which the vessel should be tied, I cannot but think that it is an improvement that the catgut which we now use need not be kept in the bottles of oil in which our old carbolised catgut used to be kept. It is kept in the dry state as easily as silk, and all that has to be done before using it is to put it in the antiseptic solution for a very few minutes. As to the first dressing that should be used, it is certainly a very difficult matter to have some material that shall be portable, of small bulk, and at the same time shall give a fair promise of being effectual antiseptically. I am inclined to think, in the present state of our knowledge, that iodoform is the agent which promises best for this purpose. It is by no means the most powerful, but still it is a very excellent antiseptic. It does not seem to be able to destroy the poison of erysipelas as easily as carbolic acid, for example; and it certainly does not destroy various bacteria, as we have ascertained by experiment, nearly as well as carbolic acid, and some other of the more powerful antiseptics. Nevertheless, those who use iodoform, and I have used it a great deal myself, must confess it is really a very satisfactory agent as a dressing, used, for instance, in the form of iodoform-wool. It has this very great advantage, that, while it has the really valuable efficacy as an antiseptic, it is exceedingly little soluble in water or in the discharges that come from the wound, so that a very small quantity of it lasts a long time, while at the same time it is almost absolutely free from irritating properties. This is a very wonderful combination of advantages, and I am disposed to believe that dusting the wound over with the iodoform-powder, and then covering it over with some absorbent substance is, in the present state of our knowledge, the best thing that can be done for the wounded man in the first instance. It so happens, only this very day I was reading an account, by Dr. Ladislas Lesser of Leipsic, on this very subject, and he proposes that antiseptic powder should be carried by the soldier in an empty cartridge. This, he considers, would contain a sufficient amount for the treatment of wounds. He says, as to the particular antiseptic, he does not wish to dogmatise upon that. He recommends two parts of boracic acid powder and one part of iodoform-powder. I am inclined to think, myself, it would be more prudent to use the iodoform-powder pure; because if the antiseptic is to be carried in small bulk, it should be very effective in proportion to its bulk, and the boracic acid is by no means so powerful for equal bulks as iodoform is. He recommends, then that the soldier should have a cartridge full of this antiseptic powder; that he should have wrapped round this a bandage composed like these bandages which Mr. Stephenson has shown us this evening, corresponding a good deal to our antiseptic gauze, of open cotton texture, impregnated with spermaceti, which may be a very good thing, as it will not stick to the wound as cotton-wool would. He recommends that round the cartridge containing the antiseptic powder should be wound this bandage, about four yards long, and round this again a piece of absorbent cotton-wool, which will go into very small bulk, and round this a three-cornered cotton-handkerchief. Then he points out in what way these should be used. First of all the wound should be sprinkled with the powder, a few turns of the bandage put round, the absorbent cotton put over this, then the rest of the turns of bandage, and then the three-cornered handkerchief, used in the case of injuries to the arm, in the form of a sling. I am inclined to think that these suggestions of Dr. Lesser's are exceedingly good. I will only say that perhaps the little box containing the iodoform might be made with advantage in the form of a small dredging box, with small perforations in the lid covered with a cap. If there were a little space in the cartridge-box for this little dredger, then the other matters might, as Dr. Lesser says, instead of being packed round the box, be carried in the soldier's pocket, or, as was suggested, sewed in under his coat. If every soldier had material of this kind by him, it would certainly be a very important matter. A dressing of this kind would often answer the whole purpose. It might be left on in the case of smaller wounds till the healing was complete, or, at all events, for twenty-four or forty-eight hours, or even longer. It would be found, I believe, to keep the wound aseptic in the majority of cases.

Sir WILLIAM MAC CORMAC said that he had certainly heard a most interesting speech from Sir Joseph Lister, containing much of pregnant interest. Recently, he had had the opportunity of addressing a very large class in New York—a class numbering eight hundred students; and the Professor of Surgery had selected, as the subject of his address, gunshot wounds. He had then said that, of all known antiseptic material, iodoform seemed for the purpose of the first dressing of the wounded by far the best, and he was very glad to hear from Sir Joseph Lister that he entertained the same opinion. Iodoform, possessing the valuable properties of being very little poisonous, unless used in undue quantity, and of not having any irritating properties when applied to a wounded surface, and of being almost entirely insoluble in the discharges of a wound, and possessing remarkable volatile and antiseptic properties, seemed to furnish to military surgeons a combination which no other substance possessed; the exact manner in which it should be applied, whether as Sir Joseph Lister suggested, or in some other manner, was a subject which the ingenuity of the military surgeons concerned in these matters would very soon be able to settle. It could not be too strongly set forth that the future of every man wounded in war depended, to a very large extent indeed, upon how he was first dealt with. Much was proved, in those remarkable experiences which Professor Bergmann and Dr. Reyher had in the Caucasus and on the Danube, to show how the antiseptic treatment of the gunshot-wound in the first instance was attended by remarkably happy results. The method of healing was the old-fashioned method of healing under a scab, and the materials that were applied externally were intended to favour that method of healing. That was the manner in which these wonderful results were obtained in the cases of penetrating gunshot-wounds of the knee. Mr. Godwin mentioned that, of fifteen cases treated by Bergmann, fourteen recovered with their life; and though, in two cases, the limbs were sacrificed at a subsequent amputation, they recovered. A gunshot-wound was a sort of subcutaneous injury; the external opening was very small, the internal damage often exceedingly great; but, the external wound being small, the nature of the injury was one which lent itself readily to this form of treatment. Of course, there were some cases in which it might be necessary to interfere by instrumental means in the first instance, but they were very few. Hæmorrhage had been mentioned. Hæmorrhage was an exceedingly rare occurrence in the first instance in gunshot-wounds. It sometimes occurred as the result of an injury to a large vessel, but the subject of that injury was usually very soon beyond the reach of all surgery. Secondary hæmorrhage used to be exceedingly frequent; but, with the employmenment of antiseptic methods, the occurrence of secondary bleeding as the result of gunshot-wounds, once very frequent, would become as rare as other forms of accident happening to wounds under this method of treatment—as rare as erysipelas and hospital-gangrene, and other of those preventable accidents which followed injuries. Sir Joseph Lister's statement, that the use of the spray was not one of the essential details of the antiseptic method, was one to which the experience of surgeons at home and abroad had been gradually pointing, and had a very important bearing on military surgery, because there could be no doubt that the use of an antiseptic spray was all but impossible on the field of battle. What military surgeons tried to do on the field, was to imitate as closely as possible the essential details and method of treatment which had been found most successful in time of peace; but certainly, in the first line of dressing, the only treatment that could be adopted was that of the simplest and shortest kind. The greatest possible good must be done to the greatest number, and this would not be done if a great length of time were devoted to any one particular case; and a great length of time would certainly be needed if any opportunity were given to carry out in full detail the practice of dressing which was and always would be associated with the name of Professor Lister. The first dressing must be something very much more simple. What was aimed at, in the first dealing with wounded men on the field, was to make them safe from harm, to protect them till they reached the more fully equipped and established places in the rear, where all the means were furnished for the full development of the best form of treatment known and adopted at the time. In hospitals at the rear, in field-hospitals, and in the base-hospitals, in every future war in which England might be engaged, ample means of dealing with all the most modern and best appliances would be provided; but, in the front or actual field of battle, any attempt to complicate matters must be attended by disaster. It must be attended by this consequence, that, as the number of surgeons present could never equal the wants and needs of those who were wounded; some must be neglected if extra time was devoted to others.

Professor **Longmore** said that it had been proved by Sir Joseph Lister and by Sir William Mac Cormac, that it was an essential point with regard to the antiseptic treatment in the field, which all were agreed should be carried out, as far as practicable under the circumstances of warfare, that the first field-dressing should be, in a great measure, a protective and an occlusive dressing; and that no operations should be undertaken in the first line, excepting in cases that admitted of no delay, such as hæmorrhage, and the removal of anything that common-sense would tell one must be dealt with; all other wounds should be protected by a simple first dressing. The question what that first dressing should be, was a material one. Without entering into the particular details of its composition, it was quite evident that the first field-dressing must be of a most simple kind. It must be very portable, it must be cheap, it ought to be thoroughly antiseptic, and it ought also to be protected from dirt and from wet. It must be remembered that the first field-dressing, in a large number of instances, was not applied by surgeons at all. Men lying scattered about wounded applied them mutually to each other, or they were applied by bearers. It was only in exceptional cases, when the men were lying about afterwards, that the surgeons came and applied first field-dressings. There were some practical points which were, in reality, very important, although they appeared trifling. For instance, where should first field-dressings be carried? In Egypt, for example, lately, in the sanitary instructions issued, the first field-dressing was to be carried in the left-hand pocket of the soldier's trousers. He had examined a great number of the trousers of men who were in Egypt, and a large number of them had no left-hand pocket; they had only one pocket, and that was on the right side. Then, with regard to the pockets themselves, they varied very much in size and make. In many cavalry trousers they were so small and flat, that the first field-dressing could not be put into them. A little money might be carried in them, but that was all; moreover, it was covered by the waist-belt, and, in order to get at it, the waist-belt must be undone, and the tunic hitched up. This was an important point, because the first field-dressing should be somewhere where everybody would know where to find it, and where it could be readily got at. In the Ashantee campaign, the first field-dressing was very well arranged. It was a very great improvement on what had been employed before in many respects. It was composed of some lint spread with an ointment, which, to a certain extent, was rendered antiseptic. There was a triangular bandage, and a restrictive bandage, the whole being enclosed in waxed paper, which protected it from wet and dirt. As a matter of fact, during the Egyptian campaign, the first field-dressing was carried by the large mass of soldiers in their haversacks. It consisted of a roller bandage, with a piece of lint in it. These haversacks lying on the ground, the sand readily penetrated them, and got into the bandages; and, besides that, the men carried tobacco and all sorts of things in their haversacks; consequently, the first field-dressing was anything but antiseptic. The first field-dressing was one of the most important things in the field. Sometimes, men were placed in a position where they had nothing else to rely upon. In the unfortunate business at the Ingogo in South Africa, the Boers shot the horses that were in the carts conveying the surgical equipments; and for the whole of that night, as those who were there had related, there was nothing beyond the first field-dressing to rely upon; therefore, not only was the composition of the dressing important, but also the arrangement for its own protection, and where it was to be placed. In the Ashantee campaign there was a regular arrangement made, a pocket on purpose, on the left side of the breast of the tunic; and consequently everybody knew where to find it when it was wanted. Esmarch's first field-dressing was very convenient, but he did not think that it could not be improved. No doubt the tampons would not do for sabre-wounds, but very few sabre-wounds were now inflicted in war. Nor would they do for large shell-wounds; it was, therefore, a question whether instead of the tampon some dressing, such as had been suggested, might not, with advantage, take its place. The dressing which had been brought forward by Mr. Stephenson appeared, from its size and the manner in which it was protected from dirt, to be a very serviceable dressing, and might well form a model for an improved field-dressing in our service. With regard to the wood-wool, he had lately been using it in a case of Syme's amputation of the foot. It had very remarkable properties. There was nothing that he knew of that was so absorbent. One ounce of the wood-wool absorbed twelve times its own weight of water. It was more absorbent by far than cotton-wool, or tow, or other materials of that kind; but its use was not continued because, although extremely soft, elastic, and very absorbent, it had not any antiseptic effect on the discharges from the wound; and although the half grain per cent. of the corrosive sublimate was sufficient to keep the wood-wool itself aseptic, and prevent any putrefactive change from occurring in the substance, it did not seem to be sufficient to rely upon for the protection of the wound itself. It had, therefore, been abandoned, and Listerism again resorted to. In a few days, the discharges were perfectly inodorous, aseptic, and all that could be desired. This was one instance of the use of the wood imbued with the corrosive sublimate; but still, from the great absorbent quality of the wood, from its cheapness, and its softness, he thought it was destined to play an important part in surgical dressings in the future. Sir James Hanbury had referred to the difficulties of such warfare as had occurred in South Africa, Afghanistan, and other places, and said that we must not compare the arrangements for such wars with the arrangements for a European warfare. But he thought we ought to start with the arrangements to be made for European warfare, and then adapt them to the ever varying and difficult conditions that had to be dealt with in uncivilised warfare. No doubt there. the dressing-station must very often become for the time—for some time at least—analogous to the field-hospital; and, as bearer-companies were now organised, it would be found that they would admit of very little improvement excepting in such details; for example, all the dressings that were not antiseptic at present should be made antiseptic. He did not think the British Service had ever had the credit that it ought to have for introducing the first field-dressing into army-equipment. The first field-dressing was introduced during the Crimean War for the first time in any service, and, since that period, it had been copied by every civilised power in the world—the principle of every man carrying on his own person the means of dressing his wound if he should unfortunately meet with that calamity.

Deputy Surgeon-General **Marston** had listened with very great satisfaction. The reason for this special satisfaction was that there were two directions in which Sir Joseph Lister had particularly spoken, and these were the two directions in which he had been glad to see the Director-General had been steering the ship in this antiseptic sea. Some little time ago, when it was stated that corrosive sublimate had such remarkable action on the movements of bacteria, and that, moreover, it had been used at Dresden, he had the curiosity to write to Dresden, and Dr. Groth was good enough to supply him with a great many details connected with the use of corrosive sublimate. He would not enter into this, because Sir Joseph Lister had anticipated very much of what he would have said on this matter, even as to the quantities and strength of the solutions. If his memory were correct, Dr. Groth had said that, at the Civil Hospital during the year they had upwards of 300 major operations carried out with very great success, in which they had used corrosive sublimate solutions almost exclusively. He also mentioned that for certain operations, iodoform was used; that was one source of satisfaction; and another was that since observing the result of the use of iodoform as an application to wounds in Egypt, and as an application, mixed with other substances, to the eyelids in purulent ophthalmia, he had been very much struck with the results, and thought that it might be applied in the same way, and some miniature dredges had actually been made for the use of this remedy. It had not been fully developed yet, but they were on the track, and therefore it was that he had listened with such peculiar satisfaction to what Sir Joseph Lister had said with regard to this particular subject in relation to military surgery. In Egypt we had a very great advantage in one respect. On the day of the battle of Tel-el-Kebir, we had an advanced depôt, which was really in part a field-hospital, but in part an advanced dressing station, because we had many of the appliances of a field-hospital; we had a large number of tents, and in those tents we had solutions of every kind, and there was an ample supply of disinfectants and antiseptics of all kinds. The method adopted was as follows. First of all the wound and the part was washed with a solution of carbolic, 1 in 20. The wound was then dusted lightly over with iodoform. Then a piece of protective was dipped in the carbolic solution, and placed upon the wound; then two or three layers of boracic lint, and above that the gauze bandage. These cases did very well, and in visiting the hospital at a subsequent date, he had found there was no smell, the hospital-atmosphere was perfectly pure, the wounds themselves had little or no discharge, and they were aseptic as far as could be ascertained by the senses. No man could well realise what a battle was until he had seen something of the kind. In the first place, the central point of all the arrangements was that the force was going on with great rapidity in front. The ineffectives came in an opposite direction, namely, in the direction which they must eventually take, to the rear, and to each corps-unit, that is to say, to every regiment or battalion, there was one medical officer. His paramount duty was to press on with his regiment, for the simple reason that his presence was in itself a great moral support; he could not do very much, and need not do very much. What was chiefly required was, that the wounded man should see that he was aided, that the blood and the wound itself was kept from his gaze and his comrades' gaze, and that if there were anything like active hæmorrhage going on, which was very rare, it should be attended to. If there were nothing very urgent, the duty of the surgeon was to press on with his corps, knowing perfectly well that men of the bearer-company would soon be after him behind. Now, as they must put on something, it was quite as well that it should be an antiseptic dressing of some sort, and, therefore, something extremely simple, and very light, was wanted, which could be easily carried, and promptly applied. Its chief use was that it prevented the attendants from fingering the wound, that was the great thing. The great good which these bearer-companies affected was to secure that the man was promptly transferred in some vehicle to the place where he could be properly treated. At Tel-el-Kebir, there were four hundred brought in in thirteen hours. It was tremendous work, but in all great battles it is almost impossible to apply antiseptic surgery with anything like the care that is requisite until the wounded man is in a field-hospital. In the meantime, as something must be applied, he thought that that something should be a simple form of antiseptic dressing, such as cotton-wool, salicylate, or some other preparation.

The CHAIRMAN said that the subject had been dealt with so ably and so exhaustively, that he would not say very much. He was, he believed, but giving expression to the prevailing feeling, when he said that the very able paper, by which this discussion had been opened, by Surgeon-Major Godwin, together with the valuable facts contributed by the surgeons present, gave the means of forming sound conclusions as to the treatment of wounded in the field, having special reference to the class of warfare that England had been engaged in for some time past. It was on this account that it was so fortunate a circumstance that the head of the department was present, because he was primarily interested, being the official adviser of the authorities on matters of this kind. He had been much struck with the remarks of Sir Joseph Lister upon iodoform, especially upon its facility of carriage, for that was one of the first requisites. Sir William Mac Cormac referred specially to large warfare, such as he had seen in Europe. Now the Army Medical Department had very little opportunity of seeing large warfare; for some time past, at least. What was wanted was assistance in the first line, and that assistance must be given in the first forty-eight hours. Dr. Marston referred to those hospitals of which we had administrative charge at Tel-el-Kebir, and where he and the very energetic staff who assisted him performed most excellent service. That station-hospital was exactly an example of what he had meant, that is to say, it performed the functions of the dressing station. It was not a field-hospital; the field-hospital was about eight miles to the rear, and could not be got up; and, if that dressing-station had not been there, the wounded would not have been dressed until the next morning. That was the point he wanted to press—the necessity of having a first-class dressing, perfectly portable, perfectly compatible, in the first line of assistance. It was his pleasant duty to propose a vote of thanks to Surgeon-Major Godwin for his very valuable paper, and also to those gentlemen who had accepted the invitation to attend the meeting.

Director-General CRAWFORD said that it was too late to review, even casually, so admirable a discussion of a subject which was of very great importance to army-surgeons, and to none more than himself, who had to provide the things which the army surgeons required in the field. He felt greatly indebted to Sir Joseph Lister, and also to Sir William Mac Cormac, for their kindness in giving such admirable lessons in field-surgery. Having reference to that portion of the discussion which had been devoted to the subject of first field-dressings, he felt bound, as the supplier of those inventions, to say that, up to this time, he had been very dissatisfied with the result. It was no easy matter to devise an appliance which could be kept in a quartermaster's store, to be issued indiscriminately to thousands of individuals, who neither knew its use, nor cared how it was kept or how it was carried; and at the same time it was difficult to hope even that those things would be had when they were most required. He confessed that he had almost despaired of even seeing the day when we could rely upon the British soldier individually on having this particular appliance at hand, in a form in which it could be safely used to his wounds. Whether we should be able in the future to devise an antiseptic dressing which should take the place of our very simple one, was a question to be decided; but it was right to try, and he hoped the endeavour would be successful. He had, for his own part, greater confidence in measures which were being taken for the army in another direction. It was his hope that, in future wars, every surgeon in the advanced line would have a magazine of appliances which were well suited to meet every requirement in the field. In that case, he hoped that, at all events, all the wounded who came immediately into the hands of the surgeon would be so dressed as to render it unnecessary to disturb the wound, which was the great misfortune of our present system of using field-dressings. A great deal was heard about ambulance-corps and bearer-companies, and what men could be taught in a few lessons, and how useful these were in saving the lives of soldiers when they went into the field; and we had heard, even in public addresses in the city of London, statements made by individuals who ought to have known better, that a soldier to whom a lesson of this sort had been given, if he had been in the field at Alexandria, when an officer was mortally wounded through the femoral artery, would have succeeded in saving his life. If we were to talk about our bearer-companies and about field-dressings in that sense, he feared that the field-dressing would be a misfortune; but if we bore in mind what Sir Joseph Lister and Sir William Mac Cormac had said, he thought we might come to the conclusion that the less done for a wounded soldier, until he falls into the hands of a surgeon, the better it would practically be for him; and that, when he had once fallen into the hands of the surgeon, the means should be at hand so to dress his wounds, that the man might be sent safely to the rear, without touching him again till he was in a comfortable hospital. If these principles were right, then we could hardly hope that the field-dressing, whether carried in the left hand or the right hand pocket, would be of very much use. What was wanted was a good staff of military surgeons, well equipped, and [illegible] provided for their materials. If we could succeed in having the appliances on the field, we should not fail to find a sufficient number of surgeons to give a good account of the wounded in future.

ST. JOHN AMBULANCE ASSOCIATION.—A [illegible] on February 2nd, when certificates were [illegible] by Mrs. Clarkson Maynard. Sir Edmund [illegible], Bart., representing the Order of St. John. A [illegible] subscribed for by his pupils as a mark of their appreciation of his courteous kindness and [illegible] the success of the classes, was presented to the lecturer, Dr. Maynard.

EPIDEMIOLOGICAL SOCIETY.

Wednesday, February 13th, 1884.

Norman Chevers, M.D., C.I.E., President, in the Chair.

DISCUSSION ON CHOLERA.

After some preliminary business had been transacted, the adjourned debate on Surgeon-General Hunter's paper was resumed.

Sir William Smart, in reopening the debate, said that he thought Dr. Hunter had brought forward a mass of evidence enough to shake, if not to overturn, the theory of importation. Comparing the various epidemics in Egypt, it was easy to conceive that several had been in reality recrudescences, as, for instance, that in 1848 of 1847, that in 1855 of 1854, and that in 1866 of 1865; and he thought that there was considerable evidence in favour of the view that in the longer intervals the disease was still present, showing itself in sporadic cases or small outbreaks. Cholera had been first described in 1630. In 1782, Dr. Curtis, a naval surgeon, had given an accurate description of an epidemic. In 1817, it first extended extensively eastward to China, and westward, through Persia, to Eastern Russia. The second invasion occurred in 1830; it reached England in 1831-2. Writing in 1843, Sir Thomas Watson said that "slight sprinklings of the disease" had been noted in the interval. Epidemics had ceased in England, owing to the improved sanitary state of the country. The pandemic of 1848 seemed to have died out of Europe, but in reality persisted in some villages in Bohemia, and in 1851 gathered new strength, spread through Europe, and caused a large mortality in England. Similar evidence of the protraction of one visitation might be drawn from the history of the pandemic beginning in 1865. On the whole, therefore, he could easily accept Dr. Hunter's position.—Inspector-General Lawson said that the real point at issue was whether cholera could be conveyed by human intercourse alone, or in other ways alone. The question had been before the profession for fifty years; they had acted on partial information and theoretical considerations, whereas true advance could only be made upon facts, and a rigid analysis of them. Ten years ago, he had read a paper before the Society, urging these points. Very often, when cholera broke out at a place, there was evidence pointing to importation, and there was also evidence that the disease had been pre-existent. For instance, when, in 1865, cholera broke out at Alexandria, it subsequently appeared in Marseilles, and it was assumed that the disease had been imported; but, on the other hand, it was discovered that choleriform cases had occurred before the supposed importation. Such cases were useless for the purpose in hand. Cases must be sought for where both kinds of influence were not at work—*i. e.*, where importation of the disease could be excluded, as in the epidemic of 1865 in this country, when even Dr. Parkes had failed to trace the mode of importation. In a matter of this sort, facts, and the strict logical deductions from them, alone should be dealt with. By the phrase sporadic cases was meant apparently cases which did not propagate themselves, and were not in relation with other previous cases; but this was not a sound way of arguing; nothing occurred without adequate cause, and cases did not occur by chance. In the Registrar-General's report, deaths from cholera formed a fluctuating quantity, and during an epidemic there was an increase in the mortality from the malignant cases. On several occasions when there had been a marked increase in the number of deaths from summer-cholera here, there had been an epidemic of cholera somewhere in the neighbourhood. In 1869, during an epidemic in the South of Europe, there had been a marked increase of cholera in this country, with distinct outbreaks at Southampton Water, at a village in Yorkshire, at a prison in Manchester, and at Wick. Sometimes such a manifestation preceded the arrival of an epidemic. Cases of sporadic cholera were part and parcel of an epidemic, owned the same causes, and were an indication of the existence of those same causes. He held that the active cause of cholera might reach a place without any communication at all from elsewhere, and give rise either to an isolated case or to an epidemic.—Dr. Thrupp was prepared to defend the views expressed by Surgeon-General Hunter, having been convinced by the evidence he had brought forward. Taking into consideration the difficulties of collecting evidence at all in Egypt, and the shortness of time that had been devoted to the inquiry, there was ample evidence to show that a disease called cholerine, cholera nostras, choleriform, and, in some instances, cholera, existed throughout the Delta and Upper Egypt between the years 1865 and June, 1883. The question to be answered was, What was the clinical and pathological connection between cholerine, choleriform, cholera nostras, choleraic diarrhœa, and cholera itself? In India they were found to be, clinically and pathologically, one and the same disease, varying only in intensity and degree. He suggested that a comparison should be made between India and Egypt. In both countries a like form of disease existed permanently; in both countries a like form of epidemic raged at intervals. On what clinical and pathological grounds could it be said that the epidemic in both countries was the same, but that the disease which existed during the intervals was only somewhat similar? Was it not, in fact, the same? If all illegitimate theories and hypotheses were discarded, there were still some reasonable data left from which to draw some reasonable deductions; and the first proposition he would bring forward was "that so-called types of cholera were only different expressions of diseases that were clinically and pathologically the same," from which it followed that such terms as Asiatic, Russian, Indian, and English, only expressed local varieties, depending for their varied effects upon individual local climatic and meteorological conditions. The second proposition he would bring forward was "that the disease had, in every country where it existed, two distinct phases, an endemic and an epidemic phase, and that the first was converted into the second by a combination of local, climatic, and meteorological conditions;" from which he concluded that these three factors in the causation of epidemic activity must act in concert, *i.e.*, remove one and the other two became inert. The indication, then, was, that every country should do its utmost to abolish the local factors, and then, but not till then, would its government be justified in assuming the expectant attitude of the Egyptian fellaheen, who, when they had sown their seed, sat down to smoke, expecting Allah to do the rest.—The President inquired whether Dr. Thrupp considered that the slighter form of cholera always existed in India.—Dr. Thrupp replied that the slighter causes, which passed under such a variety of names, were the same in Egypt and in India, and that they represented the endemic form of cholera.—Dr. Longhurst observed that Surgeon-General Hunter had conclusively proved that the disease in Egypt was true cholera, the same disease as was known in India; and he thought that it had been shown also that the disease belonged to Egypt not less than to India; but if by the term endemic were meant a disease ever present among a people, then he did not think that cholera was endemic; he thought it a disease of climatic origin ever present, but taking on periods of exceptional activity. Still, he believed that in cholera there was a specific entity. Fear could not produce cholera, but it might cause an amount of shock which would predispose to it.

Mr. Scriven (Brigade-Surgeon) said that he did not hold that the cholera-poison arose spontaneously; no doubt it originated in the Delta of the Ganges; it was at home there, and spread in some way from that point. All the possible modes of importation into Egypt had not been excluded; with regard to pilgrims to Mecca, some went independently, and not with the regular yearly pilgrimage. As to the disease being endemic in Egypt, this was not fully proved; the cases were too vaguely given, the clinical records were imperfect, and there was very little evidence of its tendency to spread. We had to find out whether cholera was still prevalent in Egypt; if it had no home in Egypt, either it had already ceased, or would do so very shortly. The local practitioners should rely upon suppression of urine and fall of temperature, as the two most important symptoms. In India all cases of purging and vomiting were accounted by the natives as cases of cholera, and he quoted three instances to show how fallacious this opinion might be.

After some remarks from Dr. Cullimore, and an explanation by Dr. Murray, Sir Joseph Fayrer mentioned that Her Majesty had announced her intention to confer on Surgeon-General Hunter the honour of knighthood.—Sir W. G. Hunter, in reply, said that he hoped that the honour conferred upon him would be taken as an honour conferred for work done within the profession. He was pleased to find Sir W. Smart and Dr. Lawson in such entire accord with himself. Dr. Thrupp's question gave the real key to the position, and he replied to it by another question, viz., when a case came with purging, vomiting, prostration, aphonia, anuria, cramps, and symptoms of an algide state, if it was not cholera, what was it? Sometimes the symptoms were not so marked, but this group of symptoms always signified cholera. He had referred, in his Report, (p. 40, note) to the remarkable persistence of cholera at the mouth of the Missisippi. Cases of cholerine, etc., might vary in degree, but they were one and the same thing. He could see no difference between the cases in Egypt and the cholera he had seen in India. As to "typhus-cholera," the cases might be instances of typhoid symptoms occurring after cholera; he was not responsible for the opinions of others. Details of the cases were admittedly meagre, owing, in some instances, to the destruction of documents by fire, but the evidence was that of medical men, who had only their memories to rely upon, but this made him not less inclined to accept their statements. He hoped that further observations would be made. There was no subject upon which opinions were more numerous, or facts more scanty. He challenged anyone to prove the importation theory. Dr. Mahé's evidence was as vague as could well be. The difficulties of his investigation had been much increased by the political and mercantile considerations which so embarrassed this question in Egypt.

At the conclusion of the meeting Sir. W. G. HUNTER read a letter from Dr. Buchanan, containing the following extract from Bacon. "It is recorded, by competent observers, that if you take earth from the side of the Nile, and protect it from wet or waste, and weigh it every day, you will find that it remains always of the same weight until June 17th, when it begins to increase in weight, and continues to increase in weight during the whole time that the river is rising. This can be due to nothing but the air, and this is the more extraordinary, because it has been observed that just at that date it is the habit of grievous plagues to make their appearance at Cairo."

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, FEBRUARY 19TH.

T. MCCALL ANDERSON, M.D., President, in the Chair.

DISCUSSION ON ALBUMINURIA: ITS PATHOLOGY AND CLINICAL SIGNIFICANCE.

PROFESSOR GAIRDNER introduced the discussion by a short review of the historical aspects of the subject. He stated that, previous to the time of Bright, albuminuria was usually considered to be a mere secretion or transudation of blood-serum, and raised the question as to whether or not this was altogether an error. Bright himself did not do or say anything to change this view, but he insisted on, and proved the fact, that this leakage or excretion represented in many cases, and always when associated with dropsy, etc., a change or changes in the structure of the kidney, which when chronic were mostly irreparable. He then considered the question whether Bright's disease was one or several distinct diseases. Bright did not dogmatise on this point, but, subsequently to his time, diseases which were not now described as characteristically Bright's disease, were regarded as such, *e.g.*, fatty kidney, cystic kidney, etc. No doubt the impulse given by anatomical researches produced a marked effect upon the current opinions; but by too exclusive attention to cases tending towards a fatal termination, practitioners were discouraged in the treatment of Bright's disease, and the prognosis was rendered unduly grave. Pathological research, however, had in this, as in other departments, by more careful observation, corrected the errors to which less perfect methods of investigation gave rise. Dr. Gairdner referred to the case, mentioned by Dr. Roberts in his address at the last meeting, of a patient suffering from albuminuria, in whom the left ventricle had become hypertrophied, and remarked that such a circumstance was very unusual, and therefore of great interest. But still it must be admitted that the prognosis of Bright's disease, except in the most acute form, and even in some cases of the acute form, was very unfavourable, perhaps regarded unduly so, owing to the absence of *post mortem* evidence of the cure. It had, however, been shown, by examination after death, that persons recovered from organic disease of the kidney just as it had been demonstrated that recovery from phthisis, tuberculosis, etc., was possible. He then remarked that there were various opinions entertained with regard to the unity underlying Bright's disease, of which albuminuria was one, but only one, expression; and said that, in his opinion, although the different forms might vary in detail, yet there were distinct indications of an obvious relationship between them. He then mentioned the views of Dr. Mahomed; but, seeing that he was present, did not discuss them at any length. Dr. Gairdner said that, in his own early experience of pathological investigation in kidney-diseases, he used to liken renal albuminuria to pulmonary catarrh of the finer or terminal air-tubes, not only in respect of it being a transudation or exudation of proteids from the blood, but because of its leading up to indefinitely numerous disorganising lesions without being itself a disorganising lesion. Both albuminuria and pulmonary catarrh might be mild or severe, transitory or persistent, acute or chronic, and the prognosis might be regarded as favourable or unfavourable, according as there were complications in other organs. As our field of experience ranged over simple or grave cases, so would our prognosis be favourable or the reverse. Probably the current ideas of the last half century had been towards a too grave prognosis on the whole, but this was a long way from accepting Dr. Roberts's proposition of an albuminuria of health, or still more of a physiological albuminuria. He did not dispute Dr. Roberts's facts, but could not accept this last expression without some demur, or perhaps some alteration of its terms. Albuminuria might occur in persons apparently healthy, but it might persist and become habitual without being regarded as an abnormal or morbid condition. Dr. Gairdner mentioned a case where a patient had a distinct cardiac murmur, persistent since boyhood, and who was ultimately the father of two families; and yet there was no indication, other than the murmur, of any disease. He also referred to a case where there was crepitation over the upper lobe of one lung, heard on every occasion when sought for, and yet not associated with any evident deterioration of the health, and asked if these cases, from the fact that they were not accompanied by discomfort to the patient, or visible evidences of disease, could be regarded as physiological. But while he did not dispute the facts brought by Dr. Roberts, he was inclined to consider the presence of albumen in the urine as at least a warning which could not be altogether overlooked.

Dr. MORTIMER GRANVILLE restricted his remarks to the second phase of the subject, namely, "the clinical significance of albuminuria," discussing the physiological pathology of the presence of albumen in easily discoverable quantities in the urine when voided; whether its occurence were due to excessive filtration, caused by relatively excessive blood-pressure, or to failure in the hypothetical process of re-absorption, by which, as some thought, albumen, having been thrown out from the blood under normal conditions, re-entered the current. In his opinion, the influence of the nerves of the kidney, in their connection with, and relation to, the cerebro-spinal centres, more particularly the vaso-motor centre, and the sympathetic system, as illustrated by the known experiments of physiologists, to which he briefly alluded, supplied a sufficient explanation of the occurrence of albuminuria without kidney disease in cases which could not be classed as instances of "physiological albuminuria," or described under either of the special heads already suggested, such as "the albuminuria of puberty," "the albuminuria of adolescence," etc. The author then directed attention to two not generally recognised classes or groups of cases in which albumen frequently occurred in the urine without organic disease. First, there were cases of young men in which the genito-spinal centre had been debilitated and rendered preternaturally excitable, not necessarily by sexual excess, but by the struggle to repress and restrain the passions, a mental and nerve-centre excitement which might be so wrought up as to prove as mischievous in its effects as excess or abuse. In these cases, he said, albuminuria frequently occurred, and was either overlooked or wrongly regarded as evidence of kidney-disease; the latter mistake being the more likely to be made, because there were frequently pains in the region of one kidney, generally the right, and, as often happened when neuralgia of viscera was accompanied by vaso-motor disturbances, "pain on pressure." The second class of cases to which he directed attention consisted of studious or sedentary men of middle age, who suffered from mental depression and "nervousness," with, perhaps, agoraphobia or claustrophobia, or both. In these cases albumen was often found in the urine, and, in some instances, its appearance alternated with that of sugar in small quantities, pointing significantly to the location of the excitement, or the glance of the reflex, and suggesting the fact of nerve-centre disturbance as the cause of the malady. He pleaded for the recognition of these varieties of albuminuria without kidney-disease, and, insisting strongly on the scientific error of placing the albuminuria in the first of these cases, with the result of creating needless alarm, and in too many instances producing grave mental depression, urged a wiser and better use of the urinary test-box, recommending that the urine of all patients should be examined both for albumen and for urea. Under this more extended practical and more precise method of research, he believed it would be found that albuminuria without kidney-disease was by no means uncommon.

Dr. MAHOMED first passed in review the evidence afforded by experimental observations, by clinical observations, and by morbid anatomy, as to the conditions giving rise to albuminuria. He pointed out the inability of the physiologists to produce variations of arterial pressure by retarding or accelerating the capillary circulation throughout the body, and suggested that investigation into the variations of the tension and the rapidity of the interchanges of the gases in the blood and tissues were urgently needed. He criticised the theory, propounded by Professor Hamilton, that the increase of arterial pressure was due to the diminished specific gravity of the serum; and pointed out that the specific gravity of the serum was not usually decreased to any [illegible] extent in Bright's disease, quoting the observations of [illegible] in support of this. He stated that reduction of the specific gravity had only been observed in cases of long standing, and was generally very gradually produced; while, to account for the increase of pressure in Bright's disease, it was necessary that the [illegible] gravity should be very rapid, that they should be produced in a few hours, and that no such a rapid change of gravity was [illegible] by the results of all previous physiological experiments [illegible]. The [illegible] of the circulation of blood in the [illegible] Malpighian [illegible], owing to their [illegible] in the large size of the glomerular capillaries, was [illegible]. It was [illegible] that the circulation in them was probably more rapid than in any other capillaries in the body; and conclusions were drawn, from the previous observations, that the retardation of the glomerular circulation, combined with increased pressure in, and increased distension of, the glomerular vessels, were the chief factors in the causation of albuminuria. It was pointed out that, while water might readily transude from the glomerules under normal pressure and rapidity of blood-flow, albumen, being left diffusible, would probably be retained; but that slight delay and increased turgescence of the glomerules might permit of the exudation of paraglobulin and other more diffusible forms before the appearance of serum-albumen. The immediate causes of albuminuria were classified as follows: 1. Increased glomerular pressure, and slowing of the blood-flow in the glomerules—*a*, from general increase of arterial pressure, with local hyperæmia of the kidney, due to disorder of the other excretory organs, especially the skin and bowels (this might occur as a functional condition); *b*, from general increase of arterial pressure, aided by the increased distension of the glomerules, owing to obstruction of the tubular plexus of capillaries, either by distension of the tubules by their epithelial contents or by compression of tubular plexus by fibroid growth; *c*, from increase of arterial pressure in the kidney, due to derangement of the nervous system, either local, general, or reflex; *d*, from obstruction to the return of the venous blood. 2. From alteration in the tissue of the blood-vessels, tube-walls, and epithelioma, produced by acute inflammation or infarction. 3. From the presence of abnormal forms of albumen in the blood-serum. It was stated that a large number of forms of albumen were found in the urine; that they were very mutable bodies, and were constantly undergoing change; that, consequently, heat and nitric acid failed to detect many of them. For these and other reasons, the use of such tests as the brine-test, picric acid, and potassic mercuric iodide were advocated. It was stated that these were good negative tests. The fallacies of a large number of tests were pointed out, and their respective advantages were indicated. It was shown that many cases occurred in which albumen, detected by nitric acid and heat, alternated with a form of albumen only recognised by the more delicate tests, especially brine and picric acid. The albuminuria occurring in healthy persons was next considered. Dr. Mahomed said that he had found albumen in the urine of 9 out of 58 persons (*i.e.* in 15.5 per cent.) thought to be healthy, whom he had examined previous to life-insurance during the past year. Details of the cases in which albumen was found were reported, and it was shown that 7 out of the 9 cases were clearly not in perfect health, and it was suggested that many such cases were produced by temporary functional disturbance. Albuminuriæ were divided, for diagnostic purposes, into several groups. 1. Cases of fully developed Bright's disease. 2. Cases with the cardio-vascular symptoms and changes of Bright's disease, but with only slight and occasional albuminuria. 3. Cases in which the albuminuria was considerable and prolonged. These were subdivided into. *a*. Those with no other symptoms of Bright's disease; the arterial pressure not being increased; the quantity of albumen being small; prognosis good. *b*. Those without increese of arterial pressure, the quantity of albumen being large; prognosis hopeful. *c*. Cases in which the albuminuria was persistent, and was associated with increased arterial pressure. Prognosis grave, but never hopeless. 4. Cases of temporary and intermitting albuminuria associated with anæmia, debility, nervous depression, or some other condition which could often be easily recognised. Several cases, with sphygmographic tracings illustrating these groups, were related. It was pointed out that Bright's disease had two distinct aspects, the renal and the cardio-vascular; albuminuria affording evidence of the one, high arterial pressure of the other; and that either of these might be present for many years without producing grave symptoms or giving rise to any anxiety; their existence merely told of possible dangers in the future. If both albuminuria and high arterial pressure were present, the cause for anxiety was greatly increased. The chief advantage of recognising the condition was, that it afforded the key to the general management and treatment of the case, and of the most effective way to deal with the small ailments which might from time to time arise. In conclusion, Dr. Mahomed stated his views concerning Bright's disease briefly as follows. The first step was the existence of an acute or chronic form of blood-poisoning, either due to some definite form, such as scarlatina, alcohol, or lead, or to the blood being laden with excrementitious matter, as in gout or pregnancy. This produced two results: a rise of blood-pressure from impeded capillary circulation throughout the body, and a more or less severe functional hyperæmia of the kidney, the chief excretory organ of the body; chill, constipation, or an excessive amount of poison might now determine an acute inflammation of the kidney, and the structural changes might produce albuminuria by obstructing the circulation through the tubular plexus. If no inflammation took place, and the condition remained chronic, albuminuria might be only occasionally present, and that in small amount; but the cardio-vascular changes took place as the result of prolonged high arterial pressure. The subsequent symptoms would depend on the situation and extent of the change in the kidneys.

Dr. James Finlayson said that his remarks would be entirely confined to the clinical aspects of the subject, with special reference to the theory that, in a large majority of cases, albuminuria might be regarded as of toxic origin. It was well known that many organic and mineral poisons had the power of causing the appearance of albumen in the urine. He need not refer in detail to those, as they were mentioned in the various text-books. Cantharides, when taken into the system, might be regarded as producing a somewhat acute albuminuria, whereas lead set up a more chronic variety. Turning now to more definitely pathological conditions, it was known that many specific fevers were associated with the presence of albuminuria, which was probably to be explained by the action of the poisonous material circulating in the blood. Thus albuminuria was notoriously a result of scarlet fever, and the same might be said of small-pox and malignant pustule, the pathology of the latter having been carefully worked out by Professor Greenfield, who was present. In cases of pneumonia, which was closely allied to the specific fevers, albumen was frequently discovered in the urine. Referring to the albuminuria of pregnancy, he thought that it was not altogether to be explained by the effects of pressure, as it was often found in the early stage when these could not be present, and supported this idea by the fact that in some cases where the fœtus had died *in utero*, the albumen had disappeared from the urine. He referred to lead as being one of the causes of disease of the kidney, the lesions of which were closely allied to those occurring in gouty subjects. But while both of those forms of disease had been demonstrated to be common in London practice, they were almost entirely unknown amongst the patients met with in hospital practice in Glasgow. Without expressing an opinion as to the influence of the bacillus in the causation of tubercular disease, he recognised the fact that there were many points of resemblance between tuberculosis and the specific fevers, and regarded the pathology of albuminuria in tubercular subjects as being probably capable of a similar explanation as that occurring in febrile affections. In conclusion, he remarked that all these points which had been mentioned seemed to him to lend strong support to the idea that in many cases albuminuria was probably of toxic origin.

ALDERSHOT MILITARY MEDICAL SOCIETY

Monday, January 7th, 1884.

E. C. Markey, Surgeon-Major, A.M.D., in the Chair.

The Prognostic Value of Temperature-Range in Destructive Lung-Disease.—A paper on this subject by Surgeon M. R. Ryan (who was unavoidably absent) was read by Surgeon H. J. Michael. His remarks were founded on a careful clinical study of cases of destructive lung-disease met with in military practice. The circumstances which appeared chiefly to influence the range of temperature in these affections were the presence or absence of tubercle, the extent of lung involved, and certain conditions pertaining to individual patients. The presence of tubercle, whether primary or secondary, had a most important influence on the temperature. It might be stated generally that the higher the temperature, the greater the probability that tubercle was present; and, on the other hand, that, so long as the febrile movement in the course of a destructive lung-affection kept within moderate limits, that is, when the evening temperature did not usually exceed 100° or 101° Fahr., there was fair ground to conclude that the patient was not tubercular. A sudden and persistent elevation of the evening temperature occurring in the course of a chronic inflammatory lung-affection, which had previously, perhaps, been only attended by slight hectic, was highly suggestive of the development of tubercle. The examples of extreme hyperpyrexia occasionally met with in phthisical patients (of which one was related, in which the evening temperature once reached 109° Fahr.) were, in the writer's opinion, invariably dependent on the presence of tubercle. The vast majority of cases of primary tuberculosis were attended by high temperature from the outset, and the fever, in many instances, preceded the development of definite physical signs. While active inflammatory mischief was in progress, the invasion of fresh portions of the lung was often attended by corresponding increase of temperature; but the writer had observed cases in which most extensive implication of one or both lungs had produced only a very moderate elevation. Such cases, notwithstanding the gravity of the physical signs, might be regarded as favourable. A very limited lesion sometimes sufficed to produce an amount of fever and general constitutional disturbance out of all proportion to its extent. There was always, in such cases, good reason to suspect tubercle. The conditions or peculiarities pertaining to individuals were of much importance. There was no doubt that some individuals were much more obnoxious to febrile disturbance from a given cause than others. Race seemed to have some influence in this respect. During a sharp and fatal outbreak of acute destructive pneumonia among the troops in Afghanistan in 1879, the author observed a decided contrast between the temperature-range exhibited by the European and the native soldiers (chiefly Sikhs). It was usually much lower in the latter, though they succumbed more rapidly to the disease than the Europeans. The influence of malarial poisoning in modifying the temperature of phthisis, and the effect of albuminuria (as pointed out by Dr. Theodore Williams) in lowering the temperature of phthisical patients, were next briefly considered. Making proper allowance for possible sources of error in each case, the writer had confidence in formulating the proposition that, in destructive lung-disease, the chances of arrest or cure were in direct proportion to the recession of the evening temperature towards normal. The remainder of the paper was devoted to the history of cases illustrating the foregoing remarks.

Medical Organisation in the Field.—Subsequently there was a discussion on Surgeon Major Evatt's paper on medical organisation in the field, read at the last meeting, in which Surgeons-Major Markey, Cufle, Gillespie, and Ruttledge, Major Harvey, R.A. (Garrison Instructor), and Assistant-Commissary General Young, took part.

Presentation to the Society.—Surgeon-Major CUFFE, C.B. (acting for the Honorary Secretary) announced that Surgeon Shaw Simpson, A.M.D., had presented to the Society a large collection of mounted microscopic specimens illustrating various physiological and pathological conditions.

A vote of thanks to Surgeons Ryan and Simpson brought the proceedings to a close.

ACADEMY OF MEDICINE IN IRELAND: MEDICAL SECTION.

FRIDAY, JANUARY 18th, 1884.

WILLIAM MOORE, M.D., President, in the Chair.

Living Specimen.—Mr. ARTHUR H. BENSON showed a case of tabes dorsalis, showing "Argyll-Robertson's sign" well-marked, and atrophy of the optic nerves.

Specimens by Card.—Dr. WALTER G. SMITH—drawings: (1) Multiple Onychia; and (2) Peculiar Condition of Skin of Scrotum. Dr. J. HAWTREY BENSON: Primary Malignant Disease of the Liver.

Bronchitis and Emphysema with Remarkable Symptoms.—Dr. H. V. DILLON read a paper on a case of bronchitis and emphysema, loss of taste and partial loss of deglutition, subsequent to injury of upper cervical vertebræ. D. S., a pensioner, aged 38, had always good health till the injury was received. He served seventeen years in the British Army, during which time he suffered from dysentery and ague; he had had gonorrhœa, but no specific disease. On January 17th, 1881, as he was sitting in the forecastle of a ship, a sailor fell from the yard arm on to the back of his head, bending it and his neck forwards. D. S. felt at the time as if something had given way at the back of his neck. He heard a noise at the seat of injury, and then became unconscious, remaining so for about fifteen minutes. On coming to, he felt excruciating pain at the seat of injury, which lasted for six months, and radiated along the back of the head. At the expiration of this time a hardened enlargement was remarked at the back of the neck, over the three upper cervical vertebræ, in the mesial line. A few months subsequently he had an abscess of the left internal ear, which discharged externally, from July 1881 to July 1883. The auditory canal became almost completely closed, and hearing was lost on that side. Subsequently, cough and dyspnœa came on and lasted since. The lungs were emphysematous, and he suffered from bronchitis, huskiness of the voice, impaired power of deglutition and partial loss of taste. Five months after the left ear distress ulceration took place in the upper gums; the teeth loosened; and later on there was necrosis of the alveolar process of the superior maxilla, a portion of the bone coming away when the teeth were retracted. The hard palate then ulcerated. The respiration was of a harsh and blowing character, pointing to paralysis of the soft palate. About six or eight months ago there was a circumscribed patch of congestion at the base of the left lung, which disappeared on treatment. He had lost flesh considerably since the accident, but had no signs of paralysis. The swelling at the seat of injury was now confined to the right side, having disappeared from the medial line within the past year. He could not rotate the head completely to either side; neither could he flex or extend it to the full extent.—Dr. HENRY KENNEDY asked if there was any evidence of abscess about the nape of the neck.—Mr. WILLIAM STOKES, having seen the case, said it was one of extreme rarity. The view, as suggested, that it was a case of cervical dislocation, could not be maintained, having regard to the complete absence of symptoms of motor paralysis. He considered the injury resulted in osteitis and periostitis of the upper cervical vertebræ; that this process extended upwards, involving the temporal bone, and subsequently the superior maxilla on the left side, and that this was followed by caries. He asked was there any trace of a syphilitic taint.—The PRESIDENT considered the case one of great interest.—Dr. DILLON, in reply, denied the existence of any abscess in the neck, or of any syphilitic taint in the patient, and considered that the symptoms might be referred to stretching of the atloido-axoid ligaments, and consequent inflammation.

Pneumonia with Paradoxical Temperatures.—Dr. C. F. KNIGHT reported a case of pneumonia, with frequent paradoxical temperature, in a woman, aged 30, in which large doses of quinine were administered.—Dr. CAMERON had frequently tested the temperature of the patient when in the Adelaide Hospital, but never found it above 99°. He suggested the possibility of the absence of toxic symptoms after the large doses of quinine being due to its being mixed with cinchonine.—Dr. WOODHOUSE stated that the patient had been in the Hardwicke Hospital last June for an attack of typhoid fever. The temperature at the usual time of convalescence, instead of coming down, went up to 104°, 107°, reaching 114° at the end of August, and 127° at the end of September, when, a watch being set, she was detected using a piece of lint 12 inches square, which she acknowledged she had employed for the purpose of raising the register of the thermometer by wringing it out of hot water, and secreting it under her pillow.—Dr. COX argued that the presence of a cloud in the urine on the application of the picric test was due to the presence of quinine.—Dr. W. G. SMITH pointed out that the presence of any alkaloid would cause a cloud on the addition of picric acid.—Mr. KEENAN and Dr. GUNN doubted whether the patient had taken the large dose of quinine prescribed, and concurred with other speakers that the case was one of malingering.—The PRESIDENT and Mr. ORMSBY having also joined in the discussion, Dr. KNIGHT replied, and concurred in the view that the case was one of malingering. The picric acid test was applied before a grain of quinine was administered.

Poisoning by Tainted Meat.—Dr. J. HAWTREY BENSON read a case of poisoning by tainted meat. The patient had eaten about an ounce of roast turkey which was somewhat high. Immediately afterwards, he had nausea, fœtid eructations, etc., but the symptoms did not reach their maximum severity till about twenty-six hours afterwards. At that time he was extremely faint; pulse 92, intermittent, scarcely perceptible, extremely compressible; first sound of heart very weak, second sound quite inaudible, even at base; precordial anxiety and feeling of pressure akin to pain at heart; pupils dilated; vision dim; headache severe. The skin was cold, but dry; throat dry and sore; articulation very difficult; tympany great; he had severe abdominal pain, tenderness along the descending colon, and constipation. Four hours afterwards, his pulse was 104; temperature 101.8°. During the succeeding night, he suffered intense fever-symptoms, with very marked dryness of skin and mucous membranes. Towards morning, he had two very copious watery scalding evacuations, followed by great and prompt relief to all symptoms. During the night he passed a large quantity of urine of specific gravity 1038, containing, in 1,000 cubic centimètres, 34 grammes of urea and 1.39 grammes of uric acid, no sugar, a trace of albumen. Next morning the patient was convalescent, and, some days afterwards, exhibited a subnormal temperature. The writer then discussed the question whether the case was one of "septic poisoning," by the absorption of some of the ptomaines, or of "septic infection," caused by the entrance into the blood and by the multiplication therein of a specific micro-organism. He referred to the cases described by Van den Corput, and to the Welbeck Abbey and the Nottingham cases examined by Dr. Klein, and to the Wexford cases investigated and published by Dr. Charles A. Cameron, and expressed an opinion that the symptoms in the case he had just described were produced by the cadaveric alkaloids; his chief reasons for this opinion being the rapidity with which the acute symptoms disappeared after copious evacuation, the dilatation of the pupils, the extreme lowering of arterial tension, the dryness of the mucous membranes, and the very rapid convalescence.—Dr. CAMERON said that, as he was himself the patient referred to, he had painful remembrance of the circumstances of the case. He never felt nearer dying. He had cold sweat, and felt utterly prostrate, and had great difficulty in walking. He suffered intensely during the two nights. During the first, he did not sleep at all, and only obtained about an hour's rest on the second night. He had intense thirst, and suffered great pain. His urine, immediately on being passed, became quite thick. His mind was quite clear, but he found it difficult to articulate his ideas.—Dr. H. KENNEDY thought that, at the time the patient took the tainted meat, he was mentally depressed, and, being inclined to gout, he was unfavourable to resisting any disease. With reference to the absence of the second sound of the heart, he had frequently remarked this to be the case in the last cholera-epidemic.—Dr. FINNY thought Dr. Kennedy's remarks as to the absence of the second sound of the heart proved the converse of his proposition; because, while cholera was preceded by evacuation from the intestinal canal, in this patient there was no loss of the usual fluid circulating in his body. He could not understand any reason for the absence of the second sound in this case.—Dr. COX asked where simple indigestion ceased and poisoning began, as he himself had frequently suffered almost as much after taking different kinds of food which disagreed with him as the patient under discussion.—Dr. LENTAIGNE mentioned a case where effects similar to those described had been produced by the ingestion of imperfectly boiled Brussels sprouts, causing irritation of the intestinal canal. The objectionable matter having been passed, the patient quickly recovered.—Mr. F. A. NIXON said that the theory advanced by the last two speakers was opposed by the fact that other members of the family who had partaken of the turkey suffered also.—The PRESIDENT, and Drs. DILLON, J. E. KENNY, and W. A. CARTE joined in the discussion; and Dr. BENSON replied. He said there was no second sound to be heard over the aortic valves, due, he considered, to the extreme lowering of the arterial tension preventing the flapping back of the valves from being heard. He could not undertake to say when indigestion ceased and poisoning began. Anyone seeing his patient during his illness could have had no doubt that his was not a case of indigestion. The fact of other members of the same family being affected confirmed this view.

REVIEWS AND NOTICES.

THE INTERNATIONAL ENCYCLOPÆDIA OF SURGERY. A Systematic Treatise on the Theory and Practice of Surgery. By Authors of Various Nations. Edited by JOHN ASHHURST, Jun., M.D., Professor of Clinical Surgery in the University of Philadelphia. Illustrated by chromo-lithographs and woodcuts. Vol. iv. London: Macmillan. 1884.

THE fourth volume of Dr. ASHHURST's great book of reference is, like the second, essentially Anglo-Saxon rather than international, but well proportioned as to the selection of representatives from English-speaking lands, three out of the seven articles in the volume being written by United States surgeons, three by British authors, and one by a Canadian. It is almost entirely devoted to the surgery of the bones and the vertebral column with the spinal cord, the sole exception being a chapter on tumours, which, at the will of the editor, has strayed, in a singular manner, out of the pathological section of the *Encyclopædia* into a volume professedly devoted to injuries and diseases of various tissues, and to regional surgery.

The first article is on "Injuries of Bones," by Dr. John H. Packard, surgeon to two hospitals in the city of Philadelphia. It is a very complete work in itself, like several of its predecessors in the *Encyclopædia*. In discussing Colles's fracture, the author considers that the great reason why deformity often follows this accident, is that reduction is not effected at all. He gives no rules, believing that the line of fracture, amount of impaction, if there be any, and other circumstances, are very variable, and each case ought to be studied by itself. Dr. Packard considers that it is important to act as much as possible on the fragments themselves. In cases of impaction, extension of the hand alone is frequently a useless infliction of pain. The author employs a very short splint, simply a slip of wood so shaped as to fill up the concavity just above the wrist, held in place by adhesive plaster first, and then with a bandage. The splint must be applied with great accuracy, and the condition of the parts examined every second day for the first two weeks. Turning to fracture of the patella, Dr. Packard is very slow to recommend the Listerian operation; he even prefers the use of Malgaigne's hooks, though he does not think that any great gain is effected by them. He reviews different opinions, and then gives his own judgment at great length and in a most able manner; but his latest references are as far back as the earlier part of 1883, where he reports, from this JOURNAL (vol i, 1883, p. 720), Dr. Barling's case, read before the Midland Medical Society. The article was evidently through the press before Sir Joseph Lister's cases were discussed at the London Medical Society. We may pass over the three papers by English writers, as the opinions of Mr. Barwell, who writes on "Diseases of the Joints, Mr Butlin, who contributes a monograph on "Tumours," and Mr. Treves, the author of a chapter on "Malformations and Diseases of the Spine," must be well known to our readers. Dr. Ashhurst himself contributes the article on "Excisions and Resections," and a supplementary article on the same subject is written by Dr. G. E. Fenwick, of Montreal, entirely devoted to his own special operation, excision of the knee-joint after a particular method, whereby the saw is so applied as to leave the end of the femur convex, and the head of the tibia concave.

A very complete and elaborate article of over two hundred pages, one of the small books, in fact, of which each volume of this *Encyclopædia* is chiefly made up, was written by Dr. John A. Lidell, late surgeon to Bellevue Hospital, New York, a gentleman celebrated for his great experience in military surgery, who died, as the preface informs us, almost as the last proof-sheets of his work were being corrected. It deals with injuries of the cord, the vertebral column, and the dorsal muscles and integuments. A great part of the matter contained in this contribution refers to gunshot injuries, as illustrated by the clinical and pathological records in the *Medical and Surgical History of the War of the Rebellion*, by the case of President Garfield, and by other valuable archives of transatlantic surgical literature. Perhaps the best part of the late Dr. Lidell's contribution refers to bed-sores, a subject often too briefly treated in other medical works as something hopeless and unsavoury.

As in the preceding three volumes, the illustrations are very unequal in execution, and few come above the level of mediocrity. Woodcuts like figs. 736 and 737, representing a little girl before and after the operation of excision of the knee-joint, are very unsightly, and are based on a principle open to great abuse; in the two preceding figures, representing the similar case of a boy, the features of the patient appear, through want of artistic skill, rather more miserable after than before the operation. In Mr. Butlin's paper on "Tumours," where correct drawing is of high importance, the engraver has performed his duties fairly, but a comparison of the author's drawings of microscopic specimens in the *Encyclopædia* with similar productions by the same surgeon and pathologist in the *Transactions of the Pathological Society of London*, is much to the advantage of the latter. The large coloured plate representing eczema of the nipple associated with carcinoma is fairly executed; for though, in the language of an art-critic, the outlines and proportions are faulty, and the carnations are essentially crude, still the artist has been happy in his rendering of colour of the diseased area. The two coloured engravings of rodent ulcer are very fairly painted, but that representing sarcoma of the humerus and scapula might well have been omitted.

Notwithstanding defective drawings and certain repetitions of the same subject in several different articles, this fourth volume of the *International Encyclopædia of Surgery* is a very valuable collection of several small works on surgical and pathological subjects of great importance.

ELEMENTS OF HUMAN PHYSIOLOGY. By HENRY POWER, M.B., F.R.C.S., Ophthalmic Surgeon to St. Bartholomew's Hospital, London; Examiner in the Board of Anatomy and Physiology, Royal College of Surgeons. Illustrated with 47 engravings. London: Cassell and Company, Limited.

THIS is an excellent manual of the very best class, for it is written, not by a young author, at the beginning of his career, but by a physiologist of high experience and celebrity. The science of which this manual treats is becoming intensely specialised, and yet, on the other hand, its relations with other departments of biology, and with physics, are found to be more intimate than was ever before suspected. Hence physiology is now a very hard science for the beginner, and it is only a teacher of great judgment that can pick out from its intricate records matters that are elementary, yet at the same time essentially necessary for the student and practitioner. Histology is now recognised by all compilers of manuals as a science by itself; it is certainly to be regretted that its details, always of a certain interest to the student, should be so much excluded in modern works like that of Mr. POWER, in favour of chemistry, mechanics, and other sciences not so evidently bearing on medicine. For most assuredly will the student think for himself, whatever his elders may tell him; and whatever may be the truth, he will never fail to take more interest in matters which, to his mind, are the most intimately associated with the dissecting-room and the wards of his hospital. But physics and chemistry must be taught, and the opinions of the JOURNAL and of the Association on the importance of these sciences as a part of a student's preliminary education must be well-known to our readers.

Mr. Power has treated all questions that concern the above-mentioned sciences in a manner that will make them as palatable as possible to the student. We need not say that the essentially physiological passages, where lists and chemical formulæ are absent, are written in the pleasant style for which the author is so justly noted.

THE PRINCIPLES AND PRACTICE OF SURGERY. Being a Treatise on Surgical Diseases and Injuries. By D. HAYES AGNEW, M.D., LL.D., Professor of Surgery in the Medical Department of the University of Pennsylvania. Profusely illustrated. Vol. iii. Philadelphia and London: J. B. Lippincott and Co. 1883.

THIS is a very solid and complete volume, including diseases and injuries of the larynx, trachea, nasal regions, pharynx, eye, ear, muscles, tendons, bursæ, aponeuroses, nerves, lymphatic system, skin, and mammary gland, with chapters on syphilis, tumours, tenotomy, electricity in its application to surgical therapeutics, nerve-stretching, and massage. As in similar transatlantic publications, this volume is, as its title-page announces, "profusely illustrated," and the woodcuts are of very unequal artistic merit. The highest praise may be awarded to several of the illustrations of eye-diseases, which are all "plain," yet give a far better idea of nature than many of the pretty coloured drawings familiar to the student of ophthalmological literature. A large number of the woodcuts represent instruments, and this is an essentially good feature in American works of this kind, as the surgical reader consults a book for information, and one of the most essential requisites for the surgeon is a knowledge of the tools he must use; besides, it is not advisable that the reader should be forced to refer to illustrated catalogues issued by dealers. The subjects of each chapter cannot be reviewed at length; we must content ourselves by observing that, though this volume is too deep for the unqualified student, it is a valuable work of reference for general surgeons and specialists.

ON STERILITY IN WOMEN. Being the Gulstonian Lectures delivered in the Royal College of Physicians in February 1883. By J. MATTHEWS DUNCAN, M.D., LL.D., F.R.S.L. & E. London: J. and A. Churchill. 1884.

THESE lectures have already appeared in the pages of this JOURNAL, and, in the preface, the author states that they are now published as they were delivered. They represent a vast amount of labour, obstetrical, zoological, and statistical; and the results of Dr. DUNCAN's researches have been freely discussed since the lectures were delivered. The subject involves questions of vital social importance, and others of profound scientific interest; and all are treated in a masterly way by the author, whose lectures will prove a standard work of reference for the present and the next generation. The very nature of the subject demands that it should be studied in all its aspects at once, as is the case in the work now under consideration; and as the three lectures take up but 134 pages, the thorough consideration of sterility after the views of a most competent authority will not prove a very laborious task. It is earnestly to be desired that isolated passages will not be quoted, regardless of context, to bolster up eccentric gynæcological or political doctrines, or to satisfy the natural but idle curiosity of unscientific sections of the public. There is no social and political aspect of sterility that does not, to a very great extent, depend on the physical causes of barrenness; and the converse is equally true.

LEGAL MEDICINE. Part II. By CHAS. MEYMOTT TIDY, M.B. London: Smith, Elder, and Co. 1883.

THE first volume of Dr. TIDY's elaborate work on Legal Medicine has already been reviewed in our columns; and the volume—all gorgeous in scarlet—now before us forms but the second volume of an undertaking which threatens to be stupendous. This second volume contains the notes of one course of Dr. Tidy's lectures at the London Hospital, and yet treats of only a limited portion of forensic medicine, namely, sexual relationships, and various forms of death from asphyxia.

The amount of matter brought together is very great, is well arranged, and the teaching generally sound, with perhaps a little bias towards accepting too literally the questionable, and often exaggerated, statements of old writers and those who deal in exaggeration. But to the cautious reader, who knows how to make allowance for this, the novel cases and marvellous stories in which Dr. Tidy revels give the book an additional charm.

With the author's views on many legal points we are not altogether inclined to agree, and we think that his strong desire to see justice done sometimes leads him to enunciate questionable opinions. Thus, for instance, in treating of abortion, and the now well known legal principle that, when the only proof against a person (*e.g.*, an abortionist) charged with a criminal offence is the evidence of an accomplice (*e.g.*, the woman operated upon), it is the duty of the judge to warn the jury that it is unsafe to convict upon the evidence of an accomplice, uncorroborated, Dr. Tidy, in his anxiety to protect women, is anxious to make the evidence of the woman sufficient without corroboration by the evidence of others. Much as it is to be desired that the hideous, and, as we believe, increasing crime of criminal abortion, should be put a stop to, we deprecate any such change in the law as Dr. Tidy contemplates. Were the evidence of the woman alone sufficient to convict, medical men would not be safe from the attacks of designing women. These might go to an abortion-monger, and have an operation performed; then, immediately after, call in a medical man, who, in the event of an exposure, might easily be made the innocent victim of malice. The principle of the existing English law as to the evidence of accomplices is good, albeit the guilty too often escape through its instrumentality.

The limits of space at our disposal forbid a detailed criticism of a work replete with principles and details, and on the whole admirably carried out. The main defect of the volume is a want of due proportion in its parts. Thus, under abortion, five pages are devoted to a description of ecbolics, the greater number of them admittedly inoperative, and barely a page to the instruments used for the procuring of abortion.

NOTES ON BOOKS.

A Handy-Book on Window-Gardening. By H. C. STEWART, F.R.C.S. Fourth Edition. London: Barrett and Son. 1883.—This small treatise has been written to instruct those who know little or nothing of window-gardening, and of the means employed by florists in the culture of plants and flowers. It is cheap, easy of comprehension, and contains but few technical terms. It begins by giving particulars as to pots, boxes, glass cases, loam, peat, leaf-mould, charcoal, manures, light, sand, air, water, cleanliness, and worms; and, in the second part, affords information as to cuttings, slips, layers, pipings, parting of roots, pegging, seeds, potting, training, and tying. The third part contains practical notes for the cultivation of some seventy plants, arranged pretty closely in the order in which they flower, which is mentioned under the head of each, together with the means to be adopted for their propagation, and the kinds of soil and amount of moisture best suited to each. In Part iv the ferns fitted for window-gardening, and the cultivation of the more tender ones, and of lycopodiums, in Ward's glass cases, are discussed; and, in the last part, the chief evergreens which in winter may be made to fill the window-boxes, are shortly noticed. Any one desiring to render his or her windows gay and attractive, will find in these pages sufficient information to enable him to carry out this praiseworthy object with considerable success. That the merits of the publication have been to some extent appreciated, is evidenced by the fact that already, within three years of its first appearance, a fourth edition has been issued. The small price (threepence) at which it is published brings it within the reach of all, and the devotion of a small amount of attention to its pages should enable the denizens of the courts and alleys of our big towns to cultivate cheaply the plants best suited to their windows, the companionship and contemplation of which are calculated to beguile many a weary hour, and to humanise and soften some of the harsher traits of lives passed in big cities. Altogether, Mr. STEWART, who, as treasurer to the North Street Marylebone Flower Show Committee (an association which has for its object the promoting of shows of window plants and flowers amongst the poor), knows what is required in this matter to make window-gardening attractive, deserves credit for the trouble which he has taken to put into these pages just so much information as apparently is necessary to make the subject intelligible, whilst wisely avoiding whatever might be considered superfluous.

CONGENITAL FEMORAL HERNIA. Dr. Sabourin has recorded, in the *Progrès Médical* (January 26th), the case of a female child, born at seven months, and small but well developed, in whom the mother, a few days after birth, noticed a swelling in the right inguinal region. Six weeks later, when Dr. Sabourin was called in, the tumour had attained the size of a filbert; it was situated at the upper part of the right thigh, below Poupart's ligament, and on the inner side of the femoral artery. It disappeared on pressure with a distinct gurgling sensation, and reappeared when the child cried. After reduction, the borders of an opening in the fascia could be felt. The hernia was cured in less than three months by the pressure of a small pad.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 23rd, 1884.

MEDICAL LEGISLATION.

THE corporations are again preparing themselves for a last desperate struggle for their privileges. A meeting was held at the College of Surgeons in Ireland, on Friday, the 15th instant, where Dr. Kidd, the advocate of free trade in medicine, who said in 1882, "Let us give up the idea of protection.......Let the public learn that no licence is necessary to enable any man to practise medicine," stood up for the preservation of the privileges of his own college, "more especially the right of conferring a title to practise."

Seeing that the delegated representatives of the Irish College of Surgeons in the General Medical Council have more than once given in their adhesion to the principle of one conjoint examining board in each division of the kingdom; seeing that Dr. Robert McDonnell, an ex-president of the College and member, representing Ireland, on the Royal Commission, equally with Sir Wm. Jenner, approved and signed, without qualification of any kind, the Report of the Royal Commission recommending the establishment of such conjoint boards, it is somewhat late for the Irish College, under the influence of vague unfounded fears of pecuniary loss, now, at the eleventh hour, to oppose the Government Bill, based as it is on the Report of the Commission, and supported by the general body of the profession.

The whole proceeding recalls the old illustration of "the battle of the shops," described by the late Sir Dominic Corrigan. Unfortunately for the *prestige* of the College, the discussion mainly turned on the fear of loss to the exchequer of the College that would follow in the wake of the Bill; the interests of the public, and the interests of the medical profession, were apparently deemed unworthy of consideration.

This retrograde action was opposed by Dr. Jacob and Dr. Thornley Stoker. Dr. Jacob maintained that the Irish College would possibly be a gainer rather than a loser by the establishment of a conjoint examining board in each of the three divisions of the kingdom, under the General Medical Council as supreme controlling authority, inasmuch as the migration of candidates would thereby be prevented. He stated that, on analysing the lists of men qualified within the last year in the two Edinburgh colleges, he found that of the 277 examined, 35 were Scotchmen, 146 English, 61 Irish, and 51 foreigners (mostly Canadians). Mr. Edward Hamilton, when speaking against the Government Medical Bill, stated, "They knew that some of the corporations had failed in discharging their duties," but he proposed no remedy. Dr. Kidd replied at great length to Dr. Jacob, and threw doubt on "certain diplomas being trafficked in," and was actually bold enough to assert, if the report of his speech in the *Irish Times* be correct, that Dr. Jacob had obstructed the movement for conjoint examination in Ireland, notwithstanding that Dr. Jacob is unquestionably the unflinching and uncompromising advocate of compulsorily conjoined boards of examination in each division of the kingdom. In reference to the *plébiscite* of the profession taken by the British Medical Association in 1878, when 5,075 ayes were given for direct representation, and only 121 noes; and 4,910 ayes for the compulsory conjoint scheme, and 264 against it, Dr. Kidd said that "the men who joined in the *plébiscite* were men who wanted to protect themselves against quacks." Misstatements and insinuations such as these carry their own refutation with them. They would mar even a good cause, and they may, therefore, well be allowed to speak for themselves.

In proof of the present unsatisfactory professional examinations and mode of conferring licences, it is only necessary to refer to the minutes of evidence of the Select Committees of the House of Commons, to the evidence taken before the Royal Commission, and to the Report of the Royal Commission. In the coming legislation, the Royal College of Surgeons in Ireland will have its fair share of influence in the Divisional Board for Ireland, and its due weight in framing the conjoint examining board for admission to the *Medical Register;* but it will not retain its present power of conferring a title to practise, any more than the Royal College of Surgeons of England.

In further proof of the inequality of the examinations at present entitling to registration, the incomplete character of many of such examinations, and the remedy for them, we need only adduce the following excerpt from the minutes of the General Medical Council.

On June 26th, 1868, the Council appointed an Education Committee. Sir Robert Christison, Mr. Syme, surgeon to the Queen for Scotland, Professor Allen Thomson, of the University of Glasgow, and Dr. Andrew Wood, strongly represented the Scotch interests on the committee; Dr. Apjohn, the representative of the University of Dublin, Mr. Hargrave, and Dr. Aquilla Smith, sat for Ireland; while Dr. Acland, the present President of the Medical Council, with Mr. Cæsar Hawkins, Dr. Sharpey, and Dr. Parkes, represented England. In the report of this strong and representative committee, the inequality of the examinations was denounced in the following striking terms. "One of the great evils, at the present moment, is the inequality of the examinations for the licence. This inequality of the test of efficiency is the more unfortunate as every licence confers an equality in the right to practise everywhere. The easy examination of one licensing body tends to depress the standard of the examination in all the rest. Visitations of examinations, doubtless, partly remedy this state of things, but, to completely remove it, a bolder course is necessary. The time has now arrived when, leaving to the universities and corporations full liberty to deal as they please with their honorary distinctions and degrees, the Medical Council should endeavour to effect such combinations of the licensing bodies included in Schedule (A), as may form a conjoint examining board for each division of the kingdom, before which every person who desired a licence to practise should appear, and by which he should be examined on all subjects. Any higher degrees he may wish to take should come after, and should be optional." The plan is one which the Council has often approached, and has recommended in principle. We feel assured that the examinations for licence will never be made satisfactory without it, and, therefore, that it is for the public good to enforce it without delay.

ANTISEPTIC SURGERY IN MILITARY SERVICE.

THE meeting of the Military Medical Society at Woolwich, which took place on Friday, the 15th instant, at the invitation of Sir James Hanbury, the principal medical officer of the station, and, previously to holding this office, chief of the medical staff of the army during the campaign in Egypt, is a noticeable event. It is a rare occurrence to find some of the leading members of the profession in civil life joining with surgeons conspicuous in military practice, for the special purpose of discussing the best mode of applying a certain line of surgical treatment to the conditions of things which exist when troops are engaged in active service in the field.

On the occasion referred to above, the meeting took place for the purpose of discussing "the application of antiseptic surgery to field-service." The father of antiseptic surgery, specially so called—Sir Joseph Lister—was himself present at the gathering, as were also Sir William Mac Cormac, Mr. Stevenson, and a large number of other practitioners well known in civil life. Among the representatives of the military medical service were Sir James Hanbury, who occupied the chair; the Director-General of the Army Medical Department, Dr. Crawford; Professor Longmore of Netley; Deputy Surgeon-General Dr. Marston, who was sanitary officer of the army during the war in Egypt; Surgeon-Major Evatt. Surgeon-Major Godwin, A.M.D., in medical charge of Woolwich Arsenal, an establishment which contains some thousands of workmen engaged in various avocations that not unfrequently give rise to very grave wounds and injuries, had undertaken to open the discussion at the meeting. A large number of other medical officers engaged on duty in Woolwich garrison were also present.

The meeting took place in the mess-room of the large and handsome mess-buildings of the Army Medical Department at Woolwich. It is not necessary to refer at any length to the details of the discussion which took place, as we publish elsewhere a full report of the proceedings. There was a general agreement of opinion that the principles of antiseptic practice should be applied to the treatment of wounds and injuries on the field as far as practicable; and it was agreed that the treatment, to be effective, should be carried out from the earliest period each wound received attention. In time of war, every soldier is supplied with, and carries upon his person, the necessary materials for dressing one wound; these are technically known as the "first field-dressing;" so that, in case of being himself wounded, every man is sure to have at hand materials suitable for application to the wounded part. It does not appear that this "first field-dressing" was composed of antiseptic materials during the campaign in Egypt; it was described as having consisted of an ordinary calico roller-bandage and a piece of lint. The necessity for the first bandaging materials possessing antiseptic qualities has been fully recognised on the Continent for some years past; and a form of dressing for the purpose, designed by Professor Esmarch, of Kiel, in which all the materials composing it are impregnated with salicylic acid or chloride of zinc, is one with which most surgeons are familiar. Mr. Stevenson exhibited to the meeting a form of dressing, which, from experiments he had made, seemed to comprise all the requisite antiseptic qualities for protecting and keeping a wound pure until it could be systematically treated in the hospital to which the patient might be taken. Mr. Stevenson's plan, although appearing very simple by the side of spray-producers and other elaborate dressings that can be employed in civil practice, was evidently regarded by most of the military surgeons present as beyond the limits of practical applicability in the hurry and confusion that attend an action with an enemy. Nothing, it was alleged, can be employed that involved even washing of a wound; the dressing must be such as can be applied by a wounded soldier's comrade as well as by a surgeon or trained attendant. It must be placed where it can be easily and quickly got at; the situation where it is to be found must be universally known; so that, having to be carried in a place made for it in some part of the soldier's uniform, the military authorities have to be consulted on its size and other points; it must be of very cheap materials, in consideration of the vast numbers required; and other considerations of a corresponding nature were also mentioned as having to be taken into account in the arrangement of the soldier's field-dressing, in addition to its surgical fitness. One of the advantages of civil and military practitioners meeting together, as on this occasion, is that it was made manifest in the course of the discussion that, in applying to military practice treatment easy enough in civil hospitals, many obstructions have to be taken into account, that would not be likely to occur to any surgeons who had not had practical experience of the state of things usually met with in the circumstances of warfare, while the attention of all was directed to the best means of meeting and overcoming difficulties of the kind referred to. The desirability of doing little else than affording antiseptic protection to the wounded patients in the field of action itself, excepting in any cases where there might exist very urgent need of surgical interference, as when active bleeding was taking place, and only making a full exploration of each wound, and applying definite treatment after the arrival of the patients at a regular field-hospital was generally admitted; and, indeed, the discussion chiefly turned on the simplest and most effective means of affording this protection, consistent with military circumstances. The time of the meeting was so fully occupied in considering the questions to which this subject gave rise, that several of the other topics which were placed on the agenda paper for discussion were left unnoticed. It is to be hoped that these will be considered at future meetings of the Society. Sir J. Hanbury has inaugurated a valuable means of improvement in military medical practice, and there seems to be every reason for hoping that the Woolwich Army Medical Society, which has just started into existence, will become an established institution of great practical advantage, not merely to army surgeons, but, indirectly, to the army at large.

DR. KOCH'S FIFTH CHOLERA REPORT.

The Berlin newspapers of the 14th instant republish the text of the fifth report of the German cholera commission. It is written by Dr. Robert Koch, and is dated Calcutta, January 7th. The report begins by stating that the members of the commission have received every assistance from the authorities in Calcutta, and that opportunities have been plentiful for the prosecution of their researches. It is mentioned that they have been able to perform nine *post mortem* examinations of persons who had died of cholera, and obtained materials for working with from eight other cases.

The results of these examinations went to show that the particular bacillus which was fixed upon by this commission in Egypt as being peculiar to cholera, has also been met with in all the cholera cases in India. And, further, the commission is now of opinion that whereas it was not possible satisfactorily to distinguish this bacillus from other bacilli found in the intestines by mere examination of the tissues, they have, by resorting to artificial cultivations, now succeeded in satisfying themselves that the bacillus in question possesses distinctive characters. Setting aside altogether the fact that at present mycologists of the first rank are hopelessly divided as to whether most bacilli are not genetically related to one another, and that, at least, many of them can be made to acquire totally different morphological characters, according to the nature, temperature, etc., of the medium in which they are cultivated, we confess that reasoning of this kind is not quite clear to us.

In the necropsies which were made, of persons who had died of other diseases, pneumonia, dysentery, phthisis, etc., these bacilli could not be found. As will be remembered, the French Commission in Egypt were not able to recognise a distinctive bacillus in the intestinal tissues of persons who had died of cholera—several forms being present in one and the same set of preparations—though they believed they could identify the particular kind fixed upon by Dr. Koch, but they stated it was absent in some of even the graver forms of the disease which had come before them. We understand that the slides forwarded to the President of the Royal Medical and Chirurgical Society by M. Straus, the chief of the French Commission, and placed before the meeting of that Society a few evenings ago, fully bore out the description given of them, and that the bacilli imbedded in the intestinal walls were by no means of the same size and form.

Hitherto, the attempts which have been made by both commissions to communicate the disease to animals have totally failed, though Dr. Koch, in the present report, states that he had recently instituted a fresh set of experiments, which "gave reason to hope for further results." With this remark, so far as reference to the bacilli goes, the report somewhat disappointingly stops, no details whatever being given as to the nature of the observations which gave rise to the hope for further results, though doubtless the fullest particulars will be furnished, should subsequent inquiry warrant a definite statement being made. A recent Reuter's telegram, however, brings us a stage further on in the progress of the researches, as it announces that, according to the *Calcutta Englishman*, the Commission had found bacilli, of precisely like character to those found in cholera, in the water of a pond in the locality of an affected quarter of the town. Too much stress is not to be placed on a mere newspaper-report of this kind. Indeed, it seems to us that it would be hardly likely that a Commission of this character would venture to assert unreservedly that organisms of such a minute size were found in one dirty pond wholly different from those found in another pond of a like appearance in the very next village: that the one kind were harmless, and the others most pernicious. Sweeping statements of this kind may be made by novices, but hardly by experts. Moreover, it would be necessary to examine the pond some time after the cessation of the epidemic, so as to ascertain whether the organisms also had disappeared. *Festina lente.*

Dr. Koch brings his report to a close with a somewhat sharp criticism of the suggestion which was made by the French Cholera Commission in Egypt, that the peculiar micro-organism of cholera was to be found in the blood rather than in the intestine. He mentions that he gathered this information from the medical journals; and, as it might consequently be inferred that the German Commission was on the wrong track, he proceeds to point out that probably the organisms referred to by the French observers were certain well known minute plasmic bodies—*Blutplätchen*—which were accurately figured in a *Report of Microscopical and Physiological Researches* in connection with cholera, by Lewis and Cunningham, so far back as 1872, and which were therein shown to be by no means confined to the blood in cholera. "Seeing, therefore," Dr. Koch writes, "that the most careful examinations of cholera-blood have failed to demonstrate the existence of any other bodies which simulate bacteria, and seeing that the description of these, given by the French Commission, corresponds in every particular with the *Blutplätchen* referred to, I cannot but infer that this Commission has fallen into the same error as other observers have done, and looked upon these particles as specific organisms." A reference to our article on the report of the French Commission will show that we ourselves ventured to speak of these so-called cholera blood-organisms in very similar terms. At the same time, it must be borne in mind that, in pointing to the blood as a more promising field for research, the French Commission have considerable reason on their side; seeing that, undoubtedly, the blood does undergo very remarkable changes in cholera, whereas it is known that the intestine, in some of the rapidly fatal forms of cholera, presents but little, if any, serious change. Moreover, the fact that hitherto all the attempts which have been made to detect the bacilli in any other tissue than the mucous membrane of the intestine, a membrane which manifestly is often the seat of necrotic changes before the occurrence of general death, also furnishes, *primâ facie*, some support to the French view, that the cause of the disease is to be sought for elsewhere.

THE EXISTING LAW AS TO UNSANITARY AREAS.

PUBLIC attention is at present a good deal directed to the question of unsanitary dwellings, especially in the metropolis, and local authorities are frequently blamed for not having cured the defects which undoubtedly exist. The *Times* mentioned recently that the Local Government Board were in communication with the vestry of St. George's, Southwark, in reference to numerous unhealthy dwellings within their district, of which one block, called Fisher's Buildings, may be taken as a sample. They are described as "a row of seven small houses in a court, erected in the year 1821. They face northwards, and have small courtyards in front of them, which, with the footway, are badly paved with bricks. Each house consists of a sitting-room below and a bedroom above. They have no back openings. They are all very dirty and much dilapidated, and the walls are damp from the foundations, due probably, in great part, to the inferior and absorbent quality of the bricks used in the construction. No amount of repairs will render these houses wholesome habitations." The local authority allege that they find a difficulty in obtaining legal power to compel the owners to repair or pull down these houses, and that they could only get rid of the nuisance by buying the ground. The case is a typical one, and worth examining. The number of houses being small, they cannot be dealt with under the Artisans' and Labourers' Dwellings Improvement Acts, 1875-1882, better known as Cross's Acts; and the local authority must therefore proceed under Torrens' Acts, or under the general laws relating to public health, the provisions of which do not seem to be applicable to this case. As "no repairs will render these houses wholesome habitations," they are buildings of which the officer of health of the vestry ought, under section 6 of 31 and 32 Vic., c. 130, to report that they ought to be demolished. If this were done, the vestry might require the owner to take down and remove the premises; and, if he failed to do so within three months, they would themselves be bound to take down and remove them (s. 20 of the same Act). They would be entitled to sell the materials, and to deduct from the price the expenses incident to the taking down and removal, and only be bound to pay the balance, if any, to the owner. If the price be not sufficient to defray these expenses, the Act of 1879, section 9, gives the vestry power to recover the balance from the owner. Section 5 of that Act, however, empowers the owner, within three months after receiving a notice to demolish his premises, to require the vestry to purchase them; and this is a power which would very possibly be exercised. If it were, the vestry would be bound to pay the "fair market value of such premises, and of the several interests in such premises, due regard being had to the nature and present condition of the property, and the probable duration of the buildings in their existing state, and to the state of repair thereof, without any additional allowances in respect of compulsory purchase." They would also have to pay costs of ascertaining this value by arbitration, and those costs might possibly be heavy. If the arbitrator attended properly to the statutory provisions which are laid down for his guidance, the price awarded for houses, to which the description given above of Fisher's Buildings is applicable, ought not to be large; but it is a common ground of complaint that arbitrators are apt to give compensation far in excess of the price at which dilapidated houses could be sold if offered in the market. The decisions of arbitrators, moreover, are practically final; and the vestry are thus justified in considering that they may not impossibly be obliged to pay a large price if they order Fisher's Buildings to be pulled down. They also have to consider that possibly most, if not all, of the money spent in effecting the required improvements would be spent irrevocably. Judging from the description of the site, it might be difficult to erect new buildings there which would not be unhealthy, because of being too much shut in, if for no other reason. The vestry must not themselves erect obstructive or unhealthy buildings, and might therefore have to leave the yard wholly, or in great part, unbuilt on and unproductive. The result of these objections has been, in this case, as in many others, that no report has been made against the premises, and that the vestry have done nothing, and have shut their eyes to the existence of a state of things which is reported to the Local Government Board as being intolerable.

This is not a case where the vestry have refused to exercise their power. There is a local authority in the metropolis, namely the Metropolitan Board of Works, which has power, under the Acts of 1879 and 1882 (42 and 43 Vic., c. 64, s. 12, and 45 and 46 Vic., c. 54, s. 11) to interfere in cases where the vestries decline to act, either of its own accord, or on the complaint of the board of guardians of the union or parish in which the premises are situated, or of any owner of property in their neighbourhood. But this power, like that of the vestry, can only be exercised upon a report of the medical officer of health of the district that the premises are unhealthy, and such a report seems, in the present case, never to have been made. The report which has been made recently to the Local Government Board, seems to show that it ought to have been made, and that the vestry ought to have acted long ago. To whom, if at all, blame ought to attach, we cannot at present say; but it looks as if Fisher's Buildings were premises which would not exist in their present condition, if the powers provided by law for the improvement of unhealthy dwellings had been enforced, as they might have been, if it were not the interest of the representatives of the ratepayers to shut their eyes and close their pockets, while nuisances continue unabated.

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IT is reported that Sir Charles Dilke will be the chairman of the Royal Commission on the Dwellings of the Poor, which will shortly be appointed.

THE Victoria Hospital at Suez will be fitted up for sick soldiers. Admiral Hewett will make arrangements for a ship to be at Suakim to receive the sick, and another ship will ply to Suez.

IN accordance with instructions from the Horse Guards, Surgeon R. C. K. Laffan, A.M.D., a warrant officer, four staff-sergeants, five sergeants, and forty privates of the Army Hospital Corps, three sergeants of the 2nd Battalion Shropshire L.I., and the 3rd Battalion Rifle Brigade, have been ordered to Port Said.

AT the meeting of the Royal Medical and Chirurgical Society, on Tuesday, February 12th, there was an exhibition of the first specimens of the so-called cholera-organisms that have been shown in England. They were sent by Dr. Straus, of the French scientific mission for the investigation of cholera in Egypt, and attracted much attention and discussion. The majority were, in technical skill of preparation, very markedly inferior to specimens of bacilli from leprosy, anthrax, and tuberculosis, which Dr. Thin and Dr. Heneage Gibbes showed at the same time. Egypt, however, it should be remembered, may be a much less convenient place for mounting microscopic preparations than a London laboratory. Those taken from rice-water stools presented organisms of many familiar shapes, and much *débris.* The sections from the ileum were too thick to be lucid. It would have shown undue predisposition to a belief that any micro-organisms found in any disease are its specific and true causes if the specimens had been considered to prove the existence of a definite cholera-organism; and Dr. Straus was moderate in his claims in their behalf. They served, however, to lead up to the important remark that the presence and nature of the organisms which occur in common intestinal catarrh is a subject which needs thorough examination before any judgment can be pronounced on the so-called cholera-organisms.

INTERNATIONAL PRIZE-ESSAY ON CRIMINAL ANTHROPOLOGY.

La Rivista di Discipline Carcerarie offers a prize of 2,000 lire (£80) for the best essay "to exhibit the progress made in the present century (in Italy and elsewhere) in the study of criminal anthropology, and the theories upheld by the most competent writers; to examine the facts and statistical figures adduced in support of such theories, and to compare them or to combat them with other facts and with other statistics." The prize is open to all comers. The essays must be written either in French or in Italian, and must be sent to the *Direzione della Rivista di Discipline Carcerarie* not later than December 31st, 1884.

BABY-FARMING.

AT the inquest on the bodies of the two children at Milton who were removed from the house of Emily Green, Dr. Waring stated that in his opinion both the deceased children were starved to death. They had been fearfully neglected, as had the other children found in the house, one of whom was now in a dangerous state in the Infirmary. The foreman of the jury said that they were agreed to bring in at once a verdict of "Wilful Murder," against Emily Green. The coroner said that the evidence disclosed a shocking state of things, but he should adjourn the inquest to give time for the parents of the other children to come forward.

A ROYAL ANATOMIST.

PRINCE FERDINAND of Bavaria, brother-in-law of the Duke of Genoa, having published a work with the title "The Anatomy of the Tongue and Studies in Comparative Anatomy," has received from the University of Munich the honorary degree of Doctor of Medicine.

PURIFICATION OF THE AIR OF ROOMS.

AT the meeting at the Parkes Museum of Hygiene, at 8 P.M. on Monday next, February 28th, Dr. B. W. Richardson, F.R.S., will take the chair, and the subject of the Purification of the Air in Living Rooms and Sick Wards will be discussed. Dr. H. C. Bartlett, F.C.S., will treat the subject from a general point of view, and Dr. Richard Neale will explain the theory and action of the chemical lung invented by him.

OPHTHALMIC LECTURES.

A SERIES of lectures, to which members of the profession will be admitted on presentation of their cards, will be delivered this session at the Royal London Ophthalmic Hospital, Moorfields. The dates and subjects are as follows: on February 28th, Mr. Tweedy, on the General Pathology of Inflammations of the Eye; on March 6th, Mr. Adams, on Ocular Muscles; on March 20th, Mr. Couper, on some Points in the Treatment of Cataract; on March 27th, Mr. Hulke, will give an historical account of Different Methods of Operating for Cataract. The lectures will commence at 8.30 P.M.

A LOST MEDICAL WORK.

AT the annual meeting of the Obstetrical Society of London, Dr. Aveling mentioned that the Society had some time since asked Dr. Fordyce Barker, of New York, to have made for them a transcript of Woolveridge's *Speculum Matricis.* This book, published in Dublin in 1670, is the earliest original work on midwifery in the English language, and the only copy known to exist was in the possession of Dr. Fordyce Barker; who, at the request of the Society, employed a man to copy it. This person absconded with the volume, and died in Europe. Thus, it is feared, the only copy of this work has been irretrievably lost. It is asked that if any of our readers should meet with or hear of a copy of this rare book, they will inform the Honorary Librarian of the Obstetrical Society of London.

ANTIVACCINATION AGITATION.

THE opponents of the Vaccination Act have lately been busy in the West of England. At a meeting of the Bedminster Board of Guardians held on January 22nd, it was decided, by a majority of eight to six, not to prosecute a Mr. Wise, who happens to be a member of the board, for refusing to have his child vaccinated. The Bedminster Union is a large and important one, containing as it does 40,000 of the population of Bristol. It is very much to be regretted that in a district where, we are informed, vaccination has hitherto gone on quietly and been well done, the guardians should be so easily led, by the specious arguments of those who object to vaccination, to neglect to carry out the usual provisions of the law in the case of those who decline to have their children vaccinated. A few days later (January 31st), Mr. Enoch Robinson, the well known opponent of vaccination, delivered an address in the Guildhall at Bath, entitled "One Hundred Years' Experience of Disease as a Protective Remedy in Inoculation, Vaccination, and Pasteurism." His address did not contain any fresh facts or startling arguments against vaccination. Improved sanitation had been the cause, he said, of the diminished mortality from small-pox, vaccination being of no account. The meeting, which was presided over by Lord Clifton, was clearly in sympathy with Mr. Robinson, and the noble chairman doubtless expressed the sense and reflected the intelligence of the audience when he remarked that "children ought to be left in the state in which God had created them."

DEATH FROM ETHER.

A **DEATH** occurred recently at the Gloucester Infirmary, of which the following were the particulars furnished at the inquest. The deceased was a labourer, aged 50, and, when admitted to the infirmary, he was suffering from a cancerous growth in the gums and throat. An operation had to be performed, and it was decided to remove beforehand some of his teeth which were sources of irritation. He was accordingly placed under the influence of ether, and one tooth had been removed when it was noticed that his breathing was bad, and pulse failing. Artificial respiration was attempted, but proved of no avail, for the patient died in about a quarter of an hour from the first exhibition of the ether. The patient had been weak from the exhausting nature of his malady, but there was no sign of disease in the heart or lungs to contraindicate the use of ether. He had been an habitual smoker, and as a soldier had served in the Crimea and in India. The saliva which he was continually swallowing was of a poisonous nature. When he was found to be in a dangerous condition everything appears to have been done to restore animation, but the efforts unfortunately proved fruitless.

REMOVAL OF A PORTION OF THE LUNG.

DR. BONFIGLI sends to the *Gazzetta degli Ospitali* a curious and interesting case that he has extracted from an old medical author, Nicholas Tulpius, of Amsterdam. A piece of lung about three fingers' breadth protruded through a large wound under the left nipple. The wound was altogether neglected for at least two days. The protruded portion of the organ then being found dead, was ligatured, and was cut off with scissors. It weighed about three ounces. The wound healed within a fortnight, with the viscus united to it, the latter point being verified six years later by section of the parts. Celsus and Hippocrates are quoted in support of the treatment adopted. Touching this case, it is of interest to remark that Dr. Biondi, from his experiments on animals, concludes that the removal of a lobe or the whole of a lung is, in a great number of animals, well borne. The operation in the human subject, however, performed three times lately with a view to cure (twice by Ruggi, of Bologna; once by Block), has as yet had only a fatal issue.

THE ROYAL COLLEGE OF SURGEONS.

PROFESSOR W. H. FLOWER is about to deliver, at the Royal College of Surgeons, nine lectures on "The Principal Types of the Human Species," on Mondays, Wednesdays, and Fridays, at 4 o'clock; commencing on Monday, February 25th, and concluding Friday, March 14th. The course will include, Introductory Observations on Anthropology and Ethnology; Physical or Zoological Anthropology; the Nature and Extent of the Differences between the Permanent Types or Races of Men, illustrated by Comparison between the European and the Tasmanian Native; Methods of Estimating the Differential Characters of the Various Modifications of the Human Species, Elements of Craniometry; Characteristics of the Black or Frizzly Haired Races in their Typical and Modified Forms; Characteristics of the Yellow, or so-called Mongolian Races; Characteristics of the White or so-called Caucasian Races; Races not readily grouped under either of the above Principal Types; Classification of the Races of the Human Specimens. These lectures are, we regret to say, probably the last that will be delivered in the theatre of the College by the present conservator of the Museum.

THE DISCUSSION ON COLD APPLICATIONS IN ENTERIC FEVER.

THE paper in which Dr. Sidney Coupland introduced the subject of the application of cold in enteric fever at the discussion now in progress before the Medical Society of London, was one of no ordinary magnitude or importance; it could in reality, with all its appendices, tables, and charts, rank rather as a monograph, and no doubt it will shortly see the light in some permanent form. Meanwhile, we print an extended abstract which brings into prominence all the main points raised. Dr. Coupland, while not altogether accepting the percentage obtained by Brand, who, by the collation of some sixteen thousand cases arrived at the conclusion that the mortality, by the systematic use of the cold bath, had been reduced from 21.7 per cent. to 7.4 per cent. or about two-thirds, evidently leaned to the opinion that the application of cold did diminish the mortality (his own percentage is 7.8), but that to obtain the full desired effect it was necessary to begin the treatment before the end of the second week. Brand has maintained that cold applied early and systematically not only lowers the temperature, thus diminishing the injurious effects of the pyrexia; but actually prevents the development of the characteristic intestinal lesions. We hope the discussion may do something towards proving or disproving this bold doctrine; Dr. Coupland brought forward some evidence in its favour, but earned the commendation of Dr. Bristowe, who followed him with a clever criticism of the statistical method, by the caution with which he dealt with this part of the subject. We shall watch the continuance of the debate with interest.

POISONOUS WALL-PAPERS.

THE National Health Society, about a year since, appointed a subcommittee to consider the injuries arising to health from the use of arsenical and other poisonous pigments in the tinting of wall-papers and textile fabrics, as well as for other industrial and decorative purposes. By desire of this subcommittee Mr. Ernest Hart, the chairman, wrote to Earl Granville, asking that the representatives of the Foreign Office abroad in Europe and America should be instructed to forward reports concerning foreign legislation or municipal enactment having for its object limitations, restrictions, or safeguards in the manufacture, use, or sale of arsenical and other poisonous colours in the tinting of wall-papers, textile fabrics, and other industrial decorative purposes. Earl Granville issued a circular to our representatives, and their replies, which have been revised by Dr. Edward F. Willoughby, secretary to the Poisonous Pigments Committee of the National Health Society, have now been issued in a Blue-book containing returns from more than twenty States. Abstracts of these appeared in our pages on June 30th, with the exception of the Austrian and Russian, the former of which was added on November 24th of last year. The German Imperial law, which supersedes all local legislation, is by far the most complete, and has served as a basis for those of Denmark and other countries; the Austrian laws are very satisfactory, and probably would be more applicable to the circumstances of our own country. In accordance with a suggestion of the Board of Trade, further special inquiries have been made by her Majesty's representatives abroad on the subject of the Customs regulations affecting the importation of textile fabrics and wall-papers, and the result of such inquiries has been to show that no special Customs regulations or restrictions exist having for their object the detection of poisonous substances employed in colouring these articles imported into the undermentioned countries: Baden, Bavaria, Belgium, Denmark, France, Germany, Greece, Netherlands, Portugal, Roumania, Saxony, Servia, Spain, Switzerland, United States, and Würtemberg. In Austria there are certain Customs restrictions which will probably be made more stringent. In Italy the new Customs tariff, approved by royal decree of August 9th, 1883, enacts that goods which the competent authorities shall decide to be dangerous to the public health shall be destroyed or sent back at the cost of the importer. In Sweden and Russia elaborate instructions are in force.

RAPID SEWAGE-PURIFICATION.

AN important case, under the Thames Conservancy Acts, was heard on the 11th instant, at the Uxbridge Petty Sessions. The Uxbridge Local Board were summoned by the Thames Conservancy Board for having on two occasions passed into the River Colne, a tributary of the Thames, injurious or offensive matter, which was likely to enter the Thames at Staines, about four miles above the intake of a water-company. From the statements made for the prosecution, the treatment of the Uxbridge sewage is a matter of charming simplicity. Surface-scum is caught by a board, and the sewage is then passed through two upright screens formed of boards, six feet apart, with holes in them an inch in diameter. Fine vegetable charcoal is floated between the screens. The affluent, examined by Mr. Wigner, chemist to the Conservancy Board, was asserted by him to be unfit to be passed into the Colne, and would be likely to reach the Thames, seven and a quarter miles distant. His evidence was confirmed by Dr. Stevenson, who found three hundred and fifty-six grains of solids per gallon in suspension, of which ninety-nine were organic matter. For the defence, Dr. Tidy was called, and deposed that the polluting matter was entirely destroyed after a flow of half a mile. The summons was dismissed, with heavy costs. It is to be hoped, nevertheless, that the Thames Conservancy Board will not be deterred by this case from endeavouring to protect the interests of the water-drinkers of the Thames Valley and the metropolis.

PERSIA AS A HEALTH-RESORT.

THE United States Consul at Teheran, Persia, has recently sent to Washington an interesting account of the climate of Persia. He says that it is generally conducive to a high average of health. The low northern districts bordering on the Caspian Sea are the sites of malaria and malarial fevers, by which, however, the natives are scarcely affected; and the neighbourhood of the Persian Gulf in the south is intensely hot and relaxing. Otherwise the kingdom generally is salubrious. It consists of an immense plateau, elevated an average of 4,000 feet above the sea, and intersected by numerous lofty ranges, soaring sometimes to 16,000 feet above the sea-level. Eternal snow exists on their summits. The plains are covered with verdure, and watered with streams from the mountains. The winter is short, but characterised by high winds, and in many of the northern parts by violent snowstorms. The spring and autumn are mild and delightful. The summer is hot, but the nights are tempered by cool breezes. By August 20th, the cooler weather of autumn commences. At Teheran, during last summer, the thermometer ranged from 90° to 110° Fahr., in the shade, but the air was always dry. In a cluster of villages, nine miles from the city, and 1,300 feet higher, at the foot of the Shiniran mountains the mercury ranged from 75° to 90° Fahr. in the shade at midday, rarely going above 85°, and falling to 70° at sunset. After becoming acclimatised by the assistance of quinine and the exercise of common sense in general habits, Europeans find the climate healthful and agreeable. Phthisis is extremely rare among the native population. The greatest mortality is among young children, resulting from uncleanliness and carelessness in diet. Venereal diseases are widely spread, and tend to perpetuate chronic and hereditary disease, especially affections of the eye. Notwithstanding this, however, the people are handsome, finely formed, and capable of great endurance. With more regard to sanitary precautions, Persia might be regarded as one of the healthiest countries on the globe. With the exception of the provinces above mentioned, it offers no dangers to the health of Europeans who take ordinary care of themselves. It can be especially recommended to those afflicted with pulmonary complaints, provided they do not delay going until the overland journey is too severe for their strength, a precaution too often disregarded by invalids as well as by their medical advisers.

POLLUTION OF WELLS.

A MOST important decision upon a point of law relating to the pollution of wells was given on the 14th instant by Mr. Justice Pearson, in the case of Ballard *v.* Tomlinson, and one which must, as we think, eventually lead to an alteration in the law. The action was brought by the plaintiff, a brewer, to restrain the defendant from permitting a well on his premises being used in such a manner as to pollute the water passing into the plaintiff's well, and for damages sustained by reason of the water having been polluted. The plaintiff had a deep artesian well on his premises, which yielded a pure water; and the defendant had a similar well on his premises, about ninety yards off. Into this the defendant led a drain from a water-closet; and the polluted water in the defendant's well found its way into that of the plaintiff, so that he was unable to use it. Mr. Justice Pearson, in giving judgment, said it had already been decided that any person might, on his own property, so deal with the water which he found there as to divert it from his neighbour's property, and so deprive his neighbour of every drop of water coming from the same source. His lordship had some difficulty in seeing why, if a person had liberty to take away the whole of the water and deprive his neighbour of it, he should not also be at liberty to alter the quality of the water. In these circumstances, he was of opinion that the plaintiff had no cause of action against the defendant in point of law. Then it was alleged that, if the two wells were left alone, the water would not flow from one well into the other, because they were both at the same depth, and therefore on the same level; and the plaintiff was himself to blame for inserting a pump into the well by which the water was drawn from one well into the other. Now, this was derived from a large stratum in the chalk, and it was taken and used subject to everything which might occur in the district to pollute it, and each man having a well of this depth might complain of every other well within a certain district, which would cause very great inconvenience. He was of opinion that the plaintiff was not entitled to any relief, and the action must be dismissed with costs.

INFANT-MORTALITY IN THE SLUMS.

ONE of the points to which the Royal Commission on the Homes of the Poor may profitably direct their attention, is the terrible waste of infant life that is constantly going on in the slums of our great towns, through the ignorance, vice, or degraded habits of parents. It may be hoped that the following occurrence, reported by Mr. Harris, the health-officer of Sunderland, is phenomenal; but it throws a lurid light on the conditions of existence amongst the poor. Speaking of the alarmingly high death-rate registered amongst infants in Sunderland, Mr. Harris states that in one house that he visited, the parents were inebriated at 10 A.M., while their child lay dead in the room. There were several other persons with them, one being a woman living in the same house; she, too, was drunk. A fortnight later he was again in the same house, inquiring the cause of another infant's death from diarrhœa, and he discovered that it was the child of the very woman whom he had previously seen in a state of intoxication. London may be horrible enough, but it is evident that the need for improvement is as great elsewhere as it is in our own overgrown metropolis.

JERRY-BUILDERS AND BUILDING BY-LAWS.

SIR CHARLES DILKE's reply to the question which Sir Richard Cross asked on the 14th instant, may serve to dispel the notion, which has apparently very general credence, that the suburbs of London outside the technical limits of the metropolis are of necessity powerless in the hands of the jerry-builder. It must be confessed that a walk through any of the districts favoured by this worthy's attentions does not serve to dispel the illusion; but there are in the background powers which, if they could only be exercised with sufficient promptitude, would very effectually pare his claws. The Select Committee on Artisans' and Labourers' Dwellings recommended that many of the sanitary provisions of the Metropolitan Building Acts should be at once extended to the suburbs, under the control of extra-metropolitan sanitary authorities. What they probably intended to convey was that there should be some standing building-law extant, subjecting the speculative builder to smart penalties whenever he dared to infringe its provisions. There can be no doubt that this is urgently wanted. The history of the recent mushroom-growths of houses about our large towns is mostly as follows. As the town expands, a demand arises for building-sites on areas which, though practically part of the borough, are technically outside the municipal boundary. The jerry-builder, free from the restrictions which the borough by-laws impose upon him, runs up, before the extra-municipal authority is well aware of his intentions, row after row of defectively built houses, which will be a standing source of sanitary mischief in the future. That this is no fancy picture, report after report can be produced to testify. Part of the evil arises from the reluctance of the Local Government Board to grant urban powers to rural authorities. It is not easy to see why there should be one law for the town and another for the country; and this anomaly has been often pressed upon the Local Government Board. A "rural authority" is not, under the present law, competent to make building by-laws, unless it have been clothed, by a formal order of the Local Government Board, with the necessary "urban powers." Even supposing a rural authority to be impressed with the necessity of curbing the fancy of the jerry-builder in an area which, as contiguous to the borough, it has come to regard as outside its sympathies, the formalities of applying for and obtaining urban powers, and, when obtained, of framing and getting sanctioned by-laws regulating new buildings, absorb, at the best, some months of time. Meanwhile, the houses that are the immediate cause of the local authority's activity and concern have been built; and, as the by-laws cannot be made retrospective, the evil remains unremedied during the lifetime of the houses, unless they can be condemned as nuisances, or as uninhabitable. It is, no doubt, natural that Sir Charles Dilke should dwell upon the merits of the model by-laws that his department has prepared, and upon their superiority over the Metropolitan Building Acts, in which that department had no hand. If, however, he would really do good, let him consolidate all that is worthy of reproduction in both, and make one Building Act of universal application, which shall protect town and country alike, which can be enforced at once and always, and which will put an end to the now constantly recurring examples of the futility of shutting the stable-door when the steed has been stolen.

THE RESIDENT LIBRARIAN OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE Council of the Royal Medical and Chirurgical Society have appointed Mr. James B. Bailey Resident Librarian, in succession to the late Mr. Wheatley. Mr. Bailey, who has been for the last sixteen years Sublibrarian of the Radcliffe Library, Oxford, has had considerable experience in cataloguing, and is the author of several essays on the theory and practice of indexing.

ARTIFICIAL VACCINE LYMPH.

M. QUIST, of Helsingfors, has recently made some very interesting experiments with vaccine lymph, and has come to the conclusion that the micrococcus to which the fluid owes its activity, can be made to multiply at will without losing its power. He placed a fragment of pustule in a liquid prepared by mixing blood-serum with glycerine, and adding a small quantity of carbonate of potash (1 to 900). The fluid was kept under a glass cover at the temperature of the room. After a few days, it contained numerous micrococci, and could be used with success for inoculations; it did not lose its activity after being kept for three weeks in a sealed tube. Revaccination with fresh lymph gave no result in a child previously inoculated with artificial lymph.

FOOTBALL CASUALTIES.

THE Faculty of Harvard University has forbidden its students to play football, until the rules have been modified so as to diminish the at present large number of injuries received in nearly every public match. The *New York Medical Record* states that the football-eleven of a leading college set out for its last contest with eight substitutes and a surgeon; and that the accounts in the public press show that few public games occur without two or more persons being laid up for a time at least. It is the adoption, as we understand, of the Rugby rules which has led to such serious consequences in the United States. The game, we are told, as formerly played there, was one of the most invigorating and manly of sports, and one in which almost anyone could, to some extent, indulge. Of the very great danger which attaches to the Rugby game, we have often had sad proof. Though the exact cause of death, in the young man who died last month at Bath, was not ascertained by *post mortem* examination, and has given rise to no little discussion in Bath and Bristol, yet there can be little doubt that death was due to hæmorrhage taking place gradually into the arachnoid. It was given in evidence at the inquest that the deceased "collared" one of the opposing team, and, as they were running downhill, both fell heavily; the deceased got up and moved away to a neighbouring house; soon after reaching the house he complained of his head, sank against the wall, and speedily became unconscious. Two hours after the accident happened, we are informed that he was quite comatose, with stertorous breathing, squinting, and unequal pupils. He survived some time, but died without regaining consciousness. The jury returned a verdict of "Death from natural causes;" but we may perhaps be allowed to observe that the symptoms may have been due, not to rupture of an artery by strain, but to fracture of the skull and rupture of the middle meningeal artery. They agree very closely with the symptoms described by Mr. Erichsen as produced by that accident.

THE LATE DR. HILTON FAGGE.

WE are glad to hear that the movement on foot to raise a memorial to the late Dr. Hilton Fagge is receiving hearty support, the sum of nearly £800 having been already subscribed. It is not yet determined what form the memorial will take, but, from the letter addressed to past Guy's students and others, we understand that it is intended to devote the surplus of what is subscribed to the education of his children. While all Guy's men must wish that the memory of this distinguished physician may be perpetuated at the hospital where he did so much good work, both as an original investigator and as a teacher, it is to be hoped that the contributions will be so numerous, that a considerable sum may be left available for this latter very worthy object. The committee includes, besides members of the staff, representatives from the students, and numerous old Guy's men. The treasurer is Dr. Wilks, 72, Grosvenor Street, W.

THE GOVERNMENT AND COMPULSORY VACCINATION.

WE have very little hesitation in saying that we absolutely disbelieve the rumour which has been recently industriously circulated, that the present Government will give their support to a resolution to be moved in the House of Commons, in favour of the repeal of the Compulsory Clauses of the Vaccination Acts. Such a rumour, indeed, could have but one of two sources. It must have either emanated from someone unfriendly to Mr. Gladstone and his colleagues, or from some member of the society which endeavours to discredit vaccination, and which would not be unwilling to cheer the drooping spirits of their associates by encouraging them to look upon such a decision of the Cabinet as within the bounds of possibility. It is only necessary to recollect that as recently as last year, in a full house of over 300 members, but sixteen were found to be in favour of Mr. P. A. Taylor's motion, condemnatory of compulsion, and that the name of not a single member of the Government was to be found among the minority. The Government may be prepared to support the abolition of cumulative penalties, it is true; whether wisely or not, we do not propose at this time to discuss; but such intention is not caused by any sympathy for offenders —of this there is no doubt whatever—but is simply due to the desire to remove a cause of irritation which, if it does not succeed in procuring the vaccination of children, may act perniciously in giving opportunity for a continuance of outcry against vaccination.

WESTON'S WALK.

FROM walking in the Cutlers' Hall, at Sheffield, in a limited and enclosed space, Weston, on Wednesday week, was drowsy and late in starting on his daily round. Though he did not set out till 6.45 A.M., he was so sleepy that, at the end of the fourth mile, he had to rest for an hour and a half. No more than an hour, therefore, could be spared for dinner, and it was 10.15 P.M. when he completed the day's work. On the following day, the beautiful weather and walking in the fresh air, wrought a marked improvement. Weston started before 6, and reached Nottingham (39 miles) by 4.26 P.M. After fully two hours' rest, he finished 3,700 miles at the Alexandra Rink before 9.30. At this stage he was examined by Mr. Henry Macdonald, who reports that he found Weston in capital condition, with a pulse of 80, a temperature of 98.2°, and the now closed wound on his left heel still painful on pressure. Mr. Macdonald points to Weston's experience as a proof that alcohol is of no value in prolonged exertion, and commends Weston as a clinical puzzle to the notice of practitioners in the various towns through which the remainder of the route will lie. Next day, in the same place, the record was brought up to 3,750 miles, being three-fourths of the whole task. The start was at 6.45 and the finish at 9.45. Saturday was noteworthy from the pedestrian having, from 6.40 A.M., walked for ten hours continuously, not retiring or resting even to dine. He ate his dinner while doing his 34th and 35th miles, then slept for two hours, and after 2½ hours' splendid going, did the fiftieth mile under eleven minutes. On Monday Weston walked from Nottingham to Leicester. On Tuesday, in the Rutland Hall Rink at the latter town, Weston, after an hour's walking, could not overcome his drowsiness, and rested for an hour and a quarter, though he did not start till after 7 A.M. He dined while on the track, and, with only half an hour's rest in the afternoon, finished 3,900 miles at 10.15 at night.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

IN accordance with a resolution of the Court of Directors, an extraordinary general meeting of the Society was held on Friday, February 8th; Dr. Harvey Owen, V.P., in the chair. Sir James Paget, Bart., was unanimously elected President of the Society. The members present adopted the resolution carried at the extraordinary Court of Directors on the resignation of Sir George Burrows, Bart., and requested the Secretary to forward to the late President a copy of this resolution, which was published at page 233 of the BRITISH MEDICAL JOURNAL of the 2nd instant. A desultory conversation arose as to the means which might be adopted for making the Society better known and appreciated amongst the members of the profession, with a view to increasing its sphere of usefulness. The end and aim of the Society is to make grants to the widows and orphans of its members who may be left in such straitened circumstances as to require pecuniary assistance. At present, it brings up the income of each widow to about £55 *per annum*, and allows her as well about £14 yearly for each child. Thus, a widow with three children might expect to receive nearly £100 a year. The terms of membership amount to two guineas a year only, and by the payment of this small sum a medical man may absolutely insure to his widow after his death an income of at least £50 a year. When one considers how great a boon this would be in hundreds of instances, it seems marvellous that this provident society has only about four hundred members, and not thousands, as one might have anticipated. The treasurer mentioned, at the above noticed meeting, that a sum of about £77,000, chiefly derived from bequests, now stands invested in the names of the Society's trustees; and the interest on that fund is all expended on the widows and orphans. The action of the Society is generally limited to London and its immediate vicinity; but, when once a man has become a member, he may reside wherever he wishes. Thus, any student, at the end of his London career, may become a member, and at once leave for the country, and continue his membership, wherever he may chance to practise. No one should consider this beneath his notice, or think that he is placed so high above adversity that his wife and children are never likely to require help. Adverse circumstances proverbially occur when least expected, and even a simple trusteeship may involve the most upright man in heavy pecuniary losses. The Secretary to this splendid provident society is Mr. J. B. Blackett, of whom all information may be obtained at the Society's rooms, 53, Berners Street, Oxford Street, W. It is greatly to be desired that, under the *régime* of its new and popular President, the number of members of the Society may be much increased, and its sphere of usefulness by so much the more extended.

BRIGHTON, AND THE COMPULSORY NOTIFICATION OF INFECTIOUS DISEASE.

UP to the time of the Worcester meeting, when, by a decisive vote, the Association condemned the principle of compelling medical men to notify to the Medical Officer of Health cases of infectious disease, town after town had yearly applied, with success, to Parliament, for powers to enable them to carry that principle into operation. Immediately after the vote, however, and apparently in consequence of it, there was a remarkable diminution in the number of such applications. The reason of this is plain. It was not that sanitary authorities were any the less disposed to the exercise of compulsion, but that, through the action of the Association, the attention of medical men everywhere was directed to the subject, and that, the moment danger was apprehended, meetings were convened, opinions expressed, and, ultimately, such influence brought to bear on the authorities, as to lead them to abandon their intention. Illustrations of this successful resistance have been afforded by Liverpool, Wigan, Bath, St. Helen's, and other towns. It is possible, too, that the determined attitude of the Association influenced Medical Officers of Health, and that those gentlemen have been less eager than formerly to take the initiative in seeking for powers which, if exercised, must often place them in a position of painful antagonism with their medical brethren, and which every successive year proves to be of little practical value. For, taking a diminished rate of mortality, and especially a diminished rate of mortality from infectious diseases, as the only truly reliable test for determining whether compulsory notification has done good or not, it must be admitted that there is a singular absence of proof of any benefit having accrued from it. But, whatever test be applied, the same negative result is obtained. If the comparison be made between the sanitary progress of the towns possessing these unusual powers on the one hand, and that of the country generally on the other, the advantage is almost always on the side of the country, and not of those towns. Or, if the progress of such towns be compared with that of others equally populous, but which do not possess unusual powers, the result again is more frequently in favour of the latter than of the former. Or if, lastly, the fatality caused by special outbreaks of disease, and the length of time taken to subdue those outbreaks in the two sets of towns, be compared, there is nothing whatever to indicate that those which have exceptional powers possess the slightest advantage over those which depend on general sanitary agencies only. Proofs of all these propositions have been so often advanced, and their validity has been so entirely unimpugned, that any repetition of them here would seem superfluous. It may be as well, however, to point to one or two recent conspicuous illustrations of the failure of compulsory notification, and the action of the sanitary authority which follows it, to arrest epidemic disease. Thus, Edinburgh has measles in its schedule of diseases to be notified. Prompt notification of the first cases, followed by their prompt isolation under the supervision of the sanitary authority, would, it was hoped, prevent that, as well as other infectious diseases, from attaining epidemic proportions. But there were 138 deaths from measles in Edinburgh last year, and the disease continues to prevail. In what then is she better than towns without notification, so far as that disease is concerned? Scarlet fever is included in the schedule of every local Act where notification by medical men is compulsory. Is scarlet fever thus prevented from becoming an epidemic? Leicester obtained her Act in 1878, during which year only 12 deaths occurred from that disease. In the second month of 1879 it showed signs of increasing, but, so far from this increase being prevented by the Act, the disease continued to prevail, in an epidemic form, at the end of 1882, having then lasted eight months longer than any one of five previous epidemics, which had occurred since 1857, and having caused a mortality of 4.0 per 1,000 living. Accrington obtained her Act in 1882, and almost simultaneously an epidemic of scarlet fever broke out, which it did not influence in the slightest degree. The disease raged with almost unexampled severity for some months, and destroyed, during that period, no fewer than 120 children, out of a total population of 31,435. Small-pox occurred nearly simultaneously at Nottingham, Sheffield, and Leicester, in 1882. Nottingham requires compulsory notification; the other towns do not. Nottingham had 57 deaths during the year, Lincoln 14, Sheffield very few, if any. Yet if Lincoln's mortality had been proportionate to that of Nottingham, it should have been 19 instead of 14. Sheffield, where the disease broke out in an acute form, was no doubt saved from a severe visitation, owing to what the Town Council justly characterised as the "noble example of self-sacrifice and humanity" of the Medical Officer of Health, Dr. Hime, and it was to this self-sacrifice, and not to the mechanical operation of a compulsory notification law that the result was due. In spite of these examples (and they are capable of being greatly increased) of the general incompetency of compulsory medical notification, the Brighton Town Council have recently decided to promote an improvement Bill, which goes further than the Acts yet obtained; for, whereas all of them either directly specify the diseases to be reported, or limit the number by some such expression as "dangerous infectious disease," Section 4, Clause 52, of the Bill in question, seems to require that every case of every infectious disease shall be notified. The section is as follows:—"Every medical practitioner attending on, or called in to visit such inmate, shall, on becoming aware that such inmate is suffering from any infectious disease, forthwith fill up, sign, and deliver or send, to the Medical Officer or Health, at his office, a certificate or declaration, stating, according to the form so prescribed, the name of such inmate, the situation of such building, the name of such occupier or person, and the nature of the infectious disease from which, in the opinion of such medical practitioner, such inmate is suffering." But whether in some other portion of the Bill—the whole of which we have not had an apportunity of reading—a limited meaning is given to the term "infectious disease," or not, does not much affect the question. The serious matter is, that the Bill proposes to compel medical men to inform on their patients, and that they object to be so compelled. The section was unanimously condemned at a largely attended meeting of the Brighton Medico-Chirurgical Society, and a resolution to that effect forwarded to the town clerk. The Town Council, however, decided on retaining it unaltered, and individual members of that body, in their speeches, indulged in remarks concerning the medical profession, which showed that they entirely misunderstood the grounds of opposition to the Bill. What further action will be taken by the Brighton medical men we do not know, but we may remind them that their position is much more advantageous than that of their brethren similarly situated a few years ago; for, as we stated in the JOURNAL for July 14th, 1882, Sir Charles Dilke, in an interview with Mr. Ernest Hart, engaged, and the engagement was subsequently confirmed to a deputation which he received on the subject, "that in case of any private local Bill coming forward, which should involve the question of Compulsory Notification of Infectious Disease in any town, he would be willing to receive deputations from the practitioners of such town, expressing their views in reference to such local Bill;" and it is scarcely likely that an opposition that is unanimous, or almost unanimous, on the part of those most seriously affected by the Bill, will fail to produce any modification of its provisions.

SCOTLAND.

DR. ANGUS MACDONALD succeeds Professor Simpson, in rotation, as medical officer to the Royal Maternity and Simpson Memorial Hospital. Messrs. W. Fraser Macdonald and William Spence will take duty as house-surgeons.

IT is gratifying to learn that the Town Council of Aberdeen have agreed to increase the salary of their medical officer of health, Dr. Simpson. Dr. Simpson is to receive £50 additional this year, and another £50 in 1885. Even with these additions, the salary is not so large as it should be, considering the amount, and quality, and difficulty of the work which Dr. Simpson has undertaken and carried out most successfully, and to the entire satisfaction of the community.

EDINBURGH AMBULANCE SOCIETY.

A MEETING of the general committee of the Edinburgh Ambulance Society was held last week, presided over by Professor Chiene. Office-bearers were appointed, and the general committee was divided into district committees, who will deal with the applications (which have been received in considerable numbers) for instruction, and will ascertain the number of classes required in each district. It was also determined to co-operate with the St. Andrew's Association of Glasgow, in the course of instruction and general arrangements. It augurs well for the success of this ambulance society, that so much interest has been manifested in its conception, and that its general committee comprises a large number of employers and their *employés*.

EDINBURGH SOCIETY FOR THE RELIEF OF THE DESTITUTE SICK.

THE Edinburgh Society for the Relief of the Destitute Sick, which is such an aid to the work of the dispensaries, will celebrate the centenary of its useful and honourable career next year. At a quarterly meeting of the directors, held in Edinburgh, on Tuesday, a subcommittee was appointed to make arrangements for the celebration of this event. At the same meeting, the quarterly report submitted showed that the visitors of the Society had made 2,980 visits on the destitute sick, and had distributed among them money, meal, coal, and clothing, to the extent of £502. It is worth noticing that these visitors perform their duties voluntarily, and in their philanthropic pursuits spare neither their time nor their exertions.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

IN the JOURNAL of February 16th, and at page 369 of our present number, abstracts of a discussion on "Albuminuria; its Pathology and Clinical Significance," held at the above Society, are given. The wide interest felt in this important subject has been shown by the number of gentlemen who have taken part and are still to take part in the discussions, and the large attendance at the meetings. The original intention of the Council of the Society was that the discussion should be limited to two meetings, but it has been found necessary to prolong it to a third, and it may not be brought to a close until the fourth evening. The next meeting will be held in the hall of the Faculty of Physicians and Surgeons, on Tuesday, the 26th instant, at 8 P.M. All members of the profession are invited to be present.

THE SCOTCH FISHERY INVESTIGATIONS.

THE Scotch Fishery Board is steadily continuing the investigations set on foot with the object of enabling them, by artificial cultivation or otherwise, to increase the supply of the ordinary food-fishes of the country, and so bring them more within the reach of the general community. To do this successfully, it is necessary to obtain accurate information as to the habits and time of spawning of the different fish, and it is to this point that the present efforts are being directed. Thus, at St. Andrew's, Professor McIntosh is studying the sole and other flat fish; while the herring and its allies will shortly be investigated in a laboratory to be formed at North Berwick. At the twenty-six stations of the Fishery Board on the coasts of Scotland, all the officials are engaged in the collection of materials, an examination of which, it is hoped, will help considerably towards the elucidation of what is the food of fishes. These materials are forwarded from time to time to the University of Edinburgh, where they undergo examination at the hands of Professor Cossar Ewart, Convener of the Scientific Investigation Committee, and his assistants. It is thought not unlikely that the services of Professors McKendrick, of Glasgow, Stirling, of Aberdeen, and Schafer, of University College, will be secured to aid in carrying on the investigations.

THOUGHT-READING DEMONSTRATIONS.

DURING the past week Glasgow has, at the hands of Mr. Stuart Cumberland, had its turn of the popular expositions of so-called thought-reading, alternating with the exposures of the practices of the spiritualists. These public performances in no way differed from what has taken place in other towns, and nothing was done at any of the meetings to give the slightest grounds for thinking that there exists a new form of mental power which has hitherto escaped the observation of scientific men. All the experiments undertaken showed that it is only under the conditions of actual contact between the operator and his subject, combined with a determined wish on the part of the latter that the former must do something, involving muscular movement, that success can be obtained, for on the absence or removal of these conditions, failure at once results. Hence it may safely be said that as yet there has not been demonstrated that there exists any new means by which thoughts may be communicated from one to the other, and the unspoken wishes revealed. We observe that in all the public performances given by Mr. Cumberland, medical gentlemen have ranked largely amongst his subjects, and we are almost inclined to think that it might be prudent to consider whether, in the present state of matters, it is advisable that this should continue to be so, for in this way there is indirectly given the support of the profession to one who seems to claim publicly the power of accomplishing by mental powers, what is clearly done by the physical agency of the muscles.

THE DANGERS OF TINNED MEAT.

Now and again cases occur which raise the question as to the complete safety of the various tinned meats which are so much used just now by the public. Recently, some circumstances have occurred in Glasgow which have led the authorities to investigate two deaths which are alleged to have occurred from eating some New Zealand tinned meat. It appears that, on the 9th instant, a number of people residing in the southern district of the city, purchased at the same shop some tins of New Zealand mutton. On the evening of the same day a boy, aged nine years, partook of some of this mutton, and soon afterwards showed signs of irritant poisoning, namely, vomiting and purging, from the effects of which he died within forty-eight hours. On the same day the members of another family, who had partaken of mutton purchased at the same shop, were seized with sudden and severe symptoms of illness, and a child, two and a half years old, died in three or four days. Although no more fatal cases occurred, several other persons were attacked with similar symptoms. Upon a report from the medical officer of health, the authorities have ordered an investigation into the cases, including a *post mortem* examination of the bodies of those who have died, and an analysis of the meat. Until this report is made, we refrain from doing more than directing attention to the circumstances.

IRELAND.

THE ACADEMY OF MEDICINE.

THE Academy of Medicine has resolved to entertain its first President, Dr. Banks, at dinner on March 6th, as a mark of its esteem and respect for him. It is anticipated that a large number of the Fellows and Members of the Academy will join in paying this well deserved compliment to Dr. Banks. The dinner will take place at the College of Physicians, the President having granted the use of the hall for the occasion. Dr. Kidd and Dr. H. Kennedy are the Honorary Secretaries of the Committee having charge of the arrangements.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND AND MEDICAL REFORM.

A MEETING of the Fellows of this College, convened by the President in compliance with a requisition signed by eighteen provincial Fellows, was held on February 8th, "to consider the provisions of the Medical Act Amendment Bill, and its probable effect on the College, should the said Bill become law."

Mr. WHEELER, President of the College, occupied the chair.

Mr. MALONY, of Tulla, County Clare, moved the first resolution, as follows:—

"That this meeting approves, and will gladly support, a well-considered measure of reform calculated to remove such defects as have been proved to exist in the constitution of the medical profession; but, at the same time, the Fellows here assembled desire to express their conviction that it would be injurious to the public welfare, and an unjustifiable employment of State authority, to strip of their privileges institutions which can be shown to be using them both well and wisely." He did not know what could be said in favour of the Medical Act Amendment Bill. At first there had been extreme reticence about it, and it was only lately that the profession had awakened to the knowledge that, if passed into law, it would destroy institutions to which they were so much attached. It was to the action of provincial Fellows that the present meeting was due. Were they to submit to have that College, which had done so much for the advancement of surgery and science, deprived of all its rights? They were told that it was best for them to accept the inevitable; but when an institution fought for its rights it was sure to get better terms than if it succumbed.

Dr. EDWARD HAMILTON, President of the Dublin Branch of the British Medical Association, in seconding the motion, said they were in favour of reform, but opposed to levelling down and confiscation. They knew perfectly well that some of the corporations had failed to discharge their duties as regarded education and examination. But that was no reason why others, which had done their duty, should be destroyed. The college to which they belonged had done its duty; it had been foremost in maintaining the standard of medical education. The Royal Commissioners scarcely admitted any connection with the Bill in question. It had been framed by a draftsman who knew very little indeed of the requirements of medical reform. It contained two principles which ought to have been kept distinct—one, that of direct representation on the Medical Council, and the other that of reform of medical corporations. It might, no doubt, be very useful to have direct representation in the little parliament in Oxford Street; but it would be a higher ambition to seek representation for the profession in Westminster Hall. It was an outrage on common sense that the farmers of petty boroughs should send representatives to Parliament, while the medical profession, who were linked with every movement of social reform and sanitary legislation, were obliged, if they wanted to have a grievance rectified, to go, cap in hand, to lay members of the House of Commons, or to the few members of their own body who belonged to it. There could be no doubt that the proposed Bill would work injuriously as regarded the pecuniary interests of that college.

Dr. JACOB, President of the Irish Medical Association, moved as an amendment: "That the words in the motion from 'but, at the same time, the Fellows here assembled' to the end be struck out, and that in their place the following be inserted 'that this College approves of the course pursued by the council as to the Medical Act Amendment Bill of last session, and remits it to the council to take such steps with reference to any medical Bill which may be introduced, as may be necessary for protecting the interests of the College.'" He admitted the truth and propriety of the first part of the resolution. Every year since 1878 the College had proclaimed its acceptance of the general principle of the Bill. Now they were asked to reverse that policy. He took the most complete and emphatic exception to the predictions which were made by those who advocated a hostile position towards this Bill. It had been said that if it should pass, that College would die of inanition. If the College had no claim for existence, let it die of inanition; but he did not believe that the College would lose a shilling of income by it. He asserted that the demand for their diplomas would be greater under the Bill than heretofore. The College would still have its three examinations in the first instance, in which it could charge what it pleased. Its method of obtaining income, after the State qualification provided by the Bill, would also be untouched. He asserted that the state of medical education was rotten at the core, and that it was necessary to lift off the back of the profession the disgrace brought on it by traffic of licensing bodies in sham diplomas, by reason of which the lives of the public were not safe. But that other departments had stepped in, they would have young men going out from their own College who were unfit to attend a woman in her confinement. The Scotch colleges were the greatest sinners as regarded the underselling of diplomas. They attracted students by giving their diploma after an easy examination, a short period of study, a limited curriculum, and for a cheap fee. The Huxley dogma in favour of coadjutor examiners at nineteen different licensing bodies, each examining three or four times a year, would be impracticable. Such a plan might bring the examinations to a proper standard, but would have no effect on the curriculum and the period of study. If the corporations assumed a mulish attitude, the Government would, if necessary, drive the Bill over their bodies. He wanted the College to be in the position of saying it approved of the principles of the Bill, but must have such and such changes in it, for which they should work with all their strength.

Dr. Thornley Stoker seconded the amendment, which was opposed by the Vice-President of the College (Professor Bennett), Dr. Frazer, Mr. Macnamara, Mr. P. C. Smyly, Dr. Tagert, and by Dr. Kidd, who said the proposal of the Bill was that all students should be examined by certain boards, which were to supersede all the existing institutions, and were to give a diploma of simple competency. The standard must be low. [Dr. Corley: But very much higher than the lowest existing standard.] The question was not whether this college or other colleges were to suffer. Everyone knew that their profession would be judged at home and abroad by their professional standard, and they were now asked to degrade their status by becoming men of "simple competency." Was it necessary, for the good of the profession and the public, that (as Dr. Jacob suggested) that college should be allowed to die? He held that it was not. A great deal had been said about certain examinations being shams, and certain diplomas being trafficked in. Where were the facts and figures to prove it? The Edinburgh College of Surgeons had written, saying that that was a slander, and he (Dr. Kidd) said it was a slander. [Dr. Jabob: Why do the students go there from England and Ireland?] Dr. Kidd said because the colleges there had been wise enough to comply with the Act of 1858, which had not been done here. There, for the payment of one fee, the student obtained the diploma which enabled him to take a public appointment, whilst here he must pass three examinations, and pay three fees. He charged Dr. Jacob with obstructing the movement for a conjoint examination in Ireland—a statement which Dr. Jacob rose to deny—and, resuming, said the Bill would deprive the College of all its privileges save that of granting a Fellowship. Should it pass, they would be no longer allowed to superintend preliminary examinations; to say what schools were fit for the teaching of students; to grant licences; to hold final examinations. True, they might grant licences of their own, but these would not be recognised, and would be of no use. All they would be allowed to do would be to meet once every five years, and elect two members of the general board. They might go to sleep in the interval. And this, in return for having made their medical men the best educated in the country. The argument for the Bill was that because three out of nineteen licensing bodies had discharged their duties imperfectly, the rest were to suffer. The Bill did not provide any penalty against unlicensed practitioners. Dr. Kidd proceeded to say that he believed the advocates of the movement had been purposely trying to mislead the profession; and further, that Dr. Jacob's statements were to be received with the greatest caution. They were most inaccurate, to use no stronger phrase.

Dr. Jacob warmly repudiated Dr. Kidd's accusation, and said that all the statements he (Dr. Jacob) made could be proved.

The amendment was then put, and lost.

Dr. Corley then moved, and Sir Robert Jackson, C.B., seconded, the following amendment: "That, whilst disapproving of certain clauses in the Bill recently before Parliament, we are of opinion that legislative interference is absolutely necessary in the interest of the public, of the medical profession, and of such of the licensing bodies as have been mindful of their duties and responsibilities."

Mr. Stokes said that he objected to the Bill *in toto*, and therefore opposed the amendment. He defended the Scotch colleges against the charges which had been made against them, and quoted his own experience as a visitor of examinations under the General Medical Council, for the purpose of showing that the accusations levelled against the Scotch corporations were greatly exaggerated.

The amendment was then put, and declared lost; and

The original resolution being put, a division was taken, with the result that the resolution was carried by a majority of thirty-one to seven.

Dr. Whistler moved: "That, inasmuch as the Bill introduced into Parliament last session would, had it become law, have deprived this and other medical authorities of the power and influence over the profession which they have hitherto exercised, and which were conferred on them by charter, the Fellows of this College are of opinion that any such legislation should be resisted by the entire profession, as being in a high degree injurious to its best interests."

Dr. Stoker seconded the motion.

Dr. Barton supported it, and said the Bill meant ruin to the College, degradation to the profession, and injury to the public.

The resolution was passed unanimously.

On the motion of Dr. Nolan (Gort), seconded by Dr. William Thomson, the next resolution was passed: "That this meeting, having been informed that it is the intention of the Government to introduce into Parliament during this session a Bill similar to that of last year, recommends the Council to use all the influence it can command to obtain such changes in that Bill as may be necessary to preserve the chartered privileges of the College, more especially the right of conferring a title to practise; and, failing this, to oppose the passing of such a measure by all constitutional means."

The proceedings then terminated.

MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

A meeting of the Provisional Executive Committee of this Society was convened at 38, Wimpole Street, on Thursday, February 14th, when the following members were present: Dr. Ord, Mr. Sibley, Mr. Malcolm Morris, Mr. Noble Smith, Mr. Frederick Wallace, Mr. Brindley James, Mr. Behrendt (Burringham); Mr. Major Greenwood, jun., Mr. Radley, Secretary; Mr. Noble Smith in the Chair.

The minutes of the last meeting were read and approved. Letters were read from the following gentlemen, who were unable to attend. Dr. Dolan (Halifax); Mr. J. Bain Sincock (Bridgwater). A communication was read from Dr. Hardwicke, who was in favour of sick-pay for illnesses of seven days as a minimum, instead of fourteen.

The Secretary reported, that, in accordance with a resolution passed at the last meeting, he had consulted Mr. Neison as to the proposed limit of seven days when sick-pay should commence; and Mr. Neison was of opinion that such an alteration could be made quite safely, without affecting the basis on which the tables were drawn. It was decided to refer this matter for discussion at the general meeting.

Mr. Malcolm Morris asked if it would be possible to suggest a scheme by which the Society could offer to pay to the widow, on the death of a member, some small portion of the sum which had been paid, after a certain term of years.

The Secretary said that to make any provision of that kind now they would have to entirely remodel their tables and increase their premiums. He, however, thought it a very desirable thing; and if it were found that their present rates were too high, he considered the surplus might be applied in some such way.

The Chairman stated that the tables as now arranged quite met the want referred to by Mr. Morris, as the insurer could subscribe to the sickness-fund and also for a sum at death.

Mr. Brindley James asked if a member should temporarily retire from practice, and, during such retirement, should fall sick, whether he would be eligible for sick-pay.

The Secretary replied in the affirmative.

A report was read showing the progress of the Society. Up to February 9th, 230 members had been enrolled, and the sum received for entrance-fees was £122 6s. 6d., and for premiums paid in advance, £27 15s. An account had been opened at the Union Bank, Argyll Place, Regent Street, and these amounts paid into the account.

The resolution that the report be adopted was passed unanimously.

The question of the appointment of auditors was discussed (some applications for the appointment having been received), and it was decided that Messrs. Waterhouse, Price and Co., be asked to act in this capacity until the general meeting, when the question would come up again for discussion.

Mr. F. Wallace stated that, at a meeting of the East London and South Essex District of the Metropolitan Counties Branch of the British Medical Association, to be held on the 21st, he proposed calling the attention of the members to the benefits of the Society, when he would invite suggestions to extend, if possible, its usefulness.

Mr. Malcolm Morris suggested that they should advertise in all the medical papers in London, Glasgow, Edinburgh, Birmingham, and other large centres, and that other means should be taken to gain increased publicity.

The SECRETARY reported that Mr. Daly had written, proposing that, instead of a weekly sum in sickness, the Society should send a *locum tenens* to carry on the work of the sick member.

This was discussed, but was unanimously considered to be impracticable.

Mr. BRINDLEY JAMES proposed that the heads of the profession be addressed by a special letter, calling their attention to the Society, and asking them to co-operate in making it known and extending it, especially among young men entering the profession.

The CHAIRMAN referred to the first declaration on the proposal-form as being so worded, that some who were desirous of becoming members might be deterred because they could not subscribe to it, whereas the object of the form was to obtain information as to the general condition of the proposer's health, and the fact of his having to alter that declaration would not necessarily debar him from membership. He also suggested that proposers should give dates of their illnesses, and of their being accepted or declined by other insurance societies, as this would much facilitate the examination of the cases.

It was unanimously agreed that it would be very desirable to state these points more plainly in the future, and that, after a short time, the proposal form should be revised.

The remainder of the sitting was devoted to the report of the subcommittee on the proposal-forms, and to the decision as to rejection or admission of members.

INTERNATIONAL HEALTH EXHIBITION.

PREPARATIONS for the holding of this Exhibition are proceeding rapidly. The Board of Trade have certified that the Exhibition is an International Exhibition. Formally, the buildings will be considered, by Her Majesty's Customs, as a bonded warehouse during the continuance of the Exhibition. The General Committee now numbers nearly four hundred members, and from these seventeen subcommittees have been formed. The allotment of space, which has been largely applied for, is being rapidly proceeded with, and applicants will soon be informed of the decision of the Executive Council with regard to their applications. In response to a request made by His Royal Highness the Prince of Wales, President of the Exhibition, the eight water-companies of London have resolved to exhibit, in a pavilion which is being erected for them, their appliances for the supply, filtration, etc., of water, together with diagrams showing the various processes and localities; and a powerful subcommittee, under the active chairmanship of Colonel Sir Francis Bolton, has been formed to carry out this branch of the Exhibition. The water-companies have also determined to put up in the grounds a large fountain, which will be illuminated at night by electricity. This fountain of light will, it is anticipated, materially add to the beauty of the illumination of the gardens. It is impossible, as yet, to give any definite information with regard to foreign countries; but, so far as one can judge at present, Belgium, China, and India will be the best represented. A Royal Commission has been appointed in Belgium, and the Consul-General in London is their active representative here. To China has been allotted the space which it occupied last year at the Fisheries Exhibition; and a Chinese tea-garden, restaurant, and shop, will not be the least interesting objects in the Exhibition. India is to be adjacent to China, and strenuous exertions are being made to secure the united action of many of the principal tea-planters in India, so as to insure a good and representative show of the Indian tea-growing industry.

COLLECTIVE INVESTIGATION OF DISEASE.

LIST OF RETURNS RECEIVED IN JANUARY 1884.

I. PNEUMONIA (71).

G. R. Allan, M.D.; F. Alderson, M.D.; J. Alexander, Esq. (3); W. Alexander, M.D.; R. L. Batterbury, M.D. (2); C. Beddie, Esq.; M. G. Biggs, Esq.; C. Y. B[illegible], M.B.; J. Bain, M.D.; W. P. [illegible], M.D. (2); [illegible] Bowen, M.D.; C. B[illegible], M.B.; H. L. Browne, Esq. (2); W. E. S. Burnett, Esq.; J. Carmichael, M.D.; [illegible] R. H. Chinn, Esq. (4); G. M. Coleman, M.B.; H. Dunn, M.D.; C. F. [illegible], M.D. (3); M. Edmunds, M.D. (3); W. A. Finlay, M.D. (3); G. A. Gibbons, M.D.; M. Greenwood, M.D.; W. Lamb, M.D. (2); S. G. Littlejohn, M.B. (3); J. J. Lloyd, Esq. (2); J. T. McMahon, Esq.; H. C. March, M.D. (3); W. W. [illegible], M.B.; J. W. [illegible], M.D. (2); W. J. [illegible], M.D.; H. Parsons, Esq.; J. Reid, M.B.; H. G. [illegible], M.D.; J. Reid, M.B.; D. J. Reid, M.B.; F. [illegible], Esq.; W. D. Sheppard, Esq. (2); J. Taylor, Esq.; T. E. Underhitt, M.B. (4); J. J. Webster, Esq. (5); D. M. Williams, Esq.; G. Williams, Esq.; T. Wollaston, M.D.

II. CHOREA (10).

C. Y. Biss, M.B.; J. M. Booth, M.B.; Thomas [illegible], Esq.; W. J. Hunter, M.D. (3); J. T. McMahon, Esq.; W. D. Sheppard, Esq.; T. Wollaston, M.D. (2).

III. RHEUMATISM (10).

M. G. R. Biggs, Esq.; W. Kelly, Esq.; J. J. Lloyd, Esq.; J. T. McMahon, Esq.; D. J. McKenzie, M.D.; A. C. Rich, M.B.; G. H. Salter, Esq.; T. E. Underhitt, M.B.; T. Wollaston, M.D. (2).

IV.—DIPHTHERIA (12).

D. H. Barley, M.B. (2); C. Beddie, Esq.; W. A. Hollis, M.D.; R. Lowther, M.D. (3); J. A. E. Stuart, Esq.; T. Wollaston, M.D. (2); J. B. W[illegible], M.B. (2).

IVa.—DIPHTHERIA (2).

W. A. Hollis, M.D.; J. A. Erskine Stuart, Esq.

V.—SYPHILIS (2).

T. Wollaston, M.D. (2).

Va.—SYPHILIS (2).

M. G. R. Biggs, Esq. (2).

VI.—GOUT (4).

J. H. Galton, M.D. (2); T. Wollaston, M.D. (2).

VII.—PUERPERAL PYREXIA (2).

J. Murphy, M.D.; T. F. Pearse, M.D.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 20th, June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th 1881.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
V. Syphilis, acquired.
Va. „ inherited.
VI. Acute Gout.

URGENT.—*The Committee needs more cases of Pneumonia, and hopes that they will be sent in as soon as possible.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
September, 1883. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH WESTERN PROVINCES AND OUDH BRANCH.—Meetings are held on the first Friday of every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeon SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the Railway Hotel, Stafford, on Thursday, February [illegible], at half-past three o'clock in the afternoon.—VINCENT JACKSON, Secretary. January 28th, 1884.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of the above District will be held at Ashford, on March 13th, Dr. Wilks in the chair. The Chairman [illegible] all members to luncheon at his house, and has [illegible] Board [illegible] to conduct the [illegible] over Eastwell Park, the residence of H.R.H. the Duke of Edinburgh, [illegible]. [illegible] 3.0 P.M., Collective Investigation Subcommittee. [illegible] Whether the recognised Infectious Diseases [illegible] [illegible] Dr. W. [illegible] by [illegible]. The Dinner will take place at 5 P.M.—F. [illegible], Honorary Secretary, 4, St. George's Place, Canterbury.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this district will take place on Friday, March [illegible], at [illegible] Hartbury, K.C.B., M.D., in the chair. [illegible] A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital [illegible] February 20th. Further particulars will be duly announced.—A. W. NANKIVELL, Honorary Secretary. January [illegible], 1884.

THAMES VALLEY BRANCH.—The next meeting will be held at the Griffin Hotel, Kingston-on-Thames, on Wednesday, February 27th.

METROPOLITAN COUNTIES BRANCH: WEST MIDDLESEX DISTRICT.—The next meeting of the above District will take place on Friday evening, February 29th, at 8 o'clock, at the Horbury Schoolroom, Notting Hill. A paper will be read by Mr. Noble Smith, on Mechanical Appliances in the Treatment of Deformities, with Diagrams.—ED. HART VINEN, Honorary Secretary, 17, Chepstow Villas, Bayswater.

BATH AND BRISTOL BRANCH.—The fourth ordinary meeting of the session will be held at the Museum and Library, Bristol, on Wednesday evening, February 27th, at half-past seven o'clock; E. Crossman, Esq., President. The following communications are expected. 1. A case of Typhoid Fever illustrating the Effects of Kairin: R. S. Smith, M.D. 2. Two cases of Amputation at Shoulder-Joint for Tumour of Biceps, with specimens: N. C. Dobson. 3. Short notes on cases of Uterine Polypi removed by Operation: A. E. Aust Lawrence, M.D. 4. Two cases of Venesection in Heart-Disease: A. J. Harrison, M.B.—E. MARKHAM SKERRITT, R. J. H. SCOTT, Honorary Secretaries.—Clifton, February, 1884.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.

A MEETING of this district was held at the residence of Dr. Cree, St. John's Park, Upper Holloway, on January 31st.

The Dangers of Collective Investigation.—Dr. G. W. POTTER read a paper on this subject. He observed that investigation was the parent of knowledge. Two competent persons investigating the same phenomena would arrive at conclusions more entitled to authority, than one person working alone. The value of conclusions was directly proportioned to the number of competent persons who arrived at them under the same circumstances. A hasty inference from these postulates would affirm the great value of the collective investigation now conducted by representatives of the British Medical Association; but such an inference might be very far from the truth. Inductions which were intended to be raised to the rank of formulated principles, must be obtained under certain indispensable conditions. The collective investigations of the British Medical Association could not fulfil these conditions; therefore, from these investigations, a real advance of positive knowledge, a gain of incontrovertible rules, was not to be expected. It was maintained by Dr. Potter: 1. That when the conditions of investigation vary, certainty is not attainable; 2. That where a moderate degree of certainty cannot be attained, formulated rules may be misleading and dangerous. The conditions of the investigations under consideration differed in three essential particulars. (*a*) The investigators differed. Among the thousands of practitioners who took part in the work, only a small proportion were competent, by natural capability and education, to conduct scientific inquiries. There must on this account be a winnowing of the wheat from the chaff when the answers to questions were returned. Who was to act the part of the winnowing-fan? What principles of selection would be adopted in order to secure the survival of the fittest? Four principles of selection were suggested. 1. Heads might be counted, and a mere numerical majority might decide concerning truth and error. 2. The answers given by men of more or less eminence might be chosen, and truth decided by great names. 3. The committee (*i.e.*, the secretary and one or two others, perhaps) might select from the answers those which they considered nearest the truth—"the discovery of truth by committees." 4. All the answers might be shaken up in a bag, and a certain number withdrawn at random, a proceeding which might be designated the "search for truth by lottery." (*b*) The subjects of investigation differed. This was, of course, inevitable. If there were any generally received principles of classification, whereby the different investigators might at least know when they were investigating exactly similar cases, just comparisons might be made, and trustworthy results arrived at. But there were no such generally received principles, and this was a further element of uncertainty. (*c*) The circumstances under which the investigations were made differed widely. For example, one case of pneumonia might occur in a sanitarily perfect house on a breezy sea-side down; another might be in a wretched slum, where every breath inhaled was laden with poison, and the surroundings of the patient were unspeakably depressing. These varying circumstances would not merely affect the final result, but profoundly modify every incident and feature of the case during its whole history. The want of identity, or even of approximate similarity, in these three important conditions of investigation, rendered any approach to certainty absolutely unattainable. Dr. Potter maintained, in the second place, that where a moderate degree of certainty was unattainable, formulated rules might be misleading and dangerous. The results of the investigations would undoubtedly be formulated and published, and many persons would attach to them the idea of finality. This was greatly to be deprecated. It was impossible that the results of this or any other investigation of similar facts, by whomsoever conducted, could be really final; and any attempt to stamp these results with an appearance of finality was thoroughly unscientific and misleading. Moreover, it was dangerous to truth in the abstract, and to certain classes of medical practitioners. The weak and the timid, who were easily imposed upon by authority, however constituted, would accept the finality idea, and cease to think original investigation necessary or profitable. Their feeble and flickering consciousness would be reduced to a minimum, a very undesirable result. The indolent and the confident would become more confirmed in their faults. If they knew as much as the Collective Investigators, and if the Collective Investigators knew all that is to be known, what more would be desired? In concluding, Dr. Potter said that the work undertaken by the Committee would undoubtedly be of some value, though not of the kind which would be attributed to it by many. It would not settle anything. It would add little or nothing to positive knowledge. As an educational and disciplinary movement, it would be of service to those who took part in it.

After a vote of thanks had been passed, a general discussion ensued.

[Dr. Potter's remarks apply, it may be said, to all investigations of all subjects, under all circumstances, by all persons; forasmuch as the subjects always differ, the circumstances always differ, and the investigators always differ. Nevertheless, it is by this method, and by making due allowance for these various and inherent sources of fallibility, that science is advanced. Collective investigation, on a large scale, is being more generally resorted to, and it seems that the advantages of thus bringing together many facts from many sources will more than compensate for certain necessarily attendant disadvantages. Those who are carrying on the work of collective investigation on the part of the Association are fully alive to the difficulties with which they have to contend, and may be trusted, we hope, to make careful analyses of the facts submitted to them. We trust the members of the profession are not quite so incompetent to conduct scientific inquiries as Dr. Potter seems to think, but there can be no doubt that those who take part in this disciplinary movement will be benefited by it.—ED.]

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

A MEETING of this Branch was held in the Medical Institute, New Edmund Street, on Thursday, February 14th. The chair was taken by the President, Dr. BALTHAZAR FOSTER. Forty members were present.

New Member.—Mr. Alfred Freer was elected a member of the Branch.

New Laws.—Dr. Foster moved, and Mr. Lawson Tait seconded, the adoption of the laws of the Branch revised by the committee appointed for that purpose. Dr. Foster proposed, and Mr. Manley seconded the adoption of the revised laws of the Council.

Communications.—The following communications were made:

1. Mr. Vincent Jackson showed a Tumour removed from the internal surface of the Iliac Bone.

2. Mr. Priestley Smith showed a Picture of an Eye removed for Sarcomatous Growth. He also exhibited the patient from whom the eye had been removed.

3. Mr. Lloyd Owen showed a patient on whom he had operated for Abscess of the Frontal Bone.

4. Dr. T. Savage showed two Parovarian Tumours which he had removed.

5. Dr. Carter showed a case of Ichthyosis.

6. Mr. J. Lloyd showed a patient from whom he had removed an Epithelioma of the Leg.

7. Dr. Savage read a paper on Abdominal Sections, performed by him in 1883.

8. Mr. Messiter (Dudley) read a paper on Pneumonia in Enteric Fever.

9. Mr. Vincent Jackson exhibited a large Tumour, recently removed from a married female, aged 25. When admitted into the Wolverhampton and Staffordshire General Hospital, she stated that it had been growing since 1882 without pain or tenderness. Upon examination, it was determined that the tumour was extraperitoneal, its exact position being on that side of the abdomen coming from the right innominate bone, just below the crest, and not far from the anterior superior spinous process. The regions that it occupied were the right iliac, right lumbar, umbilical, and hypogastric. Its position upon palpation seemed to be superficial, but was doubtless beneath the muscles in this situation. The measurements were five inches transversely, and three inches from above down. The outer or attached end was fixed, the inner rounded

and free. Upon removal, the growth was found to be lying upon the peritoneum, and at one point adherent to it so closely, that before separation was effected, the membrane was opened. The tumour weighed one pound and a half, was encapsuled, and in structure fibrous.

BRITISH GUIANA BRANCH.

A MEETING was held at the Colonial Hospital, Berbice, on December 18th, 1883. Fifteen members were present.

Telegrams from Drs. Widdup and Shannon, regretting inability to attend, were read.

New Member.—Dr. Manget was unanimously elected a member of the Branch.

Chairman.—In the unavoidable absence of the President and the President-elect, Dr. MANGET was voted to the chair.

Communications.—The following communications were made.

1. Dr. Hillis read a paper on the Bacillus of Leprosy, on which an animated discussion ensued, taken part in by Dr. Manget and other members present. It was moved by Dr. Fisher, and seconded by Dr. Gonsalves, that Dr. Hillis be thanked for his paper, and be requested to prosecute his researches, and report to this Branch at future meetings.

2. Dr. Cameron's Draft of an Ordinance to Regulate the Practice of the Medical Profession in British Guiana was considered, and with slight amendments was adopted.

3. Dr. Hillis showed a specimen of Tænia (solium or medio-canellata ?), of remarkably small size, from a patient in his district.

4. Dr. Veendam asked if a Hydrocele with complete Vaginal Hernia could be safely tapped and injected.—Dr. Manget was of opinion that, if the hernia could be reduced and kept up, the injection was safe, but that, in any case, tapping without injection was quite safe. This was also the opinion of the meeting.

JAMAICA BRANCH.

Officers and Council.—The following are the office-bearers of the Branch for 1884: *President*, M. Stern, Esq.; *President-elect*, J. C. Phillippo, M.D.; *Honorary Secretary and Treasurer*, F. Saunders, Esq.; *Members of Council*, J. Cargill, Esq., J. Gayleard, Esq., G. Gerrard, Esq., James Ogilvie, Esq., J. Pringle, M.B., D. P. Ross, M.D., A. Saunders, M.B.

SPECIAL CORRESPONDENCE.

PARIS.

Transfusion as an Hæmostatic.—Progressive Muscular Atrophy. Muscular Degeneration after Nerve-section.—The Waters of Néris. The Waters of Contrexéville. Rickets and Genu Valgum. A New Variety of Flat-foot. Osteoclasis. The Effect of Anæsthetics on the Retina and on the Lacteal Secretion.—Paris and Provincial Hospitals.—Food for Working-men.—The President of the Académie des Sciences.—The Night Medical Service. Paris and Provincial Diplomas.—Natural History Museum.

M. HAYEM at the meeting of the Société Medicale des Hôpitaux, on January 25th, made a communication concerning transfusion as a hæmostatic. He considers transfusion a valuable hæmostatic agent, but does not recommend it in advanced cachectic conditions. Transfusion was practised on a patient in his wards suffering from pernicious anæmia, phlegmasia alba dolens immediately appeared; first one limb was effected, afterwards the other. The transfusion might have been the cause.

MM. Landouzy and Déjerine describe a special kind of general progressive muscular atrophy which declares itself in infants when there is hereditary predisposition. The authors mention a case where this predisposition was shown by muscular atrophy similar to that presented by many members of the family. Hereditary myopathy outwardly resembles progressive muscular atrophy in adults; but while, in the hereditary form, atrophy in children first attacks the facial muscles, in adults this is quite exceptional, and is never an early manifestation. The lesions in the spinal cord characteristic of progressive atrophy, were also absent in the specimen of the hereditary form hitherto examined, but the muscles exhibited the well known lesions of muscular atrophy.

M. Vulpian has presented to the Académie des Sciences a note from M. Babinski on muscular degeneration after nerve-section. M. Babinski explains the atrophy of the muscle supplied by the divided nerve by an excessive formation of protoplasm which slowly penetrates among the muscular fibrillæ, and by pressure obliterates them.

M. Peyrot calls attention to the therapeutic action of the waters of Néris on chorea, and mentions two severe cases cured, when all other treatment failed.

M. Debout describes the effect of the waters of Contrexéville on diabetes. The elimination of uric acid is simultaneous with the disappearance of glucose during treatment at Contrexéville.

M. Desprès, at a recent meeting of the Société de Chirurgie, attributed genu valgum to children of a tender age carrying infants in their arms, and rickets to inducing children to walk too soon. He treats genu valgum by electricity. He presented a patient at a recent meeting whose condition was greatly improved by this treatment. M. Desprès believes that muscular paralysis is present at the onset of the malady, and that bony lesions are subsequent. M. Sée admitted that allowing infants to walk at an early age, is favourable to deformity; but said that the characteristic lesion existed previously. Genu valgum was also induced by standing erect, and was more frequent among bakers than among others. M. de Saint-Germain did not believe that young children carrying infants were thus predisposed to rickets, and he constantly observed children deformed before they could walk.

M. Terillon described a new form of flat-foot *(pied plat-valgus douloureux)*, of which three examples had fallen under his notice. The deformity was accompanied with loss of power of the peroneus longus muscle and the tibialis anticus. Treated by electricity, the foot regained its arched instep. The pain was localised in the tibio-fibular articulation. Near the anterior ligament of this articulation, the patients complained of pain; lateral movements could be executed. In one instance, the articulation presented fungoid growth. M. Terillon attributed the lesion of the parts to paralysis of the tibialis anticus, and believed that paralysis, which was bilateral, was of medullary origin. Electricity produced improvement. M. Le Fort considered talipes valgus to be generally due to overstrain of the ligaments of the inner inferior surface of the foot, the results of standing and wearing thin flat shoes. The distension was probably increased by the presence of slight arthritis. M. Verneuil maintained that it was impossible to include every variety of flat-foot under the same name. He divided them into three principal varieties. One (rarely met with), was due to contraction, which might disappear suddenly, either spontaneously or under treatment. A second was often due to the paralysis of the tibialis anticus, but not of the peroneus longus; and a third, to arthritis provoking contracture. M. Desprès objected to the ligament-theory of M. Le Fort. It was easily understood that electricity was powerless at an advanced stage; dislocation of the scaphoid furnished the explanation. M. de Saint-Germain observed that, at the Bureau Central, the out-patients suffering from flat-foot were provided with soles of a special kind. This deformity was frequent among those classes where slippers were worn.

M. Mollière of Lyons, at a meeting of the Académie de Médecine, on January 5th, presented fourteen boys and girls on whom he had successfully operated for genu valgum by osteoclasis. He fractured the femur. The instruments and apparatus, recently invented by M. Robin, effected the fracture with great precision at the point desired; the operation was also easily performed on adolescents. Six or seven days after osteoclasis, the leg is straightened and kept in position. There is neither swelling nor injury to the periosteum.

M. Dubois has observed that when animals are submitted to slow and prolonged anæsthesia by means of a mixture of chloroform and air, the retina is frequently obscured. This is due to transitory astigmatism, which modifies the conditions of ocular refraction; and the rays of light are irregularly refracted. M. Dubois is inclined to admit that, owing to the diminished intra-ocular tension, the corneal membrane presents small folds, so that the rays of light are irregularly refracted in passing through this membrane. M. Dubois has also observed the lacteal secretion arrested in a bitch submitted to prolonged anæsthetisation.

M. Desprès has sent a letter to the *Journal des Débats* concerning the admission into the Paris hospitals of patients suffering from chronic complaints, and the diseases of old age. According to medical statistics, strangers and provincials during the first few months they are at Paris are singularly apt to contract disease. Those of the indigent class seek relief at the hospitals, and charity demands their admission. But M. Desprès calls special attention to the numerous chronic cases that could be as well treated in provincial hospitals. The poor who receive assistance from the Bureau de Bienfaisance, persuade their fathers, and mothers, and grandfathers, etc., to come to Paris, where they receive ten francs a month, the pension given by the Bureaux of the different districts to old people. After a few months' residence, entrance into a hospital is persistently asked for. Sometimes old infirm relations are brought to Paris, and there abandoned at night in the streets; all questions meet with an obstinate silence, and finally he is sent to a *hospice* or medical asylum. M. Després suggests that 2,000 of the chronic affections and infirm now treated in Paris hospitals, should be sent to provincial hospitals, which would result in a saving of 1,500,000 francs (£60,000). In France there are 1,580 hospitals and *hospices*, with half the beds remaining empty; peasants rarely seeking relief at hospitals. At Paris, the daily cost of a hospital-patient is 3 francs 5 centimes; in the provinces, 1 franc and 60 centimes. There are 152,449 beds for patients, including the infirm and destitute children. These are tended by 2,801 medical men, 11,454 sisters of charity, 3,002 officials, and 24,414 servants.

M. George, in a lecture "On Food for the Working Man," given at the Conservatoire des Arts et Metiers, stated that, in 1841, when the railway from Rouen to Paris was constructed, the English employed on it did more work than the French. The authorities, on inquiry, ascertained that the English workmen were fed principally upon meat, and the French principally on vegetables. The French were consequently put on the same diet, and achieved more work than their neighbours. M. George impressed upon his audience the necessity that working men should eat "butchers' meat," not pork. He recommended horseflesh. By means of a magic lantern, M. George showed representations of a series of edible animals, and indicated the best and most healthy portions for working men's food.

A banquet in honour of M. Bouley's election to the President's chair at the Académie des Sciences was lately given by the Ecoles Vétérinaires at the Grand Hotel. M. Bouley is the inspector-general of these schools. M. Pasteur presided, and it was unanimously agreed to have a medal struck in commemoration of M. Bouley's election.

The night medical service organised by M. Passant continues its good work. In 1883, 6,899 visits were paid; in 1876, the year of its organisation, 3,616; the difference between these two returns is sufficient proof of the utility of a medical night-service.

During the scholastic year 1882-1883, the six French medical faculties conferred 662 doctors' degrees (*diplômes*); the Paris Faculty, 465. The largest number at a provincial faculty was 69, at Montpélier. In Germany, during the same year, 692 diplomas were conferred.

The collection of submarine animals made by the *Talisman* and *Travailleur* is now organised at the Natural History Museum, where the public are allowed to visit it.

A second edition, revised, corrected, and enlarged, of M. de Sinety's *Traité pratique de Gynécologie, et des Maladies des Femmes* has just appeared.

ALEXANDRIA.

The Weather and Public Health.—Greek Hospital at Alexandria. Mr. Clifford Lloyd.—Sanitary Reform.

THE weather for the past two months has been unusually severe; there have been frequent storms, and very heavy rainfall, with occasional showers of hail. The sky has been dull and overcast, quite unlike the usual clear azure sun on the shores of the Mediterranean. On some days the thermometer in the shade did not rise above 50° Fahr., and the nights have been bitterly cold. The vivid red glow at sunset has been very remarkable here, as in other places, for some months past. The general health of the community shows a great improvement. The following is an extract from the official bulletin for February 1st (population, 166,000). The total number of deaths was 22. This number was made up as follows: phthisis (pulmonary), 2; bronchitis, 2; typhoid fever, 3; asthma, 2; convulsions, 5; gastritis, 1; dysentery, 2; hydropsy, 1; whooping cough, 1; intermittent fever, 1; pneumonia, 1; paralysis, 1—total, 22. As to nationality, 20 were natives, and 2 were Europeans. By the decision of the International Sanitary Council, clean bills of health were issued from January 15th to all vessels leaving Egyptian ports, no death from cholera having occurred in Upper Egypt since December 19th, or in Alexandria since December 29th. The Peninsular and Oriental mail service will resume direct communication between Brindisi and Alexandria at the end of this month, instead of obliging their passengers to go round by Port Said, as at present. Although much inconvenience was suffered from the recent inclement weather, all the buildings used as barracks admitting more or less rain (in some it went so far as having a tent pitched in some of the rooms), the sick rate of the part of the army of occupation in the Alexandria division is low. The following is to-day's state of the more important diseases in hospital: enteric fever, 3; simple, continued, and remittent fevers, 7; dysentery, 2; venereal, 68; all diseases, 115—that is, 7.33 per cent. of strength, the whole division numbering 1,567 troops. The high rate of venereal disease of course results from there being no legislative measures to control it. This average of sickness per cent. shows a considerable diminution, as we had it 14 per cent. a few months ago. Admissions for enteric fever are going down steadily. The following are the admissions by months for this disease since it appeared here: 1883—April, 1; May, 3; June, 15; July, 12; August, 6; September, 7; October, 4; November, 4; December, 2; 1884—January, 1.

The *fête* which took place recently for the Greek Hospital at Alexandria was a great success, being attended by all the leading members of the Hellenic community, and by many friends of other nationalities; it was quite a festivity, the hospital being decorated inside and outside with Chinese lanterns in profusion. His Holiness the Patriarch opened the proceedings with a short address, and was followed by one of the higher clergy of the Orthodox Greek Church. In the course of the evening a lottery, in which were many valuable prizes, was started; it yielded a profit of over £200, which will prove a welcome addition to the funds of the institution. A military band attended, and the entertainment was brought to a close with a brilliant display of fireworks.

Mr. Clifford Lloyd has quite recovered from his illness, which followed closely on his assuming the duties of Under-Secretary of State for the Interior on January 14th. He has lately received several petitions from different parts of Egypt, complaining of the use of the *koorbash* by the administrative authorities. This instrument of chastisement consists of thongs made from the dried sinews of the buffalo. In one of these petitions, mention is made of a case of fracture of the ribs resulting from this punishment.

The programme of sanitary reform still remains in the future. Whether it be finally received that the conclusion of Drs. Hunter and Dutrieux that cholera is endemic in Egypt is correct, or it be maintained that it occurs only by importation, all are now quite alive to the fact that the sanitary conditions of the towns and villages of Egypt are eminently calculated to foster, if not originate, the filth-diseases. The question of the disposal of sewage at Alexandria is comparatively easy, energy and money only being required to institute a sewage-system, with an outfall into the sea; but as regards Cairo and the towns of Upper Egypt the problem is much more complex. Whatever solution of the difficulty be adopted, it is to be hoped that drainage into the Nile, which has been proposed, will be dispensed with; this would seem to be only a more fertile source of disease than the present condition. Sewage-irrigation has also been proposed, which, however, cannot be judged as to its working here, by experience of it in other countries, for our chief difficulty is the unsanitary habits of the population, and the impossibility of getting them to co-operate in sanitary efforts. The fellaheen look upon water as their natural drink, without troubling themselves about its quality; and they cannot be brought to see that the clearest filtered article has any advantage for domestic purposes over the highly odoriferous fluid which would be pumped on to an irrigation-farm. That this fear is not exaggerated will be evident from this: the main drain from the citadel at Cairo, which is garrisoned by British troops, leads out to the desert some distance at the back; and the women of the neighbouring village may be seen filling their water-jars and old petroleum tins for household use from this drain.

CORRESPONDENCE.

BETTING AND DISEASE.

SIR,—Under the title of "Betting and Disease," you call attention to what must have been a very interesting lecture, by Dr. Crichton Browne, on the "Gospel of Recreation." But among the chief causes of mischief to the health from gambling, must be reckoned the prolonged mental strain which becomes necessary to the maintenance of self-control during extended periods of intense excitement. Various as the characters must be of persons who gamble, they become for the most part remarkably alike in the suppression of all manifestations of emotion in the time of suspense, or when the result is made known. The countenance of most of them betrays no sign of what is passing within, but it wears an uniform aspect of stolid indifference. Now, the effort to maintain this composure, upon which gamblers in general pride themselves, and which is nowhere so marked as in Englishmen, must surely be at an enormous cost—a cost varying widely, no doubt, in different instances, according to natural obtuseness of feeling or strength of emotion; but always, I should think, great enough to make, in the long run, large demands on the health and strength.

Within the last few weeks, I have seen a lady, who had just returned from a visit to Monte Carlo, broken down in health, whose countenance bore very visible traces of anxiety and distress. She had played deeply, and had won and lost large sums; and she declared that the effort to maintain an impassive expression during the risks she constantly ran was, she felt sure, the chief source of her subsequent extreme exhaustion. She described very vividly her state of mind and body, upon reaching the seclusion of her room, after an hour or two at the tables; and she declared that her ability to continue the game was determined by the power of sustaining an aspect of indifference in the presence of spectators.—I am, sir, yours, WILLIAM S. SAVORY.

February 18th, 1884.

SHOT-SILK RETINA.

SIR,—Claims to priority are rather amusing, even if not quite up to the mark in importance and raciness. I should like to add some remarks to those which have recently appeared in your paper under the above heading.

Mauthner, in his *Lehrbuch der Ophthalmoscopie* (1867-1868), after referring to the delicately striped marking, "corresponding to the separate bundles of nerve-fibres" to be seen sometimes on the fundus, says: "Peculiar reflexions may be seen in the retina. These are, especially under strong illumination, with a dark choroid and in young people, wavy radiating lines, accompanying the borders of the vessels, and shifting from one side of the vessel to the other under slight movements of the ophthalmoscopic mirror, according to Schirmer, or they may occur on both sides of the vessel at the same time, so that 'the vessel included in this glistening appearance is covered at parts, and resembles a varicose vein.' Schirmer states that 'portions of the retina, especially in the neighbourhood of the macula lutea, often become visible, the appearance reminding one of small, finely branched, bright, and glittering ice-flowers on the window-panes.' This figure is due to the form of the ultimate distribution of the vessels."

In Stellwag's *Lehrbuch der Praktischen Augenheilkunde* (1867), a similar passage may be found, the authority quoted being Schirmer again.

Schirmer's paper, *Ueber das ophthalmoscopische Bild der Macula Lutea*, was published in Graefe's *Archiv für Ophth.*, Band x, Heft 1, page 148 (1864). Schirmer would, therefore, seem to have the prior claim in this case.

I found this appearance of the retina a familiar object of study and subject of remark in the ophthalmoscopic classes of Jaeger, Borysiekiewicz, and Dimmer at Vienna, a year or two ago. It could hardly be otherwise, seeing that both Stellwag and Mauthner belong to that school.

It is hardly necessary to remark that the note on page 55 is not correct. Ever since Virchow's researches (1856), it has been known that "opaque nerve-fibres" are caused by the presence, not of neurilemma, but of the medullary sheath.—I am, sir, yours, etc.,

C. FRED. POLLOCK, M.D.

Hillhead, Glasgow, February 11th, 1884.

SIR,—Mr. Spencer Watson (to judge by his reply) does not seem to have read my remarks on "shot-silk retina" with care. Sixty-six per cent. was the proportion I found amongst normal healthy children at Artane Industrial School (not, as Mr. Watson states, amongst deaf-mutes). He further represents me as saying that I "should expect to find one case in every six children examined," and then proceeds to criticise my arithmetical acquirements. But Mr. Watson must know that to say "one has only to examine half a dozen healthy children to find a case or two" is very different from stating the ratio to be one in six. Within the last few weeks, I have examined, by the erect method, the eyes of over three hundred boys in Artane School, and am of opinion that (1) shot-silk retina is the rule; that (2) the appearance is perfectly physiological, and (3) that it is a survival of a fœtal condition only in the same sense that all normal structural appearances in the eye may be regarded as the survival of fœtal conditions.—I am, sir, yours obediently, ARTHUR H. BENSON.

MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

SIR,—I am much interested in the Medical Assurance Society, and am anxious to join it as soon as possible, but there is one thing I do not quite understand, although I have read the rules carefully. It is this. Supposing I am a member paying for the sick-allowance of £4 4s. a week, on attaining the age of sixty-five my premiums cease, and I receive an annuity of [illegible] a year, irrespective of health. This is all plain enough, but supposing I become ill when I am over sixty-five years, am I then to receive my annuity at [illegible] instead of my sick-allowance £4 4s. for the first six months, and half that amount for as long as the illness lasts? If this is so (and it is upon this point that I want information), it strikes me as not being equitable, because when a man reaches the age of sixty-five, he much more requires the larger amount of sick-allowance if he is unable to work, than he does the smaller amount of annuity if he is able to work. Again, supposing a man is permanently disabled at, say the age of fifty, why should his sick-allowance be reduced to one half when he attains the age of sixty-five (for the annuity is about half the permanent sick-allowance)? Trusting you will insert this letter in your next issue, I enclose my card, and remain, your obedient servant,

February 11th, 1884. M.D.

*** We are informed that the point raised by our correspondent has not escaped consideration. The rules contemplate the entire cessation of sickness-pay at the age of sixty-five, whether a member be in receipt of such pay on attaining that age or no. The annuity (which is not contingent upon health), is at that age substituted for sickness-pay. The system adopted is preferable to sickness-pay throughout life for two reasons—it reduces the rate of sick-contribution, and it gets rid of an element of much uncertainty and consequent danger. It is impossible to predict with any certainty what is the risk of sickness at advanced ages, and equally difficult at those ages to distinguish sickness proper from mere old age. The substitution of an annuity relieves the aged member from irksome restraint, makes a fair provision for the closing years of life, and protects the society from making contracts that no skill or experience can accurately or adequately provide for without extravagantly high premiums.

ALLEGED OVER-WORK IN ELEMENTARY SCHOOLS.

SIR,—The report sent to Mr. I. L. [illegible], clerk to the Kingswinford School Board, signed by F. J. Palgrave, contains one or two erroneous statements, that I am desirous to have corrected. 1. It is stated that vomiting and intense pain were absent. Both these symptoms did exist; the vomiting continued more or less the whole day; and the child also complained of great pain in the head. 2. It is true that she had had scarlatina some time previously, but did not have as a sequel to it dropsy or albuminous urine, being quite convalescent at the end of five weeks, and able to return to school. 3. As Mr. Barrington Ward did not ask me to give him in detail the symptoms which occurred in the case, only asking one or two commonplace questions, I am at a loss to understand how he could frame a report, to present to the Local Government Board for the medical officer to give a correct opinion, without the notes of the case.

The following is the history of the case. On November 8th, 1883, at 12 A.M., I was summoned to see S. R., aged six and half years. On my arrival, I found her suffering from vomiting, pains in the head, pupils contracted, pulse 100, and full delirium. At 9 P.M., she had convulsions, dilated pupils, feeble and intermittent pulse, cold extremities; afterwards coma; and death occurred at 4 A.M. the following morning. With the above symptoms existing, I leave it for the medical profession at large to judge if my diagnosis was correct or not. At the same time, I still adhere to the statement that I made, that the present system of cramming is injurious to the health of young children; and my opinion is that they ought to be classified according to their abilities.

I am, yours respectfully, JAMES BRADLEY, M.R.C.S.Eng.

The Poplars, Pensnett, near Dudley.

P.S.—The girl had been at school for nearly five weeks, making altogether ten weeks from the time of having scarlatina.

SHIP-SURGEONS.

SIR,—A recent issue of the *Times* publishes a letter by Dr. Domett Stone, in which he does me the honour of quoting, at length, from my articles upon the present defective medical service on transatlantic steamers. I desire to add a few lines upon the channel through which this present disastrous condition of affairs may be averted.

Dr. Domett Stone advises the ship-surgeons to enroll themselves into a mercantile marine medical service, with the view of laying their grievances before Parliament. Let me predict that the only result of such a movement would be the immediate dismissal of its leaders and a probable movement of disability among those who survived the [illegible] of their employers. Ship-surgeons are aggrieved; they are allowed no position or authority; they are assigned the worst cabins; they are remunerated on a par with cooks, stewards, and second engineers; in fact, their [illegible] are many and various. But who [illegible] ship-surgeons? [illegible] grievances, and ready to accept the general [illegible] that [illegible] can [illegible] of price; and that a class of workers [illegible] are [illegible] in the field of public [illegible]

Let ship-surgeons who are dissatisfied with their position retire from it, and enter upon any of the other walks of the profession which are open to them, and in which honest energy and ability are certain of ultimate recognition. Those who are content in a life of semi-inebriate dormancy, may congratulate themselves upon the unique facilities for such an existence which the present system affords. But of this much all may rest assured; that, even should the moiety of gentlemen and competent practitioners now in the sea-service unite in a strike against existing conditions, such a course would not seriously inconvenience their employers.

The average shipowner desires a person whose qualification complies with the minimum requirement of the law, whose faculties or philosophy are of the character which accept what is as right, who can be judiciously silent when it might be inconvenient to speak, judiciously blind when not intended to see, but who will ever be ready to act as a buffer between negligence and public indignation, when the health-interests of passengers come into opposition with the money-interests of his employer. And, unfortunately, there are still in the profession of medicine enough loafers, and general "bad eggs," to fill the vacant posts, and render more homogeneous, and quite as satisfactory to its employers, a class in which now the best and the worst are exactly upon the same footing. Ship-surgeons must recognise that they are a drug upon an over-stocked market, in which pertains the abnormal condition that the quality of the article is little object to the purchaser; and hence to grumble and formulate grievances must ever be a futile task.

There is, however, another aspect to this question.

It has been demonstrated that among the thousands upon thousands who annually cross the Atlantic there is a serious depression of health, and a highly excessive mortality, referable to the unreliable medical service, and to the absence of an efficient sanitary administration on shipboard. Statistics collected from reliable sources, and unmistakably pointing to this conclusion, have been published by me, and still remain unchallenged, although proof has been offered for every statement which has been advanced. The British Medical Association has fully endorsed my views, and memorialised and interviewed the President of the Board of Trade, but as yet without result.

Mr. Chamberlain, apparently absorbed in the matter of load-lines and free-boards, and questionably seaworthy craft, seems to regard it as legitimate enterprise, in which Government has no concern, that 2,000 persons should be despatched across this ocean in a steamer whose construction defies every law of sanitary science, and whose medical service is disgracefully inefficient. This, however, must soon come to an end either with or without the intervention of the Board of Trade. If the profit-interests of the transatlantic carrying trade are already entirely European, the health-interests of passengers are at least as much American. Of the saloon-passengers by Atlantic steamers, probably three-fourths are American; the steerage are, with few exceptions, already citizens of this country, or intend to become such. Atlantic passenger-travel has long since emerged from the legitimate sphere of private enterprise, and become an important national concern to this country. The United States has a right to supervise the transit of her citizens, a right to follow the example of our British Colonial Governments who appoint an independent medical superintendent to every vessel carrying emigrants to their shores; and I do not hesitate to predict that, unless reforms be soon instituted by the home authorities, Englishmen may prepare themselves, and that on short notice, to swallow an unpalatable pill of American interference in this important branch of British national trade.—I am, sir, your obedient servant,

J. A. Irwin, M.A. Cantab.; M.D. Dub.,

Late Honorary Physician to the Manchester Southern Hospital.

363, Fifth Avenue, New York.

THE PROVIDENT PRINCIPLE.

Sir,—Ever since I began to devote my attention to the subject, it has been painfully obvious to me that the provident principle in relation to medical practice is very far from being generally understood; and the letter of Dr. Lee is a reminder that, in spite of all that has been written in explanation of its advantages, there are still some members of the profession who have failed to grasp the subject.

"If any one consider the question carefully," says Dr. Lee, "he will see that it is as reasonable to provide against the butcher's and the baker's bills as against the doctor's. The provident principle cannot be applied as in life-assurance, where a comparatively remote contingency or risk is shared by large numbers and supported by small payments."

Now, I am really compelled to say that it is only when the question is not considered carefully that it is possible to arrive at such an erroneous conclusion. The provident principle can be as successfully applied in medical practice as in life-assurance, with such slight modifications as the differences of the two cases would lead us to expect. It is true that the contingency of illness is not so remote as that of death; but even now, with the comparatively slight attention that is given to prevention in private practice, illness cannot be considered an event of annual occurrence except in the lives of a very few; and the time that may elapse in the case of most people without any medical attendance is sufficiently long, on an average, to make medical providence remunerative to the doctor, and to render sufficient a scale of fees much below the annual sum that would be required of each individual if sickness were an annual event in the lives of all.

It is needful to remark, however, that Dr. Lee's objection to the provident principle appears to be due to his confounding it with provident dispensaries. But provident dispensaries that cannot be worked without the aid of charitable contributions afford but a lame example of the provident principle. Once and again I have pointed out that the provident principle is applicable to the rich man as well as to the poor—to every class, in fact, above the destitute; and my own experience in practice confirms the truth of the reasoning that first led me to adopt and advocate the provident system. Provident dispensaries would not be necessary, and would probably never have existed, if medical men generally had adopted in their own private practice the provident principle, and arranged in accordance therewith a scale of fees, such as I have elsewhere published, to suit the means, not of the wage-earning class alone, but—generally speaking—of all classes; and that, too—as in life-assurance—with due regard to risk, where the client can afford to pay for it.

I cannot enter more explicitly into the subject now. I will only add that the provident principle can not only be made to afford assurance against the doctor's bill, but also against disease itself, by stimulating the preventive functions of the medical man. It is a real life-assurance, therefore, and a greater boon than that which bears the name. To me it is a continual source of wonder that truths so obvious and so important should be so misunderstood or persistently ignored. W. F. Phillips.

St. Mary Bourne, Andover.

MILITARY AND NAVAL MEDICAL SERVICES.

EXAMINATION FOR THE ARMY, INDIAN, AND NAVAL MEDICAL SERVICES.

The following questions were submitted to the candidates at the recent examination for commissions in Her Majesty's Army, Indian, and Naval Medical Services.

Surgery (Mr. Pollock): 1. Mention the symptoms which would enable a surgeon to diagnose an irreducible inguinal hernia, not strangulated, from hæmatocele, and from an enlarged testicle. If the inguinal hernia be recent, not strangulated, but large and irreducible, what measures should be adopted with a view to its ultimate reduction, without recourse to operative interference? 2. What are the various causes of blood in the urine, independent of accident? Describe the symptoms which would indicate whether it depended on kidney or on bladder complications. 3. A patient has obstruction of bowel. Describe the symptoms which would indicate that the seat of obstruction was probably in some portion of the small, rather than in the large bowel, and the treatment in such a case. 4. Describe the conditions diagnostic of epithelioma of the tongue; the symptoms which would indicate the propriety of operation, and what would be the best method of its removal. 5. What is the condition known as perforating ulcer of the foot; to what cause is it ascribed, and what should be the treatment? 6. Under what conditions does a mammary abscess most commonly occur; what are its usual symptoms, and what should be the treatment, local and constitutional?—*Zoology, Botany, and Physics* (Dr. Allman). 1. *Zoology:* 1. Select any form of echinodermata you please, and describe the more important points in its structure. 2. To what subkingdom and class of animals do we owe the formation of coral-reefs? Give a classification of coral-reefs, and mention the principal features in their geographical distribution. 3. Define the term notochord, and adduce one or more examples of the persistence through life of this structure. 4. What is meant by alternation of generations? Cite from the animal kingdom one or more examples of this phenomenon. 5. What are the special features by which the mammalian fauna of the Australian region is characterised? 2. *Botany:* 6. What are the conditions necessary for the germination of the seed? 7. Give some examples of underground stems, and show how these differ from true roots? 8. What is the "Cambium layer" in a dicotyledonous stem? Describe the behaviour of this layer during successive years in the growth of such a stem. 9. Point out the differences between the germination of a bean, and that of a grain of wheat. 10. Contrast with one another as regards the condition of their floral verticils the following genera: lilium, papaver, primula. 3. *Physics:* 11. Define electrical induction, and point out the essential nature of this phenomenon. 12. Describe some of the modes by which a bar of steel may be converted into a magnet. 13. Describe an experiment for showing the composition of water by means of the voltaic current. 14. Explain the origin of the tides, pointing out the conditions on which spring and neap tides respectively depend. 15. What is a moraine? Enumerate and distinguish the various kinds, and point out the origin of each.—*Anatomy and Physiology* (Sir Joseph Fayrer): 1. Describe the occipital bone, and let your account include a description of its articulations, its relations to other parts of importance, and an enumeration, in their order, of muscles or other tissues to which it gives origin or insertion. 2. Describe the anatomy of the male perinæum, enumerating, in their order, the parts exposed in a dissection of this region. 3. Describe the pancreas, its position, anatomical relations, structure, and physiological functions; give an account of its secretion and its effects on digestion. 4. Describe the origin, course, anatomical relations, and distribution of the right vagus nerve and of its branches. Give an account of its functions generally, and especially of those of the branches which are distributed within the thorax. 5. Describe the dissections by which you would expose the cervical portion of the internal carotid artery, and the relation that it bears to surrounding parts.—*Medicine* (Dr. Aitken): 1. Describe the coarser or naked eye appearances, and the finer structural details or microscopic characters, of the liver in the varieties of cirrhosis of that organ; and also in the so-called "nutmeg liver." Discuss the causes, symptoms, complications, and sequelæ of the lesions you describe. 2. How do you estimate the following constituents in a clinical examination of the urine: (1) The amount of solids passed in the twenty-four hours, as approximately determined by the specific gravity of the urine? Give an example. (2) The amount of free acid passed in the twenty-four hours, expressing the result in the usual way? (3) The amount of urea passed in the twenty-four hours, determined by Liebig's method? (4) The amounts of chloride of sodium and of chlorine passed in the twenty-four hours? State the normal amounts passed by an adult man from forty to fifty years of age, and 140 to 150 pounds weight, in the twenty-four hours, of—(1) urea; (2) free acid; (3) chloride of sodium; (4) chlorine; (5) water. 3. Describe the structural changes which give rise to regurgitant aortic valve-disease. Discuss the physical signs (including sphygmographic phenomena) of this condition, the consecutive results, and the general treatment of a case. 4. Describe the distinguishing characters of the head, the mature joints, and the ova of the tænia solium, tænia mediocanellata or saginata, and the bothriocephalus latus; and the sources of each of these parasites. 5. How do you diagnose the following diseases: ovarian dropsy, uterine fibroid or fibro-myoma, and large malignant tumour of the uterus? 6. What are the medicinal substances which stimulate the liver? and discuss the evidences or reasons which justify the conclusion that the substances you name do so act.

ARMY MEDICAL SERVICE.—List of candidates who were successful for appointments as surgeons in Her Majesty's British Army Medical Service at the competitive examination in London on February 4th, 1884.

	Marks.		Marks.
1. J. R. Barefoot	2440	11. J. I. P. Doyle	2145
2. R. H. Clement	2420	12. N. Manders	2120
3. G. D. Hunter	2335	13. L. R. Colledge	2100
4. W. C. Beevor	2300	14. S. F. Freyer	2075
5. L. E. Anderson	2275	15. C. Birt	2070
6. G. B. Russell	2250	16. R. S. F. Henderson	2020
7. A. E. C. Spence	2220	17. H. Mitchell	2000
8. J. R. Mallins	2200	18. S. Butterworth	1990
9. R. J. McCormack	2180	19. C. J. Holmes	1930
10. H. N. Thompson	2169	20. I. R. Lane	1920

NAVAL MEDICAL SERVICE.—At the competitive examinations for commissions in the Medical Service of the Royal Navy, held on February 4th and following days, in the Hall of the University of London, Burlington Gardens, the undermentioned gentlemen were the successful candidates.

	Marks.		Marks.
F. M. Puddicombe	2415	J. H. Thomas	2130
D. S. Gunn	2250	F. J. Lilly	2120
H. J. Gordon	2220	J. Dowson	2070
H. Harries	2200	G. F. Dean	2055
E. Corcoran	2145	G. Welch	2050
J. Lloyd Thomas	2145	H. F. Ilewicz	2030
J. L. Smith	2140		

INDIAN MEDICAL SERVICE. At the competitive examination of the candidates for Her Majesty's Indian Medical Service, held at Burlington House on February 4th, 1884, twenty-one candidates competed for five appointments. All were reported qualified. List of successful candidates were as follows.

	Marks.		Marks.
1. J. H. T. Walsh	2164	4. G. H. Fink	2071
2. H. Hendley	2110	5. W. G. P. Alpin	2040
3. H. E. Banatvala	2102		

MEDICO-LEGAL AND MEDICO-ETHICAL.

VACCINATION PROSECUTION.

A DIVISIONAL Court of the Queen's Bench summarily crushed last week an astute attempt to re-open a great constitutional question by means of an appeal from a conviction by the Eastbourne bench of magistrates for non-compliance with Section 31 of the Vaccination Act of 1867. The appellant had been summoned and fined three times for not having caused his children to be vaccinated, and it was argued on his behalf that, having been once fined for non-compliance with the section, he could not be twice punished for the same offence—in other words, that the payment of one fine secured him an indulgence against compliance with the law. The applicant's counsel asked, in effect, that the Court would override the well known decision in Allen *v.* Worthy, made after careful consideration by the Court so long ago as 1870. But this the judges promptly declined to do, and refused the rule that was desired for setting aside the local justices' decision. The case deserves special attention, because attempts are frequently made to show that repeated prosecutions for non-compliance with the Vaccination Acts are illegal.

Into the policy of repeated prosecutions we shall not now go; but there is the clearest evidence that the decision of 1870, which the judges have now upheld, is in accordance with the spirit of the Vaccination Acts. Prior to 1867 there was no power of repeated prosecution for neglect of vaccination, and a well known case, Pilcher *v.* Stafford, tried in 1864, first directed serious attention to the subject. The Act of 1867 not only made provision, therefore, by its 29th Section, for a penalty in case of neglect to secure vaccination within three months of birth, but also, by its 31st Section, enabled a justice, on the application of the vaccination-officer, to make an order for the vaccination of a child under fourteen years of age. The plain meaning of this section is that until the offence is purged by the vaccination of the child, the order may be repeated again and again, as often as may be requisite, until the vaccination of the child be effected. In the case of Allen *v.* Worthy, which it has now been sought to upset, that acute lawyer, the late Lord Chief Justice Cockburn, held that a person was rightly convicted for disobeying a second order, requiring him to have his child vaccinated, notwithstanding that he had already been convicted of disobedience to a previous order, and he observed: "I think that the power given by Section 31 is not confined to one notice, one order, and one conviction, but that the whole proceeding may be instituted *toties quoties*, so long as the disobedience continues." As our readers will be aware, many unsuccessful attempts, direct and indirect, have been made to upset this clause by the limitation of penalties for non-compliance with the law. One more attempt is threatened this session, though after the crushing defeat of last year it might have been thought that the anti vaccinators would have desisted from the hopeless task of converting the House of Commons to their way of thinking.

MEDICAL ETIQUETTE—A REPLY.

SIR,—I wish to reply to Mr. Reid's explanation, published in the BRITISH MEDICAL JOURNAL of January 19th.

1. I think sixteen months sufficient time for Mr. Reid to get to know his ordinary family patients; and, in any case, it has no important bearing in this matter.

2. Although having been on very close terms of intimacy with his senior, I never was with him.

3. My absence from his senior's house and surgery has nothing to do either with the infirmary question or Mr. Reid; and I may here say I strongly object to any extraneous subjects being brought to bear on this matter.

4. I made no derogatory remarks about Mr. Reid; what I said was done openly and courteously to his senior and himself, viz., that an assistant has no *locus standi* in the appointment to the honorary post of the infirmary.

5. As far as I am aware, my manner has not altered to Mr. Reid.

6. On the morning in question, the case being of an exceedingly serious nature, the usual courteous preliminaries were deferred, even between A. and B., until we had left the house; and again I maintain that, as I met him, spoke to him, and asked him to make an examination immediately on his arrival, this was courteous.

7. We did not leave the room abruptly, nor leave the case to him, for he had more time to examine the patient than either A. and B. took; and I invited him along with B. to adjourn downstairs before making any move.

8. Within a day or two of the occurrence, Mr. Reid was informed that I was the family attendant. His memory must have misled him.

I have sent a courteous communication on the above points to him; and wish you, as referee, to decide on the case: (1) Whether you will alter your decision given in the BRITISH MEDICAL JOURNAL, January 5th, 1884, page 37? (2) After your decision, please to state the course that A. and C. (Mr. Reid) should take towards each other. By inserting an early reply, you will greatly oblige. I enclose my card, and remain, yours faithfully,

SURGEON A.

** Although Mr. Reid's letter of explanation contained matter not strictly bearing on the ethical questions at issue, we considered it only fair that his version of the case should appear in full—between which, we would observe, and that of Surgeon A. there are material discrepancies, which render adjudication a somewhat difficult task. Indeed, we have ever held a strong opinion that such cases could be more satisfactorily investigated and decided by an unbiassed local or provincial "court medical," by which the respective disputants and their witnesses could be examined, and the evidence noted and sifted, as a guide to adjudication. In the absence, however, of such a tribunal in the present instance, we have carefully reviewed the correspondence submitted; and while we still hold the opinion that Mr. Reid, in retaining the case (although he had been led by the husband to believe that the patient was his senior's) without communicating with A. or B., was undoubtedly ethically wrong, we have arrived at the conclusion that the unprofessional error arose rather from a lack of ethical knowledge and procedure than wilful intent—an error, however, that would, we think, have been avoided had A. and B., in accordance with professional right and rule, remained in the bedroom until C. had completed his examination of the patient, or, at least, in the room to which they retired, pending his return; on which a consultation should have been held between the three practitioners, and their united or diverse opinion communicated to the family.

In reply to A.'s second query, we would simply suggest for consideration the practical moral inculcated in the motto appended to the *Code of Medical Ethics*, viz., "Bear and Forbear."

SUDDEN DEATH.

SIR,—Will you kindly give your opinion on the following statement in an early issue of the JOURNAL? and oblige, yours truly, RUSTICUS.

X. fell down while at work; a bystander ran for the nearest doctor, A., whose assistant, B., attended and pronounced the man dead. A policeman saw B. present; and, as a result, B. received a coroner's order to make a *post mortem* examination, and give evidence at the inquest as to the cause of death. This he did, and received the usual fee. A. was from home at the time of death, but returned the same day. X. was in a friendly society, of which another doctor, C., is medical officer. X. had not been medically treated for some time before his death. C. was at home when the sudden death of X. took place, and could have attended if he had been sent for; he, however, saw the corpse carried away. C. insists that A., on his return home, should have "formally handed over the case" to him, so that he might have taken steps to be summoned by the coroner instead of B., and thus have secured the fee, which he believes himself entitled to, as X. was in his club. A., on the other hand, maintains that X.'s death severed his connection with the club, and that the inquest and *post mortem* examination were placed in B.'s hands by the coroner, and were paid for by him. The following are the main points in the dispute. 1. Did A. fail to observe the usual etiquette in not formally acquainting C. of the sudden death of X. a fact C. already knew? 2. After having failed to acquaint C. of a fact he already knew, did A. act unfairly in allowing his assistant, B., to retain the fee instead of handing it over to C., who claimed it on the ground that X. was in his club?

*** The following rule, extracted from Dr. Styrap's *Code of Medical Ethics*, should, in our opinion, directly and inferentially govern the case submitted by "Rusticus." "In a case of sudden or accidental death, in which the deceased person was incidentally attended by a practitioner other than the usual 'family doctor,' the latter, in the event of a *post mortem* examination being deemed necessary, should be specially invited to be present."

In accordance with the principle enunciated in the above rule, we consider that the justice of the case would have been fairly and ethically met, had B. invited C. to be present and take part in the *post mortem* examination, and, at the close of the inquest, handed him a moiety of the fee.

INDIA AND THE COLONIES.

INDIA.

THE CAMA HOSPITAL OF BOMBAY.—H.R.H. the Duke of Connaught has recently laid the foundation of the Cama Hospital for Women and Children, in Bombay. The hospital was designed by Khan Bahadur Murzban, a Parsee Executive Engineer of the Presidency, in accordance with the terms of the Government resolution. The design has been prepared after consultation with the first physician of the Sir Jamsetjee Jeejeebhoy Hospital, with a view of further extension should occasion require and necessary funds be forthcoming hereafter. The style will be mediæval and gothic. The hospital will consist of a main building affording accommodation to forty-two in-patients, dispensary and waiting-room for outdoor patients, delivery ward, an operating room, matrons' quarters, surgeons' offices, and quarters for resident-surgeon or apothecary, detached building for infectious fever cases, disinfecting-room, dead-house, servants' quarters, cook-rooms, store-rooms, latrines for servants, and bathing-places for servants. The extreme length of the main building will be about 156 feet, and the extreme width, including a porch at the main entrance, will be 94 feet, and consist of a ground and upper floor, with an additional floor in the centre.

ST. JOHN AMBULANCE ASSOCIATION.—The large railways in India and the Colonies are devoting attention to the importance of ambulance instruction for their *employés*. In India, classes in connection with the Bombay centre of the St. John Ambulance Association have been formed on the Bombay, Baroda, and Central India Railway; and, in Canada, a meeting has been called at Montreal, for the same purpose, on behalf of the Grand Trunk Railroad officials.

CHOLERA of a very bad type is, according to the *Times of India*, still prevalent at Saidapet, Madras. The epidemic seems to be so severe that the Government High School and the Agricultural College have both been closed.

AUSTRALIA.

INFANT MORTALITY IN AUSTRALIA.—Dr. Jamieson, Lecturer on Obstetrics at Melbourne University, has recently published a valuable contribution to the vital statistics of Australia, on the above subject. Dr. Jamieson's method of calculating infant mortality, *i.e.*, the death-rate among children under one year of age, is the same as that adopted by the Registrar-General, and is based upon the number of births registered. He makes a comparison of the infant mortality in England and some other countries, with that in the leading Australian colonies, and of these colonies with each other, following this by an account of the most important causes of death, as registered, with a view of discovering the conditions under which these causes are brought into operation. Compared with that observed in most countries, the death-rate among infants under one year of age, in the Australian colonies, is not excessive. During the five years, 1876-80, this death-rate averaged 120 in Victoria, 115 in New South Wales, 141 in South Australia, and 135 in Queensland. In England and Wales during 1870-77 it averaged 151. In a table showing the rates of infant mortality in the three largest towns in Australia, during the five years 1876-80, the rate in Melbourne is given as 163, in Sydney as 170, and in Brisbane as 172 per 1,000 births; shewing, therefore, comparatively slight variations. In the eastern metropolitan portions of Victoria, the rate of infant mortality is stated to be 99 per 1,000, in New South Wales 93, while in Queensland it is as high as 127 per 1,000 births. Dr Jamieson considers that infant mortality in Australia is relatively high, considering the advantageous circumstances of climate and prosperity, and the low general death-rate. Though Dr. Jamieson admits that climate has an influence on infant mortality, he contends that it has far less effect than other conditions, such as the proportion of urban to rural population, the extent to which people are engaged in manufactures, and the customs of rearing and management; and that all these conditions ultimately resolve themselves into the one of management, especially with regard to feeding.

PUERPERAL FEVER IN AUSTRALIA. An interesting and valuable paper on the above subject, also by Dr. Jamieson, has been published in the *Australasian Medical Gazette*. Dr. Jamieson admits the great difficulty there is of obtaining trustworthy statistics relating to childbirth and puerperal fever, either in Australia or elsewhere, from the tendency there is to withhold the fact that in childbirth cases the death, certified as caused by peritonitis, etc., occurred soon after delivery; and in cases of puerperal fever to give a less alarming name to the cause of death. Consequently, the death-rate from puerperal fever, and from all diseases in connection with child-birth, is understated. He is, however, of opinion that the vital statistics of Victoria are more carefully compiled than those of any other of the colonies. Dr. Jamieson considers that the death-rate from metria is habitually understated through the fact that, when there is a high recorded death-rate from puerperal fever, there is a simultaneous rise in the number of deaths from so-called "accidents of childbirth," which, if not usually presenting a fixed quantity, at least should not run parallel with those of an acute contagious disease. In a series of tables, Dr. Jamieson shows the number of births, the deaths from metria and from the accidents of childbirth, and the rate therefrom per 1,000 births during the decade, 1871-80, in each of the four chief colonies of Australia; also the relative mortality of metria and childbirth in England and Australia, and in Melbourne and Sydney. There are also tables showing the deaths from erysipelas and puerperal fever; from them he draws the conclusion that either puerperal fever often owes its origin to contagion from a case of erysipelas, or that both of the diseases originate under the influence of the same local or general conditions. Of these the former appears to be the more probable; the concurrence of the two diseases in the colony being much closer than is observed in the case of any other two contagious diseases, and too close to be the result of accident.

CANADA.

EXCESSIVE INFANT MORTALITY IN A CANADIAN "HOME."—The *Canada Lancet* states that the City Council of Ottawa has recently caused an enquiry to be made into the excessive mortality among infants received into the Home of Bethlehem in that city. The home is under the charge of the Grey Nuns, and the infants come to it chiefly from a lying-in hospital. The official reports show the death-rate per annum to be about 88 per cent. of all admitted. A report presented by the six physicians appointed to make the enquiry, while commending the individual efforts of the attending physicians and sisters in charge, and admitting that the situation of the building is not as favourable as it might be, attributes the high death-rate to the system of dry-nursing. The two weeks of maternal nursing required by law it considers insufficient, and advises that some other method of rearing the infants be adopted. In consequence of this report, the Council has ordered the charity to be closed until it offers better means for preserving the infants' lives. Should the warning be disregarded, the attention of the legislature will be directed to the matter.

SUCCESSFUL VACCINATION.—Mr. George Harvey, of Wirksworth, Derbyshire, has been awarded by the Local Government Board the sum of £10 11s. for efficient vaccination. This is the fourth grant received by this gentleman.—The Local Government Board have awarded to Mr. W. Inglis Mason, of Sudbury, Suffolk, a grant of £21 10s. for efficient vaccination. This is the fifth grant received by Mr. Mason.

A CENTENARIAN.—M. Aaron Lisbonne, a Jew, formerly a member of the Chamber of Deputies, recently died at Carpentras, in France, at, it is said, the age of 106.

OBITUARY.

ARMAND LESLIE, M.R.C.S.

THE death, on the field of battle, of Armand Leslie, late Chief Medical Officer to Baker Pasha's force, adds one more to the long roll of medical men who have fallen at the post of honour and of duty. To many, both in the profession and in general society, the news of poor Leslie's sad but glorious end will bring a pang of sorrow. Though his life had been short, it had been full of adventure and moving incidents. A student of the Middlesex Hospital, and subsequently of the Ecole de Médecine in Paris, he passed the College of Surgeons in 1868, and shortly afterwards proceeded to Circassia, where he was in medical charge of a railway which the Russian Government were then constructing. He remained in this post some two years, acquiring a very intimate acquaintance with the Russian language and character. At the commencement of the Servian campaign in 1876, Leslie joined the Red Cross Society, and saw a good deal of fighting at the siege of Alexinatz. He was subsequently transferred by the same society to the Turkish camp, then at Nisch, under the command of Abdul Kerim Pasha. In this position he was senior medical officer of the society's staff, and, as such, had charge of all its stores, money, and diplomatic business. The winter of 1876, in the Balkans, was a trying one. It set in suddenly and with great severity, and found the unfortunate Turks as unprepared as our soldiers were in the days of the Crimea. To relieve suffering and to administer relief, as best it could be done with absurdly insufficient means at his disposal, was Mr. Leslie's task. Those who, like the writer of these lines, then co-operated with him, can best speak of his ability, his energy, and his calm courage in the face of difficulty and danger. At the close of the Servian campaign, Leslie was invited by the Red Cross Society to continue in its service, and, under its flag, fought through the great Russo-Turkish war. His duties lay chiefly with Suleiman Pasha's *corps d'armée*, and he was present all through those dreary days of meaningless slaughter which marked the capture and subsequent loss of Shipka. In conjunction with Dr. Neville, now in practice in London, and Mr. Gay, of the *Daily Telegraph*, Mr. Leslie was shortly afterwards taken prisoner by the Russians, and subjected to many indignities and hardships at their hands. These and his various other services, won for him the Turkish Orders of the Medjidieh and Osmanlie. After leaving Turkey, he devoted himself, for a brief interval, to journalism, and subsequently proceeded to South Africa. There he aided Lady Strangford in the establishment and conduct of her hospital, and saw a good deal of administrative service.

Returning to London, it was his intention to have settled in practice. Before, however, his plans had been matured, cholera broke out in Egypt, and Mr. Leslie volunteered his services, which, from his previous experience of the East, were gladly accepted. At the close of the epidemic the English medical officers in most cases returned, but Leslie remained, and it was understood that he was to have the appointment of chief medical officer of a Sanitary Commission, which was to be created *en permanence*. Meanwhile, the disastrous defeat of Hicks Pasha took place, and when General Baker went forward to take up a forlorn hope, he invited Mr. Leslie to serve under him. For two months previous to his death he had held the arduous and responsible position of chief medical officer to the small and mixed force of Europeans, blacks, and Egyptians, under Baker's command. A letter received only lately shows how anxious and onerous his duties were, and how manfully and successfully he had grappled with difficulties of every kind.

Cut off in the prime of his strength and manhood, Mr. Leslie will long be remembered, with affectionate regret, by many in England and abroad, who have known and worked with him. He was an able surgeon, and possessed of great practical knowledge of his profession. His administrative ability was of a high order. He was prompt in emergencies, and possessed that kind of courage which grows ever cooler and most assured in proportion as the danger is greatest. Mr. Leslie had also devoted a good deal of time to journalism, and had acted for more than one daily paper as special war correspondent in Turkey, South Africa, and Egypt. His knowledge of French language and literature was far beyond the average. With his energy and ability, his knowledge of men, and his experience and commanding presence, had his life only been spared, he would, in all probability, have gained both name and fame in the career which he had marked out for himself.

ALEXANDER THOM THOMSON, F.R.C.S., J.P.

ON January 29th, at his residence, Montrose House, Oldham, there passed away, at the age of 63, Mr. Alexander Thom Thomson, F.R.C.S., J.P. Mr. Thomson was born at Montrose in 1820. His professional training [illegible] to his uncle, the late Mr. Thom, of Dobeross, and afterwards at the Edinburgh College of Surgeons. He became L.S.A. in 1843, receiving the same year the diploma of the Royal College of Surgeons of England, and obtained the Fellowship in 1858. Mr. Thomson commenced the practice of his profession, at Cheadle, in 1843, where he remained until 1854, when he succeeded the late Mr. Dunkerley, of Oldham. His commanding abilities speedily placed him in a leading position, and he acquired a very large practice, which he pursued with energy, until, in 1864, his health broke down, and evidence of degeneration of the cerebral arteries became apparent. This necessitated his associating with himself, in practice, his brother-in-law, the late Dr. Bradbury. Rest having re-established his health, he was enabled to take a fairly active share of work up to the death of Dr. Bradbury, in 1872, when he was joined by Dr. George Thomson. Mr. Thomson's health again broke down in September 1873, when a small cerebral hæmorrhage was followed by slight left hemiplegia, which speedily passed off, but left his health permanently impaired. From this time forward he was unable to take a very active share of work, and finally retired from the practice of his profession at the end of 1878.

Mr. Thomson was endowed with great mental powers, and although he never contributed to the literature of his profession, yet he was always a student, and fully abreast with the times. His skill in diagnosis led to his being frequently sought as a consultant by his professional neighbours, who valued him not less for his undoubted great powers as a physician, than for the honourable, courteous, and kindly spirit always extended to his professional brethren.

His influence among his own profession was emphatically shown in the part he often took in smoothing those unhappy differences which too often arise among medical neighbours. He was, moreover, an admirable man of business, which led to his counsel being constantly sought on other than professional matters, and he was always ready to listen sympathetically, and do his utmost to advise. Mr. Thomson took an active share in the organisation of Oldham Infirmary, twelve years ago, and succeeded then in getting the principle of payment for medical services recognised. He also organised a system of enquiry for the purpose of keeping a check on the abuse of the charity, which has continued in successful operation ever since.

Mr. Thomson was appointed a justice of the peace for the county of Lancaster in 1879, and devoted himself with ardour to his duties. For some months before his death he had been conducting a physiological class for young men at a neighbouring church institute, which afforded him great pleasure, and was very popular. It was in walking home from presiding at a meeting in this institute, in the teeth of the terrible wind of January 26th, that the seizure took place which terminated fatally. The cold and severe physical exertion brought on a return of the cerebral hæmorrhage, and he dropped on the roadway near his own residence, and was carried home. He never recovered consciousness, and died at 1 P.M. on January 29th. He leaves a widow and one son and a daughter. His remains are laid in Turton churchyard.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.—During the week ending the 16th instant, 5,814 births and 3,367 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons. The annual rate of mortality per 1,000 persons living in these towns, which in the three preceding weeks had been 20.3, 20.5, and 20.6, declined again to 20.1 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follows: Portsmouth 11.8, Wolverhampton 14.0, Cardiff 15.1, Halifax 16.1, Leicester 16.5, Oldham 17.4, Leeds 17.7, Birmingham 17.8, Blackburn 17.9, Norwich 17.9, Brighton 18.9, Bristol 19.1, Derby 19.1, Bradford 19.4, Nottingham 19.6, London 19.8, Plymouth 20.0, Hull 20.4, Birkenhead 21.2, Salford 21.4, Sheffield 21.7, Huddersfield 21.8, Bolton 22.0, Manchester 22.8, Newcastle-upon-Tyne 23.1, Preston 24.6, Liverpool 24.7, and Sunderland 25.8. The average death-rate last week in the twenty-seven provincial towns was 20.3, and therefore slightly exceeded the rate recorded in London. The 3,367 deaths registered last week in the twenty-eight towns included 415 which were referred to the principal zymotic diseases, against 421 and 399 in the two preceding weeks; of these, 120 resulted from whooping-cough, 59 from scarlet fever, 57 from measles, 44 from diarrhoeal diseases, 40 from "fever" (principally enteric), 39 from diphtheria, and 16 from small-pox. These 415 deaths were equal to 12.3 per cent. of the total deaths, and to an annual rate of 2.5 per 1,000. This zymotic rate was equal to 2.7 in London, whereas it did not exceed 2.3 in the twenty-seven provincial towns, among which it ranged from 0.0 in Wolverhampton, and 0.5 in Brighton and in Preston, to 3.4 in Salford and in Newcastle-upon-Tyne, 3.8 in Leeds, and 5.1 in Sunderland. The fatal cases of whooping-cough, which had been 130, 126, and 124 in the three preceding weeks, further declined last week to 120, and caused the highest proportional fatality in Huddersfield and Bolton. The deaths referred to scarlet fever, which had been 103 and 94 in the two previous weeks, further declined to 79, and caused the highest rates of mortality in Sheffield, Newcastle-upon-Tyne, and Leeds. The deaths referred to measles, which had steadily declined in the five preceding weeks from 116 to 53, rose again last week to 77; this disease caused the largest proportional fatality in Oldham, Salford, and Derby. The 44 fatal cases of diarrhœa showed a further increase upon recent weekly numbers. The deaths referred to different forms of fever were slightly lower than those in the previous week, and caused the highest death-rates in Sheffield and Nottingham. The fatal cases of diphtheria in the twenty-eight towns, which had been 36 and 28 in the two preceding weeks, rose last week to 39, and exceeded the number recorded in any week since December last; 26 occurred in London, 5 in Hull, 2 in Liverpool, and 2 in Leeds. The deaths from small-pox in these towns, which had been 4, 14, and 21 in the three preceding weeks, declined last week to 16, of which 10 were recorded in Sunderland, 3 in Birmingham, 2 in London, and 1 in Liverpool. The death-rate from diseases of the respiratory organs, judged by the metropolitan returns, continues much below the average; the deaths referred to these diseases in London, which had been 367 and 347 in the two previous weeks, further declined last week to 334; they were no fewer than 241 below the corrected weekly average number, and were equal to an annual rate of 4.3 per 1,000. The causes of 80, or 2.4 per cent. of the 3,367 deaths registered last week in the twenty-eight towns, were not certified, either by medical practitioners or by coroners. In London, the proportion of uncertified deaths did not exceed 1.2 per cent., while in the provincial towns it averaged 3.4 per cent., and showed the largest excess in Bristol, Preston, Sheffield, and Wolverhampton.

HEALTH OF SCOTCH TOWNS.—In eight of the principal Scotch towns, having an estimated aggregate population of 1,254,607 persons, 852 births and 504 deaths were registered during the week ending the 16th instant. The annual rate of mortality, which, in the three preceding weeks had been 20.1, 22.5, and 24.7 per 1,000, declined last week to 20.9, which, however, exceeded by 0.8 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the death-rate was equal to 14.1 in Leith, 15.0 in Aberdeen, 16.9 in Paisley, 18.1 in Edinburgh, 18.6 in Greenock; 20.2 in Perth, 20.4 in Dundee, and 25.3 in Glasgow. The 504 deaths registered last week in these towns included 21 which resulted from whooping-cough, 14 from diphtheria, 14 from diarrhœal diseases, 11 from measles, 8 from scarlet fever, 4 from "fever," and not one from small-pox; in all, 72 deaths were referred to these principal zymotic diseases, equal to 14.3 per cent. of the total deaths, and to a rate of 3.0 per 1,000, which exceeded by 0.5 per 1,000 the average zymotic death-rate recorded last week in the twenty-eight English towns. In the Scotch towns, the lowest zymotic death-rates were 0.7 and 1.7 in Greenock and Perth, whereas the rate was equal to 3.6 in Glasgow and 5.4 in Paisley. The fatal cases of whooping-cough were 2 less than the number in the previous week, and included no fewer than 15 in Glasgow. The deaths referred to diphtheria, which had been 6 and 23 in the two preceding weeks, declined to 14, of which 8 occurred in Glasgow, and 2 in Dundee. The 11 fatal cases of measles were within one of the number in the previous week; 4 more deaths from this disease were recorded in Edinburgh, 3 in Glasgow, and 3 in Paisley. The deaths from scarlet fever, which had been 5 and 15 in the two previous weeks, declined to 8, of which 4 occurred in Glasgow, and 3 in Edinburgh. The 4 fatal cases of "fever" showed a marked decline from recent weekly numbers, and were fewer than those returned in any week since November last. The mortality from diseases of the respiratory organs in these Scotch towns was again considerably below the average, and was equal to an annual rate of 4.7 per 1,000, which slightly exceeded the rate last week from the same diseases in London. As many as 71, or more than 14 per cent. of the 504 deaths registered last week in these towns, were uncertified.

HEALTH OF IRISH TOWNS.—During the week ending Saturday, February 16th, the number of deaths in the sixteen principal town districts of Ireland was 449. The average annual death-rate was 27.2 per 1,000 of the population, the respective rates for the several districts being as follow, ranging in order from the lowest to the highest:—Kilkenny, 4.2; Sligo, 4.8; Newry, 14.0; Dundalk, 17.5; Lisburn, 19.3; Galway, 20.2; Armagh, 20.7; Limerick, 24.3; Londonderry, 25.0; Cork, 25.3; Drogheda, 25.4; Waterford, 25.5; Belfast, 27.6; Dublin, 30.7; Wexford, 34.2; Lurgan, 35.9. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.7 per 1,000, the rates varying from 0.0 in Galway, Newry, Kilkenny, Drogheda, Sligo, Lisburn, and Lurgan, to 10.3 in Armagh; the 4 deaths from all causes registered in the last-named district comprising 2 more from whooping-cough. Among the 115 deaths from all causes registered in Belfast are 4 from scarlatina, 3 from whooping-cough, 1 from enteric fever, and 6 from diarrhœa. Among the 39 deaths from all causes registered in Cork are 3 from measles, 1 from typhus, 3 from whooping-cough, 1 from ill-defined fever, and 1 from diarrhœa. The 18 deaths registered in Limerick comprise 1 from scarlatina, 1 from whooping-cough, and 2 from diarrhœa; and the 11 deaths registered in Waterford comprise 2 from scarlatina and 1 from whooping-cough. In the Dublin Registration District the deaths registered during the week amounted to 211; of these, 16 were from zymotic diseases, comprising 4 from scarlet fever (scarlatina), 2 from typhus, 2 from whooping-cough, 1 from enteric fever, 2 from diarrhœa, etc.

HEALTH OF FOREIGN CITIES.—It appears from statistics published in the Registrar-General's return for the week ending the 16th instant, that the annual death-rate, according to the most recently received weekly return, was equal to 29.4 in Bombay, and to 65.1 in Madras. Cholera caused 22 deaths in Bombay and 26 in Madras. The fatal cases of small-pox in Madras were no fewer than 118 out of 498 deaths from all causes; "fever" fatality was also greatest in Madras. According to the most recent weekly returns, the average annual death-rate in twenty-two of the largest European cities was 27.8 per 1,000, and was no less than 7.5 above the mean rate last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 38.7, and showed a slight decline from the steadily increasing rates in previous weeks; the 688 deaths included 23 from typhus and typhoid fever, and 18 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged only 22.7, the highest rate being 23.4 in Christiania, where 7 of the 55 deaths resulted from scarlet fever; 6 deaths from diphtheria and croup were returned in Stockholm, and 5 from whooping-cough in Copenhagen. In Paris the death-rate was equal to 24.1 (4.3 above the rate in London), and the deaths included 43 from diphtheria and croup, and 21 from measles. The 181 deaths in Brussels, of which 7 resulted from small-pox, were equal to a rate of 22.5. The rate in Geneva was 29.0, the 38 deaths including 2 from diphtheria and croup. In the three principal Dutch cities—Amsterdam, Rotterdam, and The Hague—the mean death-rate was 26.7, the highest rate being 28.4 in Amsterdam, where 27 deaths were again referred to diphtheria and croup; 6 of the 80 deaths in Rotterdam resulted from scarlet fever. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 26.9, and ranged from 22.6 and 24.3 in Berlin and Hamburg, to 30.6 in Dresden and 38.5 in Prague. Small-pox caused 50 deaths in Prague, showing a further increase upon recent weekly numbers, 4 in Vienna and 3 in Buda Pesth; diphtheria showed the largest proportional fatality in Dresden and Berlin. The death-rate in three of the principal Italian cities averaged 34.2, and was equal to 35.7 in Rome, 32.5 in Turin, and 33.6 in Venice; malarial and typhoid fevers caused 11 deaths in Rome, small-pox 4, and measles 12 deaths in Turin, and 5 fatal cases of diphtheria and croup occurred in Venice. The 160 deaths in Lisbon included 2 from scarlet fever, and were equal to a rate of 41.0. The returns from Philadelphia and Baltimore showed death-rates equal to 25.1 and 22.4 respectively. The deaths in Philadelphia included 25 from scarlet fever and 14 from typhoid fever; and of the 175 deaths in Baltimore, 12 resulted from diphtheria and 11 from measles.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

BEDFORD, RURAL AND URBAN.—Out of a total of 406 deaths from all causes recorded in the rural district in 1882, 38 were referred to zymotic diseases, equal to a death-rate of 1.6 per 1,000. The circumstances attending an outbreak of diphtheria, which destroyed eight lives, went far to show the highly contagious nature of the disease, and the advantages of prompt isolation. At Thurleigh, there was an epidemic of enteric fever, the origin of which Dr. Prior could not satisfactorily make out; but he thinks that the progress of the disease gives abundant evidence, not only of its direct contagion from person to person, but of its indirect conveyance, probably through infected garments. There was also an epidemic of enteric fever at Sharnbrook, where the infection seems to have been spread by the usual direct method from the sick to the healthy. The general death-rate represented 17.2 per 1,000, no fewer than 143 deaths being registered in persons aged sixty-five years and upwards. Diphtheria was the most serious and troublesome disease in the urban district, where it was fatal to nine persons. Dr. Prior regrets that isolation and disinfection are not carried out so thoroughly as they should be, and he observes that the germs of the disease appear to be occasionally capable of a most persistent vitality, though, as to its absolutely spontaneous origin, there is little scientific evidence. Judged by its mortality-statistics, the town of Bedford would seem to be in a remarkably healthy condition, for the death-rate is 0.3 lower than that recorded for 1881, when it represented 15.6 per 1,000. Dr. Prior does not expect that this low rate can be maintained for a series of years, but he thinks that, by persistent sanitary work, the mortality of the town, for a decennial period, can be brought within 18 per 1,000.

CARNARVONSHIRE COMBINED DISTRICT.—Mr. Rees's reports on this combination are very readable, as well as being thorough and complete. There were five invasions of small-pox in the whole area during 1881, but in four cases the disease did not spread beyond the houses in which it first made its appearance; and in the following year it was fatal in one case only. Scarlet fever did not appear, either in 1881 or 1882, in any great force, but the disease became more markedly epidemic towards the end of 1882 and the beginning of 1883. Diphtheria and croup were not nearly so prevalent or fatal in 1882 as in 1881, but the first disorder hovered about several parishes, and assumed epidemic proportions in one. The incidence of the typhoid mortality fell principally upon the urban and rural districts of Bangor and upon Bethesda; 89 deaths (out of a total of 117) being registered in these three districts alone. During 1881, Bangor was remarkably healthy throughout, the general and infantile death-rates were low, and there was a complete absence of infectious disease in a fatal form. There was one death from fever, doubtful in character, but probably simple continued fever, and there were four from diarrhœa, but no others that could be referred, even remotely, to a zymotic origin. In 1882, however, the case was widely different, for it is estimated that no fewer than 540 cases of fever occurred, with 52 deaths. The death-rate of the combination from all causes represented 18.06 per 1,000, and from zymotic diseases 2.01, against previous rates of 18.4 and 1.26 per 1,000 respectively. In both reports, Mr. Rees gives minute details of the progress of sanitary work, and he notes with satisfaction that, at Llandudno, all the preliminaries have been settled for the construction of an infectious hospital on the most approved principles. It will be a priceless boon to the district, which, like all watering-places, must necessarily be peculiarly liable to importations of zymotic disease from the constant influx of visitors.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At meetings of the Board of Examiners in Dental Surgery, on the 18th, 19th, and 20th instant, the following gentlemen, having passed the required examination, were admitted Licentiates in Dental Surgery, viz.:

Messrs. H. Apperly, Stroud, Gloucestershire; A. W. P. Ayres, Stratford Place, N.W.; S. C. Buckland, Wimbledon Park; A. M. Fox, Teddington; H. Baldwin, Moore Street, S.W.; S. Mundell, Castley, near Leeds; R. D. Pedley, Member 18 July, 18[illegible], Railway Approach, London Bridge.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—During the January sittings of the Examiners, the following gentlemen passed their first professional examination.

S. G. Sharpe, Norwich; L. E. Portal, Mauritius.

The following gentlemen passed their final examination, and were admitted Licentiates of the College.

G. L. Baker, Dorchester; F. H. Brown, Bombay; H. E. N. Dobie, China.

Mr. G. D. Orrock of Edinburgh, having passed his final examination, was admitted L.D.S. Edinburgh.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH.—DOUBLE QUALIFICATION. The following gentlemen passed their first professional examination during the January sittings of the Examiners.

J. S. Stewart, Lanarkshire; C. W. H. Abraball, London; G. A. H. Woodforde, London; C. C. Dickson, Galashiels; E. Portal, Mauritius; C. J. Lumpkin, Sierra Leone; F. Goode, Birmingham; H. St. David Griffiths, Cheltenham; E. Jones, South Wales; F. J. Stone, Glasgow; H. E. L. Earle, Plymouth; L. G. Wright, Colombo, Ceylon; J. Arthur, co. Derry; H. J. Augustine, Calcutta; R. M. Forde, Cheyne; H. W. R. R. Grosse, Middlesex; Parvah Nath Datta, Bengal; G. M. Green, Blackrock, co. Antrim; J. B. Wall, Blyth, Coleshill, Birmingham; G. E. Garde, Timoleague; E. Davies, Barmouth; R. Morrison, Toberdoney; S. Windrush, Heslerton; T. J. G. Garrett, Exeter; J. H. Jones, Merthyr Tydfil; R. P. Rankin, Victoria, Australia; J. Gray, Keith; H. P. Huybertsz, Ceylon.

The following gentlemen passed their final examination in February, and were admitted L.R.C.P. Edinburgh and L.R.C.S. Edinburgh.

J. S. Stewart, Lanarkshire; C. E. Morris, Campden; C. J. Lumpkin, Sierra Leone; R. N. Gaggin, Bally Richard; W. C. Hamilton, East Lothian; W. J. McFarland, co. Tyrone; J. W. Irvine, San Francisco; A. A. Dighton, Gloucestershire; J. B. Drew, Stow-on-the-Wold; J. Hanson, Weeting, Norfolk; A. W. Dalby, Jedburgh; J. G. G. Corkhill, Liverpool; A. Harper, co. Monaghan; R. K. C. G. McCorkill, Canada; L. D'Almeida, India; T. A. B. Kane, co. Armagh; M. S. Cussen, co. Kerry; C. H. Barkley, London; A. N. Barnley, Bedfordshire; W. H. Square, Kingsbridge; E. J. Flynn, Dublin; H. L. G. Chevers, Calcutta; H. E. L. Earle, Plymouth; O. G. Taaffe, Sherborne; W. R. Condon, Tipperary; W. F. Hamilton, Londonderry; R. F. O'Farrell, Galway; E. H. Goode, Birmingham; S. O. Eades, India; C. Reidy, Limerick; E. H. G. Phillips, Limerick; J. H. McAuley, Randalstown; J. Orr, Kilbride; J. J. Hanly, co. Tipperary; S. V. Daly, Cork; A. J. Griffith, co. Leitrim; J. McMichael, Dublin; D. A. MacCrimmon, Ontario; E. F. McGragh, co. Cork; H. G. Thomasz, Ceylon; T. F. Hanly, co. Tipperary; W. Gibb, Dundee; R. Fitzmaurice, co. Cork; W. Robinson, co. Derry; D. M. Nairn, Dundee; J. Amy, Jersey; A. W. McFadyen, Stirling.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the monthly examinations for the Licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, February 4th, 5th, 6th, and 7th, the following candidates were successful.

For the Licences to practise Medicine and Midwifery.—S. Finlay, Ballyshannon; E. B. Hazleton, Holywood, Belfast; N. S. Manning, Ballyhaise, co. Cavan; F. F. Peet, Tralee, co. Kerry; V. A. J. Smith, Sandycove, co. Dublin.

For the Licence to practise Medicine only.—W. P. Delahunt, Rathgar, Dublin; W. T. Price, Tircapel, Trecastle, Brecon; F. C. Roe, Mountrath, Queen's County.

For the Licence to practise Midwifery only.—T. G. Bell, M.D.R.M.I., Armagh; H. E. Brown, M.D.R.M.I., Passage West, co. Cork; C. A. Digby, M.B. Univ. Dub., Dublin; R. W. Henderson, M.D.R.M.I., Garvagh, co. Derry.

The following Licentiate in Medicine of the College, having complied with the by-laws relating to membership, pursuant to the provisions of the Supplemental Charter of December 12th, 1878, was duly enrolled a member of the College.

G. D. Bourke, Lic. Med. 1873, Surgeon A.M.D.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 14th, 1884.

Hall, William George, Swindon, Wilts.
Hill, George William, Sydney Street, South Kensington, S.W.
Livermore, William Leppingwell, Queen's Road, Finsbury Park, N.
Martin, Thomas Berkeley, Hylton Road, Sunderland.
Nicholson, Henry Gilbert, St. Peter's Square, Hereford.
Waters, Avery Clough, Mornington Road, Bow, E.

The following gentleman also on the same day passed the Primary Professional Examination.

Thomas, Edwin Clifton, London Hospital.

MEDICAL VACANCIES.

The following vacancies are announced.

ANDERSON'S COLLEGE DISPENSARY. Two vacancies for Physicians on the Dispensary Staff, also one Physician for Diseases of Women and Children. Applications to D. Wilson, 42, Bath Street, Glasgow.

ARMAGH UNION. Medical Officer, Richhill Dispensary. Salary, 140l., and fees. Applications to James Best, Honorary Secretary, up to February [illegible].

BEDFORD GENERAL INFIRMARY AND FEVER HOSPITAL. Resident Surgeon. Salary, 100l. per annum. Applications by February 28th.

BIRKENHEAD BOROUGH HOSPITAL AND DISPENSARY.—House-Surgeon. Salary, 100l. per annum. Applications to the Chairman of the Weekly Board by March 3rd.

CHESTERFIELD UNION. Medical Officer for the Bolsover District. Salary and fees about [illegible] per annum. Applications to the Clerk by February [illegible].

FULHAM UNION. Resident Medical Superintendent. Salary, [illegible] per annum. Applications by February 25th.

GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester. Junior Resident Medical Officer. Salary, 80l. per annum. Applications to the Chairman of the Medical Board by March 5th.

GENERAL HOSPITAL, Birmingham. Resident Medical Officer. Salary, 120l. per annum. Applications by February 28th.

GLASGOW HOSPITAL AND DISPENSARY FOR DISEASES OF THE EAR, Buchanan Street. Aural Surgeon and Lecturer. Applications to A. Sutherland, Esq., by March 5th.

HOSPITAL FOR WOMEN, Soho Square, W. Assistant Physician and Assistant-Surgeon. Applications by March 1st.

HOSPITAL FOR WOMEN, Soho Square, W. Administrator of Anæsthetics. Honorarium, 20 guineas. Applications by March 8th.

ISLANDS OF SANDAY AND NORTH RONALDSHAY, Orkney. Medical Officer. Salary, [illegible] per annum. Applications by March [illegible].

JERSEY GENERAL DISPENSARY. Medical Officer. Salary, 120l. per annum. Applications by May 1st.

KENT AND CANTERBURY HOSPITAL. Physician. Applications by March 22nd.

MEMORIAL HOSPITAL, Jarrow-on-Tyne. Resident Surgeon. Salary, 150l. per annum. Applications by March [illegible].

PAROCHIAL BOARD OF THE PARISH OF TOROSAY. Medical Officer. Salary, 100*l.* per annum. Applications to Alex. McDougall, Inspector of Poor, Auchnacraig-by-Oban, by February 23rd.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, St. Marylebone Road, W.—Resident Medical Officer. Applications by February 23rd.

RADCLIFFE INFIRMARY, Oxford.—Dispenser. Salary, 100*l.* per annum. Applications by February 27th.

ROCHESTER AND DISTRICT FRIENDLY SOCIETIES' MEDICAL ASSOCIATION. Resident Medical Officer. Salary, 200*l.* per annum. Applications by February 23rd.

ROYAL FREE HOSPITAL, Gray's Inn Road. Senior Resident Medical Officer. Salary, 104*l.* per annum. Applications by February 27th.

ROYAL SOUTH LONDON DISPENSARY, St. George's Cross, Lambeth Road, S.E.—Honorary District Surgeon. Applications by February 29th.

SUSSEX COUNTY HOSPITAL. House-Surgeon. Salary, [illegible]0*l.* per annum. Applications by March 5th.

SUSSEX COUNTY HOSPITAL.—Assistant House-Surgeon. Applications by March 5th.

WONFORD HOUSE HOSPITAL FOR THE INSANE, near Exeter.—Resident Medical Superintendent. Salary, 500*l.* per annum. Applications by March 11th.

WEST KENT GENERAL HOSPITAL, Maidstone. House-Surgeon. Salary, 120*l.* per annum. Applications by March 6th.

MEDICAL APPOINTMENTS.

Bolster, J., M.D., appointed Medical Officer to the Shillelagh Union Dispensary.

Dingley, E. A., M.D.Lond., M.R.C.S.Eng., appointed House-Physician to the Wolverhampton General Hospital, *vice* Dr. Collier, resigned.

Good, F. T., M.R.C.S.E., L.S.A., appointed Medical Officer and Public Vaccinator for No. 2 District of the St. Neot's Union, *vice* S. Wright, deceased.

Green, Edwin Collier, M.R.C.S., L.S.A., L.R.C.P., appointed House-Surgeon to the Derbyshire General Infirmary, *vice* W. Benthal, M.B.Cantab., M.R.C.S., L.S.A., resigned.

McNeill, Roger, M.D., appointed Medical Officer to the Gesto Hospital, Colonsay.

Maddison, W. T., M.B., appointed Assistant Medical Officer to the Darenth Asylum for Imbecile Children.

Maguire, Robert, M.D.(Lond.), M.R.C.P., appointed Demonstrator and Assistant Lecturer on Pathology in the Owens College, Victoria University.

Marsh, O. E. Bulwer, L.R.C.P., M.R.C.S., L.M., appointed Honorary Surgeon to the Newport (Monmouthshire) Infirmary, *vice* B. Davies, M.D., resigned.

Voigt, J. C., M.B., C.M.Edin., appointed Senior Resident Medical Officer to the Infirmary, Bury, Lancashire.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

Brand. At "Invery," Driffield, East Yorkshire, on February 16th, the wife of Alexander Theodore Brand, M.B., C.M., of a daughter.

MARRIAGES.

Bradley—Fenwick. At St. Joseph's Catholic Church, on February 18th, by His Lordship the Bishop of Hexham and Newcastle, assisted by the Rev. Father Mathews, M. M. Bradley, M.D., Jarrow-on-Tyne, to Elizabeth Mary, only daughter of William Fenwick, Esq., of Gateshead.

Picken—Craig. February 4th, at First Randalstown Presbyterian Church, by the Rev. James E. Ferguson, B.A., James Picken, Physician and Surgeon, Hazelbank, Randalstown, to Anna, daughter of the late James Craig, Clonbuoy House, Randalstown.

Wallace—Reid. At Greyfriars (East) Church, Stirling, on February 20th, by the Rev. John Smith, M.A., B.D., North Church, assisted by the Rev. J. P. Lang, minister of the parish, Abraham Wallace, M.D.Edin., F.F.P.S.Glas., Professor of Midwifery, Anderson's College, Glasgow, to Ann Isabella, daughter of the late James Reid, Esq., Woodville, Stirling.

DEATHS.

Bull. February 1[illegible]th, at Shenley House, the residence of her cousin, James Waddell, Esq., Louisa Jane, the beloved wife of William H. Bull, Surgeon, St. Oswald's House, Stony Stratford, aged 27 years.

Scott.—On the 10th inst., at Shrewsbury, Ebenezer Samuell Scott, M.B., C.M. (Edin.), aged 31.

Donations and Bequests.—An old governor of St. George's Hospital, after going through it and making a minute inspection, has given £1,000 as a mark of his satisfaction.—The London Hospital has received £1,000 anonymously.—Mr. James Benjamin Ball, of Merrion Square, Dublin, bequeathed £1,000 each to the Adelaide Hospital, the Mercers' Hospital, the City of Dublin Hospital, and the Rotunda Lying-in Hospital; £500 to the Whitworth Hospital, Drumcondra; and £300 to the Combe Lying-in Hospital.—Mrs. Catherine Cain, of Southport, bequeathed £100 each to the Children's Infirmary, the Home for Incurables, the Lying-in Hospital, and the Royal Infirmary, all at Liverpool.—Mr. Thomas Smart, of Goldsmid Road, Brighton, bequeathed £100 to the Sussex County Hospital, and £100 to the Asylum for Idiots.—"N. N." has given £100 to the Hospital for Sick Children.—The Clothworkers' Company have given £100 to the Great Northern Hospital, £50 to the North-Eastern Hospital for Children, £50 to the Surgical Aid Society, £50 to the Charing Cross Hospital, and £50 to the Hospital for Women.

OPERATION DAYS AT THE HOSPITALS.

MONDAY ....St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY ......St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

Charing Cross.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

Guy's.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

King's College.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

London.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

Middlesex.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

St. Bartholomew's.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

St. George's.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

St. Mary's.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

St. Thomas's.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

University College.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

Westminster.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., [illegible]; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. The Cold Bath Treatment of Enteric Fever (continued). Drs. Cayley, Samuel West, Gilbart Smith, A. T. Myers, Mahomed. Discussion.—Royal College of Surgeons, 4 P.M. Professor W. H. Flower: The Principal Types of the Human Species.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Thomas F. Chavasse: On Neurectomy of the Second Division of the Fifth Nerve. Mr. Christopher Heath: A Case of Amputation of the Arm and Scapula for Ossifying Sarcoma: Recovery. Dr. Heneage Gibbes will show Microscopic Specimens of Putrefactive Organisms at 8 o'clock.

WEDNESDAY.—Hunterian Society, 8 P.M. Mr. R. Clement Lucas: On Injuries to the Kidney. Mr. [illegible]: A Case of [illegible] of the Hip and Elbow Joints.—Royal College of Surgeons, 4 P.M. Professor W. H. Flower: The Principal Types of the Human Species.

THURSDAY.—Moorfields Ophthalmic Hospital, [illegible] P.M. Mr. Tweedy: On the General Pathology of Inflammation of the Eye.

FRIDAY.—Royal College of Surgeons, 4 P.M. Professor W. H. Flower: The Principal Types of the Human Species.—Medical Society of Charing Cross Hospital, 8 P.M. Mr. H. Montague Murray: The Value of Phrenological Theories.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT. We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

Preliminary Expenses Fund.

THE following additional sums have been received.

	s.	d.
Dr. Samuel Warren, Hoylake	10	6
Dr. Cunningham, Campbeltown	10	6

DIPHTHERIA AT ST. JOHN'S WOOD.

SIR,—In the report of the last meeting of the West Middlesex District of the Metropolitan Counties Branch (BRITISH MEDICAL JOURNAL, February 16th, p. 338), there is an error in regard to the cases mentioned by myself. They were cases of diphtheria, not typhoid fever. I said I had been informed that the milk-supply to the three houses was from the same dairy: a suggestive coincidence, but not, however, an established proof, as might be inferred from the report that the disease was caused by infected milk. It is only fair to add that Dr. Gwynn, the medical officer of health for Hampstead, has since informed me that, in one of the fatal cases to which I alluded, he has ascertained that the milk-supply was from another source altogether. I am, sir, your obedient servant,

W. F. CLEVELAND.

199, Maida Vale, W., February 16th, 1884.

WIRTZUNG'S PRACTISE OF PHYSICKE.

SIR,—Will any member kindly tell me the money value of Christopher Wirtzung's *Practise of Physicke*? It is translated into English by Jacob Mosan, M.D., and has been published by Thomas Adams, London, in the black letter type, and it bears the date of 1617. I am, sir, your obedient servant,

Hurworth-on-Tees, February [illegible], 1884. CHARLES E. WALKER.

ALCOHOLIC LEG-PAINS.

SIR,—In the JOURNAL of January 26th I observe a letter from "Quaerens," who asks concerning "tibial pains in alcoholic drinkers." These pains are so characteristic and so often met with, that I feel surprise that they have received but little attention. Indeed, I cannot call to mind any description of them in medical literature, nor do I find that my medical friends know much of them. These pains are commoner in women than in men; they are often tibial in distribution, but occur also often about the ankles and feet. They are usually associated with marked cutaneous hyperæsthesia. I have diagnosed in women many a case of secret drinking by these pains alone. Indeed, if a woman were found to complain bitterly of pains in the legs below the knees, pains somewhat nocturnal in occurrence, and as severe as those of syphilitic periostitis; if she resented any free handling of the limbs; if, again, she lay with legs adducted, extended, and with the feet pointed, much as in lateral sclerosis, but without permanent rigidity; if for all this outcry there were no visible cause whatever, the tibiæ smooth, and no more seen of special disease than perhaps a slight ankle-œdema, then I should, almost without hesitation, infer that alcohol was the cause. As "Quaerens" finds, the pains cannot readily be eased, and can be cured only by time, with abstinence. In his case, I suspect the cause is still in operation. For my own part, I tell my patient how he is to promote his own cure, and am not sorry to use the pains as an argument for abstinence. I feel little doubt that the cause of them lies in an irritation of the spinal cord or its membranes. I am, etc.,

T. CLIFFORD ALLBUTT.

6, Park Square, Leeds.

POST-EPILEPTIC AUTOMATISM.

SIR,—As I am occupying your columns, I would add a few lines upon an epileptic phenomenon which came under my notice a few days ago, as it is of the utmost value from a medico-legal point of view. A young gentleman who is now under my care for epilepsy [illegible] with two ladies the other day to make an afternoon call. After sitting [illegible] he rose from his chair, and one of his friends said to the other, "[illegible] is in a fit." This she knew by his face. To her surprise, he went to the tea-table, helped himself to tea, and then walked [illegible] in another part of the room. When seated again, he recovered consciousness. My patient assures me he was utterly unaware of his actions, and was very much startled to find himself transferred [illegible] from his seat to another distant one. It was only by chance the matter [illegible] were not of a [illegible] to encourage [illegible] and proves once more the possibility of a series of [illegible] in post-epileptic states.

T. C. A.

HYDROSALPINX AND PYOSALPINX.

MR. LAWSON TAIT writes: "Up to the present time, I have carefully preserved the uterine appendages in all my cases, and I have accumulated a large mass of material useless to me, but which might be of use in museums. I have supplied the large museums of this country with as many specimens as they care to have, and I shall be very glad to supply specimens to any other museums the curators of which desire [illegible]."

CHEYNE-STOKES RESPIRATION.

As a further contribution to the discussion of this phenomenon, Surgeon S. L. O'Neill, A.M.D., send us the following quotation from the works of the late Dr. J. Warburton Begbie, pp. 392, 393.

"The case of Philiseus, as recorded by Hippocrates, is one of great interest. The occurrence of accession of fever towards the evening of the third day, freedom from fever having been noted in the morning, with supervention of several unfavourable symptoms; in particular, great thirst, dry condition of the tongue, black urine, delirium, and coldness of the extremities, led Galen, in his commentary, to remark that the fatal issue of the disease might have been anticipated. It is, however, in respect to the peculiar character of the breathing that the case of Philiseus acquires its chief interest, and it is in this particular that a resemblance is to be found between the ancient and the modern clinical examples now quoted. The attention of Hippocrates had been arrested by the peculiar character of the breathing which existed throughout the fatal illness of Philiseus. Surely, it is matter of interest and for reflection that the respiration described by Hippocrates as ἀραιὸν μέγα, "rare and large,' and to which Galen has attached the meaning, 'like a person who forgot for a time the need of breathing, and then suddenly remembered,' or 'the respiration throughout, like that of a person recollecting himself, was rare and large,' has attracted great attention in quite recent times. The expression used by French writers 'besoin de respirer,' corresponds in some measure to the meaning which is sought to be conveyed by the Greek words.' In Latin, the rendering is, 'Spiratio huic perpetuo rara et magna fuit.' Daremberg, the learned French editor of Hippocrates, thus translates the passage: "La respiration fut constamment grande, rare comme chez quelqu'un qui ne respire que par souvenir.' The relation of this peculiar character of the breathing with which, under the name of 'ascending and descending inspiration' of the eminent Dublin physician, Dr. Stokes, the profession is now familiar, to lesion of the nervous system, was, of course, unknown to Hippocrates; and, for many subsequent ages, could not be known to those who were ignorant alike of anatomy and physiology. In recent times, it has been described by the late Dr. Cheyne, of Dublin. 'For several days,' wrote Dr. Cheyne, in 1816, in his account of a patient, aged 60, who had fatty degeneration of the heart, with irregular and intermittent pulse, and whose death was due to apoplexy, 'his breathing was irregular; it would cease for a quarter of a minute; then it would become perceptible, though very low; then by degrees it became heaving and quick, and then it would gradually cease again. This revolution in the state of his breathing occupied about a minute, during which there were about thirty acts of respiration.' Subsequently, Dr. Stokes connected the peculiar respiration with a weakened state of the heart, 'a phenomenon to be looked for in many cases of fatty degeneration.' 'I have never seen it,' remarks the same authority, except in examples of that disease.' In his description of it, Dr. Stokes observes: 'It consists in the occurrence of a series of inspirations, increasing to a maximum, and then declining in force and length, until a state of apparent apnœa is established. In this condition the patient may remain for such a length of time as may make his attendants believe that he is dead, when a low inspiration, followed by one more decided, marks the commencement of a new ascending and then descending series of inspirations. This symptom, as occurring in its highest degree, I have only seen during a few weeks previous to the death of the patient. I do not know any more remarkable or characteristic phenomena than those presented in this condition, whether we view the long continued cessation of the breathing, yet without any suffering on the part of the patient, or the maximum point of the series of inspirations, when the head is thrown back, the shoulders raised, and every muscle of inspiration thrown into the most violent action; yet all this without any stridor or sign of mechanical obstruction.' Dr. Stokes refers to the fact of the sighing respiration, which is closely allied to the more formidable 'ascending and descending respirations,' being observed in persons who are labouring under certain forms of gastric and hepatic derangement, and in connection with undeveloped gout, and likewise to the significant fact of Laennec having described a form of asthma with puerile respiration, while the illustrious French physician attributed the malady to some special modification of nervous influence.

AMBULANCE CLASSES.

ENQUIRER, being desirous of opening a class on the lines of the St. John Ambulance Association, is anxious to know of a good small work containing the necessary hints, etc., for conducting it on the best principles.

*** The handbook used by the St. John Ambulance Association is Shepherd's *[illegible] Sudden Illness*. Any further information on the subject our correspondent may require will be gladly afforded by the Secretary, St. John's Gate, Clerkenwell, E.C.

COMPLICATED PREGNANCY: A WARNING.

SIR,—I send the following case in answer to your correspondent "[illegible]." A woman was admitted, about six years ago, into the Manchester Workhouse Hospital, New Bridge Street, who stated that about three weeks before, being at the time three months pregnant, she fell downstairs, and soon afterwards noticed that her belly grew very full. She grew larger daily, [illegible] of water; but, when [illegible], had to push the enlargement [illegible]. On examination, there was a pear-shaped tumour reaching to the umbilicus, tense, fluctuant, and dull on percussion. On passing a catheter, 100 ounces of water were drawn off. The gravid uterus was found to be [illegible], and the woman went out in a week. [illegible] of a healthy child some months afterwards. The medical man under whose care she had been for a fortnight sent her in as a case of tumour of womb or ovaries, requiring tapping. Yours truly,

W. L. [illegible].

Swinton, Manchester, February 18th, 1884.

ADVERTISEMENTS BY CANDIDATES FOR HOSPITAL APPOINTMENTS.

SIR,—Pray accept the following, in reference to a leader in the last [illegible] of the JOURNAL upon advertising by medical men for hospital appointments, [illegible] which every one who has the [illegible] must most strongly condemn. The evil has [illegible] time some effort should be made to stop the practice [illegible] now adopted by candidates, and [illegible]. As a governor of St. Bartholomew's Hospital, I gave notice to the court of governors assembled last month that I should, at the next meeting, in April, bring forward a plan by which the [illegible]. I trust [illegible] may be approved of by the profession as well as governors and electors of all public charitable institutions.—I am, etc.,

Southlands, Ryde, February 1884. B. BARROW.

Stammering.

"M. G." asks if there be a monograph on stammering in English, or where and how information is obtainable to enable him to treat a case, as the observations on this subject which are to be found in ordinary text-books are meagre and insufficient for the purpose.

*** Our correspondent should consult *The Impediments of Speech, and their Cure*, by A. E. Gerdts, published by the author, Bingen-on-the-Rhine.

The Early History of Vaccination.

Surgeon-General C. R. Francis.—Many thanks. But we think the share of Farmer Jesty in the discovery of vaccination is too well understood by those interested in the point to make necessary any present reference to the subject.

Tinea Versicolor.

If "A Member" (Egypt), who asks for suggestions as to the treatment of obstinate tinea versicolor, will refer to a short paper in the British Medical Journal for May, 1877, he will find a very efficient treatment recommended by Mr. A. W. Mayo Robson, under the heading, "The Treatment of Pityriasis Versicolor by Means of Goa-Powder.

Pneumaturia.

Sir,—May I be permitted to inquire, through your columns, of some of the scientific readers of the Journal, whether it is possible that, during the formation of acetone from the decomposition, as Dr. Ralfe states, of ethyl-diacetate, or, as he prefers to term it, aceto-acetic acid, in the body of the diabetic subjects, a gas might not be formed which would account for that rare phenomenon, pneumaturia. The process of decomposition or fermentation, as we are well aware, causes the evolution of carbonic acid gas. The question arises, might not this gas be formed in the blood, and give rise to the sudden coma of diabetics; and, if it form in the blood, could it not form in the urine as well, and produce pneumaturia?—I am, your obedient servant, Harvey J. Philpot.

14, Finsbury Circus, E.C.

*** Our correspondent's suggestion is plausible. Pneumaturia, when it occurs, seems to be parallel to those cases of extreme flatulent distension which we sometimes meet with in hysterical and hypochondriacal patients. The suddenness with which this comes on in these cases, and the fact that it occurs often on an empty stomach, points to a rapid diffusion of gas from the blood. This diffusion is generally attributed to nervous influences, but it may possibly occur from an over-formation of carbonic acid in the blood from fermentative changes. Of this, we have no evidence as yet. In considering the subject, it would be necessary to distinguish true pneumaturia from mere frothy urine, which is more or less a mechanical condition; also from any carbonic acid formed in the bladder attendant on the decomposition of urea. Our correspondent may consult, on the subject of the diffusion of carbonic acid, Dr. C. H. Ralfe's recently published *Clinical Chemistry*, p. 227.

Poisoning by French Beans.

Sir,—Mr. Broadbent gives (British Medical Journal, February 9th, p. 267) a case in which he attributes symptoms of poisoning to kidney-beans. I should hesitate to ascribe poisoning qualities to this most useful vegetable, which, in foreign countries, is much given in the hospitals, and is becoming more and more an article of everyday diet in this country. The roots of the scarlet runner (*Phascolus Multiflorus*) are said to have narcotic properties; but I have never heard any injurious properties attributed to the seeds of any species. May it not be that the children ate the uncooked seeds, which are very indigestible, and suffered from gastric symptoms in consequence?—I am, etc.,

2, Sheil Road, Liverpool. A. H. F. Cameron, L.R.C.P.E., M.R.C.S.

Strangulated Hernia.

Sir,—In a case of strangulated hernia of three days' duration, after failure of several attempts at reduction by taxis, I recently tried the following treatment, with immediate and complete success. I injected successively solutions of carbonate of soda and tartaric acid in suitable proportions for effervescing. Immediately the gas was formed, the hernia went back. Can you or any of your readers kindly inform me whether this treatment has been described and practised before. Cairo does not offer the means of examining the literature of medical subjects, but in the books and periodicals at my disposal, I can find no mention of any such or similar treatment. The injection of air in intussusception is the nearest approach to the method I am aware of. In any case, the treatment I have described seems worthy of being more widely known and practised than it is.—I am, yours faithfully, Sidney Davies, M.A., M.B.Oxon.

Cairo, January 21st, 1884.

*** Applications of a like kind have of late been made abroad in the treatment of intussusception, and with the object of diagnosing the extent and situation of cancerous growths of the stomach. We are not aware that such injections have ever before been used in the treatment of strangulated hernia. On the contrary, surgeons, following the example of O'Beirne, who used his long elastic tube with much success in cases of strangulation, have sought, in attempting reduction, to diminish rather than add to the gaseous contents of the intestinal canal.

Quasi-Menstrual Discharge in a Woman Seventy Years Old.

Sir,—I am attending a woman suffering from chronic Bright's disease (the contracting form, I believe). She was seventy years old on the 20th instant. There are no signs nor symptoms of uterine disease. About two months ago, she had pains in her back and the lower part of her body, followed the next day by a discharge of blood from the uterus, lasting four or five days, and resembling in every way (according to her own statement) her former menstrual periods. An interval of more than twenty years has elapsed since the menopause.—Yours very truly, P. Fraser, M.B.Glas.

COMMUNICATIONS, LETTERS, etc., have been received from :

Mr. E. L. Freer, Birmingham ; Mr. E. C. Green, Streatham ; Mr. Alexander T. Brand, Driffield ; Dr. Isambard Owen, London ; Mr. Henry Horton, Bromyard ; Mr. Arthur Cooper, London ; Mr. W. H. Hart, Funchal ; Mr. C. G. Baxter, Glasgow ; Dr. Fairlie Clarke, Southborough ; Mr. C. B. Keetley, London ; Our Glasgow Correspondent ; Dr. Frederick Taylor, London ; Mr. J. Howell Thomas, Wellingborough ; Dr. E. H. Vinen, London ; Dr. E. Waters, Chester ; Dr. J. B. Pettigrew, St. Andrews ; Mr. A. G. Jeans, Liverpool ; Mrs. Shearman, Rotherham ; Mr. Myles, Limerick ; M. B. M. A. ; Dr. Sayre, New York ; Mr. Charles H. Butlin, Camborne ; Dr. Fletcher Beach, Darenth ; Mr. G. Harrison Younge, Cawnpore ; Dr. W. A. Hammond, New York ; Mr. S. Andrews, Basingstoke ; Our Dublin Correspondent ; Mr. H. J. Jones, London ; Mr. H. E. Spencer, York ; Dr. C. Orton, Newcastle-under-Lyme ; Mr. Blenkarne, Buckingham ; Dr. Clifford Allbutt, Leeds ; Mr. Tinley, Whitby ; Mr. George Eastes, London ; Dr. Hutchinson, Scarborough ; Dr. Savage, Birmingham ; Mr. Watson Cheyne, London ; Dr. H. A. Lediard, Carlisle ; Dr. R. S. Archer, Liverpool ; Mr. H. Boyle Runnalls, Saltash ; The Secretary of the Midland Medical Society; Dr. T. Savage, Birmingham ; Our Belfast Correspondent ; Dr. A. H. Benson, Dublin ; Mr. T. F. Raven, Broadstairs ; Mr. N. Hannah, Ashton-in-Makerfield ; Messrs. P. B. Burgoyne, London ; Mr. Terry, Northampton ; Dr. A. D. Roe, London ; Sir Edmund Lechmere, London ; Mr. J. C. Voigt, Bury ; Mr. John Furley, London ; Mr. J. Reid, Chiswick ; Mr. Lawson Tait, Birmingham ; Mr. J. McGain, London ; Mr. W. F. O'Grady, Swinton, Manchester ; Mr. G. C. Searle, Brixham ; Mr. C. Vipan, St. Leonard's-on-Sea ; Dr. David Newman, Glasgow ; Dr. F. J. Driver, Southsea ; Dr. W. A. Moseley, Cheltenham ; Dr. Styrap, Shrewsbury ; Mr. J. Niven, Glasgow; Professor Humphry, Cambridge ; Mr. F. T. Good, St. Neot's ; Mr. W. Johnson Smith, Greenwich ; Messrs. G. Whitehead and Sons, Huddersfield ; Dr. Kaeser, London ; Mr. J. D. Morrison, Lanark ; Dr. Arlidge, Stoke-on-Trent ; Dr. Brailey, London ; Dr. Martin G. B. Oxley, Liverpool ; Dr. Barrett Roué, Bristol ; Mr. George Harvey, Wirksworth ; Mr. E. Cureton, Shrewsbury ; Mr. E. Walford, Ramsgate ; Our Aberdeen Correspondent ; Mr. W. J. Mackie, Turvey ; Mr. Tomes, Caterham ; Mr. R. B. Sellers, Rochdale ; Dr. W. F. Cleveland, London ; A. W. M. R. ; Dr. Alexander Thomson, Huntly, Aberdeenshire ; Mr. E. Clarke, London ; Mr. Arthur Kempe, Exeter ; Dr. M. Skerritt, Bristol ; Dr. Jagoe, Port Adelaide ; Mr. G. F. Hodgson, Brighton ; Mr. W. Inglis Mason, Sudbury ; Mr. Ernest Sheaf, Barrow-in-Furness ; Mr. T. W. Reid, Canterbury ; The Secretary of the International Sanitary Exhibition ; Mr. B. H. Dale, Devizes ; Dr. John Highet, Workington ; Mr. H. MacDonald, Nottingham ; Mr. D. Livingston, Jarrow-on-Tyne ; Mr. H. Gray, Maidstone ; Inquirer ; Mr. B. Rake, Salisbury ; Dr. Norman Kerr, London; Dr. Huggard, London ; Dr. Stevenson, London ; Mr. J. Lloyd Roberts, Denbigh ; Dr. C. W. Suckling, Birmingham ; Mr. J. G. Houseman, Newcastle-on-Tyne ; Dr. Cheadle, London ; Mr. S. Montgomery, Ovenden ; Mr. J. W. Dyas, London ; Dr. Neale, London ; Dr. MacCombie, London ; Mr. Barrow, Ryde ; Our Cairo Correspondent ; Our Manchester Correspondent ; Mr. R. Fitzroy Benham, London ; Dr. Hadden, London ; Mr. G. F. Hentsch, London ; E. C. ; Mr. Savory, London ; Mr. W. A. Thomson, Shrewsbury ; Mr. T. Pagan Lowe, Bath ; Sir James Hanbury, Blackheath ; Mr. W. H. Cripps, London ; Mr. W. Roger Williams, London ; Mr. W. Furner, Brighton ; The Secretary of the Parkes Museum ; Mr. A. W. Manly, London ; Dr. E. A. Dingley, London ; Mr. Jaynes, London ; Mr. Richard Booth, London ; Dr. E. Malins, Birminghnm ; Mr. Molyneux, Upholland, Wigan ; Mr. Rutherford, London ; Mr. H. F. Trail, Fraserburgh ; Mr. J. Edwards, Liverpool ; Mr. A. Macmillan, Hull ; Mr. M. Handfield Jones, London ; Messrs. Cassell and Co., London ; Dr. Russell O'Brien, London ; Mr. J. A. Godley, London ; Dr. Barnardo, London ; Mr. R. Maguire, Manchester ; Dr. Herman, London ; Dr. Mahomed, London ; The Secretary of the Royal Medical and Chirurgical Society, etc.

BOOKS, ETC., RECEIVED.

A Guide to the Study of Ear-Disease. By P. McBride, M.D. Edinburgh : W. A. K. Johnston.

Germs, Dust, and Disease ; Two Chapters in Our Life-History. By Andrew Smart, M.D. Edinburgh : Macniven and Wallace.

Selections from Essays on Health-Culture. By G. Jaeger, M.D., Stuttgart. Translated from the German.

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ABSTRACT OF REMARKS

ON

THE ANTIPYRETIC TREATMENT OF TYPHOID FEVER.

Delivered before the Medical Society of London, February 24th,

By WILLIAM CAYLEY, M.D., F.R.C.P.,
Physician to the Middlesex Hospital.

Dr. Cayley said that, before bringing forward in a very brief form the general results of the antipyretic treatment of typhoid fever as he had observed them at the London Fever Hospital, he wished to say a few words in answer to some objections brought against this mode of treatment by Dr. Bristowe in the interesting and instructive paper to which the Society had listened with much pleasure at its last meeting; and although, from the manner in which he urged these, it did not appear as if Dr. Bristowe himself attached any very great weight to them, nevertheless, coming from him, they could not fail to have great weight with his hearers.

In the first place, Dr. Bristowe adduced two cases where the patients, after being subjected to cold bathing, died with extensive collapse of the lungs, though he expressed himself somewhat doubtfully as to whether this complication was really caused by the treatment. Now these cases were not examples of the antipyretic mode of treating typhoid fever, that mode by which its adherents believe that the whole course of the disease is modified and rendered milder. The antipyretic treatment does not consist in leaving the fever to run its course unchecked till nearly the end of the third week, and then, after the continued high temperature has already effected all the mischief ascribed to it, in bathing the patients in cold water, but in steadily keeping down the temperature from the first; and it is only in this way that any material influence on the disease can be expected.

With regard to collapse of the lung, to the extent to which it had taken place in these cases, it must be regarded as a rare complication, but to a less degree, associated with hypostatic congestion it was very common; the one condition being due to failure of the heart, the other to bronchitis and impaired respiratory power, the patient not fully inflating his lungs. It could hardly be doubted that these complications were rendered much less frequent and severe by keeping the temperature down from the first, but whether, when they were already present, they were likely to be relieved by cold bathing, would depend on circumstances. In some cases, the treatment, by its stimulating effect on the nervous system, might rouse the patient, and cause him to make deep inspirations, and so tend to remove the condition; in others, where the powers of reaction were too much impaired, it was very likely that the future termination might be accelerated. These two cases were not instances of the injurious effects of the antipyretic treatment, for they had not been subjected to it.

It had been argued that, in estimating the value of any particular modes of treatment, statistics could not be relied on, but that we must be guided solely by individual clinical observation. Now the canons by which statistics must be tested were perfectly simple, and it was not generally very difficult to see whether the statistics in any severe case did, or did not, conform to them. First of all a sufficient number of instances, spread over a sufficiently long time, must be collected so as to exclude accidental sources of error; second, only like instances must be compared. If statistics did not conform to these canons they were of little value; if they did, then their evidence was conclusive.

With regard to the antipyretic treatment of fever, there had now been collected a body of statistics which completely fulfilled these requirements.

Dr. Bristowe had quoted the statement of an Austrian physician that, in Germany, the antipyretic treatment had been largely abandoned, and was now chiefly supported by those physicians who were its original introducers, and whose reputations were bound up with its success. Dr. Cayley said he had some difficulty in meeting this statement, as he had no recent personal experience of the manner in which patients were treated in German hospitals; but, judging from German medical literature, he would have formed a very different opinion. He cited a paper published in the December number of Virchow's *Archives*, by Dr Sassetzky of St. Petersburg, on the effects of the antipyretic treatment in the metabolism of the tissues in fever, where the author gives a summary of the history of the introduction of this mode of treatment, and the opposition it had to encounter; "but now," he says, "we only here and there meet with a solitary opponent" (*ein einziger, seltener gegner*). The treatment, moreover, has been introduced into the Prussian army.

Dr. Cayley then discussed some of the causes which influenced the mortality of typhoid fever apart from the treatment, and pointed out, on the authority of Dr. Murchison, that the disease was much more fatal among the well, or overfed classes, than among the ill-fed and those subjected to privations.

Thus, the rate of mortality was much lower in Ireland than in England, and among the Irish inhabitants of London than among the English. In the London Fever Hospital, while the rate of mortality among patients of English birth exceeded 16 per cent., among those of Irish birth it was only 8 per cent. Before 1872, the London Fever Hospital took in two classes of patients—all the pauper cases of fever in the metropolis, and also patients who paid. The rate of mortality of the former class was 15 per cent.; among the latter, 18 per cent. In 1872, the hospital ceased to admit paupers, and only took in paying patients, and, as might have been expected, the rate of mortality at once rose. Thus, during the seven years preceding 1872, there were 3,107 cases, and 447 deaths, giving a rate of 14.3 per cent. During the next seven years, there were 550 cases, and 93 deaths, giving a rate of nearly 17 per cent. Another cause for this increase of the rate of mortality is, that most of the patients are in a position to have medical treatment before their admission, and, in consequence, it often happens that, as long as the case seems to be a mild one, and likely to go on favourably, the patients remain at home. Should the case turn out to be a severe one, or any serious complication develop, then it is transferred to the hospital. Hence an increasing number of cases were sent in late in the disease, after the occurrence of some serious complication, as hæmorrhage or peritonitis.

The rate of mortality, then, from 1872-78 inclusive, was about 17 per cent. The antipyretic treatment was then introduced, at first only tentatively, latterly systematically; the methods employed being bathing, sponging, iced compresses, and the use of antipyretic drugs, principally quinine, sometimes salicylate of soda, and latterly kairin.

During the next five years, there had been 355 cases, and 51 deaths; rate of mortality 14 per cent. But if those cases be excluded which were admitted so late in the disease, or suffering from such complications, as to render all treatment unavailing, the rate would be very greatly lowered.

With regard to the intestinal complications—viz., hæmorrhage and perforation—if the fatal cases only of the two periods were compared, it was found that the proportion of deaths from these causes was much increased. Thus, during the former period, there were 93 deaths, of which 24 or 26 per cent. were due to hæmorrhage or perforations. In the latter period there were 51 deaths, of which 19, or 53 per cent., took place from hæmorrhage or perforation. But if the total number of cases under treatment were compared, we find that the rate per cent. of deaths from hæmorrhage and perforation was almost exactly the same in the two series; showing that there was a diminution of the other causes, but no increase of these complications.

Thus, during the first period out of every hundred cases treated, 4.3 died of hæmorrhage and perforation, during the second, 4.8; and of these several were already suffering from these complications on admission.

At the Middlesex Hospital, the results of the cases under Dr. Cayley's care coincided very closely with those under Dr. Coupland's. During the six years ending 1883, he had had in his wards 152 cases, with 18 deaths, giving a rate of 11.8 per cent.

Of course, neither these statistics, nor others brought forward by Dr. Coupland, though encouraging, would be sufficient to prove the advantage of the antipyretic treatment. The instances were far too few, and the time was far too short. But other statistics might be adduced which are not open to these objections.

Thus, if so large a hospital as the Charité at Berlin were taken, which admitted many cases of typhoid—and this hospital might be taken, because it was not open to the objection that its physicians were prejudiced enthusiasts in the antipyretic cause—and the rate of mortality over a period of many years, before the introduction of this treatment, were compared with that over a period of many years after the introduction, statistics were obtained which conformed to the canons, inasmuch as there were a large number of cases spread over a long time, and a comparison of exactly similar instances.

During the twenty years, 1848-67, 2,228 cases of typhoid fever were admitted into the Charité; of these, 405 died, which was a rate of mortality of 18 per cent., which corresponds pretty closely with the mortality of the general hospitals of London. The antipyretic treatment was then introduced, and during the nine years, 1868-76, 2,086 cases were admitted, and 267 died, giving a rate of 13 per cent. If 64 cases were excluded which were admitted in a condition not admitting of the treatment, the death-rate would be 10.5 per cent.

A still more conclusive instance was afforded by the Prussian army. During the seven years from 1868 to 1874, the rate of mortality from typhoid fever was 15 per cent., an extremely favourable rate, which spoke much for the efficiency of the medical department. The antipyretic treatment, chiefly in the form of cold bathing, was then introduced, and during the next seven years (1875 to 1881) the rate was 9.7 per cent. Here a comparison of exactly similar instances was made. The men in the two cases were of the same age, of the same social position, fed in the same manner, clothed in the same manner, lodged in the same manner, and, in all respects, placed under the same conditions; the only difference being in the mode of treatment. But, as German statistics on this question were perhaps regarded as *suspect*, an appeal might be made to French authorities, and here Professor Jaccoud might be cited; and perhaps his authority would have more weight with many, inasmuch as he was decidedly opposed to Brandt's method, but without having given it a fair trial. He stated, in the debate on this subject at the Academy of Medicine last year, that, after a careful collection of more than 80,000 cases, he found that the average rate of mortality in typhoid fever in France, under the old methods of treatment, was about 19 per cent.; whereas, under the new method, it was below 11 per cent. It was now necessary to inquire what was this new method which had effected this great reduction in the rate of mortality.

Professor Jaccoud had his patients sponged with cold vinegar and water, if necessary, as many as ten times in the twenty-four hours, which he termed giving them a *séance;* and also administered, from time to time, large doses of quinine or of salicylate of soda. Now, whether a patient was sponged ten times a day with cold vinegar and water, or had an occasional cold bath, was a question, not of principle, but of detail. In either case, the same end—namely, the persistent reduction of temperature—would be effected. It need hardly be said that the antipyretic treatment was not bound up with the system of cold bathing, or of any particular method of reducing temperature. Cold bathing was, perhaps, the most efficient mode, and the one most generally applicable, and which, on the whole, caused least annoyance to the patient; but a large number of cases were not suitable for it, and for these other means must be adopted. Dr. Cayley stated that, in his opinion, keeping the temperature down by the abstraction of heat gave much better results than the repeated administration of large doses of the antipyretic drugs, as these powerful remedies could not be given in these large and frequently repeated doses without incurring the risk of seriously disturbing important functions. In his opinion, therefore, they should be regarded as adjuncts to the other antipyretic methods, and not as substitutes.

Dr. Cayley then stated the principal conclusions which the advocates of the antipyretic treatment of typhoid fever believed to be established on sufficient evidence. First, they maintained that this mode of treatment fulfilled the physiological indications; that, by keeping down the temperature, the febrile metabolism of the tissues, and the accumulation in the blood of the products of this metabolism—and to this Dr. Murchison attributed most of the symptoms of the typhoid state—were much diminished. The granular infiltration and softening of the central nervous system, of the heart, of the liver, of the kidneys, of the voluntary muscles, was to a great extent prevented; and, by the stimulating effect of the treatment on the vaso-motor system, that want of tone and general relaxation of the arteries which was so marked a feature of the disease was counteracted. Many of the opponents of the treatment admitted these conclusions, though, by so doing, they gave up more than half the field of battle. It was not, of course, necessary to assume that the high temperature was the only or even the chief injurious agent in typhoid fever. It was enough to say that it was an important factor, which could not be denied; and it was one which it lay in our power to counteract.

Secondly, they maintained that, where the treatment was efficiently applied, it produced a marked alleviation of the symptoms. And this, too, was acknowledged by many of the opponents, though by so doing they gave up the greater part of the remainder of the ground. Where the temperature was kept steadily down, the so-called typhoid symptoms were seldom seen. The persistent headache, the febrile oppression, the sleeplessness, the muttering delirium, the stupor, the dry glazed tongue, the muscular twitchings, the bed-sores, were either prevented or alleviated; and, to quote the words of Dr. Austin Flint, who was here endorsing a statement of Liebermeister, the old picture of the typhoid case was no longer to be seen, and the disease had lost half its terrors. Dr. Austin Flint, it was hardly necessary to say, was no enthusiast blinded by his eagerness for this method.

Thirdly, it was maintained that, by this method of treatment, the complications of typhoid fever were neither rendered more frequent nor more severe. With regard to the pulmonary complications, the hypostatic congestion and pneumonia, there could not be a doubt but that they were rendered much less frequent. With regard to the intestinal complications, hæmorrhage and perforation, Dr. Brandt asserted that, when the treatment was applied from the very first, they, too, were much diminished, and it was only reasonable to suppose that, as the tissues were less degenerated and softened, they would be more capable of resisting the sloughing and ulcerating processes. But, when the treatment was deferred till after the elapse of the first few days, it did not appear to exercise much influence, but there was no evidence that these complications were rendered more frequent.

Lastly, it was maintained, and on evidence that could not, he thought, be overthrown, that by this method the rate of mortality was greatly diminished; so that, when arguments were brought against it, on theoretical grounds, by those who had never tried it, or on practical grounds by those who had only given it an imperfect trial, we might simply reply, with Professor Jaccoud, "Nevertheless, while the rate of mortality in typhoid fever under the old method of treatment is about 19 per cent., under the antipyretic mode it is under 11 per cent."

ABSTRACT OF THE HARVEIAN LECTURES

ON

PROGNOSIS IN HEART-DISEASE.

Delivered before the Harveian Society of London, November, 1883.

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LECTURE III. MITRAL INSUFFICIENCY OR REGURGITATION.

THE evidence of regurgitation through the mitral orifice is a systolic murmur in the region of the apex, usually heard also to the left of this spot towards the axilla, and often in the left interscapular space, sometimes upwards round the outer side of the mamma. The only murmurs likely to be mistaken for that of mitral regurgitation are a systolic aortic murmur conducted to the apex, a tricuspid regurgitant murmur, and a spurious murmur produced by compression of the edge of the lung. These sources of error being eliminated, a systolic mitral murmur means regurgitation from the ventricle into the auricle.

The causation, however, of mitral incompetence is most varied, and the range of possibilities extreme.

There are, first, the so-called hæmic murmurs of anæmia and chlorosis, of convalescence from acute disease, of some cases of chorea and of cardiac weakness. It is to these that Dr. McAlister's explanation of mitral reflux, without disease of the valves, applies. The complete closure of the orifice is not effected merely by the floating out of the valvular curtains, but is aided by a great constriction of the orifice, which is part of the ventricular systole. When this is imperfectly performed, the valves do not quite guard the opening, and allow regurgitation.

There is no direct relation between the degree of anæmia and the occurrence of mitral regurgitation; there may be no reflux in the worst cases of anæmia of whatever kind. The state of the blood constituting a predisposition, the immediate cause may be over-exertion, or perhaps climate, or worry. But a direct cause of dilatation of the left ventricle exists in many cases of anæmia, viz., unduly high arterial tension from resistance in the peripheral circulation. This may not only give rise to temporary insufficiency of the mitral valve, but may possibly be the cause of the organic change in it, which Dr. Goodhart has shown to be a probable result of anæmia in many instances.

This "curable mitral regurgitation," borrowing the term from Dr. George Balfour, can usually be recognised by means of the history and general condition of the patient, but the character of the murmur may be of assistance; it is usually smooth, accompanies the first sound, instead of extinguishing or replacing it, and not unfrequently it is postsystolic rather than systolic. It is sometimes said that a hæmic mitral murmur is not conducted towards the axilla; but this must not be altogether relied upon.

A temporary mitral regurgitation is not uncommon after acute disease, and may follow acute rheumatism, when it is liable to be taken for the effect of endocarditis.

A mitral systolic murmur during chorea may be either the result of functional derangement or of organic disease of the valves.

In middle age, or in advanced life, mitral regurgitation, without actual change in the valves, is common, and may be induced suddenly by overstrain or illness, or come on insidiously. Sometimes the orifice is of the normal size, at others enlarged; and it is often impossible to say what its exact condition is, or to distinguish between such cases and others in which the valves are damaged. When the orifice is unduly large, there will also be dilatation of the ventricle. The character of the murmur, and especially the presence or absence of the first sound, may be of great service in deciding whether the reflux is considerable or small in amount.

Disease of the valves may be the result either of acute endocarditis, usually rheumatic, or of chronic inflammatory or degenerative change.

The kind and degree of deformity may vary greatly, and we have to endeavour to see our way to the prognosis under these diverse conditions. In some cases, the disease will prove fatal in a few months or years; in others, it may exercise little influence on the health or life. In two instances mentioned, mitral regurgitation had been ascertained to exist twenty years since in patients still living and well; and in another case, repeatedly examined within the last three years, the patient had been condemned to life-long inactivity after acute rheumatism thirty-five years ago, but was still, at the age of 64 or 65, doing strenuous work, a mitral murmur having been known to be present all this time. It is very common to meet with mitral regurgitation at and after the age of 70, but its duration cannot be ascertained. This form of disease is very frequent among the out-patients of hospitals, and sends into the wards numerous cases of dropsy which recover. It is, in effect, not a deadly kind of valvular affection, and is probably less serious than aortic stenosis, which is placed lowest in the scale of danger. It is not simply that, in a large proportion of cases, the valvular change is comparatively slight; even considerable disease may be long survived, if not progressive; [illegible].

The first inquiry will be as to the signs and symptoms by means of which the amount of regurgitation may be estimated.

In some cases, the character of the murmur affords much information. When it is not conducted much beyond the apex, and is not heard in the back, especially when the first sound of the left ventricle is not lost, but is still audible at the apex; and particularly when the murmur does not begin with the first sound, but follows it at a brief interval, *i.e.*, is post-systolic, the leakage is usually inconsiderable. Care must, of course, be taken not to take the soft short murmur of a gaping orifice and a weak heart as an indication of slight mischief, and not to mistake the short sharp first sound of mitral stenosis for a normal left ventricular first sound. Mitral systolic murmurs are often musical, and a musical note would seem to imply a narrow chink and small regurgitant stream; but observation alone must determine the significance of any particular kind of murmur.

For further evidence, the effects of regurgitation through the mitral orifice must be followed. The first of these will be distension, and then dilatation of the left auricle; but, from the deep-lying situation of this chamber, an early stage of enlargement is not easily made out. But the obstruction to the entry of blood into the auricle from the pulmonary veins will give rise to increased pressure in the pulmonary artery, audible evidence of which will be accentuation of the pulmonary second sound. It is not easy, however, to define the degree of intensification of this sound which must be accepted as proof of obstruction at the left side of the heart; especially as obstruction may arise in the pulmonary capillaries. From the increase of pressure in the pulmonary artery, another effect follows, hypertrophy and dilatation of the right ventricle, manifested by displacement of the apex to the left, and undue impulse of the right ventricle. But the effects do not end here; the pressure maintained in the left auricle must be such as to afford resistance to the return of blood from the ventricles; and must, therefore, in severe cases, almost equal the pressure in the aorta. Such pressure must, during the ventricular diastole, drive the blood violently into this cavity, and act as a dilating force, and dilatation will involve hypertrophy. The situation, then, of the apex beat will be the resultant of hypertrophy and dilatation of the two ventricles, and the volume of the heart, as a whole, will be greatly increased.

These changes, the result of mitral incompetence, become [illegible] measure. A systolic mitral murmur, without any of the signs enumerated, and without symptoms, is not attended with much [illegible], and is not a source of present danger, unless it mark the beginning of progressive mischief, it may practically be disregarded. As the indications of pressure in the pulmonary artery and of change in the heart increase, we infer increase in the amount of reflux, and look for diminished stability of the compensation, and expect less power of regaining a working equilibrium if it is once overthrown. These statements are of course subject to the qualifications enumerated in the first lecture.

At the risk of being tedious, one more qualification must be added. It has been pointed out how the right ventricle comes to the aid of the left by maintaining a degree of pressure in the left auricle which resists the reflux through a gaping mitral orifice. The resistance must, when the barrier of the valve is withdrawn, be greater than the pressure in the arterial system. Everything depends, therefore, upon the resistance in the capillaries and arterioles, and this varies greatly in different conditions. If this be considerable, the arterial tension is high, the backward pressure on the auricle and pulmonary veins is great, and the demand upon the right heart is heavy—all circumstances tending to the production of dilatation and hypertrophy. If, on the other hand, the arterial tension be low, the conditions are reversed. In the case mentioned, of mitral regurgitation known to exist for thirty-five years, the pulse is extremely soft and short; and, as there were at one time disquieting symptoms—a sense of constriction of the chest on slight exertion, and a liability to slight fainting attacks—it was feared that the heart was failing. The family pulse, however, is one of extreme low tension, and to this the patient owes, in part at least, his immunity.

The pulse of mitral regurgitation has still to be considered. Its characteristic is irregularity, both in rhythm and force, which, in advanced cases, is extreme, no two beats being alike. This irregularity, however, is not confined to mitral regurgitation; it is met with in some instances of dilatation of the left ventricle without leakage of the valves, and may be independent of all structural change. Its causation is not very clear, but it is possibly due to the varying respiratory pressure affecting the pulmonary veins and left auricle.

Up to this point, it has been assumed that the compensation established has sufficed to neutralise, in a great measure, and under all ordinary circumstances, the effects of the valvular imperfection; but, in many instances, this is imperfectly accomplished, and the patient is short of breath on comparatively slight exertion, is subject to cough, and presents habitually evidences of venous stasis. The deficient compensation may result either from the excessive amount of regurgitation, or from failure on the part of the heart to respond to the call for structural change; and it would be a matter of extreme difficulty to decide between the two on a single examination, especially in the presence of complications; but observation extending over a considerable period, or a full and accurate history, would usually guide to an accurate conclusion. In either case, the leading prognostic indication would be the degree of derangement of the circulation, and the instability of such compensation as was present.

Even when compensation has been effectual for a time, if any considerable lesion of the valve exist, permitting a serious amount of regurgitation, symptoms will arise, sooner or later, either from deterioration of the muscular walls of the heart with advancing years, or from the gradual dilatation of the cavities under the continued strain, or under the influence of anæmia, or as a result of acute disease, especially of the lungs or kidneys; or acute dilatation may be brought about by over-exertion, or excitement, or anxiety. These symptoms are the well known evidences of obstruction in the pulmonary circulation, and of damming back of the blood in the systemic veins. The shortness of breath does not require exertion for its production, but comes on in paroxysms without apparent cause, or is habitual, amounting to dyspnœa. The face and lips are dusky, the eyes watery, the hands cold and purple. There is much cough, and the lungs may be congested or œdematous. The urine is scanty, high coloured, and loaded with lithates. A further stage of the symptoms is marked by the appearance of dropsy, which may at first be represented by slight œdema of the feet and ankles, which comes and goes, but later ceases to subside and gradually extends up the legs. As the dropsy advances, the respiratory distress becomes more painful; the patient can no longer lie down, and, in aggravated cases, must sit in a chair, or on the edge of a bed, so as to let the legs hang down. Sleep is almost impossible, and the short snatches obtained are disturbed by frightful dreams, and the patient awakes in an agony of dyspnœa and distress. [illegible], the paroxysms are usually worst during the night.

When dropsy is present, or severe pulmonary complications, the prognosis depends much on the question whether the symptoms are the direct result of the state of the heart, or have been precipitated by some disturbing influence, such as a chill, or exertion, or fatigue, or anxiety. If no adequate exciting cause can be [illegible], and rest and caution have been exercised, it is not probable that treatment will reverse the fatal tendency. If the exciting cause of severe symptoms be explained, then the degree of [illegible] and hypertrophy will furnish us with [illegible] prognosis [illegible] estimation already set forth.

As has been said, cases of dropsy from mitral regurgitation very often recover in hospital. The patients, belonging to a class the members of which have to earn their bread, must work hard and undergo exposure, and are frequently subject to hardships and privations. It is under such unfavourable influences that the compensation breaks down, and the reversal of these is often of itself sufficient for recovery. Similar results are furnished by private practice, examples being related.

On the other hand, a gentleman of strong build, who had suffered very little inconvenience from mitral regurgitation, established fourteen years before, but in whom extensive dilatation and hypertrophy indicated considerable reflux, began, after a little overwork, to suffer from cough and dyspnœa, which was soon followed by œdema of the legs, and the equilibrium, thus easily overturned, was never regained.

BROMIDE OF ETHYL AS AN ANÆSTHETIC FOR SHORT OPERATIONS, AND AS A PRECURSOR TO THE ADMINISTRATION OF ETHER.

By W. ROGER WILLIAMS, F.R.C.S.Eng.,
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It is now generally admitted that the essentials of anæsthesia are not satisfactorily attained by any of the anæsthetic agents in ordinary use. Of the dangers of chloroform and the inconveniences of ether, we have lately been forcibly reminded. All this suggests the need for further inquiry. At such a time, the claims of new anæsthetics merit particular attention. The attempt now being made in the United States by Drs. Chisholm and Prince, to reintroduce bromide of ethyl as an anæsthetic for short operations and as a precursor to the administration of ether, presents many interesting features. Before alluding further to these, it may be as well to give a short account of the chequered career of this drug as an anæsthetic.

Hydrobromic ether or bromide of ethyl ($C_2 H_5 Br$)—a direct combination of bromine with the ethyl radicle—discovered by Sérullas in 1829, was first used as an anæsthetic agent by Nunneley, of Leeds, in 1849 (*Trans. Prov. Med. and Surg. Assoc.*, London, 1849, vol. xvi. p. 206, also p. 325). At that time, chloroform monopolised all attention in this country, and ether in the United States; hence the new anæsthetic was ignored.

No further experiments were published until the meeting of the British Medical Association in 1865, when Mr. Nunneley again championed the drug, and stated that for some time he had not performed any serious operation, in private or at the Leeds Infirmary, without using either it or "chloride of olefiant gas," both of which he regarded as preferable to chloroform (BRITISH MEDICAL JOURNAL, August 19th, 1865, p. 192). However, nothing came of this; and bromide of ethyl was forgotten, as an anæsthetic agent, until Rabuteau published an account of some experiments with it on the lower animals in 1877.

At the annual meeting of the British Medical Association at Cork, in 1879, Dr. Turnbull advocated its use for anæsthetic purposes, he then being unaware of Nunneley's and of the French experiments. Subsequently, he published a very favourable account of its use in a large number of cases (*Philadelphia Medical and Surgical Reporter*, March 6th, 1880). About the same time, Dr. Levis, of Philadelphia, also recorded his experience of the drug in glowing terms (*Philadelphia Medical Times*, January 17th, 1880).

As the result of these favourable experiences, bromide of ethyl was extensively used in the Philadelphia hospitals and elsewhere in the United States, as a substitute for ether and chloroform. But this position it was unable to maintain; for, before the end of a year, two cases of fatal syncope were recorded from its use (*New York Medical Record*, April 3rd, 1880; *Philadelphia Medical Times*, July 17th, 1880).

The publication of Dr. Wood's experiments on dogs, at this critical juncture, gave bromide of ethyl its *coup-de-grâce* (*Philadelphia Medical Times*, April 24th, 1880). Its use as a general anæsthetic was straightway completely abandoned.

As Dr. Wood's is the best account of the physiological action of the drug that has yet appeared, I give here a summary of his conclusions, which certainly ought to be known by those who intend to administer it according to the new method. Dr. Wood says of his experiments: "They show that bromide of ethyl may cause anæsthesia without reducing the blood-pressure; but they also indicate that it is distinctly depressant to the circulation, reducing, when in excess, the force of the blood-current to a very marked extent.

"When the cut-out heart of a frog is touched with a drop of the bromide, or even when it is hung in the concentrated vapour, all movements cease. This, of course, indicates that the drug acts directly upon the heart-muscle or its contained ganglia."

The influence of this anæsthetic resembles, therefore, that of chloroform, and not that of ether; and it is probable that it shares the dangerous properties of chloroform.

These statements, however, must be qualified by the results of other observers, which have shown that, although bromide of ethyl undoubtedly exerts a depressant action on the heart, it does so in a much less degree than chloroform. Thus, while fifty minims of ether and twenty of ethyl-bromide were required to weaken the action of the frog's heart, one or two minims of chloroform rapidly weakened and arrested it. (*Trans. Internat. Med. Cong.*, vol. i, p. 451; BRIT. MED. JOURNAL, November 11th, 1882, p. 934.)

An account is given of the experience of the French surgeons with the drug in the BRITISH MEDICAL JOURNAL of 1880, vol. i, p. 820; also in Terrillon's article in the *Bulletin de Thérapeutique*, 1881, p. 337. It has never had a fair trial in England; but cases have been reported from Glasgow, in which it was very successfully employed (*Glasgow Med. Journ.*, March 1880, p. 259).

Having thus briefly recapitulated the chief facts in the history of bromide of ethyl, I will now proceed to give an account of its reintroduction by Dr. Chisholm on an independent basis in 1882. He says: "I have found that its action is so very evanescent that it can never take the place of chloroform or of sulphuric ether for any surgical operation, which requires some time for its performance; but for all quick work which can be done in one or two minutes the use of this anæsthetic agent leaves nothing to be desired." The time being so short, every preparation for the operation should be completed beforehand.

The mode of administration was as follows. A towel, between the folds of which paper had been put, was made up into a small nearly air-tight cone. Into this was poured about a drachm of the bromide of ethyl, and it was immediately inverted over the nose and mouth of the patient. To ethylise completely, a saturated vapour must be used, and the inhaler must not be taken from the patient's face once the apparatus has been put over the nose and mouth. Out of over three hundred administrations, the time required to produce deep narcosis did not in a single instance exceed sixty seconds. The anæsthetic sleep thus induced lasts about two minutes; then the patient awakes suddenly, as if from ordinary sleep, without either vomiting, nausea, headache, or any other unpleasant symptom whatever. "These really magical effects," says Dr. Chisholm, "must be obtained from the first inhalation, what I will call the primary anæsthesia. If the operation be protracted, and a second or even a third dose of the bromide of ethyl be inhaled, then I find nausea, vomiting, and heaviness, in all respects as if chloroform or ether had been used. Under this repetition, bromide of ethyl loses all its advantages."

It has been used largely by Dr. Chisholm for passing nasal probes, splitting the canaliculi, scraping out tarsal cysts, strabismus operations, etc. (*Maryland Medical Journal*, December 5th, 1880; *Philadelphia Medical News*, January 27th, 1883.)

Dr. Chisholm has thus succeeded most effectually in demonstrating the value of this anæsthetic for short operations. His experience has since been fully corroborated by Dr. Prince in over five hundred cases. Dr. Prince has also used it largely as a precursor to the administration of ether, and with the best results; and for this purpose he considers it superior, in many respects, to nitrous oxide gas. He says: "The main objection to its readoption will be that it is unsafe. It would seem scarcely necessary to point out that this apprehension concerning its safety has grown out of the acknowledged fact that, as an agent for the production of prolonged anæsthesia, it is a blood-poison, probably by preventing oxidation. In the light of more recent observations, it appears that these cries of alarm were not from the primary anæsthesia, which alone we advocate, and which, in the case of chloroform, is attended by unconcealed solicitude; but the reported cases of death have come from the subsequent poisonous action of the agent." (*St. Louis Medical Journal*, October 1883.)

Should these statements be substantiated by further experience, bromide of ethyl is destined to become a valuable addition to our list of anæsthetic agents.

Manufacture of Putrid Meat.—At Newcastle-under-Lyne, on January 23rd, a butcher was fined £6 10s., with the alternative of two months' imprisonment, for having in his possession 20lbs. of meat in a putrid state, which he intended to make into sausages and brawn. The profits of this kind of business must be large, and we would like to see offenders sent to prison without the option of a fine.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIRST ANNUAL MEETING.

PROCEEDINGS OF SECTIONS.

DIPHTHERIA: ITS ETIOLOGY AND TREATMENT.

Read in the Section of Public Medicine.

By ALFRED CARPENTER, M.D.Lond., M.R.C.P.Lond.

THE etiology of diphtheria is still a disputed point. There are many reasons why this is to be regretted; the most important being that treatment must be empirical until its causation is determined with certainty. Intimately associated with causation are the sequelæ which follow upon its incidence; and no explanation will be satisfactory which does not thoroughly explain them. These latter may be divided into two sections: those which are immediate, and those which probably follow in the relation of cause and effect, but which are at present seldom associated in the mind of the medical attendant with the preceding diphtheritic condition. I propose to show the ultimate relationship between these classes of cases, and to point out that treatment to be effectual must be based upon rational lines, and be followed out on those lines to the termination of the case.

Without asserting that diphtheria and potato-disease are in any way allied to each other, except by analogy, I have been struck by the similarity of the effect produced in both diseases. The breathing-passages are impeded. There is a similar train of results, though in the opposite direction: in the one case, carbonic acid cannot get into the plant to allow the devolution of oxygen; and, in the other, oxygen fails to get admission to the blood-current, so as to allow the oxidation of carbon in the various tissues of the body. There are in both cases suffocation, and rapid death when it is immediately severe. If the course of the disease be not so rapid, and death do not arise from asphyxia, the nutritive fluid becomes altered by something which is intimately connected with the causation of the disease itself, and which leads to death either by paralysis or by failure of nerve-power in the human body, whilst in vegetable life it arises from simple loss of power to assimilate the juices upon which the life of the plant depends. There is a blighted state produced, by which the crop is destroyed sooner or later in the course of the season. If both these dangers be escaped, the fruit is permeated by a mycelium which produces seed of its own. The evil day is only postponed; for, when the store is opened in mid-winter, a large portion of the crop is found to be invaded by processes similar to necrosis. Even those potatoes which seem sound are permeated by mycelium, or have resting spores in their buds only waiting for seasonable opportunities to develop into new growths, which will inevitably destroy the potato and prevent any healthy production from that part of it which is so affected. The causation of one kind of potato-rot is recognised as produced by a fungus called Botrytis or peronospora infestans, one of the genus Mucedines or hyphomycetous fungi. They form the commonest moulds upon decaying vegetable substances, and include some parasitic families which produce great devastation in the vegetable world. Their germs are always present almost everywhere, and only want a forcing-bed in which they can develop, and then their effects are immediately manifest.

There is great doubt in the minds of some men as to the capacity of parasitic life either to injure plants or animals which are in vigorous health. It is possible that this doubt has a sound basis, and that we may agree with my great teacher, John Simon, "that a contagium of a given disease, such as small-pox or measles" (I here interpose potato-rot) "has no more power to influence the unpredisposed body than yeast has to ferment alcohol, or to turn pure water into beer." I am now inclined to think that this is so; and that, in the absence of some impurity in the blood of the animal, or in the juice of the plant, [illegible] material which is the sequence of the act of living, and which material has not been properly excreted out of the system, the germs which set up parasitic [illegible] would fail to find a pabulum in which they could increase and multiply, and that they would be starved, so as to ultimately abort or dwindle away to nothing, and thus fail to establish a colony in their victim. I have taken up this view from a variety of reasons. It is true that it is not indubitably established that infective disease, such as diphtheria, is the result of filth in the house or in its surroundings; but the presence of the disease, in the great majority of instances, is intimately connected with decomposing excreta. I have, therefore, come to the conclusion that, when it fails to be proved to be so associated, from the absence of any such visible cause outside the body, it is because the excrementitious matter had not passed away from the blood of the recipient, and that it was still within the curtilage of the human dwelling-house, that is, within the living precincts of its producers.

The connection of filth-diseases with human excreta is a recognised fact. Diarrhœa, cholera, and enteric fever, are certainly associated with human filth. A relaxed throat with diphtheritic exudation is also recognised as intimately connected with similar states; so that a person so affected cannot be cured whilst residing in a given dwelling-house, in which the air is impregnated with the results of sewage-decomposition. He must move into a purer atmosphere before the diseased state of his mucous membrane can be remedied; and why? he is like a man who, under ordinary circumstances, is well able to swim, but with his head just under the water because of heavy boots or other weight loading him beyond his swimming powers. The impure air prevents that healthy assimilation of food by which he would recover power and be able to resist the influence of the fungoid germs which now irritate his mucous membrane, just as some men are, from so-called idiosyncrasies, unable to resist the influence of the pollen of some kind of grasses, and become subject to hay-fever, whilst others do not notice it in the least, and are not so affected.

I do not assume that the excreta of a human being retained within his own body are necessarily hurtful, simply from retention. That is disproved every day of one's life; but I contend that it is impossible for an excretory organ to be defective for some time, and to fail in its complete and regular duty, without some minute particles of organic impurity being retained in the juices of the body in a condition which is foreign to their ordinary state. The blood is placed in that form which is analogous to that which obtains in the sufferer from hay-fever; and when a person is exposed to the germs upon which diphtheria depends for its production, he becomes the victim of that disease. If he were not in that particular condition, he would not be affected by diphtheria any more than the majority of us in this room would be affected by hay-fever if we joined a hay-making party. This view of the case will explain why we occasionally find diphtheria in exceptionally clean and healthy neighbourhoods. It will explain its hereditary tendencies and the so-called idiosyncrasies of those who appear to be especially prone to its ravages.

I have reason to believe that temperature has much to do with the sudden development of diptheria; that, whilst it is certain that those living on ranges of hills in open country are as much liable to its incidence as the inhabitants of lower regions, it arises at clusters of cottages entirely away from sewers or general water-supply, and seems to arise *suâ sponte*. It does at times follow lines of sewers in a way that shows that intimate connection with drainage which is suggestive of cause and effect; it is also propagated by milk-sellers, as is shown by evidence which cannot be disputed. It is not more prevalent in hot seasons than in the colder parts of the year, but, on the contrary, it seems more general in the colder months, producing greater mortality during sudden and violent reductions of temperature than at other times. I have always found in these isolated outbreaks that its development has been associated either with washing-day, when hot water has been allowed to flow into the cesspool or drain, or that there has been a communication between the sewer and some steam-engine, which has elevated the temperature of the sewage to blood-heat. It is to this point that I especially wish to direct the attention of those who are inquiring into the outbreaks of diphtheria. The connection of tub-night with croup is not unknown. I believe it was in Edinburgh that, about forty years ago, at a conference of medical men, it was discovered that Saturday night was the night upon which the majority of the attacks of so-called croup took place among the poor; and that it was shown to be intimately connected with the Saturday night tubbing with which the Scotch were then accustomed to treat their children; and, as a consequence, also with the steamy condition of the rooms in which they slept bringing into sudden activity the germs upon which I believe the disease to depend for its development.

That a particular form of [illegible] diphtheritic exudation, and that the germ is capable of setting up the disease [illegible] peronospora, they must have reproductive organs, and probably resting spores, as well as ordinary spores; and I think that they follow the life-history of the algæ, as well as being endowed with some of the properties of the fungal tribes.

From analogy, we may assume that the resting spores are much less destructible than the ordinary spores, and are capable of preservation under conditions which enable them to reproduce their kind whenever the conditions arise which are required for the purpose. What are these conditions? The presence (1) of certain forms of excreta; (2) of a certain elevated temperature, not much below blood-heat, but below that requisite for the coagulation of albumen; (3) of an atmosphere saturated with moisture, and probably also (4) an excess of carbonic or some other acid in the air, by which the growth of the germ is determined; and (5) some other meteorological or electric manifestation at present entirely unknown. If these states coincide, the resting spore becomes active; it finds material which it can assimilate; and the disease is set up, commencing in the mucous membrane of the throat, that being the very place in which we find moisture, warmth, and carbonic acid. The way in which such actions take place is manifest from the fact that the spores of a mushroom cannot be cultivated unless they have been in contact with the mucous membrane of some of the equidæ tribe; so diphtheritic germs, like the pollen of plants which fall upon the stigma of an appropriate carpel, as soon as they touch such a mucous surface, at once put forth all their vigour; an invisible mycelium is put out; a change takes place in the character of the fluids of the part; and the disease runs its course, and passes through the various changes which indicate its presence. A felt-like mass forms in the throat; the patient dies asphyxiated; or the blood is so altered by the action of the microderm or micrococcus that the blood-corpuscles no longer perform their duty, and oxygen gradually ceases to be assimilated. This leads to a failure of action in certain nerve-centres, and paralysis may result. These micrococci have a life-history of their own—a definite course to run. They are expelled by some of the excretory organs: and those which escape expulsion die in the course of time, leaving behind them spores similar to resting spores, which may set up sequelæ in an unexpected manner and at unexpected times. Returning to the conditions, let me say that, as regards the character of the excreta, this must be peculiar; that, as scarlatina probably has its origin, when apparently arising *suâ sponte*, in the blood of animals which are not in a healthy state, and which is undergoing decomposition or metamorphosis of some kind, so the diphtheritic germ has its apparent origin *de novo* from morbid matter produced in the tissues of animals. It is probable that the excreta of vegetable-feeders do not furnish germs which could develop into a diphtheritic micrococcus *suâ sponte*.

If the conditions be present, the cells are hatched, and they then are capable of extension by so-called contagion; but even then it is requisite that the recipient shall be in a state fitted to receive it, and, like to the carpel of a fruit, ready for the pollen which is peculiar to it; otherwise, the cell fails to find fitting pabulum for its extension and the development of its reproductive organs.

An elevated temperature is necessary, together with an atmosphere saturated with moisture. I conclude that this is so, because I have always found the coincidence in first outbreaks, and the consensus of opinion points to the necessity for moisture, or dampness, or stagnant water, whenever the disease is epidemic.

I go also to analogy, for the potato-disease spreads more rapidly in the damp atmosphere which is found among the rank vegetation of overgrown haulms, or on those days in which the sun is obscured by clouds and the air itself close, full of moisture, and the temperature high. Sunlight and dryness soon remove the incidence of potato-blight. The latter, however, probably does not require the elevated temperature which is requisite for the hatching of diphtheritic spores; but the warmth of a day in which thunderstorms abound, but the sun obscured, is sufficient for the purpose.

That carbonic or some other acid must be present is probably the case, because it has been shown that minute fungi grow much more rapidly and much more luxuriantly in such an atmosphere. It is probable that water, which is free from carbonic or some other acid in solution, will not be able to propagate even typhoid germs for want of the necessary pabulum; and this accounts for the fact of certain water, apparently free from suspicion of the presence of any infective principle, suddenly developing such a tendency, from having lost its power of neutralising the carbonic acid, or of discharging it into the atmosphere. In this case, typhoid germs rapidly multiply in the water, and disease is spread by its means; and so it is that diphtheria suddenly springs into activity. There is a rapid fall of temperature out of doors, lasting for a day or two. The school managers in a given school are not prepared for the change; fires are not lighted, but the cold and usually damp air is shut out as much as possible, and the atmosphere of the school becomes highly charged with carbonic acid; and, if it should happen that a child with an infectious throat is present, the disease spreads as rapidly as potato-rot spreads on a favourable day; and, if there be excreta of such people in the sewer, the admission of large quantities of hot water force out a steamy air into the closed-up passage from the defective drain.

But how will this explain the sequelæ which frequently follow upon diphtheritic mischief? I mentioned the fact that potato-rot is known to be propagated by the agency of resting spores. These are spores or germs which are shut up in a very resistant envelope, which enables them to retain their vitality in adverse circumstances; so that heat, if it be not much above 212°, and the cold even of zero, will fail to destroy it. These spores may by analogy be fairly assumed to exist. The ordinary spores are evacuated from the system as the patient recovers; but the resting spores remain in contact with the lining membrane of the blood-vessels, or are carried by the blood-current into some of those parts of the body which usually act as filters, and retain matters which are foreign to the blood-current. Perhaps they attach themselves to lining membranes, such as the valves of the heart. They may there, as they develop, set up ulcerative endocarditis; and being detached from the valves as they increase in size, they irritate the membrane; and, being carried on by the blood-current, they produce emboli at the spot to which they are carried. There they multiply, sooner or later, and the sequences of the disease appear as if they were separate and independent diseases, and as such are often registered among the causes of death as totally independent of the preceding diptheritic condition.

I have the history of a considerable number of cases in which inflammations of different organs have come on a few weeks after the patient has suffered from a moderately slight throat-affection, which has not been recognised as diphtheria, but which has been coincident in point of time and place with true diphtheritic attacks. I have been inclined to look upon the so-called inflammations as having been caused by diphtheritic emboli, and have treated them accordingly. I now advise that course, in the majority of cases in which the inflammatory attack appears to be idiopathic, that is, not preceded by some known chronic diseased state of the suffering part. That treatment has been the use of ammonia as the proper stimulant, so as to reduce the acidity of the blood; for I have generally found these cases in constitutions which are either rheumatic with the lactic acid diathesis, or gouty from the excess of lithic acid in the constitution. I have generally given alkalies, as lithia, or potass in combination with it; and when there has been an elevated temperature, which has indicated excessive chemical action in the invaded part, I have given the sulphocarbolate of soda, with the greatest possible benefit. This salt reduces temperature, most likely by its antiparasitic power; for, as soon as a few doses have been given, the fever subsides, and the patient is much relieved; but, if the medicine be left off too soon, there is certain to be a relapse. This is very disappointing, and, if the practitioner be disheartened, and try another remedy, his patient will probably die. But if he return to his sulpho-carbolate, he will ultimately destroy all the developing resting spores in the tissues of his patient, and lead him on to a perfect recovery. It is curious how, in these cases, organ after organ becomes involved in the disease; it is also curious, but highly satisfactory, that the congestions or embolisms follow one another in point of time, otherwise there would be very little chance for the patient to recover. I would urge the practitioner to continue the sulphocarbolate, in small doses, first with the ammonia, and, after a time, with quinine, avoiding altogether the mineral acids, as such appear to allow a more rapid development of the resting spores and a further relapse.

As regards the local treatment of diphtheria, I have been accustomed to treat it on scientific principles, and attack the disease just as my gardener attacks the oïdium upon grapes, and other parasitic disease upon vegetables generally. I apply the powder of washed sulphur to the throat very frequently, blowing it into the fauces, and applying it by means of a brush with a little glycerine or honey, alternating the application with a little sulphurous acid in solution. It is not a painful application; it destroys the mycelium and the ordinary spores which produce the disease. If this be done quickly, so that the growths do not penetrate to the deeper tissues, no resting spores will find admission to the body, and there will be no following sequelæ. I have also been accustomed to advise that creasote be kept in the room, so that the air may be placed in that condition which diminishes, if it do not destroy, the growth and development of hyphomycetous fungi.

THE salary of Dr. Welpley, medical officer of Bandon Dispensary, has been raised to £120 *per annum*.

THOUGHTS ON THE PATHOLOGICAL RELATIONS AND THE ETIOLOGY OF DIPHTHERIA.

Read in the Section of Public Medicine.

By EDWARD F. WILLOUGHBY, M.B.Lond., etc.

I. 1. RECENT microzoic pathology has established beyond doubt in some cases, and presumably in others, that infections and infective diseases, with a few apparent exceptions—if, indeed, they be exceptions—are caused by, dependent on, or constantly associated with, the presence of certain more or less differentiated forms of bacteria.

2. We are justified in considering these as specific—though, as in the case of the ova of man, ox, and dog, the specificity of which is clear enough, our visual organs may not be able to distinguish them—by the specific character of their effects in the body, the contagium of each disease producing the same, and not another.

3. Yet there is reason to believe that these specific forms may be evolved—except in the case of some of the most highly differentiated, as small-pox, the conditions necessary to whose evolution do not now exist—from non-specific and inert forms; and that thus some diseases, afterwards and usually propagated by contagion, may at times be evolved from extracorporeal or other bacilli; in other words, may arise *de novo*, though not *de nihilo*.

4. These lower forms of bacilli, non-specific, but capable of developing into higher and specific forms, as well as the necessary conditions for their development, are most likely to be found in and among the processes of putrefaction of organic matter—processes themselves invariably set up by like organisms; and such diseases are thus, as Murchison maintained against Jenner regarding enteric fever, *pythogenic*.

5. While history and medical observation warrant us in denying such evolution, under existing social and sanitary conditions, in regard to small-pox and measles, and leave the case of typhus and scarlatina open to differences of opinion, there is an overwhelming mass of evidence in favour of its frequent occurrence in enteric fever, and still more of diphtheria.

6. Bacilli of a more or less infective character are present in most forms of pharyngitis and tonsillitis, whether induced by exposure to and absorption of septic poisons, or by the usual causes of catarrh.

II. *Diphtheria* may be defined as an infectious and specific, though perhaps not highly differentiated disease, marked by some or all of the following phenomena. Locally, there is an inflammation of all or any part of the fauces, tonsils, pharynx, nasal passages, and larynx, characterised by the exudation of lymph rich in fibrine and proliferated epithelium-cells and leucocytes, leading to submucous thickening and the deposition on the surface of a so-called false membrane of any degree of thickness and consistence. Generally, there are blood-changes or derangements of innervation and nutrition, manifested not only by pyrexia and albuminuria as in scarlatina, but by certain characteristic phenomena, viz., paralysis of the heart, of deglutition, and perhaps of voluntary muscles, of the nerves of special sense, and derangements of common sensation; these phenomena differentiating it from non-specific pharyngitis.

The local dangers are: (1) the liability of this exudation to putrefaction and the absorption of the putrid matter; (2) the obstruction of the glottis by the exudation; and (3) the paralysis of the glottis, due to the inflamed state of its muscles, causing its margins to collapse during inspiration, while expiration is unaffected.

That this, and not spasm, is the cause of the suffocation is evident, because (1) muscles actually inflamed are not subject to spasm, but rather to loss of contractile power, (2) so long as the glottis is not obstructed by membrane expiration is not impeded, (3) identically similar respiration follows division of the laryngeal nerves, *i.e.*, artificially produced paralysis, and (4) is also heard when artificial respiration is performed on the dead body in which the glottis is passive.

III. *Diphtheria and Croup.* Croup is an equivocal expression, being popularly applied to any cough marked by a peculiar brassy sound, indicating its origin in any abnormal condition of the larynx. It may thus mean (1) simple or catarrhal laryngitis; (2) laryngismus or true spasm of the laryngeal muscles, arresting, during its continuance, both inspiration and expiration; or (3) laryngeal diphtheria. The last name is by some physicians restricted to cases of diphtheria, originating in the larynx itself; but identical symptoms and consequences follow the extension of the diphtheritic process from the pharynx to the larynx, and such a distinction is unscientific and without any practical value.

"Croup," therefore, if not simply catarrh or a reflex spasm of the glottis, is, and should be called, diphtheria.

IV. *Diphtheria and Tonsillitis.* In catarrhal tonsillitis the increased and altered secretion of the tonsils thickened by cell-proliferation distends and protrudes from the crypts in the form of whitish points, which may ultimately coalesce, undergo putrefaction, lead by absorption to inflammation, and even suppuration of the cervical and submaxillary glands, or assuming a fibrinous character simulate diphtheria, but in such cases albuminuria and the nervous derangements characteristic of diphtheria, are absent.

More often the inflammatory process is localised, and pseudo-abscesses in the tonsils, and enlargement of the neighbouring glands, are the only consequences.

V. Though the great majority of cases of tonsillitis and pharyngitis are purely catarrhal, set up by exposure to cold and wet, to irritants, etc.; experience places it beyond doubt that they may be produced by the absorption of septic agents, as sewer-gas, etc. Between these cases and well-marked diphtheria it is impossible to draw any satisfactory line of demarcation, and we are justified by analogy as well as by clinical observation in believing all such cases of septic tonsillitis and pharyngitis to be essentially the same as diphtheria.

By analogy, even in those fevers whose lesions are usually visible and unmistakable, we meet with obscure and unrecognised cases, cases whose true nature is only revealed by their remoter consequences, as albuminuria in scarlatina, or even by their merely giving rise by infection to other cases which admit of no such doubt. We have small-pox with one pustule, and why not with none? scarlatina without visible eruption, enteric fever marked only by slight intestinal derangement and malaise or weakness, and so on.

Clinically, I have seen three sisters with what seemed to be a common foul smelling sore-throat, but in one of whom fatal laryngeal symptoms rapidly developed, she being a feeble child of five, and they healthy girls of fourteen and sixteen years. In none was there any visible exudation on fauces or pharynx.

I, therefore, firmly believe that diphtheria is of far more frequent occurrence than is commonly supposed, and that all, or nearly all, cases of sore-throat evidently connected with unsanitary surroundings, and affecting, simultaneously or consecutively, several members of a family, are to be reckoned as diphtheria.

VI. *Etiology.* The connection between sewer-gas and faecal or other putrid accumulation in or around dwellings and diphtheria has long been recognised by medical men, especially those resident in towns. But, of late, several rural practitioners and medical officers of health have advanced a theory of meteorological causation. Dr. C. Kelly, medical officer of health for West Sussex, insists on the fact that, while diphtheria is scarcely known in Worthing, it is very prevalent in the rural districts; and he attributes it to exposure to cold and wet in going to and from distant village-schools. In the reports of the German Imperial Board of Health, I observe that it is at times fearfully prevalent in the rural districts of Saxony; and, in those of the Board of Health of Michigan, I find that among the sparsely peopled settlements in the backwoods, amid foul and stagnant pools, etc., its ravages surpass all example.

I do not deny the facts adduced by Drs. Kelly, [illegible] King, etc., but I do their inferences; for where does one meet with foul dunghills, pigstyes, etc., in close proximity to houses, saturating the soil with putrescent matter, or with cesspools side by side with wells more frequently than in such villages and rural homesteads?

Again, it is remarkable that, in Munich, as Dr. Soyka has shown, enteric fever prevails most in those quarters provided with old and pervious sewers, next in those with good sewers, but where the houses are not properly disconnected therefrom, and least in those without any sewers at all; whereas diphtheria is constantly present in the latter, drained only by the open *Stadtbächer*, and with cesspools dug in the porous rock. Thus, diphtheria and enteric fever exist in Munich side by side, but in inverse proportions in the several quarters of the city. In fact, it would appear that surface-accumulations of filth are more likely to generate diphtheria, and pent-up putrid gases to produce enteric fever.

PROFESSOR OLLIER ON NEPHRECTOMY. — The two cases of this operation in Professor Ollier's practice [illegible] was [illegible] of the kidney in a child four years old [illegible] who died [illegible] time after the operation. The second [illegible] cyst, and the patient died on the third day. In the [illegible] two years old, a renal abscess had [illegible]. An opening having been made, a fistula [illegible] M. Ollier extirpated the [illegible] lumbar region. The patient [illegible] M. Ollier [illegible] that nephrectomy is justified [illegible] and of pyelonephritis with intractable fistula [illegible] practised in cases of cyst of [illegible]

SUGGESTIONS AS TO AMENDMENT OF PUBLIC HEALTH LAW.

Read in the Section of Public Medicine.

By WILLIAM CARTER, M.D., LL.B.Lond.,
Physician to the Royal Southern Hospital, Liverpool.

In proposing any change in public health law, two facts should never be lost sight of—viz., first, that the success of the Public Health Acts, 1872-75, has been very great; and, secondly, that that success has been most conspicuous in reducing the mortality from the infectious fevers. The reason is obvious. They were openly discussed in Parliament, and their wise and moderate provisions were loyally accepted both by the medical profession and by the public. Moreover, the success has been continuous and progressive, greater results being achieved year by year. It is most important, therefore, that future legislation should be framed upon the model of those Acts, and should consist, first, of the rectification of obvious anomalies which experience has shown to interfere with their satisfactory working; and, secondly, of such a cautious extension of principles as public opinion is prepared for, and as in the nature of things is likely to do the greatest good with the least counteracting harm. Of those anomalies, some are more, and others less, easily removable. The first might probably be safely rectified at once; the second only by a slower process. An obvious example of the first class is the arbitrary division of the country into urban and rural sanitary districts; the rural districts having no power to make by-laws as to the construction of buildings, etc., a frequent result being that large factories are erected just beyond the boundaries of boroughs, and that the houses of the workpeople, forming sometimes quite a village or town near them, are, in the absence of any control, often constructed with a total disregard to sanitary requirements.

A less easily removable anomaly arises from the sanitary areas being always, or nearly so, coterminous with registration-districts or Poor-law areas. Often there is nothing but advantage from this; but it sometimes happens that owing to it a sewer running along the centre of a road which is the boundary of a district can drain the houses on one side, but not those on the other; or, that an elevated spur cutting through the centre of a single district renders two drainage-systems necessary. That any alteration of this kind should be made cautiously, and not pushed beyond actual necessity, is obvious enough. For, over and above the great and general objection to a violent change in the nature of institutions to which the country is accustomed, there is doubtless much practical advantage in having registration-areas fixed, and fairly corresponding with sanitary ones for purposes of comparison. It would be difficult to trace the effect of a given law on the mortality of a district if its registration were constantly changing. But that changes can be slowly introduced to meet growing necessities without practical harm is obvious from the fact that, during the decade 1871-80, no fewer than 137 such changes were made in superintendent-registrars' districts and registration-subdistricts. Of course, these were always based on registration, and not on sanitary requirements; but the fact remains that they were made, and apparently without serious inconvenience. As a partial remedy for some other practical defects, there seems to be a consensus of opinion in favour of a county board, or some analogous authority, which should be intermediate between the Local Government Board and the districts, and which should possess the power of control over unions, and the requisite local knowledge to enable them to apply it advantageously. Without attempting to indicate either the principles on which such bodies should be constituted, or those on which the areas supervised by them should be mapped out, it seems likely that they might perform an useful function in the future sanitary history of the country.

To proceed. The highest aim of a sanitary law should be to create conditions inconsistent with disease, that is, to prevent disease from occurring; its second and lower one to prevent it from spreading when it has occurred. These two aims should always be kept distinct. Is there a sufficiency of well ascertained fact as to the causation of many diseases to serve as the basis of further positive enactments? Three essentials, as has been well said, must always be observed, viz., certainty as to the cause of the disease, efficiency of the suggested remedy, and certainty that this remedy will not introduce greater evils than it proposes to remove. The following facts will probably receive universal assent. The death-rate of towns is always lowered by the speedy removal of excremental and other refuse from houses. It is always lowered in proportion to the diminution of overcrowding, and, where this is completely done away with, typhus is unknown. Special diseases, as diphtheria, typhoid fever, and cholera, are most frequently caused by drainage-defects, and the pollution of potable waters. Rheumatism, and probably phthisis, are favoured, if not caused, by damp subsoils. To secure good drainage, speedy refuse-removal, abundant air-space, dry subsoil, and pure water, will, therefore, be to prevent much disease from arising.

The need of further legislation is proved by the following facts. Six per cent. of good London houses have their drains completely choked, all the sewage soaking into the soil; and at least 30 per cent. show considerable leakage of sewer-gas through faulty pipes; a row of large houses within four miles of Charing Cross, of which some had been occupied several times, were found never to have been connected with the sewer; in only one out of 200 houses examined by the smoke-test in Glasgow was there no escape of the smoke through defects in pipes. Of 678 houses recently inspected in Oxford preparatory to certificates being granted for the lodgment of undergraduates, only 21 were deemed sanitarily sound. What is true of London, Glasgow, and Oxford, is true of other towns. And to show that improvement of the dwellings is really followed by improvement of health, it is only necessary to refer to our army, our prisons, and to the Industrial Dwellings Companies' houses. Before the Crimean War, the army at every age had a death-rate more than double that of a similar male population of England and Wales. A Royal Commission was appointed, and reported; legislation was framed for improved barracks, and now the chances of the soldier's life are better than those of civilians. In their ordinary dwellings in large towns, the death-rate of the working-classes is from 28 to 30 per 1,000. In the Peabody and other industrial dwellings in London, and in corresponding ones in Newcastle, it averages about 16, notwithstanding that the birth-rate is very high. In view of these facts, would it be a harsh extension of the law to make the adoption of such provisions as those of the model by-laws as to new buildings compulsory, and to supplement them by one requiring official examination and certification before tenancy could be commenced? But, in London, about 70,000 houses are said to be built annually. Could these be efficiently surveyed? Here, local experience gives a reply. West Ham declined to adopt the model by-laws, because, on the one hand, their staff was insufficient to see that they were observed; and, on the other, the rates were too high to admit of their being increased by the six additional officers required, in order that a daily visit should be paid to each of the 200 houses that were being commenced every month. But it was determined to levy a charge of one guinea on the builder—not much in addition to the original outlay—and the difficulty was solved. Two thousand four hundred guineas a year will pay for the six officers, and the owner will have a certificate that the house was sanitarily sound when it left the builder's hands. Other places adopt this plan; and some, as St. Mary Abbott's, Kensington, grant a written report by their surveyor on any house, on payment of a small fee. Generally, however, any but first tenants must, on the principle of *caveat emptor*, require a written assurance from their landlord, an arrangement with which public health law can, of course, have no concern.

In recognition of the evils arising from damp subsoil, and from the suction into the house of ground-air, infected, perhaps, by soakage from a leaking drain, the Local Government Board, by its tenth by-law as to new streets and buildings, order the whole ground-surface of a new building to be covered with a layer of good cement-concrete, at least six inches thick, etc. But these by-laws need not be adopted. And a far more serious evil to health, and one which the preceding by-law does not effectually meet, is caused by the general practice of depositing midden-refuse, tainted, as it always is, with organic, and not unfrequently with excremental, matter, in sites that will, within a short period, have to be excavated for the foundation of houses. This is sowing the seeds of disease with one hand, and trying, by aid of concrete, to prevent them from germinating with the other. To call such deposits by the euphonious term of dry ashes is simply to abuse language. Would it be a harsh extension of preventive law if urban sanitary authorities were restricted from depositing such material within certain distances, until it had been rendered innocuous? Derby and other towns have shown how, by means of appliances like Fryer's destructor, this result can be accomplished, and how great a saving to the public health is thus gained.

Overcrowding nearly always occurs in sublet houses only, and the remedy for this is in the hands of every sanitary authority. But, considering the advantages that have been experienced by the adoption of Section 90 of the Public Health Act by not a few towns, would it be too much to make its adoption compulsory on all? If such were done, the rules now applicable to common lodging-houses, including the notification of infectious diseases by the tenant-in-chief and his lodgers, would be applied, and a large sanitarily dangerous area covered.

As to water-supply, a fact or two will show at once the great evil that may be done by it, and the necessity for an extension of present powers. When Glasgow drank the Clyde water, the deaths, in cholera-years, were always very numerous, being, in 1832, 2,800; and in 1854, 3,900; whereas, in 1866, the first cholera-year after the pure and abundant Loch Katrine supply was obtained, they were, with a much larger population, only 68. Another very curious fact is, that public notices are said to have been everywhere posted throughout Oxford, our oldest seat of learning and light, early in last year, warning graduates that the city water was only safe when filtered, and not always so then. At the time of the last cholera-visitation, Dr. Hassall, then one of the inspectors, wrote:—"I beg to express my conviction that the water-supply of the metropolis will never be in a satisfactory condition, until the use of cisterns is abandoned and the constant supply adopted." Would such an extension of the law as should compel the sanitary authorities of towns to see to the provisions of a constant, direct, and pure supply of this necessary of life be unduly harsh?

But, infectious disease having broken out, can the provisions at present existing for its control be easily extended, and, if so, how? Any further extension, to be productive of more good than evil, should recognise and respect the following facts and principles: first, that there are two great social classes, the one anxious, when infectious disease occurs among them, to isolate the infected persons, and as a rule possessing the means of effecting isolation; second, that no regard for a remote public good will ever reconcile individuals to a great certain and immediate personal loss, or to the violation of deeply cherished sentiments, and that a law which tends to either of these results will be likely to be so often evaded as to neutralise, or nearly neutralise, any anticipated good; third, that the medical practitioners of the country are, and must, under any and every law, remain absolute masters of the situation, and that no law of the kind contemplated can hope to succeed which does not command their confidence and secure their cordial co-operation (and, even though in a lesser degree, those of the public also). The great objects to be secured are to bring all infectious diseases, and more particularly the first cases of such diseases, under the notice of those who possess the knowledge, power, and willingness to control them. The private medical practitioners always possess the requisite knowledge and desire, and, in the majority of cases, the power to do this; and any law will do injury in proportion as it promotes concealment of disease from them. To attempt to compel these gentlemen, under threat of fine, and, in the last resort, imprisonment, to hand over their preventive functions to a purely official class; and to compel them to accept, as it were, a double commission (for which is to be paid a double fee), viz., that for curing the patient on the one hand, and for informing on him on the other; to destroy the feeling of inviolable confidence which the unwritten law of our profession enables every patient justly to have in the secrecy of his medical adviser—a destruction of which our critics seem scarcely to have gauged the far-reaching social consequences; and to do all this by practically subordinating the vastly larger, and in most cases wiser and more discreet, class to a very much smaller class, and one whose members, as experience has painfully shown, are not always either wise or discreet, and by compelling this larger class in the vast majority of cases to give the information concerning their patients to men who are their rivals in practice, would be (as indeed we have frequent proofs that it is) to excite heart-burnings and antagonisms which will retard rather than advance sanitary progress. And to attempt to compel in every case, even the householder to notify, without at the same time giving him some sort of security beforehand against harmful intrusion on the part of the sanitary officer, would probably defeat its own end by encouraging total concealment, or, at any rate, delay in obtaining medical advice. But if a law, which, while it required notification of every case by the householder, should, at the same time, give to the medical attendant the power (by his certificate that the arrangements for isolation were sufficient) to prevent the visit of the sanitary officer (as in Section 128 of the Public Health Act), it would probably have the double effect of encouraging early application to a medical man in the hope of obtaining this security against intrusion, which would not be had if no medical man were in attendance, and of encouraging special sacrifices in order to satisfy his requirements as to preventive measures lest fear it would have to be withdrawn. But then, in order to afford adequate security both to medical man and householder, the authority of this certificate must be allowed by statute, and not be made a mere municipal ordinance revocable at the pleasure of the sanitary authority, as is the case in Edinburgh at present. If it should be objected that the poor householders cannot be trusted to give the information on account of ignorance, it is sufficient to reply that they now do so in cases of registration of births; that they daily effect purchases and sales without error; and that the tenant of the common lodging-house has for years made this very notification.

A distinction between the social classes has already been recognised in several ways, as by Section 84 of the Public Health Act, which requires notification from the tenant-in-chief of a common lodging-house; by a general order of the Local Government Board, which has the practical effect of law, whereby all district medical officers appointed after February, 1879, are required to notify; and by a similar onus being imposed on the tenant and lodgers in the lower class of tenemented houses in all towns to which, on their application for it, Section 90 of the Public Health Act has been applied. Probably means might be devised for extending the principle to public dispensary-practice.

By these provisions, all of which might perhaps advantageously be made statutory, the sanitarily dangerous and reckless classes would be covered, while the respectable artisan and small shopkeeper, as well as the classes socially above them, would be protected from the annoyance of an inquisitorial surveillance and domiciliary visitation; and the confidential relationships between the private medical man and his patients be left undisturbed.

FATAL CASE OF POISONING BY BUNGARUS CÆRULEUS.

By A. LONG, L.K.Q.C.P., Surgeon-Major A.M.D.

(Communicated by Sir J. FAYRER, K.C.S.I., M.D., F.R.S.)

[I AM indebted to Surgeon-Major Nash for the accompanying case of poisoning by Bungarus Cæruleus, a colubrine venomous snake. This interesting and admirably detailed case of snake-poisoning well illustrates the peculiar and distinctive characters of colubrine, as distinguished from viperine, poisoning, a fatal instance of which was described in the paper I read to the Medical Society on February 4th. These cases, both observed and well described by officers of the Army Medical Department, are good illustrations of the forms of poisoning well described by Dr. Wall in his recent work on *Snake-Poisoning*.—J. FAYRER.]

Private G. A., aged 33, total service five years, service in India one year and eight months, came to hospital on May 18th, shortly after 9 A.M., and said that he had been bitten three hours and a half before by a small snake, between the thumb and forefinger of his right hand; that he had experienced some tingling up the arm afterwards, but that it had almost disappeared. He made light of the matter, and had only come to hospital because he had been advised to do so. He had sucked the place at the time, spitting out afterwards. He had been in the habit of catching snakes, and stuffing their skins. I ordered him a dose of liquor ammoniæ at once. On examining the place said to have been bitten, I saw two minute punctures, such as might be made with a needle; and afterwards, with a lens, I made out two more, all on the dorsal aspect between the thumb and forefinger. There was no pain on pressure, nor any swelling or discoloration either of the hand or of the arm. Pulse natural. At 10 A.M., he complained of a violent pain in the epigastric region, but said he often suffered from the same. The apothecary on duty gave him some liquor ammoniæ and liquor potassæ. The pain soon passed off, and he said he felt perfectly well. He, however, took no dinner, and, I ascertained, very little breakfast. Between 2 and 3 o'clock, he began to complain of some difficulty in his breathing, and shortly afterwards some spasm of the glottis. It was necessary to keep him sitting up, as it was the only position in which he could breathe with any ease; even then, the spasm came on every few minutes, and he was greatly troubled by the saliva collecting in his throat. On auscultation, there was found to be slight congestion of the lungs. The pulse was quick, 96, but of fair volume. The skin was dry and hot. He had, a short time previously, an enema of turpentine and castor-oil, which brought away very little fæces; but he passed urine freely. I ordered him a warm bath, to bring on action of the skin.

Hearing that the snake had been killed, and was in the possession of one of the soldiers, I sent for it, and found it to be a krait (Bungarus Cæruleus), twenty inches in length. I was also told that Private A. was playing with it, and had hold of it by the tail when it turned and bit him. At this time, there was some swelling of the throat externally; but I could not obtain an internal view, as any interference brought on a spasm; and, although he could swallow small quantities of fluid, they had the same effect. The bath brought out profuse perspiration, and he became [illegible]. The pupils were dilated.

At 5 P.M., he was [illegible]. He appeared to have an access of [illegible]. At 7 P.M., he was not so well, he had [illegible] but the external swelling appeared less. The [illegible] of fair volume. I had thought about laryngotomy, but did not like the state of his lungs, and the above determined to wait for a time.

At 9.30 P.M., Surgeon Cusack saw him with me. He was then considerably better: the spasms were much slighter, and at longer intervals; he could swallow better. Pulse fair; pupils dilated, but not so much so as previously. I ordered another enema of brandy and chicken-broth. He went on well during the night, but had to be kept in a sitting posture. He dozed from time to time, took small quantities of chicken-broth and brandy and water, and sucked ice. The treatment was liquor ammoniæ, liquor potassæ, turpentine and castor-oil enema, brandy, strong chicken-broth, mustard plasters, and a warm bath.

He appeared to be going on well up to 5 A.M. on the 19th, when all at once he became quite faint. The pulse was hardly perceptible. I was sent for, and found the heart and pulse fluttering and irregular. After a little brandy and water had been given by the mouth, these improved; he could swallow much better. There was no spasm of the glottis. The pupils were not so dilated. Temperature, 102.6°. I ordered an enema of brandy and chicken-broth, but he did not retain it. At 7 A.M., he appeared much better, but had a most extraordinary pulse; it appeared to flow under the finger, and then come up with a sudden jerk. The action of the heart was peculiar and irregular.

At 9 A.M., he appeared somewhat better; the pulse and heart were firmer; he swallowed better. Temperature, 100°. At 11 A.M. he appeared to have improved. He had another enema of chicken-broth and brandy, and retained the whole of it for some time, and then part of it came away. He appeared to be in much the same state up to 2 P.M., when he expired quite suddenly; the cause of death being syncope.

The patient during the whole time never appeared to become unconscious; although, during a great part of the last twenty-four hours, he either could not or would not speak for fear of bringing on a spasm, the rest of the time only in a whisper; but, when asked a question, he would generally nod or shake his head. I am of opinion that, when he sucked the wound, he must have had some sore about the mouth or fauces, and thus absorbed some of the poison.

Post mortem appearances, three and a half hours after death. The body was well nourished. There was no discoloration. The joints were pliant, with the exception of that of the lower jaw, which was firmly fixed. The brain and membranes were congested. There was no fluid in the ventricles. The brain weighed 50 oz. On removing the thoracic organs, the blood was found to be very fluid, and extremely dark coloured, with a very slight acid reaction. The larynx was congested; no sores could be discovered. The lining membrane of the trachea was congested. The right lung weighed 23 oz., left 24 oz.; both were congested, otherwise healthy. The heart weighed 8 oz., and was contracted; it contained a very small quantity of liquid blood. There was no fluid in the abdominal cavity. The peritoneum was natural. The liver weighed 62 oz.; it was slightly congested. The gall-bladder was distended. The spleen weighed 8 oz., and was highly congested. There was a patch of congestion, about the size of the palm of the hand, at the cardiac end of the stomach. The lining membrane was very corrugated; it could not be stretched out; the stomach contained only a little fluid. The intestines were healthy. A large tænia solium was found in the ileum. The right kidney weighed 7½ oz., the left 8 oz.; they were congested, but otherwise healthy. In the right upper extremity, there was no swelling or discoloration. Four minute punctures were seen on the dorsal aspect of the hand, between the thumb and forefinger; two of these could hardly be seen without a lens.

OBSTETRIC MEMORANDA.

A CASE OF CRANIOTOMY.

On Saturday, February 10th, I was called to Mrs. M., a primipara, aged 18, who had been in labour for several hours. The pains were strong and frequent, and the pulse good. On examination, I found the os fully dilated, the membranes ruptured, the head very large, the pelvis deformed in the anterio-posterior diameter, the promontory of the sacrum projecting considerably forwards. As no progress was taking place, I administered chloroform, and applied the long forceps. I pulled intermittently for about an hour or more, but the head made no advance. Dr. Finegan was then called in consultation. Thinking that a stronger forceps might be more effective, he applied an extra strong and long forceps, and we both pulled in our turns for a considerable time, but with no effect. At last, we decided to perforate. After perforation, and the emptying of the contents of the cranium, Dr. Finegan applied the cephalotribe, which soon crushed the cranial bones, and was afterwards used as a tractor. Pressure externally produced a good contraction of the uterus, but, as the placenta was not expelled, I put my hand in, and extracted it. An injection of ergotine was also given hypodermically. The woman made a complete and speedy recovery. If she become pregnant again, it will be extremely advisable to bring on labour prematurely at the seventh month. The interest of the case is that it shows the advantage of the cephalotribe over the craniotomy-forceps in such cases after perforation. If the craniotomy-forceps had been used, it would, probably, have been necessary to break down and remove a considerable portion of the vault of the cranium before the head would have been sufficiently lessened to pass, and there would have been the risk of injuring the maternal structures; while the cephalotribe crushed the bones within the scalp, the latter forming a covering which prevented the sharp edges from coming into contact with the maternal structures.

James Edwards, M.R.C.S.E.,
Honorary Assistant-Surgeon to the Liverpool Ladies' Charity and Lying-in Hospital.

SPASMODIC CONTRACTION OF UTERUS OR PLACENTA.

Mr. Alfred James's communication on "Hour-glass Contraction," in the Journal of February 16th, has interested me very much, as it reminds me of a somewhat similar case which occurred in my own practice a few years ago.

A primipara, aged about 30, had a fairly good time, the child being born naturally (but a dose or two of ergot having been given). On my finding that slight traction on the cord, telling the patient to blow on the back of her hand, and other simple means, failed to dislodge the placenta, I introduced my hand gradually into the vagina, and found that (apparently) the whole of the uterus was spasmodically contracted on the placenta, the os being somewhat contracted as well; so that I could only get two or three of my fingers into the cavity. There was no hæmorrhage, and the pulse was 60. I did not, however, deem it advisable to wait very long; chloroform was therefore given by my partner, and the patient partially put under its influence. I was now enabled to introduce the whole of my hand into the uterus, and then found that the placenta was rotten and broken down; but it was not adherent anywhere. There were still irregular contractions of the uterus, which caused me some difficulty in passing the whole of the placenta; but by degrees I did so, as I was anxious to remove it all without reintroducing my hand; this I effected at last, and thus saved the poor woman the discomfort of my removing it piecemeal. She made an excellent recovery, and at no time during the whole of the operation, or afterwards, did the pulse rise above its original standard of 60. It passed through my mind whether the ergot was accountable for this spasmodic contraction; but I am inclined to think that it was merely an idiosyncrasy of the patient, as I have repeatedly used ergot in my midwifery-practice, and have never witnessed a similar untoward result. W. L'Heureux Blenkarne, M.R.C.S., Buckingham.

SURGICAL MEMORANDA.

RUPTURE OF BLADDER, DISLOCATION OF THE KNEE, AND COMPOUND FRACTURE OF BOTH LOWER LIMBS.

On July 4th I was called to an accident which had occurred at the local railway-station. On arrival, I found a lad, aged 15, in the following condition. He was blanched, and the surface of the skin was quite cold; he was conscious, and complained of great abdominal pain and an extreme desire to pass urine. There was tenderness on pressure over the lower part of the abdomen, and, on passing a catheter, about two ounces of bloody urine were drawn off, but without relieving his desire. The catheter was thereupon tied in, under the full impression that grave injury, probably rupture, existed. Further examination was then made, chloroform having been given. There was a compound comminuted fracture of the lower third of the right leg, with loss of blood from the wound, and dislocation at the knee-joint. There was also a compound and much comminuted fracture of the left leg.

The following treatment was at once adopted. Both wounds were covered with dry absorbent wool, and then the legs, to above the knee, were enveloped in Southall's pads. These were strengthened with soaked millboard splints, and the whole was firmly and evenly bandaged from the toes to above the knee-joints. The dislocation was then reduced. The boy was then carried to bed, and the legs placed in Lawrence's cradle-splints, and these were swung by ropes suspended from the ceiling, so as to ensure to the limbs the freest possible movement. Opium was administered during the night, and poultices were applied to the abdomen.

On the 5th, the patient complained only of abdominal pain. There was great tenderness over the pubes. The urine passed through the catheter less tinged with blood. Next day the urine was clear; there was still suprapubic pain. On the 14th the catheter was withdrawn, and he passed urine freely and with little pain. His legs had never given him the least discomfort; but, at the suggestion of my partner, on the 14th instant I cut open the bandages and exposed the limb. Never having seen a fracture so treated, I was astonished at its appearance. It looked quite natural; the wound had healed, nor was there even a trace of ecchymosis; the bones appeared firm and free from pain on pressure. The splints were reapplied on the 20th. Owing to a disagreeable smell, I opened and exposed the left leg, finding the following condition. The limb looked in every way healthy, but on its inner aspect, lying thoroughly exposed, and without the slightest signs of inflammatory action, was a large piece of the tibia (over two and a half inches in length). This I seized and lifted out of its bed, leaving a healthy-looking wound, which progressed rapidly towards healing.

On August 16th, both legs were put up in plaster-of-Paris, and he left for home. He has since resumed his work.

The case may be of interest to surgeons, not only on account of the pelvic injury, but to the satisfactory result of a plan of treating the most serious fractures, not as yet, I think, sufficiently recognised or adopted.

Cottenham Farmer, M.R.C.S.E., Hexham, Northumberland.

CLINICAL MEMORANDA.

HOW SMALL-POX IS SPREAD.

In the number of our Journal of January 26th, p. 178, I find a paragraph under the above heading. Well authenticated and marked facts are always the best answer to any question, be it difficult or easy of solution. I therefore send the following short history of a case which came under my observation and treatment in 1843, when I was for some time connected with the Liverpool Blind Asylum. A blind lad, aged 17, was attacked by small-pox of a most violent type, and of which he died. Only one other very mild case occurred, and this was in a man who had been the sole attendant upon the first case. The lad's arm showed no vaccination-scars. On the attendant, these were visible. There had not been a case of small-pox in the asylum for many years, and there was no epidemic in the town. The friends of the deceased were, of course, communicated with, and I learnt that the brother had just recovered from a severe attack of the disease. Upon examination of the blind lad's pockets, a letter from the convalescent brother was found; and, upon further investigation, it was ascertained that this letter had been written from the sick-bed of the afore-mentioned brother. I need scarcely say that thus we had the solution of what might otherwise have remained a mystery, and as clear a proof as needs be of the communicability of infectious or contagious diseases by means of paper. I would only add that I have never myself doubted that these diseases can be, and are too often, propagated by books and papers and letters incautiously sent from one friend to another. It was always my habit to desire all books and papers to be burnt after use in the sick-bed, and I on many occasions myself destroyed letters I found patients writing to their friends, under dangerous circumstances.

B. Barrow, Southlands, Ryde.

PERSISTENT HICCOUGH.

As a commentary on the case of "persistent hiccough treated by chloral," quoted in the issue of January 19th, page 103, I should like to relate my experience in a case of obstinate hiccough which continued about fourteen days. I am far from wishing to disparage the good effects of chloral hydrate in this disorder, as I know it has frequently been useful. Still, Dr. Kingsbury's success in this recent instance must be set against my total failure in a twin case, also quite recent.

I was called on October 19th to a man, named also W. H., and aged 56, who, it was stated, had been troubled with hiccough about every ten or fifteen seconds during three days and nights. He also vomited continually; the bowels were acting slightly. He had been drinking hard for six weeks, and had consumed enormous quantities of spirits besides other stimulants. I thought the vomiting might be due partly to the mechanical effect of the hiccough, and partly to irritability of the stomach. I used ice, and gave four hypodermic injections of morphia in twenty-four hours. Altogether, a restless sleep of about two hours was obtained, the hiccough ceasing at intervals, but recurring immediately the patient awoke. I carefully examined for symptoms of intestinal obstruction, but found none. I now tried chloral-hydrate in doses of twenty and forty grains. The patient took it like water, and with no more effect. At last, after four days' trial, during which time over three hundred grains had been consumed, I abandoned it. I now assumed that the stomach and bowel, in its upper part, must be partially paralysed by the large amount of alcohol which had been taken; and, although the abdomen was not tympanitic, I felt satisfied there must be pressure on the diaphragm. I was the more convinced of this as the patient had, by mistake, in twenty-four hours, taken the whole of four ounces of castor-oil which had been procured for him, and had experienced little inconvenience. I began to give large enemata of various kinds, and ordered turpentine stupes to the abdomen. When two or three enemata had been used, the bowels began to act a little more freely, and some small offensive motions were passed, and soon flatus accompanied the returning fluid. At this time the use of each enema was followed by about one or two hours' relief from the hiccough, though it returned after this. The diet was carefully chosen, and sedatives given, as hiccough returned at once on contact of food with the stomach.

After six days from the use of the first enema the hiccough ceased entirely, leaving the patient reduced very much by fatigue and lack of nourishment.

His great strength and muscular power had been conspicuous in the neighbourhood, but he now tottered by his bedside. A tedious convalescence has been further delayed by a sharp attack of phlebitis of the left saphena vein, followed by a less severe one on the right side.

Possibly the difference of result in these two cases may be due to an unlike pathology; both probably being nervous in origin, but the one due mainly to a loss of tonicity, the other to the same *plus* a chemical change in the nerve-endings from alcoholic poisoning. However this may be, the cases illustrate the value of collective investigation.

F. J. Driver, M.A., M.B.Cantab.

TOXICOLOGICAL MEMORANDA.

TEMPORARY AMAUROSIS FROM EXPOSURE TO THE VAPOUR OF DILUTE HYDROCYANIC ACID.

A few months ago an officer [illegible] asked me to go with him at once to see his wife, who appeared to be suddenly going blind, having complained of being unable to see as she walked across the room, after rising from the breakfast-table. I found my patient much alarmed at this unusual symptom: the eyes were perfectly normal in appearance, there was no intolerance of light, and the pupils acted naturally under its influence, but there was hemiopia. She said that on looking at me she could only see half my face and one shoulder, and everything she looked at appeared to have a wavy vibratory motion. At first I feared that hæmorrhage into the retina had occurred, and enjoined immediate and absolute rest in a darkened room with cold wet lint over the eyes. On inquiry, I was told, among other things, that she had occupied herself for about a quarter of an hour before breakfast, in trying to clean, with hydrocyanic acid, some old gold lace which was to be used in preparing a costume for a fancy-dress ball. She had asked me to let her have some hydrocyanic acid from my hospital, for this purpose, two days before, and I had, of course, declined to do so; but a druggist, in the native bazaar, had supplied her with half an ounce of the dilute acid, which she had used without any further dilution, dipping a small piece of rag into it and applying it to the lace with friction, the vapour of the acid being, of course, inhaled, and also [illegible] during the process.

On hearing this, although the patient had not [illegible] symptoms of poisoning with hydrocyanic acid, I [illegible] that her condition was probably due to the exposure [illegible] and not to any organic change in the eye, explaining [illegible] time that if my surmise were correct, the symptoms would pass away in a few hours. This turned out to be the case, for [illegible] four or five hours no trace of the [illegible] the patient was, except for a little headache, quite well.

Although I never before heard of [illegible] sure to hydrocyanic acid vapour [illegible] so in this case, and [illegible]

H. De Tatham, M.D., M.R.C.P.Lond., Civil Surgeon,

[illegible]

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

MANCHESTER ROYAL INFIRMARY.

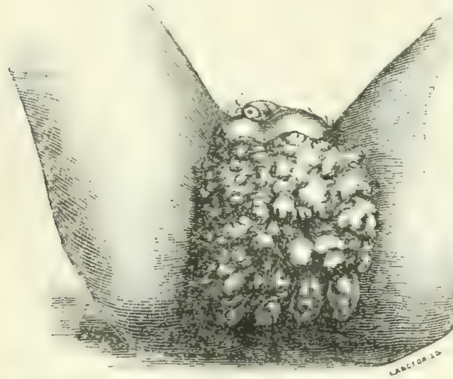
MULTIPLE ADENOMA OF COLON AND RECTUM.

(Under the care of Mr. WALTER WHITEHEAD.)

LEWIS H., aged 21, bookseller, was admitted on July 28th, 1883. He recollected that, when eleven years of age, he noticed for the first time that, when his bowels acted, a worm-like substance protruded from his anus, and retracted when defæcation was completed. This continued until he arrived at the age of 13, without causing him any real discomfort. The growth was then noticed to have materially increased in size, and much difficulty and considerable hæmorrhage were experienced in replacing the mass within the sphincter each time the bowels acted. He also commenced about this time to be troubled with a profuse mucous discharge from the rectum during the intervals of defæcation. The tumour continued to grow, and ultimately its bulk began to obstruct the passage of the fæces; and the constipation thus produced led to gastric disturbance and a distended abdomen.

On admission, he was very thin and anæmic, complaining of great prostration, and of having lost an alarming amount of blood from the bowels. The abdominal walls were very much relaxed, so that the contents of the abdominal cavity could be defined with more than ordinary facility. The descending colon and sigmoid flexure could especially be made out as a long sausage-like body, firm and unyielding to the touch. The anus was patulous and easily dilatable, readily admitting four fingers without occasioning any distress. The cavity of the rectum was also dilated, and was filled with innumerable pedunculated tumours, varying in length from half an inch to two inches. These growths extended up the bowel as high as the fingers could explore, and some of them could be torn off without the patient being conscious of their removal.

The operation was performed on August 3rd, 1883, under the influence of chloroform. The contents of the lower rectum were forcibly expelled by means of a hand placed above the pubes making firm pressure into the cavity of the pelvis—a plan frequently employed by Mr. Whitehead to protrude hæmorrhoids in ordinary cases, previously to operations for their removal. With the growth *in situ*, a photograph was taken by Mr. Hunton, from which the accompanying woodcut has been executed. An attempt was first made to excise the growth, by taking each component peduncle and cutting through its base with scissors; but this plan was relinquished, owing to the troublesome oozing, after two portions had been removed. The operation was completed by simple manual pressure, the whole mass being grasped between the thumb and first finger of both hands, and strangled off. The entire growth (which would equal in bulk what a slop-basin would contain) came away quite easily, without the loss of so much blood as flowed from any one of the growths removed by excision. When everything had been removed external to the anus, the rectum was again explored: first, by the fingers, and then, owing to the absence of an impediment, by the hand; and eventually the arm beyond the elbow was readily passed up the bowel. The impression conveyed was that the entire abdominal cavity was occupied by a distended colon; and, wherever the hand could reach, pedunculated growths similar to those removed could be detected hanging in great profusion from the walls of the bowel. The kidneys could be easily felt, and the abdominal vessels readily controlled, by the hand; and, in fact, a thorough investigation of the abdominal contents could have been made had it been desired, the facility afforded by the dilated bowel being so great.



The patient left the hospital on August 10th, 1883, seven days after the operation, able to retain his motions, free from hæmorrhage, and considering himself convalescent.

On October 5th, 1883, he reported that his bowels acted daily without pain or straining, that the motions were well formed, and that he had only twice passed any blood, and then in small quantities. On examining the abdomen, the descending and sigmoid colon could still be detected as prominent and distended. He stated later, in a letter received on February 2nd, 1884, that he had only twice noticed blood in his motions since the operation, once on Christmas Day, and again about a week later. On each occasion, the hæmorrhage did not exceed two drops, and occurred after constipated actions of the bowels.

Pathological Appearances.—The tumour was examined by Mr. Bilton Pollard, who reported that the growths varied in size from that of a pea to that of a hazel-nut, or somewhat larger; they were of a pale reddish colour, and of soft consistence. The microscope showed them to be adenomata; there was a delicate mucous lining, on which a few columnar epithelium-cells could be detected here or there; the main bulk of the growths was composed of delicate fibrous tissue containing a moderate number of small cells, and having many alveolar spaces lined with spheroidal or short columnar cells. The fibro-cellular matrix and the adenomatous tissue formed about equal proportions of the growths.

SALOP INFIRMARY.

(Cases under the care of Mr. WILLIAM EDDOWES.)

CYST OF THE LIVER: ABDOMINAL SECTION: RECOVERY.

MARY W., aged 53, married about thirty years, had had six children; two had died, one from phthisis; the youngest child would now have been 9 years old, had it survived. She first noticed a lump to the left of the umbilicus, as big as a hen's egg, seven years before admission. It remained much of the same size for about six years and a half, but during the last half year had increased rapidly. At times she felt pain about the umbilicus, and tenderness over the right hypochondrium. She had lost flesh of late. At the time of admission, the tumour occupied the anterior and upper part of the abdomen. There was dulness on percussion in the front, but resonance at the sides of the abdomen. The cyst was evidently attached to the liver, but free at the lower part of the abdomen. It contained fluid. There was no history of liver-mischief.

The patient was admitted October 30th, 1882. On the following day Mr. Eddowes made an incision, about two inches long, to the right of and above the umbilicus, plunged a trocar into the cyst, evacuated it, enlarged the opening, and stitched the edges, by a continuous suture, to the parietal peritoneum, under Listerian precautions. On the fourth day after the operation, the discharge was very profuse and contained bile; so profuse, that the dressing was changed twice daily. An attack of bronchitis supervened, which almost killed the patient. The bilious discharge continued from the wound, and on December 12th she was sent home.

From this time she rapidly improved, and in about a month the wound healed. When last seen she was in perfect health, and gaining rapidly in weight. The highest temperature after the operation was 101.5°.

ENLARGED PROSTATE: PERINEAL SECTION: CURE.

T. D., aged 55, was admitted October 18th, 1882, with enlarged prostate. Urine was passed very frequently, and in small quantities; it was alkaline, and contained pus. Some difficulty was experienced in passing a catheter, on account of the great enlargement of the prostate; and the introduction was attended with severe pain. The usual remedies were used. Catheterisation, which gradually became more frequently necessary, was at last so painful, that, on December 12th, a median lithotomy-incision was made, and a gum-elastic tube passed into the bladder, and tied in. This was left in for twenty-one days. The bladder was daily washed out with water acidulated with nitric acid. On the third day after the operation, there was great pain over the pubes, and tympanites. Heim's pill[1] was ordered three times a day, and poultices, and the tympanites gradually subsided.

On January 21st, he complained of severe lumbar pain, and had several rigors. The pain persisted for about a week. The urine gradually became clearer, and when he was discharged, on February 17th, it was acid in reaction, and passed almost entirely by the urethra.

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[1] The formula for this pill is: quiniæ sulph. gr. [illegible]; pulv. digitalis gr. [illegible]; pulv. ipecac. gr. [illegible]; pulv. opii gr. [illegible]; ext. helenii q.s.

When seen about three months later, he had gained much in flesh, and said that he had very little trouble with his urine, having almost complete control over the bladder.

PERICÆCAL ABSCESS: ABDOMINAL SECTION: RECOVERY.

E. C., aged 19, was admitted on December 11th, 1882. He complained of swelling in the right iliac fossa, which caused him great pain, and was very tender to the touch. He was of a strumous habit, and had been under treatment at the dispensary for about a year. He first noticed the swelling in the iliac fossa about a fortnight before admission.

On December 19th, he had a rigor, and the temperature rose to 103.7°.

On the following morning, Mr. Eddowes made an incision along the margin of the right iliac fossa, and opened the peritoneal cavity. A swelling could then be felt under the cæcum and ascending colon. Dissecting downwards in the fossa, suddenly a large quantity of fœtid pus escaped, of distinctly fæcal odour. A drainage-tube was inserted, and an antiseptic dressing (Lister) applied.

On the third day after the operation, a piece of hardened fæces, resembling a cherry-stone, was syringed out of the abscess-cavity. His temperature was 100° Fahr. on the night of December 21st (the day of the operation); but, after this, it rapidly declined, and he made an uninterrupted recovery.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 26TH, 1884.

R. BARWELL, F.R.C.S., Vice-President, in the Chair.

Bacteria.—Before the discussion began, there were exhibited, on the tables, a large collection of the bacteria of putrefaction, brought forward by Dr. Heneage Gibbes, stained, as a rule, with the dyes which stain other tissues, and showing a great variety of forms, some of them precisely similar to those alleged by certain observers, to be specific to certain diseases. 1. A section of diphtheritic membrane showed two forms of micrococci, one large, in groups, the other much smaller in masses. 2. A section of human spleen, from a case of tuberculosis, showed large micrococci in groups. Similar organisms were found in the lungs and liver of this case. 3. Sections from the livers of two pigs which had died of the "purples," or "red soldier," were shown. These were sent to Dr. Gibbes by Mr. Crooke, of the Leeds Fever Hospital. Sections of these livers were full of bacteria, but the forms were quite different in each. In one liver the bacteria consisted of short rods not joined together, in the other they were very long and slender. 4. A section of kidney from one of these cases showed the vessels full of a form quite different from those in the liver. 5. A stool, from a case of infantile diarrhœa, showed organisms very similar to those in the specimen of rice-water stools sent by Dr. Straus. Other specimens were: (6) Very large organisms from the stomach, in a case of carcinoma of the pylorus; (7) Spirilla, vibriones, various forms of bacteria in chains, micrococci from putrefying animal matter in water; (8) Section of a mesenteric gland, showing the so-called typhoid bacillus; (9) Human sputum, from a case of tuberculosis; one specimen showed nine different forms of bacteria in the field of the microscope, and this, with an oil immersion-lens magnifying 600 diameters. These specimens were shown with Messrs. R. and J. Beck's new pathological microscope, which they have made from Dr. Gibbes' designs.

Mr. BARWELL, on taking the chair, read a short report from a committee appointed at the last meeting to examine the specimens of the cholera-organism sent by Dr. Straus, of Berlin, who reported that no specific organisms were found in the specimens. It was signed by Dr. Thin, Mr. V. Horsley, and Dr. Klein.

Neurectomy of the Second Division of the Fifth Nerve. By THOMAS F. CHAVASSE, M.D., C.M. Case I. A man, aged 50, had intractable neuralgic pains extending over a period of fourteen years. Talking and movements of the jaws gave rise to painful paroxysms, which were exaggerated in cold wet weather. The pain always commenced in the situation of the right upper molar teeth, thence it passed upward to the cheek, to the temporal fossa and parts round the orbit, and produced a profuse flow of tears. He had endeavoured at intervals to follow his occupation as a labourer, but, for six months before admission to the General Hospital, Birmingham, had been quite incapacitated. October 3rd, 1882. Carnochan's operation, modified as to the skin-incisions, was performed, and, by removing portions of the anterior and posterior walls of the antrum by trephines, the infra-orbital nerve was traced back into the spheno-maxillary fossa, and removed just anterior to the foramen rotundum, together with Meckel's ganglion. No constitutional symptoms followed the operation, and by October 16th the wound was healed. The patient had continued to be free from pain ever since, and had resumed his old occupation.—Case II. A man, aged 47, had suffered from intractable neuralgia for eleven years. Pain, excited by speaking, masticating, and walking, always commenced in the situation of the upper molar teeth of the left side, and latterly was so severe that relief could only be obtained by lying quietly in bed. February 9th, 1883.—Similar operation as in previous case. The cavity of the antrum was very deep, and the hæmorrhage profuse; so that, although the posterior dental nerves were seen and divided, Meckel's ganglion was not removed with the nerve. The wound healed in a fortnight, and the patient was able to take solid food. The immediate relief from pain was not so complete as in the case in which the ganglion was taken away, but the patient was now in full health. The opinions of Carnochan of New York and Billroth were quoted as being favourable to the removal of the ganglion when possible. In both cases Dr. Chavasse thought that the more radical operation of neurectomy held out better hopes of obtaining relief than either neurotomy or nerve-stretching. Statistics showed that, after this operation, relief was generally obtained for longer or shorter periods, and no fatal result had been recorded. Attention was directed to the methods of operating introduced by Professor Lücke of Strasburg, and by Professor Lössen. Cases were quoted in which Braun had successfully operated by the plan of the latter, and an instance was given, in which Reyher of St. Petersburg had tied the common carotid artery before proceeding to the other steps of the operation.—Mr. WALSHAM reported his experience of several operations of a similar kind. In one case he had seen the infra-orbital and supra-orbital nerves stretched under the care of Dr. Buzzard and Mr. Adams, but without much relief. He proceeded then, with the help of Mr. Butlin, to cut down upon, and, with a trephine, to reach, Meckel's ganglion, as Dr. Chavasse had suggested, and succeeded in removing it. He thought the operation had been rendered more easy and less dangerous by the use of a special forceps for the removal of the lower edge of the orbital fossa, and by care in not wounding the periosteum of the posterior wall of the antrum. Great benefit also was to be derived from the use of reflected light, as Dr. Chavasse had suggested, in getting a good view of the bottom of the antrum. The pain in his case had not recurred, but he admitted that it was too soon to give a complete opinion of its success. He went on to give some details of four cases of epileptiform neuralgia in which he had stretched the supra-orbital, inferior dental, or infra-orbital nerves, and had so far prevented a recurrence of the attacks.—Mr. A. H. BOWLBY inquired after the microscopical appearances in Dr. Chavasse's cases, mentioning that he had himself found great thickening of the nerves by connective tissue, which was possibly the cause of the pain, or possibly the result of surgical interference. Mr. HENRY MORRIS congratulated Dr. Chavasse on putting off his report until it was possible to judge of the permanent results of his cases, for many such were published too soon. In tetanus also, some cases were published as cured by nerve-stretching, in which the cure was due really to chloral and the other drugs with which they had been treated. The table of cases which Dr. Chavasse had laid before them showed no greater certain duration of the relief by neurectomy than two years, and similar relief for two years had once been impressed on them by M. Trousseau as following the use of opium. Mr. Morris had himself a patient, aged 88, in the Middlesex Hospital, who had had epileptiform neuralgia for about forty years, with breaks of two or three years, and whom he had found possible to relieve at present by morphia and [illegible]. He objected to the reasoning that, if the pain were in the region supplied by a certain branch of the fifth nerve, therefore the lesion was in that branch, or higher up in the course of the main trunk. A pain in the hip or knee might be due to causes in the periphery, and the same might happen in the face. A case in 1881 had shown him the importance of the peripheral causes in facial pain. A man [illegible] had had epileptiform neuralgia for four years, and had been under [illegible] Sir Joseph Lister and Mr. Pick at various times. The infra-orbital nerve had been first stretched, then divided, and a red-hot needle passed down its canal, and it was thought that the [illegible] had been cut, and a cautery finally had been passed into the inferior dental foramen; but no relief was given. On very careful examination, it was noticed that there were some very small [illegible] mucous membrane of the palate. On pressing on these, [illegible] were produced. These lumps Mr. Morris [illegible] complete relief. The exact nature of the [illegible] was [illegible]; they were certainly more than two years [illegible]. Mr. Treves said he thought Dr. Chavasse's results should give him great satisfaction, even if the relief proved only temporary, as permanent cures were very rare.—Dr. BUZZARD ventured to speak on what was pre-eminently a surgeon's subject, because one of the cases in which Mr. Walsham had operated had been under his care. He thought the observation of the exact seat of pain of great importance. In Dr. Beevor's notes on his case, he had described attacks of screwing pain in the orbit, passing backwards, and sometimes felt passing along the back of the mouth and in the right upper gums. Such a pain in the roof of the mouth argued an origin in Meckel's ganglion; and however formidable the operation for its excision might seem to a physician, it was not too severe for the relief of a state of almost unendurable pain. His patient had had several teeth removed and the antrum perforated, which led to the discharge of a little pus, which suggested the origin of the disease, but failed to effect a cure.—Mr. WALTER PYE agreed in the importance of waiting a little while before publishing these cases. In one patient he had stretched the sciatic nerve, and for nine months there was complete relief from pain, but recurrence after eighteen months was severe. In another case of true tic, he had stretched the facial nerve with complete relief for two years, but then there was recurrence of the pain.—Dr. CHAVASSE thanked the Society for the attention paid to his paper and for many complimentary remarks. He agreed with Mr. Walsham in the importance of using reflected light, and even thought his second case might have done better with it, as he was embarrassed in his operation by the darkness of a thunderstorm. He recommended stretching, as a rule, before neurectomy. As to the pathological condition of the painful nerve, he could only say he had found some that might not be traced to surgical operation.

Amputation of the Arm and Scapula for Ossifying Sarcoma: Recovery. By CHRISTOPHER HEATH, F.R.C.S.—The patient, a lad aged 16, was admitted into University College Hospital, July 2nd, 1883, with a large sarcomatous tumour of the upper arm and shoulder. Two years before he had noticed that the upper end of the right humerus was slightly larger than that on the other side. It had gradually increased in size, but much more rapidly during the last six months. In January, 1883, the patient was in St. George's Hospital, where Mr. Holmes proposed to amputate, but the patient declined, and went home to Cornwall. The shoulder was obscured by a roughly pyramidal swelling, the base being at the axillary border of the scapula, and the apex at the middle of the humerus. The posterior edge of the growth was rounded, and its outer surface was divided by a depression into a lower prominently rounded half, and an upper more flattened mass. The growth involved the scapula, and completely fixed the shoulder-joint, but the whole mass, with the scapula, moved freely over the thorax. The skin was not broken, but was tight, and cracked over the posterior part of the growth, where it was of a dark red colour. The tumour throughout was hard, and bossed here and there. Its circumference at the most prominent point was twenty-four inches. The glands in the axilla and neck were not enlarged. The chest and abdomen were healthy. On July 4th, 1883, Mr. Heath made an oval incision as for amputating at the shoulder, and, having stripped back the skin, cut upon the position of the shoulder-joint, and removed the arm, necessarily leaving a large mass of growth attached to the scapula. The axillary artery was tied with hemp ligature, and the neck of the scapula, with the glenoid cavity and inferior border of the bone, was sawn off. Mr. Heath next removed the scapula, first dividing the clavicle at its outer third, and then isolating the posterior border of the scapula. The wound was dressed on second and fourth days, and the patient made an uninterruptedly good recovery. The highest temperature was 104° on the eighth day. He was discharged on August 30th, being only fifty-nine days in hospital. The part removed consisted of a large mass of ossifying sarcoma surrounding the upper end of the humerus, and firmly united to the scapula and clavicle, the growth extending down the humerus to the junction of the upper and middle thirds. The scapula itself was but slightly affected, the growth extending backwards for a short distance around the neck of the bone, and down the axillary border. The growth extended into the subscapularis, teres minor, and, slightly, the infraspinatus muscles. The cut end of the clavicle was healthy. Microscopically, the growth was found to be a sarcoma of mixed small cells and oval corpuscles, with extensive ossification, in the shape of bony spicules, running through the tumour. In none of the spicules were Haversian canals to be seen, but lacunæ were normally developed. The patient was shown, and some microscopical specimens from the tumour. Mr. Heath added, that he was glad to be able to bring forward this large specimen of non-malignant tumour. He had just seen the patient, who was in attendance, and noticed that in all respects his condition seemed to remain good, except that he had a small resonant nodule near the cicatrix, which he proposed to remove at once.—Mr. BUTLIN protested against the use of the word "non-malignant" in such a case. The glands certainly were not enlarged, but that did not happen generally with this class of tumours, unless the tumours grew actually into them.—The PRESIDENT quite agreed as to its malignancy, and gave short details of a similar case, in which he had operated for Mr. Hancock, taking the flap, however, from the skin of the arm. The man had recovered excellently for a time, but had come back, about two years afterwards, with growths near the cicatrix, and in the lungs and liver.

MEDICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 25TH, 1884.

Sir JOSEPH FAYRER, K.C.S.I., M.D., F.R.S., President, in the Chair.

ADJOURNED DISCUSSION ON THE COLD BATH TREATMENT OF TYPHOID FEVER.

DR. CAYLEY re-opened the discussion with the remarks published at page 399.

Dr. SAMUEL WEST questioned the doctrine that the danger of enteric fever resided in the high temperature alone. Even if it were proved, which it was not, that a temperature of 103° or 104° was in itself dangerous to life, it yet remained to be discovered whether the reduction of the temperature would necessarily be accompanied by a diminution of the other unfavourable concomitants of fever. The statistics at St. Bartholomew's Hospital showed that the rate of mortality varied enormously from year to year; though, in taking the whole 1,600 cases which had been treated during the last twenty-three years, it was 16.9 per cent. The mortality in quinquennial periods was as follows:—1860-64, 12.33 per cent.; 1865-69, 21.7; 1870-74, 13.9; 1875-79, 14.6; and, in the three years 1881-83, 19.01. In the three years ending 1883, the mortality of the four physicians at St. Bartholomew's varied considerably, the percentages being 12.9, 15.6, 16.36, and 24.7. Yet these very varying rates of mortality were obtained in the same hospital in the same epidemics. The other statistics brought forward from the other hospitals also showed wide variations in the rate of mortality in different years. The comparison of the statistics of the various advocates of the cold bath treatment also showed wide discrepancies; moreover, the death-rate taken by these advocates as that encountered on the expectant treatment, was very high, far higher than that usually met with, and he thought that a variation of five per cent. in the mortality came well within the range of periodical variations. He summarised his conclusions as follows. 1. The thorough cold water-treatment was based upon a one sided view of the process of fever. 2. The question was one which statistics could not settle. 3. A general opinion had developed against the indiscriminate use of cold bathing. 4. It was the most valuable treatment in hyperpyrexia, but, taking cases of enteric fever as a whole, the success of the treatment depended chiefly on the clinical skill which recognised the proper circumstances for the use of the bath. His remarks applied only to the cold bath-treatment, and not to the application of cold by other means.

Dr. GILBART SMITH said that he had collected the statistics of the London Hospital in the six years 1878 to 1883; he found that there were 456 cases of enteric fever, with 68 deaths, or 14.9 per cent. The mortality for the three years from 1878 to 1880 was 18.0 per cent.; for the three years 1881 to 1883 it was 12.9 per cent. In the total number of cases, death was due to collapse or adynamia in 22.2 per cent., to perforation in 24.5 per cent., to pneumonia in 11 per cent., to pleurisy and congestion in 11 per cent., to peritonitis in 7 per cent., to hæmorrhage in 7 per cent. In 1883, out of 55 cases in which the treatment was known, in 40 sponging or bathing was used, and, of the remaining 15, 10 were mild cases. Deducting these, and considering those that presented continued or severe pyrexia, there were 45 cases of medium or extreme severity, of which 5 were not sponged or bathed; that is to say, 89 per cent. of this class of cases were bathed. Of the 7 fatal cases, all of which were sponged or bathed, 2 died of perforation, 2 of pneumonia, 1 of congestion of the bases of the lungs and bronchitis, 1 of peritonitis, and 1, in which hot sponging was used, died probably of perforation. As a rule, sponging was resorted to when the temperature reached 102°, and bathing when it reached 103° or 104°. He suggested that a cold air bath might be a good substitute for the cold water bath.

Dr. A. T. MYERS had to thank the Society for its courtesy in allowing him, as a visitor, to add a few words to the long record of facts they had heard. He had to lay before them a few facts from the medical register of St. George's Hospital during the last seven years, 1877 to 1883. The work of the first three years had been carried out with the most conspicuous care and patience by their medical secretary, Dr. Isambard Owen, and for the last three years he was himself responsible. He could not entirely disregard statistics, as Dr. West advocated, for that would leave a deductive method from intuition alone possible. The main feature of this series of 281 cases was that 69 had proved fatal, which gave the high death-rate of 24 per cent. There had been no use whatever of cold water or of strong antipyretic drugs; the treatment had been by expectancy and alcohol. The alcohol had been given in large quantities; three-fifths of the patients had had, at some time in their illness, as much as 8 ounces of brandy in the day, or more; and nearly a quarter of the whole number, adults and children, had risen gradually to as much as 16 ounces of brandy in a day; often, however, only for short periods of great danger; about 13 per cent. had had no alcohol at all. Dr. Coupland's series of cases was, perhaps, not sufficiently large to furnish proof for any very confident conclusion, but he had shown a remarkably low mortality of those cases which had been admitted to the hospital antipyretic treatment early in the disease; and that testimony, if very largely supported by other statistics, might show the efficacy of treatment in controlling the disease. In the series of cases at St. George's Hospital, he had not been able to find that the cases admitted early in the disease had been less fatal than those admitted later. It was, of course, obvious that the most serious cases would probably apply for admission earliest. As to the causes of death, Dr. Coupland's statistics had given him good reason to think that, with antipyretic treatment, they were due chiefly to the intestinal lesions, and not to the febrile state, as had been previously the case. In the 281 cases at St. George's Hospital, hyperpyrexia had certainly been very fatal; there had been 17 cases over 106°, 4 above 108°, 1 above 109°, and all but one of these had died, and of the whole number of deaths about one-half were due to febrile rather than intestinal causes. The average maximum temperature of the 69 who had died was 105°; of the 212 who had recovered, 103.5°. He thought he might say, in conclusion, that the high death-rate was due, at least in part, to a very strict use of the term enteric fever, and the exclusion of the minor cases of fever where the proof was insufficient, and which it was becoming more in accordance with modern practice to include.

Dr. MAHOMED declared himself an advocate of the cold bath treatment of enteric fever. When a large number of cases were reviewed, he believed that the mortality, when the patient early had the advantage of treatment, good nursing, and other favourable environments, was about 16 per cent. Under similar conditions, the mortality, when cold bathing was used, could be reduced to about 10 per cent. These numbers applied to hospitals; in private practice, he believed that the mortality might be very materially lower, and that there was no valid objection against using the antipyretic method in private houses. He did not think that Brand's statistics could be compared with those obtained in hospitals for two reasons, namely, that a large number of the patients were soldiers under observation from the very earliest period, and that slight and short cases were included. There was a certain class of patients who, owing to the severe type of the disease, or the environments, would invariably die under any system of treatment, and there was another class of slight cases in which the tendency to death was slight. He was inclined to believe that the early use of the bath was of great value and importance; it checked the formation of the habit of high temperature. The degree of pyrexia had little to do with the severity of the local lesions, and he was therefore sceptical as to the supposed beneficial influence of the cold bath treatment, in preventing their occurrence. He thought that the bath might be used in all cases of enteric fever without fear, with the exception only of very old persons.

Dr. ISAMBARD OWEN observed that the high rate of mortality at St. George's Hospital might probably be traced to two causes, namely, the stringent definition of enteric fever, and the fact that a large number of the cases were domestic servants—butlers, cooks, and others—who were, in his experience, bad subjects for enteric fever, and, moreover, were in the habit of taking a good deal of alcohol; this might also account for the large quantities used in the hospital.

Dr. BROADBENT thought that the case for the cold bath treatment of enteric fever had never been better formulated than in Dr. Coupland's paper. He had no statistics to bring forward, but, after prolonged experience of both methods, his judgment was distinctly in favour of the treatment. When the temperature reached 102° Fahr., he used sponging; if it remained for twenty-four hours at or above 103° Fahr., he resorted to the cold bath. If the severity of a case of enteric fever were not proportionate to the height of the fever—and this had been said during the debate—then he was very much deceived. With the exception of a certain small number of cases, which could be recognised as a class apart, and were called in France "bilious," he regarded the temperature during the first three or four days as a good index of the severity of the attack. He had never seen the evil consequences of cold bathing that the opponents of the treatment feared; on the contrary, complications, such as albuminuria and pulmonary disorders, commonly cleared up under its use; moreover, the pulse was improved, tympanites diminished, and the general nervous distress calmed, so that the patient generally got some sleep. The treatment perhaps tended to protract the fever, but the only contra-indication was intestinal hæmorrhage.

Dr. MACLAGAN thought the action of cold on the surface was to drive the blood from the surface, and that it therefore tended to increase the danger from intestinal complications; this theoretical view was, he thought, borne out by Dr. Coupland's and Dr. Cayley's statistics. High temperature *per se* was not a danger, but it was an indication of a severe attack, and, therefore, of severe intestinal lesions.

Dr. A. E. SANSOM had employed the cold bath treatment since 1872. Every case under his care had been sponged at 102° Fahr., and bathed at 104° Fahr. The statistics, he thought, showed very clearly that, since the antipyretic treatment had been introduced into Europe, the mortality had on the whole declined. He thought, also, that individual experience was in favour of the cold bath treatment; and, in his own experience, it diminished the tendency to complication. As to its causing pneumonia, he invariably used cold baths or cold packing in severe cases of this disease. He thought that the suggestion that congestion of internal organs was caused by the cold bath treatment was supported neither by theoretical considerations nor by experience.

The PRESIDENT, in the name of the Society, thanked Dr. Coupland for the careful, elaborate, and skilful paper, in which he had dealt with a very difficult subject.

Dr. SIDNEY COUPLAND said that many of the objections brought against the cold bath treatment had been met by other speakers, and especially by Dr. Cayley. With regard to *a priori* reasoning in favour of the antipyretic treatment, he thought it just to observe that dangerous *a priori* reasoning was used by those who magnified its problematic dangers. As a matter of fact, those who used the cold bath treatment did not meet with those lesions of internal organs that were feared by the opponents of the treatment. A thorough examination of the statistics showed that intestinal hæmorrhage and other lesions of internal organs were diminished by the cold treatment. The treatment could be carried out without disturbing the patient in an undue degree, and, in fact, contributed largely to his comfort.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 22ND, 1884.

Sir ANDREW CLARK, Bart., M.D., LL.D., F.R.C.P., President, in the Chair.

Specimens.—The following living specimens were shown: A case of Excision of the Patella, by Mr. R. C. Lucas; a case of Pulmonary Regurgitation, by Dr. J. K. Fowler; Anomalous Affection of certain Bones and Joints, by Mr. Morrant Baker; a case of Charcot's Joint-Disease, by Dr. Buzzard; a case of Nodules on the Finger, by Mr. Godlee; a case of Sweating confined to the Upper Part of the Body, by Dr. S. Mackenzie; Congenital Hypertrophy of the Left Lower Extremity and Prepuce, by Mr. Symonds.

Thrombosis of the Inferior Vena Cava.—Mr. MANSELL MOULLIN read notes of this case. The patient was a man, aged 35, who was admitted into the London Hospital, in August 1883, for varicose veins and ulceration of the left lower extremity. He was employed as a paper-hanger; he had been a trumpeter in the army, but had never had syphilis. There was no history of gout. A year and nine months before admission, he fell down a staircase on to his back, cutting his right leg severely and falling with his loins across the hand-rail. From the effects of this accident, he was confined to bed for five weeks, his right leg, the one that was injured, becoming much swollen, though he was quite positive the veins never stood out as they did on the left. While in bed, three weeks after his fall, he noticed that the veins in the lower part of the abdomen were enlarged, and from that time they had gone on gradually increasing in size and spreading in extent up to the present time. There did not appear to have been at any time either general anasarca or hæmaturia, judging from the statements made by himself and his friends. On admission, it was noticed at once that the abdomen was covered with great clusters of tortuous veins, which could be divided into three main groups—two on the left side, the one having its origin in Scarpa's triangle, and the other just above the crest of the ilium, and the third on the right, behind, close to the [illegible] of the vertebral column; and from these main groups [illegible] distended veins stretched upwards, [illegible] as they reached the thorax, and could be traced into the superficial epigastric, intercostals, and long thoracic veins. The right saphena was but slightly enlarged in comparison with the left; in this, as in all the rest, the current was upwards in direction. The left limb was so swollen as only to be lifted with difficulty; the right, six inches less in circumference, was almost normal. In the abdomen was a large ill-defined mass lying in front of the vertebral column, most prominent opposite the umbilicus, and, running down to the right of this, a line along which pulsation and a systolic thrill and *bruit* could easily be ascertained. Besides this, in the large left lumbar cluster were a continuous thrill and an exceedingly loud *bruit*. There were no signs of aneurysm, the pulsation in the abdomen being distinctly not expansile; the lungs were emphysematous; the heart was slightly enlarged, and the aorta dilated; there were no hæmorrhoids, nor varicocele to any extent, nor albuminuria. The diagnosis made was that of thrombosis of the inferior vena cava, with a clot extending down through the left iliacs to the femoral on that side, the ill-defined tumour in the abdomen being the plugged inferior cava, with swollen and œdematous tissue round it, the line of pulsation corresponding to some large abdominal vessel, probably the superior mesenteric displaced to one side. The thrombus could never have extended above the renal veins, but there was no evidence to show whether it originated in a small trunk and spread on till it involved the cava, ceasing where the renal veins poured in a large current, or started in the cava itself. There was, however, little doubt that, from the time of its occurrence, it must be directly connected with the accident. Reference was made to a case published by Robin, in which violent exertion while in a stooping position produced the same result, and to other cases, which tended to show that complete obstruction of the inferior cava by tumours or otherwise need not of itself cause appreciable enlargement of the external veins or much œdema. The patient was produced, and Mr. Mansell Moullin promised to keep him under observation, and to report his condition to the Society at some future time.

Charcot's Joint-Disease attacking the Right Elbow and Foot.—Mr. R. Clement Lucas gave a description of this case. The patient was a man, aged 39, who came under notice last autumn, and was at that time exhibited at the Society. His father died of heavy drinking and consumption. His mother was still living, but suffering from dropsy and asthma. He was one of nine children, seven of whom were living. One brother was a cripple from right-side paralysis from birth, but lived to be 40. He denied having had syphilis, and there was no history of fits or insanity in the family. He had been much exposed, as a hawker, to wet and cold, and had drunk freely. About four or five years ago he became subject to rheumatic pains, which shot through him. He had had neither girdle-pains nor gastric crises. For twelve or eighteen months he had had occasional numbness in his hands, especially the right, and had found a difficulty in buttoning his collar and in walking in the dark. Eight or nine months ago he had an attack of double vision, which lasted about a week, and then passed off. He occasionally felt giddy when starting to work in the morning, but was unconscious of any decline or defect in walking. About two years ago his right elbow became enlarged, but not very painful. He sought advice, and was treated with blue ointment. He had continued to work with it ever since. A few weeks before being seen, his right foot became somewhat suddenly enlarged, red, and painful, and it was on this account that he came under Mr. Lucas's care. The swelling extended from the malleoli to the bases of the metatarsal bones, and occupied the dorsum and sides of the tarsus. It was neither œdematous nor tender, but he suffered from aching pain beneath the head of the astragalus, especially after walking. The right elbow-joint presented a remarkable deformity. On the back of the ulna, two inches from the top of the olecranon, was a rounded projection about the size of half a Tangerine orange, two inches in diameter and bony, at the base. Between the head of the radius and the olecranon was another projection, sharp, prominent, and bony, apparently growing from the radius, and another prominence, continuous with this, between the head of the radius and the external condyle. These latter projections absolutely prevented all pronation and supination. A small outgrowth sprang from the inner side of the olecranon, and projected beneath the internal condyle. In front of the joint, just external to the tendon of the biceps, was a rounded swelling an inch and a half in diameter, covered by muscles. Flexion of the elbow could be carried to the normal limit, but extension was arrested at an angle of 150°. The joint was free from pain. It measured about two and a half inches more in circumference than the other. The signs of locomotor ataxy were the following: He was unsteady when his eyes were closed; if told to touch his nose with his eyes shut, he often missed the mark; he had difficulty in walking in the dark, and in buttoning his shirt-collar. His pupils were not contracted but unequal, and insensitive to light; patellar reflexes were entirely absent. Mr. Lucas alluded to the liability there was of these cases being mistaken for osteoarthritis. He thought it rare for the joint-affection to be in advance of the ordinary symptoms of ataxy. More generally the paralytic symptoms had existed some time before the joints suffered. Surgeons had been blamed for not recognising the disease. The symptoms, he thought, were sufficiently distinct, but the disease was not common among surgical out-patients. In reply to the President, Mr. Lucas stated that the pain in the foot never was acute, though, when it first appeared, it rendered walking difficult. The elbow, although greatly deformed, had not been painful. There had been no eruption at the seats of pain.—Dr. Buzzard thought that Charcot's joint-disease was by no means so rare as it appeared to be, and that numerous examples of it were still unrecognised. If so excellent a clinician as Mr. Lucas had some difficulty, as he had fairly acknowledged, in diagnosing his case, what might be expected in the case of those who were far less experienced? A case which he had brought to the Society that evening was in point. The man, who was affected in his right shoulder-joint, had been at work as a cabinet-maker till the end of October last, when his shoulder suddenly swelled and became painful. There was, at the present time, great enlargement, and the joint "scraunched" when moved, but was not dislocated. Now this man had been under treatment in the surgical department of two metropolitan hospitals, and apparently the essential cause of his disease had not been diagnosed. This was probably due in no small measure to the circumstance that he presented no ataxic symptoms in walking. There was, however, some ataxy, not of the legs, but of the arms. This had first shown itself by the man being unable to saw in a straight line, or to knock a nail on its head. All the other symptoms of tabes were present—lightning-pains, absence of knee-phenomenon, anæsthesia of fingers, paresis of the oculo-motor nerve of the right eye, contracted pupils without response to light, diplopia, and bladder-symptoms. It was only right to say that, in Mr. Lucas's case, the state of the joint was certainly peculiar. There was less fluid and far more bony outgrowth than was usually seen in these cases. He was inclined to think that the presence of the outgrowths was due to the fact that the bones were not separated, as was usually the case, by abundant effusion and relaxation of ligaments, so that they did not rub loosely against each other, and so occasion the wearing away of bony surfaces commonly seen. Dr. Buzzard believed that in Charcot's joint-disease the ligamentous structures about the joint were affected at an early stage. In some cases he had found a relaxation of the ligaments, constituting alone, as it seemed, a slight phase of the disease. There was no effusion into the joints, nor crackling sounds. So relaxed were the ligaments sometimes, in these circumstances, that the patient was unable to stand, owing to the ankle-joints giving way under the weight of his body. As regarded the cause of the bony lesion in tabes, Dr. Buzzard referred to an hypothesis suggested by him in 1880. He had remarked in cases of Charcot's joint-disease the enormous frequency of gastric and laryngeal crises which, he had suggested, were probably due to sclerosis attacking the roots of the vagus, an opinion which anatomical examination had since, he thought, confirmed. It had appeared to him possible that lesion of a structure adjacent to the roots of the vagus might be the direct or indirect cause of the altered nutrition of the bony skeleton. It was possibly a vaso-motor centre which was in question, but of course this was hypothetical. Let that be as it might, his experience of the last four years had entirely confirmed the idea of a close association of some kind or other between the existence of joint and bone affection, and the occurrence of either gastric or laryngeal crises or frequent passage of stools in tabes dorsalis.—Dr. Hale White said that a pelvis he showed at the Pathological Society had been forwarded to Professor Charcot, who had pronounced it to be undoubtedly a rare form of the disease now under discussion. Dr. Hale White also pointed out that there were still many who did not consider Charcot's disease as a specific entity; they might be divided into two classes—first, those who thought there was nothing peculiar in the joint-affection; that it was an ordinary arthritis, modified by the peculiar condition of the patient, by his general lowered conditon, by the enforced rest, so that new bone was not thrown out so much as was usually the case; and that it was not due to any nervous lesion. Then, secondly, there were among the sceptics those who thought that the disease was an ordinary arthritis, produced by a nerve-lesion situated somewhere in the central nervous system. In favour of this view, it might be pointed out that many cases were recorded in which injuries to nerves had set up arthritis, and that Charcot, in one of his very first papers on the subject of joint-disease in locomotor ataxy, in the same article described cases of arthritis due to cerebral softening and hæmorrhage on the opposite side of the body; and that he drew attention to the fact that, whilst on the one hand these cases could not be distinguished from those of arthritis due to nerve-lesion, on the other they were undoubtedly allied to the arthropathy found in locomotor ataxy.—Dr. Althaus thought we must be put in possession of more facts before dogmatising as to the exact nervous lesions of this disease. He believed the symptoms were probably due to local disorder of peripheral nerves, such as old peripheral neuritis, and subsequent wasting of the nervous structures. In locomotor ataxy neuritis was a marked symptom, as in tabes. But there was no anæsthesia in any part of the body. In many skin-diseases, as perforating ulcer, herpes, and ichthyosis, peripheral nerve-disorder was apparent. Dr. BUZZARD said that Charcot, in his lectures, mentioned that in the case of joint-disease in which no lesion of the anterior cornua of the cord was discovered, the peripheral nerves were also healthy. It must not be assumed, therefore, that the lesions discovered by Pitres and Vaillard were necessarily constant.—Dr. MOXON said that he was amongst the sceptics who thought the connection between Charcot's joint-disease and locomotor ataxy not quite made out. He had seen much of locomotor ataxy but little of Charcot's disease; and although something in the medulla oblongata might be a Secretary of State for the Bone Department, yet he thought the hypothesis was not proved. In twenty-three cases of ataxy, he had not found one of the joint-disease. He would like to know what was the proportion of cases of chronic rheumatic arthritis in locomotor ataxy. One would not expect that ataxic patients would have immunity therefrom more than other people, and the meeting of the two conditions meeting in the same person would probably modify the resulting state. He found that people coming to his consulting-rooms were having frequent crises without being ataxic, or having Charcot's joint-disease.—The PRESIDENT said that it had been announced that Charcot's disease went with locomotor ataxy, but he believed it accompanied other nervous symptoms.—Mr. LUCAS said his case was exceptional, and did not quite answer to the cases described by Charcot. There was the bony condition about the elbow. The joint-disease of the foot, too, was special; the foot was swollen, and yet not very painful; and, with his elbow diseased, the patient could yet move his arm, although the bones grated. He had had no lightning-pains. It was not osteo-arthritis. The large baggy condition of the joint and its painlessness were quite sufficient to distinguish it.

Dislocation of one of the Semilunar Fibro-cartilages of the Knee-joint.—Mr. NOBLE SMITH described this case. The left knee was first injured sixteen years ago (1867) by a fall. Great pain was felt, and while being carried home the patient was upset, the knee again twisted, and the intense pain was immediately relieved. This history was considered as characteristic of displacement of one of the cartilages. The patient was unable to move for many months, rest and local applications being prescribed. After nine months, walking was commenced again. The subsequent history was that of repeated injury from trivial causes and a continued state of weakness of the joint, with discomfort or pain during movement. The same kind of treatment was always prescribed; and in the course of weeks or months after each accident, the patient would gradually recover sufficiently to be able to get about again, but always with difficulty and in danger. On November 11th, 1882, this patient was first seen by Mr. Noble Smith. A stiff knee-cap was being worn, and any locomotion was extremely difficult. Rest as complete as possible had lately been again recommended, and the advice was being carefully followed. The knee was slightly flexed, and could not be moved without pain being produced. The internal cartilage of the left knee was felt to project slightly beyond the upper border of the tibia. Upon pressure being applied to this protrusion while the leg was flexed and extended repeatedly, the cartilage was felt to slip back, after which the patient walked round the room perfectly naturally, and felt a relief which had only once been experienced since the first occurrence of the accident. A pad was strapped over the place where the cartilage had protruded. During the next few weeks there was a tendency to relapse, but, by perseverance with the treatment, the joint was gradually worked into a natural condition. An apparatus was made which, while it permitted flexion and extension of the leg, prevented lateral motion and twisting. Walking exercise was recommended from the first, provided no pain was felt. This patient had remained quite well up to December 1883, when the report was written. Several other similar cases had been met with by Mr. Smith. Great care in forming a diagnosis was necessary. This displacement, which was first described and the appropriate treatment devised by Mr. Hey of Leeds, was to be distinguished from inflammatory disorders and the presence of loose cartilages. The variety of the conditions which might occur were described by Hamilton. Bonnet of Lyons experimented upon a dead body, and produced displacement of the inner cartilage, and subsequently reduced the dislocation by extension. The experiment was frequently repeated with a similar result.—Mr. HOWARD MARSH said the instrument used by Mr. Noble Smith was one also used by Sir James Paget. The cartilages could be displaced in various directions, due either to relaxation of the attachments of the cartilage or to a sudden tearing of the cartilage, as in football-playing, when a kick was made at the ball, and the ball was missed. The leg was then twisted round. In a case of the kind the semilunar cartilage was torn, and became loose in the joint. He wished to insist on the mechanical treatment of these cases. He had frequently used this instrument, and in the majority of cases it succeeded admirably.—Dr. W. J. TYSON (Folkestone), had recently treated a case of the kind. A woman, aged 59, for ten years had had the internal semilunar cartilage out of joint. There was great difficulty in getting it into position. With the leg flexed and rotated outwards, and proper pressure upon the cartilage, in five minutes it went back to its proper position. She had been safe only with the joint fully extended. He had come to the meeting to learn what apparatus could be had for the purpose of keeping the cartilage in position.—Mr. LUCAS described his treatment of a case, and Mr. NOBLE SMITH replied. He said that all the cases he had treated were those of the internal cartilage; and the lesion had been due to sudden forward movement of the leg, which was not stopped, as in kicking at anything and missing it. He thought reduction should be adopted before the instrument was applied. As regarded the apparatus which he used, it was a modification of the one used by Sir. J. Paget. It combined the principles of rest with certain movements. All the cases which came to him had been previously treated by rest.

A Case of Pulmonary Regurgitation.—The PRESIDENT named Dr. D. Powell, Dr. Moxon, and Dr. F. Taylor, to form a Committee with Dr. Fowler, and to examine and report upon his case to a future meeting.—Dr. MOXON remarked that he had lately seen a case at Guy's Hospital, which, at the *post mortem* examination, turned out to be one of regurgitant pulmonary valves.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, FEBRUARY 6TH, 1884.

H. GERVIS, M.D., President, in the Chair.

Auvard's "Nest."—Dr. MATTHEWS DUNCAN exhibited the "nest," or "incubator," of Dr. Auvard. A similar machine had been used for some years in the Paris Maternité by Dr. Tarnier, but upon this Dr. Auvard's was an improvement. It was planned to maintain a uniform temperature. It was simple, cheap, and useful. Dr. Auvard stated that, by its use, the mortality of children under 2,000 grammes weight at birth, had been reduced from 65 to 38 per cent. The child was placed in it clothed. The machine was kept warm by hot water-bottles, the air moistened by passing over damp sponges, and ventilation kept up and watched by a little anemometer. Any ordinary nurse could manage easily the whole matter.—Dr. FANCOURT BARNES had seen a similar machine in use at the Hôpital Tenon. He believed that Dr. Tarnier, not Dr. Auvard, was its originator.

Hearson's Incubator.—Dr. GODSON exhibited Hearson's incubator, and introduced its inventor, who explained it.

Monstrosity.—Dr. HORROCKS exhibited this specimen, it belonged either to the order of exencephalians or pseudencephalians; but to which it was not possible, until it had been dissected, to decide.

Uterus Removed per Vaginam.—Dr. W. A. DUNCAN exhibited an entire uterus, with epithelioma of the cervix, successfully removed *per vaginam* by Schroeder's operation.

New Cephalotribe.—Dr. FANCOURT BARNES exhibited a new cephalotribe which he had made. It was long, with a French lock, the perineal curve, and Aveling's handle-curve; it allowed traction to be made in the brim of the pelvis.—The PRESIDENT was accustomed to use Hicks's cephalotribe.—Dr. ROBERT BARNES had put this instrument to a practical test, having used it in a case of contracted pelvis, in which he had failed to deliver both with his own forceps and with Tarnier's. It worked admirably, and he thought it might be stamped "*probatum est.*"—The business of the annual meeting was then proceeded with. The list of officers proposed by the Council was accepted by the Society, and the President delivered an address.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 21ST, 1884.

GEORGE P. FIELD, M.R.C.S., President, in the Chair.

Wet Packing in Scarlatinal Dropsy.—Dr. DAY read notes of a case of scarlet fever, followed by nephritis, convulsions, and [illegible], temporarily relieved by wet packing. The patient, a boy aged [illegible], was first seen by him on October 1st, 1883, when he was covered with a bright scarlet rash, having been apparently in his usual health on the previous day. The throat, cervical glands, and kidneys were severely affected, and albumen and blood appeared in the urine. On October 18th, scarlatinal dropsy set in, which almost disappeared under wet packing. On the 20th, there was diarrhœa with vomiting. On the 23rd, the patient was seized with convulsions, and died. Attention was drawn to the extreme brightness of the rash, which was distinct on the tenth day of eruption, and to the dropsy, which the author did not consider frequent when the skin was so much involved. He thought that the wet pack was of great advantage in exciting free cutaneous action and in relieving the anasarca. He also alluded to cases of scarlatinal dropsy without albuminuria, and quoted several authorities on the subject.—The PRESIDENT, in commenting on the paper, referred to the frequency of suppuration within the tympanum after scarlet fever, and to its treatment by early paracentesis.—Dr. MAHOMED called attention to the present rarity of postscarlatinal dropsy as compared with former returns; at the Fever Hospital, hardly more than two or three cases were recorded in the year. This result he attributed to the early treatment of the nephritis, none being more successful than sharp purging and leeches to the loins. Dr. Mahomed bore testimony to the usefulness of Dr. Oliver's test-papers (mercuric iodide) as a ready means of proving conclusively the absence of albumen from any urine.—Dr. CLEVELAND insisted on the therapeutical value of the perchloride of iron in cases of hæmaturia.

Prognosis in Structural Diseases of the Heart.—Dr. BROADBENT read an important paper on prognosis in structural diseases of the heart, in continuation of the subject of the recent Harveian Lectures, in which prognosis in valvular disease had been mainly considered. The paper dealt with the conditions of "fatty degeneration of the heart" and of "cardiac dilatation" in an exhaustive manner, which does not admit of any adequate report being furnished here. A discussion, in which Dr. Stephen Mackenzie and Dr. Mahomed took part, was followed by a reply by Dr. Broadbent, and the meeting was adjourned.

CHESTER MEDICAL SOCIETY.

FRIDAY, FEBRUARY 1ST.

E. WATERS, M.D., President, in the Chair.

Rupture of the Uterus.—Mr. GEORGE HARRISON showed a specimen, and gave the following account of the case. He was sent for about 1 A.M., on January 1st, to see Mrs. B. The patient was 41, and this was her ninth confinement, she having had twins on two occasions. All the children were born alive, but only three were now living. He found that the labour-pains, after lasting sixteen hours, had passed away. On examining *per vaginam*, he could find no presentation; and, on introducing his hand, he felt the uterus pretty well contracted, fallen over the pubes. Mr. Harrison sent for Mr. Taylor. Chloroform was administered, and Mr. Taylor introduced his hand into the abdominal cavity, and with difficulty succeeded in turning the child, and bringing down the legs. The head, being large, was perforated, and the placenta removed from the abdominal cavity. The patient survived half an hour. On opening the abdomen, and removing the uterus as low down as possible, a longitudinal rent, about three inches in length, extending upwards through the peritoneum, with lacerated edges, was found at the junction of the cervix with the body; and there was a considerable amount of blood in the abdominal cavity. Mr. Harrison alluded to the rarity of the case. He then mentioned the usual causes; and said that, whilst gastrotomy was the usual treatment, he doubted if the woman would have rallied.—The PRESIDENT said that, in this case, the choice seemed to be either letting the woman die undelivered, or extracting the child *per vias naturales*.—Dr. KING advocated gastrotomy in such cases, and quoted a successful case.—Mr. TAYLOR thought attempts should always be made to deliver the child, whatever might be the mother's condition.—Dr. HAINING suggested that, after delivery, as in this case, abdominal section might be done antiseptically to clean out the pelvis, and so avoid peritonitis.—Dr. Weaver and others took part in the discussion.

Amblyopia and Hemiopia.—Mr. F. M. GRANGER brought forward a case of amblyopia and hemiopia. The patient was a man aged 31, who had suffered from an injury to the foot some months previously. On going out for the first time after the accident (after being laid up for eleven weeks), he felt giddy, and was not able to see clearly, especially with the right eye. When he came under observation, the eye was found to be almost blind. The pupil was slightly contracted; reaction to light and accommodation were almost absent. The optic disc was white. There was temporal hemianopsia of the left eye; central vision was retained.—Dr. PARRY, Mr. TAYLOR, and the PRESIDENT joined in the discussion upon the case. The chief points considered were the double nervous supply of the macula lutea, as compared with Sharpey's theory of the double cortical centre; the origin of the crossed fibres; and the importance of localising cerebral diseases, and carefully distinguishing between disease of the visual centres and peripheral changes, in defect of vision.

Puerperal Pyrexia.—Dr. HAINING read notes of three cases. Case I. Mrs. P., aged 22, a multipara, had an easy labour, but the expulsion of the placenta caused considerable pain; and, on introducing the hand into the uterus, it was found that quite half of the placenta remained. This was slowly removed. Things went on well till, after exposure on the night-chair, the patient had a rigor. On the seventh day, the temperature was 104.8°; pulse 124. There was restlessness, but no particular pain. The milk and lochia, previously free, had disappeared. The tongue was beefy; the urine was loaded with urates. Salicylate of soda, chlorate of potash, and iron were given; and on the twelfth day the pulse and temperature were normal. The secretion of milk was in abeyance twelve hours, and the lochia twenty-four hours. She made a perfect recovery. In this case, the interference necessary in the third stage might account for the symptoms; but, in septicæmic cases, the fifth day was rarely passed before ominous symptoms developed. The suppression of milk and lochia seemed ominous; but, beyond the scare, little harm was done.—Case II. Mrs. L., primipara, was confined without aid. Not suspecting labour, she had previously eaten a hearty meal. Eight hours after delivery, she had colic, and then convulsions supervened, and continued for twenty-four hours. Seventy-two hours after delivery, the temperature was 103°. The lochia and milk disappeared; the latter altogether, the former for two days. The temperature on the seventh day became normal. On the eleventh day, it was 104°. On the previous evening, the patient had eaten a hearty supper. After bilious vomiting and a purge, the temperature became normal on the fourteenth day. On the sixteenth day, two slight fits occurred, and for two days the temperature was 101°. The further progress of the case was good. Here, gastric derangement was undoubtedly the exciting cause. She also had albuminuria.—Case III. Mrs. S., aged 17, primipara, was delivered without assistance of a large male child. On the third day, after having the bowels moved, she had a rigor; her temperature rose to 105°. On the seventh, the temperature was normal. On the ninth day, she sat up for a short time; and on the tenth day the temperature was 103°, and for a month was never under 102°, the pulse ranging from 110 to 130. Severe pain, apparently rheumatic, occurred, first in the right elbow, and then in the left, going in turn through all the joints. There were sour acid perspiration, loaded urine, and confined bowels; but the appetite remained good, and the tongue clean. At the end of the sixth week, a painless fluctuating swelling was observed along the right forearm from the elbow to the wrist; and, two days later, a similar condition was noticed two inches below the left trochanter. These abscesses were superficial, gave no pain, and occasioned no rise of temperature. Both burst and discharged healthy pus, and healed up in four days. Fissure of the os, owing to rapid delivery, may account for the earlier rise of temperature; and the second elevation was probably due to an attack of rheumatism.—The PRESIDENT spoke strongly of the use of discussions on such cases, and said that medical men could not be too careful of cleanliness. He believed erysipelas to be the most frequent cause of puerperal pyrexia, and by far the most dangerous.—Dr. WEAVER considered scarlet fever quite as dangerous as erysipelas, if not more so.—Mr. HAMILTON concurred with the President as to the dangerous nature of erysipelas, mentioning several cases which ended fatally.

Separation of the Patella after a Burn.—Mr. HAMILTON showed a patella which had sloughed away after a burn. The patient was drunk, and fell asleep before the fire, and was severely burnt. Nine months afterwards, the patella came away, and the man had now a fairly useful limb.

Mammary Tumour.—Dr. W. H. DOBIE read notes of a case, and also showed several microscopical specimens. The patient said the tumour had existed for nineteen years, but was only of the size of a walnut till menstruation ceased, three years ago, when it commenced to grow rapidly and give pain. In October 1881, the enlargement near the nipple on the left breast was rather egg-shaped. In November 1883, it was as large as a man's fist, hard, ovoid, not adherent to the skin or deeper textures. The veins were dilated; there was no glandular enlargement. The growth, together with the entire breast, which appeared involved, was removed. The tumour was pinkish white in colour, and grated under the knife. There were numerous small white bodies in small cavities which had a smooth lining. The ducts of the gland seemed to ramify on the capsule. It seemed that the new growth had caused considerable atrophy. Microscopically, the contents of the cavities were found to be degenerated epithelium-cells. The wall of the cavity was epithelium, with a basement-membrane, and the stroma was partly fully formed connective tissue, and partly spindle-shaped nucleated cells. The chief question appeared to be whether it was an adenoma or a sarcoma; and the general opinion of the Society seemed to be that it was a sarcoma, which had remained stationary till the menopause, and then rapidly increased.

Ulceration of the Œsophagus from a Foreign Body in a Dog.—Dr. **Dobie** also showed a small puppy, which had swallowed a large bone, that had stuck in the lower part of the œsophagus, and ulcerated into the left pleural cavity.

MANCHESTER MEDICAL SOCIETY.

Wednesday, February 6th, 1884.

D. J. Leech, M.D., President, in the Chair.

Excision of Ribs in Empyema.—Mr. **Whitehead** exhibited a man, aged 25, upon whom he had resected between two and three inches of the sixth, seventh, eighth, ninth and tenth ribs, in the Manchester Royal Infirmary. The patient was originally admitted into the medical wards on June 8th, 1883, for empyema on the right side. The chest was opened on June 16th, and a portion of the ninth rib resected to facilitate drainage. In consequence of the sinus remaining patent, and only a moderate collapse of the chest-wall having taken place, the more extended operation was performed on January 4th this year. Each rib was resected subperiosteally. There was practically no hæmorrhage, not a single intercostal vessel being wounded. The opening into the chest was enlarged, and a quantity of lymph scraped with a lithotomy-scoop from the walls of the cavity. When shown, the man appeared to suffer very little inconvenience from his condition; the ribs on the side operated upon were plainly seen to be approaching their posterior segments, and the discharge was reported to be steadily diminishing. Mr. Whitehead stated that the operation was one of remarkable simplicity, and free, so far as he could judge, from any serious risk or difficulty in its execution. In answer to a question, he stated that he was dubious as to the utility of leaving the periosteum; as the tendency of that membrane was the reproduction of bone, and, consequently, renewed rigidity, a sequence calculated to frustrate the object in view. At the same time, he recognised the advantage of retaining the periosteum so far as the question of hæmorrhage was concerned.

Spina Bifida.—Mr. **Whitehead** also showed an adult female, upon whom he had successfully operated for a large spina bifida.

Photophore.—Mr. **Whitehead** exhibited Trouvé's photophore, and demonstrated some of its uses in surgical practice.

Excision of Upper Jaw.—Mr. F. A. **Southam** showed this patient, in whom excision of the upper jaw had been performed; in one case, for a papilloma commencing within the antrum; in the other, for a sarcoma originating in the nasal fossa, and involving the antrum secondarily.

Fibro-myxoma of the Upper Jaw: Excision, etc.—Mr. A. H. **Young** exhibited the left upper jaw of a girl aged 9, which he had excised four months previously. The patient suffered from a succession of gumboils about twelve months before coming under observation, but apparently quite recovered, and it was not until eight months later that any enlargement of the jaw was noticed. When first seen (a month before operation), there was considerable projection of the cheek, downward displacement of the hard palate, and expansion of the alveolus, with irregularity of the teeth. The nose and orbit were not affected. At the operation, the antrum of Highmore was found packed with cartilaginous nodules and intervening mucus-like material. The entire upper jaw was removed in the usual manner. The child made a rapid recovery, and was convalescent and up in eleven days. Microscopic examination of the new growth from the antrum showed it to be almost a pure myxoma; the fibrous tissue-elements present were scanty.

Aneurysm of the Aorta.—Dr. **Simpson** showed two patients suffering from aneurysm of the thoracic aorta, in whom great benefit had resulted from treatment. In one case, galvano-puncture was performed twice.

Address by the President.—At the conclusion of the business of the meeting, Dr. **Leech**, the President, opened the fiftieth session of the Society with a sketch of its history since its formation.

MIDLAND MEDICAL SOCIETY.

Special and Ordinary Meeting, Wednesday, January 23rd, 1884.

W. Ross Jordan, M.R.C.S.Eng., in the Chair.

Ovulation and Menstruation.—Mr. **Lawson Tait** read a paper on the relations of ovulation to menstruation. He gave a historical sketch of the literature of the subject since 1843, the date of the publication of Dr. Ritchie's papers; and observed that, although Dr. Ritchie's discoveries had been amply and frequently confirmed, the text-books still reiterated the mistaken view that menstruation was the equivalent of the œstrus or rut, and that it was due to the ovarian excitement of the ripened follicle. He next gave a series of observations derived from his surgical practice, in which it was shown that, in forty-nine observations, there was evidence of the concurrence of ovulation and menstruation in nine only; whereas in forty cases the evidence was either negatively (fifteen cases) or positively (twenty-five cases) against the ovulation-theory of menstruation.

Uterine Myoma.—Mr. **Lawson Tait** showed a large soft œdematous myoma without pedicle, removed successfully from a woman aged 43; also a specimen of abscess of the right ovary.

Acute Yellow Atrophy of Liver.—Dr. **Suckling** showed a specimen of acute yellow atrophy of the liver. The liver weighed twenty-five ounces, was soft and flabby, with wrinkled capsule, and was yellowish in colour, with patches of red. During life, there were marked jaundice, delirium and coma, obstinate constipation and vomiting, with no enlargement of the spleen, nor fever. The jaundice was of three weeks' standing. Crystals of tyrosin were found in the urine.

Traumatic Myelitis.—Dr. **Suckling** showed a living case of traumatic myelitis, caused by a fall. There was displacement of the first and second lumbar vertebræ backwards, with paralysis of both lower extremities below the knees, the muscles being completely destroyed.

Epithelioma in the Cicatrix of a Burn.—Mr. **Chavasse** exhibited a large epitheliomatous mass occurring in the cicatrix of an old burn situated on the anterior surface of the upper third of the forearm, and extending to the lower third of the arm. The patient was nineteen years of age, and the burn was received when she was seven years old. Fourteen months before her admission to the hospital, the cicatrix had been pinched, and rapid growth followed the injury. The limb was successfully removed immediately below the shoulder-joint.

Epithelioma of the Tibia.—Mr. **Jordan Lloyd** showed a specimen of epithelioma of the tibia. The bone was enlarged to twice its natural size, and was covered in patches with small osteophytes. At the centre of its anterior border and inner surface was a fungating mass as large as a turkey's egg. The fibula was enlarged, and the two bones were ankylosed together at their lower third. The interosseous membrane was ossified in parts. The specimen was removed from a man aged 42. He had had chronic ulceration of the leg for twenty-five years, but was able to work until six months ago, when the sore began to exhibit this cauliflower-like growth. There were several enlarged glands in Scarpa's space. Amputation was performed below the knee; and the wound healed soundly in three weeks, with three dressings.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

Ordinary Meeting, February 1st, 1884.

J. H. Bell, M.D., Vice-President, in the Chair.

Anomalous Rheumatic Pains.—Dr. **Myrtle** gave details of an attack of "rheumatism" in certain muscles from which he had himself recently suffered. After drinking two glasses of a particular claret which had on one or two previous occasions disagreed with him, he had slight jaundice, with symptoms of gastro-duodenal irritation. The jaundice having disappeared, peculiar and painful sensations were experienced in the calf-muscles of both legs during several days. These suddenly disappeared also, but were succeeded in a few hours by excessive pain in some of the intercostal muscles, so as to compel him to keep at perfect rest. No treatment, except rest, did any good. Formerly, in such cases, he used to bleed, and this he would do in his own case if he were attacked similarly again.—Dr. Dobson, Mr. T. Pridgin Teale, Dr. Clifford Allbutt, and Dr. Black spoke; and Dr. Myrtle replied.

Sea-Change.—Dr. **Farquhar** read a paper on "Sea-Change," the effects of voyaging, with cases. He remarked on the paucity of information on this subject, Dr. Faber being the only observer who had gone to work systematically. No one should send out a "pulmonary" case without first consulting his contributions to the *Practitioner*. Dr. Farquhar's observations on a voyage last winter up the Mediterranean led him to the belief that many unsuitable cases were sent voyaging by medical men; and, in the event of such a rigorous winter as was the last, even in Italy and Greece, the disappointment to invalids in search of health must be great. He then gave details of the various cases that came under his care and observation. The most pronounced benefit was obtained by most of the phthisical cases; but some left the steamer before the tonic and stimulating action of the sea air had made itself felt, unnerved by the hardships endured in a storm experienced on leaving the Mersey. Voyagers suffering from the effects of overwork and mental strain did well, but "[illegible]" cases showed the most marvellous results, complete recovery being the rule. Dyspeptics did not do well, nor subjects of skin-disease of a nervous origin. To sum up, his experience in this voyage led him to believe that no diseased condition, where the nervous irritable element was present, had much chance of benefit; the sea-air stimulus was in the end too powerful through its constancy. Such cases should land after the first beneficial stimulation, which generally occurred within the first three to four weeks of the voyage.—Dr. T. **Clifford Allbutt** alluded to the rash way in which invalids were sent for long sea-voyages or to health-resorts, forgetful of the many conditions which should govern such advice. Unfitness in patients and unfitness in places led to much disappointment. Speaking generally, those who did well at sea were overworked persons not of nervous temperament, anæmics, syphilitics, and selected cases of phthisis and Bright's disease. Those who did ill, were neurotics, chronic dyspeptics, and most subjects of organic disease. For all, the risks of bad weather, sea-sickness, and ill-cooked food, were too heavy to be left out of account.—Dr. Dobson and Dr. Bell also spoke; and Dr. Farquhar replied.

Stricture of the Urethra.—Mr. J. W. **Teale** described three cases varying greatly in their symptoms, but in all of which an unsuspected stricture was found and cured, and the symptoms complained of disappeared. In the first, a middle aged gentleman had suffered for years from chronic dyspepsia, and had lost two stone in weight. A stricture was discovered, and after long and careful treatment was cured; an operation for fistula was also required, and he quite regained his health and weight. In the second case, a young naval officer suffered an attack of excruciating pain in the kidney, which entirely disappeared when a series of tight strictures in the urethra were discovered and removed. In the third case, a gentleman suffering from tenderness of the prostate and irritability of the bladder was quite cured when a stricture of the urethra was discovered by accident and relieved.—Mr. T. P. **Teale** spoke of his very favourable experience of the use of Lister's bulbed and graduated sounds, which he had used almost exclusively in his treatment of stricture the last twelve years. He also expressed his impression that, with such sounds, in most cases it was a safe, and possibly a safer, method to dilate up to No. 10 or 12 at one sitting, and that the risk of producing rigors was not increased thereby.—Mr. **Mayo Robson** corroborated Mr. T. P. Teale's remarks, and said that, in the out-patient department of the Leeds Infirmary, he and his colleague had found the method of rapid dilatation by means of Lister's sounds to be both safe and efficient. The safety was possibly due to complete dilatation preventing the retention of any urine or discharge behind the stricture.

Reading and Writing in Schools.—Mr. **Simeon Snell** made a few observations on writing and reading in schools. After referring to the influence school-life was held to have on the causation of myopia, he alluded to the unsatisfactory nature of the old slates in general use, and exhibited Kohn's white composition-slates, which were thought to possess manifest advantages over the older ones. Allusion was made next to the printing of school-books, size of type, etc., and reference was made to the valuable articles of Javal on the "Physiology of Reading," published a short time since in the *Annales d'Oculistique*, and to the practical hints of this observer as to the formation of type.

Electric Lamps.—Mr. H. B. **Hewetson** showed a modification of the Swan electric lamp for ophthalmoscopic use, and demonstrated its application on some patients. The glass globe of the lamp was frosted, to prevent too great a glare, and to obviate the reflection of the image of the luminous arc on the cornea.—Mr. **Hartley** also showed an electric lamp for surgical purposes, which fitted on the forehead in the same manner as a laryngoscope-mirror.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

February 7th, 1884.

H. F. Banham, M.D., President, in the Chair.

Athetosis.—Dr. **Dyson** exhibited a patient suffering from athetosis of the right arm, and, in a much less degree, of the right leg. The patient, a girl aged 11, had scarlet fever three months ago. About six weeks ago she was seized with an apoplectiform attack, in which there was a loss of consciousness, paralysis of the right side of the face, the right side of the tongue, the right arm, and the right leg. She was in bed a fortnight, and as the paralysis passed off, the present condition of the right arm gradually supervened. Sensation was little affected, but the slow deliberate character of the spasmodic movements, *plus* the intensification of them on exertion, were exactly those described in cases of athetosis. There was no history of rheumatism, and the heart was healthy. The urine was normal.

Tumour of the Liver.—Mr. H. **Lockwood** exhibited morbid specimens from a patient aged 59, under the care of Dr. Dyson. The patient was admitted into the Public Hospital on October 11th, 1883. He had enjoyed good health up to two months ago, when he became rapidly ill and experienced great difficulty in breathing. On admission, there was œdema of the lower extremities and body, but none of the upper. He had well marked aortic regurgitant murmur, and increase of cardiac dulness. His arteries were very atheromatous, his abdomen tense and fluctuating. On *post mortem* examination, the heart was very much hypertrophied and the valves calcareous; but there was no very extensive disease. On the under surface of the right lobe of the liver, a cartilaginous-feeling tumour was found. It was about the size of a small egg, and, on a section being made, the interior was found to be filled with caseous substance. The specimen was referred to the Pathological Committee for report.

Sarcoma of the Femur.—Mr. **Atkin** showed a specimen of rapidly growing sarcoma of the lower end of the femur, for Mr. Favell, who had removed the limb at the hip-joint. After making remarks on the diagnosis, he pointed out the well marked radiating appearance and different characteristics of the growth in different parts, being calcified and chondrified behind, whilst in front it was of soft pulpy consistence. The fact of its growing from the periosteum and infiltrating contiguous muscles showed its malignancy, and the necessity of amputation as far off as possible, though in the thigh it was impossible to detach the origins of the implicated muscles. Attention was also drawn to the point of sarcomata nearly always attacking that epiphysis which was first to ossify and last to be joined to the shaft, and at that end of the bone to which the nutrient artery was not directed.

Congenital Malformation of Genital Organs.—Mr. **Atkin** also showed an enlarged clitoris of recent growth from a girl aged 13, which had been removed by Mr. Favell on account of its inconvenience. Complicating the case was some congenital malformation of the internal genital organs.

Acute Arthritis.—A specimen was also shown of acute arthritis from the knee-joint of an infant, which Mr. A. **Jackson** had excised that afternoon. Following a slight injury an abscess formed in the lower end of the femur, which ultimately bored its way through the articular cartilage into the joint.

Cyst in Connection with Hernial Sac.—Dr. **Keeling** showed a portion of very thick hernial sac, with a cystic growth behind it, removed from a patient operated on for femoral hernia. The patient was an elderly female, and had had a hernia for twelve years.

Sequel to a Case of Idiopathic Anæmia.—Mr. **Pye-Smith** related the sequel to a case of idiopathic anæmia which he had brought before the Society last year. The patient, J. K., aged 61, remained well for a couple of months after treatment (by arsenic) was discontinued. He then began to feel a fulness in the right inguinal region, which somewhat impeded his walking. This was at first attributed to a slight rupture, and he was ordered a truss. A week later, he walked home one night a distance of more than a mile in a drenching rain, and the next day he felt stiff and rheumatic. His gait soon became tottering, and when seen again, a fortnight later, he had well marked impairment of co-ordination in the legs, and most of the usual signs of locomotor ataxy had since supervened. Arsenic had been again administered, but without any result.

The Use of Antiseptic Inhalations in the Treatment of Phthisis.—Dr. **Gwynne** read a paper on the antiseptic treatment of phthisis, in which he related several cases where the antiseptic inhalations had acted beneficially in "easing the breathing," lessening the amount of the sputum, and improved the general condition of the patients. He recommended impregnating the air of the chamber with antiseptics, as likely to produce better results than those derived from the use of the respirator-inhaler. He ventured to predict that, as in the treatment of wounds surgeons found an ally in scrupulous cleanliness almost as valuable as the most intricate observation of Lister's rules, so, in the treatment of tuberculous ulceration in the lungs, the inhalation of purified air would tend to lessen the destructive vitality of any organisms present, and would promote new and healthy action. He related the history of several cases of phthisis where inhalations had done signal service. He went on to say that, although the treatment by antiseptics was a corollary to the micro-organic theory of the causation of the disease, yet he did not consider that the treatment should stand or fall by the fate of that theory. The beneficial effects were too well marked and too long practised to fall into disuse. He believed that heredity operated far more in the causation of the disease than was supposed, and to explain this by saying that what was transmitted was the "suitable soil" for the germs to grow in, did not appear to him to be an adequate explanation. The germs might be invariably present, and, when introduced to another animal of the same species, might produce the same disease; but might not quite innocuous organisms, when for a lengthened period brought into contact with diseased structures, themselves become so modified, as to be able to reproduce the disease in another animal? In this sense, the bacilli would only occupy a secondary position in the causation of the disease.—After remarks by Dr. Hunt, the discussion on this paper was adjourned.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

FRIDAY, FEBRUARY 1ST, 1884.

A. H. CORLEY, M.D., President, in the Chair.

Spontaneous Rupture of the Femoral Artery.—The PRESIDENT detailed the history of a case in which rupture of the femoral artery had been the cause of death, and he exhibited the specimen. On the evening of December 20th, 1882, A. B., aged 56, a labourer, an inmate of the North Dublin Union Workhouse, was observed to be limping; and, on being questioned, complained of pain in the thigh, which was seen to be swollen. He was examined by Dr. R. Kenny the same evening, and rupture of the femoral artery was diagnosed; but the swelling had increased to such a degree, and the signs of collapse were so marked, that surgical interference was out of the question. There was no attempt at rallying, and he died next morning. A *post mortem* examination was made under very unfavourable circumstances. All that could be done was to examine the limb and remove the diseased artery. There was enormous swelling, extending from Poupart's ligament to the knee; and obstruction to venous return had produced considerable œdema of the leg. A quantity of blood, partly fluid and partly coagulated, roughly estimated at nearly two quarts, was found diffused under the fascia lata. An examination of the artery showed a fusiform thickening of about three-quarters of an inch in its greatest diameter, and three inches long, extending from the apex of Scarpa's angle into Hunter's canal; and an opening, somewhat funnel-shaped, was seen on the anterior aspect of the vessel, the coats being unequally destroyed. The artery was pervious both above and below the rent, but for the whole extent of the dilation was occupied by a soft reddish clot. On slitting up the vessel, it was perceived that there were three slight saccular dilatations existing in the fusiform portion of the artery, and that it was the highest of those that gave way. Although the history was necessarily meagre, it seemed evident that some obstruction to the current through the superficial femoral must have been of considerable duration, as the trunks of the profunda femoris and its branches were all unusually enlarged.

Elephantiasis of the Scrotum.—The SECRETARY exhibited, for Dr. W. H. HART of Sierra Leone, an example of elephantiasis of the scrotum removed by him from a negro chief, aged 56. In its shrunken condition, after preservation in strong spirit, the tumour weighed 14 lbs. 5 oz.; weighed immediately after removal, it was 31 lbs. The patient was in fair health, but affected by pityriasis. He had no fistula or urinary trouble, and had been tapped for hydrocele. On his admission, no fluctuation could be detected in the tumour. He spoke no English, and his history was learned with difficulty. The tumour had been growing for ten years. On March 28th, 1883, Dr. Hart operated antiseptically, with Esmarch's bandage. Both spermatic cords were ligatured, and a lateral and a mesial flap saved. The testes were removed. Five veins were tied on removal of the Esmarch's band. Considerable shock followed the operation, but the temperature on reaction rose only to 101.2°. On March 3rd, the temperature, etc., were normal. On April 20th, he was discharged with only a very small portion of the surface of the penis being as yet uncicatrised. The examination of the tumour showed a vast hypertrophy of all the structures of the scrotum, amongst which the testes were, after a patient search, found without serous envelope, the tunica vaginalis being obliterated; but the glands appeared healthy.

Two Cases of Epithelioma from Local Irritation.—Dr. BALL showed two specimens of epithelioma. The first was from the front of the scrotum of a man aged 40, who had worked as a distiller of crude carbolic acid from tar for nine years previously to admission to Sir P. Dun's Hospital. The larger tumour was two inches long, and an inch and a half broad, and beside it was a smaller wart, to which was adherent a well marked horn. These growths were removed, and, two years subsequently, another small tumour was removed from the side of the scrotum. This was not connected with the cicatrix; and the author considered that it was attributable rather to a continuance of the original irritation than to an infection of the tissues by the previous growth. The glands in the groin, which were somewhat enlarged and hard before the first operation, had decreased markedly after the removal of the scrotal disease. A microscopic examination, which was made by Dr. Abraham, showed the appearances of ordinary epithelioma. Inquiries were made as to the health of the other operatives at the works where this man was employed. One man was seen with a large number of small epitheliomatous warts over the body; and Dr. Ball was informed that two men, who recently worked there, had horns followed by open sores on the face, but he was unable to trace these cases. As only sixteen men were employed, it would appear that the fumes given off in the destructive distillation of tar produce an irritation peculiarly liable to originate epithelioma of a chronic form, and in all respects similar to the chimney-sweep's cancer, as described by Pott. The second case was from the nose and upper lip of a man aged 40, who had suffered from lupus of the face and nose for many years. He had been under treatment by Dr. Walter Smith for lupus, and was transferred to Dr. Ball's care for removal of the tumour. There was a fungating mass, of nearly black colour and great vascularity, involving the tip of the nose, the alæ and septum, and extending down into the upper lip. The submaxillary glands were not enlarged. The patient positively stated that this growth had only commenced three months previously. It was removed freely; but, when the patient was seen three months after the operation, a number of glands, evidently carcinomatous, were to be felt deep in the submaxillary space, the cicatrix appearing quite healthy. The intense malignity of this case formed a marked contrast with the former; and Dr. Ball suggested, as an explanation of this fact, the great vascularity of the tissues induced by the lupus before the commencement of the carcinoma. Dr. Abraham reported the case as distinctly one of epithelioma. In the deeper portions were to be found a very large number of small round cells, as usually found in lupus. The author alluded to a recent communication made to the Berlin Medical Society by Dr. Lewin on carcinoma developing on a basis of lupus, in which he reviewed the published cases of this condition, stated to number about twenty.

Tumour of the Nose.—Dr. ABRAHAM communicated a note on the tumour of the nose discussed by Dr. Ball. The deeper parts of the sections were chiefly made up of a more or less round celled growth, much infiltrated with other small darkly staining cells and nuclei. The texture was often loose and œdematous, and the lymph-channels and spaces were well marked. Some of the latter contained finely granular, and occasionally fibrous, coagula. Protoplasmic masses were also to be sometimes found in various parts of the tissue. Towards the surface of the growth the larger cell-elements could be traced into prolongations from the epidermis, and in this situation numerous epithelial cell-nests were developed.

Fracture of the Upper Extremity of the Humerus.—Dr. E. H. BENNETT exhibited an example of fracture of the upper extremity of the humerus which was, in his opinion, consecutive to dislocation. Having referred to his communication on this subject made at the Cambridge meeting of the British Medical Association, and to the paper of Mr. Eve published in the *Medico-Chirurgical Transactions*, he expressed his opinion that this new example agreed with the five specimens already described by him in its general characters, the head of the bone being only slightly differently placed. It was united by ligament both to the scapula and to the humerus. It projected into the axilla beneath the vessels, and had pierced the subscapular muscle at its lower border. It retained a great part of the subscapular attachment, *i.e.*, of the lesser trunk of the humerus attached to it. The long head of the biceps was united to the bone in the fibrous tissue between the fragments. The specimen, unfortunately, was without life-history.

VIVISECTION.—Dr. H. Newell Martin, at the formal opening of the new biological laboratory of the Johns Hopkins University on January 2nd, declared his intentions as to the use of vivisection in demonstrations. Seven years ago, on the opening of the old laboratory, he used the following words: "Physiology is concerned with the phenomena going on in living things, and vital phenomena cannot be observed in dead bodies; and from what I have said you will have gathered that I intend to employ vivisection in teaching. I want, however, to say, once for all, that here, for teaching purposes, no painful experiment will be performed." Also: "I cannot doubt that we have a right to inflict suffering upon the lower animals, always provided that it be reduced to the minimum possible, and that none but competent persons be allowed to undertake such experiments." Dr. Martin, at the opening of the new laboratory, said that this declaration of principle was a pledge given to the community when he began his work, and that in all those seven years, during which the laboratory was open to all visitors, he had heard no complaint—a sufficient proof, he considers, that Baltimore assented to the principle. "On this occasion," he said, "when we formally make a fresh start, I desire to reassert the principle and repeat the pledge." The new biological laboratory is the largest and most complete in America, probably the largest yet built.

REVIEWS AND NOTICES.

The Pathology and Treatment of Venereal Diseases. By Freeman J. Bumstead, M.D., LL.D.; and Robert W. Taylor, A.M., M.D. Fifth Edition, revised and rewritten with many additions, by Dr. Taylor. Pp. 906. London: Henry Kimpton. 1883.

The death of Dr. Bumstead since the appearance of the last edition of this work has placed the responsibility of the present one on Dr. Taylor alone. The most prominent features of the new edition appear to be a still further increase in size, and the addition of some chromo-lithographic figures copied from the works of Cullerier and of Clerc.

As regards the question of size, there can be no doubt that the book has grown unnecessarily large, and that its value would be in no way diminished by a considerable reduction in bulk. This might be accomplished, first, by cutting out altogether the chapters on such subjects as Hydrocele, Hæmatocele, Varicocele, and Sexual Hypochondriasis; secondly, by vigorous compression of the remainder of the text; thirdly, by the omission of some of the woodcuts, which are all but useless as regards any information they convey. The work would also be much improved by thorough revision—notably, of the authors' phraseology. The mixture of "I's" (used by both authors without distinction) and "We's," with an occasional lapse into the third person singular, does not add to the elegance or coherency of the text; nor does the misspelling of foreign names—the latter a blemish that ought hardly to exist in the fifth edition of an important work.

The general scope and arrangement of the book are too well known to need any detailed description at the present time; but, speaking generally, after a careful examination, we feel bound to say that, though the account of the various subjects treated is in the main accurate and complete, the contents of this edition have not been in all respects brought down to the date of publication. We may just mention, in passing, that Dr. Taylor has tried Mr. Watson Cheyne's plan of treating gonorrhœa with iodoform bougies, etc., in ten cases, without success; and that he speaks strongly in favour of erythroxylon coca as an adjuvant to specifics in the treatment of syphilis.

It will, of course, be seen that some of the imperfections we have pointed out are merely such as might arise from the association of two authors in a work originally written by one, and that all of them might easily be remedied by care and research. Treated on the lines above indicated, there is assuredly no reason why the book should not continue to hold its deservedly high position as one of the best and most comprehensive treatises on venereal diseases.

Life and its Lessons, being the Inaugural Address Delivered to the Bristol Medico-Chirurgical Society. By James George Davey, M.D., President. Bristol. 1883.

It is impossible not to admire the indomitable perseverance manifested by Dr. Davey, in the promulgation of his views. Many years ago he wrote a treatise in favour of the ganglionic system. In this address, the author re-maintains the priority of the sympathetic ganglia over the cerebro-spinal system, and their special and independent uses apart from the brain and spinal cord. The relation of this system to life, as shown by the well known effect of a powerful blow on the stomach, leads Dr. Davey into a somewhat impassioned and diffuse defence of materialism, but we find it difficult to discover any additional proof of this hypothesis in the study of the ganglionic system. All that can be urged in its favour would seem equally convincing from a consideration of the brain and its functions. We were at first puzzled to reconcile Dr. Davey's materialistic views with the experiences to which, some years ago, he bore witness in the papers, in regard to a communication from a member of his own family after death at a spiritualistic *séance*. We observe, however, that he is no materialist in the vulgar acceptation of the term. He only objects to the term "the mind." He does not deny that matter survives the tomb, thus coinciding in opinion with Bishop Law that the soul, or life hereafter, is "a second bodily existence." As long as the *post mortem* life of man is granted, carrying with it his intelligence and identity, it would seem to be of no consequence, theologically, whether the word mind or matter is employed. Dr. Davey holds that "the hard practical and material experiences of Messrs. W. Crookes and A. R. Wallace, including those of the late Professor de Morgan, in what is miscalled spiritualism," favour this view. In short, instead of speaking with St. Paul of a spiritual body, we ought to say a bodily spirit. Dr. Davey lays himself open to misconstruction by the way in which he attacks Dr. Carpenter for advocating "Forces behind Nature," and Dr. Bastian, for entitling his book "The Brain as an Organ of the Mind;"[1] and it is by an almost incidental reference that one infers that he would have no objection to the ideas intended to be conveyed by these expressions, if only the writers would clothe them in a material dress, such dress being, if one like, as indestructible and eternal as mind and an intelligent power outside nature are supposed to be. The author will be equally misunderstood when he speaks with approval of Dr. Maudsley's lecture, "The Physical Basis of Will," unless the supplementary belief of a material form surviving death believed in by Dr. Davey, be clearly recognised. Dr. Davey's style would gain by compression and by a rather clearer enunciation of what he does not, as well as what he does, mean by materialism.

Study and Stimulants. Edited by A. Arthur Reade. Manchester: Abel Heywood and Son. London: Simpkin, Marshall, and Co.

This is an attempt on the part of Mr. Reade to answer from experience the practical question, "What has been the experience of those engaged in intellectual work regarding the effects on them of using or abstaining from alcohol and tobacco?"

To a circular letter which the editor appears to have addressed to a large number of literary men, 132 replies were received. The writers in many cases not only replied to the question asked as to their habits regarding alcohol and tobacco, but many of them also gave interesting details as to the habits of their lives in other respects, such as the use of tea, coffee, quinine, and other nervine stimulants or tonics. The little volume has, therefore, a historical interest of a more or less abiding character, since some of the most eminent literary men have here given to the world little autobiographical pictures which might otherwise have been lost. For the rest, we fear that, in its present form, no great scientific value can be attached to the book. As might have been expected, different literary men have very various habits of life. Thirty-four abstain from alcoholic liquors altogether; twenty-seven use wine at dinner only; twenty-six use tobacco, out of whom only thirteen smoke while at work; one chews, and one takes snuff.

But these interesting details are incomplete, and do not in their present form justify the founding on them of any very wide generalisations. Such a question as the influence of alcohol on longevity, for example, has no possible light thrown on it by these experiences, nor can it be helped to its solution during the lifetime of the authors, nor even afterwards, unless we had the power of comparing all the important habits of life, as well as the use of alcohol and tobacco. At the same time, some conclusions can be drawn, though we believe most or all of them were known before. Evidently, we may say that literary work of the highest class has been produced without the help of alcohol or tobacco. Louis Blanc, James and Harriet Martineau, Canon Farrar, and Barthélemy St. Hilaire show this. On the other hand, Matthew Arnold, Professor Bain, Charles Darwin, Mr. Gladstone, Professor Haeckel, and the Abbé Moigno form an even brighter galaxy, who used (some of them extremely moderately indeed) alcohol or tobacco, or both. Mr. Gladstone finds his "glass or two of claret at luncheon, the same at dinner, with the addition of a glass of light port......especially necessary to him at the time of greatest intellectual exertion;" while Canon Farrar believes from his experience that "work may be done more vigorously, and with less fatigue, without wine than with it." With two such opposite opinions stated by two eminent men, it does not seem clear to what judgment outsiders can come, except that every man must find out what mode of life suits him best, and act accordingly. The editor says that no one of those who have replied to his questions "resorts to alcohol" for inspiration; but Mr. Gladstone's statement that wine is "especially necessary to him at the time of greatest intellectual exertion," is scarcely compatible with this.

On the question of the use of tobacco, the same diversity of practice appears. Some use it immoderately; some use it moderately; and some do not use it at all. Between the 300 cigars a month which Mark Twain finds sufficient to "keep his constitution on a firm basis!" (the prince of American humourists appears to be in earnest when he writes thus, though it is difficult to realise), and the "entire abhorrence of the practice of smoking" manifested by Mr. Ruskin, there may be a great many variations of practice. We would not give much for the eyesight or the digestive power of most men who smoked as much even as half the allowance referred to; and, though it seems to us that no very satisfactory conclusions can be drawn from Mr. Read's book, we cannot help feeling with Dr. Maudsley and some other eminent men that neither alcohol nor tobacco is in the least necessary or beneficial to persons in health, and that harder and sounder work is probably done without them.

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[1] It is a curious example of careless quoting, that Dr. Davey interpolates the definite article into this title, although studiously avoided by Dr. Bastian. Dr. Winn, who also attacks the book from another standpoint, displays the same want of accuracy.

POISONS: THEIR EFFECTS AND DETECTION. By A. W. BLYTH, M.R.C.S. London: Charles Griffin and Co. 1884.

THIS volume, forming a thick octavo, is an entirely rewritten portion of Mr. BLYTH's *Practical Chemistry;* and in it the author has endeavoured to give an original cast to the work, by embodying in it his own views and experiences, while summarising the labours of others; and he trusts that it may be found useful to both students and experts.

The magnitude of the task which Mr. Blyth has proposed to himself can only be rightly appreciated by an examination of the elaborate volume itself; and we are bound to state that the manner in which the task has been fulfilled reflects, on the whole, great credit on the author. To the mere student of medicine, the book will be of comparatively little value; but it will form a necessary adjunct to the library of every expert in toxicology. It is throughout replete with all that is novel in the way of tests and processes for the identification of poisons. Mr. Blyth is evidently well read in foreign scientific literature; and *Poisons* is a book containing more of what will be considered novelties by the general reader than any existing manual in the English language.

In the main, the book is reliable, as might be expected when descriptions are taken very liberally from foreign sources. But a careful revision would have been serviceable; and the descriptions of chemical processes are too often obscure and unintelligible to all but experts. As we take it, however, it will be chiefly these who will consult Mr. Blyth's elaborate and interesting volume; and they will be able to supply the connecting clue to obscure passages.

The volume commences with a novel chapter on poison-lore, and concludes with one on treatment, in which Dr. Murrrell's essay is pretty closely followed as to the administration of physiological antidotes. The bibliography and references of Mr. Blyth's book are most valuable; and, in this respect, the work is of much value.

SANITARY PRINCIPLES, MORE ESPECIALLY AS APPLIED TO INDIA. By Surgeon S. J. THOMSON, S.Sc.C.Camb., Her Majesty's Bengal Medical Service.

THE Government of India have for many years past been anxious to obtain a simple and popular treatise on health, written in such a way as to be intelligible to British soldiers and to tolerably well educated natives, and have offered a pecuniary reward to the competitor who best complies with the conditions laid down for the guidance of those who compete for this prize. So far as we are aware, none of the competitors have succeeded in satisfying the judge or judges appointed by Government to adjudicate between rival authors; the objection taken to all of the treatises sent in being that they were "too theoretical." Whether this was so, or whether the theories put forward ran counter to the theories of the judges, we are not in a position to say. It does not appear that the little work under notice, by Mr. THOMSON, is one of the "rejected addresses" on Indian sanitation referred to. It is, in the words of the author, "an attempt to reproduce in a compact form some of the chief points to be noted in the study of public health." A glance at this excellent little treatise shows that it was not written for soldiers or others not fairly educated; much of it would be quite above their comprehension, for it deals with matters, elementary though they be, "not understanded" by their class, although intelligible enough to fairly educated people, native and European. It deals with the food we eat, the water we drink, and the air we breathe; and the necessity for the sufficiency and purity of all three is well insisted on in detail. In a general way, all educated people give a languid assent in words to this necessity; but we need not go to India in search of people who, while giving a verbal assent in general terms to the fundamental principles of sanitation, honour them with their lips, but in their daily lives and practice set them at nought.

We have looked through Mr. Thomson's *Sanitary Principles* with care, and can confidently recommend it as a useful guide, not only to educated natives of India, for whom it is mainly intended, but also to military officers and members of the Civil Service, who, although in the present day invariably well, and often highly educated, too often go to India deplorably ignorant of the laws of health, personal and public, with consequences often deplorable to themselves and to those they are expected to guide and govern. When the information given in this little work on air, water, food, on soils and sites, on the construction of habitations, the disposal of sewage and of the dead, and the simple rules on personal hygiene and the prevention of disease, becomes general among our countrymen in the east, and the people they are sent to govern, we may look for a diminution of mortality, and an increase of human happiness hardly to be estimated.

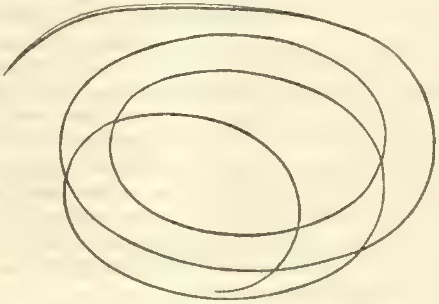
REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW SURGICAL NEEDLE AND THREAD.

(Exhibited in the Surgical Section at the Meeting of the British Medical Association at Liverpool.)

By JOHN WARD COUSINS, M.D.LOND., F.R.C.S.,
Surgeon to the Royal Portsmouth Hospital.

THIS is a very simple innovation, the ordinary steel needle can be superseded by converting the end of the wire into a needle. The wire is cut into equal lengths, and each piece is separately reduced by drawing, with the exception of an inch or two at one extremity. The end is then converted into a convenient needle by pointing and burnishing.



This little invention offers several advantages in many surgical applications. The needle is always new and clean, and it can be used only for a limited number of sutures. It requires no preparation or threading, and the continuity of the needle and the ligature prevents the delay in introduction which often occurs with the ordinary needle from kinking or twisting at the eye. The point is always perfect, so that the pain of penetration is considerably reduced. Damaged needles are instruments of torture; and, even in these days of antiseptic surgery, I have found them carefully preserved in pocket-cases ready for any emergency. The chief purpose of this little invention is to prevent unnecessary pain, and to provide a needle with a perfect point, which can be used only in the introduction of eight or ten sutures, and then thrown away for ever. It is, moreover, especially adapted for the immediate surgery of the field of battle.

In my hands, nickelled steel wire has proved an excellent metallic thread for closing skin-wounds; and, in consequence of its peculiar rigidity, it requires only one turn of the ligature to secure the edges in perfect apposition. It admits also of very easy removal, and this is a great advantage, for the "taking out" of the thread is often a more painful operation than its introduction. The single turn of the wire should be made on one side of the wound, over the point of penetration; and then, on dividing the wire, close to the skin on the opposite side, the suture can be withdrawn with great facility.

The surgical needle and thread is manufactured by Messrs. Maw, Son, and Thompson, in several convenient sizes, from nickelled steel and silver wire. The steel needles are made both straight and curved; the silver needles are tipped with steel, and flexible, so that they can be bent to any shape, and are thus especially adapted for many plastic operations. To protect the point from accidental injury, each needle is supplied with a shield of fine straw.

SALARY OF AN OFFICER OF HEALTH. The Local Government Board, in writing to the Arlecdon and Frizington Board acknowledging the receipt of a letter informing them of the death of Dr. Syme, said "they trusted that when another medical officer of health was appointed they would make such an increase as would be satisfactory."

BRITISH MEDICAL ASSOCIATION. SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 1st, 1884.

THE ROYAL COMMISSION ON THE DWELLINGS OF THE POOR.

IT will be seen, from our summary of parliamentary intelligence in another column, that the Government have granted the Royal Commission on the Housing of the Poor, for which the Marquis of Salisbury moved on Friday last. Whatever may be the views which we entertain as to the outcome of the Commission, or even as to the need of its appointment, it cannot be denied that, both in the mode of its origination and in the character of its constitution, it starts under the most favourable auspices for its success. It is true that there are one or two names on it whose special fitness for the work which it will have to undertake is not at first sight very apparent; and there are certainly several others not upon it whose presence would have much increased the confidence of the public in the good results which it will effect. But, taking it as it stands, it contains a sufficient number of earnest and competent men, whose capacity to get at the truth, and whose resolution to let it be known when they have discovered it, is so well established as to offer a solid guarantee of painstaking and impartial effort to deal with the important subject that is entrusted to them in a comprehensive and exhaustive manner.

And now that the Commission is appointed, what, it may be asked, can we expect that it will do? In some remarks which we made on this subject a few weeks ago, we ventured to urge that it was not easy to see what a Royal Commission could do in the way of adding to the information which we already possess in abundance, in regard to the facts of the case. That our contention, in this respect, was correct, is proved conclusively by the support given to it in the debate on Friday, in the House of Lords, by two such competent authorities as Lords Shaftesbury and Carrington. The noble earl, whose life-long experience of all that relates to the poor gives great weight to any statement which he may make in connection with this subject, asserted that the information already obtained in regard to it was "far more minute and accurate than could be obtained by any Royal Commission." Lord Carrington, who represents the Local Government Board in the House of Lords, also stated that the Board is already "in possession of most of the necessary information as regards populous places." For, as both he and the Earl of Wemyss, in a subsequent stage of the discussion, pointed out, a Committee of the House of Commons, which sat in 1881 and 1882, thoroughly threshed out the causes of the failure of the various Artisans and Labourers Dwellings Acts; and the recommendations which they made, as the result of their labours, have been embodied by the Government in legislative measures which they have framed and carried into effect accordingly. Even Lord Cranbrook, whose political sympathies with the mover of the Address doubtless made him feel, more strongly than members of the Government would do, the need of strengthening the case for a Commission, was only able to suggest that the reason why he was desirous of seeing it appointed was, "because of the valuable service it would do in bringing to a focus all the information on the subject, and having it investigated." His lordship's illustration is a happy one. We have abundance of information already, and the Commission will only be wasting its time if it trouble itself to seek for more; unless it may be in regard to such few points as may need special elucidation. What we really want is to "focus" our information. We want to eliminate the "chromatic aberration" of sensational descriptions, and the "spherical aberration" of writers and speakers who can only see things from their own individual point of view. We shall then be better able to bring the rays of our knowledge to a true focus, and, having done this, we shall see the better what is the path in which we ought to proceed, in order to attack the hydra-headed evil with which we have to deal.

And there is the additional reason for keeping this aspect of the functions of the Commission prominently in view, that it will enable its members to guard against the possible effect which its appointment may have in arresting the action of local bodies, as well as of voluntary organisation, in the efforts which are already being made in this direction. The Prince of Wales, in the short but graceful speech which he made on the occasion, expressed somewhat emphatically the belief which he felt that the Royal Commission could in nowise clash with the efforts of private individuals. If His Royal Highness had used "should" for "could," we should have felt more confidence in the view which he enunciated. But we venture to think that the experience of those who have had much to do with movements that need the aid of a powerful public opinion for their support, will confirm our conviction that anything like a protracted delay on the part of the Commission in publishing the results of its labours will have a most disastrous effect in paralysing the efforts both of voluntary philanthropy and of official zeal. Everyone who has had anything to do with the question of the treatment of sewage, for instance, by local sanitary authorities, must have had abundant opportunities for observing how ready they are to shelve any suggestions for action by the excuse that a commission, or a committee of inquiry, of some sort or other, no matter what, is investigating the matter, and that they think it expedient to do nothing until they can learn what such commission or committee advises them to do. The fact is, that procrastination is the badge of all the tribe of people with whom we have to deal in this matter. Landlords, vestrymen, local boards, and all who are interested in the sort of property upon which the public are seeking to lay their hand, will avail themselves of any excuse to avoid doing just that one thing which is the chief difficulty we have to face, namely, spending money to improve it. In view of these considerations, it is somewhat reassuring to find that the noble marquis at whose instance the Commission has been granted, expressly states his opinion that a "speedy investigation" of the matters entrusted to it is necessary. In the course of the admirable speech which he made, he ably shadowed forth some of the more important problems which it would be the duty of the Commission to solve; and we feel assured that, intricate as some of these problems are, there is no body of men to whom the office of resolving them could be committed with greater hope of success than the powerful combination of earnest philanthropy, cultivated intelligence, and shrewd knowledge of the world, which is to be found in the Commission of which Sir Charles Dilke will be the appropriate head.

THE TREATMENT OF ENTERIC FEVER BY COLD BATHING.

THERE are few more remarkable instances of the oscillatory progress of medicine than is to be found in the history of the treatment of fever. In the days of the saints it seemed a reasonable proceeding to put a man suffering from fever under the pump. A rebound came, and anything in the shape of a chill was deprecated as likely to send the fever in, or rather the rash which was the open expression of it; and now, in modern days, we again, not only discuss, but apply, a treatment similar in its aims to that of our ancestors for the moderation certainly, some think possibly the abolition, of fever. Happily, however, in the present we have more numerous means at our command, and those that are so, are more delicately adjusted for the wonderful mechanism to be dealt with. Were it not so, the more open measures, such as cold bathing and the methods allied to it, would have but little chance of success; at least, it would be left to the most energetic and robust medical advisers to propose them much in the same way as the practice of bleeding stands now. The patient dislikes the idea of venesection even when it would probably be beneficial to his recovery; and, in the uncertainty of medicine, the medical man does not think it worth his while to insist upon a treatment so repugnant. It is not far otherwise with the bath-treatment of fever. The conditions of hyperpyrexia are more urgent, and the relatives of a patient thus affected more willing by so much to listen to reason; but the public is as yet not sufficiently instructed to like the idea; and, in proportion as this treatment is extended to cases other than the worst cases, so at present there will be difficulties in applying it. For this reason, therefore, the discussion just concluded at the Medical Society of London is of very considerable value. It will serve to clear the air by making manifest, in some measure, what is the mind of the profession in the matter; for it is clear that to have any chance of success, a method, which, in a most important respect, traverses notions which may be almost said to belong to us as instinct, must be recommended by those who have no doubt of its efficacy. The discussion in question was the treatment of typhoid fever by cold bathing; but, while the scope was thus narrowed in one direction, it was widened in another, because facts which do not admit of dispute for hyperpyrexia, allow much room for discussion when applied to the conditions of ordinary fever. Dr. Coupland, in his elaborate and able paper, rightly says that cold bathing is the only measure which has succeeded, and he might have said on several occasions, in saving life threatened by hyperpyrexia, and no one would dispute its efficacy as a last resort in such urgent cases. But it is the employment of the bath to control the whole course of the fever that he discusses in his paper. The conclusion at which he arrives is one in common with Brandt, Jürgensen, Liebermeister, Cayley, and others, that the mean mortality of London from enteric fever treated all round is 15 to 18 per cent.; while the mortality from cases treated by the cold bath would appear to be from 10 to 7 per cent. This is so material a reduction that, if the facts are to be relied upon—and we think they are sufficient for the purpose—it should ensure for this treatment a much more extended sphere of application than it has hitherto obtained. As regards the facts, we think they are worth attention, if only on *a priori* grounds. We are now quite familiar with the demonstrations of experiment which show that all the tissues are structurally damaged by the persistence of pyrexia. As a matter of fact, demonstration is hardly needed, when it has happened to most of us to see the wreck of brain and muscle produced by a prolonged attack of typhoid fever, and the anxious period of slow rebuilding which follows. Nevertheless, it is not without value.

Again, there are illustrations in abundance that pyrexia reacts upon local conditions, and may, therefore, and probably does, intensify any local inflammation which may even have been instrumental in calling it into existence. Unless, therefore, it can be shown that the antipyretic treatment by the application of cold increases the mortality by increasing the frequency of hæmorrhage or pulmonary complications, which is not likely to be the case, if it be applied early and at the same time with discrimination, a strong case is made out for its more general adoption. At the same time, we are far from underrating the difficulties of drawing conclusions from figures. Perhaps there is no disease which is more capricious in its course; it constantly happens that continued fever is called typhoid because we do not know what else to call the attack, and when, under these circumstances, it becomes the practice to cool fever at 102°, for instance, and to start as early as possible in the course of the attack, no doubt this treatment will acquire here, as it has already acquired abroad, a better character than it deserves.

It is a truism that nothing succeeds like success. In this respect, Dr. Bristowe's criticisms are of great value. There can be no doubt whatever that the application of the cold treatment to fever is the handling of a means of great power, and of proportionate danger if used without discrimination; and this in all sorts of ways, as regards the type of the fever, and the patient who is to be treated. We talk of dangerous remedies, but it is a question of risks. A disease so severe as to be dangerous to life can hardly avoid some risk in other directions in the treatment, if the malady is to be combated successfully. We can, therefore, but expect that baths will occasionally produce grave results, and such must be carefully noted as they occur, that they may be avoided as far as possible subsequently. As regards Dr. Bristowe's remark, that in St. Thomas's and other hospitals the treatment has been abandoned after trial, we venture to hesitate before accepting all that it might seem to imply. All, of course, hinges upon the question what the trial has been; the treatment, as we have said, is one at the results of which it is difficult to arrive. Dr. Taylor showed this from the experience at Guy's, in consequence of the want of uniform method. Some are bathed, some sponged, some packed, some cooled once or twice only during a long course of fever; but it may be doubted whether there has yet been any systematic practice of this kind, except by individuals and at the Fever Hospital. And it is well worth noting that all who have tried the bath-treatment of enteric fever, or most of them, spoke warmly in its favour; and, of those who spoke against it, very little evidence was forthcoming, except by Dr. Bristowe, of the objections that were raised being the outcome of their experience. Dr. Samuel West summarised his remarks in four objections; and much of the mind and heart of the profession would probably concur with Dr. West's objections; but what are they? That the cold water treatment is based upon an one-sided view of the process of fever—but the same might be said of any or every treatment for almost any disease. Mercury hits syphilis when the marksman has but a very fractional view of the bull's-eye. Again, it is objected, that the success of the treatment depends upon the clinical skill with which it is applied; we should certainly be sorry to deny it; but is it any less so with digitalis in heart-disease? Dr. West is, no doubt, correct in saying that a general opinion has developed against the practice; but this has been already indirectly alluded to, and in some measure explained, in a sense that makes the objection of less weight than it would otherwise be entitled to.

Lastly, it is said that this is a question which statistics will not settle. We admit, for there is no doubt about it, that typhoid fever varies to a high degree in intensity in different epidemics, and we only come back to this: that it is unsafe to take a large number of cases collected from all sources, of which no minute details can be stated; and that the experience of individuals, provided it be obtained upon some definite plan, and is large enough to ensure an average result, is probably more reliable. We should think this the more, for another reason just noted; that no doubt this is a treatment that does require clinical skill. It seems that this personal experience for a sufficiently long period, and from several independent workers, is still a desideratum. Dr. Coupland's series is admirable, as showing the kind of elaboration that is wanted; but it is hardly sufficient as yet to prove the reduction of the mortality—the kernel of the matter—though unquestionably the finger of observation points that way.

Thus far, on the whole, facts are in favour of the cold bath. But there is another aspect of the question which must be by no means reckoned too cheaply. Is the general adoption of this plan practicable? This hardly received the attention that was its due. Dr. Mahomed did indeed express the opinion that there was no valid objection to the application of the antipyretic treatment in private houses. But if by antipyretic treatment he meant the cold bath, it is quite certain that within a very short radius of his window several of those who are engaged in general practice could easily be found to convince him of his error. It is too often forgotten in the treatment of disease, that the attitude, the often enforced attitude, of the general practitioner to his patient, is "all things are good, but all things are not expedient." There is the already mentioned cold reception of the suggestion of a distasteful remedy, when coming at the onset of the illness, and when there is perhaps no appearance of any great severity of the attack; for, it must be remembered, we are not now dealing with hyperpyrexia. This is an objection valid enough, since it is a real obstacle; but put it aside as worth nothing in face of an increased risk to life, and then come to no bath but the morning tub; no nurse, perhaps, but a sister or wife; perhaps there is a suitable bath, but the room is so small, or the bed so high, as to make the moving the patient a matter of the greatest difficulty.

These are only some, indeed few, of the difficulties met with in hundreds of homes in the middle classes; and, as a matter of experience, we venture to say they are often so great, as to make even an advocate of the cold bath look sometimes very carefully to see if, perchance, some less radical measure may not suffice for the occasion. Even in a hospital, a case requiring frequent bathing upsets a ward considerably, and we have certainly to learn that, except in the best appointed homes, a treatment which consists of lifting a patient in and out of bed, perhaps frequently, bathing him, etc., can be anything but troublesome and disagreeable.

No doubt there are many families where means, intelligence, education, and energy on the part of the medical attendant, will all contrive to render the treatment as easy as possible under the circumstances; but, for the present, the rule being, we believe, as we have stated it, what is wanted is a comparative series of cases treated by the cold bath on the one hand, and by other measures, such as sponging and ice-packing, on the other.

It is admitted on all hands that the reduction of temperature by bathing is more decided and more persistent than by any other means; but, at the same time, we cannot think that the ingenuity of the mechanical mind has exhausted itself in its present measure of applying cold to the surface of the body. It would hardly be an insuperable difficulty to apply continuous cold to the surface, either dry or moist, equivalent to that of the bath; and it is quite possible that in the ice-pack and the water-bed, or some modification of it, the advantages might be obtained without the necessity of taking the patient from his bed.

THE INDIAN MEDICAL SERVICE.

It is some time since, in our editorial columns, we invited the attention of our readers to the grievances of the Indian officers of the above-named service. We were willing to hope that the temperate language in which this subject has been treated in this Journal, as well as the respectful representations of the case of the medical officers, by the Parliamentary Bills Committee of the Association, to the Secretary of State for India, would have sufficed to bring about the desired redress. We are sorry to say that our reasonable hopes have not been realised. One thing only has been done; the India Office has withdrawn the deceptive document put into the hands of intending candidates for appointments which has given rise to so much discontent, for the very plain reason that it held out expectations which were not fulfilled. Mr. Cross, in the House of Commons, strongly maintained, in the face of very stubborn facts, that, as regards this ingeniously worded document, its promises were carried out to the letter. It is remarkable, after such a statement by a responsible Minister, that, as we have just said, it has been withdrawn, and an "amended memorandum" substituted, which, although not so clear on some points as it might be, at all events explains what is meant by the terms "officiating" and "substantive" appointments respectively. Beyond this, redress does not go. In no way does this improve the position of the junior officers, who, as they truly say, were induced to take service under the Government of India by the promises held forth in the document now withdrawn. We have before us the *Indian Medical Gazette* for January of this year, a most valuable and ably edited journal; the editor is a medical officer of distinction, whose name is on the title-page of his journal. How strong must be the case of the junior officers of the service, when this gentleman, under the very nose of the Supreme Government of India, expresses himself, in an interesting review of the *Annus Medicus*, 1883, in the following plain terms. "Great discontent has existed among junior officers of the Indian Medical Service on account of their long detention on 'unemployed' rates of pay, even when, to all intents and purposes, 'employed.' The hardship of having to pay their own travelling expenses, when proceeding to join appointments in which they draw a few rupees more of monthly pay, is also acutely felt. These are very substantial grievances, and it does not conduce to the credit or welfare of the State that they have not been redressed." It is true that, in another paragraph, the editor attempts to console the aggrieved officers with the cold comfort to be derived from the assurance, "that their success in life, or in the service, does not depend on the few hundred rupees, more or less, which they may draw during the earlier years of their career." But when the fact is considered that the treatment of which the juniors complain is in itself a gross injustice, extending over five or six years of their service, we are of opinion that the grievances are very "substantial" indeed.

We are reluctantly constrained to notice a rumour which has been, we are assured, widely circulated, at least in the Bengal medical service, on high authority, to the effect that, if they give more trouble, Lord Kimberley is prepared, if necessary, to sanction the dismissal of the seventy or eighty junior members on the list. We cannot believe that Lord Kimberley would for a moment contemplate a high-handed measure like this.

It is probable that this unofficial threat, if made at all, was issued in a moment of irritation from the lips of some local official, who has, without authority, used the Secretary of State's name. Such a measure as this would call for justification in the House of Commons; and we need hardly add that the justification would need to be something more substantial than the fact that a body of officers, who, rightly or wrongly, considered themselves aggrieved, had made these grievances known, and, without a single breach of military discipline, had sought redress at the hands of the Government they serve.

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A meeting of the Medical Sickness, Annuity, and Life-Assurance Society will be held at 38, Wimpole Street, on Thursday, March 6th, at four o'clock.

THE VIRUS OF HYDROPHOBIA.

M. Pasteur made an interesting communication to the Paris Academy of Sciences, on February 26th, in relation to canine madness. He stated that the disease could be communicated to a dog by inoculation with fragments of marrow or of nerve taken from a mad dog. He also stated that he had rendered twenty dogs proof against the disease by inoculating them with a modified virus.

AN INTERESTING TREE.

At a recent meeting of the Berlin Medical Society, Professor Virchow showed photographs of a gigantic plane-tree in the island of Cos, under the shade of which Hippocrates is said, by tradition, to have held medical consultations. The tree now stands in the market-place of the town of Cos, on the east side of the island. The branches, which spread over nearly the whole of the market-place, are supported by marble pillars.

AN OTOLOGICAL CONGRESS.

It is intended to hold an international congress of aural surgeons in Basle from September 1st to 4th. Notice should be given before May 15th to Dr. Burckhardt-Merian, of Basle, of any papers or specimens which it is intended to read or to exhibit. Mr. W. B. Dalby, of St. George's Hospital, and Dr. Urban Pritchard, of King's College, are the English members of the committee of organisation, which includes also the names of Dr. Burckhardt-Merian (President), Dr. C. J. Blake, of Boston, Dr. Hartmann, of Berlin, Dr. Löwenberg and Dr. E. Menière of Paris, Dr. A. Politzer, of Vienna, Dr. St. John Roosa, of New York, and Dr. G. Sapolini, of Milan.

DEPUTY SURGEON-GENERAL O'LEARY.

WE are much gratified to learn that Dr. O'Leary has been gazetted to the honorary rank of Deputy Surgeon-General. This step on the part of the military authorities shows that they are completely satisfied that Dr. O'Leary has entirely cleared himself from the aspersions brought against him with regard to his conduct while serving with the Egyptian expedition. We heartily agree with our contemporary, the *Broad Arrow*, that "it is a matter for sincere congratulation that Dr. O'Leary should have been thus reinstated in rank and reputation before the world. It is not given to every man whose character has been clouded by misrepresentation to be so speedily and completely restored to good fame."

THE DESTRUCTION OF SCENERY.

WE are glad to note that Mr. Bryce's motion in the House of Commons, to instruct the Committee to which the Ennerdale Railway Bill was referred, to inquire whether the proposed railway would interfere with the enjoyment of the public, was carried by a majority of 20. The necessity for the construction of the railway, which would probably deface the scenery of one of the most beautiful remaining valleys of England, is more than doubtful. In the first place, it is stated that, in four miles of the district proposed to be served, there are only 12 or 15 houses, with a total population of 75; and, in the second place, there is, at the present time, a railway-station within a mile and a half of Ennerdale Bridge. The argument that the railway will benefit the working classes who desire to enjoy the scenery will not bear inspection.

A MODEL UNSANITARY HOUSE.

AT the International Health Exhibition, one of the most amusing, and at the same time most instructive, of the objects exhibited will undoubtedly be the model, on a large scale, of a house, illustrating every kind of sanitary defect; pan water-closets with D traps, baths and housemaid's sinks in direct communication with the sewers, cisterns for drinking-water into which sewer gas is carefully supplied, badly made plumbers' fittings, unventilated rooms, smoky chimneys, and many other similar evils, will doubtless be fully represented among the apparatus of this house, and it will, we imagine, be honeycombed with cess-pools, and undermined by leaky drains. This house will be contrasted with another, as perfect in every detail as the combined skill of the Committee entrusted with the task of carrying out this scheme can make it. This Committee consists, we believe, of Captain Douglas Galton, C.B.; Professor Corfield, M.D.; Mr. Rogers Field, C.E.; Mr. Ernest Turner, C.E.; Mr. W. H. Collins, C.E.; and Mr. George Shaw, Master of the Plumbers' Company.

WESTON'S WALK.

ON the 21st February, after walking from Birmingham to Worcester, Weston, at 9.30 P.M., completed 4,000 miles, four-fifths of his whole undertaking, after which he lectured under the presidency of the Mayor of Worcester. Next day, in wet weather and over heavy roads, the pedestrian walked *viâ* Tewkesbury to Cheltenham. On the way, his left heel was again injured by a constable stumbling over the walker, from the pressure of the crowd. On Saturday, Weston, still lame, started from Cheltenham before 5 A.M., and walked to Bristol (46 miles) without a halt. This is the longest unbroken distance he has made on his present tour. On Monday, he spent the day in the Victoria Rooms, Clifton, setting out a little after 7 A.M., and finishing at 9.30 P.M. He walked steadily at the rate of four miles an hour. On Tuesday, he went from Bristol to Bath, at which latter place he finished the day's journey at the People's Hall, walking 40 miles of the record without a break. During the past week, Weston has thus greatly improved. He was in better form at the end of 4,200 miles than when he set out from London, and bids fair to succeed in accomplishing his self-imposed and extraordinary task. He will visit Salisbury, Southampton, Portsmouth, and Brighton, and finish up with a week of pedestrianism in the Victoria Coffee Hall, long well known as the Victoria Theatre, in the New Cut, where several medical men and others will preside at his evening lectures.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE annual meeting of the Royal Medical and Chirurgical Society will take place at 8 P.M. on Saturday, March 1st, when the yearly elections will be held. The following is the list of officers and other members of Council nominated for 1884-5. *President:* *George Johnson, M.D., F.R.S. *Vice-Presidents:* *William O. Priestley, M.D.; Reginald E. Thompson, M.D.; Richard Barwell; William S. Savory, F.R.S. *Treasurers:* Charles B. Radcliffe, M.D.; J. Cooper Forster. *Secretaries:* R. Douglas Powell, M.D.; M. Berkeley Hill. *Librarians:* Wilson Fox, M.D., F.R.S.; John W. Hulke, F.R.S. *Other Members of Council:* George F. Blandford, M.D.; Dyce Duckworth, M.D.; Samuel J. Gee, M.D.; Frederick W. Pavy, M.D., F.R.S.; *C. Theodore Williams, M.D.; *John Croft; *Sir William MacCormac; *Thomas P. Pick; *William Sedgwick; W. Spencer Watson.—Those gentlemen to whose names an asterisk is prefixed, were not on the Council, or did not fill the same office last year.

THE ILLNESS OF DR. C. THEODORE WILLIAMS.

WE much regret to hear that the condition of Dr. C. Theodore Williams has not continued to improve, as the last report led us to hope. Although the fever had entirely subsided at the end of the third week, abdominal pains continued to recur; and, in the fifth week, the temperature rose to 102°, and on three days to 103°, with distinct indications of peritoneal inflammation. Under the continued use of opiates and turpentine-fomentations, these symptoms were mitigated; but, a few days ago, the stomach gave way, and nausea and retching prevented the due supply of food. Nutritive injections satisfied the need till the sickness subsided. He is now again able to take light peptonised food, and the temperature continues to fall. Although again more hopeful, the general condition and weakness are such as to cause continued anxiety.

THE MUSEUM OF THE ROYAL COLLEGE OF SURGEONS.

WE have received a copy of the second volume of the catalogue of the specimens illustrating the osteology and dentition of vertebrated animals, recent and extinct, contained in this museum. It is devoted to the class mammalia, exclusive of man, and has been prepared by Professor Flower, with the assistance of Dr. J. G. Garson. It forms a very stout volume, of about eight hundred pages. Great care has been taken to ensure correctness in regard to generic and specific names. The principles adopted in the arrangement and description of the specimens are much to be commended. The scientific name of the genus and of the species, and the authority for these, and the most important synonyms having been determined, the best known English name, when any exists, and the general habitat, without entering into details of geographical distribution, are given. In the case of extinct species the names are printed in old English type, and the geological horizon in which their remains are found is added. Each number usually represents the whole, or such parts as the museum contains, of a single individual animal. In order to make the work of greater utility than a mere list would be, the modifications of the dentition, characteristic of the different groups of the mammalia, are given so far as they can be represented by the usual formulæ. The collection which is the subject of this volume includes 3,972 specimens. The catalogue is a work of the highest value, and reflects great credit on its authors, who have laboured under very great difficulties in the course of its compilation, especially in identifying the species of many rare specimens, and in the less interesting but equally necessary task of ascertaining synonyms and variations in nomenclature. The third volume of the *Pathological Catalogue* is in the press, and will shortly appear. There is yet a great task to be completed in another department of the vast collection in the museum of the Royal College of Surgeons, a task that offers a field of solid labour and high distinction to many young workers in the metropolis. We refer to the physiological series, which includes a vast number of specimens of the viscera and organs of locomotion, etc., of man and of animals of every grade in the scale of life. A catalogue of this series would, in every respect, amply reward its authors for many years of hard work in its compilation, and it is most remarkable that no person has as yet volunteered to undertake so profitable a task, after the example of Mr. B. T. Lowne, who prepared the catalogue of the teratological series.

MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

WITH the view of extending the field of usefulness of the Medical Sickness Annuity, and Life-Assurance Society, it is proposed to establish local committees throughout the United Kingdom. It cannot be doubted that the formation of these local committees will be of great service in making the objects of the Society more widely known throughout the profession, and will aid in its futher development. Though the Society first took form at a meeting held during the Liverpool meeting of the British Medical Association, it draws its members from the profession at large, and is in no way limited to the members of the Association. Already more than half the number required to place it on a paying footing have been enrolled, and great credit is due to those whose exertions for the success of the Society have been dictated by the one desire to make its benefits more widely known. Mr. Ravenhill of Birmingham, who was one of the first and most active promoters of this Society, and who has watched with keen interest its rapid growth and healthy development, has sketched out a *modus operandi* for effectually carrying out this proposal as to local committees, which was first made at an early meeting of the Society. The course which Mr. Ravenhill proposes to adopt in Birmingham and its vicinity, and which he thinks may serve somewhat as a guide for other large towns, is the following. When a certain number of members have been obtained in any town or district, he proposes to call them together, and let them elect from their own number a committee of about ten members. This committee would call a general meeting of the profession in the town and district, in order that the subject might be thoroughly ventilated. They would also each be answerable for making a personal canvass of all the medical men in their own district.

THE LOST MEDICAL WORK.

IN reference to the loss of Woolveridge's *Speculum Matricis*, published in Dublin in 1670, and the earliest original work on midwifery written in the English language, we have learnt, since our article on the subject last week, the following particulars from Dr. Godson, who informs us that the person intrusted with the volume, for the purpose of copying it, has not been proved to have absconded with the volume. Dr. Fordyce Barker, in a letter to Dr. Godson, dated May 15th, 1883, gives a full account of the transaction. Dr. Barker possessed a copy of the book in question, and about five years ago, at the request of the Obstetrical Society of London, took steps to find a man who could make a copy of it for the Society. Two American librarians referred Dr. Barker to a well-known and learned dealer in old books, named Sabine, now deceased. Mr. Sabine recommended an eccentric Frenchman, who lived in constant penury, but was a good copyist, much employed by collectors in New York, London, Paris, and Rome. This man, whose name was Emile Bourgeaud, undertook to copy the specimen of *Speculum Matricis*, which was at once lent to him for the purpose by Dr. Barker, who could not get him to fix on any sum to be paid for his services. Dr. Barker lost sight of Bourgeaud for a long time, but in April, 1881, he brought back the book, repaired with great skill, but only a part of the copy. Starvation had evidently prevented him from completing his task. Dr. Barker has never seen since then this poor copyist, who took away the book once more to complete the copy. He wrote once to Dr. Barker, saying that he had been invited to Brazil by the Emperor, in order to do some work for the Imperial Library, but hoped to be back in New York by November, 1881, with the book completely copied. Bourgeaud never returned the work. Dr. Barker communicated with the United States Legation at Rio de Janeiro, and was informed that Bourgeaud had really been at work in the Imperial Library, and he had never asked for any remuneration, though his work had given great satisfaction. A steerage-passenger in a steamer which sailed from Rio in November, 1881, was entered in the ship's list as "A. Boojo." Dr. Barker then discovered that the ship's cook, a Frenchman, named Quinquinet, had taken great interest in this passenger. On landing in New York, he took his unhappy countryman, who was in very bad health, to a low French tavern in Worcester Street. In May, 1883, Dr. Barker found out this tavern, and discovered from the landlady that the sick Frenchman had brought with him a box, and asked for ink, but used to sit still in his room doing nothing, and his reckoning was only once paid, and then by some friend, who took him and his trunk away. This is the last news that Dr. Barker could obtain about poor Emile Bourgeaud. It is very unlikely that he destroyed either the original book or his copy, and it is to be hoped that it was found in the box by the friend, if Bourgeaud really died soon after leaving the French tavern, as appeared to be highly probable. If the friend and the box could be traced, the ultimate fate of the book may yet be known. Possibly some of our readers may find the missing work on this or on the other side of the Atlantic.

THE DENTISTS' ACT.

IN commenting upon the action of the Executive Committee of the General Medical Council with regard to their refusal to admit a qualified medical practitioner to the *Dentists' Register*, we were recently (BRITISH MEDICAL JOURNAL, p. 279) led into error. The rights of the medical profession were preserved, as Mr. John Tomes has been good enough to point out to us, by the second part of Section III of the Dentists' Act. The absurdity, in reality, consists in this, that a person possessing a medical qualification, may, without giving any proof that he possesses any special dental knowledge, legally call himself a Dentist, or Dental Surgeon, but yet cannot have his name placed upon the *Dentists' Register*.

THE "BACILLUS OF CHOLERA."

THE microscopical specimens of organs and of stools, from cases of cholera, sent to this country by M. Straus, chief of the French Cholera Commission, and exhibited before the Royal Medical and Chirurgical Society on February 12th, were referred to a committee for examination, and the following is the report drawn up by this Committee. "We have examined the microscopical preparations exhibited to the Society on February 12th, 1884, and have found in them the micro-organisms described by Dr. Straus, but do not observe any features of the bacilli in the tissues that can be considered as specific. Signed, E. Klein, M.D., F.R.S.; Heneage Gibbes, M.D.; Victor Horsley, B.S., F.R.C.S."

POISONING BY PRESERVED TURKEY.

M. DARNET, *pharmacien*, of Soulac, describes the symptoms of poisoning experienced by himself and three friends, who partook together of the two wings of a "confit de dinde," prepared four months previously, under his own superintendence, in an iron saucepan, so that all suspicion of contamination by copper or lead was out of the question, and in which neither the eye, smell, nor taste could detect anything amiss. His friends left soon after dinner, but, between two and three hours later, he was suddenly seized with severe headache, vertigo, and repeated eructation, followed by violent vomiting and a sense of extreme weakness. Five hours after dinner, diarrhœa set in, with frightful colic and profuse sweating. With difficulty he reached his bed, when he was seized with convulsive tremors, intolerable coldness of the extremities, and a sensation which he could only compare to an "alternate strangulation and paralysis of his lungs," such that for a whole hour his face was livid. In spite of a kilogramme of ice and three siphons of soda-water, the vomiting and diarrhœa continued for six hours, and a glass of cold water almost every minute failed to allay his thirst and burning sensation in the throat. He then, nine hours after dinner, fell into a profound slumber, from which he did not wake till next day. Dr. Durand, who was called in at the first commencement of the symptoms, on examining the *confit*, noticed several greenish or yellowish patches in the folds of the limbs; these M. Darnet identified as *penicillium glaucum*, the development of which he attributes to the presence of air, the melted fat not having completely filled the jar, but left some vacant spaces in contact with the meat. To explain the very discordant accounts given of the effects of *penicillium* and *aspergillus*, M. Darnet suggests that it is not the mould itself, but particular products, probably ptomaines, to which it gives rise, that induce these toxic effects. M. Darnet's friends suffered, on reaching their homes, in a similar manner, but far less severely, having eaten much less.

PRESENTATION TO DR. MICHAEL TAYLOR OF PENRITH.

On Friday, February 22nd, after the dinner of the Border Counties Branch of the British Medical Association at Carlisle, an address was presented to Dr. Michael Waistell Taylor, of Penrith. The address referred to Dr. Taylor's achievements, not only in medicine and pathology, but in archæology, and to the very high estimation in which he was held by his professional brethren, as was evidenced by his unanimous selection as the President of the Border Counties Branch on its formation sixteen years ago. Dr. Macdougall, the President of the Branch, occupied the chair, and paid an eloquent tribute to the life-work of Dr. Taylor. We heartily join in the hope that Dr. Taylor, who carries into an honourable retirement the esteem of troops of friends, and the consciousness of working-days well spent, may long live to enjoy his well earned repose.

NEPHRITIS AFTER VARICELLA.

In a recent number of the *Berliner Klinische Wochenschrift*, Professor Henoch relates briefly four cases which have come under his notice, in which varicella was followed by nephritis. The patients were aged respectively 10, 2, 5, and 4 years. In all, the eruption of varicella was generally abundant, and was accompanied by fever; and, at the end of a period varying from eight to fourteen days from the appearance of the eruption, there was œdema, with nephritic urine. In three of the cases, recovery took place in a few weeks, under the use of diaphoretics, with Bilin water or acetate of potash as a diuretic. One, a girl aged 2, who was the subject of congenital syphilis, died; and, after death, there were found œdema of the lungs and hypertrophy of the left ventricle. Dr. Henoch has not been able to find any record of varicellar nephritis in medical literature. He regards it as analogous to the nephritis which attends other infectious diseases, especially scarlatina.

MEDICAL ASPECTS OF THE SOUDAN EXPEDITION.

In a recent number we drew attention to the highly unsanitary state of Suakin and its environs; we have every reason to believe that the condition of other seaports on the western shore of the Red Sea is in no way superior. The intention of the English Government is said to be to rescue and retire, but no one knows how long this process will take; in war nothing is certain but the unexpected. If the troops be detained in the low ground near the Red Sea, we anticipate a large amount of sickness; malarial fevers are extremely prevalent in that region; the hot season is at hand; the strongest and healthiest men, exposed to great heat, bad water, heavy duty, and food indifferently cooked, are quickly reduced in strength by waste of tissue, and become exceptionally liable to dysentery and other diseases of the intestines, and epidemics of typhoid fever and cholera. We do not wish to be alarmists, but we would like to learn whether the hygienic conditions of success have been sufficiently considered by the authorities at home. We are not now referring merely to the effects of heat; what these are, and how fatally and extensively they may affect a European force, the public have heard once more from Field-Marshal Lord Strathnairn, who in a speech delivered in the House of Lords last week, forcibly dwelt on this evil, illustrating it by facts that had come under his own observation during the mutiny in India, and emphasising his warning by quoting the order issued by the rebels that no attack was to be made on the English before eight o'clock in the morning, as the sun after that hour was most fatal to them. We are thinking rather of dangers to health arising from unsanitary surroundings. It is reported that the troops are to be supplied with drinking water from the ships; but have combatant officers been impressed with the necessity of preventing their men from following the natural instinct in a thirsty land to drink wherever water can be obtained? Are effective rules enforced to preserve the cleanliness of camps? In fact, have all the dearly bought lessons of former campaigns been utilised or wasted? We are quite sure that, if the medical and sanitary advisers of the authorities at home be listened to, every measure upon which science and experience have taught us to rely for the safe conduct of a campaign in a hot country will be taken; but with every precaution a climate such as that of the Red Sea littoral is a deadly climate, and if these precautions have been neglected here, or fail to be enforced there, the consequences of this folly will soon be apparent.

EXTIRPATION OF THE LARYNX IN AN OLD MAN.

In August last, Dr. H. Leisrink extirpated the larynx in a man aged 72, on account of a cancerous tumour which nearly filled the cavity and threatened suffocation. The patient recovered from the operation, and remained in good health for four months. He died in December, of croupous pneumonia. There had been no return of the disease for which the operation was performed.

MYXŒDEMA.

We are requested to state that the committee appointed by the Clinical Society to investigate myxœdema have drawn up a schedule of inquiry. A copy will be forwarded to any gentleman who has had cases of this disease under his care, on application to Dr. Hadden, 21, Welbeck Street, London, W.

MILITIA RESERVE FOR THE ARMY HOSPITAL CORPS.

From the reply to Baron de Worms' question as to the formation of a militia reserve for the Army Hospital Corps, it appears that steps are being taken to get men from the various militia battalions to form the nucleus of such a body. We believe that direct enlistment for a militia medical corps should be the rule, and really intelligent men chosen for it. Such an annual training to 1,000 men would form an aid in war-time of great importance to the medical service.

THE MEDICAL ARRANGEMENTS FOR OUR NEW CAMPAIGN.

So far as has been arranged up to date no distinct medical unit, either as a bearer-company or as a field-hospital, has embarked for Egypt from England. A party of forty men of the Army Hospital Corps have embarked under Surgeon Laffan for Egypt, but we understand that they will be employed in the Egyptian hospitals in filling up the vacancies caused by the removal of men of the Army Hospital Corps for the Suakin Expedition. While, on the one side, Lord Wolseley seems to be controlling the Suakin force in every detail, however petty, the medical arrangements for the expedition seem to be entirely under the local authorities in Cairo. This is evidently the sense of Lord Hartington's reply to the very important question asked by Sir Harry

Verney, in the House of Commons, as to the conservancy arrangements of our war-hospitals. No provision whatever is made in the regulations of the Army Medical Department for any conservancy staff for our hospitals, and, as a consequence, great trouble results from such an unsanitary state of things in war-time. The washing of the patients' clothes is also of great importance, and we hope the Cairo medical authorities will rise to the occasion, and not permit any hospital to leave for the front unless it be provided with men for these subsidiary services. We note that application has been made to India for tents for the hospitals. The Indian European privates' tent is in every way a better war-equipment than our marquee. The latter is very intricate to pitch. It really needs a mathematical calculation to get it into position, and the ropes and lines are far too numerous. It is also of too elevated a roof-line, and is liable to catch the wind in a dangerous manner. If the European privates' tent of India could be copied as the regulation hospital-marquee, it would be a great simplification in pitching a hospital-camp. We hope the approaching ambulance section of the International Health Exhibition will show us many varying types of hospital-tent, both of our own and foreign armies, and that the best and simplest pattern will be selected and sealed to govern future issues. In a campaign such as the Suakin Expedition, the efficiency of the mule-equipment of the medical service is one of great importance. The present mule-equipment of our bearer-companies is far from complete, and, as far as the regulations are concerned, is defective in medical comforts and cooking utensils. The supply of soup to wounded men immediately on being brought to the central dressing station is very important, and for its supply cooking utensils are needed. In originally drawing up the scale of field-equipment for a bearer-company with mule-equipment, both medical comforts and cooking utensils were omitted. The present Director-General of the Army Medical Department, noting this defect, added, during the Egyptian War, medical comfort-boxes, and canteens with cooking pots, and doubtless they will be found entered as part of the regulation equipment in the new edition of the Army Medical Department Regulations shortly to be issued. In like manner, the equipment of a field-hospital, carried by mules, is much needed; and, in view of our many varying wars, it seems desirable to fix on a defined unit suitable to be carried by a mule, and to reduce all equipment to this unit. Then, in our campaigns, the simple mule-pannier can be carried by two coolies, or two panniers by a mule, or four panniers on a Maltese cart, or eight panniers in a general service waggon. This seems to be a way out of the difficulty which besets an army like ours, which is one year at Coomassie with coolies, another year at Kandahar with camels, a third year at Cabul with mules, and is found, perhaps, another year with a Cape bullock-wagon as its transport-unit. We hope to see all these units of medical equipment complete at the Health Exhibition.

SCOTLAND.

THE death is reported from Gourock of a child to whom a dose of carbolic acid was administered by mistake.

MEASLES still continues prevalent at Maybole; and, though the disease is of a mild type, several deaths have occurred.

THE annual report of the Greenock Infirmary for the past year shows a large amount of work done, no fewer than 1,325 patients having been admitted to the hospital; but the revenue still falls short of the expenditure by several hundred pounds, which seems to call for increased liberality on the part of the public and of those who benefit by the institution.

EAST OF SCOTLAND UNION OF NATURALISTS' SOCIETIES.

A MEETING of delegates from the scientific societies of the counties of Aberdeen, Fife, Forfar, Kincardine, and Perth, took place in Perth on Saturday, February 9th. The object of the meeting was to establish a union of naturalists' societies for the furtherance of joint action in scientific work, and of friendly intercourse among the members. Dr. Buchanan White was elected president of the new union, and Mr. Frank W. Young, of Dundee, secretary. The first general meeting will be held in Dundee on June 6th and 7th.

ABERDEEN PHILOSOPHICAL SOCIETY.

DR. SIMPSON, the medical officer of health of Aberdeen, gave a lecture to this Society on "A Recent Visit to Egypt." After describing the appearance of Alexandria and Cairo, and the manners and customs of the natives and foreigners, he referred to an outbreak of cholera which took place while he was in Egypt. A *cordon militaire* was posted round the village to prevent any ingress to or egress from it. In spite of these precautions, more cases occurred outside the village, the reason being that many of the villagers had escaped, some by taking advantage of the darkness of the night, but the greater number by taking advantage of the weakness of the soldiers for "backsheesh."

GLASGOW SICK CHILDREN'S HOSPITAL.

THE supporters of this, the youngest of the Glasgow charities, held their first annual meeting on February 13th, when the report presented by the directors was adopted. The facts brought forward show that the institution has been carried on by the promoters during the past year with great success; and the hospital, fitted up in the most modern and improved manner, is about to be handed over to the citizens of Glasgow free of debt. It appears that the total cost of the hospital, including site, as well as that of furnishing and equipping it, was £12,510, which has been paid, leaving a small balance still in hand. The number of patients admitted to the hospital during the year was 260, of whom 103 were cured, 56 improved, 33 unimproved, 16 died, and 52 still remain in the house. The advisability of establishing a dispensary in connection with the hospital was brought forward. As already mentioned in the JOURNAL, steps are being taken by a very influential committee of ladies to raise funds for the permanent endowment of the hospital.

THE COPYRIGHT IN UNIVERSITY LECTURES.

SOME weeks ago, in the JOURNAL, we directed attention to a case which was pending in the Scotch law-courts, the decision in which involved the question of the rights which university professors have in their delivered lectures. Judgment has been given, and the Court holds that professors are fully entitled to the benefits of the Copyright Acts; and that the mere delivery of the lectures to a class, each member of which has paid a fee to listen to them, does not in any way affect the lecturer's right of property in them, nor does it in any way give another person the right to publish or reproduce the lectures. In the present case, the action has been raised by the Professor of Moral Philosophy in the University of Glasgow against a local bookseller, who offered for sale a book entitled *An Aid to the Study of Moral Philosophy*, which was wholly or in substance a reproduction, more or less correct, of the lectures delivered by Professor Caird to his class of moral philosophy. With the view of still further protecting Professor Caird's interests, the judge gave him the full benefit of the Copyright Act, and not only bound over the defender to stop the publication of the book in dispute, but ordered him to deliver up all the copies remaining in his hands, or within his control, in order that they might be destroyed. This decision is an authoritative statement upon a point of some importance, and about which there has heretofore existed some difference of opinion.

AN EDINBURGH UNDERGRADUATES' UNION.

WE are glad to learn that, stirred by rumours of grand receptions and banquets, of graduations and other ceremonials, and of the illustrious men from all parts of the world who will do honour to the famous

University tercentenary, and receive honours in return, the students have become inspired with the idea of themselves doing something, and partly in order to make arrangements for the ceremony, and partly with a view of caring for their interests generally, a representative association has been formed. The council of this association has already done good service; and, recognising that in Edinburgh the students are not only denied the many advantages that naturally fall to the lot of the more fortunate English undergraduates who reside in college, but that they have practically no opportunity of meeting each other except in the various class-rooms; that, in fact, university life as usually understood is absolutely non-existing; recognising these facts, they have determined to take advantage of the tercentenary to inaugurate a better state of things. They believe that their object will be best gained by establishing an union on the same general plan as the Union at Cambridge, but with such modifications as will bring it into sympathy with the traditions of their Alma Mater. This movement, if successful, will begin a new epoch in the history of the university. We wish the union every success.

GIFT TO THE THOMAS WALKER HOSPITAL, FRASERBURGH.

Mr. Alexander Watson, of the North of Scotland Bank, has intimated his intention to present, in accordance with the wish of his late wife, the sum of £1,000 to the Managers of Thomas Walker's Hospital, at Fraserburgh. The fund, which is to be designated the "Helen Watson Memorial Fund," is to be applied by the Managers towards the maintenance in the Hospital of poor and indigent patients from the town and parish of Fraserburgh, and the other contributing parishes. Hitherto the Thomas Walker Hospital has not had anything in the shape of endowment, and consequently comparatively few have availed themselves of the advantages which it offers. It is believed that, with judicious management, the Helen Watson Memorial Fund will be found sufficient to maintain three patients in the Hospital all the year round.

PROSECUTIONS UNDER THE FOOD AND DRUGS ACT.

Two convictions have just taken place in Glasgow under the above Act. In the first case, the defendant was found guilty of having sold for butter a substance which, on analysis, was found to contain 95 per cent. of fat other than butter, and which was really a compound known in the trade as "butterine." In the second case, a fine was inflicted for the sale of pepper, which was mixed with 20 per cent. of starch. Both prosecutions were undertaken by the sanitary authorities, and their action in the matter of the butterine compound is very much in the interest of the public; for it so much resembles ordinary butter, that the one is hardly distinguishable from the other. It is the duty of those who sell this commodity, that each quantity which a purchaser gets, should be clearly stamped with the word "butterine," but many do not consider that it is necessary to conform to this regulation, and the sanitary authorities have very properly stepped in and insisted upon them indicating the difference between the genuine and the adulterated article. It is satisfactory to see that the Court has supported them in this line of action.

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IRELAND.

An election for a resident medical officer to the Limerick Workhouse took place last week, in the room of Dr. O'Connor, resigned. There were three candidates, Messrs. Butler, Cleary, and Nolan, the last named being successful.

BELFAST BRANCH OF THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

The forty-second annual meeting of this society was held last week, presided over by Dr. T. H. Purdon. Dr. Browne having resigned the office of honorary treasurer, Dr. Drennan moved the following resolution, which was seconded by Dr. McGee, and passed unanimously:—"That the Society, in accepting Dr. Browne's resignation of the office of treasurer to this branch of the Medical Benevolent Society, which he has held for so long a period, the members present at this annual meeting are desirous of expressing their very grateful sense of the services which Dr. Browne has conferred upon the Society by his prolonged and most efficient discharge of the duties of that office, and of the warm interest he has uniformly taken in everything connected with the interests of the Society." It was mentioned that the medical students of the Queen's College had sent a donation of £6 towards the funds of the society. The President (Dr. T. H. Purdon), Dr. Arnold, J.P.; Dr. Drennan, Dr. Browne, J.P.; and Dr. McClelland, J.P., or as many of them as could attend, were unanimously appointed as a deputation to represent the branch in Dublin at the annual meeting of the parent Society, to be held next June. The following office-bearers were elected for the ensuing year:—*President*: Dr. T. H. Purdon. *Committee*: Dr. Browne, J.P.; Dr. Drennan, Dr. Cuming, Dr. Ferguson, Dr. Murney, J.P.; Dr. J. T. Smith, Dr. Whitaker, Dr. McCleery, Dr. Bryce-Smith, Dr. Harkin, J.P.; Dr. McGee, Dr. Spedding, Dr. W. McKeown, Dr. Ross, Dr. Wales, Dr. Hawthorne, Dr. McClelland, Dr. Jameson, Dr. Musgrave, J.P.; Dr. Higginson, Dr. McDonnell, J.P.; Dr. Stuart. *Honorary Secretary*: Dr. Wilberforce Arnold. *Honorary Treasurer*: Dr. F. Beck.

THE CONJOINT EXAMINATION SCHEME FOR IRELAND.

The latest attempt to establish a conjoint examination between the King and Queen's College of Physicians in Ireland and the Royal College of Surgeons in Ireland, has collapsed, like all the preceding ones. This was quite as we anticipated and expressed in this column when it was first mooted, and is not, therefore, to be wondered at. But the cause of the failure in the present instance is peculiar and instructive. A combined committee of the Colleges was appointed, as our readers will remember, for the purpose of suggesting and reporting upon a scheme for the giving conjointly of diplomas in medicine, surgery, and midwifery. The joint committee held several meetings, and drew up an *ad interim* report, which was in due course submitted to the Council of the College of Surgeons. This body discussed the report at four of its meetings, and made some amendments in it. It added, however, the following resolution to the report: "That it is desirable that the Apothecaries' Society be requested to co-operate in the conjoint scheme of examinations." We need hardly observe that such a resolution was distinctly *ultra vires;* the original proposal made by the College of Surgeons to the College of Physicians being for a combination between the Colleges in giving complete qualifications in medicine, surgery, and midwifery. The Council of the College of Surgeons must have been well aware that the College of Physicians could not accept such a proposition. And it may, therefore, well be asked, if the Council knew this, what object had it in view in allowing such an irregular resolution to be put forward and adopted? It is a significant fact that the resolution was voted for by one, at least, of the opponents of the conjoint scheme, who recognised the effect its adoption would have in causing the utter collapse of the scheme he so persistently opposed. The College of Physicians, as may be supposed, received the official report of the proceedings of the Council of the College of Surgeons on the *ad interim* report of the combined committee, including the objectionable resolution, with unmixed feelings, and it adopted the following strongly worded resolution unanimously: "That, as this College entirely disapproves of any scheme for a conjoint examination which includes the co-operation of the Apothecaries' Society, the College consider that it is useless to enter into the discussion of the report." We trust, accordingly, that we have now heard the last of combined examinations, and of these "schemes" of corporations, which in themselves show so strongly the necessity for an efficient legislative enactment.

PROTECTION OF YOUNG GIRLS.

We notice that a deputation from the Minors' Protection Joint Committee has recently had an interview with the Home Secretary to urge the introduction of a Bill for the better protection of young girls.

Sir W. Harcourt informed the deputation that he was fully alive to the importance of the subject. Last year, he had caused a Bill to be introduced in the House of Lords, and that Bill had raised the age of protection from 12 to 16 years. (The Committee, it appears, wish the age to be raised to 18 years.) Sir W. Harcourt also expressed his conviction of the necessity of dealing with street-solicitation, with brothels, and with juvenile prostitution, which are greatly on the increase. The clause which dealt with these matters had, to his great regret, been rejected by the House of Lords. He thought legislation of this kind would be to some extent a substitute to make up for the want of the Contagious Diseases Acts, the beneficial effect of which had been made manifest in certain places.

We sympathise to the fullest extent with the benevolent efforts of the Minors' Protection Committee, and we wish them all the success they deserve. But we have little faith in Acts of Parliament, unless they be accompanied by some specific machinery by which they can be enforced. Private efforts can do little or nothing, and at best will only act spasmodically to suppress so widespread an evil as this. We were told perpetually by the agitators against the Contagious Diseases Acts that municipal and police regulations already existed which were amply sufficient to effect all the benefits which those Acts were claimed to have produced in this direction. Why, then, are they not enforced, as it is said they have been in Glasgow, which is described as a model town in this respect? Is there any other place where these merely permissive powers have been brought to bear? How is it that the police are permitted to connive at the scenes which may be witnessed at midnight in the Haymarket and its neighbourhood, scenes which are a disgrace to the metropolis, and would not be tolerated for a moment in any capital in Europe? Why do not the vestries suppress those dens of infamy into which young girls are decoyed, and often forcibly detained, for purposes of prostitution? The police could point them out at any moment. No passing of Acts of Parliament, to be worked by voluntary agency, will be of much avail in the future, any more than the powers of the municipality and the police have availed in the past. The Contagious Diseases Act, directed mainly to prevent the propagation of disease, has proved itself in its working to be of greater service in protecting young women and girls from themselves, as well as from those who trade in them, than any agency yet known. Sir W. Harcourt no doubt well knows that, though not directly introduced for that purpose, those Acts, in the towns where they have been at work, have suppressed street-solicitation, and have also absolutely prevented juvenile prostitution, as well as regulating and preventing the mischief caused by the many brothels, with beer-houses attached to them as a blind.

The essential clauses of these Acts have been suspended by the Government, with the result, as we are constantly informed from the large towns and stations in which they worked, such as Devonport, Portsmouth, and Aldershot, of the return of all the evils from which they formerly suffered. The hospitals for women are half empty, their inmates are again to a great extent young women, often almost children, disease has increased greatly in severity and nearly fourfold in numbers, and disorder in the streets is as rampant as in former days. It is our conviction that in all large towns young women and girls will continue to go to perdition, body and soul, at their own misguided will, unless they are placed under some such police-supervision as that which has proved so successful during the last fifteen or sixteen years, and which, while providing for the cure of those diseased, has prevented so many thousands from entering upon or continuing in a career of infamy and vice.

INTERNATIONAL HEALTH EXHIBITION.

Water-Supply and Sanitation of the Dwelling-House.—With a view of bringing before the public examples not only of thoroughly good sanitary arrangements, but also of the defects existing in ordinary houses, the Committee have, with the sanction of the Executive Council, undertaken to supervise the erection of two model dwellings in the grounds of the Exhibition, one of which will show, as far as can be done on the limited scale, a house with good sanitary arrangements, while the other will show the usual defects. In the latter case, no attempt will be made to exaggerate the ordinary conditions. In erecting and fitting these typical houses, the Committee will have to rely on the assistance of manufacturers; but they wish it most distinctly to be understood that, while they must of necessity adopt, for purposes of illustration, fittings made by particular manufacturers, they do not in any case recommend these special fittings for adoption, or wish to give the idea that the special fittings adopted are superior to those produced by other makers. In many cases, it is quite certain that there are several appliances, all equally good; but the space at the disposal of the Committee will not permit examples of all these appliances to be shown.

Besides these typical illustrations, the Committee will be glad to receive examples of the articles indicated by the classification; in all cases, the exhibits must have a distinct bearing upon health; as architecture or building-construction generally is outside the scope of the Exhibition. The exigencies of space will not permit the Executive of the Exhibition to invite contributions illustrative of schemes for drainage, water-supply, etc., applicable to towns or large districts; the exhibits must be confined to domestic sanitation alone.

It is desired that exhibits should be restricted to typical examples of each article, and the Committee cannot undertake to find space for things which are substantially duplicates of one another. As the Exhibition will be a place of popular resort, and is intended for the instruction of the general public rather than specialists, it will be desirable that exhibitors of sanitary wares should assist the Committee in making such arrangements as will bring the articles which it is necessary to show before the notice of the public in a manner as agreeable as possible. It will, of course, be necessary to show examples of closets, urinals, etc., but these should be so arranged that, while it may be possible for anybody desiring to inspect their action to have full opportunity of doing so, they yet will not attract general attention in an undesirable manner.

Meteorological.—It is desired to illustrate as far as possible the relations of meteorology to health, and for this purpose a special subcommittee has been formed. It is hoped that the Royal Meteorological Society will establish a Typical Climatological Order Station, provide the complete equipment, and supervise the same. The attendant will take daily observations from the instruments, which will be exhibited in diagrams, and a copy furnished to the editorial department of the Exhibition, for publication in the daily programmes. It is hoped that a series of large diagrams, illustrative of the climatal conditions prevailing in various parts of the world, may be exhibited. Besides the collective exhibit above described, space will be provided for the exhibition, by manufacturers, inventors, and others, of meteorological instruments bearing upon the relations of climatology to public health. Among those which it is considered desirable to show may be mentioned: barometers, thermometers, earth thermometer, hygrometers, anemometers, airmeters, rain gauges, automatic meteorological apparatus, sunshine recorders, evaporation gauges, ozone papers, ozonometers. The committee also appeal to authors of papers upon the relations between health and disease, rainfall, percolation, evaporation, and flow from ground, and other subjects embraced by the Exhibition, and invite them to exhibit diagrams, models, and apparatus illustrative of their researches.

SURGICAL APPLIANCES FOR THE POOR.

On Wednesday, February 20th, a public meeting was held at the Mansion House to consider the matter of improving the method of supplying surgical instruments and appliances to the poor; General Moberly, in the absence of the Lord Mayor, presiding. There were present: Mr. F. D. Mocatta, the Rev. G. M. Murphy, Mr. Jabez Hogg, Mr. G. W. Medley, Mr. W. Gray, the Rev. A. R. Westhorp, Mr. H. C. Burdett, the Rev. W. Dawson, Mr. F. S. Warren (honorary secretaries), and others.

After a few introductory remarks from the Chairman, the Secretary read letters from Sir H. Thompson, Dr. Quain, and Mr. T. Smith, warmly commending the objects and aims of the committee promoting the meeting.

The committee appointed to consider the question reported that they had requested the principal London hospitals and certain special institutions to give their evidence on the subject. The points of inquiry ranged themselves under four heads: 1. As to the extent to which existing hospitals grant surgical appliances: (*a*) to in- or out-patients? or to both? (*b*) from what funds? 2. How the arrangements with the Hospital Sunday Fund in the matter had been found to work, and whether the medical staff of the hospitals would object if their relations with that body were much enlarged? 3. Whether the hospital-authorities would, if funds were forthcoming, be willing to control the supply of surgical appliances to the needy, and to inquire into the circumstances of all applicants: (*a*) as to the medical necessity of the case; (*b*) as to the ability, or otherwise, of applicants to pay part of the cost. 4. Opinions as to the present agencies for the supply of surgical aid, especially those societies which require from the applicants letters of recommendation in proportion to cost of appliance.

As the result of their inquiries, the committee "considered that those cases which were not under the Metropolitan Poor Act might be dealt with by carrying out the following suggestions: (1.) The general hospitals should be strengthened, so as to enable them to provide surgical instruments for such of their out-patients as require them, as well as for their in-patients. To this end, the charitable public should be induced to respond to appeals made to them for special cases by the chaplains or secretaries of the hospitals, and should also subscribe more largely to their Samaritan funds, pouring into those channels the sums they now supply to the various surgical aid societies. These societies, each having a separate office and staff, naturally expend a very large proportion of their resources in administration, and in some instances this proportion is not far below half of the whole amount collected. (2.) The Council of the Hospital Sunday Fund should be invited to consider the propriety of handing over that part of their collection which they set apart for providing surgical appliances to the Samaritan or other funds of the London hospitals, to be devoted to them specially for this purpose. There can be little doubt that they would find that their benevolent aim would be better attained by adopting this course, than by any means of directly disposing of it themselves. The hospitals would thus be able to carry out this most important charitable work, which was indeed their peculiar province, and which involved to a large number of suffering persons not only the difference between pain and ease, but also, in many cases, between ability to earn an honest livelihood and starvation."

Mr. **MOCATTA** moved a resolution, declaring the present system of supplying the necessitous poor with surgical appliances to be faulty, and in need of improvement. The system of compelling poor cripples to march all over London seeking subscribers' letters to enable them to get a surgical appliance was a very bad one, and often prevented them obtaining an instrument which would not only give them ease, but enable them to continue their employment.

Mr. G. W. **MEDLEY** seconded the motion, to which

The Rev. G. M. **MURPHY** moved, as an amendment: "That this meeting receives the printed report of the committee, thanks the committee for their labours, lays the report on the table, and adjourns *sine die*."

Mr. W. **GRAY** seconded the amendment.

A very warm discussion followed. Several gentlemen connected with the different surgical aid societies defended the method of supply at present in practice; and it was alleged that the declared intention of the promoters of the meeting was to injure the various surgical aid societies which had done so much to help the indigent and afflicted poor.

A further amendment was moved by Mr. **BURDETT**, recommending that representatives from the various surgical aid societies should be appointed to confer with the committee on the subject as to the best means of aiding the poor in this respect. This proposition was lost on a show of hands, and, at the end of two hours, Mr. Murphy's amendment was carried by a large majority.

Votes of thanks to the Lord Mayor for the use of the Mansion House, and to the Chairman for presiding, were passed.

THE ROGERS' TESTIMONIAL.

THE following additional subscriptions to the fund for a testimonial to Dr. Joseph Rogers have been received. It should be understood that the subscription to this fund is not confined to Poor-law medical officers. The Treasurer is Mr. J. Wickham Barnes, 3, Bolt Court, Fleet Street, E.C.; and subscriptions are received by the Editor of the BRITISH MEDICAL JOURNAL.

The promoters of the expression of opinion of Dr. Joseph Rogers' public work, during upwards of thirty years, desire to inform the profession and the public that the subscription list will remain open until the end of March.

Thirteenth List.—Albert Southey, Esq., Colnbrook, £1 1s.; Dr. E. T. Willett, Isleworth, £1 1s.; Messrs. Pinching, Gravesend, 10s. 6d.; H. T. Wood, Esq., Calstock, Devon, 5s.; Dr. T. Morgan, Montgomery, 5s.

FROM a return recently issued by the Sanitary Inspector of the Whitechapel district, it would appear that the annual rate of mortality in that district, in spite of all that has been done to improve its sanitary condition, still compares very unfavourably with the death-rate of London as a whole. In 1876, the death-rate of Whitechapel was 23.9, and that of London was 22.0; but whereas the London death-rate has since sunk to 21.4 in 1882, the death-rate in Whitechapel had risen to 25.2 in that year.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 20th, June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881. FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
V. Syphilis, acquired.
Va. ,, inherited.
VI. Acute Gout.

URGENT. —*The Committee needs 150 more cases of Pneumonia, and hopes that they will be sent in as soon as possible.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
September, 1883. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH. Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT. The next meeting of this district will take place on Friday, March 28th, at Woolwich; Sir James Hanbury, K.C.B., A.M.D., in the chair. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary of the district, A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than February 29th. Further particulars will be duly announced. A. W. NANKIVELL, Honorary Secretary.—January 29th, 1884.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT. The next meeting of the above District will be held at Ashford, on March 13th; Dr. Wilks in the chair. The Chairman kindly asks all members to lunch at his house, and has obtained the Royal "permit" to conduct the members over Eastwell Park, the residence of H.R.H. the Duke of Edinburgh, before the meeting. The order of business will be as follows: 12.45 P.M., Lunch at Dr. Wilks's, 1.30 P.M., Carriages to Eastwell Park. 4 P.M., Meeting at the Cottage Hospital, Report of Collective Investigation Subcommittee. Dr. Wilks: A case of Delirium Tremens treated by Cold Affusion; a case of Hydatid Mole, with Specimen. Dr. Fyson: Malignant Disease [illegible] Syphilis. 6 P.M., Dinner at the Saracen's Head. T. WHITEHEAD REID, Honorary Secretary, 34, St. George's Place, Canterbury.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT. The next meeting of the above will be held at the Queen's Hotel, Upper Norwood, on Thursday, March 13th, at 4 P.M. The following papers have been promised. Dr. J. Milner Fothergill: The Uses of Ipecacuan. Noble Smith, Esq.: The Treatment of Hip-joint Disease. Members desirous of making communications in the form of papers, or cases, are requested to communicate with the Honorary Secretary without delay. Dinner will be served at 6 P.M.; charge, 7s., exclusive of wine. J. HERBERT STOWERS, Honorary Secretary, [illegible], Finsbury Circus, E.C.

SOUTHAMPTON DISTRICT: SOUTHERN BRANCH. The next meeting of this district will take place on Monday, March 3rd, at 8 P.M., at the residence of Dr. Trend, 6, Anglesea Place, when a Sketch of the Life of the late Dr. Osborn will be read by Mr. [illegible], F.R.C.S. Names of new members will be submitted for election, and the accounts of the past year presented for audit. [illegible] W. [illegible], M.D., Honorary Secretary. February [illegible], 1884.

METROPOLITAN COUNTIES BRANCH: HERTFORDSHIRE DISTRICT. It is proposed to hold a meeting of the above district at Hertford, [illegible] March. Members desirous of reading papers are requested to send the titles as early as possible to the undersigned. R. R. [illegible], Honorary Secretary.

SOUTH WALES AND MONMOUTHSHIRE BRANCH. The spring meeting will be held at Llanelly, on Wednesday, April 2nd. Further particulars in circulars. Members wishing to read papers or [illegible] are requested to send titles of the same to Dr. Sheen, Cardiff, not later than March [illegible], in order that they may appear in the circulars. ALFRED SHEEN, M.D., D. ARTHUR DAVIES, M.B., Honorary Secretaries.—February [illegible], 1884.

SPECIAL CORRESPONDENCE.

LETTERS FROM THE RIVIERA.

III.—NICE.

Nice, the Brighton of the Riviera.—Its Merits and Defects.—High Mortality and Sanitary Reform.—Its Streets and Promenades.—The Exhibition.—Reforms called for.—Mundane Attractions and Repulsions.

MR. ERNEST HART writes from Nice:—

Nice, the Brighton of the Riviera, has been somewhat out of the way of Fortune's smiles this year. An autumnal epidemic of typhoid fever, and the fear that the ambitious "Exposition de Nice" would attract a crowd and raise prices of lodging and living, have concurred, with other causes, to lessen the popularity of the place, and have kept its hotels half empty through the first part of the season. The carnival week always attracts a throng of pleasure-seekers, and it is now filling up. The neighbourhood of Monaco, and the influence of the gaming-tables in attracting a large number of objectionable persons, constitute an influence more seriously hostile to the welfare of Nice as a resort for quiet people seeking health and rest, than either of these temporary causes. But, sooth to say, Nice has other characteristics which operate against its selection by this class as their winter home. Sun-worshippers need also to be protected from northern and easterly winds; they ask for something of rural quiet and the soothing influences of luxuriant vegetation, flowering gardens, and the refreshing beauties of nature. There is less of this influence in Nice than in most of the other health-resorts of the Riviera; less than at Cannes, Mentone, Bordighera, San Remo, or Alassio. Its shelter by the surrounding hills is imperfect, owing to the deep gullies and ravines which cut them, and down which sweep the northern blasts, often cruelly cold. The palms and pepper-trees along the sea-esplanade, and in the public garden, tell clearly enough the tale of a wind-swept shore; and although Nice can boast of its sunny skies and picturesque mountains, and though it has some beautiful surroundings, it is, plainly enough, a city which presents many traps and pitfalls to the invalid, as well as to the gay and unwary strangers who flock to its festivities. For Nice boasts much of its mundane life, its balls, dinners, theatres, concerts, "redoutes," "veglione," "pigs-nigs" (*sic*), and I know not what other doings of fashionable "ig-lif" (*Anglice*, high-life). These have taken the place of much that charms the weary and heals the sick; for the grass-sward there is the "tapis-vert;" for rambles by the shore, there is the paved "Promenade des Anglais;" miles of streets, some of them handsome and brilliant; for exercise, a dance every night, if not a grand dress-ball; then a *petite sauterie*. The villas are crowded close in the town, and with little gardens; the hotel-gardens do not compare with those of Cannes; altogether, like its prototype, a town without gardens, and a sea without ships. These are its prominent defects for some kinds of people; for others, who seek to renew the pleasures of the season in London, Paris, or St. Petersburg, under a sky usually brilliant, and in a temperature usually not much below that of an English May, who can be prudent enough to study, from day to day, the temperature and the direction of winds—no very difficult task; who love night city-life, with its brilliant gaieties, its comforts and luxuries, its rush and excitement, and can avert their eyes from some of its most deeply stained dark spots; for the exile who seeks to forget himself in social interest and amusements; for the pleasure-seeker; for the mundane traveller, who wishes to carry with him the influence of this metropolitan "mardi," Nice has no rival on the Riviera in the variety of its resources, and the brilliancy of its welcome.

It has yet, however, much to do to deserve the character of a city of health. The foul stenches which beset some of its streets are unspeakable; and it is appalling to note the inhabitants and small shopkeepers sitting tranquilly at their doors in an atmosphere so reeking with local pollution, that one rushes past in hot haste and with a quickly rising feeling of overwhelming nausea, to avoid even momentary inhalation of the air of which they are contentedly respiring the malodorous fragrance. Stinks are the sentinels which warn ordinary nostrils of the dangers of neighbouring putrefaction; the stoical disregard of this warning by the Niçois is a source of astonishment rather than of admiration. The mortality of Nice recently has been high; it can never be permanently low until the drainage-system is improved; until the internal arrangements of the ordinary bourgeois dwelling are remodelled; until every man learns to respect his neighbour's health as his own, and abstains from simply polluting the nearest ditch or channel which can assist (imperfectly enough) to relieve his own dwelling, thoughtless of his neighbour or the passer-by.

This want of cleanliness is accompanied throughout the Riviera by a want of modesty and modest decency which are very painfully noticeable. In the most beautiful parts of the public gardens at Monaco, for instance, at the corner of the most attractive flower-beds, obtrude under the eyes of the visitors the most prominent and offensive notice-boards relating to the retiring places, most coarsely described. In the railway-stations, the retiring places for the two sexes have frequently a common door of entrance to the building, and are parted only by a partition which does not frequently rise nearly to the ceiling. This kind of immodesty seems correlative with the neglect of cleanliness and sanitation; and it is quite time that the better examples now abundant in the English quarters of the Riviera should be generally adopted in these towns. Their mortality will never fall to a normal level while the present state of things is allowed to continue; it is as dangerous as it is disgusting.

I should, however, not like to quit Nice with these hard words; for it is only fair to acknowledge how much has been done successfully to beautify the town, to widen its avenues and thoroughfares, to cleanse the main streets, and, after a fashion, to drain it. It is only right also to dwell once more upon its relatively mild temperature, the beauty of its suburban villas, the number, variety and excellence of its hotels, its pleasant proximity to a gentle sea, and the picturesque excursions which may be made in its neighbourhood. Of the Exhibition I need say only that it is well placed in a picturesque and extensive building, with pleasant surroundings. It has some artistic interest, especially in pottery, furniture, and oil-products. Its scientific value is, of course, very slight. I was glad to see Shone's process of dealing with sewage illustrated. If it were adopted stringently in the towns of the Riviera, it would go far to solve the existing difficulties, and render them safer and more highly attractive than they even now are. Nature has so bountifully endowed this lovely coast, that the sin of men in defiling and defacing it is unpardonable and cries for judgment.

In one respect, Nice has set an example which other towns of the Riviera have not been wise enough to follow; it has preserved its shore-walk. This it owes to the English, who five years ago subscribed enough money to lay out the Promenade des Anglais, and thus laid the foundation of the best element in the town's permanent popularity. The whole seaboard has been made available for walking and driving. Elsewhere along the Riviera the railway has been allowed to cut off the shore from the town, and to appropriate long tracts of it. Not only Cannes, but San Remo, and others of these ports suffer in the same way. Along the whole coast there is a great want of local foresight and public spirit. The speculation in land has been carried to a great excess, and the ground has been appropriated to the highest bidders without considering the interests of the visitors by whose aid these fortunes are accumulated and these values attained. It is not yet too late for some of the newer health-resorts—Alassio, Bordighera, San Remo—to profit by and avoid the bad example. In the sacrifice of their foreshore they have already partially followed it.

I am quitting now the Western Riviera for Rome, whither I am called for the fufilment of some duties in connection with the forthcoming Health Exhibition. This will give me an opportunity of visiting Nervi, Rapallo, Spezzia, and others of the bays of the Eastern Riviera. These are now opened up by railway, and provide better accommodation for travellers than at the time when Dr. Bennet's book on the Riviera was written. They are much more Italian than the now Frenchified coast of the Western Riviera; their vegetation is, in many respects, more beautiful, their rock-scenery more picturesque, and the turquoise sea which bathes their shores has perennial attractions. I incline to think that they will prove very attractive in the near future to the holiday winter traveller and to colonies of invalids.

CAIRO.

[FROM OUR SPECIAL CORRESPONDENT.]

The Prison at Cairo.—The Conseil de Santé.—Cholera.—The Victoria Hospital.—The Weather.

IN a former letter I described the unsanitary and disorderly conditions of the Zaptiyeh, or chief prison of Cairo. To-day I again visited it in company with Dr. Crookshank, Inspector-General of Prisons, and found a wonderful transformation. At the time of my former visit, besides the general filthy condition of the wards and offices, there was no kind of arrangement of the prisoners; young and old, the sentenced, and those awaiting trial, were all herded together without any employment, with nothing but the floor to sleep on, and without an attempt at classification. Now, the air of the wards and passages is, for the most part, quite sweet. The cesspools have been closed, closets have been built, with stone and cement fittings for the receipt of iron pails, and a drain made to carry off the liquid sewage. The dry excreta are received into the pails, and the wet into channels made in the cement at the foot and in front of the seats. The pails are emptied twice daily, and the sewage carried into the desert. Dr. Crookshank proposes shortly to have dry earth provided for mixing with the excreta. On admission, each prisoner receives a paper with his name, charge, and sentence (if any). He is allotted a plank-bedstead with matting, over which is written a number. The boys are in separate wards from the men. Further, the men are now employed in various ways, which is, perhaps, the most important reform after the sanitary changes. Some are making boxes, plank-beds, etc., under the direction of a prisoner who is a carpenter; others make mats for the beds, and the rest break stones in the square where they formerly congregated in idleness. The appearance and demeanour of the prisoners has undergone a vast change for the better, and no one accosted me with complaints as on my former visit. Dr. Crookshank is to be highly complimented on the good work he has done in so short a space of time. His introduction of the dry system of sewage-removal is a reform of extreme importance; and it is to be hoped that the Egyptian sanitary authorities will soon adopt the same method, at any rate throughout Cairo. Mr. Hooker, a chemist of considerable ability, who recently received the Queen's medal for his services during the cholera, has proposed, in a long letter to the *Egyptian Gazette*, to utilise the sewage by mixing it with the rubbish-heaps which abound in the desert at both extremities of Cairo. These heaps contain large quantities of wood, charcoal, lime, and animal remains. and it is considered that, by mixing the sewage with them, a valuable manure might be formed. It would probably be better to carry earth from these rubbish-hills into the town, and use it for a dry earth-system. At any rate, there is little doubt that a dry system of sewage-removal might be carried out without pecuniary loss, if not at a profit. I may add that Dr. Crookshank has recently received a testimonial from the householders in the immediate neighbourhood of the Zaptiyeh, expressing their gratitude for being able now to enjoy nights undisturbed by the cries of the prisoners. This is a gratifying proof of the improved discipline which now reigns.

Mr. Clifford Lloyd's scheme for the abolition of the "Conseil de Santé" and the establishment of a sanitary directorate has met with an unexpected check. It was submitted to the "Corps Legislatif" or "Council of Notables," a representative body for whose existence Lord Dufferin is in great part responsible. They have rejected the scheme, it is believed, unanimously. However, this body is only consultative, so perhaps the proposed changes will be carried out all the same. Meanwhile, however, nothing is being done. The "Conseil de Santé" is practically paralysed by its expected dissolution, and the reforms which it proposed long since remain a dead letter. Typhoid fever, diphtheria, phthisis, and marasmic diarrhœa continue to ravage the poor in their unhealthy abodes, while, according to an English journal, England waits till it has been proved that cholera is also endemic. In reference to the endemic theory, it is worthy of note that no sporadic cases of cholera have been observed anywhere throughout Egypt since December 26th.

A report on the cholera in Cairo has just been published by Ahmed Hamdy Bey, Sanitary Inspector. From it, it appears that the epidemic of 1883 lasted only forty days in Cairo, against ninety-two in 1865, though only 300 more deaths were registered from cholera in the latter year than in the former.

The Victoria Hospital is temporarily closed. The late committee closed the hospital, and dissolved themselves, on the ground that there were not sufficient funds to carry it on. The Government refused to give more than £2,000 a year towards its support. However, no sooner was the old committee destroyed, than a new one was found to be occupying its place, including Mr. Clifford Lloyd, Colonel Scott Moncrieff, and Mr. Edgar Vincent, among its members. Several of the members of the old committee sit on the new. The new committee are supposed to be now seeking for funds and a new resident medical man. It is to be hoped they will be successful, though the rather peculiar inauguration of the new era does not promise well for ultimate prosperity. We doubt not that Lady Strangford's praiseworthy tenacity of purpose will set a new hospital going.

The weather has been unusually cold and wet during January. There is now, fortunately, a decided change for the better, so that there is a probability that the numerous tourists who have arrived late may enjoy a short but pleasant Cairo season.

PARIS.

[FROM OUR SPECIAL CORRESPONDENT.]

Liquefaction of Hydrogen.—Proposed Inspection-Regulations. "L'Homme à la Corde."—Thuillier's Bust.—A Medical Hoax.—Donation.—Hypodermic Injections of Chloroform.—Maximum Thermometers.—Gasometer for Prolonged Inhalations.—Albuminoids of Milk.—Trichinosis.

M. WROBLEWSKI of Warsaw, in a communication to the Académie des Sciences, explains the process he employs for liquefying hydrogen. M. Wroblewski is a pupil of M. Cailletet, and utilises his method, obtaining intense cold by the transition of gas in a liquid state to that of, again, a gaseous, and combines this cold with pressure. Just at the moment that liquefied oxygen from a lessened pressure resumes its gaseous condition, a temperature of −186° is obtained. This intense cold, combined with pressure, liquefies hydrogen. According to M. Wroblewski, hydrogen in a gaseous state, submitted to the pressure that will liquefy it, presents a density 0.33—the same that has been determined for liquefied hydrogen. M. Clzewski, professor at the University of Cracow, in a letter to the Académie des Sciences, questions the accuracy of M. Wroblewski's assertions concerning the liquefaction of hydrogen, also the value of his experiments.

M. Hérisson proposes to the Chamber of Deputies a measure that will oblige inspection of American cured and salt food. The system of inspection is to be placed under State control, and the inspectors named by the prefects. The expense of inspection will be twenty-five centimes (2½d.) a barrel or case, and fifteen centimes (1½d.) pieces separate. The prices charged are to defray the expenses of the staff, and not to swell the receipts of the Treasury.

A few days ago a patient was admitted to the Lariboisière Hospital with a piece of cord, a yard long, projecting from his mouth. He had recently quitted the Beaujon Hospital, and it is supposed that, under the influence of a feverish condition, he attempted to hang himself, but, being surprised when he was arranging the cord, he swallowed it in order that it should not be seen. The cord was successfully removed, and the patient was restored to his family. "*L'homme à la corde*" now ranks with *l'homme à la fourchette* and *l'homme à la cuillère*, who were successfully operated on by M. Léon Labbé.

The bust of Louis Thuillier, of the Pasteur Commission, was placed a few days ago in the museum of Picardy at Amiens. The prefect and mayor of Amiens were present. The Chambers of Commerce, the Syndic Chambers, the civil and military authorities, the collegians, and the public schools of Amiens, marched past the bust.

A well known electrician received, a few days ago, a letter signed with a name unknown to him, containing notes to the amount of £24. He was asked to go at once to the Pavillon St. Germain Louis XIV, to see a patient who was dangerously ill. No doubt concerning the authenticity of the letter was felt by the doctor, who started the same evening. Arrived at St. Germain, he happily bethought himself to ask a railway-guard to show him the way to the Pavillon, as the road was dark and a hurricane was blowing. When they reached their destination the hotel was in darkness, and the porter was with difficulty awakened. No one was ill at the hotel, and no one of the name of the person who wrote the letter was staying there. At Pavillon Henri Quatre the same answer was given. The two medical men who, according to the letter, desired to meet the electrician in consultation, are unable to furnish any clue to the mystery, which has somewhat disturbed the medical world, as it is difficult to decide whether it was a hoax, though a costly one, or a snare, for the purpose of doing bodily harm, which failed owing to the presence of the railway-guard.

The city of Tours has been enriched by three million of francs (£120,000), left to it by the Countess of Clocheville, who founded the Asylum for Convalescent Children. The sum willed represents the whole of the countess's fortune, and is to be used for the benefit of the above asylum.

M. Bouchard has made a series of experiments on rabbits and dogs, in order to determine the effect of subcutaneous injections of chloroform. A cubic centimètre of chloroform injected under the skin had no apparent effect on the animals until twenty-four or thirty-six hours had elapsed, when violent albuminuria declared itself, and death quickly ensued. Three-fourths of a cubic centimètre determines death; one-fourth results in one half of the animals under experiment being attacked by albuminuria; one-fifth does not provoke albuminuria. M. Bouchard supposes albuminuria [illegible] to be due to chloroform poisoning, and that hypodermic injections of chloroform should be practised on patients with the greatest precaution. The cause of the death of the animals consequent on albuminuria remains unexplained.

M. Constantin Paul has presented to the Académie de Médecine some maximum thermometers he has recently invented, admirably suited for clinical use. They can be applied to most unequal surfaces, and register the temperature. In cases of confinement, applied to the hypogastrium, + 35 Cent. indicates that labour has begun.

M. Saint-Martin announces that he has invented a gasometer, especially suitable for taking prolonged inhalations of chloroform-vapour mixed with air when long operations have to be performed, such as ovariotomy, etc.

M. Pasteur has presented to the Académie des Sciences a note from M. Duclaux, on the albuminoids of milk, which present twenty varieties. M. Duclaux proposes to class them under casein, as they are but modifications of this substance, which is easily demonstrated by the influence of heat or weak reagents. M. Wurtz observes that milk-albuminoids undergo certain changes in the mammary gland, apparently due to a sort of intraglandular digestion. It is important to determine these modifications with reference to infant nutrition.

M. Pouchet has fed five rats during six weeks on trichinous American pork which had been seized by the sanitary inspectors. When the six weeks had elapsed, a small piece of flesh was removed from the animals, and, on examination, was seen to be entirely free from trichinæ. The rats under experiment are perfectly healthy; slight transitory diarrhœa has been the only result of the trichinous pork given them. The trichinæ were not abundant in it; and, according to M. Bert, trichinosis is a *maladie de quantité*, unlike affections resulting from inoculation from a virus, when a single drop suffices to kill an animal in a receptive condition. M. Pouchet intends to continue his experiments at the Natural History Museum on rats and pigs.—M. Leblanc, at a meeting of the Académie de Médecine, stated that a patient, treated at the Beaujon Hospital for fracture of the bones of the leg, was in the habit of eating meat he knew to be trichinous. He was treated by M. Tillaux. His health was good; there was absence of all symptoms of trichinosis; and no trichinæ were present in his muscles.

BIRMINGHAM.

[FROM OUR OWN CORRESPONDENT.]

The General Hospital.—Teaching of Anatomy in Queen's College.—Death of Dr. James Hickinbotham.—The Social Science Congress.—Entertainment at the General Hospital.—The Ear and Throat Hospital.—The Small-pox.

THE annual meeting of the General Hospital was held on Wednesday, February 20th; the President, Lord Lyttelton, in the chair. The report contained the usual statement of the satisfactory progress of this excellent charity. Lord Lyttelton alluded to the difficulties of some of the metropolitan hospitals, and to the possibility that they would have to seek the aid of the ratepayers—an alternative which, he appeared to think, was one of horror and dismay. I am quite unable to share this feeling, and would gladly see a closer connection between the community and those institutions performing functions which no one ventures to doubt are obligatory, and for which the community cannot avoid its responsibility. It is nothing less than a disgrace that hospitals which are doing an absolutely needful work should be crippled by want of funds; but the corporate system of management affords a ground of defence, as the public may justly refuse to contribute to institutions in the management of which it has no share. The progress of the Jaffray Hospital Fund formed a novel feature in the report; and £25,000 has been collected, and annual subscriptions to the amount of £320 have been promised. In this matter, I am strongly of opinion that the wisest plan is to give annual subscriptions towards the required income, and not to make a large endowment which passes out of public control.

At a meeting of the Council of Queen's College, held on Thursday, February 21st, it was resolved to take steps for terminating the whole of the present arrangements for teaching anatomy, and to place this duty in the hands of a professor, who shall devote his whole time to the post, and will receive an adequate stipend. This reform, which I foreshadowed in a letter written some months ago, is a very desirable one, and will tend to strengthen the medical school very much. It, in fact, completes the arrangements for medical education, which, in most respects, have been of a very high class since the opening of Mason's College.

I regret to record the death of Dr James Hickinbotham, which occurred on Friday, February 22nd, at the early age of forty-two, after a short and sudden illness. Dr. Hickinbotham had gained much experience and reputation as an accoucheur and gynæcologist. He was Physician to the Women's Hospital and to the Lying-in Charity. He had besides taken part in public work, having been an active and most useful member of the board of guardians, in which capacity he had carried many salutary reforms bearing upon the medical and sanitary management of the workhouse. He was also a Conservative candidate for a seat on the Town Council, and would probably have succeeded in entering that body, where his abilities and tact would have made him a prominent and useful member. His death, at a comparatively early age, has robbed the town of a valuable citizen, and has deprived him of the merited reward of his earnest labours.

The Social Science Congress will be held here during the week commencing September 17th. It is to be feared that we shall be deprived of some, whom we should gladly have present, by the attractions of the meeting of the British Association in Montreal, from which members will not have returned by that date; but there is every prospect that the congress will be a memorable one. The question of the housing of the poor will, no doubt, be the most prominent subject for discussion, and upon this we shall have many in this town well qualified to speak. The committee appointed by the Town Council to inquire into this matter is still sitting, and it is certain that they will not close their inquiry until it has been thoroughly exhausted. Speaking relatively, the housing of the poor is exceptionally good in Birmingham; but there is a condition of things in certain properties which cannot be tolerated, and must be put an end to. A very healthy public opinion is being aroused, without which legislation would be inefficient, and which may effect all that is needed.

The resident staff at the General Hospital, with the assistance of a few friends from outside, recently gave a capital performance of "H.M.S. Pinafore" to the patients and nurses of the institution.

The Ear and Throat Hospital, which at present shares accommodation with the Orthopædic Hospital, is said to be seeking a separate home—a course which is warranted by its usefulness and its financial position.

Small-pox has been very severe since Christmas, but is now slacking its pace; and, with the advent of spring weather, we may hope to see its epidemic character disappear.

CORRESPONDENCE.

THE MEDICAL ACTS AMENDMENT BILL.

SIR,—I am desirous of occupying a space in your columns with reference to the above contemplated measure, which is likely again to occupy the attention of Parliament—this session, probably in both Houses, and not, as last, the discussion of its various, almost bewildering, clauses being confined to the Upper Chamber.

Permit me to assert at commencing that I believe fully and sincerely in the remarks about to follow, which must be judged of—taken into consideration by your numerous readers—as to whether they are worthy of any attention on their part, for ample thought from the profession has scarcely been sufficiently given or drawn to the radical changes proposed to be effected.

When the discussion on the Bill commenced, no little surprise—and, indeed, proper indignation—was felt, and openly expressed, that the Society of Apothecaries was left out in the cold. Sinister influence apparently had been at work. What had the Society done in the past, or is doing at present, to deserve such an unmerited slight? Let that pass by. The three examining boards are the great panacea offered in the forthcoming Bill. The licensing bodies, many of them grand institutions in themselves, that have not only devoted their energies towards the teaching and instruction of the medical students for ages past, but have also been the means of keeping up and nurturing museums and libraries, are to be thrust aside, and "the licence in surgery and medicine and midwifery of the General Medical Council" is to be the open sesame, *l'outrance*, to the *Medical Register*.

Will the high-sounding title be cared for? All associations revered in themselves from generation to generation are to be ignored, for it is not to be supposed that students will choose to pay extra fees and undergo supernumerary examinations, such as F.R.C.S., etc., the admission to the portals of the profession being already so heavy. Parents know that to their cost.

The General Medical Council, out of their enormous procreative funds, have for some years past devoted a sum worthily for "visitations of examinations." Reports for a lengthened period lie before me. What do I find and discover? That the licensing bodies have right royally, truthfully and honestly, carried out the behests and requirements of the Council, whilst the highest educational standard has been attained that can well and in all justice be anticipated.

There is a restless spirit permeating or spreading over the present age; a morbid desire for change, without caring or looking out for ulterior consequences; but I would ask members of the profession in the three divisions of the United Kingdom to rally round and close their ranks against a measure so pernicious, insidious, and destructive, as the proposed Government Medical Acts Amendment Bill.—I am, Sir, your obedient servant, A CONSTANT READER.

⁂ The statements and arguments contained in the above letter have been repeatedly published in the JOURNAL, but without in any way shaking the steadfast adherence of the profession and the Association to the necessity of the compulsory conjoint scheme of examination as a cardinal principle of medical reform. Similar views were forcibly urged before the Royal Commission, but without producing the effect apparently desired by some of the corporations and by our "Constant Reader."

CAPILLARY PULSATION.

SIR,—I cannot pretend to priority in the observation of capillary pulsation, since, as stated in your article, Lebert, Quincke, and Becker had published papers on the subject in 1871; but I may fairly claim originality. In April 1875, I published two cases in the *Lancet*, one observed in October 1874; and from that time have constantly demonstrated the phenomenon on red patches induced by warmth and pressure in cases of aortic regurgitation. It did not, however, occur to me to induce redness of the skin by friction; and I scarcely know now from whom I learnt it.

I cannot quite accept M. Frank's conclusion that the capillaries in aortic regurgitation are in a state of spasm, since pulsation can sometimes be observed in the veins of the back of the hand, the pulsatile movement not having been arrested in the capillary network.—I remain, sir, your obedient servant, W. H. BROADBENT.

Seymour Street, Portman Square, W.

INFANTILE SCURVY.

SIR,—In your report of the remarks made by me at the recent discussion at the Harveian Society on Mr. Owen's case of subperiosteal hæmorrhage in infantile scurvy, published in the JOURNAL of February 16th, p. 319, there is an important and very misleading error. I am therein made to say that I had "seen a case of infantile scurvy recover completely under the exclusive use of Swiss milk." What I did actually say was the very opposite of this; viz., that I had recently met with a case of scurvy in a child fed solely on Swiss milk. The Swiss milk was the diet which produced the scorbutic condition—not which cured it. And I further stated that the disorder quickly disappeared on a change being made from condensed milk to an antiscorbutic diet of fresh cow's milk, raw meat, and potato-pulp.—Faithfully yours,

February 16th, 1884. W. B. CHEADLE, M.D.

THOUGHT-READING DEMONSTRATIONS.

SIR,—In a paragraph in the BRITISH MEDICAL JOURNAL of February 23rd, referring to Mr. Stuart Cumberland's thought-reading demonstrations in Glasgow, you express a doubt whether it is advisable that the medical profession should give its support to any one who seems to claim publicly the power of accomplishing by mental powers what is clearly done by the agency of the muscles. If Mr. Stuart Cumberland advances any such claim as that which you attribute to him, he is certainly unworthy of the countenance of the medical profession, or of any honest man who can see through the hollowness of his pretensions; but the suggestion that he makes any claim of the kind causes me much surprise, for I have good reasons to believe that he has hitherto, distinctly and consistently, repudiated "the false doctrine, heresy and schism" with which you now charge him. The patronage of the medical profession has, as far as I know, been bestowed on him because he has taken his stand on a physiological instead of on a pseudo-psychological basis, and has professed to show how "thought-transference" and "willing," and such like puerile performances, are carried on, when *bonâ fide*, not by any short cut from brain to brain, but by the ordinary circuitous channels of human communication, by nerves and muscles, and sense-organs and nerves.

In April 1882, I was invited by Mr. Stuart Cumberland to take the chair at a meeting which he proposed to hold in the Marlborough Rooms. Before consenting to do so, I required of him an explicit confession of faith on the subject to be brought forward at the meeting; and I then received from him a letter (still in my possession), in which he expresses his abhorrence of the theory and practice of spiritualism, mesmerism, and clairvoyance, and his devotion to scientific truth, and admits, in the most unreserved way, that his own demonstrations in "thought-reading" are accomplished, not by virtue of any special gift or occult force, but by the power of a naturally quick and well-trained perception to interpret the indications given, consciously or unconsciously, by subjects with somewhat leaky nerve-centres, distended to the utmost by expectant attention and emotional excitement. It was because of the thoroughly satisfactory character of the explanations given by Mr. Stuart Cumberland, coupled with his assurances that it was his great aim to expose imposture and dispel mysticism, that I agreed to preside at the Marlborough Rooms meeting, where the same explanation of the phenomena exhibited was publicly offered from the platform in the most unequivocal terms. It was, I know, only after obtaining guarantees similar to those which I secured, that Dr. Horatio Donkin, Professor Ray Lankester, Professor Ferrier, and many others gave Mr. Stuart Cumberland their support.

If Mr. Stuart Cumberland still maintains the same position, and, standing well forward in "the light of common day," warns back the infatuated multitude from the black and quaking bog of superstition over which broods the night of ignorance, illustrating, by means of a dark lantern, how its will-o'-the-wisp fascinations are produced, and affording glimpses of those who lie in wait to pillage those who may fairly flounder into it, he is doing a good and useful work. But if he have receded from that position into the twilight of mysticism, and if he now teach that, while the bog itself is foul, treacherous, and infested by robbers, its outskirts are curious and attractive, he has forfeited his title to scientific patronage, and has ranged himself with the charlatans, tricksters, and silly "psychical researchers" of the day.

I am, sir, yours obediently, J. CRICHTON BROWNE.

London, February 23rd, 1884.

A CAUTION.

SIR,—Having this morning received a printed circular, headed "British Medical Association," and signed "R. S. Carpenter," in which my name is used without my authority, I shall be glad if you will permit me to state that I know nothing of the committee stated therein to have been formed, that I do not approve of it, and that I advise members of the Association to send no donations for such a purpose.—Faithfully yours, H. NELSON HARDY.

February 27th, 1884.

A LOST MEDICAL WORK.

SIR,—I am very happy to be able to inform you that a copy of James Woolveridge's *Speculum Matricis; or, the Expert Midwives' Handmaid, Catechistically Composed*, London, 1671, exists in the Radford Library of St. Mary's Hospital, Manchester. I am indebted for this information to my friend, Mr. Thomas Windsor, who is well known as one of our most learned medical bibliographers.—Faithfully yours,

J. H. AVELING.

⁂ A short notice of the circumstances attending the loss of Dr. Fordyce Barker's copy of this work will be found at page 426.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, February 22nd.

The Dwellings of the Poor.—The Marquis of SALISBURY moved an address to Her Majesty for the appointment of a Royal Commission to inquire into the housing of the working classes in populous places. He expressed his opinion that though this question of the poor was not a political one, no political question exceeded it in importance. It was not a simple one, but, on the contrary, one of a very complicated character. Some persons thought that it was a purely sanitary question, and that if the sanitary measures now in the Statute Book were duly carried out, they would be sufficient to meet the evil. But it was not so. There was in the first place that which was usually known as an "unsanitary condition." The accounts of the condition of the dwellings of the working classes in the metropolis undoubtedly showed that in this respect these dwellings were lamentably deficient, and that the sewage-arrangements were in a highly unsatisfactory state. If it were merely a question of proper arrangement with respect to sewage-matters, the existing legislation would seem to be adequate. But we know that for some reason these beneficent provisions have not had their full effect. This subject was intimately connected with the question of water-supply, and the matter of water-supply was linked on to that of water-companies. How far the water-supply was insufficient, how far the local authorities were blameable, and how far any obstacles interfered to prevent the proper application of the law, were matters which required careful investigation. He would remind the House that it must not be too impatient in this matter. It was but twenty-five years ago that Parliament enabled the Metropolitan Board of Works to carry out the great drainage-system of the metropolis, and only since then it had been possible for the sewage-arrangements to be placed in a satisfactory condition. But bad housing meant something else besides bad sewage-arrangements. Houses were in bad repair. Here the Statute Book appeared to deal with the question. But the difficulties were not confined to the actual structure of the dwellings. Houses of the poor were built too closely, and in courts and alleys where there was no ventilation or sunshine, and where all the influences that ministered to disease were unusually powerful, and do not meet with their natural checks. It was to get rid of these unhealthy areas that the measure associated with the name of Sir Richard Cross was passed in 1875. Though this Act had done much good in respect of the structures occupied by the working classes, it had not done what was required. The compensation for ground in the metropolis was very high. Some persons would meet this by putting a part of the cost on the ground landlord or the leaseholder, as the case might be. To such persons he would say that if they had resort to confiscation at all, they ought to get all they could by it, and not confine themselves to confiscating the shilling or sixpence a foot to which the owner was entitled. However, this matter of the structures was another element of the question. He next came to overcrowding, which he regarded as the dominant difficulty of the question. The pulling down of unhealthy houses and turning out the inhabitants was not a remedy, because its immediate effect was to increase the overcrowding of all the remaining houses in which the working people could be accommodated. Unless Parliament could cope with overcrowding, it would defeat all their efforts in this matter. A fitting subject of inquiry by the Commission would be as to the numbers who required house-accommodation, and the radius within which a certain amount of accommodation was required. He did not seek to throw on any class blame for the existing state of things; but as to the charge that much of it was caused by the clearance of estates, he pointed to the circumstance that the census-returns showed a considerable increase in the number of houses in the counties contiguous to London in 1881, as compared with 1871. He thought that agricultural distress had much to do with overcrowding in the poorer districts of the metropolis. While not favouring any great scheme of State interference, he was in favour of Parliament avoiding cowardice in this matter, because there were no absolute rules or principles in politics, and because material and moral laws ought to prevent the State from being indifferent to the social condition of the people. The noble lord concluded a well-received speech by moving the address. —Lord CARRINGTON said that, since Sir Robert Peel, in 1844, gave an impulse to improvement by issuing an inquiry into the state of large towns and populous districts, vast improvements had been made. The cellar-population in Liverpool and Manchester now scarcely existed; but much remained to be done. He thought that the House would admit that the proposal of the appointment of a Royal Commission had the concurrence of the country. It might be asked, why was the proposal not made by Her Majesty's Government? Ever since the present Government took office this subject had received their most anxious consideration. A Select Committee, of which Sir Richard Cross was chairman, sat in 1881 and 1882, and recommended that a "short amending Bill of the Acts of 1875-9, should at once be brought into Parliament to relax the compulsory accommodation of at least as many persons of the working-classes as may be displaced by the improvement-scheme," and "that the accommodation required should vary from one-half to two-thirds." This the Government settled by the Artisans' Dwellings Act, 1882. Other measures were also taken to reduce the expense, delay, and difficulty of carrying out the Artisans' and Labourers' Dwellings Acts. Her Majesty's Government considered that sufficient powers already existed to meet the case, although they had not, in all instances, been sufficiently enforced by local authorities. The reason why the Government did not propose a Royal Commission to inquire into the housing of the poor in populous places was, that if it were granted, there might be a marked indisposition on the part of many local authorities to exercise their legal powers till the Royal Commission had reported. Her Majesty's Government were, however, of opinion that it was desirable that the inquiry wished for should be carried still further. It was felt that the condition of the housing of the agricultural labourer should be improved. Her Majesty, acting on the advice of her Ministers, had decided to issue a commission in the words proposed by the noble marquis, with the omission of the words "in populous places."—The PRINCE of WALES said that he took the liveliest and the greatest interest in the question; but he had not gone into the matter deeply enough to venture on giving any opinion. The subject of the housing of the poor was not totally unknown to him, as, having acquired a property in Norfolk twenty-one years ago, he had had something to do in building fresh dwellings for the poor and the working classes. On arriving there, he found some of the dwellings in a most deplorable condition; but he hoped that now there was hardly one person on the estate who could complain of not being adequately housed. A few days ago, he visited two of the poorest courts and districts in St. Pancras and in Holborn, where the condition of the poor, or rather of their dwellings, was perfectly disgraceful. There had existed, for some time, several private societies organised for inquiry into this question. All ought to be grateful that they should have given time to so important a subject; and he felt that a Royal Commission could in nowise clash with the efforts of these private individuals. His Royal Highness earnestly hoped that the inquiries of the Royal Commission would result in its being able to recommend to Parliament measures of a drastic and thorough character, which should be the means of ameliorating, not only the dwellings of the poor, but their condition generally.—The Earl of SHAFTESBURY said that, although there existed a vast amount of information quite as minute and complete as could be obtained by a Commission, it might be beneficial that it should all be brought as it were into a single picture. At the same time, he was afraid that a number of useful operations now going on would be suspended during the inquiries of the Commission, as there were unfortunately many persons who were glad of an excuse for doing nothing at all. Many imagined that it was the immorality of people which led to the wretched condition of their homes; but he believed that it was structural defects that led to immorality, rather than immorality that produced the condition of the dwellings, and that it was the insufficiency and offensiveness of rooms and their surroundings that degraded the mass of those who were forced to live in them. The houses to which he was referring were so constructed that no current of fresh air ever passed through them. The condition of things was such that domestic duties could not be performed with order and decency. In the condition of life in which thousands of poor people lived, immorality and ill health could not but be largely developed. It was said that if their homes were made better they would soon bring them back to their former state. No doubt many of them were hopelessly sunk in degradation; but there were thousands who would welcome a better state of things. Compared with the state of things which existed forty years ago, there had been an enormous improvement. There was no necessity for new legislation; there were Acts of Parliament enough which only wanted to be consolidated and put consistently into practice. There was, however, one thing for which legislation was needed. Officers of health should be made independent of local bodies, and should not be removable except with the consent of the central authority. Many rookeries had been pulled down, and the dwellings of thousands of the poor had been removed. No doubt, those improvements had been productive of great good; wide streets had been opened, and fresh currents of air passed in every direction. But, unfortunately, most of the poor people had to live in the neighbourhood of their old homes, and hence, in the neighbouring streets, the overcrowding greatly increased. He hoped the Commissioners would take care that the houses had an abundant supply of water all day long, for this was a matter of health. Since the common lodging-houses had been put under the inspection of the police, they were sweet and clean, whereas before the passing of the Act, they were dens of misery and filth. Fever used to be dominant in them, and thirty or forty cases of fever sometimes occurred in a single week; but during the last thirty years only two cases had been reported from the common lodging-houses. The matter before their lordships was well worthy of their consideration, and of the consideration of the Government and of the whole empire. Of this he was quite sure, that there was no hope for the dignity, there was no hope for the safety of the empire, unless it be founded upon the comfort, the health, and the purity of the hearths and homes of the working classes.—The BISHOP of LONDON expressed his satisfaction at the fact that Her Majesty's Government had consented to the appointment of a Royal Commission. The existing remedies, to a certain extent, had already been applied, but they could only be applied to a limited extent, because there were many occupations in which working men must live near to their work, and if their dwellings were cleared away too quickly, the consequence would be that large numbers would be driven out of their homes and crowded together in a worse manner than before.—The EARL of WEMYSS believed that it would be well to leave as much as possible to private enterprise, and to philanthropic efforts and agencies, and he could not see that the appointment of a Commission was necessary. A Committee of the House of Commons appointed to consider the subject had sat for two years, had taken full evidence, and visited many districts, and their conclusion was not that further restrictive legislation was necessary, but was in favour of further relaxation. The Legislature, therefore, already possessed all the information necessary. The appointment of this Commission would cause delay, because no one would invest in this kind of property until he saw what the Commission recommended. It would cause discouragement, because people could not know what might happen at the end of the two years. It would cause demoralisation, because it would teach large classes that they had not to look to their own exertions, and that the State must come forward and raise them out of the slough of despond. He had no trust that the idea would not get abroad that the State, no matter at whose cost, was going to build houses for the poor in the large towns.—Viscount **CRANBROOK** did not think that any of their lordships who assented to this Commission considered that, by so assenting, they implied that the State was to take the building of houses for the poor into its own hands. But the State had a great duty, not only of a sanitary but of a moral kind, and since it had taken into its hands the compulsory education of the poor, that duty was far more imperative. He was not at all convinced that the Legislature possessed all the desirable information on the subject. What he desired was, to see the information gathered from different localities brought into one focus, and treated by minds coming new to the subject. There was not only a great deal of information as to the present condition of things, but a great deal of exaggeration.—The **BISHOP of ROCHESTER** bore out the opinion of Lord Shaftesbury, as to the great evils now existing in consequence of over-crowded dwellings.—The **LORD CHANCELLOR** congratulated the House on the unanimity of their lordships on this subject, and paid a tribute to the poorer classes in the great cities and towns of this country, and to the general excellence of their character in very trying circumstances.—Lord **SALISBURY** stated that he had no objection to the omission of the words "in populous places," and that he had nothing to do with the composition of the Commission.

The motion as amended was agreed to.

HOUSE OF COMMONS.—Friday, February 22nd.

Egyptian Hospital Arrangements.—Sir H. **VERNEY** asked the Secretary of State for War whether, in the field-hospitals detailed for service in the approaching campaign, any increase of the Army Hospital Corps staff would be made for the purpose of providing washermen, sanitary police, watermen, and other subsidiary services of the hospital, of which the want was so much found in the Egyptian campaign.—The Marquis of **HARTINGTON**: The arrangements for equipping the medical service of the expedition to Suakim have been made locally, and reports as to details have not yet been received. The Army Hospital Corps in Egypt has been reinforced by a detachment of 50 non-commissioned officers and men.

Cholera.—Dr. **CAMERON** asked the Secretary to the Local Government Board whether, in consideration of the exceptional importance of accurate knowledge as to the nature and causes of cholera, he would communicate with the Foreign Office as to the possibility of presenting to Parliament translations of the reports by M. Pasteur and Dr. Koch, of the Commissions recently sent out to Egypt and India to investigate the pathology of that disease.—Mr. G. **RUSSELL** was understood to say that the Local Government Board had communicated with the Foreign Office, and the reports would be printed and laid on the table.

Monday, February 25th.

The Royal Commission on the Housing of the Poor.—Mr. **PENNINGTON** asked the First Lord of the Treasury whether, in view of the exceptional experience of Miss Octavia Hill on questions relating to the housing of the poor, he would consider the advisability of her being appointed to serve on the Royal Commission which was about to inquire into the subject.—Sir C. **DILKE** said there could be no doubt as to the exceptional experience of Miss Hill, and he had, for the last thirteen years, had personal knowledge of her excellent system. The experience, however, of highly skilled persons was often more valuable when they had an opportunity of giving evidence before a Royal Commission than when they were themselves commissioners.—Sir R. **CROSS** asked whether the Royal Commission would extend its inquiries to Ireland and Scotland, and, if so, whether an Irish and a Scotch member should not be placed on the Commission.—Sir C. **DILKE** said the inquiry would, no doubt, have to be made into the housing of the working classes in Scotland and Ireland. If the Royal Commission, at its preliminary meeting, should decide to consider at an early date the question of the housing of the working classes in either Scotland or Ireland generally, an addition to the Royal Commission would probably be recommended to the Queen.

London Water.—Lord G. **HAMILTON** asked the Secretary for the Home Department whether his attention had been directed to a decision of Mr. Justice Pearson, on February 14th, in a case "Ballard v. Tomlinson," heard at the High Court of Justice, Chancery Division; and whether, assuming his judgment to be correct, the Government would take steps to remedy an obvious defect in the law, which permitted the pollution of the water derived from wells in the chalk, from which many of the London water-companies took their supply.—Sir W. **HARCOURT** said that there was a clear difference between water-right in respect of water flowing in a well known water-course, and water flowing in subterranean channels. In the former case, an adjoining owner had a right to resist by law any diversion or pollution of that water; but it was not so in the case of subterranean waters. He should, however, have the matter examined from every point of view.

Contagious Disease at Chatham.—Mr. **BENTINCK** asked the President of the Local Government Board whether he had received a report from Dr. Buchanan relating to the present state of contagious disease at Chatham; whether this report was not in possession of the Local Government Board on Thursday last, when the right hon. baronet said that he had received no report from Dr. Buchanan; and whether the right hon. baronet would lay the report on the table of the House.—Sir C. **DILKE** replied that a copy of the report was received at the Local Government Board on Thursday last, the day on which the question of the right hon. gentleman was announced. He had seen the report, which went outside the question of Poor-law administration. He did not think it of a nature to receive general circulation, but he would be happy to let the right hon. gentleman see it himself if he desired to do so.—Mr. **BENTINCK** expressed his intention of moving that the report be laid on the table of the House.

MEDICO-LEGAL AND MEDICO-ETHICAL.

POOR-LAW MEDICAL OFFICERS AND INFIRMARY APPOINTMENTS.

SIR,—I thank "Honorary Medical Officer," in the JOURNAL of February 16th, has just cause for complaint on the action of his colleague in accepting the appointment of a parochial medical officer. A hospital-appointment may [illegible] of little value where the whole staff do not appreciate the dignity of such a position. I make no allusion to village hospitals, where the necessities of the surroundings must be taken into consideration, but in large towns it is a different matter. In these, it often happens that a number of appointments fall to the share of one or two men, from interest of one sort or another. In this manner, many junior members of the profession are left without any share in what really ought to be their work, by their seniors. The amount of work involved by the holding of many appointments, and the hurry and, perhaps, neglect, caused by having so "many irons in the fire," is, I believe, the reason why so many medical friendly societies and private dispensaries are now springing up in all our large towns, to the detriment of the profession as a whole. In the town where I reside, there are three surgeons to the hospital; and two of these are parochial medical officers, vaccination officers, medical officers of health, and have club appointments as well; and one is, in addition, medical officer to the union infirmary. The propriety of such an amalgamation of appointments I leave to the judgment of your readers. I am, etc., M.B., M.A.

THE LAW OF PARTNERSHIPS.

SIR,—"Subscriber" will find the information which he requires as to "medical partnerships and agreements, and deeds relating thereto," in Glenn's *Manual of the Law affecting Medical Men*, published by J. and A. Churchill, London, 1871. I am, etc., F. C. [illegible], M.B.

10, New Street, Newry, Co. Down, February 11th, 1884.

MILITARY AND NAVAL MEDICAL SERVICES.

VOLUNTEER BEARER DETACHMENTS.

SIR,—In reply to your correspondent "Active Service," who asks for information respecting the formation of a detachment of regimental bearers in [illegible], in your editorial note, we should first of all apply to the commanding officer of the battalion for permission. This granted, he will be [illegible] per company, to be trained as [illegible] bearers to their respective companies. But, from experience, I have found it better not to ask for men, as it is apt to cause friction with officers and colour-sergeants of companies when not [illegible] parade, and the detachment can only work satisfactorily when a mutual good feeling exists between the two departments. Of course, [illegible] desired, to any [illegible] attending the purely technical classes, [illegible] not interfere with company drills. With us, the ambulance [illegible] equivalent to company drills when the two departments are on parade together. I would suggest the advisability of taking [illegible] their companies, as petty officers and [illegible] which [illegible] after the [illegible] has been formed. One exception to this rule, however, may [illegible] in the case of [illegible] officers who may be [illegible] by application to the [illegible] of instruction, and, best, for [illegible] to Lieutenant A. [illegible] Ambulance Department, [illegible] S.W. [illegible] I shall be pleased to give any further information in my power.—Yours, etc.,

Lewis [illegible] Surgeon 1st Vol. Bat. Royal War. Regt.

[illegible] Newhall Street, Birmingham, February [illegible], 1884.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

QUARTERLY RETURN OF THE REGISTRAR-GENERAL.

THE return, recently issued, comprises the marriages registered in England and Wales during the third quarter of 1883, which were those of 104,384 persons, corresponding to an annual marriage-rate of 15.5 per 1,000 of the estimated population. This rate was the same as that of the corresponding quarters of the ten previous years. The rate was lowest, as usual, in the agricultural, highest in the mining districts of the country, and in London.

The births registered in the fourth quarter of 1883 in England and Wales were 214,882, being 2,715 less than the number returned in the corresponding period of 1882. The annual birth-rate was 31.8 per 1,000 of the estimated population, and was 2.4 below the mean rate of the ten preceding corresponding quarters. So low a birth-rate has not been recorded in the fourth quarter of any year since 1855. In London the birth-rate was 32.4, in the twenty-seven largest provincial towns it was 33.8.

During the last three months of 1883 the deaths registered in England and Wales were 128,905, corresponding to an annual death-rate of 19.1 per 1,000 of the estimated population. This death-rate was 1.8 below the mean rate of the ten preceding corresponding quarters, but exceeded by 0.4 the exceptionally low rate in the fourth quarter of 1881. The low rate last quarter implied that nearly 17,000 persons survived the three months who would have died had the death-rate corresponded with the average rate in the 45 preceding corresponding quarters. The 128,905 deaths included 66,292 of males and 62,613 of females. The annual death-rate among males was 20.2, and among females 18.1 per 1,000 estimated to be living of each sex. In equal numbers living, the deaths of males were 112 to 100 deaths of females. The urban death-rate was 20.7, the rural 16.6; the former was 2.2, the latter 1.4 below the average. In equal numbers living, the deaths were 125 in the urban to 100 in the rural population. The death-rate of London was 20.3, and 21.9 in the twenty-seven largest provincial towns, among which it ranged from 16.8 in Portsmouth, and 17.7 in Bradford, to 25.7 in Preston, 26.7 in Newcastle, and 27.9 in Manchester. In fifty other large town-districts, the death-rate was 21.0; it was 12.8 in Colchester, 14.2 in Dover, and 14.7 in Maidstone, whereas it was as high as 27.2 in Stoke-upon-Trent, 28.5 in Ashton-under-Lyne, 28.7 in Wigan, and 33.4 in Dudley.

The 128,905 deaths last quarter included 30,560 of infants under one year of age, 64,932 of children and adults aged between one and sixty years, and 33,413 of persons aged sixty years and upwards. The rate of infant mortality was 142 per 1,000 (measured by the proportion of deaths under one year to registered births), against a previous ten years' average of 144. The infant mortality of the twenty-eight great towns was 159 per 1,000 births; it was 144 in London, and 114 in Portsmouth, and ranged upwards to 191 in Leeds, 195 in Manchester, 200 in Blackburn, and 220 in Preston. In other town-districts, it ranged from 80 in Colchester, 96 in Hastings, and 97 in Darlington, to 239 in Stoke-upon-Trent, 243 in Macclesfield, and 245 in Bury.

Among persons aged between one and sixty years, the annual rate of mortality was 10.8 per 1,000 persons living, against an average in the ten previous corresponding quarters of 11.8. The deaths among persons aged sixty years and upwards corresponded to a rate of 66.3, and was 5.6 below the mean rate of the quarter. It was only 70.4 in London, and was as high as 89.6 in Newcastle, 93.2 in Manchester, and 102.4 in Halifax. The rate of mortality at all ages was 8.6 per cent. below the mean rate in the ten preceding corresponding quarters. The death-rate of infants showed a decrease of 1.4 per cent., that among children and adults aged between one and sixty years a decrease of 8.5 per cent., and that among aged persons a decrease of 7.8 per cent.

The 128,905 deaths from all causes included 4,197 attributed to scarlet fever, 3,148 to diarrhœa, 2,493 to measles, 2,197 to fever, 1,794 to whooping-cough, 1,227 to diphtheria, and 231 to small-pox. The total number of deaths ascribed to these causes was 15,287, corresponding to an annual rate of 2.27 per 1,000. Scarlet fever was chiefly fatal in Leeds, Walsall, Middlesbrough, Wigan, Ashton-under-Lyne, and Dudley; diarrhœa in Preston, Stoke-upon-Trent, and Dudley; measles in Manchester, Salford, Barrow-in-Furness, Cambridge, South Shields, Romsey, Bridport, and Gainsborough; fever in Liverpool, Blackburn, Preston, Swansea, and Wigan; and whooping-cough in Brighton, Huddersfield, Chatham, and Macclesfield. Diphtheria was more fatal in this quarter than in any other single quarter of the last ten years. The chief mortality from this disease took place in the extrametropolitan parts of Middlesex, in Bedfordshire, and in Huntingdonshire, London, Cardiff, and Plymouth.

The mean temperature of the air in the quarter at Greenwich was 44.9° Fahr., and was 1.3° Fahr. above the average; the rainfall 5.26 inches, and 1.93 inch below the average. The average price of wheat was lower than in the last quarter of any year since 1864. The natural increase of population of England and Wales, or the excess of births over deaths, was 85,977 last quarter; but 37,832 English emigrants left these shores during the same period.

INFECTIOUS DISEASE AND TRAVELLING VANS.

A REPORT by Mr. George Turner to the Buntingford Sanitary Authority contains an account of an epidemic of scarlet fever, which was spread in a remarkable manner through the agency of a travelling van in which the first case appeared. Early in the spring the van stopped at Therfield, where there were cases of scarlet fever. The man's child, a girl about four years old, was ill with a sore throat; next the man himself, his brother, and a son, suffered in a similar manner. The van proceeded to Cotterel, the village in which the proprietor lived, and there the disease quickly spread, and the man called on his sister, living at Cromer, to see his daughter. This family subsequently suffered from scarlet fever, and communicated the disease to those living near them. The van went next to the school and club feast at Yardley, on Whit-Monday, and several cases occurred there in consequence. On May 30th it went to Chipping, and on June 1st some children who had visited the van at the fair were attacked by the fever. These were the first cases of which the authority received any information, and they were visited by Mr. Turner on June 8th. Great Munden was the next destination of the van, where it stayed from June 1st to June 8th, with the result that several cases of scarlet fever appeared in this village also. During the next three days the van remained at Wade's Hill, where the disease made its appearance; but Mr. Turner was unable to trace any definite connection between the cases in this and adjoining places and the visit of the van. The mischief caused by this family did not cease here, for a relation in the same line of business travelled with them, and thus a separate family living at Doe Bridge suffered in the same way from sore throats. The children went to school at Sandon, and infected others attending from other villages. The sanitary authority properly decided to prosecute the man, but the proceedings unfortunately fell through, owing to the fact that the medical attendant had failed to inform his patient at the outset of the nature of the disease. With a view of meeting similar occurrences, Mr. Turner strongly advocates the abolition of fairs, which, when effected, would be followed by the disappearance of the travelling vans. The small local fairs are described as nothing more nor less than public nuisances; no business worthy of the name is transacted at any of them, and their present use seems to be restricted to converting a quiet village into a pandemonium for a day or two. A similar circumstance, though, fortunately, not of such an extensive character, happened at Welwyn, whore a case of small-pox was imported by a Whit-Monday holiday-maker. In referring to the incident, Dr. C. E. Saunders observes that there is scarcely any public holiday which is not immediately followed in some part of his extensive district by a case of infectious disease, due to the visit of friends, or to persons themselves visiting infected districts. The congregation of large numbers of persons at fairs, and a consequent dissemination of zymotic disease, is no new evil, and efforts have been made in some parts of the country to stop these gatherings, though so far with very partial success.

STIMULANTS IN MARYLEBONE WORKHOUSE.

FROM the annual report presented to the guardians by the master, Mr. Geo. E. Douglas, we learn that in 1883, during the whole of the year, the medical officer had ordered no stimulants for any of the inmates under his care, so that, except on Christmas Day, when half a pint of porter was allowed to each person at dinner, there had been no beer, wine, or spirits consumed in the workhouse. This absence of a disturbing intoxicating element may account for the very satisfactory account of the discipline and general conduct in the establishment, the master reporting that there were hundreds of old people in the house whose existence might be unknown, so far as regarded the trouble they gave either to the guardians or the officers. The daily average number of inmates was 1,540.

SALARY OF A MEDICAL OFFICER OF HEALTH.—Some correspondence has lately passed between the Local Government Board and the Okehampton Rural Sanitary Authority, which has resulted in the former declining to confirm the appointment of Mr. Bennett, as medical officer of health at £50 *per annum*, on account of the inadequacy of the salary "for the efficient discharge of the important duties" of the office. The subject was under consideration at a recent meeting of the authority, and they passed a resolution pointing out that the salary is the same as the Local Government Board sanctioned only one year ago, when Mr. Ash was appointed; that Mr. Bennett resides in the centre of the district, while Mr. Ash was twelve miles distant from it; that they are well conversant with the requirements of the district, which is healthily situated; and that, as Mr. Bennett is willing to act, they saw no reason why the salary should be increased beyond the amount sanctioned last year, and urged the Board above to reconsider the matter.

HEALTH OF ENGLISH TOWNS.—In twenty-eight of the largest English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated aggregate population of 8,762,354 persons, 5,641 births and 3,538 deaths were registered during the week ending the 23rd ultimo. The annual rate of mortality per 1,000 persons living in these towns, which had been 20.6 and 20.1 in the two preceding weeks, rose to 21.1 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow: Portsmouth, 14.1; Hull, 15.3; Wolverhampton, 16.0; Brighton, 16.6; Leicester, 16.9; Bristol, 17.2; Bradford, 18.2; Birmingham, 18.6; Plymouth, 19.4; Derby, 19.7; Sheffield, 19.8; Sunderland, 19.9; London, 20.1; Cardiff, 20.7; Birkenhead, 20.7; Blackburn, 20.8; Salford, 21.2; Preston, 21.5; Huddersfield, 21.8; Norwich, 23.1; Liverpool, 23.9; Oldham, 24.7; Newcastle-upon-Tyne, 25.9; Bolton, 26.3; Halifax, 26.6; Leeds, 26.8; Nottingham, 26.9; and Manchester, 30.8. In the twenty-seven provincial towns the death-rate last week averaged 21.8 per 1,000, and therefore exceeded by 1.7 the rate recorded in London. The 3,538 deaths registered, last week, in the twenty-eight towns, included 127 which were referred to whooping-cough, 99 to scarlet fever, 95 to measles, 38 to diarrhœa, 34 to "fever" (principally enteric), 29 to diphtheria, and 11 to small-pox; in all, 433 deaths resulted from these principal zymotic diseases, against 399 and 415 in the two preceding weeks. These 433 deaths were equal to 12.2 per cent. of the total deaths, and to an annual rate of 2.6 per 1,000. In London, this zymotic death-rate was last week equal to 2.7 per 1,000, and in the twenty-seven provincial towns it averaged 2.5, and ranged from 0.0 in Brighton, 0.5 in Bradford, and 0.6 in Norwich, to 4.0 in Salford, 4.8 in Manchester, and 5.1 in Leeds. The deaths referred to whooping-cough, which had steadily declined from 130 to 120 in the four previous weeks, rose again last week to 127, and caused the highest rates of mortality in Manchester and Bolton. The fatal cases of scarlet fever, which had been 103, 94, and 79 in the three preceding weeks, rose to 99 last week, and caused the highest proportional fatality in Manchester, Preston, and Leeds. The 95 deaths from measles showed a further increase upon the numbers returned in the two preceding weeks; the highest rates of mortality from this disease last week, were recorded in Salford, Oldham, Derby, and Nottingham. The 38 fatal cases of diarrhœa differed but slightly from the average. The deaths referred to different forms of fever, which had been 43 and 40 in the two preceding weeks, further declined last week to 34 (a lower number than has been recorded in any week since July, 1883) and caused the largest proportional fatality in Bolton and Plymouth. The 29 fatal cases of diphtheria in the twenty-eight towns last week were 10 less than the number returned in the preceding week; 14 occurred in London, 3 in Liverpool, 3 in Hull, 2 in Manchester, and 2 in Newcastle-upon-Tyne. The deaths referred to small-pox in those towns, which in the two previous weeks had been 21 and 16, further declined to 11, of which 4 were recorded in London, 3 in Birmingham, 2 in Sunderland, 1 in Liverpool, and 1 in Newcastle-upon-Tyne. The death-rate from diseases of the respiratory organs, judged by the metropolitan returns, was again considerably below the average; the deaths referred to these diseases in London, which had declined in the three preceding weeks from 367 to 334, rose last week to 345, but were as many as 164 below the corrected average weekly number, and were equal to an annual rate of 4.5 per 1,000. The causes of 78, or 2.2 per cent. of the 3,538 deaths registered last week in the twenty-eight towns were not certified, either by registered medical practitioners, or by coroners. The proportion of uncertified deaths in London did not exceed 1.3 per cent., while it averaged 3.1 per cent. in the twenty-seven provincial towns, and showed the largest excess in Birkenhead, Salford, Oldham, and Sunderland.

HEALTH OF SCOTCH TOWNS.—During the week ending the 23rd ult., 843 births and 545 deaths were registered in eight of the principal Scotch towns, having an estimated population of 1,254,607. The annual rate of mortality, which had been 24.7 and 20.9 in the two preceding weeks, rose again last week to 22.6 per 1,000, which exceeded the average rate for the same period in the twenty-eight large English towns by 1.5 per 1,000. Among these Scotch towns, the death-rate was equal to 11.8 in Perth, 14.8 in Leith, 17.9 in Greenock, 21.8 in Dundee, 22.0 in Aberdeen, 23.0 in Edinburgh, 24.0 in Paisley, and 24.9 in Glasgow. The 545 deaths registered last week in these towns included 77 which were referred to the principal zymotic diseases; of these, 26 resulted from whooping-cough, 13 from diphtheria, 10 from scarlet fever, 10 from "fever," 10 from diarrhœal diseases, 8 from measles, and not one from small-pox. These 77 deaths were equal to 14.1 per cent. of the total deaths, and to an annual rate of 3.2 per 1,000, which exceeded by 0.6 the average zymotic rate recorded last week in the twenty-eight large English towns. The zymotic rates in the Scotch towns ranged from 0.0 and 1.8 in Perth and Paisley to 2.9 in Greenock, 3.2 in Edinburgh, and 4.2 in Glasgow. The deaths referred to whooping-cough, which had been 23 and 21 in the two preceding weeks, rose to 26—a higher number than has been recorded in any week this year; 18 occurred in Glasgow, 4 in Edinburgh, and 3 in Dundee. The 13 fatal cases of diphtheria showed a slight further decline from those returned in recent weeks, and included 6 in Glasgow, 3 in Edinburgh, and 2 in Aberdeen. The deaths from scarlet fever, which had been 15 and 8 in the two preceding weeks, rose again to 10, of which 8 occurred in Glasgow and 2 in Edinburgh. The 10 fatal cases of "fever" exceeded by 6 the exceptionally low number recorded in the previous week, and included 6 in Glasgow. The deaths referred to measles showed a further decline from those returned in the two preceding weeks; 4 of the 8 deaths from this disease in the Scotch towns last week occurred in Edinburgh. The mortality from diseases of the respiratory organs in these towns continues much below the average, and was last week equal to an annual rate of 4.5 per 1,000, which corresponded with the rate from the same diseases in London. As many as 100, or more than 18 per cent. of the 545 deaths registered last week in these towns, were uncertified.

HEALTH OF IRISH TOWNS.—During the week ending February 23rd, there were 415 deaths in the sixteen principal town-districts of Ireland. The average death-rate was 25.1 per 1,000 of the population, the respective rates for the several districts being as follow:—Kilkenny, 8.5; Drogheda, 8.5; Armagh, 10.3; Cork, 15.6; Galway, 16.8; Waterford, 18.5; Belfast, 19.4; Lurgan, 25.7; Newry, 28.1; Dublin, 29.2; Sligo, 33.7; Wexford, 34.2; Londonderry, 37.4; Limerick, 37.8; Lisburn, 38.7; Dundalk, 39.3. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.3 per 1,000, the rates varying from 0.0 in Galway, Kilkenny, Drogheda, Wexford, Sligo, Lurgan, and Armagh, to 10.5 in Newry; the 8 deaths from all causes registered in the last-named district comprising 1 from measles and 2 from diarrhœa. Among the 81 deaths from all causes registered in Belfast were 4 from scarlatina, 1 from whooping-cough, 1 from ill-defined fever, and 1 from diarrhœa; and among the 21 deaths in Londonderry were 2 from scarlatina, 1 from whooping-cough, and 2 from diarrhœa. Two deaths from measles were registered in Cork. In the Dublin Registration District the deaths amounted to 202; 18 deaths from zymotic diseases were registered, being 2 over the number for the preceding week, but 16 under the average for the eighth week of the last ten years; they comprised 4 from scarlet fever (scarlatina), 2 from typhus, 3 from whooping-cough, 2 from enteric fever, 4 from diarrhœa, etc.

HEALTH OF FOREIGN CITIES.—It appears from statistics published in the Registrar-General's return for the week ending the 23rd ultimo, that the death-rate recently averaged 36.7 per 1,000 in the three principal Indian cities; it was 29.3 in Bombay, 32.5 in Calcutta, and 52.7 in Madras. Small-pox caused 84 deaths in Madras, and cholera 22 in Bombay, 24 in Calcutta, and 26 in Madras; "fever" fatality showed the largest excess in Bombay. According to the most recent weekly returns, the average annual death-rate in twenty-three of the largest European cities was 28.7 per 1,000, and was no less than 7.6 above the mean rate last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 40.1, and again showed an increase; the 711 deaths included 31 from typhus and typhoid fever, and 22 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged only 23.7, the highest rate being 27.2 in Stockholm; scarlet fever caused 5 deaths in Christiania, and 3 in Stockholm, and 2 deaths from typhoid fever occurred in Copenhagen. In Paris the death-rate was equal to 25.9, against but 20.1 in London, and the deaths included 60 from diphtheria and croup, and 26 from typhoid fever. The 220 deaths in Brussels were equal to a rate of 27.1, and 14 fatal cases of small-pox were registered, showing an increase upon recent weekly numbers. In Geneva the rate was 28.7, and 4 of the 39 deaths resulted from whooping-cough. In the three principal Dutch cities -Amsterdam, Rotterdam, and The Hague—the mean death-rate was 27.3, the highest rate being 33.2 in Rotterdam, where 6 deaths were referred to diphtheria and croup; 26 more deaths resulted from diphtheria and croup in Amsterdam, and three of the 48 deaths in The Hague were also attributed to croup. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.1, and ranged from 23.2 and 24.8 in Berlin and Hamburg, to 36.5 in Trieste and 38.7 in Prague. Small-pox caused 50 deaths in Prague, and 4 in Buda-Pesth; and diphtheria showed the largest proportional fatality in Trieste, Dresden, and Berlin. The death-rate in three of the principal Italian cities averaged 34.9, and was equal to 29.9 in Rome, 30.7 in Venice, and 43.4 in Turin; the 211 deaths in the latter city included 13 from measles, 6 from typhoid fever, and 2 from small-pox. The 156 deaths in Lisbon included 3 from typhoid fever, and were equal to a rate of 40.0. In four of largest American cities, the death-rate averaged 23.0, and ranged from 19.2 in Brooklyn to 26.0 in Philadelphia. The high death-rate in Philadelphia was mainly due to the fatality of scarlet fever and typhoid fever, which caused 34 and 18 deaths respectively; 9 of the 160 deaths in Baltimore resulted from diphtheria.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

HARTISMERE RURAL DISTRICT.—In his last report, Dr. Barnes has collected some interesting statistics, with a view of showing the influence of dampness of site in producing disease. In one parish, the average annual death-rate for the past twenty-three years was 23.5, and the infantile mortality represented 27 per cent. of the total deaths. Zymotic, tubercular, and lung-diseases, and phthisis, were unusually fatal during the whole period; and, in looking for a cause, Dr. Barnes attributes the high death-rate, in some measure, to the unusual dampness of the soil. The inhabitants of the place live principally in houses scattered round a large green, which is undrained, with a soil of stiff clay overlaid by a thin layer of boggy soil, from which the water frequently presses out when walked upon. The village has frequently been the seat of epidemics of diphtheria, and during 1882 there were three separate outbreaks of the disease. The first two did not extend, but the third assumed serious proportions. The initial case occurred in a house where the water-supply was open to pollution; but the subsequent cases, which were scattered all over the parish, presented nothing in common in either water-supply, or food-supply of any sort, or any other condition, except dampness of subsoil. The disease, however, was largely spread by direct contagion, in which the attendance of infected children at school played an important part. Out of a total of 25 deaths referred to the seven principal zymotic diseases, diphtheria accounted for 10, diarrhœa for 7, and whooping-cough and enteric fever each for 3. The death-rate from all causes is estimated at 18.4 per 1,000, which is 2.8 higher than the rate recorded in the previous year.

HEBBURN.—During 1882, this district was visited by a most extensive epidemic of scarlet fever, from which no fewer than 26 deaths were recorded, or 2.23 per 1,000. The disease was of a mild type; and to this fact Mr. Sweet attributes the heavy mortality, as in many cases the patients were allowed to go out too soon, and, by getting a chill, contracted other diseases ending fatally, such as inflammation of the kidneys, lungs, etc. Needless exposure seems to have been one of the principal factors in the propagation of the infection; and, in referring to the subject, Mr. Sweet observes: "It is alarming to notice the carelessness and ignorance of the inhabitants generally as to the deadly nature of scarlet fever, whether mild or malignant; the constant visitation to infected houses being the most fruitful cause of the spread of the disease, together with allowing children to go into the streets long before they are free from infection. As a rule, I find it almost impossible to thoroughly isolate the cases. Parents seem to consider that scarlet fever and measles are diseases as inseparable from childhood as dentition." He is convinced that nothing but strong measures will convince them to the contrary; and these he proposes shortly to adopt, though their exact nature does not appear. From the seven principal zymotic diseases there were, in all, 44 deaths, equal to a rate of 3.2 per 1,000, nearly twice as high as that of 1881. The death-rate from all causes represented 19.62 per 1,000. Mr. Sweet notes with satisfaction that his district has been provided with an infectious hospital, which, although only temporary, will, he thinks, be sufficient to check an outburst of disease.

KINGS'S NORTON RURAL DISTRICT.—A noticeable feature of the mortality statistics of this district for 1882, was the malignant type which diphtheria assumed wherever it appeared. Although there were in all only 12 cases notified, in 8 instances death followed. On inquiry, Mr. Hollinshead invariably found the disease to be associated with defective drainage and water-supply. All the cases appeared to have a distinct origin, and were not in any way connected with each other, except where more than one case occurred in the same house. Similar conditions were responsible for four deaths from typhoid fever, which prevailed during the latter part of the year, after a heavy rainfall. Whooping-cough was fatal to four children, who lost their lives from chest-complications brought about by careless or ignorant exposure. The mortality from diarrhœa, which occurred during the summer weather, is attributed to meteorological conditions which favoured the decomposition of animal and vegetable refuse. Altogether, zymotic diseases were fatal to 28 persons. While the death-rate from these causes exhibits a persistent decline, the serious prevalence of diphtheria and typhoid fever is an unsatisfactory feature of the obituary of 1882. In referring to the excessive infantile death-rate, Mr. Hollinshead takes exception to the deaths from infantile diarrhœa being classed as zymotic, as he is convinced that they arise from improper feeding. During 1882, the general death-rate represented 13.21 per 1,000.

STOCKPORT RURAL DISTRICT.—Mr. Moore has a satisfactory state of things to record for the Hazel Grove division of this union. Out of a total of 109 deaths from all causes, 29 occurred in persons aged sixty years and upwards, while the mortality amongst infants showed a decrease. In this last connection, the health-officer observes that he is still of opinion that more care might be exercised by those parents whose daily avocations necessitate their absence from home in placing their children out to be nursed, when a resort to that undesirable article of almost constant use—the feeding bottle—becomes imperative. Measles and scarlet fever were present at one time in epidemic proportions, and it was deemed necessary to close some of the schools. Mr. Moore speaks in high terms of the assistance rendered by the schoolmasters in immediately ascertaining the cause of every child's absence, and by this means bringing under his notice cases which otherwise might not have been discovered until disease of an infectious character had been unconsciously conveyed to others. The general death-rate represented 14.8 per 1,000. Special attention was directed to the abatement of nuisances, and the authority are reminded of the need for improved sewerage arrangements.

LANCASTER RURAL AND URBAN DISTRICT.—The chief interest of the report on the rural district centres in the account it contains of an outbreak of enteric fever at Galgate, which was the subject of inquiry at the hands of Dr. Barry, of the Local Government Board. At the outset, the water-supply was at fault; but this was discontinued almost immediately, and the subsequent cases (16) seem to have been due to direct infection, since all were relatives of the person first attacked. From all causes, the deaths properly due to the district were 298, of which 38 were caused by zymotic disorders, the death-rates representing 17.0 and 2.2 per 1,000 respectively. The chief sanitary need of the district is a systematic removal of refuse, while many localities are in need of a proper water-supply. The urban district was visited by a widespread epidemic of measles, the infection being disseminated by the attendance of children at schools. The epidemic lasted from February to April. During this period, no fewer than 700 cases occurred, with 43 deaths, all of which were children under five years of age, the illness being accompanied by inflammatory chest-affections. Diarrhœa was fatal to 25 persons, whose deaths were registered chiefly in the month of September, and in localities where common privies abound. The serious prevalence of this disorder and of measles swelled the zymotic rate to 3.4 per 1,000, the general death-rate being 20.0. There were several cases of enteric fever found in association with defective drainage, which, in spite of reiterated warnings, still remains unremedied. The statistical tables, to which Mr. Harker so frequently refers, would be a welcome addition to the reports as printed.

ROMFORD RURAL DISTRICT.—Following the lines of previous reports, Dr. Wright has prepared a useful and complete statement of his work in this district, in which he comments on the mortality-statistics and their relation to sanitary defects. Scarlet fever prevailed to a considerable extent, but in more or less isolated fashion, in various parts of the union. At Ilford it was somewhat extensively prevalent at the beginning of the year, but information as to its existence did not reach the sanitary officials for some weeks afterwards, when it was impossible to trace the source of infection. Dr. Wright complains of the want of information in this respect, and urges the provision of an infectious hospital. Small-pox appeared in a serious form at Rippleside, and of twenty-five cases seven were fatal, one death happening in the person of a woman who obstinately refused to be re-vaccinated, although she was engaged as a nurse to a small-pox patient. Several cases of diphtheria occurred, and where a death was registered from this disorder, it was found in association with faulty sanitary arrangements. Altogether, diseases of a zymotic character were fatal in sixty-three instances, equal to a zymotic death-rate of 2.06 per 1,000; the general rate of mortality, based upon a population of 30,554 persons, represented 17.4 per 1,000. Generally speaking, the sanitary condition of the district is far from satisfactory. At Ilford, Barkingside, Dagenham, and Hornchurch, the arrangements for the disposal of sewage are extremely defective, and in other places the water-supply is deficient, the inhabitants of one village being actually dependent upon itinerant vendors for this first essential of life.

EAST DEREHAM.—Mr. Vincent's report is chiefly occupied in refuting the exaggerated rumours which have been spread about of the unhealthiness of the town, especially in regard to the undue prevalence of "fevers." Mr. Vincent observes that Dereham will compare favourably with any other town in the country on the score of healthiness; but if some of its inhabitants are so disloyal as to parade all the small outbreaks of fever, which he believes are unavoidable even in the best regulated and drained communities, for the benefit of the neighbourhood, and so make a small molehill assume the proportions of a mountain, it will be impossible for any sanitary authority to maintain the credit for healthiness which the town has hitherto enjoyed. The mortality-statistics of 1882 were by no means unfavourable, for the general death-rate represented 16.9 per 1,000, and there were but 10 deaths from zymotic disease, 8 of which occurred amongst children under five years of age. The health-officer reports that the sewerage-system has worked remarkably well, and that the water-supply provided by the authority is gradually extending throughout the district.

MARKET DRAYTON RURAL DISTRICT.—While congratulating his authority upon the progressive improvement in the general death-rate of their district, Dr. Sandford reports that the mortality amongst infants still continues high. During 1882 this rate represented 3.17, and out of a total of 30 infants who succumbed during their first year of existence, no fewer than 12 were born out of wedlock. This fact is a very suggestive one, and points either to incompetent nursing or to culpable neglect on the part of the mothers, in committing their offspring to the care of foster-parents insufficiently remunerated, and consequently unable or unwilling to procure suitable food for the children they have undertaken to nurse. There is, unfortunately, good reason for believing that neglect is largely responsible for the high mortality amongst illegitimate children, and until these deaths are more frequently made the subject of a coroner's inquest, there seems little hope of reducing their number. To zymotic diseases, 19 deaths were referred, croup (not spasmodic) accounting for six, and diarrhœa for five. Enteric fever was fatal to three persons, defective sanitary conditions being noted in each case. The death-rate from all causes represented 13.7 per 1,000, against 16.1 in 1880, 18.8 in 1870, and 23.6 in 1860, each decade thus showing a steady and persistent decline. In referring to the mortality from tubercular phthisis, Dr. Sandford notes that three deaths happened in a single family, viz., both parents and a child.

WILLITON RURAL DISTRICT.—Although the western division of this district was visited with outbreaks of whooping-cough and scarlatina, there were but four deaths returned from zymotic causes, while the general death-rate was as low as 14.7 per 1,000. In referring to the difficulties which a health-officer of an outlying rural district meets with in his efforts towards restricting the spread of infection, Mr. Clarke animadverts upon the carelessness of parents, and suggests that it should be made compulsory upon schoolmasters to notify to him the absence of scholars, and the presumed nature of their illness. In other places, the efforts of school officials in this direction have been marked with no little success; and the adoption of some such scheme here would go far to assist the health-officer. The great sanitary want of the district seems to be a proper supply of water, which at present is very defective in many of the villages.

LIVERSEDGE URBAN DISTRICT.—In comparison with previous years there was a considerable reduction in the zymotic mortality, while the death-rate amongst infants and the general death-rate each exhibited a decline. After a prolonged absence, diphtheria made its appearance, and was fatal to five persons. The sanitary circumstances of the farm where it broke out [illegible], the drainage and ventilation being both defective, and the house was freely exposed to exhalations from an adjoining stable. The district enjoyed a complete immunity from whooping-cough and [illegible], and only one death was recorded from measles, but diarrhœa and enteric fever were together fatal in eleven cases. The general death-rate was equal to 16.87, as compared with 21.03 recorded in the previous year. Sewerage work was actively carried on during 1882, and Dr. [illegible] states that the main sewer is rapidly approaching completion.

HOSPITAL AND DISPENSARY MANAGEMENT.

NATIONAL HOSPITAL FOR CONSUMPTION AT VENTNOR.

THE report of the Board of Management for the year 1883, presented to the annual meeting on February 6th, stated that the ordinary receipts had amounted to £9,238, and the expenditure to £9,246. The number of in-patients treated had been 613; but the applicants for admission had far exceeded the present accommodation, there having been as many as ninety-one waiting to enter at the end of the year. An extension of the hospital has been commenced by building one block of three houses, to contain twenty bedrooms, and also sitting and other rooms, it being a special feature of this hospital that every patient shall be provided with a separate bedroom, and receive, as far as possible, the comforts of home, combined with medical treatment. The cost of building and furnishing one of these houses (£2,000) will be borne by an anonymous friend. Another block will be erected during the present year, to the memory of the late Mr. Jones, a benefactor to the hospital. At the termination of the ordinary business a special meeting was held, when the drafts of a petition to Her Majesty, and of a Royal Charter of Incorporation, were submitted and approved.

GLASGOW ROYAL INFIRMARY.

THE managers of the Glasgow Royal Infirmary have issued their annual report, and at the meeting of the supporters and friends of the institution held on January 28th it was adopted and passed. It is a long document, and deals very minutely with the affairs of the charity. The figures show, as usual, a large number of patients who have received medical and surgical aid, and also a large excess of expenditure over income. The admissions into the hospital were fewer by 156, compared with last year; the mortality, too, was somewhat greater than in the previous year; but the general facts brought out indicate that the working of the hospital is in a very satisfactory state. As is the case with many other large infirmaries, the cry of the directors is for more funds, the ordinary revenue of the year having fallen short of the expenditure by £6,000. A fortunate windfall of legacies has enabled the deficit to be met; but the managers feel that some further effort is needed to increase the annual income, and we are glad to see that the direction in which they propose to move is towards obtaining increased contributions from the working classes, who are chiefly benefited by such institutions. We shall hope to see, in future reports, that the systematic canvass of this class of the community has proved successful.

GLASGOW EYE INFIRMARY.

THE annual report of this institution, submitted to the subscribers at the meeting held on January 25th, tells of a very large amount of work done by the charity during the past year. Reckoning those left on the books at the end of the previous year, no fewer than 10,6[illegible] patients were treated, of whom 6,998 were cured by ordinary treatment, and 1,424 by operation, while 1,225 were relieved. At the close of the year, the number of cases on the books was 3,5[illegible]. The admissions into the hospital amounted to 1,015; the average weekly number of patients being 54, and the average length of each patient's residence 19½ days. Among other items of interest mentioned in the report, we see that the directors have had the sanitary arrangements of the hospital made as perfect as possible, and have also made some alteration in the rules of the constitution, so as to ensure a more efficient working of the charity. The financial position being good, the infirmary should continue to merit public confidence, and [illegible] substantial support from the *operatives* of the public works for whom it was established.

CORK DISTRICT LUNATIC ASYLUM.

THE annual report of Dr. Eames, resident medical superintendent, for the past year, shows that the total number under treatment during the period amounted to 1,168, while 248 were admitted during the twelve months. One hundred and forty-eight were discharged, and the deaths numbered 112. The percentage of recoveries on the admissions in the asylum was: males, [illegible]; females, [illegible] [illegible] [illegible] [illegible] for the year amounted to £20,581 6s. 6d., which gives a capitation sum on the entire outlay of £22 14s. 10d., being £1 8s. per head more than last year. This increase has been due to the purchase of a large stock of clothing, and to the increase in the price of beef, bread, and potatoes. During the year, £633 19s. 3d. was obtained from paying patients. An addition to the medical staff was made last August, by the appointment of Dr. Gerald B. Wilson, as assistant medical officer.

OBITUARY.

ALEXANDER WOOD, M.D., F.R.S.E., F.R.C.P.E.

ANOTHER prominent member of the profession in Edinburgh, Dr. Alexander Wood, has this week been removed by death. He died on February 26th, after a brief illness. The deceased was the son of the late Dr. James Wood, of Edinburgh, was born in Edinburgh and educated there; he graduated M.D. in Edinburgh University in 1839, and in the subsequent year became a Fellow of the Royal College of Physicians, of Edinburgh. He entered upon practice in Edinburgh with a very large measure of success. Owing, however, to the state of his health, he was compelled to relinquish this some years ago. In his earlier years he was closely associated with the late Sir James Y. Simpson in his memorable experiments with anæsthetics. To Dr. Wood the profession is indebted for the introduction of the hypodermic injection of drugs by the hollow needle-syringe. If there be any doubt as to his merit as the inventor of this method of medication, there can, at least, be none as to the important part he took in giving an impulse to hypodermic medication, which now forms so powerful a weapon in the armoury of practical medicine. In 1855, he published a paper on a "New Method of Treating Neuralgia by Subcutaneous Injection."

Dr. Wood was by nature a man of wide sympathies and of large views, and for many years he held a prominent place in various professional and public capacities. He was President of the Royal College of Physicians; he was for many years a member of the General Medical Council, and was assessor in the Edinburgh University Court for Mr. Gladstone during that statesman's term of office of Lord Rector of the University. As showing his interest in academic matters in regard to the profession, he published in 1868 his Harveian discourse, "Preliminary Education of the Medical Student." In 1854, Dr. Wood became a lecturer on practice of physic in the Extramural School, Edinburgh, and conducted courses of lectures for ten years. In sanitary matters he took a keen interest, and was a member of the Police Commission in Edinburgh, which body had not at that time merged in the Town Council, and which had important duties to perform in connection with public health. In 1860 he published a paper, "Vaccination As It Is, Was, and As It Ought To Be." In his earlier years, Dr. Wood gave the combative side of his nature free play in the warfare concerning Homœopathy, and in 1844 published a keen exposition of that system in his *Homœopathy Unmasked*. He was the author of a considerable number of papers in various medical journals, which showed the keenness of his powers of observation, and the ability of his reasoning power.

Apart from the professional side of his character, Dr. Wood was essentially public-spirited and philanthropic; he was a moving power in the "Edinburgh Association for Improving the Condition of the Poor," a society founded on sound principles, and which has done much to relieve the deserving poor without shattering their self-respect. He will long be remembered by the public and the profession of Edinburgh as a man whose commanding presence was sustained in a long public career by the energy of his character, by his active support of every measure he considered for the moral and social welfare of the people, and as one who, having determined on any course, followed it out determinedly to the end. By those who, in church and personal matters, were more conversant with him, he will be remembered as an earnest labourer, zealous of good works.

INGHAM HANBURY, L.R.C.S.I., FLEET-SURGEON R.N.

FLEET-SURGEON INGHAM HANBURY, C.B., R.N., of the troopship *Malabar*, died at Bombay on January 26th. Mr. Hanbury served as principal medical officer to the Royal Marine Battalion during the campaign in Egypt, and was present at most of the engagements of that campaign, being created a Companion of the Bath, and awarded the Egyptian medal, Alexandria clasp, and Khedive's bronze star. He entered the Navy on October 8th, 1861, as acting assistant-surgeon, in which capacity he was employed in the *Nile* throughout her commission as Sir Alexander Milne's flagship on the North American and West Indian Station. On his return home in 1864, he did duty for twelve months with the guardship *Cumberland* at Sheerness, and was then for five years (from April 1865) employed at San Juan, on the Pacific Station. Passing his examination for higher rank in 1870, he did duty under Dr. Davidson in the Plymouth Hospital, and was then appointed to the Chatham Division of Royal Marines, when he was under the present Inspector-General Robert Pottinger. He was promoted surgeon in October 1875, and then went with the *Narcissus* in her commission as the late Admiral Rowley Lambert's flagship in the Detached Squadron. His next service was as staff-surgeon in charge of the *Turquoise* corvette, throughout her commission in the Pacific, under Captains George Robinson and Medlycott. In January 1882, when he passed on to the list of fleet-surgeons, he was appointed to the Royal Marine Battalion on special service in Ireland, whence he accompanied it to Egypt.

EBENEZER SAMUEL SCOTT, M.B., C.M.Edin.

MR. EBENEZER SAMUEL SCOTT died at Shrewsbury on February 10th, at the early age of thirty-one. Mr. Scott graduated as M.B., C.M., in the University of Edinburgh in 1880; during his career at the university he took a medal in chemistry, and received, in addition, several class honours. He settled in Shrewsbury, and became one of the medical officers of the Shrewsbury Dispensary. He was a member of the British Medical Association, and was the Honorary Secretary of the Collective Investigation Local Committee. His death was felt as a loss to the profession by those who knew him best, and he was followed to the grave by nearly all the medical practitioners of the town in which he resided.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 21st, 1884.

Bailey, William Henry, Colney Heath Rectory, St. Albans, Herts.
Becher, George John Dashwood, Endsleigh Street, Tavistock Square, W.C.
Brooks, Samuel John, Tollington Park, N.
Cooper, John Wilford, Hungerton, Grantham.
Eliot, Ernest [illegible], Aston Vicarage, Birmingham.
Gwynne, John [illegible], The Poplars, Cannock, Staffordshire.
Haydon, Hillyard William, Cholmeley Park House, Highgate, N.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRKENHEAD BOROUGH HOSPITAL AND DISPENSARY.—House-Surgeon. Salary, 100*l.* per annum. Applications to the Chairman of the Weekly Board by March 3rd.

CANCER HOSPITAL (Free), Brompton, S.W.—Resident House-Surgeon. Salary, 75*l.* per annum. Applications by March 17th.

CANCER HOSPITAL (Free), Brompton, S.W.—Clinical Clerk and Dresser for six months. 20*l.* for the term. Applications by March 17th.

CHORLTON UNION.—Assistant Resident Medical Officer at the Workhouse Hospitals, Withington, near Manchester. Salary, 120*l.* per annum. Applications by March 6th.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Physician. Applications by March 19th.

GENERAL HOSPITAL FOR SICK CHILDREN, Pendlebury, Manchester.—Junior Resident Medical Officer. Salary, 80*l.* per annum. Applications to the Chairman of the Medical Board by March 5th.

GLASGOW HOSPITAL AND DISPENSARY FOR DISEASES OF THE EAR, Buchanan Street.—Aural Surgeon and Lecturer. Applications to A. Sutherland, Esq., by March 5th.

HOSPITAL FOR WOMEN, Soho Square, W.—Assistant-Physician and Assistant-Surgeon. Applications by March 1st.

HOSPITAL FOR WOMEN, Soho Square, W.—Administrator of Anæsthetics. Honorarium, 20 guineas. Applications by March 8th.

ISLANDS OF SANDAY AND NORTH RONALDSHAY, Orkney.—Medical Officer. Salary, 60*l.* per annum. Applications by March 5th.

JERSEY GENERAL DISPENSARY.—Medical Officer. Salary, 120*l.* per annum. Applications by May 1st.

KENT AND CANTERBURY HOSPITAL.—Physician. Applications by March 22nd.

MARTLEY UNION.—District Medical Officer and Public Vaccinator. Salary, 55*l.* per annum. Applications to Mr. A. W. Knott, Solicitor, 14, Foregate Street, Worcester, by March 13th.

MEMORIAL HOSPITAL, Jarrow-on-Tyne.—Resident Surgeon. Salary, 150*l.* per annum. Applications by March 5th.

PARISH OF METHVEN, N.B.—Medical Officer. Salary, 40*l.* per annum. Applications to the Inspector of Poor by March 3rd.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN, Waterloo Bridge Road, S.E.—Resident Medical Officer. Salary, 70*l.* per annum. Applications by March 10th.

SALFORD AND PENDLETON ROYAL HOSPITAL AND DISPENSARY.—District Surgeon. Salary, [illegible] per annum. Applications by March 10th.

ST. GEORGE-IN-THE-EAST PARISH.—District Medical Officer. Salary, 250*l.* per annum. Applications by March 8th.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN, Leicester Square, W.C. Assistant Honorary Medical Officer. Applications to St. Vincent Mercier, by March 10th.

ST. PETER'S HOSPITAL FOR STONE AND URINARY DISEASES, etc., Henrietta Street, Covent Garden, W.C. Surgeon. Applications by March 17th.

SUSSEX COUNTY HOSPITAL.—House-Surgeon. Salary, 80*l.* per annum. Applications by March 5th.

SUSSEX COUNTY HOSPITAL.—Assistant House-Surgeon. Applications by March 5th.

WEST KENT GENERAL HOSPITAL, Maidstone.—House-Surgeon. Salary, 120*l.* per annum. Applications by March 6th.

WONFORD HOUSE HOSPITAL FOR THE INSANE, near Exeter. Resident Medical Superintendent. Salary, 500*l.* per annum. Applications by March 11th.

MEDICAL APPOINTMENTS.

CAIGER, F. F., M.B., B.S., M.R.C.S., L.R.C.P., appointed House-Surgeon to Thomas's Hospital.

GARLAND, Ormond H., M.B. (Ed.), C.M., M.R.C.P.E., appointed Visiting Medical Officer to Watt's Hospital, Leith, *vice* Dr. Robert Paterson, resigned.

GREEN, C. D., M.R.C.S., L.R.C.P., appointed House-Physician to St. Thomas's Hospital.

HODSDON, James W. B., M.D., M.R.C.P.E. (exam.), F.R.C.S.E., appointed an Extra-Physician to the Edinburgh Royal Hospital for Sick Children, *vice* John Playfair, M.D., appointed an Ordinary Physician.

HULL, Walter, M.B., M.R.C.S., L.R.C.P., appointed House-Physician to St. Thomas's Hospital.

JOHNSTON, G. D., M.R.C.S., L.R.C.P., appointed House-Surgeon to St. Thomas's Hospital.

JONES, W. Wansborough, M.A., M.B., M.R.C.S., appointed Resident Accoucheur to St. Thomas's Hospital.

MILLER, A., M.B., B.Ch.Dub.Univ., appointed Senior Assistant Medical Officer to the Warwick County Asylum, *vice* H. R. O. Sankey, M.B., promoted.

ORFORD, John, M.R.C.S., L.R.C.P., re-appointed Non-Resident House-Physician, to St. Thomas's Hospital.

ROBINSON, H. B., M.R.C.S., L.R.C.P., appointed Clinical Assistant in the Special Department for Diseases of the Skin, St. Thomas's Hospital.

SANKEY, H. R. Octavius, M.B.Lond., M.R.C.S.Eng., appointed Medical Superintendent to the Warwick County Asylum, Hatton, *vice* W. H. Parsey, M.D., deceased.

SHEPPARD, W. J., M.B., M.S., M.R.C.S., L.R.C.P., appointed Assistant House-Surgeon to St. Thomas's Hospital.

TOMSON, W. B., M.B., M.R.C.S., L.R.C.P., appointed Assistant House-Physician to St. Thomas's Hospital.

TORNEY, G. Parsons, B.A. (Dublin), L.R.C.S.I., L.K.Q.C.P.I., and L.M., appointed Junior Assistant Medical Officer to the Warwick County Asylum, *vice* A. Miller, M.B., promoted.

WOOLBY, J. B., M.B.Lond., M.R.C.S.Eng., L.R.C.P.Lond., appointed Resident Medical Officer to the Queen Charlotte's Lying-in Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for [illegible] of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in [illegible] with the announcements.

BIRTHS.

HARSANT.—On February [illegible], at Clifton, Bristol, the wife of W. H. Harsant, F.R.C.S., of a daughter.

PENMAN.—At Hawick, N.B., on the 14th ultimo, the wife of P. Mitchell Penman, M.B., C.M. (Edin.), of a son.

DEATH.

DEWAR.—At Burton, Derbyshire, on the 12th ultimo, Bertha [illegible], the beloved wife of James Dewar, F.R.C.S.E.

THE LATE MR. SHUTER.—It has been decided that the forthcoming subscriptions for the memorial to this gentleman shall be expended in the purchase and erection of a tablet in the chapel of St. Bartholomew's Hospital, and in the purchase of books for the library, to form a special collection. Intending subscribers are requested to communicate with the Secretaries, W. Bruce Clarke, 16, Harley Street, W.; and A. C. Fletcher, 12[illegible], Charterhouse Square, E.C. Want of space prevents us from saying more on this subject in our present number, than that the decision appears to be consistent and satisfactory.

OIL FROM THE WILD PLUM.—There was recently on view at the Commercial Exchange, Cape Town, a sample of oil, supposed to contain certain medicinal qualities, forwarded to the Colonial Office by the Civil Commissioner of Ladismith, and made from the berry of the wild plum-bush, which abounds in the district.

DRS. [illegible], Kussmaul, Liebermeister, Peter, and von Ziemssen, have been elected honorary members of the Imperial Academy of Medicine of St. Petersburg.

SALARY OF A POOR-LAW MEDICAL OFFICER.—The Fylde guardians have increased the salary of Mr. Henry Sharp, Medical Officer for the Blackpool District, to £80 *per annum.*

OPERATION DAYS AT THE HOSPITALS.

MONDAY	St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.
TUESDAY	St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.
WEDNESDAY ..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.
THURSDAY	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.
FRIDAY	King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
SATURDAY	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

SATURDAY.—Royal Medical and Chirurgical Society, 8 P.M. Annual meeting for election of officers, etc. President's address.

MONDAY.—Medical Society of London, 8 P.M. General meeting; 8.30 P.M. Ordinary meeting. Surgeon-General Hunter: On the late Epidemic in Egypt.—Royal College of Surgeons, 4 P.M. Professor W. H. Flower: The Principal Types of the Human Species.—Odontological Society, 8 P.M. Casual communications by Messrs. E. Lloyd Williams, W. Hern, F. N. Pedley, G. W. Field, A. S. Underwood, etc. Communications will be read from Messrs. [illegible]

TUESDAY.—Pathological Society of London, 8.30 P.M. Mr. Barwell: Necrosis affecting the Knee-joint. Mr. Lane: Fracture of Cartilage of First Rib. Dr. Hale White: [illegible] Dr. Norman Moore: [illegible] [illegible] Vertebræ (card).

WEDNESDAY. Obstetrical Society, 8 P.M. Specimens will be shown by Dr. Horrocks and others. Dr. John Williams: On the Corroding Ulcer of the Os Uteri. Mr. Alban Doran: On the Relation of Prolapse of the Vagina to Hernia, illustrated by Two Pedigrees. Royal College of Surgeons, 4 P.M. Professor W. H. Flower: The Principal Types of the Human Species.

THURSDAY.—Harveian Society of London, 8.30 P.M. Mr. Lawson Tait: Some Recent Advances in Pelvic Surgery.

FRIDAY. Royal College of Surgeons, 4 P.M. Professor W. H. Flower: The Principal Types of the Human Species. West London Medico-Chirurgical Society, 8 P.M. Mr. Hendley and Mr. Benham: Case of Poisoning by Arsenic and Red Oxide of Mercury. Mr. Howard Marsh: Three Cases of Osteotomy with Interesting Complications. Dr. Thudichum: Two Fatal Cases of Peritonitis simulating Poisoning. He will also exhibit microscopic specimens of [illegible]. Mr. Bruce Clarke: Case of Radical Cure of Hernia. Dr. Thudichum: Cases of Ammoniuria, and of Exostosis in the Nasal Cavity, with Operation and Treatment.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT. We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE REGULATIONS OF THE UNIVERSITY OF DURHAM.

SIR,—In the JOURNAL of February 9th, I noticed a letter from "M.R.C.S.," in reference to the present rule at the Durham University, that candidates for the modified M.D. examination must be 40 years of age, in addition to having been in active practice for fifteen years.

This is really a hard rule for those who happen to qualify, say, at the age of 22. What is it most necessary that a medical man should possess—age, or professional knowledge? Why, if he possess the latter, should there be any compulsion as regards the former?

There are few men, once in the whirl of private practice, who have the time to think of, or work up for, higher degrees; and the longer they delay, the less likely are they to go through an examination. Therefore, I venture to submit that greater inducement ought to be given to encourage more candidates to go in for the examination, by erasure of the rule (barren, except in decreasing the number of candidates) fixing the age at 40.—I am, yours faithfully,

E. A. G. D.

SIR,—In the BRITISH MEDICAL JOURNAL of February 9th, "M.R.C.S." draws attention to the fact that, though men are of fifteen years' standing they are not admitted till forty years old. I think, at least, they might be admitted to the Latin examination when they have been fifteen years in practice, without any infringement of the rules.—Yours truly, ASPIRANT.

"SCOTSMAN" should apply for a copy of the Regulations respecting Degrees in Medicine to the Secretary of the University of Durham, Dr. Luke Armstrong, Clayton Street West, Newcastle-on-Tyne.

MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

Parliamentary Expenses Fund.

THE following additional sum has been received: s. d.
Mr. Thomas Tilley, M.R.C.P., Whitby .. 10 0

POISONING BY FRENCH BEANS.

SIR,—In connection with the above subject, I wrote to the BRITISH MEDICAL JOURNAL of April 9th, 1870, page [illegible], respecting what I considered to be a case of poisoning after eating scarlet-runner beans. I put a query after the case reported, as to the probability of the alarming symptoms being due to a severe form of dyspepsia. I have had other cases since, but the symptoms were not so urgent. I am rather inclined to think the beans have some poisonous properties.

I should not now refer to the matter, but I notice that, in the JOURNAL of February 23rd, Mr. Cameron writes: "I have never heard any injurious properties attributed to the seeds of any species."—I am, etc., GEO. WELLS.

The Mall, Wanstead, E.

DUNOVERIUM asks: What is the disease or disorder produced by drinking milk supplied by cows affected with foot-and-mouth disease?

GOAT-KEEPING.

SIR,—Can you let me know where I can get information on the subject of keeping goats, with a view to introducing them to some of my pauper-patients who are a long way from any milk-supply, although living in the country? I have fancied there was a "National Society" interested in the matter.—I remain, yours truly, COUNTRY DOCTOR.

⁂ Our correspondent might apply to Mr. Holmes Pegler, Hon. Secretary to the British Goat Society, Marlowes, Hemel Hempstead.

THE LIGHTING OF DOCTORS' BROUGHAMS.

A CORRESPONDENT in the JOURNAL of January [illegible] made the suggestion that the electric light would be especially useful for lighting a brougham, as he had found candles neither sanitary nor satisfactory as a light. It appears that at the time our correspondent's enquiry was published Messrs. Offord, of Gloucester Road, South Kensington, were engaged in fitting a brougham with a Swan light at the suggestion of a medical man residing in that neighbourhood. We have had an opportunity of inspecting a brougham thus fitted, and can testify that the light is steady and sufficient. Considerable practical difficulty, however, stands in the way of bringing the plan into general use; the electricity is generated by a battery carried under the seat; the battery is necessarily rather heavy, and must require, also, frequent attention. Messrs. Offord propose to have a battery to provide for the ordinary requirements of one day, so that the [illegible] [illegible] the elements would require to be cleansed and fresh fluid introduced; and this is not work which can safely be entrusted to [illegible] [illegible] groom.

CLUB PRACTICE.

SIR,—Having lately been called to attend two of the club patients for accidents occurring during their usual employment, it appears to me that our position as club doctors should be clearly defined.

The Employers' Liability Act provides, I believe, compensation for injury, including, of course, medical attendance for such accidents, and it appears at first sight that we are giving our attendance to save the employer's pocket, and not that of the workman.

This, of course, was not the original intention of clubs, and, without committing myself to any opinion, I should like to see the question well discussed and properly defined. I am, sir, yours faithfully, G. [illegible] [illegible].

SIR,—I am medical officer to a local court of Foresters. A member of the court went to London, and consulted a medical man, who gave him a certificate to declare on the club, on [illegible] October, 1883; he came home, received sick benefit, and was treated by a quack. The officers of the court were of opinion that, if the member wished to continue to receive sick benefit, he must apply to me for a certificate, stating that he was unable to work. A certificate is required at certain times of the year, but the officers do not consider who attends the patient medically. If I [illegible] [illegible] that he is unable to work, and only certify to that effect, shall I act in this case [illegible] [illegible] [illegible] [illegible] [illegible] legally [illegible] [illegible] doing [illegible] [illegible] [illegible] [illegible] etc.

JUNIOR.

⁂ The managers of the court ought to see that the patient places himself under the care of the court medical officer.

INSANE OR NOT INSANE.

A CORRESPONDENT writes: Could you, through your paper, inform me of any institution for the treatment of persons mentally afflicted, but not insane? I have a sister who can conduct business, and yet has a mania for moving things, and pottering about the house. She has never had any fits, is apparently perfectly sane, but yet cannot dress herself or undress in a shorter time than [illegible] three hours. She is not bad enough for an asylum, and too bad to remain at home.

⁂ Is the enquirer positively sure that the above is not a case of insanity? Restlessness, probably accompanied with an inability to engage in any occupation, and the fact that the patient cannot dress or undress herself, point to either a condition of congenital imbecility or dementia of long standing. There is no institution for persons on the borderland of insanity. Such cases are often taken privately by medical men, as a single patient, or in association with others. The terms for such accommodation are, very properly, somewhat high. Five guineas a week is a very usual charge.

Should the patient really be sane, and should the relatives not be able to afford the usual charges, they had better advertise their requirements, and state that the terms must be moderate.

An expert opinion ought certainly to be taken about such a case, unless the relations are prepared to run the risk of acting illegally.

HAY-FEVER.

SIR,—Hay-fever is a term which in all likelihood will disappear after a time, as the use of the word [illegible] is applied, either in popular parlance or [illegible] [illegible] parlance, to a complaint caused by the pollen of grass or other plants. Some other term is much required, as there is no doubt that what is meant by "hay-asthma" or "hay-fever" is a specific disease, and wants clearing up in regard to its etiology, and is as likely to turn out in the end to be due to malaria as to pollen; for we find it affecting individuals in districts where there is no grass, and also coming on in winter. It may seem a trifling subject for investigation, but I recommend it to the consideration of the Collective Investigation Committee. Is it not worthy of investigation, to trace out some similarity between whooping cough and the paroxysmal sneezings in hay-fever proper? If the fungus from the skin of a decaying orange be blown into the lungs of a dog by means of a tube, a disease is set up identical with whooping cough. The treatment of this disease (whooping-cough) so varies that some settled principle to apply the remedies is urgently required. Quinine is the drug used by the defenders of the germ-origin, and chloral or croton-chloral by the believers in its spasmodic nature. Which system is the best?—I am, yours,

Staincliffe, Dewsbury. J. A. ERSKINE STUART, L.R.C.S.E.

POLICE-SURGEONS.

SIR,—I shall be much obliged if any of your readers can answer the following questions.

1. Is it usual for the [illegible] [illegible] of a borough or of a local board to appoint a police-surgeon?

2. Do the duties and remuneration in such a case correspond with those of divisional surgeons to the metropolitan police?—Yours, etc., A MEMBER.

CONVALESCENT HOME.

ANXIOUS desires to hear of a convalescent home on the South Coast, for a patient of very limited means (an arts student), who is suffering from muscular rheumatism.

INHALATION IN PULMONARY AFFECTIONS.

SIR,—The controversy between Dr. Hassall and Mr. Brindley James is of great interest to many of us, especially to those who practise in places such as this. My own experience confirms in every way that of Dr. Hassall. I have tried all sorts of inhalers, and all sorts of inhalations; but I am obliged to say that, in nearly every case, no good result was obtained, although in throat-cases much benefit resulted. This was most disappointing. It was manifest that antiseptic inhalations must be of the greatest use in these cases; but the antiseptic never seemed able to reach the diseased part. I have been, for some time past, using inhalation somewhat in the way that Dr. Hassall suggests. Instead, however, of spreading a towel dipped in carbolic solution on the floor, I put my antiseptic into the steam-kettle, and, in a very short time, an ordinary sized room is converted into an antiseptic chamber. Four drops of creasote will suffice for an ordinary sized kettle.

The effect of this is far different from that of the old-fashioned inhalations. It at once does away with the offensive breath; it reduces the cough, helps expectoration, and lessens the formation of muco-pus. I have now three cases under my care in which it has been of the greatest benefit. I find it does not induce night-perspirations, as I feared it might. I will give short notes of two cases.

1. A man, aged 35, with cavities of large size at both apices, following a large hæmoptysis (the third), tried all ordinary inhalations, without much benefit as to cough and expectoration, of which there was a large quantity. One month ago, he tried the steam kettle, and I have kept him in the antiseptic atmosphere ever since; the expectoration has decreased by half, the breathing is easier, and the cough is much better; he sleeps longer. His appetite is not the worse, but he says he tastes creasote in all he takes. He has increased thirty-two ounces in weight since he commenced.

2. A lady, aged 26, has a cavity in the apex of the left lung. The right lung is also weak, as she had a cavity there, which I cured four years ago. The present cavity dates from the autumn of 1883, after a sharp attack of pleurisy, when she returned to Torquay. She improved considerably in general health during October, November, and December, but the cough was very bad, especially at night; the expectoration was free, the breath offensive, notwithstanding inhalations in the ordinary way. Three weeks ago, I induced her to let me put a steam-kettle in her bedroom at night. We have since found that the temperature taken at night has been reduced from an average of 99.8° to 99°; that we have been able to leave off the morphia-draught given to ease the cough; and that she has slept fairly well. The cavity is nearly dry, the expectoration of very small amount, and she has increased in weight twenty ounces.

Both these cases are swung passively in one of my swings for an hour a day.

My third case began in December last, and is progressing most favourably; and I hope to induce others to try the plan, but the objection is the smell and steam.

All these cases are taking mullein-leaves, iron, and as much cod-oil as we can get down, as well as Devonshire cream. I think that those who try the inhalation of antiseptics in this form will be surprised at the results obtained; and will come to the conclusion that, in a mild climate, with all useful appliances, Dr. Hughes Bennett's opinion was a true one, viz., "that phthisis is a very curable disease." I have the honour to be, sir, your obedient servant,

The Towers, Torquay, February 11th, 1884. J. B. RICHARDSON, M.B.

ALOES IN PREGNANCY.

SIR,—In the BRITISH MEDICAL JOURNAL of January 5th, p. 41, is a letter from Dr. Walford, advocating more freedom in the administration of aloes in pregnancy and suspected pregnancy.

While admitting that the general fear of bad effects in pregnant women from moderate doses of aloes is, to some extent, excessive, yet I may say, on behalf of those who observe considerable caution in its employment in such cases, that I knew a lady (now dead) who took aloetic pills, on the advice of an injudicious friend, to relieve the constipation of pregnancy; and, the first dose producing no effect, took a second dose the following night, with the result of inducing premature confinement; she had no tendency either before or in subsequent pregnancies to this termination.

The dose of aloes was, no doubt, large, through unduly rapid administration; its effects, however, cannot be accounted for by violent general disturbance, but there is every reason to believe that they depended on the oxytocic properties of the drug.

As we find aloes one of our most useful medicines in certain cases of piles, so, I have no doubt, it may be carefully administered in some of the disturbances of health dependent on, or associated with, pregnancy, with good results; but I cannot think that the widespread caution observed by medical men in the employment of aloes during the period of gestation is based upon tradition and prejudice alone; and I have ventured to mention this case of premature labour, for which no other cause could be assigned, as a slight contribution to the facts upon which it is safest to rely in estimating the dangers attending possible applications of a well known drug. I am, sir, yours faithfully, WM. J. MACKIE.

Richmond House, Turvey, February 13th, 1884.

A GENERAL PRACTITIONER'S HAND-BAG.

SIR,—Will you allow me, through the medium of your columns, to suggest to the surgical instrument makers the manufacture of a hand-bag suited to the requirements of general practitioners? In place of the common hand-bag, in which bandages, vaccination cases, hypodermic syringes, etc., jumble about to their mutual detriment, a bag opening on both sides after the manner of some obstetric bags, and provided with fittings for holding in a readily accessible manner the various instruments, etc., with which the country doctor is obliged to travel, is required. Such a bag, strongly made and brought out at a moderate figure, would, I imagine, have a ready sale, and would also supply a want long felt by many besides, yours truly, NEMO.

EXTRACTION OF TEETH BY INDIA-RUBBER BAND.

M.B. asks if there be any bands specially designed for this purpose, or whether any ordinary India-rubber band would be sufficient. He also wishes to know whether the India-rubber band must be applied in any particular manner.

EUCALYPTUS IN DIPHTHERIA: AN INQUIRY.

SIR,—As diphtheria of a very fatal character has appeared in the town of Mountrath, not far from this, the medical officer there, Dr. M[illegible] Fisher, having lost his wife and four children, a friend who attended his wife, and one servant; and having heard recently from a resident of Australia that it was a successful practice in that country to treat diphtheria by the inhalation of some preparation of eucalyptus or gum-tree, I take this opportunity of applying to you for any information you can give me on the subject of the treatment of the disease by this means. I remain, yours, etc., ROBERT THOMPSON.

TINEA VERSICOLOR.

SIR,—In reply to "Member (Egypt)," I beg to say that he should first be very sure about his diagnosis. In hot climates, the fungus sometimes luxuriates on the skin, particularly in the mycelial form; this causes all parasitic skin-diseases to occur in large patches, and become ill defined. This would hardly explain the failure of the treatment employed, as all the forms of tinea are curable by the remedies he has employed.

Tinea versicolor, or chloasma, is sometimes confounded with syphilitic maculæ, but the latter are not raised, not itchy, and not scurfy. The diagnosis can be completed by placing a few scales scraped from the surface under the microscope. The scales should first be treated with alkalies, or, according to Mr. Naylor's plan, with acetic acid. Then, if the disease be true tinea versicolor, the scales will be found invaded by conidia (in heaps) and the mycelial threads (very wavy) of the fungus—the microsporon furfur.

I would advise "Member," if the disease be any form of parasitic tinea, to treat it just like scabies, even to the disinfecting the clothing. The solution of sulphide of calcium, or even common sulphur-ointment, quickly kills the fungus. Or baths of sulphuret of potassium (four ounces to thirty gallons) should quickly prove effectual. Should the bath not be attainable, a lotion of half an ounce of sulphuret of potassium to 16 ounces of lime-water, never fails to quickly remove it. But whatever remedy is used, it should be applied all over the body, except the head and neck, just as in scabies, in order to get quite rid of the fungus. It should also be applied for ten days after all signs of the disease have gone, as it is extremely apt to recur. Indeed, Startin said it was impossible to prevent recurrence except by a course of arsenic. This recurrence, however, probably depends on reinfection from dirty clothing (especially flannels), or from fungus-germs being left on some parts of the surface by partial local applications. Of course there are many other efficient parasiticides, such as mercurial preparations, carbolic acid, etc., but I think the ones previously mentioned would be much safer for application to a large surface. I am, sir, faithfully yours, JOHN STRAHAN, M.D., M.Ch.

27, Greenmount Road, Belfast.

SIR,—If "A Member" will try precipitated sulphur applied to the skin, either by a puff or gently rubbed in with the fingers, he will, I think, be not disappointed in the results. I have now used sulphur thus applied for some years, and with always satisfactory results. The dry powder has several advantages over the sulphur lotion or ointment. In the former, the sulphur is applied very irregularly, and does not adhere to the skin. Moreover, the lotion is cold and unpleasant; again, the ointment is greasy, dirty, and easily rubs off. I think, also, the skin is protected, rather than otherwise, from the action of the sulphur, by the grease. The sulphur should be applied two or, better, three times a day. I have found this mode of treatment equally efficacious in acne; but, in using the sulphur, care must be taken that it does not enter the eyes. Very truly yours, JAMES GAGE PARSONS, M.D., F.R.C.S.

A YOUTHFUL MOTHER.

SIR,—J. M., who, on February 14th, attained the age of 14 years and 3 months, gave birth on Saturday morning, February 9th, to a fully developed female child at full term. Four hours only intervened between the commencement and termination of the labour. She awoke soon after 12 A.M., complaining of pains; at 2 A.M., I was called in, and found the os well dilated, with the parts in a favourable condition for expulsion of the fœtus. I waited until 3.30 A.M., when, all pains having apparently ceased, I delivered with instruments. The patient, at the time of writing (five days after), is doing well. Yours faithfully,

W. J. IRVINE, L.R.C.S., L.R.C.P.Ed.

51, Robin Hood Street, Nottingham.

MEDICAL LEGISLATION AND UNQUALIFIED ASSISTANTS.

SIR,—Will the new Medical Act affect "unqualified assistants" who are used legitimately, *i.e.*, under the guidance of the principal, doing dispensing and the general routine of surgery work, perhaps attending to an accident in the absence of the principal, occasionally visiting cases, but not having sole charge of them? If so, it seems very hard on those who, like myself, are struggling to get qualified by this means. Of course, I do not mean to say that they ought to be placed in charge of branch practices, where they have almost sole control; such a practice ought not to be allowed. But if the Act forbid a "registered practitioner" from keeping an unqualified assistant, surely it seems onesided to let chemists have assistants, who, in many of our towns, prescribe more largely than a great many of our qualified men. How many men, now qualified, could never have been so had it not been that they, at some part of their career, had acted as unqualified assistants? Besides, some of the licensing bodies require of a student that he shall have been a pupil or assistant to a registered practitioner as a portion of his curriculum. I contend that there ought to be some clause in the Act stating that an unqualified assistant must act under the guidance and control of the principal.

I should esteem it a great favour if you would kindly let me have your views on the subject, and what will be the law concerning assistants, supposing the Act passes. I am, sir, faithfully yours, ASSISTANT.

*** We do not expect that there will be any impediment to the employment of "unqualified assistants" occupying strictly the position of pupils.

A DOUBTFUL MEMBER.—Although the examination for the Licence of the Royal College of Physicians of London includes surgery, it is questionable whether the possession of the said licence gives the right to the title of "Surgeon." It does not give the right to the title of "Dr."

DEATH IN THE PRIMER.

SIR,—The remarks which appeared in a recent number of the JOURNAL under the heading of "Death in the Primer" are exceedingly well timed, and are amply borne out by my own experience.

I have now under treatment two cases of children who are the victims of overwork in elementary schools. One, a boy aged 11 (now in the sixth standard, the seventh being the highest), suffers from constant headache, is listless, and sleeps badly. The other, a far more serious case, is that of a little girl, aged 7 (in the third standard), who is suffering from meningitis, and of whose recovery I have but little hope. Her cries are piteous, and in her delirium she calls out, "Governess, it's too hard, I can't do it;" "[illegible]" "Look at that sum, mother; it's not [illegible]," and "put down [illegible];" "Governess put that sum on the fireplace," etc.

It is high time that some steps were taken to put a stop to this educational over-pressure, which is productive of the greatest misery, and of not a few cases of premature death, or imbecility.—I am, sir, yours faithfully,

Cheltenham, February 18th, 1884. W. A. M[illegible], M.D.Brux.

MICROSCOPICAL EXAMINATION OF SPUTUM.

DR. C. P. COOMBS of Castle Cary desires to know what is the most rapid way of preparing sputum containing bacilli for the microscope. He finds Dr. Heneage Gibbes' method very good, but it involves a considerable outlay of time and trouble.

REDUCTION OF HERNIA BY GASEOUS ENEMATA.

SIR,—Mr. Sidney Davies of Cairo inquires, in your last number, whether herniæ have ever been reduced by distending the bowels with gas. A reference to Section 952 : 1 of the *Medical Digest* will show that, in 1864, this plan was advocated, as well as in 1876. Obediently yours, R. NEALE, M.D.Lond.

60, Boundary Road, South Hampstead, N.W., Feb. 26th, 1884.

UNQUALIFIED PRACTITIONERS.

SIR, I am anxious to know whether an unqualified person, practising extensively near here, is liable to prosecution; he professes to practise homœopathy, and may do so, but I have my doubts about it.—Yours faithfully, H. J. JONES.

13, Soho Square, February 19th, 1884.

*** If it can be proved that an unregistered person has pretended to be registered, or to be a legally qualified practitioner of medicine or surgery, he can be prosecuted by any one before the magistrates in petty sessions, under the 40th Section of the Medical Act (1858), for the penalty imposed by that Section. The Medical Council is not enabled to institute or conduct such proseeutions, but it would remit a part, or the whole, of any penalty that might be recovered, towards defraying the expenses of the prosecution.

THE ADVISABILITY OF CURING ECZEMA OF THE SCALP IN INFANTS.

SIR, May I ask what is the opinion of the leading dermatologists of the day about curing the eczema of the scalp in babies? Is it safe to cure it as speedily as possible? or is there any truth in the idea that if it be cured, the eczema can be "driven in," and produce serious inflammation of some internal organs and convulsions; and that it is better to leave it alone? I find that Dr. Liveing is in favour of curing it at once, but many practitioners still believe in the old theory. —Yours, etc., A MEMBER.

MATERNAL IMPRESSIONS.

SIR,—At a recent meeting of the Harveian Society, the theory of maternal impressions was brought forward in connection with deformities of fingers and toes. May I be permitted to put the following cases on record?

I delivered Mrs. C. of a dead child, and, before anyone except myself had seen it, I asked the mother if she had reason to think there was anything wrong with it. She said that, when about three months pregnant, she had cut her left thumb with a knife. It bled profusely; and, being alone in the house, she could think of nothing to do except to grasp it tightly with her other hand, at the same time holding the fingers as far away from the thumb as possible. When her husband came home, he found her very faint, and she expressed to him her conviction that the child would be deformed. The child's left thumb was absent, and the left hand was in the position it would assume if put up in a pistol-splint. There was no other deformity. An impressionist might suggest that her thumb, while bleeding, being concealed from the mother's view, was for her practically nonexistent; but this theory will not apply to the following case.

Mrs. P., when between three and four months pregnant with her first child, fell downstairs, cutting her upper lip on the left side, and severely bruising her back below the left scapula. Her child was born at seven months, and his upper lip had a cut on the left side, and there was a large nævus below the left scapula. The lip was so unlike an ordinary hare-lip that when I first saw the child (at the age of three months), I asked if he had fallen against something, and I got the foregoing history. I inquired if the mother had seen the bruise on her back by means of a mirror or in any other way, and she was positive that she had not. When this woman was "about half-gone" with her next child, a neighbour was kicked in the face by a horse, and she wiped away the blood, and put on some plaster. The child has a nævus on its forehead, but the injury to the man's face was not confined to the forehead, nor waa it most severe there. The mother believes that this, too, was the result of maternal impressions.

I am so often asked, at the birth of a child, whether there is not "something wrong," when there is actually no deformity, that I look on these cases as mere coincidences.—Yours faithfully, J. HURLEY, M.D.

Withern, Alford, February 22nd, 1884.

SPEAKING-TUBES.

SIR,—Concerning medical speaking-tubes (1) satisfactory lead-piping costs only 1½d. a foot, so that three shillings will buy one long enough for almost any purpose. (2) When such a tube is meant for internal communication, *e.g.*, with the kitchen or stable, it can be carried through a hole cut in the staircase window-sash, and then along the outer wall of the house. (3) It can be fixed up in five minutes with a few nails and some cord or wire. (4) Mouthpieces are not essential, as the mouth need not touch the tube in speaking. (5) A sixpenny whistle at each end is very desirable, except where a tnbe opens at the street-door. The value of such a contrivance in a lofty town-house cannot be exaggerated.—I am, sir, your obedient servant, C. B. KEETLEY.

20, Princes Street, Hanover Square, W., Feb. 11th, 1884.

CASES OF ABDOMINAL SURGERY.

SIR,—An apology is due to the readers of the JOURNAL for the number of clerical errors in my communication, "Cases of Abdominal Surgery" (BRITISH MEDICAL JOURNAL, February 9th).

The notes from which I read the paper before the Huntingdon Medico-Chirurgical Society were very rough; and when I was asked to publish the cases, etc., in order to save time, I dictated from my notes to a shorthand reporter the communication which appears in the JOURNAL. The manuscript which this reporter copied from his shorthand report I put in the hands of a medical friend for revision, but, inadvertently, it was sent to the JOURNAL without his corrections, and with the following errata, which have been reproduced.

Page 263, first column, bottom line, *for* "infiltrated," *read* "incarcerated;" second column, line 22, *for* "antiseptic," *read* "anæsthetic;" line 31, *for* "the indurated gland parting," *read* "an indurated gland appearing;" line 34, *for* "and," *read* "but;" line 7 from bottom, *for* "septic," *read* "aseptic."

Page 264, first column, line 2, *for* "equal with," *read* "attached to;" line 28, *for* "punctuate," *read* "puncture it;" line 11 from bottom, *for* "knew it," *read* "was in a condition which;" line 6 from bottom, *for* "This rose," *read* "six hours." In second column, line 20 from bottom, *for* "emptied," *read* "matted;" line 2 from bottom, *for* "asepticism," *read* "a septic case."—Yours obediently,

18, Westgate, Peterborough, February 1884. THOMAS JAMES WALKER.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. H. E. Allen, London; Mr. R. T. Risk, Harrow; Mr. H. F. Chappell, London; Mr. F. L. Stephenson, Woolwich; Mr. James Edwardes, Anfield; Mr. H R. O. Sankey, Hatton; Mr. W. D. Hartley, Cape Colony; Mr. J. Smith, Belfast; Dr. Alder Smith, London; Dr. Myers, London; Dr. J. H. Stowers, London; Dr. J. H. Aveling, London; Dr. R. Kirk, Glasgow; Mr. O. H. Garland, Leith; The Secretary of the Pathological Society of London; Dr. Norman Kerr, London; Mr. T. M. Stone, Merton; Mr. J. B. Woolby, London; Mr. H. Nelson Hardy, London; Our Edinburgh Correspondent; Mr. B. Hill, London; Dr. J. Rogers, London; Dr. Cresswell Rich, Liverpool; Dr. J. W. Moore, Dublin; Dr. Collie, London; Dr. Sidney Davis, Cairo; Mr. James Startin, London; Dr. Lediard, Carlisle; Mr. H. Douty, Worcester; Dr. W. K. Hatch, Bombay; Mr. M. H. Judge, London; Mr. W. Steel, Ealing; Mr. G. Walpole, London; Mr. Jai Gopal, Lahore: Dr. D. J. MacKenzie, Glossop; Our Belfast Correspondent; Dr. J. Mortimer Granville, London; Dr. W. B. Hadden, London; Mr. C. E. Thompson, Dry Creek, Australia; The Secretary of the London Sanitary Protection Association; Mr. T. Whitehead Reid, Canterbury; Dr. Burney Yeo, London; Dr. Wallace, Greenock; The President of the Cart Horse Show, London; Dr. Arthur Gamgee, Manchester; Dr. Arnold, Belfast; Dr. G. W. Crowe, Worcester; Mr. A. H. Benson, Dublin; Mr. E. White Wallis, London; Dr. B. Rake, London; The Secretary of the Dental Hospital, Dr. Eastes, London; Dr. Waters, Chester; Mr. G. A. Cardew, Cheltenham; The Secretary of the Chelsea Hospital for Women; Dr. Carter, Liverpool; Mr. W. Donovan, Romsey; Mr. E. Williams, Aberayron; Dr. Styrap, Shrewsbury; Dr. Goodhart, London; Mr. J. S. Kennefick, Clonmel, co. Tipperary; Mr. Wallace Whitehead, London; Our Birmingham Correspondent; Dr. Willoughby, London; Dr. A. Downes, Chelmsford; Mr. R. Wade Savage, London; Mr. E. G. Archer, Thetford; Dr. J. C. Ewart, Edinburgh; Dr. W. R. Huggard, London; Mr. B. Jones, Leigh; Dr. R. Neale, London; Mr. E. A. Rawson, London; Mr. Paul, Liverpool; Mr. T. W. Trend, London; Mr. C. W. Thorp, Todmorden; Mr. G. Rendle, London; Dr. Broadbent, London; Medical Student; Our Paris Correspondent; Mr. J. G. Clendinnen, Coseley, Stafford; Dr. Cheadle, London; Mr. W. Marriott, London; Mr J. L. Knight, Carlton; Dr. T. Churton, Leeds; Dr. E. Martinez, Naples; Lady Hanbury, London; Dr. Crichton Browne, London; Dr. Kaeser, London; Mr. D. Hepburn, London; Mr. J. P. Hentsch, London; Dr. W. C. Cooke, Bognor; The Secretary of the Harveian Society of London; Dr. J. Hurley, Withern; Dr. Fancourt Barnes, London; Dr. W. H. Tayler, Anerley; Dr. R. Lee, London; Mr. R. R. Lloyd, St. Alban's; Dr. Bond, Gloucester; Dr. G. A. Hetherington, Canada; Our Aberdeen Correspondent; Mr. F. A. Halesworth, Atherstone; Dr. J. Urquhart, Aberdeen; Mr. Walsham, London; Mr. Harvey Nicholl Edinburgh; Dr: Sturges, London; Mr. H. Hendley, London; Mr. Eddowes, Shrewsbury; Mr. C. C. Burman, Belford; Mr. F. W. Lowndes, Liverpool; Mr. W. Buchanan, Chatham; Mr. B. G. Morison, London; Mr. H. R. Hatherley, Nottingham; Dr. G. Stoker, London; Our Dublin Correspondent; Dr. De Watteville, London; Dr. Clement Godson, London; Mr. C. W. Wyatt, Southborne, Hants; Mr. F. H. Moore, Leicester; Dr. Usher B. Eaton, Dublin; Mr. John. Lane, London; Dr. Wilson, Leytonstone; Mr. Timothy Holmes, London; Mr. 'Blackwood, Edinburgh; Mr. J. O. L. Hadley, London; Dr. L. Bellos, Munich, Bavaria; Our Glasgow Correspondent, etc.

BOOKS, ETC., RECEIVED.

Medical Fashions in the Nineteenth Century; Inclnding A Sketch of Bacterio-Mania and the Battle of Bacilli. By E. T. Tibbits, M.D. London: H. K. Lewis. 1884.

A Text-Book of Physics. By A. Daniell, M.A. London: Macmillan and Co. 1884.

The Different Aspects of Family Phthisis. By R. E. Thompson, M.D. London: Smith, Elder and Co. 1884.

C. H. May and Co.'s Press Manual. Seventh year of publication. London: C. H May and Co. 1884.

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ON
DISEASES OF THE NERVOUS SYSTEM.

By A. HUGHES BENNETT, M.D.,
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VII. On Bulbo-Spinal Atrophic Paralysis.

Gentlemen,—I beg to direct your attention to a case which at present occupies one of my beds in the hospital, and which presents a clinical picture of disease, to which the term bulbo-spinal atrophic paralysis may appropriately be given. This condition is worthy of consideration, not only on account of its comparative rarity, its occurrence in the female sex, and at an early age, but because it supplies a text for the discussion of many intrinsic features of interest connected with it.

Jane C., aged 28, seamstress, tells us that there is no history of nervous disorder in her family, and that she herself has always been in the most robust health till about a year ago. About this time, and without apparent cause, a slight hesitation in her speech was observed; but this was at first so trifling, that no notice was taken of it. This peculiarity in talking, however, very gradually increased, and, a month or so later, in addition, weakness and awkwardness of her hands and fingers were experienced, and clumsiness in performing accustomed acts. This also very slowly progressed, and, shortly afterwards, the same condition appeared in the lower extremities. All these symptoms, which began very insidiously, have continued to increase up to the present time, the general health of the patient remaining all the while in an excellent condition.

On personal examination (January 3rd, 1884), the patient is seen to be stout and ruddy in appearance, in good spirits, and in robust general health, and all the organs and functions are healthy, except those of the nervous and muscular systems about to be indicated. She is a well educated and highly intelligent person, and there is no trace of any mental deficiency; there is no pain in the head or other cerebral abnormalities, and all the special senses are intact. Although the patient is naturally of a cheerful disposition, the expression of her face is peculiar, having a sad and almost comically dismal appearance. The orifice of the mouth is enlarged, and remains partly open, with its angles drawn downwards. The lower part of the face is flat and expressionless, and its natural furrows are smoothed out. The movements of the mouth are imperfect, and it can only with difficulty be closed; and the patient cannot purse the lips, whistle, spit, or perform those labial acts which she formerly accomplished. The tongue is seen, apparently of ordinary size, lying at the floor of the mouth. All its movements are very sluggish and imperfect, and are accompanied by a slight tremor. It can with difficulty be protruded beyond the teeth, or raised upwards at its extremity. Speech is very indistinct, so as at times to be almost incomprehensible. and is in character exactly like that of one who tries to talk in keeping the tongue fixed to the floor of the mouth, thus making it an impossibility to pronounce the palatal and dental consonants. In addition, owing to the deficient action of the palate and lips, the voice has a nasal character, and the labial consonants are imperfectly uttered. Finally, it will be observed that the voice itself is weak and low, and cannot be raised to a loud tone. The patient next tells us that she has some difficulty in swallowing, especially fluids, which not only run out of her mouth, but sometimes through her nostrils. The saliva has a tendency to accumulate; it becomes viscid, and dribbles from the angles of the mouth, and you see that she has a handkerchief constantly in her hand to wipe the moisture away. On looking at the fauces in this case, there are no visible signs of paralysis of the uvula or palate; and when these are tickled, the reflex actions appear to be active. Neither is there any determinable paresis of the lower jaw, the movements of which seem to be as in health. The movements of the eyeballs, the pupils, the sight, and the ophthalmoscopic appearance of the eyes, are normal. There are no abnormalities of the respiratory or circulatory systems.

In addition to these conditions, we find that there are more extensive morbid peculiarities. The movements of the neck are slow and deliberate, and it has the appearance of being stiff; and when the patient is suddenly addressed, although her eyes at once follow the speaker, her head follows more slowly. There is, however, no real rigidity of the muscles, and the want of activity is obviously due to the paresis. Although very soft and flabby, there is no [illegible] special wasting of the muscles of the neck, trunk, or upper arms; but, as you observe, the patient is stout, and there is a considerable deposition of subcutaneous fat, which may conceal a moderate attenuation of their substance. The muscles, however, of the forearms and hands are distinctly atrophied, especially on the extensor aspect of the former, and in the thenar and hypothenar regions of the latter. The hands are thin, flat, hollowed out, and their natural eminences have disappeared, so that the bones stand prominently displayed. Moreover, there is a marked deformity of the hands and fingers. The wrists are permanently somewhat flexed, the near phalanges are extended, and the two distal phalanges are in a state of fixed flexion. In this way the hands present a clawed appearance, or the "*main en griffe*" of the French; and this, as you know, is mainly owing to paralysis of the interossei muscles, with some retained activity of the flexors and extensors of the forearms. Accompanying these appearances is a corresponding weakness of movement, and this bears a relation to the obvious wasting of the muscular substance. In the trunk and upper arms the various actions can be performed, but slowly, feebly, and with obvious effort and fatigue. The movements of the hand and fingers are especially imperfect, and both flexion and extension of the former are very weak and limited. The actions of the thumb and fingers, in every direction, are greatly curtailed, and the patient cannot sew, arrange her dress, feed herself, or in fact perform, except very awkwardly, any of the usual manipulations of ordinary life.

The lower limbs have the appearance of being well developed, but the large development of subcutaneous fat would conceal any loss of muscular substance, unless it was very considerable. The patient can walk, but does so with great difficulty, and the gait is slow, hesitating, and unsteady, but with no evidence of inco-ordination or ataxia. The steps are short, and the feet are shuffled along the ground. The muscles of the trunk and upper limbs are soft and flaccid, while those of the lower extremities are somewhat stiff and rigid; but this condition does not exist to a great extent.

On applying electrical tests, it is seen that the stimulation of all the nerve-trunks of the body by the *faradic* current is practically followed by normal muscular contractions; the only exception being that the movements of the hands and fingers are less vigorous than natural to a standard strength, and that in the lower extremities, for proportionate effects to be produced, stronger currents are necessary. The same results follow when this stimulus is applied directly to the muscles themselves; only that, in those obviously atrophied, the vigour of the contraction is diminished. Nowhere, however, is there complete loss of reaction, and the contraction is in proportion to the bulk of the muscular substance; and even in the most wasted muscles, if the current be augmented, an action can be developed. The *galvanic* current applied to the various nerve-trunks causes analogous effects to faradism, and without abnormal qualitative change. The muscles, however, when directly stimulated by this agent, for the most part demonstrate alteration in their structure, as evidenced by the occurrence of the partial form of the reaction of degeneration. In the lower portion of the face it requires a current from eight elements, when applied to the nerve-trunk, to produce a minimum muscular contraction, while one from six elements causes a well-marked action on the muscles themselves. The character of the contraction also is altered, it being slower, more prolonged, and tonic than natural. Finally, the polar formula is modified, the anodal closing being as powerful as the kathodal closing contraction (ACC = KCC). The same general features exist to a greater or less extent in most of the muscles of the body, and more especially in those of the fore-arms and hands. In the last, a comparatively stronger current is required to produce proportionate results, and the anodal closing is more powerful than the kathodal closing contraction (ACC > KCC). Very similar conditions exist in the lower extremities, still more powerful currents being requisite to induce action in the muscles, and notably in the extensors of the feet and toes, where a strength derived from forty elements, indicating 12 M.A. on the galvanometer, produced only feeble contractions (ACC = KCC). Investigations proved that the resistance of the body presented no abnormal conditions.

The reflex actions of the skin throughout are seen to be normally developed. The knee-jerk phenomena and the mechanical irritability of the muscles are everywhere considerably exaggerated. Ankle-clonus is elicited on both sides, and fibrillary contractions, both spontaneous and artificially produced, can be demonstrated. All these various abnormalities may be said to be symmetrical on the two sides, [illegible] they are most marked throughout [illegible]. The sensibility of the skin is everywhere natural. The skin of the lower limbs is somewhat cold and cyanotic, but not to any great extent.

Commentary.—This case comprises a typical combination of symptoms which are usually differentiated into two distinct groups, and which are described as separate diseases, under the names of bulbar paralysis, and progressive muscular atrophy. To Duchenne, medical science is indebted for his researches on, and a delineation of, both these affections; and that observer believed that each of these constituted an independent malady, which was characterised by clinical and pathological features peculiar to itself. He further maintained that, in those rare cases in which the two conditions occurred in the same individual, it was a mere coincidence, the one disease being an accidental complication of the other. This view has been adopted by his followers. In the light of recent advances in neurological science, it will be of advantage to discuss this question.

From a clinical standpoint, it is asserted that progressive muscular atrophy is a disease characterised by atrophy without paralysis; whereas bulbar, or, as it is otherwise termed, glosso-labio-laryngeal paralysis, is paralysis without atrophy. In addition to this, further distinctions have been drawn between these two conditions, such as their etiology, the age at which they occur, with other minor points, all of which, however, are so uncertain and indefinite as to constitute no definition between them. The differential character on which main stress has been laid, is the question of atrophy or paralysis, as already stated; the accuracy of this assertion may, however, be disputed.

In progressive muscular atrophy, along with the wasting there is undoubted weakness, which goes hand in hand with the disappearance of the muscular substance; and, in chronic cases, owing to the secondary degeneration of the entire pyramidal tract and peripheral motor nerves, it is probable that the paresis considerably exceeds that due to actual loss of muscle.

In bulbar paralysis, on the other hand, while granting that there is paresis, it cannot be admitted that there is no muscular degeneration. From anatomical considerations subsequently to be considered, this tissue-alteration may not reach so advanced a stage as it sometimes does in progressive muscular atrophy of the limbs, but that wasting of the fibres actually takes place is evidenced not only by cases on record in which the tongue was visibly atrophied, but by the revelations of the microscope, and the more recent discoveries in electricity as a diagnostic agent. It is also to be observed that, owing to the condition of the mucous membrane, and the general situation of the parts near the face and mouth, added to the comparative smallness of the muscles involved, anything but very gross diminution in their volume is difficult to demonstrate by inspection alone. When, however, as in the case before us, electrical tests are employed during life to tissues which present no visible alterations in size, or when histological investigations are made after death, there is conclusive proof that changes exist in the structure of the muscular substance. The normal responses when the nerve-trunks are irritated, and when the muscles are directly stimulated with the faradic current; the increased contraction when galvanism is applied to the muscular fibre; the long drawn-out and tonic spasm produced; and the altered polar reactions, all give abundant evidence that the muscle has undergone those structural changes characteristic of degeneration. Granting, then, that in bulbar paralysis muscular atrophy may not be visibly apparent, and that it does not reach the same degree as in the so-called progressive muscular atrophy, it is maintained that it cannot be asserted to be altogether absent, and, therefore, does not constitute a distinction between the two diseases. On clinical grounds, then, such a distinction is not tenable.

Duchenne and his followers further believed that their views on this subject were supported by pathological facts. They admitted that bulbar paralysis was due to a central lesion, but they maintained that progressive muscular atrophy was essentially a morbid condition originating in the muscles, and that any nervous alterations complicating the situation were of a secondary nature. The histological anatomy of the spinal cord was, however, not so developed in the days of Duchenne as it is at present; and, owing mainly to the researches of Lockhart Clarke, Hayem, Charcot, Joffroy, Vulpian, and Erb, the myopathic and neuropathic discussion concerning the nature of progressive muscular atrophy may now be said to be practically at an end. In this disease, it has been for long admitted that structural alterations are present in the muscles, peripheral nerves, spinal roots, and anterior cornua of the cord. The question at issue has been, in which of these localities did the primary lesion appear? Numerous cases have now been recorded by the authors mentioned, in which the entire history and progress of the disease, the nature of its histological appearances, the comparison between it and other affections of an allied kind, force us to the irresistible conclusion that the essential degeneration is that of the motor cells of the anterior cornua of the cord, and that the other morbid nervous and muscular alterations are secondary consequences of that condition. More than one instance has been reported where there existed well marked degeneration of the motor cells, accompanied by muscular wasting, without discoverable change in the spinal roots or peripheral nerves; this not only disproves the myopathic theory, but suggests that these central ganglia preside over the nutrition of the muscle, independently of that of the nerve, or of the voluntary impulses derived from the brain, both of which may remain intact. This general invasion of the multipolar cells would also seem to best explain the imperfect and irregular distribution of the wasting, the integrity of certain fibres of the muscle, the corresponding responses to the electrical stimulus, and the absence of true paralysis or loss of sensibility. Further development of this spinal localisation has been attempted by Remak, who has endeavoured to show that the various groups of muscles which act in physiological harmony are represented in the spinal cord by special arrangements of cells, which can be anatomically distinguished from one another. A gradual sclerosis of these centres would explain the characteristic distribution of the wasting in progressive muscular atrophy. Secondary changes may result from a lesion in any part of the cord; and doubtless the slight rigidity of the muscles of the legs, and the exaggerated tendon-phenomena observed in this case, are due to such alterations extending to the pyramidal tracts.

The morbid central lesion associated with bulbar, or glosso-labio-laryngeal paralysis, is generally admitted to consist of degeneration of the nuclei of the motor nerves of the medulla oblongata. In this disease it is the hypoglossal, the facial, the motor branch of the fifth, the glossopharyngeal, the pneumogastric, and the spinal accessory nerves, which are involved.

Now anatomy teaches us that the cells forming the nuclei of these nerves are embedded in that portion of the grey matter of the medulla which is a direct continuation of the anterior cornua of the spinal cord. These, when traced upwards into the medulla, are seen to be divided by the decussating fibres of the pyramidal tract into two portions, the anterior of which contains the nuclei of the glosso-pharyngeal, spinal accessory, pneumogastric, and motor branch of the fifth; and the posterior, the nuclei of the hypoglossal, facial, and motor oculi nerves. In short, these masses of grey substance are simply a prolongation of the anterior cornua, and their nuclei in the medulla oblongata are analogous to the motor cells in the cord, the former presiding over the nutrition of the muscles of the tongue, lips, and larynx, and the latter over those of the trunk and extremities. Disease, therefore, of the one resembles, in essential nature, that of the other, the symptoms of the lesion only depending upon its locality and extent. The anatomical distribution and the clinical phenomena of the malady are in perfect harmony with each other.

Immediately above the decussation of the pyramids in the bulb is found the nucleus of the hypoglossal only; at a higher level, from before backwards, are the hypoglossal, and the mixed and sensory nerves. Above this point the nuclei of the facial, motor oculi, and acoustic nerves are situated. As destructive disease spreads, it thus involves the centres in special directions. and in a certain order; and, as a matter of fact, it is found that the hypoglossal nerve is, as a rule, the first and most seriously affected, and next in order is the facial. The spinal accessory, pneumogastric, glossopharyngeal, and motor branch of the fifth, show distinct, but less profound changes. The motor oculi, the sensory nerves, along with the entire white substance of the medulla, remain intact.

To attempt thus to found a distinction between bulbar paralysis and progressive muscular atrophy does not appear to be more successful on pathological than it is upon clinical grounds. The two conditions are, in short, identical, and are due to analogous neuropathic changes in the ganglion motor cells, and are alike in anatomy, symptoms, and progress. In neither is there any distinctive histological alteration, the modification of the centres, nerves, and muscles, being the same in both, consisting of a pigmentary granular fatty degeneration, with atrophy of substance. In the majority of cases met with in practice, the disease is so far limited that, on the one hand, symptoms of affection of the spinal cord only are produced, and, on the other, those of the medulla, which, for convenience, may be named respectively progressive muscular atrophy and bulbar paralysis. This difference in terminology may be given rather to retain the ancient nomenclature than to indicate any distinct clinical or pathological characteristics.

Less frequently, but by no means uncommonly, progressive muscular atrophy spreads upwards to the medulla, and induces all the typical phenomena of bulbar paralysis. The disorder when thus complete may then be termed bulbo-spinal atrophic paralysis. Still more rarely, as in the case under consideration, the morbid change begins in the bulb, and subsequently extends downwards, so as to involve the cord in the same physiological tract, and thus produce a similar clinical tableau. Of these, M. Hallopeau has described several instances in his thesis of 1875. Why the morbid process should at one time spread upwards, and at another downwards, the present state of science does not permit us to say.

There are other interesting features connected with this patient well worthy of attention, a consideration of which must be postponed to a future occasion.

ABSTRACT OF THE HARVEIAN LECTURES ON PROGNOSIS IN HEART-DISEASE.

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Lecture III—*concluded.*—Mitral Stenosis.

This is a common form of valvular disease, and is generally admitted to be the most serious. Of the one hundred and fifty-one cases taken by Dr. Phillips from the St. Mary's Hospital *post mortem* records, it furnished fifty-three, of which thirty-eight were females, and only fifteen males; this predominance in the female sex being constant. The average age at death among these cases is higher than the frequency of a fatal termination at a very early period of life would have led me to expect, being 33 for males and 38 for females.

A suggestive inquiry is, why mitral stenosis should be so serious, and especially why it should be attended with greater danger to life than mitral incompetence. One reason is, that the effects of obstruction here are not so easily neutralised as are the effects of regurgitation. The high pressure maintained in the pulmonary circulation and in the left auricle, by hypertrophy of the right ventricle, will antagonise incompetence of the valve in two ways—by resisting the reflux during systole, and by more rapid filling of the ventricle during diastole. In stenosis, this high pressure can only be of service by increasing the rapidity of the passage of blood through the narrowed orifice during diastole; and, as diastole only lasts for a certain time, if the contraction be extreme, the ventricle cannot be properly filled before the systole is again due. When such is the case, the compensation is inadequate. On the other hand, since the constriction may reach a degree which, in the absence of experience, would seem quite incompatible with life, and since the subjects of such extensive change must have lived through all the intermediate degrees, it can scarcely be simply that obstruction, as such, is specially dangerous. Probably the explanation of the greater danger of obstruction, as compared with regurgitation, lies in the fact that, when once adhesion between the flaps of the valves has set in, it tends to go on, the friction and strain keeping up chronic inflammation, which glues the valves further together.

There are clinical features about this form of valvular disease which are worthy of note. The patient, up to a very advanced stage, has not the look of heart-disease, is neither pallid, nor dusky, nor anxious-looking, but often has a good bright colour and cheerful expression. Not unfrequently, up to the moment when, from some cause or other, serious symptoms have set in, he or she is unconscious of embarrassment of the circulation, and capable of ordinary work. On the other hand, such patients are sometimes liable to congestion of the lungs and hæmoptysis after exertion. It is, moreover, the valvular affection which, independently of inflammation or ulceration, most frequently gives rise to arterial embolism. This is not the result of detachment of fragments from the valves, but is due to the formation of fibrinous coagula between the musculi pectinati of the left auricle, or in the appendix, or, less frequently, between the columnæ carneæ of the ventricle, which are shaken out of their beds by exertion or excitement, and carried into the circulation. Another condition more frequently met with as a consequence of mitral stenosis, according to my experience, than in other valvular affections, is great enlargement of the liver, with true pulsation of this organ; and it is not uncommon to find fluid in the peritoneal cavity before there is œdema of the feet and legs, or the œdema will disappear with rest in bed, while ascites remains for a time; whereas cardiac dropsy, as is well known, usually begins in the connective tissue.

Finally, the pulse of mitral stenosis is interesting. It is, according to my experience, almost always regular until the heart is obviously failing, unless the obstruction be complicated by regurgitation or by valvular affection of the right side of the heart; and, when irregularity comes on, it is usually at first the effect of some of the beats of the heart failing to reach the pulse—no doubt, from inadequate filling of the ventricle. The action of the heart may thus continue to be regular when the pulse is irregular. In some rare instances, there is only one beat of the pulse for every other beat of the heart; and, on listening to the heart, there will be no aortic second sound with the alternate systoles; the rhythm, as expressed by the sounds, being one-two-one, one-two-one. But perhaps the most interesting point about the pulse is that the artery, while rather small, remains full between the beats, and has the character of high tension. This would scarcely have been anticipated, and is not easily explained.

Coming, now, to the indications by which the degree of obstruction may be inferred, we cannot, as has been stated in the first lecture, rely upon the amount of hypertrophy and dilatation present. There is no dilating influence brought to bear upon the left ventricle, and no demand for increased exercise of systolic energy. This ventricle, therefore, as a rule, undergoes little change; but it is conceivable that, in an early stage of contraction, the increased pressure in the auricle might distend the ventricle during its diastole, thus giving rise to a certain degree of dilatation, which will call for some hypertrophy; and, perhaps, it is in this way that an increase in the capacity and thickness of the left ventricle occasionally met with, especially in young subjects, is produced. While, however, the left ventricle undergoes little change, all the other chambers of the heart are affected. The auricle is dilated, often to an extraordinary degree, and the walls may either be hypertrophied, or stretched and thinned. But it is upon the right ventricle that the greatest strain falls, and it becomes greatly hypertrophied with or without dilatation. Unfortunately, there is no such correspondence between the hypertrophy and the obstruction as can be relied upon for the purpose of prognosis. It would appear as if the refusal of the left ventricle to enlarge, set limits to the enlargement of the right ventricle.

We are thus compelled to fall back upon other indications, and these are, according to my experience, afforded by changes in the sounds of the heart. I have, indeed, been led to divide mitral stenosis into three stages, distinguishable chiefly by means of modifications of the sounds. The diagnostic sign of obstruction at the mitral orifice upon which most stress is usually laid, is the well known presystolic murmur of vibratory character, heard over a limited area to the inner side of the apex, and often accompanied by a thrill perceptible to the hand. When present, it is perfectly characteristic, though not absolutely pathognomonic, and probably it exists for a time in all cases; but, in a very large proportion of the occasions on which the diagnosis of this condition of the valve has to be made, it is absent. The following, then, is the course of the modifications which I have traced in numerous instances, verified by *post mortem* examination.

In the first stage, there are presystolic murmur and thrill, with more or less accentuation of the pulmonary second sound, and, perhaps, reduplication of the second sound; its distinguishing mark is the presence of the second sound at, and to the left of, the apex. An apex-murmur, followed by two sounds, can scarcely be taken for anything but presystolic, and accordingly the diagnosis is extremely easy. At this stage, according to my experience, there are no symptoms.

The second stage is marked by the disappearance of the second sound from the apex. At the same time, the first sound, as heard here, has gradually undergone a complete change of character, and has become short, sharp, and loud, so as to be extremely like, in fact, an exaggerated second sound. Now, mistakes in diagnosis are easily made; the presystolic murmur, ending in a short sharp first sound, is taken to be a systolic murmur, followed by a loud second sound, and the disease is supposed to be mitral insufficiency. Thus the most serious of the valvular affections, at a period when symptoms are impending, is taken for the least serious. There will, of course, be accentuation of the pulmonary second sound, with or without reduplication. It would, perhaps, scarcely be worth while attempting any explanation of the modifications specified, were it not that a fact will be borne in mind, for the sake of a reason, which might otherwise be forgotten. First, then, it may be asked, why does the first sound become short and sharp? No very definite answer can be given. It cannot be the direct result of the state of the valve; and seeing that, in hypertrophy, we have a modification of the first sound of an opposite kind, while in dilatation and in palpitation the first sound approximates in character that of mitral stenosis, it would seem that the peculiar modification has its origin in the walls of the ventricle; and it may be conjectured that the rapid [illegible] and [illegible], and the consequent absence of resistance at the beginning of the systole, is the determining cause. This sharp first sound has been spoken of as the remains of the presystolic murmur which leads up to it; but such an explanation is inadequate.

The disappearance of the second sound at the left of the apex, which, with the short sharp character of the first sound, marks the second stage of mitral stenosis, is probably explained by the following considerations. In the normal heart, a second sound is always audible at and to the left of the apex; and repeated careful examinations have convinced me that it is the aortic second sound which is here heard, and not the pulmonary, even when accentuated and unduly loud. In mitral stenosis, there are two influences tending to prevent the aortic second sound from reaching the surface of the chest. First, the left ventricle, not undergoing dilatation and hypertrophy, while the right enlarges greatly, is overlapped by the latter, which usurps the position of the apex, and thus the left ventricle cannot conduct the aortic sound to the chest-wall. Again, the aortic second sound will be weak, because the diminished amount of blood entering the ventricle, in consequence of the narrowed mitral orifice, will not distend the aorta, and will, therefore, fail to provoke a powerful recoil, such as is necessary for the production of a loud second sound.

The presystolic murmur itself often undergoes a modification in this stage. As commonly heard, it occupies the end of the diastolic interval, running up to the first sound, and corresponding therefore with the auricular systole. But it may be a long or a short murmur, and may indeed occupy the entire diastolic interval, when it will correspond not only with the auricular systolic but also with the active diastolic rebound of the ventricle from contraction; *i.e.*, murmur is produced by the current of blood sucked into the ventricle as it dilates, as well as by that driven into it by the systole of the auricle. This murmur occupying the whole of the diastolic interval is most frequent in bad cases. But it may further be cut in two, and, instead of being a continuous rumble from the second sound up to the first, may subside as the active dilatation of the ventricle ends, and before the auricular systole begins; or the presystolic part proper of the murmur may be lost while the diastolic part remains audible, so that the only murmur heard is diastolic, *i.e.*, a diastolic mitral murmur strictly speaking.

The third stage is characterised by the disappearance of the presystolic murmur, so that, the second sound being already lost, the only sound heard at and outside the apex is the short sharp first sound described. This is almost invariably coincident with the establishment of tricuspid regurgitation, and it is easily understood that when the tricuspid valve has given way the pressure in the pulmonary vessels will be diminished, and it is so very frequently to a degree which lowers the pressure in the left auricle to a point at which it is incapable of generating force sufficient to give rise to a murmur. It is not necessarily the case that serious symptoms are present when the third stage, as marked by the absence of the presystolic murmur, is reached; but it very frequently happens that, on the occurrence of any complication, the second stage passes into the third, and that on improvement taking place this is reversed.

But, besides the occurrence of tricuspid regurgitation from over-distension and dilatation of the ventricle, there is a considerable liability to actual disease of the tricuspid valves, and to stenosis of the right auricular ventricular orifice, either as a concomitant or as a consequence of mitral stenosis. This brings most serious aggravation of suffering and adds greatly to danger; symptoms of embarrassed circulation, indeed, are never absent, and as a rule dropsy sets in and increases. It has been stated that tricuspid stenosis gives rise to a presystolic murmur in the tricuspid area; but in none of the cases, in which I have had *post mortem* evidence of mitral and tricuspid stenosis, have I met with such a murmur, and the evidence of the latter condition is usually inferred from symptoms rather than indicated by signs.

Up to the present, nothing has been said of the co-existence of mitral regurgitation with stenosis. This is common, though less frequent than might have been expected.

An exact diagnosis under these circumstances is difficult, and the constriction is liable to be entirely overlooked. There will be the systolic apex-murmur of regurgitation, and on hearing this familiar sign it is frequently accepted as a sufficient explanation of the case. So long, however, as a presystolic murmur and thrill are present, they will at once arrest the attention of the careful observer, but when there is no presystolic murmur, great care is required for the recognition of the stenosis. Here the short sharp first sound, not extinguished by the murmur, is of great importance. The pulse, in such cases, may either be regular or irregular. Marey states that stenosis neutralises the tendency to irregularity characteristic of incompetence; my own experience would be better expressed by saying that incompetence introduces a tendency to irregularity into stenosis, and that especially it brings on irregularity early when complications arise. In some cases, however, stenosis, in others incompetence, will predominate, and it is extremely difficult to say in a given case which is the more influential lesion.

Summing up the prognostic indications, it must be borne in mind that mitral stenosis is the most dangerous of the valvular diseases, with the exception of aortic regurgitation, coming on at or after middle age, and that the appearance of the sufferer may be very deceptive, the subject of this affection often looking very well at a time when danger is imminent.

It is again frequently fatal in early life; so that, while we may hope for the establishment of compensation in aortic and mitral regurgitation affecting young subjects, we must be apprehensive of progressive mischief and comparatively speedy death in mitral stenosis.

In endeavouring to estimate the degree of constriction of the orifice, which is the most important element in prognosis, we are not greatly assisted by the extent of dilatation and hypertrophy of the cavities and walls of the heart, but a careful study of the sounds and murmurs affords some information. When, with the presystolic murmur, a fairly good first sound and a distinct second sound are heard at and beyond the apex, there is, according to my experience, little or no liability to the recurrence of symptoms. With the disappearance of the second sound at the apex, and the establishment of the short sharp character of the first sound, there comes a liability to complications and cardiac troubles, and these complications and evidences of cardiac difficulties may come on very abruptly. A prolongation backwards of the presystolic murmur, so that it occupies the entire diastolic interval, or becomes diastolic in time, adds to the gravity of the indications; so also does disappearance of the presystolic murmur, especially when it coincides with tricuspid regurgitation. Of the prognosis, when pulmonary complications or dropsy are present, there is scarcely time to speak; but it must be mentioned that, among the special contingencies of this affection, is embolism, which may occur almost at any stage. Finally, sudden death is not uncommon, though not in the sense of falling down dead while in apparent health; there is a liability to the sudden and unexpected setting-in of severe symptoms in patients already suffering, which rapidly issue in a fatal termination.

BICHLORIDE OF METHYLENE BEFORE THE ACADEMY OF MEDICINE OF PARIS.

By F. E. JUNKER, M.D.

Conflicting statements about the so-called bichloride of methylene, its value as an anæsthetic, and the correctness of the various analyses of this preparation instituted by chemists of scientific repute merely on scientific grounds, and which all tend to a like result, have lately been brought before the profession. This question was fully ventilated at two meetings of the Academy of Medicine of Paris, by two men of high authority, and whose opinion and experience are of no mean weight with those conversant with the different departments of science they represent: by M. Regnauld, Professor of Chemistry in the Faculty of Medicine; and M. Léon Le Fort, surgeon to the Hôtel Dieu, both members of the Academy of Medicine of Paris.

In a paper read by M. J. Regnauld at the meeting of April 24th, 1883,[1] the author alludes to the numerous attempts, both of physiologists and of chemists, to find a substitute for chloroform, ether, and protoxide of nitrogen, possessing equal anæsthetic but less dangerous properties. Several such substitutes, which were the subject of special monographs and treatises, were in turn praised, or even extolled, but soon abandoned and forgotten. From these failures, however, must be excepted the chloride of methylene, or chlorinated chloride of methyl, a preparation nearly allied in composition to chloroform, which, first introduced under the name of bichloride of methylene by Dr. B. W. Richardson in 1867, owes its reputation, as an anæsthetic at once safe and free from some of the objectionable effects of chloroform, to no less eminent an authority than that of Sir Spencer Wells, whose remarks on it, in his *Ovarian and Uterine Tumours*, M. Regnauld quotes in full.

In France, the chloride of methylene had not been tested until lately, when M. Léon Le Fort, after the perusal of Sir Spencer Wells's work, found it incumbent on him to avail himself of the superior qualities of this anæsthetic, particularly in the domain of abdominal surgery. M. Le Fort, knowing that M. Regnauld had been making the chemistry of anæsthetics the subject of his special study and investigation, requested him to procure some pure chloride of methylene. M. Regnauld, therefore, conjointly with M. E. Villejean, subjected the preparation sold under this name by different manufacturing chemists to a careful analysis, but failed to discover a trace of monochlorinated chloride of methylene in any of the samples. They consisted, without exception, merely of chloroform, with an addition of a small quantity of alcohol (ordinarily used for its preservation). Whilst Professor Regnauld was engaged in his laboratory in preparing and purifying a sufficient quantity of chloride of methylene for the use of M. Le Fort, the latter, anxious not to delay his experiments with this anæsthetic, obtained some direct from Sir Spencer's own purveyor. This, as well as a second supply from the same source —altogether two kilogrammes (4 lb. 6½ oz.)—after most careful examination, led M. Regnauld to the following conclusions, which I here translate *verbatim.*

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[1] "Recherches Pharmacologiques sur le Chlorure de Methylène," par MM. J. Regnauld et Villejean (*Bulletin de l'Académie de Medecine de Paris*, 17 session d'Avril 24, 1883, i, xii).

"Chloride of methylene, CH_2Cl_2, had originally been obtained by the action of solar radiation on a mixture of chloride of methyl, CH^3Cl, and chlorine. Afterwards, it was prepared by the reaction of chlorine on iodide of methylene (Boutleron).[2] The identity of the chemical preparations produced by these two different reactions was at first not understood, but was soon proved by Perkin.[3] This chemist has, moreover, ascertained that the boiling-point of chloride of methylene, or monochlorinated chloride of methyl, is not +30.5° C. (86.9° F.), as hitherto erroneously accepted, but that the real boiling-point of this preparation, by whatever process it may have been produced, is invariably 40-41° C. (104-105.8° F.), under a pressure of 0.76.

"The same methyl-compound may also be obtained by various other processes, especially by the combined action of zinc and ammonia on an alcoholic solution of chloroform. The hydrogen, engendered by the reaction of zinc and hydrochloric acid, likewise produces in this solution a considerable proportion of chloride of methylene (Greene).[4] By the latter method, slightly modified by previously distributing finely triturated copper on the surface of the zinc-shavings, we succeeded in preparing chloride of methylene of perfect purity (CH_2Cl_2). We considered such a standard preparation indispensable for comparisons in our future researches.

"Before entering into a more minute examination of the chemical composition of the English chloride of methylene, we tested the densities of this preparation and of our standard fluid by the metric method, at +15° C. (59° F.), viz.:

Pure chloride of methylene	... ...	1.334
English ,, ,,	... ...	1.363

Whilst the density of our preparation nearly corresponds with that found by Perkin, 1.360 at 0° C. (32° F.), or 1.332 at +15° C. (59° F.), the density of the English chloride of methylene, 1.363, is too high, which tends to prove that chloride of methylene does not, or at least not exclusively, enter into its composition.

"Thus having ascertained that the fluid under examination is a compound, we tried to separate by successive distillations the chloride of methylene, supposed to be one of its components, from the unknown admixture which increased the density of the preparation.

"After having verified by crucial test the correctness of the boiling-point of our standard chloride of methylene, 40-41° C. (104-105.8° F.), we intended to collect in Schloesing's apparatus all the liquid boiling between 40° and 45° C. (104-113° F.), and to separate it from the fluid condensing at 45-50° C. (113-122° F.). But, to our surprise, no distillation took place between 40-50° C., and only after the temperature had been raised to 53° C. (127.4° F.) the thermometer remained steady, whilst almost the whole quantity of the fluid under examination (about 500 grammes, or 18 ounces) boiled and condensed.

"A small quantity of the fluid, which did not pass over, manifested on examination after cooling the characteristic odour of methylic alcohol, the correctness of which similarity was proved by the transformation of the residue into crystalline oxalate of methyl. In order to separate the component which boils at 53° C. (127.4° F.) from the methylic alcohol, the presence of which was indicated by the residue, we utilised the property of the anhydrous chloride of calcium of forming with this alcohol a solid and crystalline combination, which we supposed to be insoluble, or at least very little soluble, in chloride of methylene. This process perfectly succeeded. The addition of a minute excess of chemically pure and finely powdered chloride of calcium gave rise to the development of heat, to the formation of a voluminous crystalline deposit, and of a colourless, very mobile, perfectly transparent supernatant fluid.

"The examination of both, of the crystalline deposit and of the supernatant fluid, enlightened us beyond doubt as to the nature and real constitution of the supposed chloride of methylene. The crystals, after having been freed by a pipette from the fluid, were first treated with distilled water, whereby they dissolved into an aqueous solution of chloride of calcium impregnated with methylic alcohol. We separated and purified the latter, and finally almost entirely converted it into crystalline oxalate of methyl,[5] which distilled between 160-165° C. (320-329° F.). The boiling-point of the supernatant fluid, which has a density of 1.407 at +15° C. (57.2° F.) lies between 60-61° C. (140-141.8° F.). Its transformation into formiate of sodium and chloride of sodium, by the action of an alcoholic solution of hydrate of sodium, leaves no room for doubting its identity with chloroform.

"We investigated, further, the proportion of chlorine contained in this compound, and found, in 100 parts: of the English preparation, 77.53; of pure chloride of methylene, CH_2Cl_2 (our standard preparation), 83.52; of chloroform, $CHCl_3$, 89.12. This smaller proportion of chlorine present in the English preparation confirms former experience, and shows that the latter consists of chloroform dissolved in a non-chlorinised substance.

"Taking as the basis of our calculations the difference of the weight of chlorine in this preparation and in chloroform, we find that it will require to dissolve in a given weight of chloroform one-seventh of methylic alcohol.[6] If it be permitted to apply a scientific term in such a case, we may say that we realised the composition of the English preparation supplied to M. Le Fort by mixing chloroform and methylic alcohol in the above stated proportions (viz., seven parts of chloroform and one part of methylic alcohol by weight, or four parts of chloroform and one part of methylic alcohol by measure. Such a mixture has exactly a density of 1.363[7] and a boiling-point of invariably 53° C. (127.4° F.), which is important[8] to bear in mind, and separates by the action of chloride of calcium into chloroform and crystallisable methylic alcohol.

"Therefore, the French preparations sold as chloride of methylene, were only chloroform; and the very expensive bichloride of methylene,[9] which we obtained on two different occasions from England, proved to be a mixture of chloroform and methylic alcohol, in the proportions of 7 parts of chloroform to 1 part of methylic alcohol, by weight, or 4 : 1 by measure."

Professor Regnauld concluded his paper with the remark, that it did not lie within his province to inquire into the cause of these errors, or accidental substitutions. His task was to point out the necessity of investigating the physiological properties, and, still more, the therapeutic action of a medicament, the chemical character of which had been incompletely investigated or erroneously interpreted.

M. Léon Le Fort, at the following meeting of the Academy, submitted his experience of the chloride of methylene.[10]

"The paper read by my colleague, M. Regnauld, treating of the purely chemical part, needs to be completed by a few practical remarks on the employment of the chloride of methylene as an anæsthetic. On several previous occasions, my surgical colleagues, and especially M. Perrin and myself, commented before this Academy on the frequency of vomiting during and after the administration of chloroform, which, causing great annoyance to the operator in general surgery, is fraught with particular danger in abdominal surgery, especially in operations on the sexual organs of women.

"Reading Sir Spencer Wells's *Ovarian and Uterine Tumours*, I was struck by the statement of this eminent surgeon, that he had entirely discarded the employment of chloroform, on account of the frequency of vomiting caused by it; and that, in more than one thousand operations, he had used the bichloride of methylene, from which vomiting was quite exceptional. My anxiety to secure the same advantages for my patients was natural; and I at once procured the apparatus always used by Sir Spencer Wells for its administration, and ordered chloride of methylene from the hospital dispensary. But, before using this preparation, I secured the co-operation of my colleague, M. Regnauld, who examined the sample, and found it to be nothing else but chloroform, which it also resembled in appearance and odour. I bought so-called chloride of methylene of our most respected chemical firms, but the result of its examination was the same. I then wrote to Sir Spencer Wells, who furnished me with the name and address of his purveyor, from whom I obtained a preparation which, neither from its odour nor otherwise, appeared to me identical with chloroform. M. Regnauld, after examination, declared that it was not common chloroform, but neither chloride of methylene, the boiling-points being different. The opinion which he formed, after subsequent careful analysis, is embodied in his paper read at the last meeting. I accept his conclusions, being incompetent to discuss the chemical part of the question, and the result of his analysis; but I feel bound to add that my clinical observations are at variance with the latter. This preparation has given me excellent results, far superior to those of the best chloroform."

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[2] *Bulletin de la Société Chimique*, 186[illegible], t. xi, p. [illegible].

[3] Chemical Society, 1869-1870, vol. vii, p. 260.

[4] *Comptes Rendus*, 1879, ii.

[5] Methylic oxalate, or oxalate of methyl, [illegible] crystallises in [illegible] plates, which melt at [illegible] C. [illegible], and boil at [illegible]. It is [illegible] employed in the preparation of pure methylic alcohol (*Elements of Chemistry*, by W. A. Miller, H. Armstrong, [illegible] vol. [illegible] p. 923).

[6] Five litres of the mixture by measure contain four litres of chloroform and one litre of methylic alcohol.

[7] English and French chloroforms [illegible] methylic alcohol [illegible] a mixture composed of English preparations [illegible] the [illegible] properties [illegible]. In order to obtain the density given by M. Regnauld [illegible] necessary to mix the two components in the proportion of [illegible].

[8] The importance of this statement [illegible] with that of the Messrs. Robbins, [illegible]. We [illegible] at about [illegible] from the first to the last part of the [illegible] Robbins [illegible] British Medical Journal, [illegible].

[9] [illegible] chloride of methylene [illegible] altered [illegible] chemical formula has been omitted.

[10] Emploi du Bichlorure de Méthylène [illegible] par MM. Léon Le Fort et J. Regnauld. [illegible] Mars [illegible], 188[illegible].

After describing the apparatus and the mode of administration, M. Léon Le Fort continues.

"I have continually used the chloride of methylene since February last (1883) for producing anæsthesia in all my operations, and I beg now to state the result of my experience. At first, its action appeared to me less rapid than that of chloroform; but this I have to put on account of the manner in which it was given. I first propelled the air through the anæsthetic only at every fifth or sixth respiration of the patient. Since, however, I have become more familiar with the apparatus, and have gained confidence in the preparation, I have pressed the bellows at every inspiration, and thus produced narcosis as rapidly as when using chloroform. I found that the stage of excitement was of less intensity and shorter than with chloroform. Above all, there was no sickness. As regards the latter point, I was delighted with this preparation, whatever it be. I only once had vomiting; but in this case the patient had a hearty meal one hour before the operation. Patients narcotised in this manner never suffered from the *malaise*, headache, or nervous condition which generally follow for one day after the use of chloroform. One patient vomited during the night after the operation, which had been performed the previous morning; too long a time after the administration of the anæsthetic to make it answerable.

"It would be premature to draw scientific conclusions from my still limited experience, which extends only somewhat over three months. It needs comparing the effects of chloroform given in the same apparatus, the effects of chloride of methylene given in the manner in which chloroform had been hitherto usually administered—viz., without Junker's apparatus. I ought to compare, with the assistance of my colleague M. Regnauld, the effects of the English preparation with those of the mixture of chloroform and methylic alcohol propounded by the latter. Before all, I shall have to compare the pure standard chloride of methylene with the spurious preparation. This will require time; and my present remarks are only elicited by M. Regnault's paper. I have full reliance on chemical evidence, but still chemistry fails sometimes in explaining what we occasionally succeed in appreciating without her aid—viz., the difference between the bouquet of Chambertin and Pomard. It may be that in the English compound, whatever it may be, some subtle changes take place, which chemists cannot point out, but which benefit our patients. I conclude by asking my colleagues to join me in my researches and experiments with this preparation, which I have found superior to the best chloroform. I shall certainly use the mixture of chloroform and methylic alcohol prepared according to M. Regnauld's formula; but in the meantime I shall continue with the chloride of methylene, because I have had no vomiting caused by it, and it has given me far superior results than the best of our chloroforms. (Parcequ'avec lui je n'ai pas encore rencontré de vomissements, et qu'il m'a donné des resultats de beaucoup superieurs à ceux que me donnent les meilleurs de nos chloroformes.)"

In his reply, M. Regnauld reiterated his evidence that the English preparation, of which he analysed two kilogrammes, supplied to him on two different occasions, was not pure chloride of methylene, but was a compound of four parts of chloroform and one of methylic alcohol by measure (or of 7:1 by weight), to which the term bichloride of methylene and the formula CH_2Cl_2 was misapplied. He does not wonder at the good effects of this preparation, as the methylic alcohol, discovered by the eminent chemist M. Dumas, who was present at this meeting, also possesses narcotic properties.

Since the publication of my paper, and the cases in which I gave Regnauld's anæsthetic mixture (BRITISH MEDICAL JOURNAL, July 21st, 1883, p. 211), I have had, through the kindness of my friend Dr. G. Granville Bantock, the opportunity of administering the latter: four parts of chloroform and one part of methylic alcohol by measure, in twenty cases, both in the Samaritan Free Hospital and in private practice. Of these, fourteen were abdominal sections for the removal of one or both ovaries and of myomas of the uterus; three were operations for ruptured perinæum, two for the removal of fungous growths in the uterine cavity by means of the curette, and in one case a bundle of enlarged and infiltrated glands was extirpated from the axilla, subsequently to an amputation of the breast.

The ages of the patients ranged between 23 and 69 years. In all these cases, the heart was free from any affection; the pulse at the commencement of the anæsthesia varied; owing to the different degrees of nervousness, which always prevails more or less before an operation, it became quiet when full narcosis took place, and ranged, after the operation, from 68 to 90. The rhythm of the respiration remained normal. The pupils dilated during the first stage of the anæsthesia, but became either normal or slightly contracted after complete narcosis had taken place. Muscular excitement, sickness during and after the narcosis, were absent in every case. The complexion was either unaltered or slightly flushed, never haggard or cyanotic; the skin moist from gentle warm perspiration. The patients appeared as if in normal sleep, and awoke to full consciousness soon after stopping the administration of the anæsthetic mixture.

I submit a table, showing the quantity given and the time required to produce full narcosis in each individual case, and the quantity given and the time from the commencement to the termination of the administration. According to mean calculation, 1⅘ drachms produced complete narcosis in 6 minutes (36 drachms, 120 minutes), and 8⅗ drachms were given in one hour (172 drachms in 20 hours).

	Age.	Operation.	Complete Narcosis produced by	in	Amount given.	Duration of Administration.
1	42	Ovariotomy	1 dr.	5 m.	4 drs.	30 m.
2	28	,,	1½ ,,	5 ,,	8 ,,	1 h. 45 m.
3	45	Removal of fungous growths from uterine cavity (curette)	2 ,,	7 ,,	10 ,,	46 m.
4	32	Perineal operation	1½ ,,	4 ,,	6 ,,	30 m.
5	58	Ovariotomy	2½ ,,	7 ,,	15 ,,	2 hours
6	42	,,	1 ,,	5 ,,	5 ,,	45 m.
7	32	Removal of fungous growths from uterine cavity (curette)	1½ ,,	5 ,,	5 ,,	40 m.
8	60	Ovariotomy (double)	2 ,,	9 ,,	12 ,,	1 h. 45 m.
9	44	Removal of myoma (laparotomy)	2 ,,	7 ,,	16 ,,	2 h. 20 m.
10	32	Perineal operation	2½ ,,	10 ,,	8 ,,	40 m.
11	28	Ovariotomy	2 ,,	5 ,,	6 ,,	40 m.
12	38	,,	2 ,,	4 ,,	6 ,,	21 m.
13	46	,,	2 ,,	7 ,,	10 ,,	1 hour
14	69	,,	1½ ,,	5 ,,	5 ,,	1 hour
15	28	,,	2 ,,	5 ,,	11 ,,	55 m.
16	49	,,	2 ,,	5 ,,	7 ,,	35 m.
17	23	,,	1½ ,,	7 ,,	15 ,,	1 h. 33 m.
18	50	Perineal operation	2 ,,	7 ,,	14 ,,	1 h. 20 m.
19	30	Extirpation of glands from axilla	[illegible] ,,	8 ,,	7 ,,	40 m.
20	43	Ovariotomy (double)	1 ,,	5 ,,	10 ,,	1 h. 15 m.
			36	120	172	1200

NEPHROTOMY FOR OBSTRUCTIVE SUPPRESSION OF URINE.

By BENNETT MAY, F.R.C.S.,

Surgeon to the Queen's Hospital, Birmingham.

I HEARTILY concur with Mr. Clement Lucas in regarding the case published by Mr. T. Wilmot, in the JOURNAL of November 24th, 1883, as one eminently suggestive of the propriety of operative treatment in this disease.

As Mr. Lucas, in his letter of December 1st, refers to a communication I made on the subject after his address on Renal Surgery, at Liverpool, I shall be glad of this opportunity of expressing, in a more precise and extended form, the suggestion I then made for operative measures in these cases.

In anuria from impacted calculus, urine does not ordinarily accumulate in the loin to any appreciable degree. Dilatation only takes place where the obstruction is partial in degree and of long duration. Where it is sudden and complete, no dilatation occurs, because the secretion is arrested directly the pressure is equalised; and, under these circumstances, not more than half an ounce of urine will be found in the pelvis of the kidney (*vide* case by Dr. Roberts, *Lancet*, June 1870); though ultimately, as the experiments by Strauss have shown, the organ may become converted into a cyst. The usual seat of impaction of a calculus is near the bladder, or so far down the ureter as to be quite away from the possibility of dislodgment.

My suggestion is to establish a fistulous opening in the loin by nephrotomy, for the escape of the urine; and if the operator be so fortunate as to light on the stone at the upper end of the ureter, so much the better prospect of obtaining a satisfactory result.

The first question anyone contemplating the operation would need to determine is, on which side to operate. I think the symptoms are usually sufficiently marked to settle this easily, as, for instance, in the following case. A publican, aged 50, apparently in good health, ceased to pass urine on the morning of October 31st, 1882; and, from that time till the evening of November 7th, when he died, he excreted no urine whatever. He suffered considerable pain in the right loin, with some nausea, but there was no perceptible swelling, and but little disturbance other than the anuria. I think there can be no doubt he had a calculus impacted in the right ureter; but this would not have caused complete suppression unless the other kidney were previously destroyed; and in evidence of this was a history of severe and continued pain in the left loin about three years before. I saw him a few hours before his death, in consultation with his medical attendant, who had made out every feature of the case, and supplied me with the facts. Circumstances did not permit an operation; but, if I had again an opportunity of seeing an identical case in an early enough stage, I should certainly consider the advisability of an exploratory incision in the *right* loin.

The case of Mr. Wilmot presents several peculiarities. In the first place, there was the rare condition of complete absence of one kidney, though this fact only brings it to a state of matters parallel to what ordinarily exists in complete suppression.

Then the stone, though at first blocking the ureter, was practically in the kidney, on the tissue of which it had for a long time been exercising its disorganising effects. For the first two or three days of the fatal attack, while the patient was calm and composed, with clear intellect, without headache, sickness, or fever, the symptoms were those of obstructive suppression simply; but when rigors supervened, with swelling and resistance over the region of the kidney, there was the obvious complication of suppuration in or around the organ. As Mr. Wilmot remarks, the immediate cause of death was abscess, not uræmia. I concur with him in saying that the man would not have derived lasting benefit from aspiration alone, though I think information of some value would have followed its use. The stone would probably have been detected or the abscess evacuated. But I strongly support Mr. Lucas in his remarks on nephrotomy (obviously misprinted nephrectomy) as a means of treatment in this case. An incision in the loin made before the symptoms of suppuration set in, would have led to the removal of the stone, have relieved the suppression, and probably have averted the fatal damage to the kidney.

If the principle of operation be accepted as applicable to these cases, there still remains to decide when such should be performed. A previous history of suppression, with pain on the same side, or previous attacks of nephralgia, would point to the presence of a calculus lodged in the pelvis of the kidney or in the upper end of the ureter, and would indicate an operation for the double purpose of removing the stone and relieving the suppression; and, as the further retention of the stone must lead to destructive disorganisation of the kidney, I agree with Mr. Lucas's view, that the surgeon is justified in operating early under these circumstances. Swelling and resistance in the loin, with rigors and fever, point to suppuration, and really demand the very simple proceeding of an incision down to the kidney, though it is doubtful whether it would not now come too late.

In a first attack of suppression, and without previous nephralgia, the decision may be more difficult, because spontaneous relief is not uncommon. One such recovery, after twenty days' complete anuria, is recorded by Dr. Russell (*Medical Times and Gazette*, 1879). I believe the average duration of life is from six to eight days, death usually terminating the scene rather suddenly, and without uræmic symptoms. I know that a patient can live five whole days without a particle of renal tissue in the body, and suffer very little obvious disturbance (BRITISH MEDICAL JOURNAL, September 1st, 1883). But I think the surgeon would be justified in operating almost at any time, for he can do very little harm, though he might receive the blame of an unavoidable death in case of failure to relieve.

In conclusion, my apology for occupying so much valuable space must be found in the remarks with which Mr. Wilmot closes his interesting paper, viz., "The usual treatment was followed in this case." Undoubtedly such was the fact, and, let me add, it was followed by the usual result—death. Whether the proposed departure from the usual treatment will ever lead to any other result, time and experience must determine.

ABDOMINAL SECTIONS PERFORMED DURING 1883.[1]

By THOMAS SAVAGE, M.D., F.R.C.S.,
Surgeon to the Birmingham Hospital for Women.

THE following remarks are based upon the work done by me in hospital and private practice during the year 1883. It comprises a total of 85 cases of abdominal section. Of the 85 patients, 83 were females, and 2 males; and of the females, 66 were married or widows, and 17 were single.

I think the custom is a good one, which has now for several years been observed by some of those practitioners who are doing a large amount of abdominal surgery, of recording publicly the amount and results of their work.

It is due to the public, to the profession at large, and to ourselves, that some means should be known by the profession by which the results and progress of this branch of our art are capable of being tested; at all events for the present and the immediate future, during which much that is new, both in the nature and in the details of abdominal operations, is likely to occur.

Analysis of the Series.

	Cases.	Deaths.
Cystoma of ovary:		
One ovary	20	1
Both ovaries	4	1
Fibroma of ovary	1	–
Parovarian tumour	4	–
Dermoid tumour	1	–
Removal of uterine appendages for:		
Chronic ovaritis	12	–
Uterine myoma	8	–
Metrorrhagia	1	–
Hydrosalpinx	4	–
Supravaginal hysterectomy	6	1
Extra-uterine fœtation	1	–
Cholecystotomy for gall-stones	1	–

	Cases.	Dths.
Hepatotomy for hydatids	1	–
Hydatids of peritoneum	1	
Papilloma of peritoneum	1	–
Tumour of kidney	1	
Nephrectomy	1	1
Enterotomy for obstruction	1	–
Hæmatocele (opened and drained)	1	–
Pelvic peritonitis	8	–
Exploratory operation for:		
Uterine myoma	3	–
Malignant tumour	3	–
Pelvic tumour	1	
Total	85	4

In 4 instances death occurred, I mean as a result, more or less directly, due to the operation. The cases were as follows.

1. A patient, aged 58, with a very large cystoma of the left ovary, with purulent contents and considerable adhesions. She had allowed herself to get as near to the grave as possible, and could certainly have lived but a week or two if not operated upon. In fact, I did it, at the urgent solicitation of a friend, with the idea of giving the poor creature just the chance which it afforded her of her life. Drainage was used.

2. A patient with double cystoma, referred to me by Dr. J. W. Taylor. The right tumour was full of pus, and universally adherent, having to be literally picked out of its bed. Here drainage was used.

3. A case of nephrectomy; kidney right, very large and full of pus. A clamp was used to the meso-nephron. I think that, if I had used drainage here, the result might have been different.

4. A case of supravaginal hysterectomy. A large fibromyoma, eleven pounds in weight, was removed. The operation was all that could be desired. She died in less than forty-eight hours after the operation, with symptoms of apoplexy. *Post mortem*, there was found a large hæmorrhage, extending backwards from the external part of the right caudate nucleus, and rupturing into the right lateral ventricle; the peritoneum was healthy. She was a woman with dilated facial capillaries, and was subject to frequent attacks of bronchitis; aged 59.

During the year, I used drainage twelve times. Two of these were among the fatal cases. Although I cannot call to mind any of the other cases where I might with greater advantage have drained, but did not, yet I often think we might drain much more frequently than we do. It cannot do harm; it may do good.

None of the cases were performed under what would be styled "strict antiseptic precautions"—*i.e.*, Listerism; but I was always very careful to pay the strictest attention to cleanliness. Having seen operations done under the spray, which is often used to cover a multitude of other deficiencies in the Listerian system, I have sometimes come away feeling that my own operations were at least as aseptic. The record of our work at Spark Hill, which is published in the annual report of the hospital, will disabuse the mind of anyone who is [illegible] in favour of the necessity or even the [illegible] of Listerism in abdominal surgery. Not one of the deaths mentioned above could be ascribed to the [illegible].

In one instance, death has occurred since the operation [illegible]. It was a case of a young single woman with great [illegible] and a [illegible] filling abdomen. It was thought likely to be [illegible] papilloma of the peritoneum. When the [illegible] there was found much ascitic fluid, a small cystoma of the left ovary, and a large mass of indurated lumbar glands. She easily recovered from the operation, but died a few weeks afterwards, from the progress of the original malignant disease. She was under the care of Mr. E. H. Addenbrooke.

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[1] Read before the Birmingham and Midland Counties Branch.

Four or five years ago, when cases of uterine myoma required surgical interference, I was strongly in favour of making an attempt at removing them by abdominal section, and I had very fair results for that period in the history of these operations; but it was not settled in at all a satisfactory manner what was the best method generally applicable to the treatment of the stump—whether it should be extraperitoneal or intraperitoneal. The latter was regarded with rather the most favour, in consequence, I suppose, of its having become general in ovariotomy about this time. I then inclined to the treatment of these cases by removal of the uterine appendages. This plan is often of the greatest benefit; it is generally easy and safe. It is sometimes impracticable, on account of the size of the tumour, and the consequent difficulty of reaching one or other ovary. It is sometimes also ineffective.

I have, therefore, lately been again more inclined to the total removal of these tumours by abdominal section, when possible. Supravaginal hysterectomy is an operation much less dangerous than formerly—especially so if we resolve to treat the stump extraperitoneally; and it is, of course, if successful, permanently curative. Removal of the appendages is to be advised when the major operation is impracticable, and when the myoma is a bleeding tumour, rather than one of the soft variety.

To remove the appendages after the menopause would not be likely to be of much service, unless, by ligature of the spermatic arteries, it caused shrinking and disappearance of the tumour by diminution in the supply of blood.

Complete removal of these tumours ought, as a rule, to be much more successful than is the case with what may be styled "bad" ovarian tumours, and each year lately the operation has been becoming both easier and safer.

There are a few cases of myoma met with involving very largely the lower segment of the uterus, in which it would appear as next to impossible to make a stump for inclusion in a clamp. We are often tempted to attack such a tumour from the vagina by division of the cervix and incision into the capsule. Occasionally this has been attended with success. I have seen a few cases; but the risks of septic infection are so considerable, that I would strongly advise the abdominal operation in preference, if there be the slightest prospect of its practicability. If the vaginal method be adopted, I am sure the safe course is, after the first cutting has been efficiently performed, to do as little as possible, avoiding the use of tents for dilatation, and leaving nearly all to Nature in her efforts at expulsion. Attempts at enucleation open the door to a fatal issue.

In supravaginal hysterectomy, if the stump be short, causing a dragging on the abdominal wound when the clamp has been adjusted, I think the use of a transfixion-pin is of the greatest importance. In one of my cases, where this was not applied, the uterine stump gave way during an effort at straining; in fact, slipped its moorings, and subsided into the pelvis. Although the termination was favourable, yet it was an accident that caused a great deal of anxiety, and was one that might have been prevented had I taken the precaution of transfixing the stump to the abdominal wound.

The case of cholecystotomy was in a gentleman, a solicitor. Being a nervous subject, and of sedentary habits, he had for years been conscious of the possession of a liver. He had consulted an eminent specialist for such cases, who told him that he had a hydatid tumour connected with the liver, and that it should be punctured by aspiration as soon as possible, proposing himself to do it. When I was consulted, I at once found the presence of the tumour, and said that it was probably hydatid, but that it would be better to perform an abdominal section, and treat the tumour in the best way that was thought advisable when it was exposed to view. It was put before the patient as being an operation not less safe than aspiration, and yet more likely to be curative. This plan was agreed upon, and fourteen stones, varying in size, were removed. These stones I had the honour of showing before this Branch a few months ago. The tumour was about the size of a medium coker-nut, and was, in fact, a distended gall-bladder. On tapping it, the first two-thirds of the fluid was transparent and colourless, and a little viscid; the latter one-third was bile-tinged, in fact, appeared to be pure bile. I very much regret that the fluid was thrown away in the confusion of putting straight after the operation. It has been suggested to me, in explanation of the presence of these two fluids in one sac, that the colourless fluid might have been indeed hydatid, and was kept distinct from the true bile by a wall formed of the stones, which, on the collapse of the gall-bladder by the escape of the clear fluid, broke down, and allowed the bile above it to escape also. The appearance of, and the facets upon, the stones pointed to their having been in close contact before their removal.

This case is interesting in itself, but also more on account of its showing the inutility of advising aspiration, when a tumour can be directly treated under one's eye and touch. Here aspiration would not have been of the slightest use, and might have done much damage. Indeed, it would have been more risky than an abdominal section, as bile might without difficulty have escaped into the peritoneum; and, as a matter of fact, Murchison and others have reported a goodly number of cases of tapping followed by a fatal issue.

To prevent the future recurrence and dropsy of the gall-bladder, Langenbuch, in 1883, has recommended extirpation of the gall-bladder. Three of such operations appear to have been successfully performed. Langenbuch advises to begin by detaching the gall-bladder from the liver, and to tie the cystic duct.

While speaking of hydatids, I would just mention the case of this disease affecting the peritoneum. In the one instance which I had in the year, it was clearly the result of delay in operating, the patient not consenting; as, nine months before I saw her, she had a distinct liver-tumour, which was diagnosed as hydatid by my colleague, the late Dr. Hickinbotham, who then advised her at once to have surgical help. About two weeks previous to my seeing her, her abdomen suddenly increased in size. Had this patient taken Dr. Hickinbotham's advice, in all probability the operation would at that time have been a very simple one, and entirely curative. She was first of all tapped with an ordinary trocar, and then afterwards, as she very soon refilled, I made an abdominal section, and evacuated the fluid, sponging out the peritoneum. Dr. Annie Clark examined the fluid, and found it to be hydatid. This patient is now able to do her housework, having been reduced to her proper size. She has a small peritoneal fistula, which discharges a small amount of what appears to be merely pus.

There was nothing specially noticeable about the extra-uterine fœtation, except that the clinical history was perfect, and assisted greatly in forming a diagnosis. The patient, at the time of operation, had passed the period of spurious labour about six weeks, it being attended with pains, secretion of milk, and diminution in size. After this, she had an inflammatory attack.

At the operation, the sac was found to be considerably attached to the abdominal wall. The placenta was, of course, left untouched, and some portions of it gradually came away in due course. On the twenty-second day, she suddenly became very ill, and had a severe rigor. This was clearly due to the retention in the sac of the remains of the placenta, for she soon recovered her previous satisfactory state on my removing what putrid pieces had remained behind.

The case of tumour of the left kidney was in a gentleman whom I saw with Mr. Hogg. There had been a somewhat obscure history of renal colic six months previously, and the tumour was thought to be a hydronephrosis. The abdomen was opened outside the left rectus muscle, over the most prominent part of the tumour, which was about the size of a large orange. A trocar was then pushed into it, and about an ounce and a half of dark brown and reddish fluid escaped, with a few small broken-down clots. Insertion of the trocar gave to the hand the sensation as if the mass were nearly solid, or contained small loculi separated by thin dissepiments. The wound was closed, and the patient soon recovered. The tumour for a time afterwards seemed considerably smaller, and the patient regained his former ability for active exercise. It seems likely that, sooner or later, this case may require again to have surgical aid.

The treatment by operation of intestinal obstruction has, during the past year, been a good deal occupying the minds of practitioners, and is likely yet to be much further developed. It has been found, in many instances, when the case has passed the physician's hands, and is requiring surgical aid, that it is both useless and mischievous to make a long incision, and insert the whole hand into the abdomen among a large mass of distended coils, in search for the cause of obstruction, the relief of which is not then always practicable.

Recoveries after such procedures have been but few out of the large number attempted. It has of late been thought better practice to make a very small aperture, seize the first piece of distended intestine that presents itself, stitch it to the wound (of course, including the peritoneum), and then open it to give free exit to the retained fæces. Of course, by thus opening the gut at a spot above the constriction, the obstruction, as such, is effectually relieved. The artificial anus i made, the constricted portion of gut is allowed to take care of itself and in a good number of such cases the fæces have, in course of time varying in different cases, resumed their natural course, with the ultimate closure of the artificial opening in the abdominal wall.

The present series comprised one such laparo-ileotomy; it was a case in which ovariotomy had been performed a few years ago, and had for some few days been under the observation of the esteemed President of this Branch, and of Mr. R. W. Smith. I was called upon with a view to operation, and it was agreed that the best thing to do would be to open the gut above the constriction. This was easily done. Fæcal vomiting occurred just as ether was being administered. Next morning, there had been no vomiting, and the patient looked quite comfortable; a most marked contrast to her condition just before operation. She did well for three weeks or so, regaining appetite, fæces being passed in large amount *per anum*. She then gradually declined, dying, with symptoms of general asthenia, about five weeks after the operation.

It is a difficult matter to know the exact value of symptoms, taken singly, in the after-progress of patients with abdominal operations. The pulse and temperature cannot always be considered safe guides, for I have known instances of cases going wrong where little amiss was to be found with these. Distension, again, is apt to mislead; for there may be considerable distension, and yet nothing wrong with the peritoneum. This was very marked in the case of death from apoplexy after the hysterectomy. For some few hours before death, the abdomen was very much distended indeed; and Dr. Saundby reported, in his *post mortem* examination, that the peritoneum was healthy. It is not difficult to conceive relaxation of the muscular coat of the intestines coming on in a weakly, fat, or old woman, quite apart from peritonitis. The presence or absence of vomiting is very important, and so also is the tongue; but I have come to look upon the expression of the patient's countenance as, perhaps, the one single symptom which is most unfailing in its true tale of upward or downward progress.

In the after-treatment, the administration of aperients and of frequent enemata, either simple or turpentine, and the absence of opium or morphia, unless absolutely necessary, are all a marked contrast to what obtained a few years ago; and, although advances often come by methods of a purely empirical character, yet progress is made surely and gradually.

CLINICAL MEMORANDA.

EPILEPTIC CONVULSIONS, WITH UNUSUALLY SLOW ACTION OF THE HEART.

THE following case has come under my notice; and, as I have not been able to find published in the journals, or in the books at my command, an instance of such unusually slow action of the pulse, I have deemed it worthy of professional notice. A *post mortem* examination was, unfortunately, not permitted.

E. B., aged 28, a strong, muscular man, had served for a short time in the county police-force, and claimed his discharge two months ago, but not from any ill health. He had never received any injury to the head. He suffered from syphilis two and a half years previously to his death. On November 25th, whilst talking to a friend, he suddenly felt a violent pain shooting through the right side of the head towards the posterior part, and, during the act of exclaiming, fell down in a convulsive fit. He soon recovered consciousness, and returned home, but, not feeling very well, went to bed. During the night, vomiting came on, and soon afterwards another convulsion. The vomiting and convulsions were repeated frequently before I saw him, early on the morning of November 26th. I was informed that vomiting persisted after everything taken into the stomach, and retching continued after the stomach was empty. The tongue was clean; the bowels constipated; the pupils dilated, but acting to light. The *tache cérébrale* of Trousseau was marked; the countenance was pale; the ears were of a dull purplish colour, exhibiting dilated veins and capillaries; the pulse was 24 per minute. I was informed that complaint had frequently been made during the last two months of pain in the head. I had the bowels well opened with an aperient; but no medicine which I administered was able to arrest the vomiting. Accordingly, beef-tea enemata were given.

November 27th. He passed a very restless night. Vomiting and retching were less frequent. Convulsions occurred every few minutes, whether the patient were asleep or awake. A small quantity of urine which was passed yielded, on examination, no albumen nor sugar. The pulse in the morning was 14, in the evening 24; respirations 36. During my morning visit, an epileptic convulsion took place. Tonic and clonic spasms were present. On the return of consciousness, the face became suffused, and the patient asked where he was. I happened to be recording the pulse immediately prior to one of these fits, and observed that it was totally absent for fifteen seconds. During the fit, it was exceedingly slow; but afterwards it beat for a few minutes with greater frequency, averaging 37, and gradually fell again to 24. On November 28th, the fits were still very frequent. He had retained a small quantity of fluid nourishment and medicine (iodide of potassium). The pulse in the morning was 37, in the evening 24; respirations 37. The patient died seven hours after the evening visit.

During this short illness, the patient made frequent complaints of want of air, asking for the windows and doors to be left wide open. Percussion of the head elicited pain in the inferior and superior postero-parietal regions, but not in other parts. Such pain, says Dr. Alexander Robertson, is often associated with disease of the skull, generally syphilitic. The congested state of the auricle, which showed up vividly in contrast with the pallid face, may have been symptomatic of some vascular excitement in the new growth, or of the cerebral membranes; and the *tache cérébrale* points to the same. The late Dr. Laycock, after a careful study of the symptomatology of the ear, came to the conclusion "that the states of the circulation, nutrition, and development of the tissues which make up the ear-lobule and cover the helix very commonly coincide with similar conditions of the encephalic tissues." (*Medical Times and Gazette*, 1862.) The local lesion upon which these well defined symptoms were dependent may be pretty accurately shadowed forth from a reflection upon the physiological phenomena. The cardiac centre was involved, bringing into play the inhibitory action of the pneumogastric nerve; the pulse registering at times only 14 per minute, and being absent altogether occasionally for fifteen seconds. The pupils were dilated, showing that the centre in the brain possessed of the power of producing this symptom was probably encroached upon, as was also the respiratory centre, the respirations being 37, whilst the pulse varied from 14 to 24. Death resulted when the "nœud vital" of Flourens was extensively involved. The history of syphilis leads us to suspect the gradual formation of a gummatous or hyperplastic neoplasm, and its situation evidently the floor of the fourth ventricle or its immediate neighbourhood. The case was seen with me by Mr. George Sankey, who confirmed the diagnosis.

CHARLES BOYCE, M.B. Edin., Maidstone.

OBSTETRIC MEMORANDA.

CASE OF ANTEFLEXION OF UTERUS, COMPLICATED WITH PREGNANCY: INDUCED ABORTION: RECOVERY.

MRS. D., multipara, was seen by me first about July 20th, 1883. I was sent for, as she had been vomiting incessantly for ten days. She had been under treatment for that time, but had obtained no relief. No food of any description would remain on her stomach, and even iced champagne was ejected at once.

When I saw her, the suspicion of pregnancy immediately crossed my mind. On inquiry, however, she said she did not think she was pregnant, but I found from her statements that she had not menstruated for two months. I therefore at once examined her, and found the following conditions. The uterus was very high up in the pelvis; in fact, I could scarcely reach the os uteri. This part I did not find otherwise displaced; it was considerably enlarged, congested, and tender, as seen by the speculum and felt with the finger. In front there was a rounded tumour, about the size of a turkey's egg, which I believed to be the fundus uteri, as it was freely movable with the os. I came to the conclusion that this was a case of anteflexion of the womb, probably complicated with pregnancy. I tried to replace it, but did not succeed. The patient told me that she had suffered for some time from dysuria and bearing-down pains. I prescribed bismuth, dilute hydrocyanic acid for the vomiting, and hot stupes over the hypogastrium to relieve the pain in that region of which she complained. On the 21st, there was no change in her condition. I ordered her oxalate of cerium in two-grain doses three times a day, and to have all her food iced. I also applied a blister to the epigastrium, which I had dressed with morphia. On the 22nd, I asked Surgeon-Major Robinson to see the case with me. He concurred in my opinion, and suggested hypodermic injections of morphia. She had a fourth of a grain three times for to-day and the next, with no relief of the vomiting. On the 24th, in company with Dr. Robinson, I proposed to explore the uterus with a sound, and, if possible, to replace the womb in its normal position. She was then very weak, having had no [illegible] for about ten [illegible] days. She could not bear the pain, and the least movement brought on retching; we therefore had to [illegible] completely [illegible]. Dr. Robinson administered chloroform. I then passed a No. [illegible] elastic catheter on the stilette into the uterus, [illegible] introduce about 1½ inches. I withdrew the stilet, and, after a good deal of difficulty, having to pass my hand into the vagina and pull down the os, I introduced the catheter, without stilette, into the womb, and passed it in for about 4 inches. The tumour could still be felt in front. Dr. Robinson and I were then satisfied that she was pregnant, and agreed to pass the stilette down the catheter, so that we might get the womb into position, and also bring on abortion. I did this, and, with my finger in front of the os, could feel the fundus gradually rising into position. Having attained this, I bandaged a pad on the hypogastrium, over the fundus uteri, and withdrew the stilette, leaving the catheter in. We then ordered her a dose of a drachm of liquid extract of ergot. In six hours labour-pains came on, and on the following morning (26th) she aborted, an ovum about the size of a pigeon's egg coming away perfect. There was a considerable amount of hæmorrhage, but no pain of any moment. The vomiting ceased as soon as the ovum came away, and all other symptoms quickly lessened. She was then able to take beef-tea, milk, and iced champagne. She never had any bad symptoms; she rapidly regained strength, and in ten days was going about her ordinary household duties quite recovered.

I have examined her since, and find the womb in its normal position, and her periods are quite regular. She has since told me that her labours are always troublesome. One required instrumental interference, and after another she suffered from puerperal fever.

Remarks.—This case is interesting from the following facts. 1. Anteflexion is very rare in the pregnant state, especially at such an early period of pregnancy. 2. The symptoms were so urgent as to warrant the induction of abortion in the second month. 3. The difficulty of operating on such a case as the one described is shown.

J. Courtenay Haslett, M.D.,
Surgeon, Army Medical Department.

HOUR-GLASS CONTRACTION.

In the Journal of February 16th, Mr. James notes a case of retained placenta due to hour-glass contraction of the uterus. In almost every case of this kind which has occurred to me, it has been due to the same cause; and I believe this condition can be produced by the binder being improperly applied. When it is used to aid the uterus in expelling the child, great care should be taken that it grasps the fundus well, and that the pressure be made downwards and backwards. Sometimes, the binder is allowed to slip down on to the anterior surface of the uterus; and then, in employing pressure, the chief part of the force will fall about the centre of the surface, and contraction will be greater in this situation; and, if the child be expelled with this unequal uterine action, we get, I think, one of the chief causes of hour-glass contraction.

This was especially noticed by me when I had allowed the nurses to pull on the binder; for, if left to themselves, they almost invariably get it wrinkled, in such a way, that it is little better than a narrow band or rope to effect pressure. In 175 cases attended last year, I did not have one case of retained placenta, and I think this is greatly due to care in applying and managing the binder; and I am in the habit of dispensing with it for the last one or two pains, and producing the required pressure by means of the hand.

I should be glad if some one of more experience would remark on the subject. W. Franklin Chappell, M.B., M.R.C.S.

SURGICAL MEMORANDA.

PUNCTURE OF THE FIRST PORTION OF THE ARCH OF THE AORTA.[1]

The following case may be of some interest medico-legally. A few nights ago, I was called in haste to see a man who had been stabbed in a public house. I found the man dead, and learnt from the bystanders that, about ten minutes before, he had been stabbed in the neck. Immediately on receipt of the blow, he exclaimed, "I am stabbed," and fell back into the arms of a man near him. He did not speak again, and died in about four minutes. On examination, I found a small triangular punctured wound situated on a level with the upper border of the sternum, just internal to the right sterno-clavicular joint; it measured three-quarters of an inch in one direction, and about half that in the other. A few drops of blood represented the whole of the hæmorrhage that had taken place externally. At the necropsy the following day, I found that the weapon, which was a common pruning-knife, had taken a direction downwards and backwards, entering the thorax between the cartilages of the first and second ribs, notching the sternum. It had perforated both layers of the anterior fold of the right pleura, entered the pericardium on its upper aspect, and penetrated the anterior wall of the aorta one inch from the valves. Blood had been poured out in huge quantities, filling the pericardium, and finding its way along the track of the wound into the right pleura, which it had about half filled. No other important structures were injured.

The small amount of external hæmorrhage is a notable feature in the case. It is easily accounted for. The skin-wound, owing to the direction of the blow downwards, was valvular, and retracted upwards as soon as the knife was withdrawn. Some impediment in this way was offered to the outward escape of blood; but the chief factor in its prevention was the laying open of the right pleural cavity, into which the hæmorrhage had free vent. This latter circumstance would also tend to relieve the distension of the pericardium, and thus account for the length of time the patient survived such an injury. T. Pagan Lowe,

House-Surgeon to the Royal United Hospital, Bath.

TOXICOLOGICAL MEMORANDA.

LOBELIA INFLATA.

As the trial reported in the Medico-Legal column of the Journal of February 16th, has brought into prominence the toxic properties of lobelia, it may not be amiss to report a slight incident in my personal experience, clearly indicating the danger of its indiscriminate administration, and corroborating the opinion of authorities on its poisonous properties.

Several years ago I had been reading a book by a man named Coffin (I quite forget its title), in which the frequent administration of lobelia was urged, and its safety insisted upon. I determined to try the effect of a small quantity, and for this purpose put some small scraps into my mouth and chewed them; certainly not more than a few grains. I did not swallow any of the substance, and ejected most of the saliva; nevertheless, I suffered in a few minutes from its physiological effects, among the most prominent of which were vertigo, with impaired vision, and considerable muscular weakness and trembling, with coldness of surface and pallor. The symptoms were indistinguishable by me from those produced in myself by tobacco, when I first began to smoke, except that I believe the tobacco was more nauseating. After the lobelia, there was either a complete, or nearly complete, absence of nausea; from which I am justified in inferring, that very serious depression would have occurred in me from a dose much short of that necessary to produce an emetic effect. It was a very rough experiment, undertaken purely for my own information, hence the incompleteness of the details.

I should like to refer those interested to a brief statement of its therapeutical effects in Neligan's *Materia Medica and Therapeutics*.

Wm. J. Mackie, Richmond House, Turvey.

THERAPEUTIC MEMORANDA.

GASTRIC ULCER, WITH FREE HÆMORRHAGE, TREATED BY ABSOLUTE REST OF STOMACH.

Miss B., aged 17 years, after suffering from ordinary symptoms of imperfect digestion for twelve months, on October 5th, 1882, vomited (it was said) a pint of blood in about half an hour. She was seen by Mr. Peirson of Leeds, who ordered ice, a hypodermic injection of ergotine, and perfect rest in bed. He then kindly requested me to visit the patient with him. She was blanched to an extreme degree, the lips being quite white. It seemed probable that even more blood had escaped from the vessels, and pitchy motions were, in fact, subsequently passed. Mr. Peirson informed me that she had vomited blood in January 1881, but much less than upon the present occasion. It was evident that any further bleeding at this time would be fatal; the pulse was very rapid and feeble. We therefore determined to give the stomach one week of perfect rest, in order that the plugged vessel might not be disturbed, and that the ulcer might not be eroded or irritated by gastric juice. A nutrient suppository (peptone) was given every four hours; and an enema of beef-tea, with a teaspoonful of brandy and five minims of laudanum, every four hours—one or other, that is, every two hours. After the third day, a teaspoonful of water was given every half-hour by the mouth. It was slightly warmed, as cold water causes gastric movements. Nothing else but this small quantity of water was allowed to enter the stomach until the eighth day, when the quantity of water was doubled, and a teaspoonful of milk was also given by the mouth every half-hour, the suppositories and enema being continued. No medicines were given; but, on the third day of the treatment, the escape of fœtid gas from the intestine caused us to administer an enema of permanganate of potash solution every six hours, until the evacuations thus induced no longer contained blood-*débris*. After this, a pint of tepid water was injected every other day. The patient had not complained of anything but want of more water during the first week; she had, however, wasted somewhat, and she felt prostrate, but there were no signs of greater feebleness of the heart and vessels. Her condition satisfied us, and she was not unwilling to persevere. In the third week, the suppositories had begun to cause pain; the daily number was reduced to three; bread and milk and beef-gravy with bread-crumbs were given by the mouth. In the fourth week, pounded fish or chicken was permitted once a day. She resumed her usual diet in the sixth week. She is still (1884) somewhat anæmic and dyspeptic, but she has not again suffered from hæmorrhage.

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[1] Read before the Bath and Bristol Branch.

T. CHURTON, M.D., Physician to the Leeds Infirmary.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

TWO CASES OF CARCINOMA OF THE LARYNX, WITH REMARKS.

(By HENRY T. BUTLIN, F.R.C.S.)

WHILE the pages of an essay which I have recently published on *Malignant Disease of the Larynx* were passing through the press, these two cases of carcinoma came under my care.

CASE I.—Towards the end of September, G. G., a pensioner of the police-force, was admitted under the care of Mr. Willett. He was a tall healthy-looking man, but had, in the inframaxillary region, a soft tumour as large as an orange. It fluctuated on the summit, but was firm towards the base. There were one or two enlarged glands on the same side of the neck, but the disease did not appear to be malignant; it gave the impression rather of chronic glandular disease, with softening and suppuration at one point. As the patient complained of slight occasional dyspnœa and was rather hoarse, I was requested to make an examination of his larynx. This was done on October 8th, and showed that there was serious disease. The right side of the larynx was normal, or nearly so, but the left cord and ventricular band were quite lost in an irregular red fleshy mass, which appeared to involve them and the adjoining parts. The upper and inner aspect of the mass was ulcerated, and at one place there was a slough, which accounted for the offensive odour of the patient's breath.

The history he gave of his malady was, that the tumour of the neck had been noticed about twelve weeks before his admission into the hospital; that it grew rapidly, and in six weeks attained to the size it had when he was admitted. Since then, it had only softened. He had never had anything amiss with his throat until eight weeks after the lump had appeared in the neck. He then experienced slight difficulty in swallowing large morsels, and began to be a little hoarse; about that time, too, he began to feel occasional shooting pains in the ear of the affected side. The characters of the disease of the larynx, together with the pain in the ear and the age of the patient, made it highly probable that it was carcinomatous; and, in order to make the diagnosis certain, I removed a tiny fragment with the cutting forceps for examination. Mr. Bowlby looked at it with me at once in the museum, and we discovered large quantities of distorted epithelium and cell-nests, so that no doubt existed that the disease was malignant. As the tumour was intrinsic, and appeared to be limited to the interior of the larynx, the advisability of partial or complete excision of the larynx was raised. Mr. Willett was good enough to transfer the patient to my care, and he was kept under observation for some days. The induration about the base of the inframaxillary tumour slowly increased, and extended upwards and backwards, involving the deeper structures. This led us to regard it also as malignant. A consultation was held to ascertain the opinion of my colleagues, first, as to the relation of the laryngeal disease to that in the neck, second, as to the advisability of operating on the larynx. Opinion on the first point varied considerably, some thinking that the tumour in the neck was a glandular affection secondary to the laryngeal carcinoma, others thinking that the tumours were both malignant, but not related to each other; on the second point, opinion was unanimous, that no operation should be attempted either on the neck or on the larynx. The patient is at present under my care in the department for diseases of the larynx; his breathing is thus far not seriously affected, but probably at some future time he will require tracheotomy.

CASE II.—C. B., aged 52, a painter, was sent to the throat-department towards the end of January, 1883. He was a thin sallow man, who complained of loss of voice of about two months' duration. This had come on gradually, without any perceptible cause. He had pains in the back and shoulders, but no sore-throat, or cough, or expectoration. Nor did he, at that time, complain of pains in the ear or head. His voice was reduced to a hoarse whisper, but there was nothing in his symptoms which could lead us to suppose that he was suffering from any malady more serious than a chronic catarrh of the larynx. On examination, however, the right vocal cord, which still moved, was seen to be deep red and stiff, and irregularly notched at its anterior end, while the left vocal cord and other structures of the larynx were as nearly as possible natural. There was no history of syphilis, or of any specific disease. The limitation of the affection to one cord, and the peculiar notching, led me to suspect that this might be an early condition of carcinoma of the vocal cord. Expectant treatment was adopted and the case was watched with the greatest interest; but after three weeks the patient ceased to attend.

He returned one morning in the middle of October, breathing with great inspiratory dyspnœa, and was at once admitted into the hospital by the casualty-physician, Dr. Herringham, who regarded his condition as urgent. Laryngoscopic examination showed that the mucous membrane of the ventricular bands (false cords) and ary-epiglottic fold was so much swollen, especially on the right side, that the deeper structures could not be perceived.

He said that he had ceased to attend at the Hospital in the beginning of the year because he was a little better, and was able to pursue his work. Lately he had been growing steadily worse, until his condition had become desperate, and he had been driven to seek relief.

A few days' rest in bed, with the use of benzoin-inhalations and other simple means, reduced in part the general swelling and inflammation, but the right vocal cord could not be seen, and a certain diagnosis was, therefore, impossible.

His breathing improved very much as the general swelling of the mucous membrane diminished, but a sudden attack of dyspnœa, which threatened his life, on October 31st, obliged Mr. Paget, the house-surgeon, to perform tracheotomy. He made good progress after the operation until November 4th, when a sudden burst of hæmorrhage proved fatal in the course of a few minutes.

The necropsy was made on the following day. The right ventricular band and ary-epiglottic fold were greatly swollen and œdematous, so that the true cord could not be seen from above. When the larynx was opened, the cord was found to be thickened, red, and fleshy where it was not destroyed by ulceration. But the disease lay chiefly in the interval between the cricoid and thyroid cartilages of the right side. Here there was an ulcerated cavity with ragged walls, which had laid bare the calcified cartilages on either side, and had opened into the pharynx immediately above the œsophagus. There really was no tumour, for the destructive ulceration seemed to have almost entirely removed it. During the last few days of life one slightly enlarged hard gland had been felt at the anterior margin of the right sterno-mastoid muscle; now, at least half-a-dozen were discovered, some of them as large as broad beans; but during life they had lain so deep beneath the muscle that they could not be reached. There was no disease of any other part. The exact situation and extent of the disease had not been appreciable with the laryngoscope on account of the swelling of the overlying structures, nor had the symptoms ever at any time indicated that the pharynx had been opened by the ulceration.

Fragments of the ragged wall, examined with the microscope, discovered the structure of squamous-celled carcinoma (epithelioma) containing many cell-nests.

The hæmorrhage, which had been the immediate cause of death, appeared to have proceeded from the wound in the neck; the amount of blood lost was not great, but it had passed down into the trachea and bronchi.

REMARKS BY MR. BUTLIN.—Among the many interesting features which these cases present, there are three which appear especially deserving of attention: the diagnosis, the affection of the lymphatic glands, and the question of excision of the larynx.

First, the diagnosis in the case of G. G. was rendered [illegible] by the removal of a tiny fragment of the disease with Mackenzie's cutting forceps. This was accomplished [illegible] examination of the larynx with very little difficulty, although the patient was not more tolerant than the average of persons who are troubled with laryngeal disease. In cases of squamous-celled carcinoma (epithelioma), it is scarcely necessary to make a section of the fragment which is thus removed; but in cases of carcinoma of other varieties, and in sarcoma, the diagnosis cannot be surely made unless sections be examined. Not only is no distress occasioned by this manœuvre, but patients are even relieved by the removal of a portion of the tumour; and, in many instances, the diagnosis has been made from the examination of fragments which have been removed, not for that purpose, but in order to relieve the dyspnœa and discomfort from which the patient was suffering. G. G. was in no respect worse after the removal of the fragment; and a lady, whose disease I saw diagnosed in this fashion some time ago, was easier, and slept much better after the fragment was cut away than she had done before. In the second case, it was impossible to reach the disease; and, had I not seen the patient some months earlier, and formed the opinion that he was probably suffering from malignant disease in a very early stage, I could not have formed a definite opinion of its nature when he was admitted by Dr. Herringham. In cases of subglottic tumour, which are rare, and in some tumours of the vocal cords, the disease may be thus obscured by swelling of the parts above, but this difficulty will not often be experienced. I need scarcely say that this method of forming a diagnosis must not be employed to the exclusion of all others; it must be used as an adjunct to diagnosis, and as an adjunct whose value cannot, in some instances, be overrated. The very suspicious circumstance was noted in both these cases that, while one side of the larynx was very nearly normal, the other side was affected, in the one case only slightly but peculiarly, in the other case largely and almost typically.

Secondly, although the disease of the larynx was, in both these patients, intrinsic, there was enlargement of the lymphatic glands. I have shown elsewhere that the general statement of Krishaber that the glands are not affected in connection with intrinsic carcinoma is not absolutely correct, but that it is not very wide of the truth; for it is unusual to meet with glandular enlargement in the case of carcinoma of the ventricular bands, the vocal cords, the ventricle, or the subglottic region. In the case of G. G., the relation of the glandular affection to the disease of the larynx was a matter for debate, for the symptoms of laryngeal trouble actually followed, after an interval, the appearance of the tumours in the neck. The impression of most of those who saw the patient, however, was that the glandular enlargement was really secondary to the carcinoma of the larynx. I shared this general impression, on the ground that even very intelligent persons are apt to overlook the earlier symptoms of their maladies unless they produce serious pain or inconvenience; and the comparatively advanced condition of the intralaryngeal disease suggested a much longer duration than the patient assigned to it. In the second case, the enlargement of the glands was noticed only a few days before the patient's death; indeed, only one gland was found enlarged at the border of the sterno-mastoid. But, after death, several large cancerous glands which had not been suspected were discovered behind the muscle and the pharynx. The explanation of the early and extensive affection of the glands in this instance is probably to be found in the fact that the primary disease had burrowed through into the pharynx, the connection of which with the lymphatic glands appears to be much closer than between the intrinsic parts of the larynx and the glands.

Thirdly, I have stated in my essay that, while our present experience teaches that excision of the larynx (partial or complete) for extrinsic carcinoma (epiglottis, ary-epiglottic folds, interarytenoid fold, etc.) is useless, dangerous, and apparently unjustifiable, there seems reason to hope that the operation may be practised with complete success in properly selected cases of intrinsic carcinoma. These two cases of intrinsic carcinoma serve to show what care is necessary in selecting cases for operation, and how every case must be judged on its own merits. When glandular enlargement is associated with carcinoma of the larynx, it seems hopeless to attempt to cure the patient by excision.

HOME HOSPITALS.—The Queen has consented to become the patron of the Home Hospitals Association for paying patients, and has given a contribution which will constitute her a Governor. Three years' experience of the working of the pay-hospital system, at the Home Hospitals, 16 and 17, Fitzroy Square, has shown that the demand for admission is much greater than the amount of accommodation at present provided. The Home Hospitals for acute disease have proved in practice a complete success, the Committee have determined to establish a Convalescent Hotel, or Home Hospital, where any one recovering from sickness will be received and isolated, so as not to be a danger to others, whilst being freed from any influence which is likely to militate against his rapid and permanent recovery. It is proposed that each Convalescent Home Hospital shall be provided with a resident medical officer, with skilled and competent nurses, and with a *cuisine* of a special character.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 3RD, 1884.

SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S., President, in the Chair.

Annual Report.—The annual report of the Society was read by Dr. ISAMBARD OWEN, the retiring Honorary Secretary. It showed that the Society was in a satisfactory position. Its accommodation had been greatly improved, the number of its members had largely increased, and the interest, as well as the attendance at the meetings, had been more than maintained. The report was adopted.

Librarian's Report.—Dr. ALLCHIN, the Honorary Librarian, read a report on the condition of the library, which showed that, in spite of the efforts made by him, the work of cataloguing the library was still incomplete. The books, however, had been arranged on their shelves in such a manner that any volume required could be readily found. The library was rich in works of the sixteenth and seventeenth centuries, but weak in more modern works. This want would be gradually filled up as opportunity was afforded; and special efforts would be made to do this as speedily as possible. The report, as well as a vote of thanks to Dr. Allchin, was adopted.

Vote of Thanks to the President.—Dr. BRODIE SEWELL moved a vote of thanks to Sir Joseph Fayrer, the retiring President, in a short and graceful speech; this was seconded by Dr. SYMES THOMPSON, and carried by acclamation.—Sir JOSEPH FAYRER spoke of the past history of the Society and its long career of usefulness, and prophesied a career of equal usefulness in the future, since it was more intimately related with the general body of the profession than any other in London.

Vote of Thanks to the Secretary.—Dr. DE HAVILLAND HALL moved a vote of thanks to Dr. Isambard Owen, which was seconded by Mr. SYDNEY JONES, and briefly responded to by Dr. Owen.

The late Epidemic of Cholera in Egypt.—Sir WILLIAM G. HUNTER, K.C.M.G., read a paper on the recent epidemic of Cholera in Egypt. He said that the question he proposed to put was, whether cholera was endemic in Egypt. By endemic, he meant a disease existing in a country where all the factors for the production of the disease were in existence in that country. He proceeded to review the general geographical, climatic, and meteorological condition of Egypt. All the characters of the countries where alvine fluxes were frequent were present in that country, and "bowel-complaints" had been always numerous there. He recapitulated the evidence furnished by medical practitioners in Egypt with regard to the presence of endemic cholera (BRITISH MEDICAL JOURNAL, January 19th, 1884). He dwelt on the many motives which led the natives of Egypt to suppress the fact of the occurrence of cases of cholera, or of diseases resembling cholera, in villages and towns. He examined the hypotheses in existence to support the supposed importation of cholera, and showed that, in his opinion, all were untenable. That the germ of cholera was imported from India was an assumption, only less than the assumption that such a germ existed at all. He summarised his views as follows. The physical characters of Egypt were such as were observed in endemic cholera-areas in India; gross unsanitary conditions abounded everywhere; alvine fluxes were common and fatal; cholera under one or other of its varied forms has been prevalent since 1865, and probably previous to that date; epidemics of cholera in Egypt had been frequent, six having occurred since 1831, that is to say, an epidemic in every eight or nine years. In the face of such facts he asked whether the late epidemic must have been the result of the importation of a germ from the "valley of the Ganges," as the holders of the germ-theory of the origin of cholera-outbreaks would have us believe. Were there not rather local conditions present which determined the epidemic?—Dr. THEODORE ACLAND was able to bear testimony, from observation, to the devotion and industry with which Sir William Hunter had prosecuted his investigation in Egypt. He gave instances of the almost incredible neglect of the most ordinary sanitary precautions. He thought that the absence of the proof of a contagium did not prove that the disease was not contagious. Among the Army Hospital Corps in Egypt, who were engaged in nursing the sick, the number who contracted the disease was three times greater than in the Army generally. But, with regard to the spread of cholera by water, he would point out that two battalions stationed a short distance above Boulak, on the Nile, suffered severely from cholera, while those who were stationed below suffered very slightly.—Dr. MARSTON (Surgeon-General) commented upon the many difficulties which must be met by those who believed that cholera was due to a certain something, an entity, which could be carried; especially the fact that in Bengal it invariably spread upwards, from low lands to the high lands, therefore against the rivers and streams. But he believed that something more than local conditions were necessary for the production of an epidemic of cholera; he believed in some epidemic influence. Overcrowding was an important element in the production of cholera, but human intercourse was inadequate to explain it.—After some remarks from Mr. F. Simms, Dr. Murray, Mr. J. Hogg, and Dr. Cullimore, Sir JOSEPH FAYRER observed that the question was as yet too open for either side in the dispute to dogmatise; he yielded to no one in his admiration for microscopic research, but he thought that research of other kinds, and over a wide field, was necessary before it could be proved that the all important element in the causation of cholera was a bacillus.—Sir WILLIAM HUNTER replied.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 4TH, 1884.

J. WHITAKER HULKE, F.R.S., President, in the Chair.

Fractures of the Sternum and First Costal Cartilage.—Mr. ARBUTHNOT LANE read a paper on one way in which the sternum might be fractured. M. Maisonneuve had attributed fracture of the sternum to force transmitted from the shoulder to the sternum by the clavicle; whereas Mr. Rivington had contended that the action of the clavicle was in no way essential to fracture of the sternum, and regarded the first two ribs and cartilages as the means by which was transmitted to the sternum one of the forces which fractured or dislocated it, the other being conveyed along the lower ribs. He showed that, as the inner end of the clavicle was fixed by ligaments, if vertical pressure were applied to its outer extremity, a much greater force was exerted on the anterior extremity of the first rib by the shaft of the clavicle in contact. Mr. Lane next stated that the first cartilage was one inch and a half deep at its attachment to the manubrium, while the second cartilage was only five-eighths of an inch; so that, when one cartilage was depressed by the clavicle, it tended to cause the manubrium to rotate around an antero-posterior axis, and also affected the opposite cartilage. If the pressure exerted were very great, one or both first costal cartilages might be broken, together with the sternum, without there being any displacement of fragments. Or only one cartilage might be broken. If the cartilages were very elastic, and the sternum rigid, it alone might yield, as in an experiment he had made on the dead body. In this case, the manubrium was ossified to the gladiolus. A heavy blow was struck on the outer extremity of the clavicle (carefully padded, in order that it might not be fractured); a fracture of the sternum at a point which corresponded to the junction of the first and second pieces resulted, the fragments not having been displaced. In other cases, the ligaments binding down the inner extremity of the clavicle might give way, and dislocation upwards ensue. As exemplifying this last result, he showed a specimen from the museum of Guy's Hospital, in which the inner end of the clavicle had been dislocated upwards, and the ossified first costal cartilage was fractured on the same side. Its line of fracture was irregular, and not vertical, as in fracture of the ordinary elastic cartilage. The sternum was not fractured. Mr. Lane showed a specimen similar to one which he had shown at the Society last year. The first cartilages and sternum had sustained the same fractures, no other bones in the body showing any sign of fracture. A case recorded by Dr. Bennett (*Dublin Quarterly Journal*) served also to illustrate his view. A heavy weight fell on a man, fracturing many bones. That which had fallen on the clavicles had fractured both first cartilages and the sternum at the junction of the first and second pieces. He believed that fracture of the sternum or cartilages, or of both, was not so very uncommon as the scanty literature on the subject would suggest; also that Maisonneuve had no clear idea how the clavicle transmitted force to the sternum, which it did only indirectly by pressure on the first rib and cartilage. M. Maisonneuve apparently arrived at this conclusion by observing the frequent concomitance of fracture of the scapula and clavicle with that of the sternum. The sternum and cartilages, when fractured by this means, would present very little sign during life, or at a period long after the injury, owing to the fractures remaining in apposition. It was very difficult to decide, in many ossified first cartilages, whether they had been fractured or not, as they frequently presented a very irregular outline, owing to abundant deposit of new bone, which might either be the result of fracture, or thrown up to support the joint formed in this situation.—Mr. ROGER WILLIAMS thought that Mr. Lane had hardly assigned sufficient importance to the part played by the rhomboid ligament in the transmission of force to the clavicle.—Mr. C. B. LOCKWOOD referred to one specimen shown by Mr. Lane as an example of fracture of the sternum and cartilages of the first ribs, and remarked that no history of the case had been obtainable. If the heaping up of bone were relied on as evidence of injury, it must be noted that this heaping up was quite symmetrical; and, further, that the sterno-clavicular articulations showed distinct evidences of inflammation. Mr. Lockwood believed that he had frequently seen similar appearances, and, with Mr. Bruce Clarke's assistance, a number of first ribs and cartilages had been collected from the dissecting-room of St. Bartholomew's Hospital. They bore, he thought, a striking resemblance to the specimens referred by Mr. Lane to fracture of the rib-cartilage. Whatever might be the cause of the inflammation in these cases, it seemed improbable that it was due to fracture.—Mr. BRUCE CLARKE coincided with the criticism advanced by Mr. Lockwood, but Mr. ARBUTHNOT LANE stated in reply that he was familiar with the condition referred to, but that it was quite distinct from that described in his paper.

Neoplasm of the Knee-Joint.—A specimen of tumour connected with the tibia was shown by Mr. BARWELL. The patient was a child, aged 12. The knee at first presented symptoms resembling those of strumous disease; but, subsequently, the signs of malignant disease became apparent, and the limb was amputated. The tumour was a sarcoma. Mr. Barwell reviewed the theories of the relation of sarcoma to carcinoma. He believed that malignancy was a morbid entity, presenting two forms or classes, sarcoma when it sprang from connective tissues, and carcinoma when it sprang from epithelial structures. He proposed the term cacoma to include both forms of malignant disease.—Mr. BUTLIN thought that the views advanced by Mr. Barwell were, to a great extent, not novel. It would be generally accepted that the relations of carcinoma and sarcoma were intimate, but the question of classification was a distinct question.—Dr. CREIGHTON took exception to the statement that all sarcomata were infiltrating; sarcoma growing from the subcutaneous tissues was non-infiltrating, and bore much less close relation to cancer than sarcoma springing from bone. The term cacoma he thought unnecessary and cacophonous.—Mr. ROGER WILLIAMS commented on the occurrence of sarcoma in the tibia.—Mr. GODLEE thought that if sarcoma was to be classed with carcinoma, as Mr. Barwell desired, it would be necessary to distinguish between sarcomata which were and were not malignant, just as was at present necessary.—The PRESIDENT thought Mr. Barwell's classification would tend to confusion.—Mr. BARWELL thought all sarcomata were malignant, though in different degrees, and generally maintained the correctness of the position he had taken up in his paper.

Insular Sclerosis.—Dr. HALE WHITE showed specimens taken from a case of insular sclerosis. For twelve months before admission to the hospital, the patient had had nervous tremblings, and subsequently to this weakness of the legs, which at last became so bad as to preclude walking. Latterly, her memory had been very deficient. She had always been a drunken dissolute woman. On admission, she was in such a moribund condition that a very thorough examination could not be made; but it was observed that there was tremor on movement, the right pupil was larger than the left, the grasp of the hands was feeble, and she spoke very slowly. She died shortly after admission. The necropsy was made twenty-six hours after death. In the left arachnoid cavity, and covering the greater part of the parietal lobe, was a hæmorrhage, evidently recent; the arteries at the base were thickened. Scattered about in the white substance below the level of the corpus callosum were about four grey patches, looking very like grey convolutions, showing in the white substance. The medulla was obviously diseased, many reddish grey patches being present in it. The rest of the brain was healthy. In the spinal cord, many similar patches were scattered about in various parts, but chiefly in the crossed pyramidal tracts. In many places, the whole of the white matter of the cord was affected. The kidneys were granular and hypertrophied. Microscopic examination of the spinal cord and brain showed characteristic sclerotic appearances, carried in some places to such a degree that but little healthy nervous structure was present. In many sections, it could be seen that the ingrowth of new tissue was directly connected with the rays of tissue prolonged in from the neuroglia on the surface of the cord; sometimes the axis-cylinder had completely disappeared, leaving the medullary sheath, and sometimes the medullary sheath disappeared, the axis-cylinder having alone remained surrounded by sclerosed neuroglia. It was pointed out that the chief feature of interest in the case was that it was almost a purely spinal one. Not more than four cases in which a *post mortem* examination had been made had been recorded in England, and only one of these was in the Pathological Society's *Transactions*.—Dr. W. B. HADDEN doubted whether the case was an instance of disseminated sclerosis, since the microscopical changes were not marked; it was necessary to judge by the naked-eye appearances.—Dr. HALE WHITE replied that, to the naked eye, and especially when the specimens were fresh, the changes were quite [illegible] seen.

[illegible].—The [illegible], of which micro-

scopic sections and naked-eye specimens were shown by Dr. NORMAN MOORE, were from a married woman, aged 41, who died in one of Dr. Church's wards, in St. Bartholomew's Hospital, of cirrhosis of the liver. The liver, of which a section was also shown, exhibited great increase of fibrous tissue with extensive atrophy of the liver-cells. The ovaries were large, smooth on the surface, and extremely dense. There was great thickening of the tunica albuginea and of the perivascular connective tissue throughout the ovary; this was especially distinct in the zona vasculosa. Numerous compressed Graafian follicles were visible, both small and large. Dr. Matthews Duncan had suggested that interstitial change in the ovaries was a cause of sterility in intemperate women; and Mr. Lawson Tait, in his recent treatise, referred to cirrhosis of the ovaries; but the disease was rare, and had seldom been minutely described. In this case, hepatic cirrhosis was accompanied by a similar change in the ovaries. The new fibrous tissue of the ovaries appeared more recent than that of the liver. Dr. Moore asked that the case might be referred to the Morbid Growths Committee for report.—Dr. GOODHART inquired whether ascites was present; he thought that in cases of ascites he had seen a similar condition of ovary, and it had occurred to him that a certain amount of the alteration in the ovary was due to œdema.—Dr. NORMAN MOORE said that the case was a well marked instance of cirrhosis of the liver with ascites; the kidneys were not affected.

Epithelioma of the Ear.—A specimen of malignant disease in an unusual situation was shown. Mr. A. BOWLBY said the growth originated in the helix, and was attributed to burning with lime. The growth subsequently involved the concha and lobule, starting apparently from separate centres. The growth recurred in the external auditory meatus, and in the glands of the neck, after removal. The microscopical specimens illustrated well the way in which cartilage was effected by epithelioma.—Mr. ROGER WILLIAMS showed a photograph of another case of cancer of the ear. He had examined the records of over 5,000 cases of cancer, and had been able to find records of five cases of the kind, so that the disease was exceedingly rare.—Mr. GOLDING-BIRD related the particulars of one case which had come under his observation, which had the general clinical characteristics of rodent ulcer.—Mr. BUTLIN had seen three cases of this kind; in two, recurrence occurred, but in one, a very old man, in whom the disease had commenced in a sebaceous cyst, a partial operation was not followed by recurrence.

Fibrotic Disease of the Heart. Dr. SAMUEL WEST exhibited a specimen of extensive fibroid disease of the heart. The patient was a man, aged 40, of whose previous history little could be ascertained; the most prominent symptom was extreme spasmodic pain. Death occurred suddenly. At the necropsy, some turbid fluid was found in the peritoneal, pericardial, and right pleural cavities. On the surface of the liver were some irregular thickenings; the stomach contained altered blood, and its mucous membrane as well as that of the intestines was studded with punctate ecchymoses. The pericardium was healthy, the heart was large, weighing 20½ ozs., and the cavities, especially on the left side, were enlarged. The whole surface of the left ventricle was wrinkled, dense fibrous patches spreading irregularly over it; the largest patch was at the base, and measured three inches; a similar condition less advanced existed over the right ventricle. A yellow patch extended transversely in the inner aspect of the left ventricle, only a small part of the circumference being free. The walls of the heart in the situation of these patches were much reduced in thickness, and consisted entirely of dense hard fibrous tissue, which, to the naked eye, appeared to have entirely replaced the muscular substance. The valves were healthy, but the fibrotic change reached the attachment of the mitral valve, and to the septal cusp of the aortic. Dr. West thought the case remarkable from the great extent of the lesion, and the absence of any external aneurysmal dilatation of the heart. The process was most advanced in, and had probably originated in, the myocardium. As there were old scars on the penis, and thickenings on the capsules of the liver, the patient had probably suffered from syphilis, as was usually the case in cases of fibrotic heart.

Symmetrical Gangrene. Dr. BERNARD O'CONNOR showed a living specimen of intrathoracic tumour and gangrene of the tips of the fingers. The patient was a middle-aged woman who, after suffering pain for several weeks in the arm and fingers, noticed that the skin on the anterior aspect of the fingers, at their extremity, had become cold, blue, and numb. When she was 41 years of age, she noticed a small tumour in the right breast. This was removed three years later. About three weeks before she first attended Dr. O'Connor, she had noticed a swelling in the upper part of the chest, on the left side. She complained of dyspnœa on exertion, but there was no dysphagia and there were no symptoms of arteritis. There was a collection of indurated glands above the left clavicle. On the left side, the physical signs in the subclavicular region pointed to the existence of a tumour which appeared to be solid. Dr. O'Connor discussed various theories which might serve to account for the symptoms observed in the case.—Mr. BOWLBY thought there was no evidence of the vascular origin of the gangrene, but that the symptoms pointed to interference with nervous supply, probably brought about by the pressure of the intrathoracic growth on the nerves.

Living Specimen.—Mr. H. H. CLUTTON: Primary sarcoma of the tonsil with secondary glandular growth in a man aged 54. The tumour had been first observed four months earlier.

Card Specimens.—Dr. F. C. TURNER: (1) Tuberculosis of lungs, caseous bronchial glands, and tubercular meningitis after scarlatina; (2) Intussusception of the small intestine with polypoid fatty tumour.

Mr. H. H. CLUTTON: (1) Nasal calculus; (2) Central myeloid sarcoma of the tibia, which produced no expansion of the bone.

Mr. J. HUTCHINSON, Jun.: (1) Ankylosis of second and third cervical vertebræ; (2) Superior vena cava on the left side.

Dr. GOODHART, for Dr. Pye-Smith: Chronic ulceration and thickening of tracheal mucous membrane from the presence of a rubber tracheotomy-tube.

Dr. R. PERCY SMITH: Stomach from a case of sulphuric acid poisoning.

Dr. SEYMOUR J. SHARKEY: (1) Two vertebræ of a small fish which had been impacted in the larynx and removed by tracheotomy; the patient, a child aged one year, died of double pneumonia; (2) Œsophagus, stomach, and intestine from a case of poisoning by carbolic acid.

Dr. SAMUEL WEST: Stomach from a case of carbolic acid poisoning.

Mr. GOLDING-BIRD: Micrococci from infective osteomyelitis.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, FEBRUARY 26TH.

T. MCCALL ANDERSON, M.D., President, in the Chair.

DISCUSSION ON THE PATHOLOGY AND CLINICAL SIGNIFICANCE OF ALBUMINURIA.

PROFESSOR LEISHMAN opened the discussion on this subject, limiting his remarks to the relations which albuminuria bore to the puerperal state. He was struck by the expression which fell from Dr. Roberts respecting physiological albuminuria, which seemed, on the first blush at all events, to involve something of a paradox; but if there were any truth in this, or if, in this expression, there were even an approach to the truth, he thought that nowhere would there be found confirmation of the idea more strongly expressed than in connection with obstetrics. After calling attention to the peculiar circumstances of the pregnant state, with particular reference to the condition of the blood in respect to the quantity of fibrin, diminution of the corpuscular element, and of the quantity of albumen, he considered that these changes were very significant in their bearing upon more than one theory that had been suggested in the course of the debate. He discussed Professor Hamilton's theory respecting the alteration in the specific gravity of the blood-plasma, and referred to the remarkable hypertrophy of the heart associated with pregnancy, which circumstances had been pointed out by other speakers as causes of albuminuria. In as many as 20 per cent. of pregnant women, albumen was found in the urine; but while the presence of albumen in the urine of persons not pregnant was of considerable significance, albuminuria in pregnant women was of little prognostic importance. Dr. Leishman did not regard pressure on the renal veins as an important cause of albuminuria, for he had seen cases where, after the death of the fœtus, the albumen disappeared from the urine, even though it had been persistent during some time previously. He then discussed the pathology of puerperal convulsions, mentioning Braun's theory, and referred in detail to the newer theory advanced by Traube, and the still more recent one of Dr. Angus Macdonald, of Edinburgh. He then pointed out the relationship between albuminuria and puerperal convulsions, and advanced the hypothesis that there was a mutual relationship between them, or that they were dependent upon a common cause, toxic or other.

Professor GREENFIELD, of Edinburgh, objected to the term physiological albuminuria, until it had been more conclusively shown that the alleged condition was associated with normal function as well as with normal structure. The evidence on this point only tended to show that temporary albuminuria might be produced by various causes other than renal disease. Even this, however, was not conclusively shown, as disease of the kidney was frequently latent for a long period, and was curable. When death occurred during the presence of such albuminuria, structural changes identical with those found in other inflammations of the kidney, though perhaps of slight degree and limited extent, were usually to be detected. This remark did not apply to all the cases of temporary albuminuria in fever. Careful microscopical examination was necessary, as very extensive disease of the kidney might be overlooked, even by experienced pathologists, in naked eye examination alone. He next discussed the changes which were found in the kidneys in those diseases which were especially productive of albuminuria, and stated that in chronic venous obstruction albuminuria was usually intermittent, and coincident with scanty urine and with aggravation of the general circulatory disturbance. This appeared to him to be possibly due to the coexistence of carbonic acid poisoning, or to the sudden increase of pressure, and he discussed in detail the minute changes observed. In acute inflammation of the kidney, as in those of other organs, the primary changes were vascular, not catarrhal; and the occurrence of albuminuria in the early stages was sufficiently accounted for by the acute obstruction to the efferent vessel, and the associated changes in the glomeruli, although other sources might be found for the albumen. In the chronic forms succeeding acute inflammations, the Malpighian bodies were always affected to a very great extent, and there was extensive interstitial growth of connective tissue in nearly all cases, the changes in the tubules being essentially destructive. No absolute distinction could be maintained between the forms of chronic Bright's disease following scarlet fever, and those due to other causes, although, from the nature and distribution of the initial changes, certain differences were not uncommon. With regard to the cirrhotic or granular contracted kidney, it might be divided into two forms, one not essentially different from the chronic inflammation following acute Bright's disease, but distinguished by its more chronic course; the other essentially atrophic, and due to a primary degenerative change in the walls of the arteries. Thus, in all the forms, extensive changes were found in the glomeruli, and from the fact of their intimate relation with the arteries and the vascular supply to the rest of the kidney, these changes were to be regarded as of very great importance. Various points as to the symptoms and effects produced by these diseases were discussed, and the curability of Bright's disease in its more acute forms was urged.

Dr. JOSEPH COATS, of Glasgow, began by deprecating the mechanical way in which the subject was too apt to be treated. The secretion of urine and the morbid changes in that secretion were not to be regarded as merely physical problems. In regard to the function of the glomerulus, he pointed out that the process of transudation from the capillaries throughout the body generally, was not a mere filtration under pressure—everywhere the capillary wall exercised a selective power. But the glomerulus, in addition to the capillary wall, had a layer of epithelium which followed the loops of the vessels, and covered them ultimately, and this rendered the glomerulus a somewhat complex organ. In its structure, the glomerulus was compared to the alveolus of the lung where the capillary vessels were separated from the internal surface merely by a thin layer of epithelium, which, as that of the glomerulus, was like endothelium; and yet no fluid transuded here, or at most some watery fluid. The glomerulus, on the other hand, allowed water to pass through freely, probably with its salts, but prevented the passage of albumen. It was noteworthy that, while it retained serum-albumen, it allowed egg-albumen to pass; this substance, when present in the blood, soon appearing in the urine, which it reached, according to Nussbaum's experiments, by the glomeruli. Turning to morbid conditions, it was pointed out that, once the kidney-tissue was dead or seriously injured, albumen appeared in the urine. If the kidney were cut out from a living animal, and blood injected into it by the renal artery, then a fluid like blood-serum appeared in the ureters. Amyloid disease, by transforming the glomeruli and arteriolæ rectæ into a homogeneous inert substance, rendered them no longer capable of retaining the albumen, which with an excess of water appeared abundantly in the urine. Obstruction to the veins, by causing stagnation of the blood in the capillaries and glomeruli, injured their walls, and they no longer retained the albumen, the albuminous fluid here being like that in œdema of the lungs. Obstruction of the renal artery, by depriving the vessels of their due supply of arterial blood, had a similar effect. Acute Bright's disease should always be regarded as an acute inflammation, a fact too often forgotten. Taking the lung as an example, the phenomena of acute inflammation were stagnation of blood in the capillaries and transudation of albuminous fluid with red and white corpuscles, and this transudation was through vessels which normally allowed little or no fluid to pass through. In the kidney an acute inflammation would also produce stagnation in the capillaries and smaller vessels generally, and this implied a greatly diminished separation of water and urinary constituents. There was, however, a transudation of albuminous fluid, which took place probably from the capillaries as well as the glomeruli. Red corpuscles were also transuded, coming chiefly from the glomeruli. In regard to the leucocytes of the blood, Dr. Coats stated his belief that they were exuded more frequently than was generally supposed. He referred to a case of his own in which during life leucocytes were so abundant in the urine as to give a deposit having the character of pus, and yet the case was one of subacute Bright's disease. After death, the appearances in the kidney indicated that the leucocytes had come from glomeruli, capillaries, and arteriolæ rectæ. It was also stated that, in scarlet fever, kidney-tissue was frequently overrun with leucocytes, which in many cases were present in extraordinary numbers. Dr. Coats expressed his belief that the cells often described as epithelium in the urine, were frequently leucocytes. In regard to chronic Bright's disease, the contrast between the state of the urine and that of the kidney was insisted on, the water in the urine being in excess, while the glomeruli were greatly destroyed, and the urea in the twenty-four hours usually normal, while the uriniferous tubules were greatly destroyed. This was accounted for by the view that the surviving glomeruli had an excess of blood directed to them, and at an unusually high pressure. An excess of watery urine would, therefore, pass through them, and, as the epithelium is largely destroyed, the water would escape absorption, and the urine, as it passed into the bladder, would be virtually that which escaped at the glomeruli. The absence or smallness in the amount of albumen was accounted for by the fact that the glomerular vessels were not specially affected, except by being pressed on and occluded. Dr. Mahomed's view, that increase of blood-pressure was the cause of albuminuria in this disease, was criticised chiefly on the ground that albumen was most apt to appear when the urine became more scanty, and this itself indicated rather reduction of arterial pressure. The scantiness of the urine and increase of albumen were both to be accounted for by the exacerbation of the inflammation. In regard to other cases of albuminuria, reference was made to Dr. Finlayson's remarks, according to which the presence of a poison in the blood was the cause; and it was added that poisons were most apt to produce it when they were (as cantharides) excreted by the kidneys, and so damaged their structures. Thus, in all cases, albuminuria was to be referred to damage to the structure of the blood-vessels and other tissues of the kidney, whether inflammatory or otherwise.

Dr. MCGREGOR ROBERTSON of Glasgow thought the key to the solution of the problem of albuminuria was a physiological one. The histology of the kidney showed that there were two parts played in the normal process of urinary secretion: the first by the glomeruli, and the second by the renal epithelium. It was almost universally admitted that the process in the glomerules was one of filtration. The controversy about the nature of the filtrate seemed to him to be due to a failure to realise the nature of filtration. In this connection, he quoted remarks by Dr. Mahomed, who explained the appearance of paraglobulin before serum-albumen, in some cases, by the fact that the former was more readily dialysed than the latter, and who believed that serum-albumen did not transude into the tubules, because of its difficulty in diffusing. Dr. McGregor Robertson pointed out that dialysis and filtration were essentially different processes, and that the laws and results of both were quite definitely determined. The researches of Schmidt, in Poggendorf's *Annalen*, 1856 and 1861, were quoted to show that, in the filtrate of an albuminous fluid, albumen was invariably present; and that, in filtration, the difference between the fluid on the filter and the filtrate was always a quantitative, never a qualitative, one. He concluded, therefore, that the fluid that passed into the tubules contained all the constituents of the blood-plasma, though in vastly different proportions. The question then arose, what became of the albumen? He believed in the theory that it was absorbed by the renal epithelium. In support of this view, he instanced one result he had obtained in a research in which he was engaged, where the renal cells were paralysed temporarily by the action of atropine, and albumen appeared in the urine, also temporarily. Accepting this as the physiology of the normal secretion, it was pointed out that the causes of albuminuria might be classified very generally as due (1) to increased blood-pressure in the glomerular capillaries, causing more albumen to filter than the cells could absorb, the excess appearing in the urine; (2) to conditions affecting the renal epithelium, preventing it from absorbing the albumen, even though there was no excessive filtration. Owing to anæmia or nervous conditions, the epithelium might be capable of less than the normal functional activity, and so a slight temporary albuminuria might be occasioned, such as had been referred to by Dr. Mortimer Granville. The same diminution of normal functional activity of renal cells might explain the so-called "physiological albuminuria," just as diminished functional activity of gastric cells might occasion indigestion, though none would, on that account, speak of physiological dyspepsia.

Dr. ROBERT KIRK of Partick discussed the subject of albumen tests. He objected to Heller's nitric acid test as inferior, and mentioned five others which he considered more delicate and reliable: picric, chromic, and metaphosphoric acids, potassium ferrocyanide and sodium tungstate. It was pointed out that these were most sensitive in light solutions, which could float on the surface of the urine; heavy saturated solutions of soluble reagents, as metaphosphoric acid and potassium ferrocyanide, were distinctly inferior. Various objections to picric acid were noticed, and it was acknowledged that a mucin reaction was sometimes a difficulty in very delicate testing. This, it was shown, might be obviated by testing for mucin by a light solution of citric acid, a better precipitant of this body than any of the albumen tests; if the latter did not give a more rapid result than the former in any urine, albumen was absent, and *vice versâ*. It was maintained that a mucin reaction was a still more serious objection to heat and acetic acid, and that, for this reason, it was no longer recommended by Neubauer and Vogel. It was suggested that mucin was probably sometimes mistaken for a trace of albumen in highly concentrated urines, and in the later months of pregnancy, and other conditions.

MANCHESTER MEDICAL SOCIETY: MICROSCOPICAL SECTION.

JULIUS DRESCHFELD, M.D., F.R.C.P., President, in the Chair.

Clinical Observation on the Bacillus Malariæ.—Dr. DRESCHFELD showed specimens of the blood from a patient, a sailor, who, some months ago, while in Mexico, suffered, with some other sailors, from a severe form of fever, the nature of which he could not describe. When he recovered from the fever, he found himself completely paralysed, and was sent home in consequence of his infirmity. He gradually recovered power, but felt excessively weak, and sought admission into the Manchester Infirmary. On admission, he was found to suffer still from paresis of his limbs; it was further found that the spleen was much enlarged, and that the urine contained a large amount of albumen and casts. Examination of the blood showed the presence of refractive particles, which stained well with the basic aniline dyes, and corresponded in appearance to the spores described by Tommasi-Crudeli and others in the blood of malarial patients. A week after admission, the patient had an attack of intermittent fever (sudden rise of temperature, nausea, rigors, and sweating). An examination of the blood some hours after the attack showed the same spores as before, in very much larger quantities. A week after the first attack, the patient had a second attack with very similar symptoms. The blood was examined during the attack, the patient being still in the shivering stage. To the naked eye, the blood appeared dark and thick, and, examined microscopically, showed a very large quantity of bacilli and longer filaments, of exactly the same character as those described by Tommasi-Crudeli; the bacilli were found single, and joined in groups of two, four, or more; at each termination of the bacillus, a highly refractive spore was distinctly visible. The blood was again examined soon after the attack, when the bacilli had completely disappeared; the spores, however, were again found in large quantities. Large doses of quinine were now given, and the patient had no further attacks. His general condition improved, and he left the hospital, still suffering from Bright's disease, and his blood still containing a small number of the spores.

Cystic Disease of the Mamma.—Dr. DRESCHFELD showed sections of a growth of this description. The mammary tumour, which was of two years' standing, consisted of large and small cysts, filled with gelatinous and grumous material. The larger cysts were lined by a cylindrical, the smaller by a spherical, epithelium. The sections showed the development of the cysts from the smaller ducts, the walls of which were infiltrated with leucocytes.

Mediastino-Pericarditis.—Dr. HUTTON exhibited sections of the lung and liver of a boy aged 9, who died of disease of the liver, of fifteen months' standing, consequent on mediastino-pericarditis. The lung showed general increase of fibrous tissue, thickening of the walls of the bronchi, and great enlargement and pigmentation of the lymphatic glands. The liver showed great increase of fibrous tissue around the portal vessels, with multiplication of the bile-ducts, and slight cirrhosis of the hepatic vessels. The intervening capillaries were so much dilated as to give the section the appearance of a blood-containing sponge.

Addison's Disease.—Dr. R. MAGUIRE showed sections of the suprarenal capsule from a case of Addison's disease. The capsule itself was enlarged and firm; it consisted of a whitish transparent stroma, containing yellowish patches. Microscopically, the stroma consisted of a fibro-nuclear growth, together with some epithelioid cells and many large giant-cells. The yellowish patches were the result of caseous degeneration. The blood-vessels showed thickening of their adventitia and endarteritis.

Pleuropneumonia in a Cow.—Dr. R. MAGUIRE also showed sections of the lung of a cow which died from epidemic pleuropneumonia. The lesions were mainly those of ordinary croupous pneumonia. The alveoli were filled with a mass consisting of fibrin, with red and white blood-corpuscles. The cells lining the alveolar wall were swollen and granular, but showed no proliferation, but the alveolar walls were greatly infiltrated with leucocytes, and the fibrous tissue of the lung was much increased. The pleura was inflamed and much thickened.

Brain-Tumours and Optic Neuritis.—Dr. A. H. GRIFFITH exhibited sections of optic nerves and retinæ from two cases of cerebral tumour, in which optic neuritis had been diagnosed during life. Sections were also shown of a cerebellar tumour from one of the cases. The eye-preparations showed advanced atrophy of the optic nerves, the intraocular ends of which were slightly swollen, with great increase of nuclei and of connective tissue; the nerve-strands were to a great extent destroyed. In one case, there was marked distension of the sheath of the optic nerve, with a delicate nucleated meshwork. A tubercular tumour invaded the right lobe of the cerebellum, which was almost entirely replaced by the growth.

Card Specimens.—Mr. A. H. YOUNG showed sections of Myeloid Sarcoma of the Femur; Myoma of the Uterus; Early Carcinoma of the Mammary Gland; and Molluscum Fibrosum.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

ORDINARY MEETING, FEBRUARY 22ND.

EDGAR UNDERHILL, M.B., F.R.C.S.Ed., in the Chair.

The Abuse of Poultices and Drainage-tubes.—Mr. GAMGEE showed a patient to illustrate the abuse of poultices and drainage-tubes, and the advantages of his method of dry dressing with equable pressure and rest. The patient had had deep seated suppuration in the neck, opening by many sinuses, and had been under the care of several surgeons. The cicatrices were perfectly sound, and the cure was to all appearance quite complete. Mr. BENNETT MAY and Mr. JORDAN LLOYD confirmed all that Mr. Gamgee had said as to the advantage of his method of treating wounds.

Specimens illustrating Adherent Vesical Calculus.—Mr. GAMGEE showed two calculi with roughened facets on one surface, indicating the position of the adhesion which had existed to the coats of the bladder. He expressed the opinion that such adhesions were not so rare as was supposed.—Mr. JORDAN LLOYD referred to the cases in which the calculus was found near the roof of the bladder, as cases due to such adhesions.—Mr. H. R. KER and the CHAIRMAN referred to cases within their own experience.

A Case of Cephalic Bruit.—Dr. R. M. SIMON showed a child, about 7 years of age, in whose cranial cavity a loud prolonged musical murmur could be heard. It was systolic in time, loudest over the left parietal bone, and could be stopped by compressing the right carotid. Various opinions were expressed about the case, and Dr. Simon promised to investigate it more fully and report upon it again.

A New Mode of Hastening the Maturity of Cataract.—Mr. PRIESTLEY SMITH read a short note on a new method he had lately successfully adopted for hastening the maturity of cataract. It was a modification of the plan of stroking the cornea after performing preliminary iridectomy, and consisted in stroking, with a very smooth spatula, the anterior surface of the lens. The only objection appeared to be the liability to hæmorrhage into the anterior chamber; but this, when it had occurred, had cleared up in a few days without causing any special trouble.

Aneurysms of the Internal Carotid Artery due to Suppurative Periarteritis.—Mr. JORDAN LLOYD showed a portion of the base of a skull, with the carotid canal laid open so as to expose the whole course of the vessel from its first entrance into the skull until its termination. On this trunk were several small aneurysms, the largest of the size of an almond. The surface of the bone was denuded, and had evidently been in a state of suppurative inflammation. The specimen was taken from the skull of a boy who had died from hæmorrhage into the base of the brain from rupture of a similar aneurysm on the basilar artery.—Dr. SAUNDBY said the specimen was a very rare one, and he hoped the case would be published in detail. The influence of inflammation around vessels in causing softening and consequent aneurysmal dilatation of their coats had been only recently recognised.

Removal of Iron Fragments from the Eye by Means of the Electro-Magnet.—Mr. EALES showed three patients from whose eyes he had successfully removed fragments of iron by the electro-magnet. He showed the instrument, and explained the *modus operandi*.

Excision of the Upper Jaw.—Mr. H. R. KER showed a patient whose upper jaw he had excised for a giant-celled sarcoma. The wound of the face healed by first intention, and the scars could scarcely be seen. The cavity was granulating rapidly.

LIVERPOOL MEDICAL INSTITUTION.

THURSDAY, FEBRUARY 14TH, 1884.

ROBERT GEE, M.D., President, in the Chair.

Colles's Fracture.—Dr. ALEXANDER exhibited the bones from two cases of Colles's fracture treated many years ago. In one case, the normal concavity of the anterior surface of the lower end of the radius was converted into a plane surface; and in the other, a convexity had taken the place of the concavity. The consequent alteration of the aspect of the lower radial articulating surface was pointed out, and the necessity, in the treatment of these fractures, that the normal concavity of the anterior surface of the lower end of the radius should be restored. Although this fracture could be, and often was, treated satisfactorily by a variety of splints, yet probably the majority of cases resulted in a more or less permanently stiffened wrist and impaired hand. Gordon's splint was by far the best for the treatment of this fracture; but, unfortunately, very few people knew how to apply it properly.

Syphilitic Calvaria.—Dr. ALEXANDER exhibited the calvaria of five cases of tertiary syphilis, who had suffered, for from three to five years, from suppuration of the cranial bones. In two specimens, from a male and a female, the disease consisted of caries of the external table of the vertical plate of the frontal bone. In one of these, a large perforation of the entire thickness of the bone had been produced, and through this hole the dura mater and the pulsations of the brain could be felt and seen during life. In the other, only small perforations had occurred. In the third case, from a male, the frontal bones were also principally and primarily affected; but, in addition, the caries had extended over the whole of the outer table of the vault. In the fourth case, from a female, the frontal region was sound; but about the half of both parietal bones were completely necrosed over the summit of the vault. Part of the necrosed bone had come away during life; but a large part still remained in position, although nearly separated from the adjacent healthy bones. In the fifth case, a female, both the outer and inner tables of the entire vault had been removed, or were detached by superficial necrosis from the thick, heavy, sclerosed, worm-eaten, and half dead diploë. This half dead diploë was nearly separated all round from the base of the skull; and, had the patient lived a few months longer, it could have been lifted off. During the last few months of her life, pus oozed from every part of the scalp, and through the exposed bone. The adjacent healthy bones of all these calvaria were thick, and heavy, and compact.

Imperfect Ossification of the Skull. Dr. ALEXANDER exhibited a skull in which the frontal, parietal, and occipital bones showed signs of imperfect ossification. The occipital bone was incomplete opposite the torcular Herophili. The specimen was removed from an idiot aged 20, who was also deaf and dumb since birth, and whose feet and legs were malformed through muscular contractions. The auditory nerves were normal, and the internal ears were well developed. The left tympanum was filled with mucus. The other bones of the body were well developed, and the brain was hydrocephalic.

Depression of the Skull.—Dr. ALEXANDER also showed a skull that presented a broad shallow depression over the right frontal eminence, especially marked externally, but also visible internally. No history of the lesion was known; nor did it produce any symptoms during the last illness of the patient, who died from phthisis. It was probably the result of injury in early life, although it was possibly a congenital malformation.

Central Sarcoma of the Lower End of the Femur.—Mr. RUSHTON PARKER showed, for Mr. REGINALD HARRISON, the lower end of the femur of a woman, aged 32, which had been removed for new growth. The patient had suffered from the usual symptoms of pulpy disease of the joint for two years, during which time she had been treated in a Thomas's splint. Mr. Parker called attention to the extreme difficulty in the diagnosis, in some cases, between central tumours of the bone and arthritis. In this case, nearly all the bone of the condyles had been absorbed, and the periosteum and cartilage were distended with the growth.

Compound Dislocation of the Astragalus. Mr. SELLERS showed, for Mr. HAMILTON, the case of a man, aged [illegible], who, by a fall from a height on to his feet, completely dislocated the astragalus inwards. It was so separated from its attachments, that a touch with the knife was sufficient to remove it altogether. The case was treated antiseptically, and a very good and useful foot resulted. The ankle-joint was perfectly ankylosed, but movement in front of the joint between the tarsal bones was every day becoming more free.

Metastatic Panophthalmitis.—Mr. SHEARS showed specimens from the case of a male negro, aged 26, who was admitted into the Eye and Ear Infirmary with acute suppuration of the left globe. Three weeks previously, he had a painful swelling in the left forearm, which infected the axillary glands. One week before admission, he was attacked with acute eye-symptoms. When seen, he was acutely ill; temperature 104°. The eye was incised. The next day, he had a rigor. On the fourth day, a cardiac murmur appeared, and he steadily became worse, the case running the ordinary course of pyæmia, and terminating fatally on the twelfth day. At the *post mortem* examination, a perforating ulcer was found in the right cusp of the mitral valve. There was purulent meningitis over the base of the brain, the result of extension from the orbit. There were no infarcts nor secondary abscesses beyond that in the left eye.

Cases of Heart-Disease.—Dr. GLYNN exhibited a number of specimens of heart-disease, with a series of water-colour sketches, drawn to measurement from the fresh material. The first series of sketches was intended to illustrate the effects produced in the endocardium by the strain resulting from aortic regurgitation, showing the "ripple-marked" thickening of the membrane below the valves. A series of vegetations in the posterior cusp of the mitral valve, and ripple-marks beyond them on the floor of the left auricle, were shown; also the dilatation of the pulmonary artery in comparison with the aorta; and thickening of the endocardium in the right auricle. The second series showed changes in renal hypertrophy of the heart; and, amongst other conditions, thickening of that cusp of the tricuspid which comes into contact with the hypertrophied septum; and thickening of the pericardium over the right auricle produced by friction of the lungs over the extremely tense auricle. The third series showed a very perfect aneurysm of the mitral valve, projecting from the anterior cusp into the auricle, and also the ripple-marks in the course of the regurgitant stream. The fourth series illustrated two cases of ulcerative endocarditis. One of them showed vegetations two inches long in ruptured chordæ tendineæ of the mitral valve. The vegetations teemed with micro-organisms, and the capillaries of the heart were plugged with micrococci. In this case, the boy some time before death suffered from hypostatic pneumonia at the bases. Then some condition of the heart led him to lie upon his face, when the bases quite cleared up, and the anterior surfaces suffered instead. In the other case, embolism of the middle cerebral artery occurred, followed by hemiplegia; but no softening was met with at the *post mortem* examination. This appeared to be due to the plug not quite filling the vessel, as injections could be made to pass it easily. Dr. Glynn also showed a sketch of fatty degeneration of the endocardium from a case of fatal anæmia; and one of cyanotic atrophy of the liver.

Kairin.—Dr. ARCHER read the notes of a very severe case of typhoid fever treated with kairin. The patient was admitted almost in the last extreme, with a temperature of 104.6°. Kairin was given in doses of seven and a half grains, with the result of producing perspiration and a fall of temperature after each dose. After it had been reduced to 99.9° and 98.7° respectively on two occasions on the day after admission, a cessation of the drug was followed in two hours by a rise to over 105°. Kairin appeared to have full power to reduce the temperature, but the patient had not the strength to combat the disease. The urine became of a greenish colour. Dr. Archer thought there could be no doubt about the antipyretic character of the drug, and that it would prove very useful in some cases.—Dr. OLDHAM was pleased with the effect produced in this case, though the patient had been too desperately ill from the first to have any chance of recovery.—Dr. BURTON considered that the action of kairin was too evanescent to be of any value in private practice; but he had read that hypodermically it could be given in smaller doses, and with a much more lasting effect.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 6TH.

Rheumatic Fever with Hyperpyrexia.—Dr. CARTER read a paper on a case of rheumatic fever with hyperpyrexia which was successfully treated by the graduated bath. There had been three previous attacks of rheumatism, in the course of which the mitral orifice of the heart had become affected. The temperature rose suddenly [illegible] was brought down by the bath to 99.5° Fahr., and never rose again above 102 Fahr. There was marked delirium, the onset of which preceded the hyperpyrexia by [illegible].

The [illegible] of [illegible].—Dr. MALINS read a paper in which the customs of various states and countries in the conduct of natural labour were briefly sketched, and the difference in the mortality for respective classes of human and animal life dwelt on. The influences of an adverse kind were shown to be mainly due to the adaptation of the human female to the erect position, the complicated structure of the human placenta, and the diseases engendered in early life, especially of the bones.

Large Uterine Polypus.—Dr. **Malins** showed a specimen of fibroid polypus of the uterus, weighing nearly three ounces. The patient from whom it was taken had symptoms for two years, thought to be attributable to malignant disease. The polypus was removed with scissors; recovery was immediate.

Ovariotomy.—Dr. **Malins** also showed an ovary and Fallopian tube taken from a patient, single, aged 22, from whom the other ovary was removed fifteen months previously, without relief. The ovary was three times the natural size, with numerous cysts. Perfect recovery and complete cessation from pain followed the operation.

Laryngeal Perichondritis.—Dr. **Carter** showed a specimen of laryngeal perichondritis. Tracheotomy had been performed, which completely relieved the dyspnœa, but the patient died from septicæmia. An ulcer was found on the posterior extremity of the right vocal cord, which had extended to the cricoid cartilage, the periosteum of which was separated from the cartilage by pus. There was no evidence of phthisis or syphilis.

Microscopical Appearances of the Kidneys in Cholera.—Dr. **Windle** showed sections of cholera-kidney; there were no bacteria present; epithelium-cells were very distinct, with large nuclei.

Removal of Foreign Body from Eye by Electro-Magnet.—Mr. **Eales** showed two male patients from each of whom he had successfully removed a piece of iron from the vitreous chamber of the left eye by the electro-magnet. Their ages were 25 and 26 years. In each case, the wound (about a quarter of an inch in length) was situated at the junction of the cornea and sclerotic; in each, the lens had escaped injury. In one case the wound was situated at the outer side of the eye, the root of the iris being scarcely involved. Attempts to find and extract the foreign body by means of forceps had been made unsuccessfully by the local surgeon to whom the patient first applied. On first introducing the magnet, a small grain of metal adhered to it and was removed, two or three subsequent unsuccessful attempts being made before the larger piece (a quarter of an inch long) was removed. In this case, acute iritis and cyclitis followed the operation. The eye was, however, now free from pain on pressure; vision $=\frac{20}{200}$, though the vitreous chamber was full of floating opacities. In the other case, the iris was wounded and prolapsed, and was, therefore, excised before introducing the magnet, to which a large piece of metal at once adhered, and was removed readily. This case did well; vision $=\frac{20}{200}$; no pain. Mr. Eales pointed out that, in these accidents, it was usually the left eye which was injured. He considered that both the eyes had been saved by the electro-magnet. He thought the commonest cause of failure of the electro-magnet was impaction of the foreign body in the sclerotic. Delay in the use of the magnet usually resulted in complete destruction of the eye; while its early use gave promising results.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

Wednesday, February 20th, 1884.

Angus Fraser, M.D., Vice-President, in the Chair.

Filaria Sanguinis Hominis.—Dr. **Alex. Ogston** showed some slides which had been sent from Amoy by Dr. Patrick Manson, exhibiting the filaria sanguinis hominis as occurring in the lymph and blood of man, and in the various stages of development in the abdomen and thorax of its intermediate host the mosquito.

Abscess of Lung.—Dr. **McKenzie Booth** reported a case of abscess of the lungs in a girl aged 13, and presented the patient for examination. She was of a markedly phthisical family, and had from time to time suffered from bronchitis. About a fortnight before she was first seen, she had an attack of bronchitis; and, when seen, she was much reduced in strength, and was rapidly losing flesh. Her appetite was entirely lost. She had irregular exacerbations of fever, and severe colliquative sweats, mostly toward nightfall. Temperature 102°; pulse 120 to 140; breathing was very short and hurried; the cough and expectoration were much less than they had been. On percussion, there was slight dulness over the supraspinous fossa behind the right apex; otherwise normal. Auscultation discovered crepitant *râles* over the right apex posteriorly and anteriorly. Almost all food was rejected soon after swallowing; the bowels were much constipated. A purgative was given; sinapisms were applied over the right apex; small doses of opium and digitalis were given every three or four hours. Milk and lime-water, beef-tea, and port-wine were administered every two or three hours. For the next few days, except that there was less vomiting, the symptoms grew more pronounced. At the end of a week, the temperature was between 103° and 104°, and the pulse could not be counted. About three weeks from the commencement of the bronchitis (eight days after she was first seen), a severe fit of coughing set in, during which pus was expectorated to such an amount as almost to choke the patient. Expectoration continued to be copious for a few days, though gradually diminishing. Percussion-dulness gave way, and for a time the resonance was almost amphoric; whilst gurgling alternated with cavernous breathing. At the end of a fortnight, the cough and expectoration were nearly gone, and the patient was rapidly gaining strength and flesh; although there was still percussion-dulness and broncho-vesicular breathing over the right apex. There was also marked swelling (due seemingly to lymphatic infiltration) over the right side of the neck above the pulmonary apex. After the discharge of the pus, the treatment consisted of carbonate of ammonia, with squills and senega, with free supplies of port-wine and nourishment, and afterwards tonics generally, and preparations of iron; and, under this treatment, the patient recovered speedily.—Discussion was postponed till next meeting.

Abdominal Aneurysm.—Dr. **Garden** reported a case of abdominal aneurysm, and exhibited the preparation. The patient, a granite-worker, of middle age, applied to him, complaining of pain in the back. The pain became constant, and, after two or three weeks' observation, it was concluded that the cause was a tumour near the left kidney. Pain was then complained of down the left thigh, and, though no tumour could be felt, it was believed there was pressure from a tumour about the second or third lumbar vertebra. Soon, a hard pulsating swelling was detected below the left ribs. Dr. Garden concluded that there was aneurysm of the aorta, and that the swelling discovered was the left kidney, which was pushed forward by the tumour. Shortly after this, a tumour appeared, and became quickly very large, at the back, near the spine, on the left side, and opposite the swelling in front; and, in the same situation (at the back), the skin became œdematous, discoloured, almost black, and, two days before death, appeared likely to burst. The patient died from internal hæmorrhage. The usual treatment did not seem to produce any effect. Dr. Garden exhibited the specimen, which consisted of a true aneurysm of the aorta, pressing the left kidney forward. The ribs were not affected, but the second, third, and fourth vertebræ were much eroded. There was also a false aneurysm behind the true aneurysm, and this had caused great part of the swelling behind. The size of the true and false aneurysms together was about one foot long, nine inches broad, and five inches deep.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Friday, February 1st.

Amputation through Joints of the Lower Limb.—Mr. **Keetley** showed cases of amputation through the knee-joint, and of Pirogoff's and of Hey's amputations, and he also showed (by permission) a patient in whom the late Mr. Shuter had disarticulated at the hip subperiosteally. Mr. Keetley contrasted the chief arguments for and against amputating through the joints of the lower extremity. When a distal segment of bone was left, *e.g.*, in Pirogoff's and Gritti's amputations, he strongly urged that it should be wired to the proximal bone, and he showed that otherwise it usually became retracted and a source of tenderness in the stump.—Mr. **Lunn** insisted upon the necessity of leaving the periosteum in all cases.—Mr. **Thompson** spoke in favour of the Beaufort artificial limbs, specially as regards their light weight.—Mr. **Benton** asked Mr. Keetley if it was his custom to save the patella when amputating the knee-joint; and also asked his opinion as to which were better, to make a long anterior flap and short posterior flap, or the reverse; remarking that he himself had found that the long anterior flap was often attended with much sloughing.—Dr. **Thudichum** inquired Mr. Keetley's opinion as to the exact fate of the cartilage in the case of a successful amputation of the knee-joint, and remarked upon the advantages of wiring the stump, as it afterwards became more serviceable.—Mr. **Keetley** said that he thought the artificial limbs lately exhibited by Mr. Thompson (viz., the Beaufort artificial limbs), might be well adjusted to a patient whose hip had been disarticulated, if only it were made to take a firm hold of the pelvis. An artificial limb, for an amputation at or near the hip, should make use of the pelvis; exactly as an artificial leg, for an amputation at or near the knee, used the thigh. With regard to saving the patella, he was opposed to it, unless a Gritti's amputation were done, and the freshened surface of the patella applied to the sawn surface of condyles. He believed the changes in the cartilage, after a successful disarticulation, were identical with those which occurred in cases of unreduced dislocation.

Case of Supposed General Paralysis Aphasia?—Dr. J. **Allden Owles** reported on the progress of a case brought before the Society in April last by Dr. Drewitt, who showed it as a case of general paralysis of the insane; at the meeting, however, Dr. Forbes Winslow and others thought it a case of simple aphasia, which would probably pass off in about six months. The patient shortly showed signs of improvement, both in walking and in speaking, and obtained a position as a butler. Six months later he was seen by Dr. Owles, who found him becoming much weaker, apparently from over-exertion, though in walking and speaking he had improved, and there were no symptoms specially characteristic of general paralysis of the insane. On some points his memory did not seem quite correct, but the confusion was not more than was general in those who had impaired their brains with the abuse of alcohol and other excesses. He was then for some time an out-patient at the National Hospital for the Paralysed and Epileptic, where he was under Dr. Ferrier, who reported that he found the symptoms to be those of general paralysis, very general tremulousness, defective articulation, and unequal pupils, but without any very well marked mental symptoms. The treatment was bichloride of mercury with perchloride of iron. The patient then went to St. George's Hospital, where basic pneumonia first showed itself, and in three days he died. The physicians at that hospital reported that they saw no symptoms of aphasia or signs of paralysis. No *post mortem* examination was allowed, but Dr. Owles thought the following conclusions probable. 1. It was not a case of general paralysis of the insane. There was an absence of the most prominent characteristics of that disease, and the progress of the case would negative it. 2. If it were a case of aphasia, the aphasic symptoms, as Dr. Forbes Winslow expected, had almost disappeared in six months. 3. Though there was no proof of syphilis, there was evidence of alcoholism, and it seemed likely that this was the predisposing cause, both of the symptoms of paralysis, and of the double pneumonia from which he died.—Dr. THUDICHUM considered that, except in cases with syphilitic history, the use of mercury was disadvantageous, owing to its tendency to accumulate in the tissues.—Dr. DREWITT admitted that he had great doubt on the exact diagnosis when he first saw the case; still he did not think it necessary to have distinct mental symptoms, as that depended greatly on the situation of the disease.—Dr. BENNETT spoke of a case of alcoholism, the symptoms of which simulated those of general paralysis of the insane, and which recovered under treatment.—Dr. OWLES then replied.

ACADEMY OF MEDICINE IN IRELAND: SURGICAL SECTION.

W. I. WHEELER, F.R.C.S.I., President, in the Chair.

Living Specimens. The PRESIDENT showed: (1) A young girl, aged 18, after removal of enormously hypertrophied breasts; the largest weighed twenty pounds; (2) A case of excision of knee in a boy, aged 11, for caries, and a child a year after hare-lip operation by the exhibitor's method.—Mr. STOKES: Case showing result of excision of the upper jaw for fibro-sarcomatous tumour, originating probably in the antrum.—Mr. LAMBERT H. ORMSBY: Case of excision of knee-joint.—Dr. ARTHUR H. BENSON: Primary lupus conjunctivæ.

Specimens Exhibited by Card.—The PRESIDENT: Vesical calculi removed by lateral lithotomy.—Mr. STOKES: (1) Amputation at hip-joint, parts removed on account of a rapidly growing sarcomatous tumour on inside of thigh; (2) Cast of the thigh showing size and position of the tumour; (3) Multilocular ovarian cyst recently removed from a patient, aged 17.—Mr. LAMBERT H. ORMSBY: Amputation of the thigh, (upper third) for large sarcomatous tumour.—Dr. J. HAWTREY BENSON: Viscera of a woman who died of purpura hæmorrhagica.

Radical Cure of Hernia.—Mr. W. STOKES read a paper on the radical cure of hernia by peritoneal and intercolumnar suture. The subject of radical cure of hernia had from remote antiquity engaged attention; and although it could not be said definitely that the wished-for goal had been attained, still, thanks to Listerism, much had been gained. In proof of the fact that the feasibility of obtaining radical cures by operation was *sub judice*, he referred to the writings of various surgical authorities, some of whom were opposed to, and others in favour of, such attempts being made. The object of the various operations hitherto performed—namely, obliteration of the neck of the sac, with approximation and union of the tendinous structures about the hernial passages, also the methods of "dissection," were discussed; and the author believed that the method recently adopted by himself and his colleagues was simpler and more efficacious than any of those he mentioned. It consisted in the insertion, through the open neck of the sac, and close up to the external abdominal ring, of a deeply indented carbolised catgut suture or sutures, according to the size, width, and depth of the neck; and this was followed by the approximation or closing of the canal and pillars of the ring, by the insertion of two or more sutures of a stronger or more durable material, such as chromicised catgut, gilt or silver wire. It was a dual system of suture, one being peritoneal and the other intercolumnar. Four cases were recorded in which this plan was adopted. In three of these, successful results were obtained. The unsuccessful case was one of congenital inguino-scrotal hernia. The hernia reappeared three months after the operation. The failure was probably due to not having used a sufficiently durable material for closing the pillars of the ring, that which the author employed being chromicised catgut. In future, he would employ in similar operations either carbolised silk or silver wire.—Mr. BARTON also read a paper on the radical cure of hernia. At the outset, he laid down the principle of treatment—viz., that the internal ring should be so effectually closed as to prevent the hernia from coming down into the canal at all. He described Wood's operation as a combination of this and of the old plan of invagination, which latter should be discarded, and the closure of the ring perfected. The direct operation was recommended, refracting the edges of the ring, as recommended by Gross; or cutting away the sac, as practised by Czerny. Three cases were related: (1) that of a boy aged 3, who had a hernia as large as a cocoa-nut, and which could not be held up by any truss; (2) that of a young man, who had been rejected at the physical examination at Sandhurst for a small inguinal hernia; and (3) a child three years old. In all these, the internal ring was closed with silver wire, which was left in; but, in the first case, it had to be removed subsequently, as the wound reopened. The result was that, in the first case, the child left the hospital with a truss, but the hernia again came down. In the second case, the result was satisfactory, and the gentleman was admitted to Sandhurst. In the third, the child was exhibited; but sufficient time had not elapsed to pronounce upon the result. The cases proved, first, that the operation was readily performed; secondly, that (with antiseptic precautions) it was safe; and, thirdly, that it was advisable, if not directly necessary, to retain the wire sutures *in situ*.—Mr. KENDAL FRANKS read a paper on the radical cure of hernia by the method of dissection, the name which has aptly been applied to it in Dublin. The only two methods which seemed to him to give promise of extensive application in the future were (1) suture of the abdominal openings without removal or ligature of the sac; and (2) suture of the abdominal openings after excision of the sac. The first of these operations was applied to recent hernia before the sac had time to become enlarged and thickened. The method consisted essentially in cutting down on the tumour, carefully exposing the sac which had been returned into the abdomen, and then drawing together the openings by means of two or three sutures of stout silver wire, which should be left permanently in position. He advised that the skin should be drawn slightly upwards before the first incision was made, as by that means the skin would not lie directly over the wires. Thus union by first intention was promoted, and the permanent retention of the silver wire assisted. Three cases were related in which this method was employed.—Mr. W. THORNLEY STOKER said there were two distinct classes of cases; the class in which operation was compulsory, where strangulation existed, and the class where operation was a matter of election to promote the patient's convenience rather than to save his life. In nearly all cases of operation for femoral hernia, a permanent cure had been effected; but in large inguinal ruptures a radical cure was not so frequent, and, in such cases, the peritoneum should be sutured. In the second class of cases, he advocated Wood's operation. He did not think it mattered much whether the pillars of the ring were drawn together or not. A cure was effected by the inflammation exciting the exudation of coagulum and lymph, which drew the parts together, thereby closing the opening as with a cork. He protested against leaving in the wire-suture where the ring was sutured in inguinal hernia, as most unscientific and unsurgeonlike, and a possible source of future trouble.—The PRESIDENT mentioned the result of nine cases in which he had operated by different methods. In a case of inguinal hernia, on the left side of a male, he exposed the neck of the sac. He then drew it down and applied a ligature, divided the neck, and removed the sac below the ligature. This case was successful when seen two years afterwards. In a femoral hernia, on the left side, in a female aged 18, he opened the sac, pulled down, excised and closed the edges, and the result, eighteen months afterwards, was most satisfactory. In cases where the canal was greatly distended by a large hernia it would be almost impossible to have a radical cure follow any radical measure, and the most likely method was excision of the sac.—Dr. McARDLE observed that it was almost impossible to bring the edges sufficiently close together to keep behind the sac, and that the irritation of the veins was likely to produce phlebitis.

TUESDAY, JANUARY 22ND.

W. I. WHEELER, F.R.C.S.I., President, in the Chair.

Radical Cure of Hernia. The discussion on this subject was resumed. —Mr. ORMSBY said that many of the present operations were, with few exceptions, old operations revived under new names. Mr. Stokes's procedure was bold; but, with a complete regard to the details of Listerism, operations in abdominal surgery might be performed with impunity. Having unsuccessfully tried the plans of Wutzer, Wood, and Gerdy, he himself devised a plan, and carried it out successfully, in the case of a young man aged 26, who suffered from oblique inguinal hernia (reducible). An anæsthetic having been administered, the hernia was reduced, and the skin and cellular tissue of the scrotum invaginated and pushed up with the finger as high as possible through the external abdominal ring into the inguinal canal. Then a flat needle with handle attached, armed with a stout piece of silk ligature, was passed along the finger fixed in the inguinal canal, and made to pierce upwards and outwards until it passed through the anterior wall of the canal, so that the eye of the needle was apparent through the skin. The end of the ligature having been caught and secured, the needle was withdrawn. The other end of the same silk ligature was then inserted into the needle, which was passed up along the finger, still fixed in the inguinal canal, and passed through the anterior abdominal wall as before. The two ends of the ligature were then drawn up and tightened, and a small piece of bougie, about two inches long, placed between the two ends of ligature, which were tightened and tied firmly across the bougie close to the point where they emerged from the skin. A glass rod, having been placed in a solution of liquor ammoniæ, was passed into the invaginated canal, so as to abrade the surface and excite adhesive inflammation or ulceration, and thus finally obliterate the canal. Lastly, a harelip-pin or acupressure-needle was passed deeply through the tissues transverse to the inguinal canal, at a point midway between the external abdominal ring and the position of the ligature tied over the bougie. Care must be taken not to pass the needle behind, but immediately in front of, the cord. A ligature was then placed over the two ends of the pin or needle, compressing firmly the intervening tissue, the pin or needle to remain until it ulcerated its way out. The ligature over the bougie was also allowed to ulcerate its way out. In Mr. Franks's cases, he would prefer to use chromicised gut instead of silver wire, which he would on no account leave embedded in the abdominal wall, lest trouble might ensue.—Mr. CORLEY was of opinion that the direct operation by dissection was better in theory, and more likely to succeed in practice, than Wood's. There could be no doubt that in strangulated hernia the operation ought to be the radical one. Lawrence, in his book on ruptures, published in 1838, had detailed a number of methods for the radical cure, one of the earliest and mildest operative procedures being incision—that is, dividing the integuments and opening the sac after the integuments had been replaced, and then dressing the wound so that it should heal by granulation. The point to be considered in connection with the radical cure was, how far interference was justifiable.—Mr. HAYES had, twelve years ago, performed Wood's operation with satisfactory result in the case of a female who suffered from inguinal hernia, which could not be adequately supported by a truss. She got married, bore three children, and was seen ten years afterwards perfectly free from danger of hernial protrusion. In the case of a youth, he performed the same operation, but the boy had to wear a truss. An operation was employed in America to effect the radical cure by the injection of some irritating fluid within the inguinal canal, and round the abdominal rings; and Dr. Warren had introduced the procedure at Guy's Hospital, operating upon a case of Mr. Bryant's, which did well. Mr. Bryant wrote that the man wore a truss afterwards; and, six months later, the hernia had not come down. He did not, however, perform the operation himself, as it seemed a mere matter of chance where the injected fluid went; and he preferred the operation by dissection.—Mr. THOMSON said the question always to be determined, before undertaking the operation of election, was what was the risk to the patient. There was also the preliminary question whether the patient, especially if in the lower walks of life, would not run a greater risk of strangulation of the hernia and death than by an operation performed under favourable conditions. His impression was that, where the case was prepared properly, and in all respects favourable for operation, the patient would have a better chance of life by the operation to relieve him of his hernia. As to the material to be used in stitching the pillars of the ring, he operated on a case of enormous scrotal hernia of twenty-five years' standing without stitching the ring, there being a fair stump that acted as a plug for the opening, and the result was satisfactory. The result of his experience of children was, that he would not use chromicised catgut to ligature the pillars of the ring. He objected to catgut, and preferred wire or silk.—Dr. WARREN was certain that the operation by dissection would be *par excellence* the operation of the future. He saw no objection to leaving in the wire suture.—Dr. BALL proposed carrying out an addition to the operation by dissection in a case he had under treatment in Sir Patrick Dun's Hospital—namely, by torsion of the sac, so that a portion of the neck of the sac in the inguinal canal would be occluded.—Mr. O'GRADY called attention to an accident that befel him in an operation several years ago in a young man. He had made an incision in the skin, invaginating the superficial tissues underneath, and sewing these and the pillars of the ring together. Nothing untoward attracted attention at the time of the operation; but, after some days, the wound suppurated, large quantities of urine were discharged from it, and the child died. It was obvious that the needle had gone through the bladder. To obviate a similar result in all future cases, he emptied the bladder. Mr. Thomson's argument in favour of operative procedure was brought home to himself on two occasions recently, when he was telegraphed for, and his visit countermanded.—Dr. FOY, Mr. NIXON, and Dr. ASHE having taken part in the discussion, the authors of the papers replied.—Mr. STOKES said a surgeon would not be justified in sacrificing the testicle until he was satisfied that its function was destroyed. He had determined, undeterred by the discussion, to use metallic sutures in his next case. He denied that Wood's operation was haphazard.—Mr. BARTON said the question whether invagination ought to be superseded by the plan of direct closure of the ring would be decided by the future record of operations. He would continue to employ metallic sutures, taking care as to their being safely placed.—Mr. FRANKS referred to Buchanan's method of treating children by bandaging them to a St. Andrew's cross as very successful. In operative procedure, the open had an enormous advantage over the closed, the surgeon being able to see everything he did. He did not agree with Mr. Thornley Stoker as to the exudation of lymph sufficing to approximate the rings. It could not be so efficacious as the additional obstruction afforded by the wire, the objections to which were only theoretical.

REVIEWS AND NOTICES.

GERMS, DUST, AND DISEASE; TWO CHAPTERS IN OUR LIFE HISTORY. By ANDREW SMART, M.D., F.R.C.P.Ed. Edinburgh: Macniven and Wallace.

IN the volume before us, we have a reprint of two interesting lectures by Dr. ANDREW SMART of Edinburgh, delivered under the auspices of the Health Society of Edinburgh. The volume contains much that is striking and original, and while the subject-matter is popularised to catch the public ear, it is treated in a highly scientific spirit. Dr. Smart, as an hospital-physician, pathologist, and advocate for State medicine and advanced hygiene, has brought much ripe experience to his task.

He was the first to draw attention to the characteristic bacterium in rinderpest. The germ-theory of disease is largely indebted to him for the initiative he took in this matter, in his elaborate memoirs on *Cattle Plague*, published now many years ago (1865), at the instigation of the Lord Provost and magistrates of the city of Edinburgh.

Under zymotic disease, Dr. Smart includes small-pox, typhus fever, typhoid (or enteric) fever, scarlatina, diphtheria, measles, and Asiatic cholera, and discusses them from the following points: 1, the injury they inflict; 2, how they originate; 3, their distinctive characters; 4, the conditions under which they spread; and 5, the means necessary for their control and prevention. In the first lecture, he discusses with commendable candour the several forms of epidemics and their connection with germs in the blood, tissues, and elsewhere. He refers to the labours of Pasteur, Lister, Tyndall, Simon, Burdon Sanderson, Obermeier, Klebs, and Chauveau, and follows up the didactic part of his lecture with some practical remarks on the means necessary for the control and prevention of infectious diseases, and by an appendix, in which the rules to be observed during the prevalence of epidemics are forcibly and tersely given. This part of his lecture refers more especially to the relatives and attendants on patients, to the medical practitioner, civic bodies, and such State enactments as are calculated to deal effectively with sudden outbreaks of contagious diseases; it being the duty, he contends, of all to protect the body politic from slovenly and careless local arrangements, which naturally and necessarily promote the spread of such diseases, and engender them *de novo*.

The first lecture traces the relation of germs to disease, and the second lecture shows with equal force the relation of dust to disease.

In this lecture he treats, in an exhaustive and graphic manner, every form of dust calculated to deteriorate the health, whether in the mansion or the workshop. The subject of trades-phthisis is dealt with in its various phases, as it affects the miner, the knife-grinder, and others exposed to the influence of deleterious particles, however produced. He divides his materials as under: 1. The effects of metallic dust; 2, the effects of mineral dust; 3, the effects of vegetable dust; 4, the effects of animal dust; 5, the effects of certain gases and volatile emanations; 6, the effects of constrained bodily position, conjoined with defective ventilation; 7, the effects of dust from poisonous metals; and 8, certain considerations as to the prevention of these effects. By the aid of carefully compiled tables, the comparative shortness of the life of those engaged in deleterious trades is strikingly brought out. Hints are also given as to the means to be adopted for reducing the great mortality of suffering induced by unhealthy employment. The necessity for ventilating workshops is insisted on, and the wearing of respirators in certain cases is likewise recommended. Altogether, the bane and the antidote of dangerous callings are given in a very attractive and common-sense way.

Dr. Smart advocates the foundation of more hospitals for consumption, and expresses a belief that intemperance is the result of unhealthy occupations and deteriorated health; that life and money are lavishly wasted by want of proper sanitary arrangements; that it is the duty of the State to provide these, and that State Medicine has become a necessity.

In conclusion, the lectures are remarkably well written, the author's style being at once genial, vigorous, and comprehensive. We heartily recommend Dr. Smart's volume.

ADDITIONS A LA TRADUCTION FRANCAISE DU TRAITE DES MALADIES DES REINS DE BARTELS. Par R. LEPINE, Professeur de Clinique Médicale à la Faculté de Lyon. Paris: Libraire Germer Baillière et Cie. 1884.

THESE notes constitute a very valuable addition to the recent French translation of Bartels' work on Diseases of the Kidneys, which was originally published nearly nine years ago. Since that time, there has been a great display of activity in this department of pathology, and on more than one important point very great changes of opinion have occurred.

For example, at that time, few would have been found to dispute the rule, emphatically laid down by Bartels, "that albuminuria is, in all cases, a pathological phenomenon;" yet, at the present day, in the face of the investigations of Leube, Furbringer, Senator, and others, the existence of a physiological albuminuria must be admitted. The experiments of Runeberg have disposed of the general but ill-founded opinion that albumen, like water, dialyses in direct proportion to the pressure; and we are now able to understand why it is that, with blood-pressure in the glomerular arterioles, there is a copious secretion of watery fluid containing very little albumen.

The views of Bartels on the subject of dropsy were eminently clear and simple; but the facts which convinced his mind that the accumulation of watery fluid in the serous cavities and cellular tissues is always dependent upon the insufficient excretion of water by the kidneys, have since received additions that make the pure hydræmic theory no longer tenable, and suggest the hypothesis that changes of some kind, in the walls of the blood-vessels, are always an essential factor.

Though Bartels was so much in advance of his time as to doubt that certain forms of nephritis, ocurring during the course of infectious diseases, were to be attributed to the local effect of the organised infective principle, yet the entire subject of infective nephritis is quite recent. Micro-organisms have been found in the fresh urine and in the renal substance in various infectious diseases; and it is interesting to note the differences that exist in the effects produced by them. Thus, the organisms of variola, diphtheria, and typhoid fever give rise to what is known as "coagulative necrosis" of the epithelium of the tubules; the *micrococcus pyogenes* causes minute miliary abscesses, while the bacilli of anthrax appear to possess no power of passing through the walls of the blood-vessels, and leave the epithelium and connective tissues of the organs quite intact.

Perhaps the most important change in opinion is that which has swept away the old classification of Bright's disease, the "stages" of Frerichs, and the "types" of English authors. Modern pathology recognises an infinite variety of pathological forms, yet having this in common, that all are alike due to the same initial lesion, the ultimate divergencies being explained as the effect of differences in its intensity or duration.

On the important subject of uræmia, as well as on the relations of the changes in the heart and vascular system, many important contributions have been made, the substance of which is fully recorded in these notes.

Professor LEPINE is so well known as an industrious and original worker at problems connected with Bright's disease, that no one could have been selected more competent to fulfil the task he has undertaken. There cannot be two opinions as to the value of these notes, and we are sure they will be fully appreciated by all who are interested in the study of this very important and widely distributed group of diseases.

THE GENERAL PRACTITIONER'S GUIDE TO DISEASES OF THE EYES AND EYELIDS. By L. H. TOSSWILL, B.A., M.B., Surgeon to the West of England Eye Infirmary at Exeter. London: J. and A. Churchill. 1884.

THIS book is well adapted for the use of those general practitioners whose wish it is to incur the least possible responsibility in their treatment of eye-affections, since it avoids the discussion of operative treatment, and advises that in these, and, indeed, in all serious cases, the aid of a specialist should be invoked.

Its faults will naturally rather be those of omission, and it is difficult to be critical in this regard. But there are certain points that surely should have been introduced. For example, nothing is said about the use of the mirror alone as a means of diagnosis, the importance of which can scarcely be overrated in cataract, corneal or vitreous opacities, etc. In the same way, the importance of recording the distant vision is not sufficiently dwelt upon.

The author writes clearly and simply; but, notwithstanding this, we are not clear whether he intends to make a distinction between phlyctenular ophthalmia and phlyctenular conjunctivitis. He treats of a disease he calls purulent ophthalmia of adults, which we should wish to be more exactly defined and described, if, indeed, such a condition exist as a separate disease.

With regard to the use of ointment of yellow oxide of mercury, so much vaunted lately, it is important to have some other direction than merely that it should be applied to the edges of the lids.

In its simplicity, and, therefore, in its clearness, rests the claim of this book to superiority over the manuals and text-books with which this department of surgery is abundantly supplied.

DIE QUALITATIVE UND QUANTITATIVE ANALYSE VON PFLANZEN UND PFLANZENSTOFFEN. Bearbeitet von Dr. G. DRAGENDORFF. Göttingen, 1882.

PLANT-ANALYSIS: QUALITATIVE AND QUANTITATIVE. By G. DRAGENDORFF, Ph.D. Translated by HENRY G. GREENISH, F.I.C. London, 1884.

ENGLISH chemists engaged in the analysis of vegetable products, and toxicologists, know well the value of any production from the pen of the distinguished Professor of Pharmacy in the Russian University of Dorpat; and the appearance in an English translation of Professor DRAGENDORFF's valuable treatise on plant-analysis, will be heartily welcomed.

The author is enthusiastic as to the methods of analysis he recommends, and the following extract is the keynote of his laborious, yet concise treatise.

"In it, I trust to be able to show that for the separate estimation of many substances we have methods at our disposal which, in point of accuracy, are nearly abreast of the processes employed for the determination of mineral constituents, and that we can often obtain results really serviceable in the investigation of the important component substances contained in a plant. I especially hope to succeed in showing that analysis of plants possesses, in one respect, an advantage over the analysis of minerals, inasmuch as it often happens, in examining mixtures or conglomerates of several chemical individuals, that in the latter case a much less satisfactory insight into the constitution can be obtained than in the former."

Without endorsing all that is here said, we fully acknowledge the comparative perfection which plant-analysis has attained within the last few years; and to those who are specially interested in the matter we can cordially recommend Professor Dragendorff as a guide. He has himself probably done more to improve this branch of analysis than other living pharmacists.

The translation has been well and carefully done by Mr GREENISH, who has the advantage of having been a pupil in Professor Dragendorff's laboratory. The index, too carefully following the original of the German edition, is the weak point of the translation, for we look in vain for such substances as "camphor," "essential oils," "menthol," "turpentine," names taken at random to test the value of the index.

Illustrated Guide of the Orient Line of Steamers between England and Australia. Issued on behalf of the Orient and the Pacific Steam Navigation Companies. London: Maclure and Macdonald. 1884.

THIS handsome guide-book, published with the object of stimulating travel between the home-country and the antipodes, is a work of great value, most readable and interesting, and well illustrated with maps and sketches. An introductory chapter gives a description of the vessels, the accommodation they afford, and the safety and salubrity secured to those who travel in them, whether for pleasure, health, or business. There is much to be said in favour of a sea-voyage for the recovery of health, not only of those with chest-delicacy, but for the fatigued in mind and the convalescent from acute illness. To the over-tired mind, rest from bother, and continuous fresh air without fatigue, with frequent changes of scene without pressure, worry, or anxiety in travelling, are desiderata which cannot be otherwise gained with equal certainty. As one of our authors puts it (p. 3): "With the signing of the cheque for the passage all thought of money ceases. Board, lodging, and journey, for so many weeks or months, are once for all arranged and paid for, saving further anxiety and trouble. The tourist has nothing in hand but to enjoy himself and make the most of his surroundings." Much good advice is contained in the article on the medical aspects of the voyage, including a most fitting warning against the too common practice of recommending, or rather giving medical sanction to, persons in advanced consumption undertaking such a, for them, futile means of restoration. Also, "when the intending passenger is a good deal of an invalid, he should be strongly advised to secure for himself a whole state-room; seclusion to that extent is due not only to himself, but also to his fellow-passenger." Chapters are devoted to directions as to outfit, and to hints for the comfort and well being of passengers. Brief descriptions are given of the principal places and objects to be seen on the Cape route and the Suez route respectively. The mysteries of seamanship are explained, and the natural history and meteorology of the voyage described. Part iii is devoted to a most interesting account of the individual colonies which make up Australasia, their histories, climates, and industries. Part iv, written principally for Australians taking the reverse journey, describes the chief old-world places, Egypt, the Holy Land, Italy, and chief European cities, finishing with a chapter on London and suburbs and the principal towns of England. The volume forms a valuable itinerary to the traveller, and a suggestive book of reference for the physician.

A Plea for the Cure of Rupture, or the Pathology of the Subcutaneous Operation by Injection for the Cure of Hernia. Pp. 120. By JOSEPH H. WARREN, A.M., M.D. Boston: J. R. Osgood and Co.; London: J. and A. Churchill. 1884.

THIS little work consists chiefly of an attempt to prove, on pathological grounds, the advantages to be derived from the author's method of operating for the permanent cure of hernia by subcutaneous injection. The first chapter is devoted to a brief account of modern surgical pathology; and, in the next chapter, the importance of producing only adhesive, or, as it is here termed, "regenerative" inflammation, is fully discussed. How far our readers will be prepared to accept the theory of the method is very doubtful, although Dr. WARREN has given a practical account of a large number of cases in which a complete cure has been effected. The subject has, however, been more fully dealt with in the same writer's *Treatise on Hernia*, from which a considerable portion of the contents of the recent essay seem to be derived. Much is of a purely personal character, and refers to the originator of the injection-method, Dr. Heaton, who is stated to have "cured thousands of cases of rupture." Another chapter is a reprint of a paper read before the British Medical Association at Liverpool, and in that some good arguments are used in pleading for the more general adoption of operative measures for the cure of rupture. Here, however, the author appears to have weakened his case, by relating an instance in which he has adopted the method of ligature so frequently now practised, merely substituting the galvano-cautery for the knife in the removal of the sac. From this, it is clear that Dr. Warren does not consider the operation by injection to be the absolutely perfect method which he has been led to believe. The remainder of the work is devoted to a short chapter on trusses, which contains nothing whatever that is new, and some trite remarks on the causation of hernia generally. A table of cases, of more than two years' standing, in which the author has operated with success; an useful synopsis of the chief diagnostic signs of all kinds of hernia; and a good form for report of cases, complete the work.

Dr. Warren is an enthusiastic advocate for the cure of rupture; and he very pertinently asks: "May we not see, in the near future, something more in the text-books of surgery than the same old, dull, and unimportant recommendations of a truss to retain a rupture that persists in protruding?" (Page 89.) And we entirely concur with him when he says: "Are we not warranted in our plea for something more to be done by operative measures for the ruptured?" So far as the publisher is concerned, the book is quite a model of what such an essay should be.

NOTES ON BOOKS.

The Weather of 1883, as observed in the Neighbourhood of London, and Compared in all Respects with that of an Average Year. By EDWARD MAWLEY, Member of Council of the Royal Meteorological Society, etc.—Apart from the interest which a discussion of our weather proverbially has for every inhabitant of these isles, the pamphlet before us has claims on the attention of all who are at all inclined to the statistical investigation of disease. The weather of the year 1883 was, we are told, in nearly every respect an improvement on that of its predecessor, the rainfall was below the average, there were few "really wet days," the mortality was lower than ever before, and the range of temperature was comparatively slight; as, however, the Spring quarter (so called) was "very cold, and commenced with the severest March for nearly forty years," "the comparatively slight range" of temperature seems to have been but a qualified blessing. January and February were remarkably mild, and remarkably healthy, but with the onset of severe weather the death-rate went up with a bound, and remained considerably above the average for the two following months. We often hear a great deal about the dampness of our climate as a cause of disease, of the respiratory organs especially, but as a matter of fact the death-rate and the amount of rain-fall do not appear to stand in any definite relationship, whereas a spell of cold weather produces an immediate and notable effect. We have long entertained the idea that the names by which our seasons are known required revision; it is absurd to speak of such weather as we have experienced for the last two years in the months of December, January, and February, as wintry; far worse weather is commonly experienced in March, April, and May; sometimes, indeed, when we have a "green Christmas," we have a white May-day; on April 23rd, last year, there was "quite a heavy snow-storm," and "the first two summer months were remarkable, June for its even more than usually variable temperature, and July for unseasonable coldness and dearth of sunshine," whereas November was "once more noteworthy for the comparative clearness and dryness of its atmosphere, and the unusual brightness of its skies," and December was warm and dry though dull. The practical conclusion seems to be, until some fresh change comes over the course of the seasons, and for this we must always be prepared, that persons liable to disease of the respiratory organs, ought to choose February as the month for their departure, and ought to return, not with the swallows, but with the harvest.

Drinking. Manchester Health-Lectures for the People. By JOHN ANGELL, F.C.S.—The Manchester health-lectures for the people have been of great service in educating the public in that city in the physiology of common things. The above is one of the latest published, the subject is treated in a masterly manner by Mr. John Angell, After explaining "Why we drink," and "How we drink," the lecturer, under the heading of "What we drink," points out the risks arising from indulgence in intoxicating liquors, and very clearly shows that such beverages are not needed in a state of ordinary health. He also gives some practical hints on the use of drinks, such as tea, coffee, cocoa, and milk. Popular teaching of this kind is invaluable.

Dislocation Forwards of the four Inner Metacarpal Bones.—This rare accident has been described by M. Habillon, of Nancy, in his graduation thesis. He has collected thirteen cases, all men, and resulting either from direct violence or from extreme flexion or extension of the wrist. In his own case, the dislocation was caused by the passing of a wheel over the hand, and there was a wound on the dorsal aspect of the wrist. The reduction is easy, but difficult to maintain, and a certain degree of subluxation and stiffness is generally left.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 8th, 1884.

THE LIVERPOOL POISONING CASES.

THE interest excited by the revelations of the late trial for murder of the sisters Flannagan and Higgins, at the Liverpool February Assizes, is noteworthy; and the terrible tragedy of the death of the husband of the younger convict, Higgins, has culminated in the conviction, the confession, and the execution, of the two wretched women. It is rumoured that no fewer than seven persons perished, foully murdered by the two women for the sake of the insurances effected on the lives of their victims. In Liverpool itself, so great was the popular excitement at the time of the trial, that the judge, in his summing-up, said that, even if the prisoner Flannagan were acquitted, he doubted whether she could leave the court in safety.

The trial is additionally interesting to the medical profession on account of the special points of expert and ordinary testimony raised; and the able scientific evidence of the two chemical experts, Mr. Davies and Dr. Campbell Brown, as the letter published in another column from a toxicologist, who is entitled to be heard with respect, shows, has been the subject of some comment in professional circles. Fortunately, the questionable points of evidence had no very material bearing upon the case, which was clear enough, even setting aside the deductions made from the presence of arsenic in the spleen, and left no doubt, even before the confession of the convicts, as to the guilt of the prisoners.

Thomas Higgins, aged 42, died in a wretched cellar in a poor street in Liverpool, on October 2nd last, after an illness of about ten days. He was seen once during his illness by Dr. Whitford, the parochial medical man, who found him suffering from gastro-intestinal irritation, which he attributed to improper food and bad whisky. To his surprise, the wife called upon him to ask for a death-certificate. Nevertheless, she answered all his questions so readily, describing the stools passed by the deceased as bloody, that a certificate of death from dysentery was given. A communication from the brother of the deceased, however, led to inquiries and an inquest. The viscera of the man Higgins were analysed by Mr. Davies, and subsequently by Dr. Campbell Brown, with the result that arsenic was discovered. The wife of Higgins was arrested, and her sister Flannagan, who had also been in attendance on the deceased, went into hiding, but was subsequently taken into custody. The bodies of three other persons, Margaret Jennings, Mary Higgins, and John Flannagan, were exhumed, it being suspected that all these persons had been victims of Higgins and Flannagan, and in each of the bodies arsenic was discovered by the same experts. For many weeks, the source of the arsenic administered to Thomas Higgins baffled the ingenuity of the chemists. A liquid containing a trace of arsenic was found in the house occupied by the Higgins's, and in the wife's pocket; and in the fluff in the same pocket traces of arsenic were also found, which were attributed to the drying up of a neutral arsenical liquid. Eventually, and only whilst the trial was in progress, did it occur to the experts that some well known and widely sold fly-papers might be the source whence the arsenic was derived, and a solution of these in water was found to agree in all respects with the arsenical solution already referred to. It is certain that the women knew that they could obtain a poisonous liquid from the fly-papers, but it is quite unlikely that they were aware of the nature of the poison thus obtained, a solution of arsenites of sodium and potassium, or that it could be easily detected.

In all this there is nothing to distinguish the case from any ordinary history of crime by poisoning, and the motive was the too common one, the desire to get insurance moneys. And, indeed, the extraordinarily lax methods of doing business adopted by the insurance-companies greatly favoured the fraud. But the trial presented other and peculiar points of special interest.

In the first place, the presiding judge, Mr. Justice Brett, admitted collateral evidence as to arsenic having been found in the viscera of the exhumed bodies of John Flannagan, Margaret Jennings, and Mary Higgins, although the prisoners were being tried for the murder of Thomas Higgins only. The prisoners' counsel endeavoured, unsuccessfully, to exclude this evidence, and stated that, although in two cases—one being that of Regina *v.* Colton—such evidence had been admitted, yet in a third—Regina *v.* Winslow—two judges, the late Baron Martin and Lord Penzance, had decided in favour of his contention. Another contention was as to the admissibility of fresh analytical evidence not on the depositions. It appears that on the first day of the trial, Dr. Campbell Brown, in consequence of something he heard, was led to examine, for the first time, some fly-papers; and on the second day of the trial an application was made to the judge to admit this evidence; which he did. The other topics of scientific interest are adverted to in the letter, which will be found in another column. In the published reports—and we refer chiefly to the very full one in the *Liverpool Daily Courier*, the chemists, speaking as chemists, are made to say that they were of the opinion that the arsenic had been taken in solution. It would have been more correct to have made them state that the arsenic was probably taken in solution. The mere absence of solid arsenic from the viscera affords no proof that the poison was not given in a solid state. Not to speak of those instances of recovery after the administration of enormous doses of solid white arsenic, where it is morally certain that no solid arsenic could have been retained for any length of time in the stomach or bowels, it is within the experience of toxicologists that a person may die from the administration of solid arsenic, and none of the solid be found in the viscera. In the Liverpool case, there is now no doubt that repeated doses of an arsenical solution were given for several days; but from the facts of the analyses alone, it would be impossible to say with certainty how the arsenic was administered.

Of much greater importance is the evidence as to the presence of arsenic in the spleen, as deposed to by Dr. Campbell Brown, or rather his deductions therefrom. Dr. Brown is reported to have used the fact of the presence of arsenic in the spleen, as of itself evidence that arsenic had been given repeatedly, and for a period extending over several days. We believe this to be a misrepresentation, and that any argument which Dr. Campbell Brown drew from the spleen, was drawn from the relatively large quantity of the poison found in this organ, as compared with that found in the other viscera. Nevertheless, we believe that the argument was a dangerous one, and that facts did not warrant any strong deduction being discussed as to the time or character of administration from the analytical data. The judge appears to have made the spleen-theory an important one, and he is credited with the statement that the results as to the spleen had an immense and remarkable significance on one important element of the inquiry. Traces of arsenic were found in the spleen, and the significance of it was this; with the exception of the kidneys, he believed that the spleen was the last of the organs in the body which would become impregnated with arsenic; and that, if the analysts found it in the spleen, the arsenic had been in the body for a considerable time. It is clear that, if this report be correct, either the judge was misled by the expert evidence, or, as is more probable, he misunderstood its import. Anyhow, it would, in the present state of science be rash in the extreme to attach too much importance to the presence of a fraction of a grain of arsenic in the spleen, as evidence of a protracted administration of that poison.

THE ROYAL COMMISSION ON METROPOLITAN SEWAGE-DISCHARGE.

THE first report of the Commissioners on Metropolitan Sewage-Discharge, of which we have already given an abstract, is full of information of the highest importance to those interested in the great question of the best means of disposing of town-drainage. The difficulty of satisfactorily and without nuisance removing the sewage of a town naturally increases with its magnitude, and, consequently, the problem of draining the metropolis is fraught with many obstacles which are but little felt in dealing with towns of average size. It has long been known to all persons acquainted with the subject, that the present method of disposing of the metropolitan sewage is discreditable to the first city in the world; and especially so, as the entrance to the finest river in the kingdom is thereby fouled to the extent that its waters are disgusting to the senses. A similar nuisance caused by a town of smaller dimensions would, in all probability, have been remedied long ere this, and without calling in the assistance of a Royal Commission. For sanitary reform in the metropolis is invariably retarded by the opposition of the great moneyed interests, from which such reforms usually demand sacrifices.

In the present instance, it is complained that the Metropolitan Board of Works, in carrying out the main-drainage, have not complied with the regulations which were laid down in the Act of Parliament that gave them their powers. In this Act, it was clearly intended that the sewage, before being discharged into the river, should be deodorised or otherwise treated so as to cause no nuisance. Now, no process of sewage-treatment, except on a purely experimental scale, has ever been attempted by the Metropolitan Board, who have relied entirely on that exceedingly convenient property of purifying itself which, it is alleged, river-water possesses.

This supposed property of river-water is much appreciated by sewerage engineers and other persons interested in the discharge of foul liquids into running water, but is quite unsubstantiated by facts. In the present instance, the nuisance which is occasioned, not only in the immediate neighbourhood of the sewer-outfalls, but to a distance of several miles from them, clearly shows that such self-purifying action, even if it exist at all, is quite inadequate to neutralise the prodigious pollution which here takes place. There is probably nothing which has so much militated against the mitigation of pollution of rivers, as this doctrine of the self-purification of river-water; and we regard it as unfortunate, in the interests of sanitary progress, that the present Commissioners have not more emphatically stated the entirely baseless nature of this proposition. This matter was very fully investigated by the members of the Rivers Pollution Commission of 1868, who clearly demonstrated that such a power of self-purification existed in only a very small degree, and that the instances cited by the advocates of this theory are really cases of dilution, and not of destruction, of sewage. A second and, perhaps, still more important weakness in the present system of discharge of sewage, is that, contrary to the expectations of the projectors of the main-drainage scheme, the sewage, instead of being rapidly conveyed away to sea and thus, at the worst, fouling the river below the outfalls, as a matter of fact is carried backwards and forwards by the tides, occasioning a nuisance both above and below. In this process of oscillation, a large amount of the suspended matter in the sewage is deposited, and forms banks of putrescent mud, which, although they have not hitherto interfered with navigation, are the source of exceedingly foul and nauseating exhalations, familiar to all watermen on the lower Thames. The investigation of the complex mixing action which takes place between the sewage and the river-water, has been thoroughly and ably investigated by the complainants, and the results of their experiments will be of the greatest value for future guidance in cases where sewage has to be discharged into tidal rivers. When it is remembered that these experiments have shown that sewage-matters are, in dry seasons, carried from the outfalls up the stream nearly to Teddington, a distance of about thirty miles, it will be readily understood with what danger the discharge of sewage into such tidal waters is attended. A very serious defect in the present drainage-system, which has been brought to light by the evidence given before the Commission, is the increasing utilisation of the so-called "storm-outlets" of the sewers, which are becoming annually multiplied owing to the conduits being of inadequate dimensions to carry the whole drainage during heavy rainfall. When these storm-discharges take place, the river within the metropolitan area becomes polluted with highly offensive matter which has been deposited in the sewers during dry weather, and which is swept out by the rapid passage of the flood-water. As from the evidence it appears that this is likely to be a growing evil, we hope that some remedy will be adopted before it has assumed dangerous dimensions.

It has been alleged, in evidence before the Commission, that wells in the vicinity of the river have become contaminated by soakage. If this be the case, it is a matter of very great public importance, owing to the annually increasing quantity of water which is drawn from the porous strata which lie beneath the London clay, and over the outcrop of which the polluted estuarine waters of the Thames pass. Under natural conditions, the tendency is for these subterranean waters to overflow into the river; but, owing to the land water-level being reduced by pumping, it is feared that foul river-water may enter these strata and pollute the water-supply. These strata at present yield some of the purest and most wholesome water in the kingdom, the great value of which in the immediate neighbourhood of the metropolis is becoming annually more recognised by water-engineers. It would be a circumstance greatly to be regretted if this water-bearing stratum were destined to irremediable pollution in the manner alleged. Fortunately, however, the evidence on this point is far from conclusive, and there appears to be no immediate cause of alarm.

In their second report, the Commissioners propose to treat of the most efficient remedies for the evils which they have pointed out to exist. We anticipate that this second report will form an even more valuable contribution to sanitary science than the first.

THE ACTION OF THE HEART.

THE short duration of the life of a theory in physiology has passed into a proverb; but when we consider the difficulty in dealing with all vital problems, wonder at this at once vanishes. Theories are suggested from time to time to put together, as it were, in a convenient form, the results of observations, to collect the data which, in an advancing science, accumulate about every important problem. It is not only reasonable, but also almost necessary, that theories should change as knowledge advances; and therefore the changeful character of physiological theories should not be a term of reproach, but rather an indication of the activity of the science. But to be useful, it should be distinctly understood that theories are made for facts, and not facts for theories. If this had been better grasped by former investigators, greater progress would have been made in the understanding of life-problems, and many subjects would not have collected around them masses of elaborate theory, unsupported by sufficient observation. It is, however, cheering that the modern physiologist appears to understand this, and makes accurate observation take the first, and theory the second place.

It is also cheering to observe that, as one theory displaces another, it is, generally speaking, the triumph of the simpler; and that, as one problem is explained in such a way, there is often a possibility of applying to another a similar solution. There have been few questions which have agitated the mind of the physiologist so much as the action of the heart, the relation of one part to another, the influence of the nervous system, and the action of drugs upon it. Few have been worked at with so much energy, and few have produced more apparently conflicting information.

It is to this subject that we propose to direct attention, as it appears pregnant with thoughts which must have as great an interest for the physician as for the physiologist. That a great deal of work is being done on this subject, one need only refer to the recent communication of Professor Roy to the Royal Medical and Chirurgical Society to prove. If more proof were wanting, the current physiological literature, both of the continent, and, we are pleased to add, of our own country, would afford it.

It is a well known fact that, unless under specially favourable conditions, the heart of a warm-blooded animal ceases to beat immediately on, or very soon after, removal from the body; and any extended observations upon the action of this organ have been, up to a comparatively recent date, made almost exclusively upon the hearts of cold-blooded animals, especially upon that of the frog. This animal's heart, when removed from the body, will, even if unsupplied with blood, continue to pulsate for hours, and even days, with apparent little alteration of its beat, provided that it be kept moist with serum or similar fluid, and be not exposed to extremes of heat or cold. The action is rhythmical, commencing at the sinus venosus, spreading over the auricles to the ventricle and bulbus arteriosus; it is, comparatively speaking, slow, and very strongly resembles a vermicular action. If the heart be stimulated by the prick of a blunt needle, or by an induction-current, an extra beat, differing in no degree from the normal, will be called forth; but, by increasing the strength of the stimulus, no extra effect is produced, and a series of rapidly interrupted shocks from a magnetic interrupter will not, as if we had to deal with a simple muscle, produce tetanus. The effect of the stimulus, therefore, is to call forth a peculiar action, and not a simple contraction. The stimulant will excite a mechanism which is either nervous or is inherent to the muscle itself.

The extraordinary effects of dividing up the heart, separating the auricle and ventricle from the sinus and from one another, is also well known, the parts beating in much the same way as the whole; the only difference being that the rhythmical action of the ventricle after section appears to be less easily renewed than that of the auricles, and that of the auricles than that of the sinus. The bisected heart also continues to beat as though whole. The only part of the heart which seems to be unable to take on a rhythmical action is the very apex of the ventricle (it will be seen further on that this is an apparent, not a real difference). In the frog's heart, minute ganglia have been demonstrated, chiefly localised in three situations, viz., at the sino-auricular junction, in the wall of the auricles (interauricular), and in the auriculo-ventricular junction; but in the lower portion of the ventricle towards the apex, no ganglia have been found. A very tempting theory at once would connect the rhythmical power with these ganglia, since, where the ganglia exist, the rhythmical action is the rule, whereas, in their absence, no real rhythm occurs when the part which does not contain them is separated from the rest of the heart; and this theory is the one which, with more or less modification, has been held. Observing the rhythm of the heart to begin at the sinus, it supposed that the ganglia in the sinus were the originators of the rhythm, the ganglia in the interauricular septum and in the auriculo-ventricular grooves taking it on in turns, in subordination to its starting-point, or modifying it in some way. The main interest, then, of these experiments centres upon the relations between the ganglia and the muscle. The beat is evidently automatic, as it will occur in the heart removed from the body, and is not called forth by the stimulus of the blood or similar fluid within the heart-chambers, that is, by simple reflex action, as was formerly taught, since the beat will go on in the absence of such fluid.

As a subordinate question to the relations between the ganglia and the auricle, comes the question of the relations between the sinus-rhythm and that of the rest of the heart. As regards this latter question, it may be said that, as the parts of the heart can beat rhythmically without the sinus, it is unlikely that the sinus produces the rhythm.

But it is as regards the other question, as to whether the rhythm is due to nerve-influence either partially or entirely, that the difficulty arises; and, if due to the action of the ganglia, whether this action be intermittent or constant. Is it motorial or otherwise? The experiments of Eckhard, Foster, and others, which showed that the application of a constant stimulus, electrical or otherwise, will produce a rhythm of contraction in an isolated apex void of ganglion-cells, make it probable that, if the movement be due to nerve-influence, this is constantly in action, but is converted into rhythmical action by the muscle itself, and would give to the heart-muscle a property somewhat similar to that which was called long ago "rhythmical nutrition" by Paget. But Gaskell, in his exhaustive series of experiments, goes further, and supports a myogenic origin of the heart-rhythm. His experiments upon the frog have been controlled and contrasted with similar experiments upon the heart of the tortoise and other animals. He has shown that a strip taken from the very apex of the heart, and kept moist in a chamber, will, if subjected to a stimulus of induction-shocks sent in at regular intervals, after a time take on a spontaneous rhythm, which cannot but be myogenic, as no ganglia exist in the strip; and we could scarcely believe it possible that the movement is due to the presence of nerve-fibres only, for they cannot originate movement. He has further demonstrated that the apparent difference between the action of the sinus, of the auricles, of the ventricles, and of parts of the latter, is one of degree, not of kind. If the one be myogenic, so too, in all probability, is the other, as it is unlikely that the several parts of the heart beat rhythmically according to different systems. The ventricle of the tortoise, if removed from the auricles, remains for a time quiescent, then commences to beat slowly, then more quickly, until it attains its maximum. So, too, for the strip from the ventricle; it remains quiet for a longer time; and then, under stimuli (or without?), will commence to beat, and will go on faster and faster until it reaches a maximum. The same observations are true of the action of the auricles, and of a strip from either auricle; and also of the sinus; the only difference being that there is a gradual lengthening of the period, during which the heart is as it were developing its rhythm in a quiescent state, from the sinus to the ventricular apex. We shall return to the bearing of this theory on the nerve-apparatus of the heart, and to other problems of the cardiac beat, on another occasion.

THE MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

The Medical Sickness, Annuity, and Life-Assurance Society ought to be able to supply a want long felt by the profession of medicine in this country. No profession has in its daily duties more frequent evidence of the evil consequences produced by the want of habits of thriftiness, and by the neglect to make, in early life and during the active years, suitable provision for the eventualities which none can foresee, but which may at any moment overtake any one of us.

The Society has been established on sound economic principles; there is nothing about it of an eleemosynary character, and men who join it incur no liability beyond the annual premium. No prudent man hesitates to insure his life, in order to make a provision for his family; convenient arrangements, however, for providing adequate pay during periods of sickness hitherto have not been at hand. How many promising careers, especially among men engaged in general practice, have been wrecked owing to the inability to tide over a temporary incapacity resulting from some acute illness! An attack of typhoid fever, for instance, contracted by a young man in the discharge of the ordinary duties of his profession, may be followed by a period of debility, which is prolonged, owing to the necessity under which too many men find themselves compelled to resume the practice of their profession long before they have had time to re-establish the health of body and mind which has been shattered by the illness. In a kind of half-healthy state, with a mind which quickly flags and a body that easily wearies, it is impossible for a man to prosecute his profession with the assiduity and contempt for inclement weather or unseasonable hours, that alone can build up or maintain a newly-formed practice. To such an one the liberal sickness-pay of the Society would be a boon indeed; he would not, when struck down, suffer from the depressing influence of the consciousness that his illness meant a complete arrest of all sources of professional income, but he would know that at least the needed immediate assistance was provided; when the period of convalescence came, he would be able to secure complete rest and change of scene, and so return invigorated to his work. The moral support afforded would in itself be of incalculable benefit.

The Society is steadily increasing in numbers; over three hundred members have already joined, and we are confident that, as the advantages of the Society become more extensively known, it will grow into an important and wide-reaching organisation. What the feeling of the profession is, was well shown at a meeting held during the annual meeting of the British Medical Association at Liverpool last summer; the general opinion was strongly in favour of the establishment of this Society. The members of the British Medical Association are already in full possession of the calculations and tables upon which the financial arrangements of the Society are based, and are aware that advice, criticism, and free discussion are invited. We are confident that the more the mode of working the Society is investigated and scrutinised, the more general will be the approval of its methods, and the more numerous the adhesions which it will receive.

We have dwelt especially on the sickness-pay, because we feel that this is, from the point of view of the profession as a profession, the most important element in the Society's work, inasmuch as the consciousness of the fact that the inevitable loss caused by illness has been provided for cannot but tend to give confidence in many an hour of trial; but, from other points of view, the provision for old age afforded by the annuities arranged, as well as the ordinary life-assurances, render the scheme of the Society complete. The ground covered by this latter part of the scheme is equally worthy of attention and commendation; but the necessity of providing for old age, and of insuring one's life, is very much more generally recognised than are the great advantages accruing from a provision against sickness.

The first general meeting will, we understand, be held during the meeting of the British Medical Association this summer, at Belfast. All suggestions made up to that time will receive full consideration from the Provisional Executive Committee, and at that meeting suggested modifications and amplification of the rules will be discussed, and such changes can be made as may by the consulting actuary be deemed prudent or desirable. Members of the profession who are not members of the British Medical Association, and who have not seen the tariffs of the Society, can obtain them by application to the secretary, Mr. Radley, 26, Wynne Road, Brixton, S.W.

A MEETING of the Executive Committee of the General Medical Council will be held on Tuesday next, March 11th.

ROYAL COLLEGE OF SURGEONS.

THE meeting of Fellows and Members of the Royal College of Surgeons which we mentioned in a previous issue as probably to be held on March 27th, has been definitely fixed to take place on Monday, March 24th.

THE ILLNESS OF DR. C. THEODORE WILLIAMS.

THE report in last week's JOURNAL, concerning the illness of Dr. C. Theodore Williams, was delayed in insertion, and referred to the week ending February 15th. Since that date, there has been much improvement; the symptoms of peritonitis having subsided, and, in the last few days (March 3rd), the temperature has become normal. The weakness and loss of flesh are necessarily great, after so long and severe an illness; but the power of taking nourishment is improving, and the nights good, so there is fair prospect of gradual convalescence.

THE ARMY MEDICAL DEPARTMENT IN EGYPT.

WE understand that the Secretary of State for War, in expressing to Lieutenant-General F. Stephenson, C.B., commanding the Army of Occupation in Egypt, his entire satisfaction with the expeditious manner in which the regiments detailed for duty under Major-General Sir G. Graham were despatched from Cairo to Suakim, has accorded special commendation to Surgeon-General J. Irvine, M.D., principal medical officer in Egypt, for his services in this direction.

COMPULSORY NOTIFICATION OF DISEASE.

THE upshot of recent communications between the Council of the Brighton Medical Society and the Mayor being that no alteration in the clauses objected to would now be made by the Town Council, a meeting (intended to be a general meeting of all local practitioners, but to which several were not summoned) took place on Tuesday, March 4th. Mr. Furner was in the chair, and was influentially supported. It was decided to petition Parliament against the clauses, and to send a deputation to Sir Charles Dilke in the same sense. A committee was appointed to carry out these resolutions, and to open a guarantee fund.

THE MEDICAL SOCIETY OF LONDON.

THE annual meeting of the Medical Society of London, held on Monday last, marked the close of a period which has been, for the Society, one of the most eventful since its foundation. Under the presidency of Sir Joseph Fayrer, and through the zealous efforts of its officers, it has been carried through a period of great difficulty and anxiety, and now occupies a position of more prominence than has been its lot for many years. The number of Fellows has recently largely increased, and the interest in its meetings, as shown by the numbers attending, as well as by the importance of the papers and debates, would also seem to be greater than in former years. These meetings have struck us as being commonly somewhat less formal than those of most other London societies; and as thus affording a pleasant meeting-ground, where members of the profession of all ranks might exchange experiences, with a frankness and spontaniety not possible in more ambitious assemblies. The officers and Council elected for the ensuing year were:—*President:* Arthur Edward Durham. *Vice-Presidents:* John Brunton, M.D.; Alfred Cooper; Richard Douglas Powell, M.D.; Sydney Jones. *Treasurer:* Alfred Wiltshire, M.D. *Librarian:* William Henry Allchin, M.B., F.R.S.E. *Honorary Secretaries:* Alfred Pearce Gould, M.S.; James Kingston Fowler, M.D. *Secretary for Foreign Correspondence:* Sir William Mac Cormac, D.Sc. *Council:* Samuel Benton; Thomas Lauder Brunton, M.D., F.R.S.; S. Brudenell Carter; Samuel Cartwright; John Cavafy, M.D.; Henry Radcliffe Crocker, M.D.; John Henry Drew; Sir Joseph Fayrer, K.C.S.I., M.D., F.R.S.; Heneage Gibbes, M.D.; F. De Havilland Hall, M.D.; Jonathan Hutchinson, F.R.S.; Edward Lund; Francis Mason; Edmund Owen; Isambard Owen, M.D.; Arthur Ernest Sansom, M.D.; Charles Brodie Sewell, M.D.; Thomas Gilbart-Smith, M.D.; William Heath Strange, M.D.; William Henry White, M.D.

WESTON'S WALK.

ON February 27th, Weston was on the track at the People's Hall in Bath for ten hours and five minutes at a stretch, during which time he covered 40 miles. Next day, Weston, in very wet weather and over very heavy roads, walked to Salisbury (41 miles), accompanied all the way by three young amateurs. On Friday he journeyed to Southampton on a bright and frosty day, and exhibited no drowsiness, his first halt being at the end of 15 miles, for coffee, when he stopped only for a few seconds. On Saturday, he walked at the Victoria Skating

Rink, Southampton, from 7 A.M. till 5 P.M., doing 38 miles in that space of time. He dined while on the track, and afterwards retired for an hour and a half's sleep before finishing the remaining 12 miles, which he did by half past 9 P.M. On Monday, Weston spent the day at Southampton, but at the Philharmonic Hall. He again walked 38 miles without a rest, walking steadily and well throughout. On Tuesday, soon after 6.30 A.M., in blinding rain, Weston set out from Southampton, when he completed 4,500 miles at half past 9 P.M. On this day, with the exception of two minutes' halt for coffee after doing 13 miles, the pedestrian did not retire till he had accomplished 30 miles. He has, with these long stretches, been preparing himself for his intended marvellous intention, considering the work already done, of walking from Brighton to London, 53 miles, without a rest, leaving at 3 A.M., and reaching the Victoria Coffee Hall at about 5 P.M. to-day (Saturday). At his lecture to-night, Dr. Alfred Carpenter is to preside, Surgeon-General Francis on Tuesday night, Dr. B. W. Richardson on Thursday night, and Dr. Norman Kerr, on the close of the whole walk, on Saturday week. During Weston's week of walking at the Victoria, the British Medical Temperance Association have arranged to have him under close observation, and they have retained a qualified observer to reside on the premises for this purpose. Records of permanent value may, therefore, be looked for.

ENTERIC FEVER AT THE ROYAL FREE HOSPITAL.

ENTERIC fever has recently been rife amongst the nursing staff of the Royal Free Hospital, no less than seven nurses having contracted the disease during the latter part of the year. All of these had been engaged in nursing typhoid cases, and this fact has brought into prominence an important, though we are inclined to think, a somewhat neglected factor in the etiology of the disease: we refer to the recent stools of enteric fever patients. There are probably few who will not admit the contagiousness of the disease, but probably equally few hold that the specific product is contained in the recent stool. The decomposing excreta are no doubt a source of infection, but the latter view will scarcely apply to the instances under discussion, for, presuming that the excreta be immediately removed and got rid of, and that any soiled bed or body-linen be at once changed, those who are in immediate and habitual contact with the typhoid sick should enjoy equal immunity with others, at any rate in so far as the decomposition-theory is concerned. It is true that, in some fever hospitals, there are but few recorded instances of nurses having contracted enteric fever, but this is in all probability due to the fact that they have already suffered, and are thus virtually protected, or that they are of such an age as to be less susceptible. Provided then that the attendants upon the typhoid patient be seasoned, that instant removal and prompt destruction of excreta be enjoined, that all soiled linen be at once changed, and that means be taken to ensure thorough and efficient ventilation, the enteric fever patient becomes comparatively harmless, and we can see no reason why, under such circumstances, he should not be admitted to the wards of a hospital.

A SANITARY ASSOCIATION IN HULL.

A MEETING was held last month in Hull which may have an important part in bringing about an improvement in the health of that historic borough, which has, as is well known, greatly increased in recent times in size and importance. The meeting was convened by Canon McCormick, and after Mr. R. H. B. Nicholson had dwelt on the necessity of further popular education in sanitary matters, and Dr. Macmillan had suggested the formation of a Sanitary Association, Dr. Lunn gave an account of a similar society which had been formed by the medical men of Hull thirty years ago. A resolution, moved by Mr. R. H. B. Nicholson, "That a course of lectures be delivered on sanitary matters in different parts of the town," was carried unanimously, and the following resolution proposed by Dr. Macmillan was also carried, "That, in order to carry out effectually Mr. Nicholson's resolution, a sanitary association be formed, consisting of the clergy and ministers of all denominations and members of the medical profession, and representatives of each church and chapel, with power to add to their number, and to adopt such measures as they may think necessary to promote the sanitary condition of the town." This is to attack the difficulty from the right direction; it is hopeless to try to help people unless they will help themselves, and the poorer inhabitants of our large towns must learn the advantages of healthy surroundings and healthy habits before their co-operation in sanitary work can be assured. We may warmly congratulate the town of Hull upon possessing among its citizens such public sprited men as those members of our profession who have taken so large a part in the inauguration of this good work.

THE UNSANITARY STATE OF THE RIVIERA.

THE impossibility of maintaining, much more of restoring, health without strict attention to sanitary laws, is now so widely recognised in this country, especially by the class who frequent the Riviera, that if it once came to be generally believed that the authorities of Cannes were careless about such matters, the days of its prosperity, in so far at least as it depends upon English visitors, would be numbered. In one of his recent "Letters from the Riviera," published in this JOURNAL, Mr. Ernest Hart has described with just indignation the "gross irregularities and cruel offences against health and decency," which are permitted to go on with impunity at Cannes. He instanced, in particular, a gross case where the cesspool of a large hotel was periodically emptied into a rivulet which traverses one of those ravines which ought to be, and would be if the defiling hand of man were stayed, one of the chief attractions of the town. We are glad to learn, from the letter published in another column, that this particular piece of atrocity has been put a stop to, owing to the publicity given to the circumstance by Mr. Ernest Hart's letter. The Mayor has used his influence to have the communication between the cesspool of the hotel and the rivulet closed. It is, however, evident that much more must be done if Cannes is to continue to be a health-resort. There is no real drainage in many parts of the town. Captain Douglas Galton made many excellent suggestions, and drew up a complete scheme for the drainage of the whole town. This scheme has not yet been carried out; and, meanwhile, the absence of control or system would seem to be so complete that big hotels are allowed to conduct all their sewage into large cesspools, and empty their cesspools into their neighbours' gardens. We believe that a feeling against the wisdom of sending patients to Cannes and some other towns on the Riviera will soon manifest itself among the profession in England, unless the authorities of these towns seriously set about substituting for their present barbarous arrangements others more in accordance with sanitary laws and ordinary common sense.

THE METROPOLIS WATER BILL.

THE Metropolis Water Bill is being actively promoted by the Corporation of London. The terms of the Bill provide that any consumer may demand the supply of water by meter instead of by rate. The Bill is strenuously opposed by the water-companies, who consider that it would greatly injure their interests; although it appears that if the amount of water now alleged to be used were charged for according to the terms of the Bill, the revenues of the water-companies would be actually increased. It is proposed that where the quantity of water supplied in any quarter does not exceed six thousand gallons, the charge shall be three shillings per quarter, whilst where the quantity supplied exceeds this amount, the charge shall be sixpence for each additional thousand or fraction thereof. The persons who will reap the greatest advantage from this measure are those owning large city premises where but little water is used and yet where, under the existing arrangement, heavy water-rates have to be paid. There can be no doubt that an immense quantity of water is at present wasted, and as the Bill will encourage the economical use of water throughout the metropolis, there is every reason to believe that, if this economy be not carried to excess, the public generally will benefit by the change.

THE AGITATION AGAINST COMPULSORY HOME-LESSONS.

FOLLOWING up the great meeting in Bradford, which was attended by 3,000 persons, on the subject of compulsory home-lessons in elementary schools, a deputation from the medical practitioners of the town waited upon the School Board on February 27th. At the public meeting a resolution had been passed that, in the opinion of those present, home-lessons ought not to be compulsory on children under 10 years of age. This resolution was accepted with so much enthusiasm by the meeting, and the platform contained so many medical men, including Dr. Allbutt, Mr. Pridgin Teale, Dr. Goyder, Dr. Rabagliati, and others, that it was thought by some that a medical memorial on the question could easily be obtained, which would much strengthen the hands of those who believed that the pressure of education in Board-schools was in many cases too severe. Accordingly, a petition to the School Board was drawn up, setting forth that "the undersigned, believing that evening brain-work is undesirable and often injurious to young children, earnestly pray the Board to give effect to the resolution come to at the public meeting, that home-lessons ought not to be compulsory in the case of children under 10 years of age." This petition was signed by fifty-three out of the seventy practitioners in the borough, and Drs. R. G. Alexander and Rabagliati attended to present it at the last meeting of the School Board. Dr. Alexander said that as he had recently had to attend some cases of head-mischief due to educational over-pressure, and among them a fatal case in the child of a school-teacher, and as, besides, he found the names of so very many of his colleagues appended to the memorial, he felt impelled to sign it. Dr. Rabagliati drew attention to the fact that, in the last ten years, deaths from hydrocephalus at the ages of 5 to 25 years—that is at school-ages, and the ages just beyond—had very much increased. Comparing deaths at those ages in 1880 with those from the same cause in 1870, the latter period showed an increase of no less than 20 per cent. This, he believed, must, at least in part, be attributed to educational over-pressure. He also pointed out that the mortality from cephalitis had increased in the same period by very nearly 50 per cent.; and while he did not think this could be attributed to educational pressure, he begged the members of the Board to beware lest, by their action, an additional impetus might be given to causes which already were powerfully increasing the mortality from nervous disorders. After some questions had been asked by members of the Board the deputation withdrew, the memorial having been referred to the School-Management Committee for further consideration. In Bradford, opinion both lay and medical is much exercised on this question, and the legality of compulsory home-lessons is being raised in the case of Regina *v.* Watson and others. The whole country will be interested in the decision, the general question being so important both in its medical and legal aspects.

SMALL-POX IN BIRMINGHAM.

THIS epidemic, which, since Christmas, has given cause for much anxiety, has not yet terminated, but is greatly abated. Last week's report shows a smaller number than at any time during the present year. With the advent of fine weather, which we do not seem likely to get just yet, it is hoped the disease will disappear. During the four weeks ending February 9th, 16th, 23rd, and March 1st, the number of cases reported and admitted to hospital have been respectively 27, 29, 35, and 14. In the first week, one reported case was not admitted into hospital. The deaths, during the same weeks, have been 9, 2, 2, and 3.

THE ROYAL COMMISSION ON THE DWELLINGS OF THE POOR.

THE *London Gazette* of March 4th contained the expected notification of the appointment of the Royal Commission of Inquiry into the Housing of the Poor. The warrant, which is dated Whitehall, March 4th, says that, in compliance with the address presented by the House of Lords, praying for the issue of a Royal Commission, Her Majesty has nominated, constituted, and appointed Sir Charles Dilke, M.P., chairman of the Commission, together with the Prince of Wales; Cardinal Archbishop Manning; the Marquis of Salisbury; Earl Brownlow; Baron Carrington; Mr. G. J. Goschen, M.P.; Sir Richard A. Cross, M.P.; the Bishop Suffragan of Bedford; the Hon. E. Lyulph Stanley, M.P.; Mr. W. M'Cullagh Torrens, M.P.; Mr. Henry Broadhurst, M.P.; Mr. Jesse Collings, M.P.; Mr. George Godwin; and Mr. Samuel Morley, M.P., to be the commissioners to inquire into the housing of the working classes. The commissioners, or any five of them, are authorised and empowered to call before them all "such persons as you may judge most competent, by reason of their situation, knowledge, or experience, to afford you correct information on the subject of this our Commission, and also to call for, have access to, and examine all such books, documents, registers, and records as may afford you the fullest information on the subject, and to require of and concerning the premises by all other lawful ways and means whatsoever." They are also further authorised to visit and personally inspect any such places in the United Kingdom as they may deem expedient for the more effectual carrying out of the objects of the Commission, and to report from time to time prior to the issue of their final report upon the matters submitted for their consideration. Mr. J. E. C. Bodley, barrister-at-law, is appointed the Secretary of the Commission.

EDUCATIONAL OVER-PRESSURE.

ON March 4th, about fifty members of Parliament met to discuss the subject of over-pressure in education, and among those present were Professor Thorold Rogers, M.P. (who presided), Earl Percy, Sir J. Kennaway, Lord Emlyn, Mr. Thomas Shaw, Mr. W. Rathbone, Sir Trevor Lawrence, Lord A. Percy, Sir C. Mills, Baron de Ferrieres, Sir R. Buxton, Mr. Buxton, Dr. Farquharson, Messrs. E. L. Stanley, T. D. Acland, Broadhurst, Torrens, Collings, and Hopwood. In the course of the conference, a small deputation from the National Union of Elementary Teachers suggested certain alterations in the Education Code, as a practical means of affording some relief from the existing over-pressure, and of improving the classification and education of scholars. They suggested that the department should be asked to allow the managers at their discretion to withhold from examination in elementary subjects not more than ten per cent. of the qualified scholars. Considerable discussion took place, in the course of which there was an almost general expression of opinion among the members in favour of the objects of the deputation, concerning which many questions were asked and information given. At the close of the conference, it was explained that the object of the deputation was not to join in the cry against what was called over-education, but to seek such relaxation and elasticity of the school-system as to give full course to the varying capabilities of different children.

THE HOSPITALS ASSOCIATION.

THE first Council of the Association has been constituted as follows:—*Vice-Presidents*: The Right Hon. Lord Aberdare, F.R.S., Hospital for Sick Children; Sir T. Fowell Buxton, Bart., London Hospital; Sir Andrew Clark, Bart., LL.D., M.D., London Hospital and East London Hospital for Children; Major Ross, M.P., Middlesex Hospital. *Council:* The Right Hon. the Earl of Cork and Orrery, K.P., St. George's Hospital; Viscount Powerscourt, K.P., Ireland; Sir Rutherford Alcock, K.C.B., Westminster Hospital and Hospital for Women; H. W. Acland, M.D., C.B., D.C.L., F.R.S., Oxford University; William Bousfield, Esq., King's College Hospital; J. S. Bristowe, M.D., F.R.S., St. Thomas's Hospital; Henry C. Burdett, Esq., Seamen's Hospital and Home Hospitals Association; J. H. Buxton, Esq., London Hospital; M. D. Chalmers, Esq., London Fever Hospital; the Rev. Canon Erskine Clarke, M.A., Bolingbroke House Pay Hospital; Frederick Cox, Esq., Chelsea Hospital for Women and British Lying-in Hospital; W. H. Cross, Esq., St. Bartholomew's Hospital; H. N. Custance, Esq., Metropolitan Hospital Sunday Fund; R. Farquharson, M.D., M.P., Scotland; Timothy Holmes, Esq., St. George's Hospital and Provident Dispensaries; R. Benson Jowitt, Esq., General Infirmary, Leeds; G. B. Lloyd, Esq., General Hospital, Birmingham; R. H. Lloyd, M.D., Lambeth Infirmary; Charles Macnamara, Esq., Westminster Hospital; Malcolm Morris, Esq., St. Mary's Hospital; C. Murdoch, Esq., Great Northern Central Hospital; William J. Nixon, Esq., House Governor, London Hospital; Richard Quain, M.D., F.R.S., Consumption Hospital, Brompton; T. Gilbart-Smith, M.D., London Hospital and Royal Hospital for Diseases of the Chest; Joseph White, Esq., General Hospital, Nottingham. It is proposed that the evening meetings of the Association shall be held on the third Wednesday in the month. The first, however, will take place on March 26th, when a paper will be read by Mr. William J. Nixon, House Governor of the London Hospital, on "Difficulties associated with the Administration of the Out-patient Department, and how best to deal with them." The meetings will probably be held at the rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, the chair being taken at 8 P.M. Persons desirous of being present at the evening meetings, or of becoming members or associates, are requested to communicate with the Secretary, Mr. J. L. Clifford-Smith, at the office, No. 1, Adam Street, Adelphi, who will gladly forward the necessary forms of application.

THE DALRYMPLE HOME FOR INEBRIATES.

THE record of a complete quarter's working of this institution, opened on the 29th of October last, is now available, and discloses a very encouraging prospect of future success. During the quarter, there were seventeen admissions, nine of which were under the Habitual Drunkards Act, and eight privately. Of the former, four dipsomaniacs each surrendered his liberty for twelve months, the full period allowed by the Act; one for nine months, and four for three months. All were strongly recommended to enter for the full term, and would have done so but for unavoidable pecuniary or business hindrances. The staff are wise in endeavouring to secure the retention of the patients for as long a period as possible. There was only one discharge—that of a gentleman who was suffering from phthisis, who was discharged by the Home Secretary, and ultimately died. During his residence at the home, his dipsomaniac habits were completely abandoned. It is remarkable that in no case has there been any trouble on the score of drinking—a satisfactory state of matters, mainly attributable to the variety of occupation within the home and its grounds, and to the judicious treatment of the medical superintendent, Mr. Joseph Smith. The patients included a young gentleman from the South of France, a solicitor, two civil servants, an underwriter, several graduates of Cambridge, and a surveyor. The committee are appealing for funds to establish a home for females, as well as for additional accommodation for males at the existing Retreat at Rickmansworth. A gratifying feature has been the hearty co-operation of the resident magistrates, clergy, and medical practitioners.

MORE POISONINGS.

CLOSELY following upon the Liverpool poisoning cases, two other cases are reported. A Mrs. Lefly has been committed to take her trial at the Lincoln Assizes on the charge of poisoning her husband by arsenic. Mrs. Lefly prepared her husband a rice-pudding before she went to market, leaving him to bake it. Previously in good health, the unfortunate man died in seven hours after partaking of the pudding, which was found by Dr. Stevenson to contain a large quantity of white arsenic. The man told Mr. Fraskally, who attended him, that he had been poisoned by his wife. At Knutsford, a Mrs. Wilkinson is charged with attempting to poison her son and daughter-in-law, on on whose lives she had effected insurances, by means of oxalic acid. The poison was attempted, it is alleged, to be administered in some tea, which was found by Mr. Bell, the county analyst, to consist of equal parts of oxalic acid and liquid. The peculiar appearance of the tea was noticed, and none of it was taken.

ATTEMPT TO BRIBE A MEDICAL MAN TO MURDER.

SYDNEY CLAY, a tobacconist of Holloway Road, who was recently charged with attempting to bribe Mr. De Gruyther, a medical practitioner, to poison the illegitimate child of the said Clay, as stated in the JOURNAL of February 2nd, p. 232, has been found guilty, and sentenced to six months' imprisonment with hard labour.

THE LONDON HOSPITAL.

IT is melancholy news to hear that the London Hospital is again in great financial straits; an immediate deficit of £15,000 a year, or about one-third of the total expenditure, has to be faced. Unless this sum can be raised, part of the hospital must be closed; and, as it is always full, this would be a real calamity.

A MELANCHOLY MISTAKE.

A DEATH recently occurred at the Gloucester Infirmary under very unfortunate circumstances. One of the physicians while making his rounds, ordered a woman suffering from bronchitis a sleeping draught, containing a drachm of the syrup of chloral. The pupil to whom the prescription was dictated, not being aware of the difference between the syrup and chloral itself, wrote down a drachm of chloral. This dose was unfortunately administered, and the patient died within an hour. The physician, Dr. Washbourne, frankly took much of the blame on his own shoulders, by stating at the inquest that he ought to have overlooked the prescription; we cannot help thinking that the dispenser was far more blameworthy, inasmuch as he ought to have known that a drachm of chloral-hydrate was an exceedingly unusual dose; to say the least, to take night after night. The jury appended a rider to their verdict, to the effect "that the system disclosed by this inquiry as existing at the infirmary, with reference to the dictating of prescriptions without any signature of any responsible medical officer being appended, is a very dangerous one, and one which should be remedied forthwith. And we also consider that in cases of special prescriptions there should be some communication between the house-surgeon and the dispenser on the subject."

THE TRANSMISSIBILITY OF HYDROPHOBIA FROM MAN TO MAN.

IN December it was stated, in the *Gazzetta degli Ospitali*, that Dr. J. Huszar, of Pesth, whilst dissecting the body of a man that died of hydrophobia, slightly cut his finger. Within a few days hydrophobia appeared, and quickly proved fatal. In reference to this case Professor Lussana, of Padua, writes somewhat at length, remarking that if it be true it is of the gravest importance. It had, he says, been looked upon as a settled point that the disease was not by any means whatever transmissible from man to man, though it has occasionally been communicated from man to some species of the lower animals, especially dogs. The experience of various surgeons, from the time of Andry in 1780, is then brought forward to show that wounds received in dissecting bodies of persons dead of hydrophobia were never followed by the disease. Cases in which such infection is alleged to have taken place are examined and found to be equivocal. It may be mentioned that Drs. Brigidi and A. Bianchi, out of more than a dozen attempts (*Lo Sperimentale*, August, 1883) to communicate hydrophobia from the human subject to the lower animals, succeeded only once. Though many of the other cases proved fatal, neither the symptoms nor the *post mortem* appearances could properly be regarded as belonging to the disease in question, and septicæmia was held to be the cause of death.

SUDDEN DEATH FROM "INFLAMMATION."

AN inquest was held recently at Wednesbury, touching the death of a boy aged 12, who went to school one morning apparently in his usual health; when, leaving school at noon, he complained of a violent pain in his stomach, and died a quarter of an hour later. The coroner, Mr. Edwin Hooper, who is a lawyer, is reported by the *Birmingham Daily Gazette*, to have "remarked that there was no doubt death had been caused by a severe attack of inflammation;" and the jury, apparently accepting this oracular utterance as a satisfactory explanation, did not "consider a *post mortem* examination necessary, but returned the verdict, 'Died from natural causes.'" "But is this law? Ay, marry, is't; crowner's quest law." Even three hundred years ago, the conduct of coroners and their interpretation of their duties seemed to the great poet to be in some cases deserving of satire. The verdict in the case at Wednesbury may have been in accordance with the weight of evidence; but, in the absence of any *post mortem* examination, or apparently of any medical evidence, its weight cannot have been great. It is, at least, very unusual for school-boys to die of inflammation in a quarter of an hour. Inflammation of what? Granting that it was inflammation, by what was it caused? An inquest on a death following on sudden illness where a decision is arrived at without medical evidence, strikes most impartial people as singularly futile.

SANITARY REFORM IN EGYPT.

It is reported that there has been no case of cholera in Egypt since December 26th. This is good news, if true, and speaks well for the success of the sanitary reforms inaugurated by the new *régime*. Mr. Clifford Lloyd sums up the reforms in the administration by stating that the police and prison systems have been thoroughly reorganised, and the new administrations put in full working order. A Sanitary Bill for all Egypt and a Municipal Bill for its chief seaport have also been framed, and are about to be put in execution. Much, however, yet remains to be done, and many years of vigorous government will be required before the country can be rendered safe from a recurrence of cholera in epidemic form. As the Conseil de Santé et d'Hygiène Publique has been replaced by a "Directorate Sanitaire," it seems doubtful whether the report which the former body had almost completed will ever see the light. It has now become the duty of the new "Directorate" to report, and it may be questioned whether they will think fit to complete and publish a report drawn up by an older, and to a certain extent rival, body. We understand that Sir William Hunter's memorandum presented to Earl Granville, on the sanitary state of Alexandria, recommends the adoption of the scheme of Mr. Cornish, the Director of the Waterworks. At present, the sanitary arrangements of the town are very defective, the houses are in direct communication with the sewers or cesspools, public latrines are few in number and in a filthy condition, and the soil in many districts is infiltrated with sewage. The only parts of the town provided with sewers are the districts inhabited by Europeans; but these sewers are defective, and open, by a number of separate channels, on to the shore of the bay. The proposal is to construct an intercepting sewer along the shore, and to carry it out to the promontory occupied by Fort Ada, and there pump it into the sea at a depth of seven feet below the surface. The construction of this intercepting sewer is considered to be a matter of primary importance; but it is pointed out that, before undertaking the work, it would be necessary to determine whether a current set in from Fort Ada towards the shore; in that case, the scheme would probably have to be abandoned. The quality of the water supplied by the waterworks outside the Rosetta Gate is described as good; but that supplied by the Ramleh Waterworks is not suitable for drinking.

A SUGGESTIVE RESULT.

A LINE of research carefully carried out often leads to results of far greater importance than would at first seem probable. A good instance of this truth is afforded by the history of the investigation of the active principle of jequirity. As is well known, an infusion of the seeds of jequirity, a leguminous plant, a native of Brazil, has been recently somewhat extensively used as a remedy for granular lids. The infusion made as directed quickly swarms with a bacillus and its spores, and De Wecker, of Paris, attributed the peculiar acute inflammation excited in the conjunctiva by the introduction of a few drops of the infusion, and by which trachoma was cured, to the action of these bacilli. This explanation, so fascinating at the present moment when the "germ-theory" is everywhere predominant, has failed to stand the test of exact experiment. Dr. E. Klein, has recently made an investigation into the subject, and he finds that the bacillus of jequirity is itself quite incapable of producing ophthalmia, and that the active principle of the drug has nothing to do with the bacillus; further, the pus from a case of ophthalmia produced by jequirity contains no trace of the bacillus. Dr. Klein finds that, though jequirity-infusion can be rendered incapable of inducing ophthalmia by boiling for a very short time, yet the infusion is not sterilised by this short boiling, as had been supposed by Sattler; on the contrary, if kept in the incubator, it shortly swarms with the bacillus and its spores; the bacillus, transferred to peptone solution, or to jequirity-infusion sterilised by boiling for half an hour, can be cultivated, the fluids named soon swarming with the bacillus, but they have no power of producing ophthalmia. The active principle of jequirity is therefore something more delicate than a bacillus, something which is destroyed by being boiled for a time too short to effect the destruction of the bacillus, or at least of its spores, and yet a something which does not exist in the infusion until a certain time after it is made. This something seems most probably to be a principle resembling, to some extent, in its vital properties the pepsine ferment. The importance of this result need hardly be insisted on; it was so natural to assume that the bacilli provided the active element in this case, that the disproof of their importance cannot fail to strengthen the hands of those who do not give unquestioning belief to every discovery of a pathogenic organism. It is very easy to find organisms in any disease, if the proper methods of preparation be observed. The history of the jequirity-bacillus ought to teach us that it is very much more difficult, and far more important, to establish that there is any connection between the organism and the disease.

IRREGULAR ASTIGMATISM CAUSED BY PROLONGED INHALATIONS OF CHLOROFORM.

M. DUBOIS has recently made a communication on this subject at the Paris Société de Biologie. He had observed that the ophthalmoscopic observation of the eye is sometimes impossible in dogs put under the influence of chloroform, because of the distortion of the image. On examining the cornea with the astigmoscope, he found that this deformation was caused by a considerable degree of irregular astigmatism. The same effect was produced in a man anæsthetised by M. Bert's new method. In some of the dogs experimented upon, the tension of the globe was much reduced, and there was also a diminution of the refraction. All these phenomena disappeared when the effects of the chloroform had passed off. The most reasonable explanation of such phenomena, accepting them as facts, must lie in the condition of the corneal lymph-spaces. These, in some diseases, are so distended by œdema as to render the cornea more or less opaque, as in glaucoma. It is reasonable to suppose that any agent diminishing the tension of the eye, will cause an onflow from these spaces into the aqueous chamber, and so diminish the refractive power of the cornea. This last change is intelligible, as the refractive index of the fluid in the lymph-spaces is less than that of the corneal tissue proper.

THE LATE MR. JAMES SHUTER.

AT a meeting of the subscribers and other friends interested in the Shuter Memorial, recently held at St. Bartholomew's Hospital, Mr. C. Hanbury presiding, various suggestions were received and discussed as to the form that the memorial should take. It was ultimately decided that the sum of money forthcoming should be expended in the purchase and erection of a memorial tablet to the late Mr. Shuter in the chapel of the hospital, and in the purchase of books for the hospital library. This appears to be an excellent arrangement whereby the memory of the deceased will be made useful, as was his professional life. The books will be selected by persons appointed by the executive committee of the fund, subject to the approval of th general body of subscribers and of the Hospital Library Committee; they will be kept together in one collection, to be called "The Shuter Memorial Library." Intending subscribers are requested to communicate with the secretaries, Messrs. W. Bruce Clarke, 46, Harley Street, and Alfred C. Fletcher, 12a Charterhouse Square, E.C. A collection of valuable works like Schmidt's *Jahrbücher* would be of great value to members of the hospital staff, dressers, and clinical clerks, who may be engaged in clinical and pathological studies of special subjects or rare diseases on a large scale, for proximity to such works greatly lightens labour and economises time. Everything that tends to make local medical libraries complete, in these days, is to be commended; nor is such an aim difficult to attain, since most works required for study of this kind are modern, or rather are constantly in actual course of publication, and there is no necessity for laying out large sums of money for the purchase of bibliographical curiosities of bygone professional literature. These venerable relics of Paré, Wiseman, and Harvey, can be sought, when required, at certain well known central libraries, such as those belonging to the Royal College of Surgeons and the Royal Medical and Chirurgical Society; but if works of the former class, constantly in request, are only to be found at these libraries, they tend to become inconveniently crowded, and readers constantly find that what they require is already in other hands; besides, repeated journeys from hospitals to Lincoln's Inn Fields and Berners Street soon become irksome. Hence books of the day and periodicals are greatly needed in the libraries attached to medical schools, and a more consistent manner of perpetuating the memory of Mr. Shuter, one of whose chief aims in life was to be of service to the students of St. Bartholomew's Hospital, could hardly have been devised, than that which has been adopted by the memorial fund.

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SCOTLAND.

A SEVERE snowstorm prevailed over Scotland at the beginning of the week, the fall in some places amounting to as much as twelve inches.

ABERDEEN UNIVERSITY MUSICAL SOCIETY.

THE annual concert took place on February 29th, and was in every respect a decided success. The students deserve the greatest credit for the admirable manner in which they acquitted themselves, both in the vocal and in the instrumental parts. This year a new departure has been made, viz., the formation of an orchestra. The orchestra was composed entirely of students, and it acquitted itself most creditably.

ABERDEEN STUDENTS' RECREATION GROUNDS.

THE students of Aberdeen have, with the sanction of the senatus, issued an appeal to the public for subscriptions to enable them to acquire space for recreation grounds. We hope they will carry through their project. An appeal is to be made to the graduates to support the movement. The senatus had certain moneys bequeathed to it, about £300, which they propose to hand over for this purpose.

THE PROPOSED STUDENTS' UNION IN EDINBURGH.

ACTIVE measures have now been taken to inaugurate the important movement for a students' union in Edinburgh. A large enthusiastic and thoroughly representative meeting was held last Saturday, and was presided over by Dr. Orme Masson. Resolutions were carried in favour of the proposed union, and it was stated that the promoters had already got a sketch-plan and estimate for the building proposed to be erected; the estimate, so far as could be made out thus early, showed that a sum of £12,000 would be necessary. Arrangements have been made for collecting as much as possible towards this large sum among present professors and students, and former students, graduates, and friends. It is hoped that at least £1,000 will be subscribed by present students, and we have already heard of one professor who has intimated a donation of £100. Acting committees have been provided for Edinburgh, Oxford, and Cambridge, and it is earnestly hoped that all former students of Edinburgh University will generously aid in providing for the future generations of students those comforts and kindly influences to be found in such an institution, the more so that they themselves must have regretted, both during their curriculum and since, the absence of such an institution.

ABERDEEN SICK CHILDREN'S HOSPITAL.

THE annual meeting of those interested in this institution was held last week. The balance-sheet was satisfactory, the income having exceeded the expenditure. It is proposed to erect an addition to the present building, at some distance from it, for infectious diseases. The proceeds of the bazaar, which was opened by H.R.H. Princess Beatrice last autumn, amounting to about £2,000, and other sums, are available for this purpose. The history of this institution has been one of continued prosperity and usefulness.

THE SURGICAL TREATMENT OF RENAL CALCULUS.

THE operation of nephrotomy was performed on February 27th at the Western Infirmary, Glasgow, by Dr. Paterson, one of the surgeons to the hospital. The patient was a young woman, aged 28, who had suffered for some years from symptoms of renal calculus. On cutting down to the left kidney, some ounces of pus were evacuated, and a stone, weighing one drachm, was removed from the interior of the organ. So far, the result of the operation is all that could be desired. We hope that the case will eventually be published in detail, as now that surgical treatment of renal stone is coming more prominently into notice at the present time, it is of importance to have as full and correct details of cases as possible.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

DURING the last month there has been held a special series of weekly meetings of this Society for the discussion of albuminuria, its pathology and clinical significance. The previous meetings have been largely attended, and addresses have been delivered by a considerable number of prominent members of the profession, abstracts of which have, from time to time, appeared in our pages. The discussion will be brought to a close on the evening of Tuesday, the 11th instant, in the Faculty Hall, at 8 o'clock. All medical men are invited to be present.

GLASGOW SANITARY ASSOCIATION.

IT is only eighteen months ago that we notified the formation of this Association, and we are glad to see from its second report that it has just completed another year of very useful work: Of the 217 houses examined by the officials of the Association for the first time, 97 were found to have actual leakages in the pipes, admitting of the escape of sewage, while, in most of the others, various defects were discovered permitting of the access of gas to the interior of the houses. A number of cases of illness were sufficiently accounted for by the condition of the drains. The membership of the Association at present numbers 226, but in another year we would hope to see it largely increased, for it places at the disposal of the community a reliable and inexpensive way of carrying out that annual inspection of the drainage system of their houses, which experience has shown to be absolutely necessary for the health of the inmates.

THE HEATING OF RAILWAY-CARRIAGES.

So much illness is directly traceable to chills and colds contracted during railway-travelling in this very changeable and trying climate of ours, and so little has as yet been done by our railway-companies to introduce a better method of heating the carriages, that we are glad to see the matter is attracting some attention at the hands of the Caledonian Railway Company, and some considerable progress has been made in supplying this long felt want. The idea is to utilise the exhaust steam from the engine, which at present passes into the atmosphere through the funnel, and to carry it into pipes which pass underneath the frame of the carriage, and are then led through the floor of the carriage to coils placed beneath the seat in each compartment. The connection between the carriages is by means of flexible tubes, such as those used in the continuous air-brake, and thus the heat is carried throughout the whole train. In the case of a trial recently made with a train leaving Glasgow for one of the adjoining towns, very satisfactory results were obtained; and we hope that, when means are forthcoming for better regulating the heat, we shall see this system generally adopted, as it will be a great boon to the travelling public.

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IRELAND.

The Belfast Royal Hospital has received a sum of £20 16s. 6d., being the proceeds of a football-match played by the Northern Branch of the Irish Rugby Football Union.

POISONED BY MISTAKE.

A labourer, named Mannox, recently met with an accident, and last week, by some mistake, the medicine which was to have been applied as a liniment was administered internally. Symptoms of poisoning came on immediately, and he was admitted into Barrington's Hospital, where he died shortly afterwards.

FEVER AT WEXFORD.

A good deal of fever prevails in and about Wexford, and, at a recent meeting of the guardians, Dr. Pigott reported that he believed the disease, which existed to a great extent in his district, to have been contracted by persons attending wakes.

LISTOWEL WORKHOUSE.

At a meeting of the Listowel Board of Guardians last week, a letter was received from the Local Government Board regarding the appointment of Dr. Dillon as medical officer to the workhouse. The Local Government Board refused on two several occasions to sanction the appointment, for reasons already referred to in these pages; but the guardians, in despite of this, again elected Dr. Dillon. The Local Government Board have now enclosed a sealed order dismissing Dr. Dillon from the office in question, and have directed the guardians to proceed to a new election, stating that, if they refused, the Board would appoint a medical officer themselves.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND, AND MEDICAL REFORM.

The Royal College of Surgeons in Ireland seems resolved to gain for itself a remarkable notoriety, in its opposition to medical reform on the lines of the Medical Act Amendment Bill of last session. A deputation of the Council, consisting, with the exception of officials, of five members chosen especially out of the entire body, on account of the views they held, waited upon the Lord Lieutenant on Monday last to present the resolutions passed at the late sparsely attended meeting of the Fellows (British Medical Journal, February 23rd, p. 383). Dr. Kidd, who has acted as the persistent advocate of this anti-reform movement, and whose personal influence has infused into it any of the vigour it possesses, was of course the spokesman of this deputation, and reiterated to His Excellency the views which he is well known to hold. As might have been, and in fact was, anticipated, the deputation did not get much sympathy from the Lord Lieutenant. His Excellency politely told them, in substance, that he disagreed with the views they expressed, but had nothing to say to the matter; that it was Lord Carlingford who had charge of the Bill, to which he and the Government both attached great importance; and that he, the Lord Lieutenant, would give them no encouragement to think that the Bill would be withdrawn. We give an abstract of the proceedings in another column.

COUNTY KERRY INFIRMARY.

The Lord Chief Justice has delivered judgment in a case which was recently argued on cause shown by Dr. Neligan, against making absolute a conditional order for a *quo warranto* directing Dr. Neligan to show by what authority he claimed to be a surgeon of the infirmary of the County Kerry. The question arose on the construction of two statutes, the fifth of George III, which provided that "every person who subscribed and paid three guineas should be a member for one year, from June 24th next following the payment of such subscription, of the Board of Governors of the hospital; and that, in case of a vacancy occurring in the office of physician to the infirmary, the Board should, in the manner provided, fill the vacancy; and that the governors (five forming a quorum) should, at any general quarterly meeting, have power to elect or remove a physician or surgeon." The 54th of George III further enacts, "that no unusual person should be permitted to vote at the election to any vacancy in such offices, unless he has paid the subscription, by virtue of which he claimed to vote." It seems that, on June 5th, 1883, Dr. Lawlor resigned his position as surgeon, and at that time there were three annual governors who had paid one annual subscription on June 23rd, 1882, and who, therefore, from June 24th, would be governors for the period expiring June 24th, 1883. On June 6th, these gentlemen paid their annual subscription, and they voted at the election of Dr. Neligan. The principal question argued by the court was, whether they were entitled to vote at that election, and that depended on whether they had paid their subscriptions before the vacancy occurred by the resignation of Dr. Lawlor. No doubt they paid before the formal acceptance of the resignation; but the court held that the vacancy arose when the letter of resignation was received by the secretary. When the statute provided that no payment of annual subscriptions should qualify, unless made before the vacancy, it was plain that the intention was to prevent persons from paying subscriptions merely for the purpose of obtaining this kind of franchise; and it was also plain that, in order to carry out that policy, a vacancy after the resignation should not remain in suspense for an indefinite period. These three gentlemen voted for Dr. Neligan, who had been declared elected, and two others for Dr. Fitzmaurice. The court, under these circumstances, were of opinion that Dr. Neligan was not duly elected. Another question arose as to whether Dr. Fitzmaurice was duly elected, upon which the court would not express an opinion; and this involved a question as to whether a proper quorum of five was instituted at the time of election. This latter point involved some difference of opinion among the members of the court.

PLURALITY OF APPOINTMENTS.

At the usual weekly meeting of Guardians of the Newtownards Union, a letter was read from the Local Government Board, directing them to inform Dr. Parke, who is medical officer to the Workhouse Infirmary, that he cannot be permitted to continue in that office, and at the same time hold the office of Coroner of the Northern division of County Down, to which he was lately elected. The reason assigned was, that the duties of the latter office frequently called him considerable distances from home; and, consequently, the patients in the infirmary would probably be neglected. Some of the guardians urged that, if their medical officer were obliged to resign the coronership, he should also, for the same reason, be called upon to relinquish his private practice, especially if it took him any considerable distance from home. The guardians adjourned the further consideration of the question for a fortnight.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE annual meeting of this Society was held on Saturday, March 1st. Mr. John Marshall, F.R.S., President, took the chair at 8 P.M., and declared the ballot open for an hour, nominating Dr. Bernard O'Connor and Mr. Christopher Heath as Scrutineers.

The Auditors' Report was taken as read. The report of the Council was read by Dr. Douglas Powell, one of the secretaries. The Society was congratulated on its prosperity, and on the increased number of Fellows, which, including honorary, resident, and non-resident Fellows, now amounted to 720. During 1883, 18 Fellows had died, and 2 had resigned, while 35 new Fellows had been elected. The income from subscriptions and other fees compared favourably with that of former years, while the increased payments from other learned societies which used the rooms for their meetings, had added to the income of the past year. By the audited balance-sheet, which was printed and circulated among the Fellows before the annual meeting, the total income was shown to be £1,572 11s. 2d. The expenditure, which had been raised by augmentation of the resident librarian's and other salaries, and by the greater cost of the proceedings, which now included verbatim reports of the speeches at the meetings, amounted to £1,463 7s. 3d., leaving a difference in favour of the Society of £60 17s. 10d. The advantage of the printed abstracts of the papers before the meetings, and of the changes in the publication of the proceedings, was proved by the larger number of Fellows who attended the meetings and took part in the discussions.

The session opened with an oration from Dr. Ferrier, on the progress made during the last five years in the study of the physiology and pathology of the nervous system, to which he had himself so largely contributed, that he had been awarded the second Marshall Hall prize by the Council. The library was flourishing, 461 works having been added during the past year. These included some valuable and interesting books from the library of the late Sir Thomas Watson, presented by his son Sir Arthur Watson. The Council expressed its deep sense of the heavy loss which the Society had sustained by the death of the resident-librarian, the late Mr. B. R. Wheatley, which had deprived them of a devoted and most efficient officer of unequalled skill in his profession.

Certain alterations in the by-laws had been recommended by the Council for adoption by the meeting. The President explained that the practical effect of them, if passed, would be that four resident honorary Fellows, viz., Dr. W. B. Carpenter, and Professors Huxley, W. K. Parker, and Allen Thomson, would benefit thereby, as they would then be allowed to use the library exactly as ordinary Fellows. A ballot being taken, the proposed alterations were passed.

The PRESIDENT then addressed the meeting. He began by mentioning the losses which the Society had sustained amongst its Fellows during the past year. Seven non-resident Fellows, seven resident Fellows, and one Honorary Fellow, had died. He gave full details of the lives of the deceased, taking each one in order, and beginning with the youngest in each class. For many of his statements, he was much indebted to the obituary notices of the Fellows which had already appeared in the public journals. The deceased Fellows were the following: Dr. R. S. Hudson (Redruth), who had been President of the South-Western Branch of the British Medical Association; Dr. G. H. Evans; Dr. F. H. W. Iles (Watford), who had died from blood-poisoning, contracted in performing tracheotomy, and had been surgeon to the West Hertfordshire Infirmary; and Dr. J. Marion Sims, who was aged 71 when he died last November. His sphere of practice was ubiquitous, and no other man had apparently commanded so wide a range of popularity. He was, in 1876, President of the American Medical Association; and was equally well known in Europe as across the Atlantic. Dr. J. Macnaught, who was 90 when he died, had been connected with the Liverpool Medical School, and President of the Liverpool Medical Institution. Dr. J. M. Gully, the hydropathist, of Malvern; and Mr. J. F. Harding, latterly a non-resident Fellow, completed this list. Of resident deceased Fellows, Dr. Colomiati Meredyth, the author of three works on venereal diseases, was the first mentioned. Dr. Hilton Fagge, who had been a Fellow of the Society for nineteen years, was appointed Honorary Librarian in March 1883, and had contributed seven papers to the *Transactions*, had already exhibited much independent mental energy, was an untiring worker, and had given promise of eventually gaining the highest successes of the profession. Dr. Robert Druitt, the author of the *Surgeon's Vade-Mecum*, of which 40,000 copies, published in ten editions, had been sold, was for ten years the editor of the *Medical Times and Gazette*, and Medical Officer of Health to St. George's, Hanover Square. The list was concluded with the names of Richard Phillips; of Nathaniel Montefiore, ever a true and liberal friend to persons and objects medical; of Dr. A. P. Stewart, who first, in 1840, established the true distinctions between typhus and typhoid-fevers, and who, when a purse of money was handed to him some years since, returned it to the British Medical Association, of which he was a prominent member of council, with the object that it might be utilised as a prize; and Dr. T. W. Jones (Enfield). Lastly, Dr. William Farr, whose statistical reports were models which statisticians abroad had copied, and the breath of whose mental life was statistics, was the only Honorary Fellow whose decease the Society had to deplore. The late resident librarian of the Society, Mr. B. R. Wheatley, had lived and died amongst books. In 1841, he had been engaged to catalogue the library, and had subsequently catalogued twenty other libraries. In 1850, he finished their first catalogue; and, in 1879, completed a second one. His methods of cataloguing had been much admired, and elsewhere copied. He had served the Society for thirty years.

The President then proceeded to other topics. He said it was a striking lesson that all the dead Fellows had been characteristically lovers of work. But it must not be supposed that their Society had a monopoly of this very valuable character. Other medical societies had done most excellent work. The Medical Society was founded in 1773; the Royal Medical and Chirurgical Society in 1805; the Hunterian in 1819; the Harveian in 1831; the Medico-Psychological Association in 1841; the Abernethian Society, and the Guy's Pupils' Physical Society, were both founded before 1846. Since that date the societies had increased from six to fourteen, including the Pathological founded in 1846, the Epidemiological in 1850, the Odontological in 1856, the Medical Officers of Health in 1856, the Obstetrical in 1858, the Clinical in 1866, and the Ophthalmological in 1880. Besides these, there were now fifteen provincial societies throughout England and Wales, of which only ten existed in 1846. The British Medical Association, founded in 1832, had exhibited astonishing growth. At its annual gatherings the sections did good work, reports of influential committees were presented, and prizes distributed. Its Collective Investigation Committee had inaugurated a valuable method for the combined study of disease. The weekly medical journals by their increase of space, the many hospital reports now issued, the astonishing increase of medical literature which was equally apparent abroad, and the great medical congresses which seemed to have culminated in the great International Medical Congress in London in 1881, all testified to the untiring labours undertaken by the members of the profession. Before 1846, there were fewer than fifty new medical books published yearly; in 1881, there were 108 new works, and 56 new editions of old works; in 1882, 119 new works, and 58 new editions; in 1883, 163 new works, and 70 new editions. The great benefits conferred by anæsthetics, by antiseptic surgery, aspiration, the hypodermic syringe, etc., were noticed. This Society formed an integral valuable part of the whole medical system in this country. It had now existed for nearly eighty years, and held its onward course unchecked. The library, with its 28,000 volumes, was probably the best medical circulating library in the world. The sixty-five annual volumes of its *Transactions*, too, embraced nearly every topic in medicine and surgery. It had occurred to him, as to others, whether it might not be wise to endeavour again to bring together under one head the different societies clustered around the Royal Medical and Chirurgical Society; but it appeared more appropriate that such a proposition, if made at all, should rather emanate from the members than from the President, and from some of the younger societies. These had all apparently attained their present success because they first arose from a want which had been long felt. It was true that, in Dublin, four other societies had been all merged in the Academy of Dublin. But then the population of Dublin was 300,000; that of London exceeded 3,000,000. In Dublin, there were 600 practitioners; in London, nearly 5,000. In Dublin, there were 28 public medical institutions; in London, over 170. He therefore thought the amalgamation of the different medical societies of London might be bequeathed as a problem to the future, and in that future he felt the greatest confidence as to the prospects of the Royal Medical and Chirurgical Society.

Mr. SAVORY proposed that the best thanks of the Society be given to the retiring President for his conduct in the chair during his two years of office; and for his address, which he be asked to permit to be printed. Although Mr. Marshall had held the presidency of this Society and that of the Royal College of Surgeons of England at the same time, he had yet been able to give to each post as much time as if he had had nothing else to do.

This proposition was seconded by Dr. JOHN HARLEY, and carried with acclamation.

Mr. MARSHALL returned thanks for the vote. He said that he had received the greatest assistance from the other officers of the Society, and that he was delighted to have been able to do the work.

Dr. PRIESTLEY proposed a vote of thanks to Dr. Russell Reynolds and the other retiring officers for their labours during their terms of office. He trusted that Dr. Reynolds might speedily be restored to health.

Mr. PARKER seconded the proposition, and remarked that the increased activity of the meetings during the past two years had been due to the united efforts ot the President and other members of the Council.

Dr. WILSON FOX proposed "that this Society, in grateful recognition of the moral worth and of the devoted services which its late Librarian, Mr. Wheatley, rendered during nearly forty years to this Society, resolves that a subscription be started among the Fellows of this Society, and that the Fellows of the Pathological, Obstetrical, and Clinical Societies be also invited to contribute, in order to extend the provision which Mr. Wheatley has been able to make for his sister and niece, and that a committee be named to carry out the object." The President had already noticed the grand characteristics of Mr. Wheatley's good work. All the users of the Library had always met with the utmost information and civility at the hands of Mr. Wheatley. The catalogue was his *monumentum ære perennius*, and his method of arranging books was much admired. For the first nine years of his office in the Society he had received only £140 *per annum*, for the next ten years his salary was £200, and had subsequently been raised to £300. The provision which he had left for his sister and niece was inadequate. It would be to many of the Fellows a source of pleasure to forward, after Mr. Wheatley's death, what was during his life his only worldly object beyond that of the Society.

Mr. SAVORY seconded the proposition. He said that this sort of thing seemed to be in need of some justification; but he felt that if the memory of Mr. Wheatley were allowed to pass away without some such step as this being taken, the Fellows would be depriving themselves of a bounden duty and pleasure. He had been the right man in the right place. He was full of urbanity, and had faithfully served the Society for nearly forty years. The resolution was carried unanimously. The President named the following gentlemen to serve on the committee for the purpose, viz., the retiring President, the new President, the two Librarians, Mr. Cooper Forster, Mr. Savory, Mr. Berkeley Hill, and the Presidents of the Pathological, Clinical, and Obstetrical Societies, with power to add to their number.

Mr. C. HEATH asked what was the sum likely to be required. It was much better to go to the Fellows asking for a definite sum.

The PRESIDENT thought well of the suggestion. He stated that there were ninety-three candidates for the vacant post of resident librarian, which number was at first reduced to thirty. The names of these were all tabulated, with their several qualifications. The number was next reduced to six, all of whom were ultimately invited to attend the Committee, in order to give them a personal interview. As a result of their deliberations, the Committee had appointed Mr. James B. Bailey, Member of the Association of Librarians, who had been for sixteen years sub-librarian of the Radcliffe Library of Oxford, where his services had been most highly valued by those using that library. Besides possessing great experience in library-work, Mr. Bailey had written several catalogues and indexes. He would enter on his duties on March 15th.

The ballot being taken, it was announced that the gentlemen nominated for the various offices of the Society during the coming year, whose names were published in the BRITISH MEDICAL JOURNAL for March 1st, p. 425, had all been elected. The meeting then adjourned.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND, AND MEDICAL REFORM.

ON Monday last a deputation from the Council of the Royal College of Surgeons in Ireland waited on His Excellency the Lord Lieutenant, to submit to him the views of the College with regard to the Medical Acts Amendment Bill, as expressed by the resolution adopted by the recent meeting of the Fellows (*vide* BRITISH MEDICAL JOURNAL, February 23rd, 1884, p. 383).

In addition to the President and Secretary of the College, and the Secretary of the Council, the deputation consisted of Mr. Rawdon Macnamara, Drs. Kidd, E. Hamilton, and J. K. Barton.

Dr. KIDD, after some prefatory remarks, assured His Excellency that the deputation had no personal, selfish, or pecuniary interests in the matters it brought before him. He said that an examination of the report of the Royal Commission showed that only two tangible defects had been found in the present organisation of the medical profession. Of one of these, these commissioners said, it was stated in evidence that certain diplomas did not guarantee the competence of the holders. The commissioners did not say it had been proved, but only that it had "been stated to them in evidence," and there was good reason to believe—especially from the reports of the official visitors of examinations—that, however true the statement might have been, in former times, of two or three of the nineteen licensing bodies, it was so no longer. The second defect pointed out was what is known as "half diplomas." Dr. Kidd thought it might be questioned whether this was really a defect, and whether the benefit to be found in it did not more than compensate for the inconvenience attendant on it; but the defect, such as it is, depended on the Act of 1858, which allowed men to be registered without a full qualification, and could be easily remedied by amending that Act. The really important point was the admission of practitioners to registration about whose competence a question had arisen. To remedy this, the Bill of last session promised to revolutionise the whole constitution of the profession—to establish divisional boards, who would supersede the present institutions in all their most important functions, whereby they would be reduced to a state of uselessness and poverty. Against this, Dr. Kidd said, we protest, as being unnecessary, injudicious, and detrimental to the public welfare. The plea is to establish an uniform standard of education and examination for the whole kingdom. We believe the Bill will utterly fail to do this, and we have the unanimous decision of the Royal Commission that, even if it could be done, it is not desirable. We maintain that a properly directed competition among licensing bodies is the best way of raising the standard of education. The deputation admitted the right of the State to guard against the sending forth of incompetent practitioners, but it held that this could be done more effectually and thoroughly by some such system as that proposed by the Duke of Buccleuch, and advocated by four out of the eleven Royal Commissioners. In conclusion, Dr. Kidd said that they had come to his Excellency to pray him to use his influence to have the matter reconsidered before the Bill was proceeded with, their desire being that the college they represented, and others, should not be deprived of their rights and privileges, and reduced to a condition of uselessness and poverty.

Mr. MACNAMARA having informed the Lord Lieutenant that he was a member of the General Medical Council, said that the deputation did not mean to interfere with the reconstruction of that body, which itself was not in the slightest degree held by the present condition of affairs in that respect. The Government might, he said, reconstruct the Medical Council as it liked. As to the hope expressed in the report of the Royal Commission, that students would not remain content with passing the State examination or the examination proposed under the Bill, but would go on for the higher qualifications of the several bodies, Mr. Macnamara remarked that the experience of all who had had anything to do with medical education was that the pupils were satisfied with the bread-winning qualification, and that they did not go for the higher degrees, certainly not beyond 10 per cent. of the entire.

Dr. BARTON drew his Excellency's attention to the fact that they did not come there to place before the Government any scheme other than that in the Bill, because they admitted the great difficulty of the whole question. At the same time, they desired to point out, in as clear and forcible a manner as they could, that they thought the plan of divisional boards—which was the essential feature of the Bill—invested with almost unlimited powers, was a dangerous revolution without sufficient guarantee that it would carry out the general object in view—namely, the preventing of incompetent men from getting on the registry. They felt that the plan in the Bill was open to the gravest objections, and they submitted that less revolutionary changes in the profession would give a better guarantee that such an important object would be achieved.

The LORD LIEUTENANT, in reply, said that he regretted the deputation had not addressed Lord Carlingford, who was the member of the Government responsible for the legislation; but as it was upon the report of the Royal Commission, which was appointed through his (Lord Spencer's) recommendation, the Bill was introduced, he would say a few words on the subject. After referring to the constitution of the Royal Commission, his Excellency said that the Commissioners differed on certain points, as it was likely they should; but, on the main point, they made a very able report, and on that report the Bill of the Government of last year was founded. On account of the pressure of arduous duties, he regretted he had not been able to follow out the details of that report in reference to the Bill introduced last year; but he knew that the Government and Lord Carlingford, who had charge of the Bill, were most anxious that all the interests involved should be considered, and that the Bill should be founded on lines which would lead to the settlement of this question on sound and just principles, just to the different bodies interested, and sound to the people of this country, who are deeply interested in the medical profession being placed on a satisfactory footing. "I think," said his Excellency, "from what I have gathered of the speeches I have heard to-day, that a great deal of unnecessary alarm has been created by the Bill itself. I feel quite certain that the Government never intended, nor was it the wish of the Commission itself, to bring to uselessness and poverty—those are the words of Dr. Kidd—a body that has done such eminent services as the Royal College of Surgeons in Ireland. I am certain that even under this Bill the utility of that body will remain, and that it will be a Bill to do in the future for Ireland, and the medical world in general, what they have done in the past. Now, I do not gather from the report of the Royal Commission, that the Bill was strictly following out the lines of the Royal Commission report—that the Commission wish to bring all education to a dead level, and to cut out all competition between the various educational bodies; and I find an important paragraph in the report of the Commission which puts that notion aside.

"'Although we have recommended that the divisional boards should prepare and submit for the approval of the Medical Council regulations for courses of study, we are of opinion that there should be only an outline of what is necessary. It would be a mistake to introduce absolute uniformity into medical education.'

"The paragraph then refers to some other details, and concludes as follows:

"'In certain matters of general importance, such as the duration of study and the age at which a student should be permitted to practise, some regulations ought, we think, to be laid down; but we wish to record our opinion that nothing should be done to weaken the individuality of the universities and corporations, or to check emulation amongst the teaching institutions of the country.'

"I confess that that is the view with which I approached the subject, and the view which I still entertain, and I should be extremely sorry if the Bill introduced by Her Majesty's Government went contrary to those principles. Those are the principles I understand Dr. Kidd to advocate also, and it is merely a question where, in the application of the measure, the Government may differ from you. The Government are most anxious to do what they can to get this question settled. I have been in communication with Lord Carlingford, and I know he is most anxious to press forward this measure, and if possible to carry it. He does not think it is open to the objections which have been made by you and others, but he will be most ready to take into account and consider any representations which would be made by you, and which have been made by you, on the question of the Bill. I can say for myself that there probably may be a good many questions upon which some alteration to meet your views may be made. I am quite certain he will take these most carefully into account, but I am afraid I must not encourage you to think that he will withdraw the Bill, to which he attaches immense importance, and to which the Government attach immense importance, though it is most desirable for the community that a Bill affecting the interests of everyone connected with this important profession should be passed into law. As to the question of the assessors, it does not follow that if the Government appointed them the result would be as satisfactory as it is now, when they are appointed by the colleges themselves."

LONDON SANITARY PROTECTION ASSOCIATION.

THE third annual general meeting of this Association was held on February 23rd, at their offices, 1, Adam Street, Adelphi. In the unavoidable absence of His Grace the Duke of Argyll, the chair was taken by the senior vice-president, Mr. Hugh Leonard, who read the report of council, and moved its adoption. The report stated that the membership on December 31st, 1883, had reached 723, including Eton College and all the boarding-houses there, the governing body being reckoned as one member only. During the year, the engineers had inspected 404 houses for the first time, the majority of them being in London, but some at great distances, such as the neighbourhoods of Norwich, Lynn, Bury St. Edmunds, Sherborne, Wimborn, etc. This made a total of 927 houses inspected and reported upon by the engineers of the Association in the three years of its existence, most of them three or four times. Similar associations were springing up rapidly in the provinces, to all of which the officers of the London association gave all the assistance in their power. There were already nine in existence, and three more would be founded very shortly. It was a matter of deep regret to the Council that the aid of the Association had not been more freely sought for in connection with the improvement of the dwellings of the poor, but they hoped that if the Mansion House Council on that subject, or the numerous sanitary aid committees now being formed, placed themselves in communication with that Association, they might work in harmony, and much good might result.

Mr. TIMOTHY HOLMES, the Honorary Treasurer, in presenting his balance-sheet and report, said that it showed a gross income of £1,543, and an expenditure of £1,279, leaving a balance of £264, against which there were outstanding accounts amounting to £114, leaving a net balance of £150 to be carried forward. This encouraged the Council to engage a fourth engineer, so that in 1884, in addition to the three gentlemen whose names were in the prospectus, they should have the services of Mr. Alexander Ryd.

Mr. FORD, Mr. ROBINS, and Mr. WILLIAM SHAEN having addressed the meeting upon the report, Dr. WHITELEGGE, the Executive Officer of the Mansion House Council on the Dwellings of the Poor, asked how far that Association was willing to assist the Mansion House Council in the work they had undertaken.

Dr. BRISTOWE, a member of Council, said that, as a medical officer of health, he deprecated the idea of the Association setting itself in opposition to any body of men such as the parish authorities, or mixing itself up in any contentious business which was likely to lead to litigation; and Mr. HOLMES, the Treasurer, having spoken to the same effect, the CHAIRMAN replied that the matter would be taken into the careful consideration of the Standing Committee of the Council, and an answer would be sent to Dr. Whitelegge.

The CHAIRMAN moved the adoption of the report, which was seconded by Dr. BRISTOWE, and carried unanimously.

The formal business of the election of President and Council for 1884 was then proceeded with. The whole of the outgoing Council were declared to be re-elected, with the addition to their number of General Lord Chelmsford, G.C.B., and with His Grace the Duke of Argyll as President.

General Lord CHELMSFORD moved a vote of thanks to the Council for their services during the past year, and thanked the meeting for electing him on to the Council, saying that it would give him much pleasure to serve upon it.

Colonel FRASER having seconded the vote of thanks, which was carried unanimously, the proceedings terminated.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 20th, June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council-Room of Exeter Hall on Wednesday, the 9th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, London, March 6th, 1884.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
V. Syphilis, acquired.
V*a*. ,, inherited.
VI. Acute Gout.

URGENT.—*The Committee needs* [illegible] *Pneumonia, and hopes that they will be sent in as soon as possible.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
September, 1883. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered at all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

The North-Western Provinces and Oudh Branch.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons **Shirley Deakin** and **W. A. Morris**, 8, City Road, Allahabad.

Metropolitan Counties Branch: South London District. The next meeting will take place at the Bethlem Hospital, St. George's Road, on Wednesday, March 12th, at 8.30 P.M. Dr. Hack Tuke will introduce the subject of Sleep-Walking. Dr. J. A. P. Price will give details of a case of combined Somnambulism and Hypnotism. It is hoped that members will second the efforts made to ensure a good attendance.—**Robert E. Carrington**, Honorary Secretary, 15, St. Thomas's Street, E.C.

Metropolitan Counties Branch: Hertfordshire District.—It is proposed to hold a meeting of the above district at Hertford, one day towards the end of March. Members desirous of reading papers are requested to send the titles as early as possible to the undersigned.—**R. R. Lloyd**, St. Albans, Honorary Secretary.

South Wales and Monmouthshire Branch.—The spring meeting will be held at Llanelly, on Wednesday, April 2nd. Further particulars in circulars. Members wishing to read papers or make communications are requested to send titles of the same to Dr. Sheen, Cardiff, not later than March 12th, in order that they may appear in the circulars.—**Alfred Sheen**, M.D., **D. Arthur Davies**, M.B., Honorary Secretaries.—February 26th, 1884.

South-Eastern Branch: West Kent District.—The next meeting of this district will take place on Friday, March 28th, at Woolwich; Sir James Hanbury, K.C.B., A.M.D., in the chair. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary of the district, A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than February 29th. Further particulars will be duly announced.—**A. W. Nankivell**, Honorary Secretary.—January 29th, 1884.

South-Eastern Branch: East Kent District.—The next meeting of the above District will be held at Ashford, on March 13th; Dr. Wilks in the chair. The Chairman kindly asks all members to lunch at his house, and has obtained the Royal "permit" to conduct the members over Eastwell Park, the residence of H.R.H. the Duke of Edinburgh, before the meeting. The order of business will be as follows: 12.45 P.M., Lunch at Dr. Wilks's, 1.30 P.M., Carriages to Eastwell Park. 4 P.M., Meeting at the Cottage Hospital, Report of Collective Investigation Subcommittee. Dr. Wilks: A case of Delirium Tremens treated by Cold Affusion; a case of Hydatid Mole, with Specimen. Dr. Tyson: Malignant Disease *versus* Syphilis. Dr. Bowles: Case of Myxœdema. Messrs. Down Bros. of London will exhibit Surgical Instruments at the Cottage Hospital. 6 P.M., Dinner at the Saracen's Head.—**T. Whitehead Reid**, Honorary Secretary, 34, St. George's Place, Canterbury.

South-Eastern Branch: East Surrey District.—The next meeting of the above will be held at the Queen's Hotel, Upper Norwood, on Thursday, March 13th, at 4 P.M. John Rand, Esq., in the chair. The following papers have been promised. Dr. J. Milner Fothergill: The Uses of Ipecacuan. Noble Smith, Esq.: Mechanical Principles in Orthopædic Surgery—(the subject will be illustrated by numerous diagrams). Dr. Stowers: 1. The Treatment of Acne Rosacea, and Vascular Hypertrophy of the Nose. 2. The Sequel to a case of Paget's Disease of the Nipple. Members desirous of reading cases, are requested to communicate with the Honorary Secretary without delay. Dinner will be served at 6 P.M.; charge, 7s., exclusive of wine.—**J. Herbert Stowers**, Honorary Secretary, 23, Finsbury Circus, E.C.

South-Eastern Branch: East and West Sussex Districts.—A conjoint meeting of the above districts will be held at the Grand Hotel, Brighton, on Tuesday, March 25th, at 3.30 P.M. Dr. Mackey will preside. Dr. Sturges, physician to the Westminster Hospital, will introduce a discussion on Acute Pneumonia. Dr. Bagshawe, Dr. Treutler, Dr. Roberts, Dr. Fuller, and some Brighton members have promised to take part in the discussion, if possible. The Chairman will read Brief Notes as to some New Remedies, and Cases of Rare Diseases in Children. Dinner at 5.30 P.M. Charge, 6s, exclusive of wine.—**T. Jenner Verrall**, **G. B. Collett**, Honorary Secretaries of above districts, 95, Western Road, Brighton.—March 4th, 1884.

South-Eastern Branch: West Surrey District.—The next meeting of the above will be held at the Red Lion, Dorking, on Thursday, March 27th, at 3.30 P.M. Members desirous of making any communications, or reading papers, are requested to write to the Honorary Secretary without delay.—**A. Arthur Napper**, Honorary Secretary, Broad Oak, Cranleigh.

North Wales Branch.—The next intermediate meeting will be held in Denbigh during the last week in March. Members intending to read papers are desired to signify their titles to the Secretary on or before Tuesday, the 11th instant, in order that they may be included in the circular convening the meeting.—**J. Lloyd-Roberts**, Honorary Secretary, Denbigh.—March 4th, 1884.

West Somerset Branch.—The Spring Meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 3rd, at 5 o'clock. The subject settled by the Council to be discussed after dinner will be "Chorea," when answers will be invited to the following questions:—"What is your experience as to its pathological anatomy, with special reference to concomitant heart-disease?" "What treatment have you found most useful?" Dr. Long Fox, of Clifton, has promised to open the discussion. The election of a representative of the Branch on the Council of the Association, to hold office for one year from the second day of the next Annual Meeting of the Association, should now take place, in order that his name may be returned within the prescribed time. A copy of the Articles and By-Laws of the Association, as lately altered, will be submitted with a view to the Branch having its By-Laws brought into accordance with the altered Articles and By-Laws of the Association. Members having any communications for the meeting, are requested to send early notice of the title to **W. M. Kelly**, M.D., Honorary Secretary.

Lancashire and Cheshire Branch.—It is proposed to hold an intermediate meeting at Wigan, at the end of March or beginning of April (the exact date cannot be fixed until next meeting of Council). Members desirous of reading papers, or of making communications, are requested to send their names to the Honorary Secretary without delay.—**Charles E. Glascott**, M.D., Honorary Secretary, 23, St. John Street, Manchester.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.

An ordinary meeting of this district was held at the Royal National Hospital for Consumption, Ventnor, on January 31st: present—Dr. J. **Neal** (President) in the chair, ten members, and four visitors.

The By-Laws of the Association and the District Laws.—The new laws of the parent Association were presented by the Secretary, who stated that, in accordance with the request of the General Secretary, the President and himself had read them carefully, and found that the district laws did not clash in any way.

Collective Investigation.—Mr. **Green** reported that the Collective Investigation Committee had issued a card on Paroxysmal Hæmoglobinuria since the last meeting; also Mr. Galton's Book for Family Registers. No fresh cards had been received from members during the past quarter.

The Annual Subscription.—Dr. **Davey** asked when the District and Branch annual subscription commenced.—The Secretary (Mr. **Green**) replied that the accounts were submitted at the annual meeting in April, but that the subscriptions were due on January 1st of the current year. He explained that the £1 1s. went to the parent Association, 2s. 6d. to the Branch, and the remaining 2s. 6d. was reserved for the expenses of the district.—Dr. **Davey** inquired whether the Isle of Wight could be made into a separate Branch. Reference to the rules of the parent Association showed that any number of not less than twenty members could form a Branch.—Mr. **Green** said he believed that, in future, it was not the intention of the Council to sanction the formation of new Branches in small districts which were already affiliated to a Branch. He explained that the 2s. 6d. subscription to the Branch was to meet the expenses of the Branch, and for the payment of the expenses of members to attend the Council meetings on behalf of the Branch.

Phthisis.—Drs. **Coghill** and **Robertson** showed an interesting series of cases illustrating different types of phthisis. Among them was a case of empyema, which had been discharging through a drainage-tube for two years. The patient, an ingenious mechanic, had fitted a special guard for the drainage-tube, which answered the purpose excellently, and described the method he adopted for washing out the cavity.

Pupil-Teachers.—Dr. **Williamson** read a paper upon the Relations of the Work of Pupil-Teachers to their Health. He stated that, as a rule, it was not the strong member of a family who was selected for school-work, but the delicate one, who was considered unfit for hard work; that the applicants did not undergo as stringent a medical examination, before commencing their duties, as they ought; that the number of hours of work, and the amount of teaching expected from them, was excessive; that the number of pupils in a class—*i.e.*, forty—was too many; and, as a result of all this strain, their physical health frequently gave way, and they were often entirely unfitted from following out the career laid down for them.—Dr. Coghill, Dr. Robertson, Mr. Barrow, and Mr. Watkins joined in the discussion which followed.—Mr. **Watkins** stated that he had acted for many years as manager of a large school, and spoke of the great and increasing difficulty in obtaining pupil-teachers. He did not think that forty children were too many for one to look after.—Dr. **Robertson** thought one factor of the ill-health was, perhaps, caused by deficient ventilation, and the possibility that many of them were underfed.—Dr. **Williamson** replied.

A Vote of Thanks was unanimously accorded to Drs. Coghill and Robertson for their hospitality and cases, and to Dr. Williamson for his paper.

WORCESTERSHIRE AND HEREFORDSHIRE BRANCH: MEETING.

A meeting of this Branch was held at the Imperial Hotel, Malvern, on Tuesday, February 19th, at 4 p.m.

Papers.—The following papers were read:

1. Dr. Roden: The Physiological and Curative Influence of Saline Baths in certain forms of Disease.

2. Dr. Douty: Melancholia in its Relation to Morbus Cordis and Anæmia.

3. Mr. Bates: Case of Cæsarean Section.

4. Dr. Crowe: Sudden Death from Rupture of Internal Jugular Vein.

5. Mr. Vevers: Compound Dislocation of Humerus into the Axilla.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE fourth ordinary meeting of the session was held at the Museum and Library, Bristol, on Wednesday evening, February 27th; E. CROSSMAN, Esq., President, in the chair. There were also present 48 members and 9 visitors.

New Members.—The following gentlemen were elected members: G. O. Risdon, L.R.C.P., M.R.C.S., Wells; J. T. Hyatt, M.R.C.S., Shepton Mallet; Deputy Surgeon-General W. B. Beatson, M.D., F.R.C.S., Bath; W. Irvine, M.D., Bath; W. J. J. Scofield, M.R.C.S., Bath; J. Merces, M.R.C.S., L.R.C.P., Bath.

Communications.—The following communications were made:

1. Dr. R. Shingleton Smith read a paper on a Case of Typhoid Fever, illustrating the effects of Kairin, which was discussed by Drs. Spencer, Waldo, Markham Skerritt, Harrison, and Bouville Fox.

2. Mr. Nelson C. Dobson communicated the details of Two Cases of Amputation at the Shoulder-Joint for Tumour of the Biceps, and exhibited specimens. Messrs. Ransford, Cross, Prichard, and Lowe joined in the discussion which followed.

SPECIAL CORRESPONDENCE.

MANCHESTER.

Stockport Infirmary.—The Lower Broughton Murder.—Clinical Hospital for Women and Children.—Open Spaces.

THE Stockport Infirmary will be remodelled and enlarged shortly at a cost of £5,000, and half of this amount has been already contributed. Messrs. Pennington and Bridgen, architects, of Manchester, have been entrusted with the work. The building will be constructed on the pavilion principle, and the accommodation will be increased from thirty-eight to fifty-five beds.

At the last Liverpool Assizes, before Mr. Justice Brett, Sarah Maclinson, a married woman, from Manchester, was found guilty of causing the death of Louisa Brierley, a single woman, 28 years of age, by procuring abortion, and Samuel Smart (28), of Huddersfield, was found guilty of being an accessory before the fact. Both were sentenced to death. Dr. Maguire, pathologist to the infirmary, gave the result of his *post mortem* examination, that death had been caused by peritonitis, induced by the operation. Both the prisoners have been since reprieved.

The annual meeting of the Clinical Hospital for Diseases of Women and Children was held on the 26th ult., and presided over by the Bishop of Manchester. The report stated that 3,543 children and 2,154 women had been attended to during the year, as compared with 3,396 children and 1,901 women during the previous year. The total receipts during the year amounted to £3,727, and the expenditure to £2,836. It was stated that the lectures given by the medical officers to ladies on the treatment of children had been a great success, and that the largest room in the hospital was too small to accommodate all that came. The lectures will be resumed next year, and an effort will be made to increase the accommodation.

The subject of open spaces has been taken up in earnest. At the recent conference, the mayor (P. Goldschmidt, Esq.), presided, and he was supported by Lord Brabazon, Canon Stowell, Mr. Herbert Philips, the Venerable Archdeacon Anson, and other influential gentlemen. Dr. Ransome stated that, with the exception of Liverpool and Glasgow, there were in Manchester more persons on one acre of ground than in any other town, the figures being, Manchester, 84; Liverpool, 103; and Glasgow, 96. There were 2,872 persons to each acre of park in Manchester, 1,025 to each acre in Liverpool, and 1,293 to each acre in Glasgow. It was, therefore, evident that we still needed a large amount of space for the purposes of recreation. Among other interesting statements by Mr. Greg, he said that in the three unions of Manchester, Salford, and Chorlton, about £110,000 was last year spent on pauperism, and only £9,796 was devoted in Manchester to the parks. At the evening meeting, the Bishop of Manchester presided, and strongly supported the objects of the agitation. Lord Brabazon said it lay in the hands of the people of Manchester, if they wanted to provide open spaces, to meet and agitate, and go on agitating until they got what they wanted. Ward committees will probably be formed shortly to bring pressure to bear on candidates for seats at the council, and the band of enthusiastic men who have taken the matter up are determined to attain their object. Members of the medical profession should certainly aid this most praiseworthy movement.

CORRESPONDENCE.

IS COLLECTIVE INVESTIGATION DANGEROUS?

SIR,—In a paper read before the North London District of the Metropolitan Counties Branch, Dr. G. W. Potter points out some of the difficulties and dangers which attend collective investigation. He urges, very truly, that the material brought together must be of very unequal value, both in respect of the examples themselves and of the capacity of individual observers. By way of illustrating the varying circumstances which "profoundly modify every incident and feature of a case," he adduces the numerous forms of pneumonia, that of "a breezy sea-side down, and that of a poisonous city slum." In Dr. Potter's belief, the conditions applying to collective inquiry are so complex, that even a moderate degree of certainty is unattainable. This fear is, however, lest "the weak and the timid," attaching undue weight to such investigation, should come to believe that original observation was no longer necessary.

It has been said in some quarters that the business of collective investigation has been somewhat over-praised; and that, so far, it is better known by its talk than its work. Here is a little cold water; useful, it may be, and even necessary, to clear away some misapprehensions as to the object and scope of such method of inquiry. Yet, notwithstanding the truth and cogency of much that he advances, is not Dr. Potter, in fact, speaking with two voices? With the one, he expresses fear lest injury should be done to individual observation, which, even in the hands of the weak and timid, he holds to be necessary and profitable; with the other, he mistrusts observation altogether, and warns us that the joint work of many labourers—the weak and the strong, bold and timid—all working together, is of doubtful value.

It may be a tenable proposition—although, I think, very few of us would venture to put it thus nakedly—that our observations upon disease are, for the most part, of small service, owing to their want of "scientific precision." But, that individual inquiry should be respected and fostered, while collective inquiry is held to be worthless, is surely a paradox. Indeed, the very facts to which Dr. Potter alludes, for the sake of impugning the value of collective investigation, serve very well to indicate its actual motives and sanctions. How, he asks, is an example of pneumonia on the sea-coast to be compared with one in a London slum? How, indeed, except by some system of combination? And, inasmuch as these two modes of pneumonia are far from representing all its varieties, such combination must engage more than two or three. It must, in fact, be collective investigation of the very pattern we are now attempting. In the case of pneumonia, therefore—or of any other affection which, like it, varies with the latitude, the social condition, the time of life, and many other things—this method of inquiry is essential. There is no other that can take its place.

But while certain classes and features of disease are peculiarly fitted for this plan of observation, it is not every doubtful question which can be best solved in the same way. Dr. Potter speaks humorously of "the discovery of truths by committees;" but the real function of the Committee is to settle what are the particular points which can be fitly determined by reference to the profession at large, as distinguished from those that must be left to experts—questions, I mean, involving niceties of auscultation or expert knowledge, and where the precise competence of each contributor must be known.

Dr. Potter has referred to the first subject of investigation, pneumonia; let me, by way of illustration, refer to the second, chorea. No doubt there are questions still unsolved relating to it, such as its cardiac signs and muscular irritability, which must be referred to special inquirers. But there are many other points connected with chorea—notably its connection with rheumatism, and response to treatment—that emphatically call for collective observation; the observation, that is to say, of a large number of independent medical men, who are free from that dangerous bias which besets all students of these and of many other subjects, so soon as they begin to "have views." It is needless, however, to compare the two methods of inquiry, since each has its use. To a large extent, indeed, they occupy separate ground. For, when we talk of "scientific precision" in practical medicine, it is worth considering that, whatever method we pursue, the aggregate of medical knowledge—all that concerns the family history, and a great deal that concerns the individual—depends upon the testimony of illiterate patients, whose precise standard of accuracy may be anything or nothing.

In spite of his criticism, Dr. Potter yet believes that the work undertaken by the Committee will "undoubtedly be of *some* value." What more need be said? There are many difficulties to face. Some, perhaps, have an extravagant estimate of what collective investigation can accomplish—it is a poor service that enlists no enthusiasts; others, though they wish us well (and among these I take leave to include Dr. G. W. Potter), are doubtful whether the promise of result is worth all the labour; many, no doubt, are content to contribute their *cui bono.* But I venture to affirm that the number of those who, as Dr. Potter fears, will be so impressed with the forthcoming reports—their completeness and finality—as to suspend all further inquiry on their own account, is absolutely none.—Yours faithfully,

Wimpole Street. OCTAVIUS STURGES.

A SOCIETY OF MEDICAL OFFICERS OF SCHOOLS.

SIR,—It has been suggested by some of the medical officers of the large educational establishments, that benefits would arise from a comparison of their varied experiences in questions of hygiene relating to the youth of both sexes.

To-day, owing to the isolation of the various great schools of the country, and the absence of any organisation such as we suggest, there is no centre where the lessons learned in one establishment may be recorded for the benefit of similar institutions.

The whole subject of school-hours, periods of study, recesses, the feeding and lodgment of pupils, the isolation of infectious disease, quarantine, the question of the structure of class-rooms, and school-equipment, gymnastic training and field-sports, overpressure, and cramming, all need discussion; and it is believed that advantage would result from the foundation of a society to consider these matters and collect information.

Such a society would consist of the medical officers, past and present, of our great male and female schools of every class, public, private, charitable, reformatory, or industrial, and probably of others interested in these subjects, and of medical men engaged in the study of the ailments of young persons and children. It would meet periodically to read papers on these questions, and to discuss combined action on various points.

A considerable number of school medical officers approve the idea, and it is desired to bring the subject to the notice of all medical men interested in school-hygiene and the health-conditions of young people.

Those who would like to help in forming the association, and have not already communicated with either of us, are invited to do so; after which, we propose calling a meeting in London to arrange the preliminary details.—We are, sir, yours faithfully,

G. J. H. EVATT, M.D., Surgeon-Major A.M.D., Medical Officer Royal Military Academy, Woolwich.
ALDER SMITH, F.R.C.S., M.B., Resident Medical Officer, Christ's Hospital, London.

London, February 22nd, 1884.

BROMIDE OF ETHYL AS AN ANÆSTHETIC.

SIR,—In reference to a communication from Mr. Roger Williams, in the BRITISH MEDICAL JOURNAL, March 1st, p. 402, advocating the use of bromide of ethyl as an anæsthetic for short operations, and as a precursor to the administration of ether, allow me to say that, while agreeing with him that all the essentials of anæsthesia are not satisfactorily attained by any of the anæsthetic agents now in ordinary use, I cannot endorse his last statement, "that bromide of ethyl is destined to become a valuable addition to our list of anæsthetics."

The functions of life are carried on under the dual control of respiration and circulation, failure of either producing death; and the more suddenly any agent tends to produce that failure, the more dangerous is it to administer.

You, sir, have for years pointed out that the danger of chloroform is due to the sudden arrest of the circulation, the heart not stopping gradually, but unexpectedly ceasing to beat; and here we have a new anæsthetic recommended which acts precisely in the same way.

Mr. Williams quotes Dr. Wood as giving the best account of the physiological action of this drug, and Dr. Wood states that his experiments indicate "that bromide of ethyl is distinctly depressant to the circulation, reducing, when in excess, the force of the blood-current to a very marked extent," and in his experiment on the frog's heart he proves that the drug acts directly upon the heart-muscle or its contained ganglia, and all movements cease.

Dr. Chisholm, who is the great advocate of this drug in America, says that it is useless for general surgery, "but for all quick work, which can be done in one or two minutes; the use of this agent leaves nothing to be desired.

Dr. Chisholm does not state in what way this agent is preferable to nitrous oxide, the anæsthesia from which can be prolonged for the same time without the slightest danger of arresting the heart's action.

I believe that all the operations which are suitable for the administration of bromide of ethyl could be performed under nitrous oxide, with much greater safety to the patient.

Mr. Williams speaks of the inconveniences of ether, and I conclude he refers to the struggling which takes place during the first stages; but all this is obviated if it be administered in the way I recommended in your JOURNAL of July 22nd, 1882, when, with very rare exceptions, the patient sinks quietly and easily into a profound sleep, in which he can be kept as long as the surgeon wishes.

Bromide of ethyl is put forward as a precursor to the administration of ether, but Mr. Williams does not show that it is as pleasant to inhale as nitrous oxide, which I hold to be the best antecedent to ether; while, on the other hand, he acknowledges that it possesses a danger which nitrous oxide does not. I think all will agree with me, that it is our duty to seek for an anæsthetic which shall be pleasant to inhale, perfectly safe, able to keep a patient insensible for the longest operation, and which is not followed by nausea or vomiting; but I am firmly convinced that bromide of ethyl does not answer these conditions, and I shall certainly decline to use it unless much more can be advanced in its favour than is shown in Mr. Williams's paper.—I am, sir, your obedient servant, WOODHOUSE BRAINE, F.R.C.S.

56, Maddox Street, W.

A REFORM AT CANNES.

SIR,—In your JOURNAL of February 16th, under the heading of "Letters from the Riviera," Mr. Ernest Hart describes, in fittingly indignant language, the evil that the owner of a hotel had done to Cannes, by emptying his cesspool into a ravine. After dilating on the incident, the writer adds: "It may be hoped that it will not be long before Cannes will free itself from this reproach." We were present, this morning, at an investigation held on the spot by the Mayor, and found that the pipe through which the cesspool was emptied had been already cut, and the broken end closed with stone and hydraulic cement. As, however, some of us were of opinion that a clandestine junction could be again readily effected, the Mayor used his influence to have our views met by the destruction of a farther length of pipe. The Mayor is also exerting himself to impress on the various proprietors of the ravine the desirability of their combining to have an iron pipe laid to carry off their drainage, and thus to remove the temptation to break sanitary laws. A detailed scheme to effect this is to be prepared immediately. Such energetic and prompt action on the part of the Mayor deserves recognition at the hands of all those interested in sanitary progress. His position is a most difficult one, as our aspirations as sanitarians are far in advance of existing laws.—We are, sir, yours faithfully,

T. EDMONDSTON CHARLES, M.D.
J. A. MENZIES, M.D.

Cannes, February 25th, 1884.

THE CASES OF POISONING AT LIVERPOOL.

SIR,—In the report in the *Liverpool Daily Courier* of the recent trials at Liverpool for poisoning by arsenic—a report which is, I am told, more complete than any other—the experts are credited with statements which, if they pass unchallenged, may hereafter be productive of disastrous results in future trials for poisoning by arsenic.

I am assured, on the best authority, that the gentlemen in question did not give their evidence as reported. Hence the publication of the report referred to is doubly unfortunate: first, as being a misstatement of technical evidence; and, secondly, as it attributes an undue significance to the absence of solid arsenical compounds from the viscera of the deceased man, Higgins, and to the presence of arsenic in his spleen.

Dr. Campbell Brown is made to say that he looked carefully for particles of solid arsenic in the viscera, but failed to find a trace; and, had there ever been any originally, he would have found it. Again, he is stated to have deposed that he obtained from one-third of the whole spleen a large quantity of arsenic. The quantity of arsenic found in the spleen enabled him to form an opinion as to the length of time during which the arsenic had been taken by the deceased. The taking of arsenic must have extended over several days, because the poison must have passed through the whole circulation before it was absorbed by the spleen. Had death been caused by one strong dose of arsenic, the result would have been so speedy that the poison would not have reached the spleen. The judge, in his summing up, is made to attach immense and remarkable significance to this point—the presence of arsenic in the spleen.

My own experience shows that a person may die speedily after taking a large quantity of solid arsenious acid, and yet not a particle of any solid arsenical compound be found in the viscera.

Arsenic, when taken into the stomach, quickly reaches the spleen; I have found it there eighty minutes after the administration of the poison to a rabbit. I have known a person die seven hours after taking one large dose of arsenic, and have found arsenic in the spleen of the deceased. It is within the experience of others that so much as one-third of a grain of arsenious acid, as much as was found in twenty ounces of Higgins's viscera—has been found in the spleen in a similar case. These results are in accordance with the experiments of Orfila and Chevallier on animals.

Fortunately, in the Liverpool trial, the presence of a relatively large quantity of arsenic in the spleen of Thomas Higgins was a point of minor importance, in comparison with the other irrefragable evidence in the case.—Yours, etc., THOMAS STEVENSON.

London, March 4th, 1884.

THE ANTIPYRETIC TREATMENT IN PRIVATE PRACTICE.

SIR,—Your leading article on the "Treatment of Enteric Fever by Cold Bathing" so markedly emphasises a misleading phrase in your report of the remarks I contributed to the recent debate at the Medical Society, that I must ask your permission to correct the inference which you, and doubtless others, have drawn from it.

In your article, you say that I expressed "the opinion that there was no valid objection to the application of the antipyretic treatment in private houses," and you go on to assume, as certainly seems justified by your report of my remarks, that I alluded to the use of the cold bath. It is true that I regard some form of antipyretic treatment essential in most cases of enteric fever; my chief object, however, was to protest against the slavish adherence to the rule laid down that the bath should be used whenever the temperature was above 102°. I especially pointed out the difficulties of carrying this out, both in hospital and in private practice, and stated my belief that, while the cold bath at 70° or 75° for five minutes is in most cases harmless, and is, at the same time, the most efficient antipyretic treatment, yet it is usually unnecessary; indeed, I likened it to using a steam-hammer to crack a nut. I believe that equally good results can in most cases be obtained by other means, though I should always prefer to have a bath available in case of serious necessity arising for its use. I know full well the difficulties of employing it in private practice; but, when it is absolutely necessary, these difficulties can be, and, in my experience, almost invariably are, overcome. I have known an efficient substitute obtained in the poorest of the Borough slums by the loan of a tarpaulin and a water-can from a neighbour.—Yours, etc.,

March 3rd, 1884. F. A. MAHOMED.

SURGEON-GENERAL HUNTER'S REMARKS ON THE EPIDEMIC OF CHOLERA IN EGYPT.

SIR,—As one who saw something of the epidemic of cholera in Egypt in 1883, and who differs from the conclusions arrived at by Surgeon-General Hunter, I trust you will find space for a few remarks with reference to the paper read before the Epidemiological Society.

Dr. Hunter states: "Typhus fever is far from being uncommon, and in 1883, I have reason to believe, prevailed to some extent in the towns and villages of the Delta. In the returns for Cairo for the years 1881 and 1882, previously referred to, thirty-four and forty-six deaths respectively are registered from this cause." There has not been a single case of this disease amongst the army of occupation, and it is well known that typhoid fever is frequently called typhus by foreign practitioners. Surgeon-Major McNally informed me that he investigated cases which were reported as typhus, and he always found that they were typhoid.

Dr. [illegible] statement that cholera was imported in the person of Mahomed Halifa has been satisfactorily refuted; and Drs. Chaffey Bey and Salvatore Ferrari state, [illegible] after inquiry, that the disease was not imported, and that there existed in the deplorable unsanitary condition of Damietta itself sufficient causes for the origin and development of the disease. It is not likely that it was imported by the British troops. Dr. Couvidon says: "I affirm, and I prove that the present epidemic cannot have been imported." As further evidence against importation, a writer in the BRITISH MEDICAL JOURNAL is quoted, who states that it has never been proved that cholera has been imported from the Indies to Europe or to Egypt; that the tendency is to its spontaneous disappearance on board ship during a voyage. Egypt has not suffered once until now since 1865. Aden, which is nearer to India, has only had two slight outbreaks since 1865. Cholera has prevailed in different parts of Europe ten different years since 1865. It is endemic in parts of Russia. Then, Surgeon-General Hunter shows that there was less cholera in Bombay during the six months preceding the epidemic in Egypt than usual. Dr. Mahé contends that the disease was imported by coal-trimmers and stokers employed on board steamers running between Bombay and Port Said. These views are being investigated; but Surgeon-General Hunter thinks the necessity of any investigation doubtful, considering that conditions already existed in the country itself to account for the origin and diffusion of the epidemic.

The evidence against importation amounts to this. 1. Mahomed Halifa did not bring it. 2. Drs. Chaffey Bey, Salvatore Ferrari, and Couvidon, after inquiry, are of opinion that it was not imported; and Surgeon-General Hunter always believed importation impossible. 3. A writer in the BRITISH MEDICAL JOURNAL says importation from India was never proved; the tendency is to spontaneous disappearance on board ship. Egypt has only suffered once, and Aden twice, since 1865, though cholera has been ten times during the same period in different parts of Europe. It is endemic in parts of Russia. Now, this simply tends to prove that it is easier for cholera to travel by land than by sea—a proposition which nobody is likely to deny. 4. There was less cholera in Bombay during the six months preceding the epidemic than usual. There were, however, enough cases for exportation.

We next come to Dr. Hunter's evidence of the existence of endemic cholera in Egypt. 1. Two Coptic priests report a case of death, on June 17th, with cholera-symptoms. A Greek priest reports one death in May, with excessive vomiting and prostration; no purging. 2. Dr. Dutrieux received "declaration" at Damietta in five cases. Two Greek children died, on April 27th, after one day's illness, with cyanosis, aphonia, algid state; no vomiting, no diarrhœa. Another Greek child, ill six months, had vomiting, cramp, aphonia, algid state, without diarrhœa; death after six days. An Arab barber, ill two or three days towards the end of April, died, after vomiting and diarrhœa. An Arab shopkeeper died, after twenty-four hours, with vomiting and diarrhœa. None of these cases were seen by a medical man, and are very doubtful; and, even if they were cholera, it only proves that the epidemic broke out earlier than reported. 3. Then comes the case of Dr. Giovanni Martini, who, being called out at night, about 1867, wrapped himself up in a woollen scarf, which he had used only in the epidemic of 1865, and had all the phenomena of cholera, but recovered. This case tends only to support the germ-theory. 4. Dr. Sonsino reports that Tommaso Bonassi had cholerine in 1873, and again in 1874; recovered. 5. Dr. Rabitsch, in 1878 or 1879, saw a patient, whom he pronounced to be suffering from cholera; he stated that there was no fear for the patient or the persons present. 6. Dr. Fouquet's case, which resembled cholera, appears twice. 7. Dr. Sierra saw a Jewess with copious vomiting and diarrhœa, accompanied by a marked fall in the pulse, agitation, sinking of the eyes; the symptoms lasted more than eighteen hours, and reaction was very difficult to bring about. 9. There were two cases entered as "choleriform" in Alexandria. One, in June 1882, recovered; the other was fatal, in April 1883. 10. Dr. Kartulis saw a suspicious case in 1881; Dr. Mamlouk, a suspicious case and a typical case about 1871. 11. Dr. Mackie reports four cases—two in 1881, one in 1872, and one in 1872 or 1873. Dr. De Castro observed several cases of cholera in 1866, which he considered the residue of the epidemic of 1865. Between 1875 and 1882, he saw four cases of sporadic cholera, which differed from Asiatic cholera in being less grave, less fatal, and by their non-tendency to propagate themselves, even in the absence of all sanitary precautions. Dr. Hunter scoffs at Dr. De Castro's idea that these are not true cases of Asiatic cholera. I must confess, however, that it seems to me very extraordinary that, if cholera be endemic in Egypt, the unsanitary condition of which he graphically describes, Dr. Hunter should have such difficulty in hunting up a few doubtful cases; whereas in Bombay, with its excellent sanitation, the disease is nearly constantly epidemic. 12. Dr. Demich of Alexandria states that there was an epidemic in Upper Egypt in 1872 coming from Soudan; he does not state how he got his information. He has seen one or two cases of cholera nostras each year since 1865. 13. Dr. Mastrakis had a patient at Assiout, in 1882, who died, with symptoms of vomiting, purging, cramps, and collapse, after ten or twelve hours. Cholera existed in Assiout a few days before it was recognised in the Government returns. Dr. Haddad thinks cholera was not imported from Lower Egypt. He adds: "How many years it has existed here, I cannot say, as I have neither the means nor the time to institute proper inquiries." This cannot be looked upon as valuable evidence, as Dr. Hunter only brings forward one case treated by Dr. Haddad, and already mentioned. M. Chevalier told Surgeon-Major McNally that cholera had existed in Xayoun (Upper Egypt) six years ago. Possibly, Dr. Demich also got his information from M. Chevalier. The value of this kind of information may be judged when one knows that the existence of plague in Damietta last year was currently reported and believed by people in Cairo. 14. Dr. Patterson says that he cannot recall a year, from 1855 to 1868, without several well marked cases of cholera coming under his notice. They were returned as cholera nostras. He is a believer in the disease being epidemic. 15. Surgeon-Major McNally shows that in the neighbourhood of Zagazig there had been a large mortality, since January, from diarrhœa and vomiting. There is always a large mortality from diarrhœa and bowel-complaints in Egypt, as Dr. Hunter amply proves; but this is no proof of the existence of cholera. He also reports that cholera was prevalent in Chibin-el-Kom and villages near Beuka before it was reported at Damietta. As far as I can see, this, even if it were the case, proves nothing, as there is no reason why cholera should not be imported into other places, and spread to Damietta. Dr. Houman reports about Mahallet Kebir District, that there were some cases of cholera before the disease was recognised; that there was a large mortality from diarrhœa in May in Semenoud. Mr. McCullough was convinced that cholera was raging in the island of Matarieh in Lake Menzaleh a month before it broke out in Damietta. If this be so, it strengthens the importation-theory, as Matarieh is not far from the Suez Canal, and is in a much more favourable position for importation than Damietta. This would also account for the cases reported by Surgeon-Major McNally and Dr. Honman as having occurred before the Damietta outbreak. The statement of a Turkish official, talking to our Consul-General, is worthless, as everybody knows he would be likely to say what he thought would be agreeable to Sir E. Baring. Now, the whole of this evidence collected by Dr. Hunter, who, confessedly, started with the opinion that the disease must have originated in Egypt, and who was assisted by a staff of over twenty medical men, and had every facility for inquiry, can only prove that between 1866 and 1882, a period of fifteen years, there were four deaths with cholera-symptoms seen by medical men in Egypt; and about three times that number of cases, described as cholera nostras, cholerine, etc., which recovered. The remainder of the evidence is merely hearsay, and extracted from a very ignorant population. Dr. Hunter only gives us the evidence of two of his numerous staff. Have the remainder anything to say for or against his theory? One infers, from the Surgeon-General's remarks, that the reason we get no information from them is, the Egyptian Government dispensed with their services before they had time for investigation; but several of them were in the country after Dr. McNally had left, and two of them are still in the service of the Egyptian Government. When I add that Dr. Hunter is satisfied that cholera is endemic in the British Isles, and in all the countries of Europe, it is not surprising that very little evidence is necessary to convince him that the same is the case in Egypt.

Now let us examine the evidence as to the "meteorological state" which existed during the outbreak and preceded it. Mr. R. Borg, Vice-Consul, states "When cholera was at its height in 1865 in the capital, the sky was lead-coloured, the atmosphere oppressive, so as to render breathing rather difficult at times, and the town of Cairo, as seen from Mokhattam Hills, seemed to be enveloped in a spherical cloud of thick mist during three consecutive days." This is a very frequent state of the weather in Cairo in the hot season, and is about as significant as rain in Ireland or a mist in Scotland. Brigade-Surgeon McDowell observed a very peculiar state of the atmosphere on the 23rd July: "A yellowness of the air, somewhat of the nature of a fog, and it was quite calm. The sparrows, it was noticed, had deserted the place and did not return until July 26th." On the night of July 23rd the cholera first attacked the British garrison at Kasr-en-Nil, Abassieh, and the Citadel. Does Surgeon-General Hunter contend from this that there is a special state of the atmosphere necessary to cause the disease in British soldiers? The natives were attacked all round each of the barracks days before. The fact that cholera broke out simultaneously amongst the soldiers at Kasr-en-Nil, Abassieh, and the Citadel, which are miles apart, and where cholera already existed amongst the natives, leads me to believe that it was caused by something which was common to the soldiers, and not common to them and the natives, *e.g.*, supplies. If it were caused by air, would not natives and Europeans be likely to be attacked at the same time? As a further argument in favour of this view, I may mention that, later on, when there had been no cases amongst the British troops for some days, a simultaneous attack took place in Helonan, Ismailia, and Suez, places separated by nearly 100 miles. All were receiving articles, such as ice, from Cairo. The natives at these places were not attacked. Surely a yellow cloud is not likely to single out our soldiers in this manner. Few people will believe with Dr. Kirker that the stagnancy of the air over Chalby forced the disease into existence. I fear also that the movement of sparrows are not to be taken as a guide, as these birds appear to have returned to Cairo on July 26th, long before the disease began to abate. The rest of the meteorological evidence is somewhat similar and equally vague; but it would lead me too far to analyse it.—I am, etc.,

W. H. Macnamara, M.D., F.R.C.S., Surgeon-Major, A.M.D.

Cairo, January 30th, 1884.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, March 6th.

Medical Act Amendment Bill.

Lord Carlingford, in moving the second reading of this Bill, said: The Bill which I have to ask your lordships to read a second time is the same Bill which passed through this House last session. Your lordships will remember that that Bill was considered in this House, and, after considerable discussion and amendment, was sent to the other House of Parliament. It was not rejected by the other House, because it was never discussed in that House. It was impossible to find time during last session for even a single discussion of the Bill; and, under these circumstances it has appeared to us to be the best plan to bring it in again in its original form, and to send it—as I have every reason to believe you will send it—to the other House, where, I hope, this year it will be fully discussed and adopted for the benefit of the medical profession and the public. The measure has been improved in point of drafting, and in some other respects, but there is only one amendment which I ought to mention, namely, an amendment with reference to the constitution of the Medical Board for Scotland. Those who have taken an interest in the question will remember that it was thought right, in accordance with the strong opinion of the Royal Commission on this subject, that the Scotch Universities should have a decided preponderance on the Medical Board of Scotland, but I think it can hardly be doubted that the principle was pushed rather to an excess, and that the disproportion of numbers between the representatives of the Scotch Universities and those of the Scotch Medical Corporations in the Bill of last year was somewhat excessive, the number given to the Scotch Universities on the Scotch Board being eight, and the number given to the Corporations being three. In the present Bill I have raised the number of three to five, which will still leave the majority—which they ought to enjoy—to the Universities. My lords, the Bill has some other minor, but still important, provisions; some, for instance, dealing with the status of the foreign and colonial practitioners in this country, which have very long been called for by the profession. But your lordships will recollect that the main object of the Bill is to put the system of licensing and registration, for the purpose of practising medicine and surgery in these three kingdoms, on a more satisfactory footing than it holds at present, upon a footing which will give security to the public that every practitioner who shall have conferred on him the right to practise shall be reasonably qualified to practise, which is a matter of the greatest importance to all of us, and one which greatly concerns the credit of the medical profession itself. It cannot be said that the present system attains that object; a system under which the right to confer a licence to practise is left in the hands of a large number of licensing bodies, independent of one another, acting under a very imperfect responsibility, and all beset with the temptation to compete one with another, and to compete, of course, in a downward direction—that temptation, as is well known, it has not always been possible to resist; so that, under these bodies, there has been practised far too much a system of underbidding one another, for the purpose of drawing pupils and members each to its own body. The Bill proposes, in accordance with the recommendation of the Royal Commission, to remedy this state of things by creating a medical board, on behalf of the three countries, fairly representing the licensing bodies, which board, under the superintendence of a central medical council, will alone have the right of conferring a licence to practise. Such a Bill at this moment, I think, ought to have a fair chance of success, though many before it have failed. The Bill has the great advantage of being based upon the full inquiry and able report of the Royal Commission, presided over by my noble friend the noble earl behind me (the Earl of Camperdown). The Bill has also the great advantage of a very large amount of support, indeed, from the great body of the medical profession. I think I may fairly say that no previous Bill has enjoyed anything like the same amount of support from the body of the medical profession that this Bill enjoys. The only danger which, so far as I know, the Bill appears to be exposed to, arises from the alarms—I think the greatly exaggerated and even unfounded alarms—of some of the licensing bodies in the three kingdoms; not the universities, but some of the medical corporations, who fear that their privileges and incomes may be sacrificed or endangered by the Act. My lords, I do not believe, as the Royal Commission itself did not believe, that that will be the effect of the Bill. We desire that the medical corporations should hold their ground, and should flourish and prosper in proportion to the services which they are able to render to the profession and to the public; and we believe that they will do so under the provisions of this Bill. I have reason to think that the alarm of which I speak—as it is certainly not shared by all the members of these corporations, certainly not by many of their most distinguished members—is in many cases felt, or at all events expressed, by the minority of these bodies; but I trust that, as the Bill is more thoroughly understood and discussed, this alarm will be removed. With these few words, I will ask your lordships to read the Bill a second time. I confidently believe that, if it be passed—which I trust it will be this session—no efforts will be spared by the Government for the purpose of carrying it out. I trust it will be found as much for the benefit and credit of the great profession with which it directly deals as for the advantage of the public generally.—The Earl of **MILLTOWN** regretted that the House and the country had not had more time to consider the Bill, it only having been delivered to their lordships yesterday. The medical profession were in blissful ignorance of its contents. Under these circumstances, it would be useless for him now to attempt to discuss the measure; but, as a matter of fact, two of the most important colleges in Ireland were very much apprehensive that the provisions of the Bill would lead to their disestablishment and disendowment.—The Earl of **GALLOWAY** said he was grateful to the noble lord for having offered the composition which he (the noble Earl) asked for last year—namely, a little consideration for the colleges of Scotland, as well as for the universities. He thought the proportion of 8 to 5 in the present Bill met all the requirements of the Scotch medical bodies.—Earl **GRANVILLE**, referring to a remark made by the Earl of Milltown, said the Bill was substantially the same as the Bill of last year; and therefore there had been ample time for their lordships and others to become acquainted with it.—Lord **CARLINGFORD** said the changes in the Bill were but small, and the main one was that which he was glad to find was acceptable to the noble Earl.—The Bill was then read a second time.—The Marquis of **SALISBURY** suggested that time should be given to study the Bill before it was put down for Committee.—Lord **CARLINGFORD** said he should propose to take the Bill in Committee that day fortnight.

HOUSE OF COMMONS. Thursday, February 28th.

Indian Medical Service.—Mr. **GIBSON** asked the Under Secretary for India whether any, and what, steps had been taken since last August by Her Majesty's Government to meet the grievances of the Indian Medical Service, and to lessen the disaffection which existed in all its ranks.—Mr. J. K. **CROSS**: Last year, I stated that, in view to the gradual removal of the existing disadvantages to the Indian Medical Service of having more officers than there were substantive posts for them to fill, the number of annual appointments would be reduced to the lowest pitch compatible with justice to existing students and the future efficiency of the department. This measure is still being carried out. Only ten appointments were made to the service last year, and only ten will be made this year. It is not proposed to take any other step but this, which must prove effectual in adjusting a due proportion between the number of charges and of officers to hold them.—Mr. **GIBSON** gave notice to call attention to this subject at the earliest possible moment.

Friday, February 29th.

Alleged Death from Overwork.—Mr. **LEIGHTON** asked whether the jury at an inquest just held at Cheltenham on the body of Elizabeth Rowley, aged 8, who, it was alleged, had died from overwork at a board-school, found that the primary cause of death was inflammation of the membranes of the brain, that the lessons were too great a mental strain for a healthy child of seven or eight years to bear, and that the mental strain she underwent hastened her death; and whether the New Code would be maintained in its present severity.—Mr. **MUNDELLA**: I know nothing of this case, except that I saw a paragraph in the *Times* yesterday, on which this question appears to be founded. I telegraphed at once to Her Majesty's inspector to make an inquiry and report upon it. He is in quite a remote part of his [illegible], and telegraphs that he will report on Monday. There must be some error in the paragraph, as there is no School Board, and consequently no board-school, in Cheltenham. So far from the New Code being more severe for children of eight years of age than former codes, the direct intention, and, I believe, the effect of it, is to relieve children of tender years from pressure. It empowers teachers and managers to withdraw delicate children from examination; but we think this is insufficient, and we are considering how we can best protect such children from being overworked during the year previous to the examination.

Monday, March 3rd.

London Bakehouses.—In reply to Mr. **BROADHURST**, Mr. **RUSSELL** said: We have to-day received the report of the medical officer of Lambeth. It refers to a large number of cases in which sanitary defects in bakehouses were discovered, but it does not state that "sewage came through into the premises." Neither is it stated in that report, although we do not doubt that such is the case, that several of the bakehouses are underground. We learn that notices have been served on the owners in every instance to remedy the sanitary defects, and that inspection will frequently be made. With reference to the question as to legislation to prevent the construction of underground bakehouses, a clause on this subject was introduced into the Factory and Workshops Bill of last session, but was withdrawn in deference to opposition. The Act as passed, however, contains a provision that any occupier of a place used as a bakehouse, which is in such a state as to be unfit for such use, is liable to penalties, and this applies to bakehouses under, as well as those above ground. If experience should show that further legislation is required, we should be prepared to propose it.

The Army Medical Department.—Sir T. **LAWRENCE** asked the Secretary for War whether any steps were being taken to carry out the recommendations of Lord Morley's Committee as to the closer union of the Army Medical Department with the Army Hospital Corps.—Lord **HARTINGTON**: The recommendation referred to is one of many contained in the report of Lord Morley's Committee. I hope, in introducing the Army Estimates, to make a general statement of the intentions of Her Majesty's Government with regard to that report.

Tuesday, March 4th.

The Dwellings of the Poor.—Mr. A. **BALFOUR** called attention to the condition of inhabited dwellings in crowded districts of large towns, and, admitting that there had been considerable improvement of late years in our great towns, he pointed out that the evil was not of modern origin, nor was it confined to any particular country or landed system, for it was found in Oriental towns, in New York, in Paris, and in agricultural villages. He did not propose to deal with one great cause of overcrowding—the crime or vice which attracted the population into the large towns; but the second great cause—the carelessness of our ancestors in building their towns—could be grappled with by the existing laws. It was the duty of the present generation strictly to supervise the manner in which houses were built, and also to provide that, for every given area, open spaces should be provided. Simple sanitary legislation and the law of supply and demand, could not deal adequately with the evil, and he proposed therefore that, in the case of certain public trusts and corporations having for their object the improvement of the dwellings of the poor, some relaxation should be made in the rules under which loans are at present granted by the Public Works Loan Commissioners. He denied that this kind of assistance need demoralise the people; and though there might be some risk, considering the importance of the subject, something must be done to remedy the condition of things described.—Sir L. **PLAYFAIR**, in seconding the motion, gave an interesting review of the spread of the metropolis and the growth of this evil from the time of Queen Elizabeth, as well as of the efforts made to remedy it, and the consequent improvements in the rate of mortality. With regard to London in particular, he showed that, on the whole, it was a healthy town, and touching on the obstacles to improvement, he laid especial stress on the tenure of land, the want of unity of local government, and the habits of the people.—Sir C. **DILKE** moved the "previous question," and observed that its first proposition—that sanitary legislation was not adequate in all cases—was a truism. His reason for moving the previous question was the appointment of the Royal Commission, which would inquire into this branch of the subject. Some of the worst districts in London [illegible] were well built and the streets were wide; and, agreeing with Sir L. Playfair, that the tenure of land [illegible] with the evil, he maintained that the [illegible] would greatly mitigate [illegible] foreign landlords of the [illegible] position, he did not [illegible] ing it again so soon; and, agreeing that one great defect was in the local authority, he mentioned with reprobation various cases in which leading vestrymen were personally interested in this last description of property. Sir R. CROSS regretted that the Government had alleged the Royal Commission as a reason for doing nothing, because their attitude would encourage the local authorities to hold their hands, and he saw no necessity for delaying action pending the Royal Commission. As the law stood, the local authorities had ample powers, and he joined in condemning the local authorities who preferred their private interests to public duty.—Sir S. WATERLOW also regretted the course taken by the Government; but rather than there should be an adverse vote, which would result unfavourably on the local authorities, he recommended that both the motion and the "previous question" should be withdrawn.—The CHANCELLOR of the EXCHEQUER recommended that the course just suggested should be taken; and after some remarks from Sir JOHN MOWBRAY in defence of the Ecclesiastical Commissioners, and from Mr. ALDERMAN LAWRENCE and Mr. BRODRICK, the "previous question" and the resolution were both withdrawn.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

PAYMENT OF HEALTH-OFFICERS BY FEE.

THE remuneration of medical officers of health in any other way than by a fixed annual salary, ought to be definitely prohibited by the Local Government Board. The essence of the appointment of such an officer is, that he shall be ready to act on the instant that any hint of infectious disease in his district reaches his ears, or rather, perhaps, that he shall be perpetually on the alert to prevent the occurrence of any such case. Payment by means of fee is illusory and ridiculous for an officer with functions such as these. If he has to wait for the directions of the local authority before he acts, he might just as well not act at all for all the real good that he can do. The health-officer of the St. Thomas (Devon) Rural Sanitary District is paid by fees, and apparently the authority are not keen in utilising his services, for we find the inspector reporting the continuance of scarlatina at a village, and one guardian replying to the doubts of another guardian as to whether disinfection was properly carried out, with regrets that "there was no official appointed for the district to whom they might turn for advice in such a case." He might well add that "they appeared to be only groping in the dark." No action appears to have followed this remark, and the guardians have apparently considered their duty sufficiently satisfied by ordering the clerk to ask for the instructions of the Local Government Board as to the best method of disinfection. It does not seem to have occurred to them that there was any necessity for the intervention of their health-officer, for this, of course, would have involved expense. A health-officer paid by fee is an abuse of terms, and a distinct violation of the spirit, if not of the letter, of the Public Health Act.

THE RESPONSIBILITIES OF POOR-LAW MEDICAL OFFICERS.

IN our issue of February 2nd, we drew attention to the case of Mr. Searle of Brixham, one of the medical officers of the Totnes Union, South Devon. Recently, we have had the opportunity of obtaining more precise information on the subject; and we feel that the resolution of the board of guardians, which was sent to that gentleman, intimating "that he was bound to attend, and the board would insist on his attending, to the orders of their officers;" was, under the circumstances, a very strained interpretation of the law. The new Poor Law, 1834, provided for the appointment of relieving officers, whose duty it is to inquire into the circumstances of every applicant for medical or other relief, and to give or withhold an order for such relief, according to the merits of each case. At the same time, as the relieving officer, in rural districts especially, was appointed for a number of parishes, it was arranged that, with the view to meet sudden emergencies, the overseer of the parish should be empowered to grant an order. This, however, was distinctly understood to be exceptional. As regards some other points that have been raised in this particular case, we hold that it is extremely unadvisable for medical gentlemen not holding Poor-law appointments to go on with a case of midwifery up to the point when they discover that it is difficult and complicated, and then to retire from the same by handing it over to the ill-paid Poor-law medical officer to finish; and we believe that an action would lie against any member of our profession (if there be such) guilty of such conduct. Further, an overseer has no authority to enter the private residence of a medical officer, and by word of mouth direct him to do this, that, or the other. If he give an order, he is bound to write why and wherefore; and we hold that, if he give one without due care, the medical officer aggrieved can take proceedings to recover from him costs for such vexatious conduct.

THE POSITION OF POOR-LAW MEDICAL OFFICERS.

A YOUNG PRACTITIONER writes to us as follows. "There has been lately some correspondence in your JOURNAL concerning the position which Poor-law medical officers are supposed to hold; and, from the tone of these letters and of the editorial note on the subject, the status of these gentlemen would appear to be inferior to that of their professional brethren.

"The parish appointment is soon to be vacant in the district in which I have lately settled. I shall therefore esteem it a favour if you will kindly inform me whether, in your opinion, if I were to apply for and obtain the post, my position would be thereby rendered inferior to the other medical men in the place, and whether my chances of obtaining a good class practice would in consequence be diminished."

. Our correspondent is in error if he suppose that we consider the status of Poor-law medical officers to be inferior to that of their professional brethren. On the contrary, it is beyond question that, as a class, they are a most honourable and meritorious body of men; and many who are now or have been Poor-law medical officers, hold a high social and professional position. It has often happened, that the Presidency of a Branch of the British Medical Association (one of the highest honours, we take it, that can be bestowed on a medical man by his professional neighbours) has been conferred on a Poor-law medical officer, actual or retired. The idea, then, that a Poor-law medical officer is *ipso facto* inferior to his professional brethren, is untenable. The position of our correspondent would not, in our opinion, be rendered "inferior to that of the other medical men in the place" by his holding a Poor-law medical appointment. His chance of obtaining a good class practice will depend on the reputation which he establishes for himself, of being an honourable member of the profession and a skilful practitioner. If our correspondent will again read carefully the remarks to which he alludes, he will probably observe that they refer chiefly to hospital medical officers, whose position is commonly held to be in some way superior, not only to that of the Poor-law medical officer, but to that of their brethren who follow general practice.

THE IRISH POLICE AND DISPENSARY MEDICAL OFFICERS.

SIR,—On the night of the 12th of last November, the police from a village (Ballisodare) two miles from here reported to me that they had found a man lying on the road in an unconscious state, whom they removed to their barrack, and they asked me to visit him. I attended the man, and found him suffering from symptoms of concussion of the brain; there was also a large abscess on his thigh. When he had recovered from the brain-trouble, I recommended his removal to the county infirmary, as he was too weak for the journey to his home, and he had no friends in Ballisodare who would take charge of him. Some days afterwards, I wrote to the Under-Secretary at the Castle, Dublin, for my fee of 1*l.* 1*s.*, and 2*s.* 6*d.* car-hire. I received a reply stating that my letter was under consideration, and that it had been forwarded to the police authorities. The next information on the subject I received was from the sergeant in charge of the station, about seven weeks after my visit. He read to me a communication from head-quarters to the following effect.

"Inform Dr. Molony that his application for a fee for attendance on O'Boyle on November 12th cannot be entertained, as the Attorney-General ruled, in a similar case, that a dispensary doctor is bound to attend in a case of urgency in the first instance without a visiting-ticket."

I need hardly say that the contents of the document, with its legal opinion, astonished me, as I knew from past experience in similar cases that not only was I "bound" to get my fee, but also my travelling expenses, and that it was no part of my duty as a dispensary doctor to attend a patient without a ticket. At the same time, it is hardly necessary for me to refute the idea that I (or any member of the medical profession) would be so wanting in common charity as to refuse to attend when called on, and to allow a man to die without doing everything that was possible to relieve him, simply because a fee was out of the question. But when professional aid has been given, and I apply for a fee to which I have a legal right, am I to be treated with such scant courtesy?

Under the circumstances, there was no other course left me but to consult a solicitor, who advised the sending of a "civil bill process" to the constable by whose orders I was sent for. The result has been the receipt of the letter, of which a copy is subjoined.

As this transaction may be of interest, and useful to the Irish Poor-law medical officers who are members of the British Medical Association, I hope you will be kind enough to give this letter, with the inclosed copy, insertion in the BRITISH MEDICAL JOURNAL. I am, sir, yours truly,

Collooney, Co. Sligo. JOHN MOLONY, Medical Officer.

P.S.—My duties as medical attendant to the police have nothing whatsoever to do with the case. I therefore declined to take the "generous" hint from the Treasury Remembrancer.—J. M.

[*Copy.*] "Sligo, January 26th, 1884.

"SIR,—I am directed to inform you that, upon reconsideration of the case in which you claim fee and expenses, and have issued process for 1*l.* 3*s.* 6*d.* against Constable Mansfield of Ballisodare for medical aid given by you to James O'Boyle on 12th November last, the Treasury Remembrancer, having regard to the fact that you had to travel a distance of four miles (a fact at first overlooked), has directed me to pay you the amount claimed without delay. I therefore inclose you a Post Office order for above amount. Will you have the goodness to sign inclosed form of receipt in duplicate, and return same to me?

"I am further directed, if you insist upon payment of your costs in the proceedings (which, being the constabulary medical attendant, it is supposed you will hardly do), to pay you the amount necessarily expended by you in having process issued and served.—I remain, sir, your obedient servant, W. E. LAWLESS. D.I.R.I.C.—Dr. J. Molony, Collooney.

HEALTH OF ENGLISH TOWNS.—During the week ending the 1st instant, 6,018 births and 3,417 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons. The annual rate of mortality per 1,000 persons living in these towns, which in the two preceding weeks had been 20.1 and 21.1, declined to 20.3 during the week ending March 1st. The rates in the several towns, ranged in order from the lowest, were as follow:—Norwich, 12.1; Brighton, 12.5; Derby, 13.7; Birkenhead, 15.5; Bradford, 15.9; Leicester, 16.9; Huddersfield, 17.0; Hull, 17.9; London, 19.3; Bolton, 19.6; Plymouth, 20.0; Leeds, 20.1; Portsmouth, 20.4; Halifax, 20.5; Salford, 20.6; Birmingham, 21.4; Blackburn, 21.7; Cardiff, 21.8; Sheffield, 21.9; Bristol, 22.3; Newcastle-on-Tyne, 22.8; Nottingham, 23.1; Liverpool, 23.3; Sunderland, 23.7; Preston, 24.6; Oldham, 25.9; Wolverhampton, 26.0; and Manchester, 29.5. The average death-rate last week in the twenty-seven provincial towns was equal to 21.3 per 1,000, and therefore exceeded by 2.0 the rate recorded in London. The 3,417 deaths registered last week in the twenty-eight towns included 407 which were referred to the principal zymotic diseases, against 399 and 415 in the two preceding weeks; of these, 121 resulted from whooping-cough, 87 from measles, 75 from scarlet fever, 40 from "fever" (principally enteric), 37 from diarrhœal diseases, 29 from diphtheria, and 18 from small-pox. These 407 deaths were equal to 11.9 per cent. of the total deaths, and to an annual rate of 2.4 per 1,000. This zymotic rate was equal to 2.3 in London, which was slightly below the rate in the twenty-seven provincial towns, among which it averaged 2.5 per 1,000, and ranged from 0.0 in Birkenhead and in Halifax, and 0.5 in Brighton, to 4.3 in Oldham and Leeds, 4.5 in Manchester, and 4.7 in Portsmouth. The fatal cases of whooping-cough in the twenty-eight towns, which had been 120 and 127 in the two preceding weeks, declined to 121 last week, and caused the highest proportional fatality in Liverpool and Manchester. The deaths referred to scarlet fever, which in the two previous weeks had been 79 and 99, declined again to 75, and caused the highest rates of mortality in Preston, Leeds, Sheffield, and Newcastle-upon-Tyne. The 87 fatal cases of measles also showed a decline from the number returned in the preceding week; this disease caused the largest proportional fatality in Oldham and Portsmouth. The 37 deaths referred to diarrhœal diseases differed but slightly from those returned in recent weeks. The fatal cases of fever, which had declined in the three preceding weeks from 43 to 34, rose again last week to 40, and caused the highest death-rates in Bradford and Leeds. The deaths referred to diphtheria in the twenty-eight towns, which had been 39 and 29 in the two previous weeks, were again 29 last week, of which 12 occurred in London, 4 in Sunderland, 2 in Birmingham, 2 in Preston, and 2 in Leeds. The fatal cases of small-pox in these towns, which had declined in the three preceding weeks from 21 to 11, rose again last week to 18, of which 8 were recorded in London, 6 in Sunderland, 2 in Birmingham, 1 in Liverpool, and 1 in Sheffield. The death-rate from diseases of the respiratory organs, judged by the metropolitan returns, still continues much below the average; the deaths referred to these diseases in London, which had been 334 and 345 in the two preceding weeks, declined again last week to 334; they were as many as 162 below the corrected weekly average number, and were equal to an annual rate of 4.3 per 1,000. The causes of 28, or 2.9 per cent., of the 3,417 deaths registered last week in the twenty-eight towns were not certified, either by medical practitioners or by coroners. In London the proportion of uncertified deaths did not exceed 1.9 per cent., whereas in the provincial towns it averaged 3.6 per cent., and showed the largest excess in Huddersfield, Oldham, Halifax, and Cardiff.

HEALTH OF SCOTCH TOWNS.—In eight of the principal Scotch towns, having an estimated aggregate population of 1,254,607 persons, 850 births and 559 deaths were registered during the week ending the 1st instant. The annual rate of mortality, which in the two preceding weeks had been 20.9 and 22.6 per 1,000, further rose last week to 23.2, which exceeded by 2.9 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the death-rate was equal to 13.6 in Leith, 16.2 in Dundee, 18.2 in Aberdeen, 20.0 in Edinburgh, 20.8 in Greenock, 27.6 in Glasgow, 28.6 in Perth, and 33.0 in Paisley. The 559 deaths registered last week in these towns included 21 which resulted from whooping-cough, 17 from diphtheria, 15 from "fever," 13 from measles, 10 from diarrhœal diseases, 7 from scarlet fever, and 1 from small-pox; in all, 84 deaths were referred to these principal zymotic diseases, showing a further increase upon the number returned in the two previous weeks, which were 72 and 77 respectively. These 84 zymotic deaths last week were equal to 15.0 per cent. of the total deaths, and to an annual rate of 3.5 per 1,000, which exceeded by 1.1 the average zymotic death-rate recorded last week in the twenty-eight English towns. In the Scotch towns the lowest zymotic death-rates were 0.8 in Leith, and 1.7 in Dundee, whereas the rate was equal to 4.5 in Paisley, and 5.0 in Greenock. The fatal cases of whooping-cough, which in the two preceding weeks had been 21 and 26, declined again to 21, and included 15 in Glasgow, and 6 in Edinburgh. The 17 deaths referred to diphtheria exceeded by 4 the number returned in the previous week: 5 occurred in Aberdeen, 3 in Edinburgh, 2 in Glasgow, 2 in Dundee, 2 in Greenock, and 2 in Perth. The fatal cases of "fever," which had been 4 and 10 in the two previous weeks, further rose last week to 15, and exceeded the number returned in any week of this year; no fewer than 11 were registered in Glasgow, also 2 in Edinburgh, and 2 in Greenock. The deaths from measles, which in the three preceding weeks had declined from 12 to 8, rose again last week to 13, of which 5 occurred in Edinburgh, 4 in Glasgow, and the remaining 4 in Paisley. No fewer than 53 deaths from measles have been registered in Edinburgh since the beginning of the year. The 7 fatal cases of scarlet fever in these Scotch towns last week were 3 less than the number in the preceding week; 3 occurred in Glasgow and 4 in Edinburgh. The fatal case of small-pox was recorded in Glasgow, and was of an unvaccinated infant three months old; this is the first death referred to this disease in any of these Scotch towns since the last week of 1883. The mortality from diseases of the respiratory organs in these Scotch towns was again considerably below the average, and was equal to an annual rate of 5.0 per 1,000 persons living, which exceeded by 0.7 the rate last week from the same diseases in London. As many as 84, or more than 15 per cent. of the 559 deaths registered last week in these towns, were uncertified.

HEALTH OF IRISH TOWNS.—During the week ending March 1st, the total number of deaths registered in the sixteen principal towns in Ireland was 415. The average annual death-rate was 25.1 per 1,000 of the population, the respective rates for the several districts being as follow, ranging in order from the lowest to the highest: Newry, 3.5; Armagh, 5.2; Sligo, 9.6; Dundalk, 13.1; Galway, 16.8; Lisburn, 19.3; Dublin, 25.2; Belfast, 25.2; Kilkenny, 25.4; Lurgan, 25.7; Cork, 26.6; Limerick, 27.0; Wexford, 29.9; Waterford, 34.7; Londonderry, 37.4; Drogheda, 38.1. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.2 per 1,000, the rates varying from 0.0 in Limerick, Galway, Newry, Dundalk, Sligo, Lisburn, and Armagh, to 10.3 in Lurgan; the 5 deaths from all causes registered in the last named district comprising 2 from scarlatina (which occurred in November last). Among the 105 deaths from all causes registered in Belfast, were 5 from scarlatina, 1 from whooping-cough, and 3 from enteric fever; and among the 21 deaths from all causes in Londonderry were 2 from scarlatina, and 1 from whooping-cough. One death from typhus and one from ill defined fever were registered in Wexford. In the Dublin Registration District, the deaths registered during the week amounted to 173. The deaths represent an annual mortality of 25.6 in every 1,000; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 25.2 per 1,000. Nineteen deaths from zymotic diseases were registered, being one over the number for the preceding week, but ten under the average for the ninth week of the last ten years; they comprised 1 from measles, 7 from scarlet fever (scarlatina), 5 from whooping-cough, and 2 from diarrhœa, but none from typhus, typhoid fever, or simple continued fever. Thirty-eight deaths from diseases of the respiratory system were registered; being 3 over the number for the preceding week, but 19 under the average for the ninth week of the last ten years; they comprised 23 from bronchitis, and 11 from pneumonia or inflammation of the lungs. The deaths of 14 children under five years of age were ascribed to convulsions. Two deaths were caused by apoplexy, 14 by other diseases of the brain and nervous system (exclusive of convulsions), and 8 by diseases of the circulatory system. Phthisis caused 22 deaths, mesenteric disease 6, and cancer 3. Six accidental deaths were registered. In 2 instances the cause of death was "uncertified," and in 23 other cases there was "no medical attendant."

HEALTH OF FOREIGN CITIES.—It appears from statistics published in the Registrar-General's return for the week ending the 1st instant, that the annual death-rate was recently equal to 26.0 in Calcutta, and 27.2 in Bombay. Cholera caused 17 deaths in Bombay, and 6 in Calcutta. "Fever" was almost equally fatal in each of these Indian cities. According to the most recently received weekly returns, the average annual death-rate in twenty-two of the largest European cities was 28.0 per 1,000, and was no less than 7.7 above the mean rate last week in the twenty-eight large English towns dealt with in the Registrar-General's weekly return. The death-rate in St. Petersburg was equal to 38.4, showing a slight decline from the higher rates in previous weeks; the 683 deaths included 27 from "fever," 24 from measles, and 20 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged only 23.2, the highest rate being 28.1 in Stockholm, where 5 of the deaths resulted from diphtheria and croup; scarlet fever caused 6 of the 61 deaths in Christiania. In Paris the death-rate was equal to 24.1 (against but 19.3 in London), and the deaths included 52 from diphtheria and croup, and 41 from typhoid fever. The 190 deaths in Brussels were equal to a rate of 22.9; small-pox caused 8 and whooping-cough 9 of the deaths registered. In Geneva, the rate was 28.7, the deaths including 3 from whooping-cough. In the three principal Dutch cities—Amsterdam, Rotterdam, and The Hague—the mean death-rate was 25.7, the highest rate being 27.2 in Rotterdam, where 4 of the 81 deaths were attributed to croup; 24 more deaths from diphtheria and croup were recorded in Amsterdam. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 27.3, and ranged from 21.2 and 23.8 in Berlin and Hamburg to 35.1 in Munich and 35.6 in Prague. Small-pox caused 34 deaths in Prague, showing a decline of 16 from the number in the previous week; and 2 in Vienna. Diphtheria showed excessive mortality in Dresden and Berlin. The death-rate in three of the principal Italian cities averaged 36.4, and was equal to 48.2 in Turin, 31.4 in Rome, and 26.4 in Venice. The 234 deaths in Turin included 33 from measles, 6 from typhoid fever, and 4 from small-pox. Malarial fever caused 7 deaths in Rome. The 142 deaths in Lisbon, of which 4 resulted from diphtheria and 2 from small-pox, were equal to a rate of 36.4, but showed a decline from the still higher rate in the previous week. The mean death-rate in three large American cities did not exceed 20.9, the highest rate being 22.3 in Philadelphia, where 18 deaths resulted from scarlet fever, and 12 from typhoid fever. Diphtheria caused 10 of the 170 deaths in Baltimore.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

CALVERLY.—The severance in May of one of the parishes of this district renders the computation of the mortality-statistics a matter of some difficulty. Mr. Giddings estimates the total number of deaths at 51, 27 of which occurred during the last eight months of the year, and he returns the death-rate at 16.1 per 1,000. Nearly 30 per cent. of the whole (15) occurred in persons aged sixty and upwards, while 11 were infants who had not completed twelve months of age. With the exception of two fatal cases of infantile diarrhœa, there was a complete absence from the district of zymotic disease, to which prominent attention is naturally drawn by the health-officer.

CHAILEY RURAL DISTRICT.—As in previous reports, Mr. Gravely chiefly occupies himself with a history of his individual inspections into cases of zymotic disease that occurred during 1882. The various schools in the district were subjected to examination, and, with one exception, were found generally satisfactory. The number of births registered in the district was the smallest ever recorded—viz., 262, or 12 less than that of the previous year, 24 less than that in 1880, and 10 less than in 1879. The death-rate (15.0 per 1,000), on the other hand, was in excess of the rates recorded in the three previous years, owing chiefly to the increased mortality from diseases of the respiratory organs. Zymotic disorders were fatal to 15 persons.

LYTHAM.—As Dr. Fisher did not commence work as successor to Mr. Pountney until November 1882, he naturally finds some difficulty in preparing a report for that year. The task, however, has been fairly done, and the report contains a satisfactory analysis of the mortality-statistics, with some account of the sanitary circumstances of the district. The death-rate properly due to the district was extremely low, being equal to 10.1 per 1,000, the zymotic rate representing 1.08. Out of 73 cases of diarrhœa and dysentery three were fatal, and the remnant of the epidemic of scarlet fever which prevailed during the latter part of 1881 caused four deaths. There was a decrease in the number of patients suffering from phthisis, but chest-affections were in excess.

ROTHERHAM URBAN DISTRICT.—The death-rate registered here during 1882 represented 20.98 per 1,000, against an average rate for the past nine years of 20.25. The epidemic prevalence of measles, of whooping-cough, and of scarlet fever, sent the zymotic rate up to 2.84 per 1,000, which Dr. Hardwicke thinks is fairly satisfactory, regard being had to the fact that the average rate from the same diseases in the preceding decade was 3.36. There was an increase in the mortality amongst children under five years, which is naturally attributed to the prevalence of zymotic disease above noted; but, as regards the deaths registered from convulsions, atrophy, and chest-affections, Dr. Hardwicke thinks that overcrowding, want, exposure, immorality, and intemperance played an important part in their causation. Pulmonary diseases (other than phthisis) were fatal to 159 persons, and tubercular affections to 93. But little real improvement seems to have been made in the sanitary aspect of the district. The town is deluged with smoke; and many minor nuisances, of a kind easily removed by prompt action, abound. The authority have erected a public abattoir, which however, is abused, from inefficient management; but they have not yet thought fit to provide their populous district with an infectious hospital or a mortuary.

MEDICO-LEGAL AND MEDICO-ETHICAL.

HOUSE-SURGEONS IN COUNTY HOSPITALS.

OUR attention has been drawn to one of the rules of the Devonshire Hospital, Buxton. According to a writer in the *Manchester Guardian*, among the rules are two, one referring to the duties of the house-surgeon and the other to the duties of the apothecary, in which it is stated: "He shall be required to enter into an engagement that he will not, after resigning his appointment, practise or assist in the practice of medicine or surgery in Buxton, or within a radius of two miles from the hospital." The writer says "The policy of the rules is much questioned; and he is anxious to learn the opinions of the medical profession and the public generally as regards these rules."

⁂ It is undoubtedly not unusual for hospitals to bind their house-surgeons not to practise within a certain radius when they resign their posts. Indeed, many of the leading physicians and surgeons in our provincial towns owe their introduction to the neighbourhood to the fact that they have held the office of house-physician or house-surgeon at the local infirmary.

THE RESPONSIBILITY OF A SUBSTITUTE.

SIR,—A person sends for C., but as he is from home, comes for B., who attends the case and writes to C., saying he has done so for him. Was not the responsibility of future attendance to be assumed by C.? especially when B explained to the patient that he came as the substitute of C. I enclose my card and remain,
Yours truly, C. C. B.

⁂ In the case above-mentioned B acted in strict accordance with the rules and courtesies of professional life, and the responsibility of further attendance would rightly devolve upon C.

MASTERS AND SERVANTS.

SIR,—I have been medical attendant to a gentleman and his family for two or three years. Last year one of his servants was sent to me for the treatment of a very troublesome form of eczema. The obstinate nature of the malady was carefully pointed out to both mistress and servant.

She remained under constant treatment from January to the end of August. She was seen on twenty-eight different occasions. She was supplied with medicines chiefly in the form of pill. The total amount for the eight months was as follows: Pills 232, thirteen twelve-dose bottles of medicine, six ounces of a kind of confection, teaspoonful doses, and fourteen ounces of ointments.

In the autumn the patient and a fellow-servant resolved to go to New Zealand, to start in the following spring. Taking this fact into consideration when sending in a statement of fees for the year, I put down for the above attendance, 4l. 4s. This year another medical man has been called in to a member of the family, and for this reason. The gentleman in question admits my right to charge him for the attendance, but thinks under the circumstances, the charge should have been as moderate as possible. An accusation of this kind is extremely annoying to me, and I shall be glad of your opinion on the matter. My practice is a non-dispensing one, all necessary medicines being supplied to my patients by a first-rate chemist, at my own expense.—Yours, etc., F.R.C.S.

⁂ F.R.C.S. may in some degree console himself with the reflection—unsatisfactory though it be—that the "accusation," to which he justly takes exception, is one of the many annoying contingencies common to the profession at large; and trying as the ordeal may be, to young practitioners especially, it had best be borne with a philosophic spirit.

On referring to the tariffs issued by the late Shropshire Ethical Branch, we find that the charges for servants, as in the case of their masters, vary according to class and position; and, further, that the amount charged by onr correspondent, is within a few shillings of the lowest sum suggested by the framers of the tariffs alluded to.

F.R.C.S. omits to state whether the servant-patient was prescribed for at her own residence, or was visited by him at that of her master—a point which, together with the distance travelled, and the time occupied in the visit, should always be borne in mind in charging the fee.

AN ADVERTISEMENT.

THE following advertisement has been sent to us. The sender says that it is left at the doors of houses.

"J. De C. Young, Consulting Physician and Surgeon (registered) from London, of upwards of twenty-five years' practical experience in hospital and private practice, may be consulted daily on all diseases, especially skin-diseases, eye-diseases, chest and lung-diseases, nervous diseases, and all irregularities, acute or chronic, from whatever cause. Hours of attendance: Morning, from 9 till 12; afternoon, from 2 till 4; evening, from 6 till 9. Midwifery, 10s. 6d. Club, School Board, and other certificates, 6d. Advice and medicine, 1s. Visits, 1s. Address, 1, Charles Street, Lancaster Road."

SIR MASSEY LOPES, M.P., has given a third donation of £1,000 to the new South Devon and East Cornwall Hospital at Plymouth.

HOSPITAL AND DISPENSARY MANAGEMENT.

ROYAL ALEXANDRA HOSPITAL FOR CHILDREN, BRIGHTON.

A MEETING of governors of the Royal Alexandra Hospital for Children was held recently, for the purpose of considering, and, if approved, of passing, a body of statutes altering the original ones in several respects, amongst others, in the circumstance of making election to the staff and the consulting staff less controllable by the medical committee than previously. The proposed changes had aroused a good deal of feeling, and further efforts to take the sense of a larger body were to be made at the said meeting, when the chairman ruled that no amendments could be taken, and the whole body of new statutes must be accepted or rejected *en bloc*. This ruling was strongly opposed; and, being persisted in, a technical objection to the status of the meeting was raised on the ground that many governors, notably ladies, had not been summoned, and adjournment was the only course left.

At the annual meeting held last week, the Bishop of Chichester spoke in the highest terms of this institution. A very satisfactory report was presented, showing an increase of work done and of funds received—the beds now filled being upwards of fifty, the income over £2,200, and the expenditure £1,700. Considerable interest was taken by the governors, by ladies especially, in the question of the age of patients, which was ultimately decided as from 1 year to 12 years for in-patients, and from birth to 14 for out-patients. The new statutes were passed without further discussion. The wise resolution of building without delay a laundry, at a cost of £600, was unanimously carried. Stress was laid upon a further adoption of the provident or paying system.

SUSSEX COUNTY HOSPITAL.

THE report recently presented to the annual meeting shows no trace of the "impecuniosity" spoken of some time ago. On the contrary, the income of £15,000 is rather splendid; a legacy of £3,000 has made it larger than usual. The expenditure was £11,000. The average daily number of in-patients was 146, and the average stay thirty-four days; 7,000 out-patients received treatment. The long desired convalescent home in connection with the hospital has been established during the year, and done excellent work. The resignation of Dr. Fussell was recorded; also the appointment of Dr. Rutter as physician, and of Dr. Branfoot as assistant-physician, in his place.

BRIGHTON AND HOVE DISPENSARY.

AT the annual meeting of governors of the Brighton and Hove Dispensary, a satisfactory report was presented, including the very large amount of £4,000 from legacies and several handsome donations towards the establishment of a northern branch, which was decided upon. Dr. W. Fisher was elected to fill the vacancy caused by the resignation of Dr. Tyler Smith. Great regret was expressed for the premature deaths of Mr. Jardine Murray and of Dr. Warburton Fuller.

BRIGHTON AND HOVE HOSPITAL FOR WOMEN AND CHILDREN.

THE annual report of the institution now called the Brighton and Hove Hospital for Women and Children, formerly the Lying-in Institution, records attendance on the confinements of nearly nine hundred women, mainly by trained nurses. Mr. T. J. Verrall has joined the staff in place of the late Dr. Fuller. There is a deficit in the financial account, but obligations were expressed, in the report, to the Hospital Sunday Fund.

BRIGHTON, HOVE, AND SUSSEX THROAT AND EAR DISPENSARY.

THE Throat and Ear Dispensary presents a report of increasing work and income, in new premises advantageously placed. The number of patients is given at over 600, of which number about one-sixth were children. More than £40 has been received in patients' fees—an extension of the provident system now largely utilised at Brighton charities. Mr. G. F. Hodgson has resigned office, and Mr. E. Treves was elected assistant-surgeon.

NAVAL NURSES.—The *Broad Arrow* states that the Admiralty are about to abolish the present staff of hospital nurses, and to replace them by men chosen from the Fleet. These will receive special training at the hospitals. They will thence be drafted to sea, but, on paying off, will return to their hospital, instead of being sent to the depot ships, as at present. Both the pay and position of these men are to be ameliorated.

MEDICAL NEWS.

UNIVERSITY OF DUBLIN SCHOOL OF PHYSIC IN IRELAND.—At the Hilary Term Examination for the M.B. Degree, held on February 11th, 1884, the successful candidates were arranged in order of merit as follows.

Ninian M. Falkiner; William B. Day and Charles J. Power (equal); Reginald J. Windle; Thomas Lyndon; John S. A. Ireland; Robert Morrow, George W. Yeates.

Senior Candidates.—Charles S. Grant, John F. W. Tatham.

At the Hilary Term Commencements, held in the Examination Hall of Trinity College, Dublin, on Tuesday, February 26th, the University Caput, in the presence of the Senate, conferred the following degrees in Medicine and Surgery.

Bachelors in Surgery.—Charles H. Blood, William S. Boles, John J. Cochrane, Harloe H. Fleming, Richard G. Hanley, John S. A. Ireland, Charles R. Kilkelly, Thomas Lyndon, Victor E. Smith, George W. Yeates.

Bachelors in Medicine.—Ninian M. Falkiner, Charles S. Grant, John S. A. Ireland, Thomas Lyndon, Charles J. Power, Victor E. Smith, John F. W. Tatham, Charles H. Thompson, Reginald J. Windle, George W. Yeates.

Doctors in Medicine.—Charles S. Grant, Charles J. Power.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 28th, 1884.

Boyd, Joseph Thomas, Northcote Road, Wandsworth Common.
Brooks, Jabez Pratt, Tollington Park, N.
Hayward, Arthur Ernest, Maxilla Gardens, Notting Hill, W.
Hichens, Frank, Redruth, Cornwall.
Morrinni, William Raoul de, Myddelton Square, E.C.
Plowman, Sidney, St. Thomas's Hospital.
Satchell, Charles George, Caversham Road, N.W.
Simms, Henry, Pedmore, Stourbridge.

The following gentlemen also on the same day passed their Primary Professional Examination.

Michell, John Charles, The London Hospital.
Roberts, Hugh Jones, Guy's Hospital.

MEDICAL VACANCIES.

The following vacancies are announced.

BARNSTAPLE UNION. Medical Officer. Salary, 80l. per annum. Applications by March 18th.

BRIDGNORTH INFIRMARY. House-Surgeon and Secretary. Salary, 100l. per annum. Applications by March 18th.

CANCER HOSPITAL (Free), Brompton, S.W. Clinical Clerk and Dresser for six months. 20l. for the term. Applications by March 17th.

CANCER HOSPITAL (Free), Brompton, S.W.—Resident House-Surgeon. Salary, 75l. per annum. Applications by March 17th.

CARRICKMACROSS UNION. Donaghmoyne Dispensary. Medical Officer. Salary, 115l. per annum and fees. Applications to Thomas McCabe, Honorary Secretary, Loughmoylan House, to March 11th.

CITY PROVIDENT DISPENSARY AND SURGICAL APPLIANCE ASSOCIATION, 165, Aldersgate Street, E.C. Surgeon. Applications to the Secretary by March 17th.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Applications by March 15th.

ESSEX AND COLCHESTER GENERAL HOSPITAL. Physician. Applications by March 19th.

FLINTSHIRE DISPENSARY. House-Surgeon. Salary, 100l. per annum. Applications to the Secretary, Board Room, Bagillt Street, Holywell, by April 15th.

HOSPITAL FOR WOMEN, Soho Square, W. Administrator of Anæsthetics. Honorarium, 20 guineas. Applications by March 8th.

JERSEY GENERAL DISPENSARY. Medical Officer. Salary, 150l. per annum. Applications by May 1st.

KENT AND CANTERBURY HOSPITAL. Physician. Applications by March 22nd.

MARTLEY UNION.—District Medical Officer and Public Vaccinator. Salary, 55l. per annum. Applications to Mr. A. W. Knott, [illegible], 13, Foregate Street, Worcester, by March 11th.

NORWICH FRIENDLY SOCIETIES' MEDICAL INSTITUTE, Norwich.—Medical Officer. Salary, 150l. per annum.

PAROCHIAL BOARD OF WESTRAY, Orkney. Salary, 70l. per annum. Applications at once.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN, Waterloo Bridge Road, S.E. Resident Medical Officer. Salary, 70l. per annum. Applications by March 10th.

RUBERY HILL ASYLUM. Resident Clinical Assistant. Applications to the [illegible], Medical Superintendent.

ST. GEORGE IN THE EAST PARISH. District Medical Officer. Salary, [illegible] per annum. Applications by March [illegible].

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN, Leicester Square, W.C. Assistant Honorary Medical Officer. Applications [illegible] by March 10th.

ST. PETER'S HOSPITAL FOR STONE AND URINARY DISEASES, Henrietta Street, Covent Garden, W.C. Surgeon. Applications by March 17th.

SALFORD AND PENDLETON ROYAL HOSPITAL AND DISPENSARY.—District Surgeon. Salary, 80*l.* per annum. Applications by March 10th.

STOCKPORT INFIRMARY.—Assistant House-Surgeon. Salary, 70*l.* per annum. Applications by March 14th.

SUSSEX COUNTY HOSPITAL, Brighton. Assistant House-Surgeon. Salary, 40*l.* per annum. Applications by March 19th.

WEST LONDON HOSPITAL, Hammersmith.—Surgeon. Applications by March 31st.

WEST RIDING LUNATIC ASYLUM, Wakefield.—Resident Clinical Assistant. Applications to Dr. Herbert Major, the Medical Superintendent.

WONFORD HOUSE HOSPITAL FOR THE INSANE, near Exeter.—Resident Medical Superintendent. Salary, 500*l.* per annum. Applications by March 11th.

MEDICAL APPOINTMENTS.

BUCHAN, William A., M.B.Edin., appointed House-Surgeon to the South Devon Hospital, Plymouth.

DOWNIE, J. Walker, M.B., appointed Lecturer on Diseases of the Ear and Throat at the Western Medical School, Glasgow.

HORROCKS, W. H., M.B., appointed House-Surgeon to the Royal Surrey County Hospital, Guildford.

MAGUIRE, R., M.D., appointed Demonstrator and Assistant Lecturer in Pathology to the Owens College, Manchester.

MCCLELLAND, Joseph, M.D., M.R.C.S., appointed Honorary Physician to the Liverpool Infirmary for Children, *vice* J. Armstrong, M.B., resigned.

MAYO, F. H., M.R.C.S., appointed House-Surgeon to the General Infirmary, Leeds, *vice* E. Ward, M.B.

OSWALD, J. W. Robert, M.R.C.S.Eng., L.R.C.P.&S.Ed., appointed Attending Surgeon at the South London Medical Aid Institute, *vice* P. J. Allen, L.K.Q.C.P.I., resigned.

POWELL, Simpson, M.B., M.R.C.S., appointed Assistant-Physician to the Hospital for Epilepsy and Paralysis and other Diseases of the Nervous System, Portland Terrace.

READ, L., L.D.S., appointed Assistant Dental Surgeon to the Dental Hospital of London, *vice* F. Carton, L.R.C.P., resigned.

SPICER, R. H. Scanes, M.B., B.Sc.Lond., appointed Medical Superintendent to the new Infirmary, Fulham, S.W.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

LUNN.—On the 3rd instant, the wife of J. R. Lunn, F.R.C.S.Ed., Medical Superintendent of the Marylebone Infirmary, Notting Hill, of a son (prematurely), who only survived his birth a few hours.

MARRIAGE.

SELLERS—COOK.—February 26th, at Prestwold Church, by the Rev. J. H. Killick, M.A., John William Sellers, L.R.C.S.and P.Edin., Brook House, Sileby, Leicestershire, to Mary, eldest daughter of Mr. Thomas Cook, of Prestwold, Leicestershire. No cards.

DEATH.

EASTES.—At his residence, London Street, Folkestone, on the 2nd instant, Silvester Eastes, M.R.C.S., L.S.A., J.P., aged 71.

BEQUESTS TO SCOTTISH CHARITIES.—Mr. William Renton Clapperton, Edinburgh, sole executor of a gentleman deceased, has, from the funds realised by the estate, paid the following donations, free of Government duty: Royal Infirmary, £500; Convalescent Home, £100; Royal Edinburgh Hospital for Sick Children, £50; Institution for Relief of Incurables, £25; and numerous other sums to other charities in Edinburgh.—In Aberdeen, by the death of Mr. Alexander Black, formerly of that city, the following charities benefit to the extent of £50 each: Royal Infirmary, Lunatic Asylum, the Hospital for Incurables, the Sick Man's Friend Society, and the West Aberdeen Sick Man's Friend Society; and £30 each to the Dispensary and other charitable institutions.

SUICIDES IN NEW YORK.—124 men and 27 women committed suicide in New York during the past year; 78 were married, 43 single, and 24 widowed or divorced. Nine were less than 20 years old, while 5 became tired of life in the eighth decade. Among the nationalities, Germans came first with 70 suicides. Shooting was the mode of suicide resorted to in 56 instances; there were 19 hangings, 15 stabbings and cuttings, 12 drownings, and 11 falls from high places; 18 persons poisoned themselves with Paris green, and 7 with opium.

PUBLIC URINALS.—At a meeting of the Paddington Vestry, on March 4th, a committee was appointed, at the instance of Mr. Mark Judge, to provide suitable urinals and water-closets for both men and women in every part of the parish.

GROCERS' COMPANY.—The Court of Assistants of the Grocers' Company have voted ten guineas in aid of the funds of the Metropolitan Public Garden, Boulevard, and Playground Association, whose address is 83, Lancaster Gate, W., and twenty guineas to the Parkes Museum of Hygiene.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........	St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.
TUESDAY	St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M. Cancer Hospital, Brompton, 3 P.M.
WEDNESDAY ..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M. Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.
THURSDAY	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.
FRIDAY	King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
SATURDAY	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Dr. Corfield: The Connection of Disease with Defective House-Sanitation.—Royal College of Surgeons, 4 P.M. Professor W. H. Flower: The Principal Types of the Human Species.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Champneys: Fourth Contribution on Artificial Respiration in Stillborn Children; an Experimental Inquiry. Mr. J. B. Sutton: On the Value of Systematic Examination of Stillborn Children.

WEDNESDAY.—Epidemiological Society of London, 7.30 P.M. Council meeting. 8 P.M. Dr. George Gulliver: Etiology and Pathology of Cholera.—Royal Microscopical Society, 8 P.M. Professor Abbe: On the Distance of Distinct Vision. Mr. T. B. Rosseter: Further Observations on *Stephanoceros Eichhornii*.—Royal College of Surgeons, 4 P.M. Professor W. H. Flower: The Principal Types of the Human Species.—Hunterian Society, 7.30 P.M. Council. 8 P.M. Mr. Poland: Case of Acute Suppuration of the Hip and Elbow Joints. Dr. G. H. Savage: Cases on the Borderland of Insanity, and their Treatment.

THURSDAY.—Parkes Museum, 5 P.M. Deputy Surgeon-General Dr. Henry Veale: Organisation and Management of Field-Hospitals.—Ophthalmological Society of the United Kingdom, 8.30 P.M. Living and Card Specimens at 8 P.M. Mr. Hartridge: Tumour of Choroid. Mr. R. Marcus Gunn: Case of Arteriovenous Communication on the Retina. Mr. A. Stanford Morton: Hæmorrhage in Region of Macula. Mr. Adams Frost: An Artificial Eye. Dr. A. H. Benson: 1. A Case of Coloboma of the Iris, with Drawing; 2. Some Drawings of Ophthalmic Cases. Mr. Nettleship: 1. Case showing Blood-vessels in the Vitreous; 2. Lymphatic Nævus of Orbit and Eye; 3. Central Senile

Guttate Choroiditis; 4. Central Senile Areolar Choroidal Atrophy; 5. Thickening of Retinal Vessels in a Case of Glaucoma. Communications.—Mr. S. Snell: Two Cases of Retinal Glioma, in one of which shrinking of the eyeball occurred without perforation. Dr. G. A. Brown: A Case of Severe Conjunctivitis with Formation of Membrane on the Corneæ, caused by whiskey thrown in the eyes. Mr. McHardy: Some Clinical Observations which appear to indicate a Means of reducing the Danger from Malignant Glaucoma while increasing the Efficacy of Iridectomy in the Treatment of Chronic Glaucoma. Mr. G. E. Walker: 1. Acute Glaucoma of Four Weeks' Duration, with Recovery of Good Vision; 2. Sympathetic Ophthalmia; Evulsion of False Membranes and Part of Iris; Recovery of Good Vision (with living specimens). Dr. W. R. Gowers: On Some Cases of Spasm of the Ocular Muscles. Dr. D. McKeown: On a Means of Diminishing the Blindness from Purulent Ophthalmia in Infancy. Dr. A. H. Benson: Some Observations on Jequirity, and its Value as a Therapeutic Agent. Mr. R. M. Gunn and Dr. J. Anderson: A Case of Nerve-disease with Ocular Symptoms, including alleged Uniocular Diplopia. Mr. Nettleship: 1. Cases of Recovery from Amaurosis in Infants; 2. Cases of Retro-ocular Neuritis.

FRIDAY. Clinical Society of London, 8.30 P.M. Dr. S. West: Multiple Hepatic Abscesses in a Boy. Mr. Butlin: Foreign Body in Œsophagus; Œsophagotomy. Dr. Finlay: Cases of Enteric Fever associated with Rheumatism. Mr. Davies-Colley: Case of Dislocation of the Spine. Living Specimens. Mr. Edmund Owen: Perforating Ulcer of the Foot. Mr. Golding-Bird: Dislocation of the Patella. Royal College of Surgeons, 4 P.M. Professor W. H. Flower: The Principal Types of the Human Species.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT. We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE MEDICAL ACT AND THE HOLDERS OF ONE QUALIFICATION.

"M.R.C.S. Only" says that he has lately received several circulars from a gentleman anxious to aid him in taking another qualification, and that this gentleman informs him that, under the new Act, he will not be able to practise without doing so. Our correspondent does not practise, and has no intention of doing so, but believes that the new Act would not interfere with the right to practise which he at present enjoys.

* Our correspondent is undoubtedly correct. The diploma of any of the medical authorities in Schedule (A) of the Medical Act, 1858, may be inserted in the *Medical Register*, and the Government Medical Bill in no way interferes with existing rights.

W. M., who writes on the subject of the medical service of Atlantic steamers, has omitted to enclose his card.

SUPPRESSION OF URINE.

SIR,—Mr. William Sedgwick's note in the JOURNAL of February 16th is interesting to me. On February 12th, I performed herniotomy on an intemperate old lady aged 68. A very large bunch of omentum was ligatured and removed. Subsequently to the operation, the following was all the urine secreted: in the first twelve hours, half an ounce; in the second, one drachm; in the third, one drachm; in the fourth, one ounce. After this, the quantity gradually rose to normal. There was no albumen, and no symptom of uræmia. The case was otherwise interesting, but I merely mention this one point as bearing on the note referred to. I am, etc.,

H. E. SPENCER.

York, February 17th.

MEDICAL TITLE.

SIR,—Will you kindly inform me in what terms a member of a British College of Physicians by examination, and honorary physician to a provincial hospital, should style himself on his door-plate? I enclose my card, and am, your obedient servant,

M.R.C.P.

*** The form least liable to objection would be "A. B., Physician."

A YOUTHFUL MOTHER.

SIR,—Your insertion in the JOURNAL of March 1st of Mr. J. W. Irvine's case of youthful maternity, reminds me that, on May 19th, 1879, M. H. gave birth to a female child, also at full term. She was then just two months over 14 years old. She had a lingering labour, but was delivered without forceps or ergot, and made a very prompt and satisfactory recovery. The father of the child was over 40 years of age. The girl always declared that there had not been more than one intercourse, and that a forcible one, by her master.

I am also reminded of a case I attended when a student. The patient was scarcely 15 years old when her child was born. She was married, and her husband was 31 years old, and at the time of the confinement he was in hospital with fracture of both upper extremities.—I am, yours faithfully,

HENRY HORTON, M.R.C.S.Eng., L.M., L.S.A.Lond.

MATERNAL IMPRESSIONS.

SIR,—After reading Dr. Hurley's letter upon "maternal impressions," I send you the following. I attended Mrs. H. in two confinements, natural in their character and results; upon her third confinement, I noticed that the child's left arm presented all the appearance of a stump after amputation below the elbow-joint. My patient at once said she was not at all surprised, for, ever since she had seen the stump of an arm shown by a schoolfellow of her husband's when she was three months advanced in pregnancy, she had felt something would be wrong. My services were again required in her next confinement, when, to my horror, I found both the forearms of the child enclosed in the integument of the upper arm, the child being otherwise quite healthy. Again, without seeing the child, she described how her husband came home drunk, and, upon her remonstrance, he took hold of each hand, and boxed her ears violently with her own hands. Upon her next confinement, the child's nose was flat upon its face. I said to the mother, "Well, pray what performance was this?" "O," she replied, "he threw me on my face on the kitchen-floor, and held me there until I was nearly suffocated." These are facts; whether "coincidences" or not, I must leave others to judge.—Yours faithfully,

THOMAS GODFREY.

Mansfield, March 1st, 1884.

SECRETION OF MILK IN THE MALE.

SIR,—A. S., aged 36, was, on January 16th, delivered of a healthy male child, and went on well. Two days afterwards, her husband, a spare, thin, and sickly-looking man, complained of shooting pain in the breasts, with severe headache and nausea. On January 19th, after a mild aperient, and fomentations of poppy-heads and hot water to the breasts, milk began to flow freely; when about three teaspoonfuls were taken away in a wineglass. The milk continued to be secreted until January 23rd, after which time there was a gradual diminution; and, on January 26th, no traces were to be found, leaving the nipples with an elongated, and the glands themselves a dwindled appearance. The milk, after standing for a few hours, separated into two portions; the first or top portion contained bodies like fat-globules, of a bright yellow colour, floating on the surface; and the second or bottom portion, when compared with a half-grain solution of indigo to an ounce of water, had a similar appearance.—I am, etc.,

Rushey Green House, Catford, S.E. T. A. MITCHELL, L.R.C.S.I.

WINDOW-GARDENING.

IN reply to several correspondents, we may state that *A Handbook on Window-Gardening*, which was reviewed in our pages on February 23rd, is published by Barrett and Son, 6, Church Street, Lisson Grove, London, N.W. The pamphlet was originally written to help the work of a committee "formed for the purpose of carrying out flower-shows for the poor" in St. Marylebone. The flower-show held last July was very successful, and the committee may well find imitators in other parishes.

POLICE-SURGEONS.

SIR,—In answer to "Member," under the head of Police-Surgeons, I received my appointments as medical officer of a borough gaol, also of the police-force, from the corporate body of that borough—the visiting justices attending to the gaol, and the Watch Committee (a local board of the Town Council) to the requirements of the police.

My duty was to render medical aid to the police-force, and to certify as to their fitness or unfitness for duty. For this I received (as also for gaol duties) a fixed salary. When called upon by the police to attend any case at the station, or elsewhere, a fee was ordered to be paid by the prisoner, in addition to any fine inflicted by the magistrates. In general, in giving evidence before the Bench, a fee of 10s. 6d. was allowed.

As to duties and remuneration of a divisional surgeon of a metropolitan district, I have had no experience.—I am, etc.,

SPENCER T. SMYTH, M.D., L.R.C.P., F.R.C.S.

Forest Hill, March 1st, 1884.

SIR,—In answer to "A Member," a police-surgeon in a borough in usually appointed by the borough "magistrate," not by the Council. His duties are probably the same as those of the divisional surgeon to the metropolitan police; but the remuneration probably differs materially, viz., the pay of the former is inclusive. There are few, if any, extras. In my own case, which is of nearly twenty-five years' standing, the only extras are the certifying of all pauper lunatics in the borough, with very rarely an inquest on cases brought in by the police; or cases of criminal assault which may be sent for trial to the sessions or assizes. The salary includes the examination of all candidates for the police-force, which is by no means an unimportant one; in addition to this, the attendance on the police-force in sickness, and the supply of medicine, etc., in connection with this. "A Member" does not ask for information with reference to the county force, or I could give him information on the point, having been connected with that force for nearly forty years.—I am, sir, yours truly,

A POLICE SURGEON.

MEDICAL STUDENT should address his inquiry to the Director-General of the Army Medical Department, who will furnish him with the desired information.

AMPUTATION OF THE UTERUS AMONG THE ANCIENT GREEKS.

SIR,—In reference to Dr. Godson's account of Porro's operation, as published in the BRITISH MEDICAL JOURNAL of January 26th, I ask leave to observe that the removal of the uterus had already been done by the ancient Greek physicians; thus Soranus of Ephesus, who, in his book on diseases of women, περὶ γυναικείων παθῶν[1], says: "τὴν μέντοι γε μήτραν οὐκ ἀποληπτέον κυριότητα πρὸς τὸ ζῆν ἔχειν, ἐπ' ἐνίων δὲ καὶ ἀποκόπτεται, δίχα τοῦ θάνατον αὐτῇ ἐπενεγκεῖν, ὡς ἱστόρησε Θεμίσων· ἐν Γαλατίᾳ δὲ τὰς ὗς εὐτροφωτέρας γίνεσθαι φασὶ μετὰ τὴν ἐκτομὴν τῆς μήτρας." This signifies that the uterus is not to be considered as indispensable to existence. In certain cases, Themison has recorded that it has been removed without fatal results; and, indeed, the operation used to be performed in France upon pigs for the purpose of fattening them. In p. 92, he further observes: "τὴν [illegible] μήτραν ἀποτέμνουσιν, οἱ μὲν καὶ διὰ τοὺς ἱστορήσαντας αὐτὴν ἀκινδύνως ἐκτετμῆσθαι, ὧν ἔμπροσθεν ἐμνημονεύσαμεν ἀλλὰ", which means that the whole of the uterus can be removed without danger.

From these remarks we may gather the truth of the old saying—"There is nothing new under the sun."—I am, sir, faithfully yours,

C. BELLES, M.D. Athens (Greece).

16, Landwehr Strasse, Munich, Bavaria, February 22nd, 1884.

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[1] Σωρανοῦ Ἐφεσίου περὶ γυναικείων παθῶν. Ed. by Ermerins, p. 15.

A CORRECTION.

SIR,—I observe, in the report of my remarks at the Medical Society on antipyretic treatment, by some inadvertence, I quoted statistics of the "Charite Hospital" at Berlin. It should have been "Bethanien Hospital."—Yours faithfully,

W. CAYLEY.

THE SHOEING OF HORSES.

SIR,—I have been much interested in the letters that have appeared in the JOURNAL with reference to the Charlier horseshoe or tip. In this country, one is constantly annoyed, and the horse injured by cutting himself with the long sharp caulks which the shoers think necessary to impose upon the poor brute. Again, the heel-caulks, being longer than the toe one, tend to throw the horse over in the knees, and to strain the muscles of his legs, as he is perched up on three pins, and has no firm foothold. Could any of your readers kindly inform me where the tips could be got, and where I could find a description and figure of them? Yours truly, G. STERLING RYERSON.

317, Church Street, Toronto, Canada, February 19th, 1884.

NATIONAL HOSTITAL FOR THE PARALYSED AND EPILEPTIC.

SIR,—A proposal having been publicly made that wards or beds should be set apart in this hospital for a particular class of patients, I beg permission to state that the medical committee has passed the following resolution respecting it.

"(1) As this hospital already undertakes the treatment of all such varieties of diseases of the nervous system as are capable of being treated in a hospital as distinguished from an asylum; (2) as cases of insanity are not legally admissible; and (3) as it would be detrimental to the interests of the other patients to admit insane persons, if the legal difficulty were met, we advise the Board of Management not to accept the proposal made to them." I am, sir, your faithful servant,

B. BURFORD RAWLINGS, Secretary.

National Hospital for the Paralysed and Epileptic,
Queen Square, February 7th, 1884.

ERRATA.—In the title of Mr. L'Heureux Blenkarne's Obstetric Memorandum in the JOURNAL of March 1st, page 408, col. 2, *for* "or placenta," *read* "on placenta." In line 19 of the article, *for* "difficulty in passing," *read* "difficulty in grasping."

DETERMINATION OF SEX.

SIR,—When our knowledge is greater than it is at present, I believe it will be found that the ovum, on leaving the ovary, is either a male or a female ovum, and that it is simply fertilised by the spermatozoa. The latter have no power as to sex. Microscopically, they are all alike. The determination of sex is very often hereditary on the side of the female, and quite independent of the menstrual period as to time.—Yours truly, A. T.

OLD MEDICAL WORKS.

SIR,—In reference to your article on Woolveridge's *Speculum Matricis*, published in 1670, it may interest many of your readers to know that there is, amongst the splendid collection of books in the library of the Royal College of Surgeons of Ireland, one of the oldest surgical works in existence. It is a MS. of 500 pages, written and illustrated in 1349 by John Arderne, surgeon, of Newark, Nottinghamshire. This rare old work is extensively reviewed by Surgeon-Major Gore, in the *Dublin Medical Journal* for October 1883.—Yours, etc.,

BOOKWORM.

THE VALUE OF VACCINATION.

SIR,—If nothing else could convince us as to the value of vaccination, I think the following facts would be sufficient.

In July last, I was called to see Mrs. B., who was suffering from small-pox. Her husband and three children were unvaccinated; the father and two eldest were vaccinated by me when the eruption on the mother was in the papular stage, the youngest being very delicate, and the parents being opposed to vaccination. I deemed it advisable not to operate on the child. The results were as follows.

1. The mother made good recovery.
2. The unvaccinated child died from small-pox on the fourth day of the eruption.
3. Those who were vaccinated escaped from infection entirely.—I am, yours, etc., WALTER BUCHANAN, M.R.C.S.E.

Chatham, February 1884.

GAS FIREPLACES.

"NE QUID NIMIS" is desirous of learning the experience of others in regard to gas-fireplaces (not stoves). Do they give out much heat? Can the smell of burnt gas be perceived in the room?

MARRIAGE OF COUSINS.

J. B. W. will find information on this subject in Vol. II of the BRITISH MEDICAL JOURNAL for 1883, page 456. In the case to which he refers, marriage would be decidedly unadvisable.

WORKS ON PSYCHOLOGICAL MEDICINE.

I. W.—There is no cheap "Manual of Psychological Medicine." Other works than Bucknill and Tuke's Manual, are Clouston's *Clinical Lectures on Mental Diseases*, and Blandford's *Insanity, and its Treatment*; but these do not profess to be systematic treatises.

THE MEMBER of the British Medical Association who has forwarded a page from the advertisements in the JOURNAL has omitted to enclose his card.

PRESCRIPTIONS IN ENGLISH.

THE advocates of phonetic spelling should study the following order, sent to a druggist (in America): "Gumma camfor, 1 ownze; lodnom, 1 ownze; kloryforme, 1 ownze; oil sassyfras, 1 ownze." Also this: "Surup of squills, parygarie, oyl of amonds, bolsom pavia, swet sperrit nighter. Give baror a cannl (calomel) powder for agrone persien."

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. M. D. Makuna, Pontypridd; Mr. F. Petrie, London; Mr. W. Thomson, London; Mr. G. Stoker, London; Mr. T. J. Verrall, Brighton; Mr. E. White Wallis, London; Dr. W. Cayley, London; Dr. Quinlan, Dublin; Dr. Percy Frankland, London; Mr. C. Clark Barman, Belford; Mr. W. Buchanan, Chatham; Mr. R. I. W. Oswald, London; Messrs. W. B. Hilliard and Sons, Glasgow; Mr. S. H. Fisher, Tiverton; Dr. J. Althaus, London; Dr Seaton, London; Mr. W. Y. Veitch, Middlesborough; Mr. J. R. Lunn, London; Mr. R. L. Shore, London; Mr. Shirley F. Murphy, London; Dr. Whitford, Liverpool; Dr. J. S. Grant, Cairo; Dr. F. H. Spencer, Exeter; Mr. A. P. Hills, London; Dr. Rabagliati, Bradford; Our Glasgow Correspondent; Mr. R. J. Godlee, London; Dr. G. Kitching, Enfield; Mr. A. W. Stirling, Stapleton, Cumberland; Mr. R. H. S. Spicer, London; Mr. L. Emmerson, Melton Mowbray; Dr. Waters, Chester; Mr. M. K. Robinson, Dover; Dr. Fairlie Clarke, Southborough; Mr. J. H. Raffety, London; Dr. R. Neale, London; Messrs. P. H. Burgoyne and Co., London; Mr. W. M. Beaumont, Oxford; Our Dublin Correspondent; Mr. F. W. Spiller, Birmingham: Dr. W. A. Buchan, Plymouth; Dr. Glascott, Manchester; Dr. Spencer T. Smyth, Forest Hill; Mr. Terry, Northampton; Mr. H. B. Mitchell, Norwich; Dr. G. C. Kingsbury, Blackpool; Dr. T. E. Charles, Cannes; Dr. J. A. Menzies, Cannes; Dr. Norman Kerr, London; Mr. A. Baker, Bedale, Yorkshire; Dr. W. H. Putsey, Portland; Mr. T. Clark, Dunster; Mr. J. West, London; Mr. N. C. Dobson, Clifton; Our Birmingham Correspondent; Mr. J. Willcocks, Overton, Hants; Dr. Mackey, Hove, Brighton; Dr. Stevenson, London; Dr. Mahomed, London; Dr. Clifford Allbutt, Leeds; Dr. T. H. Fraser, Birmingham; Mr. W. E. Dawson, Haslemere; Mr. P. W. Miller, Dundee; Mr. T. Blunt, Leicester; Dr. J. Strahan, Belfast; Mr. F. Page, Newcastle-on-Tyne; Dr. R. Roberts, Ealing; Mr. E. Mayord, Ramsgate; Dr. Quinlan, Dublin; Dr. W. R. Moorhead, Benburd, co. Tyrone; Dr. C. W. Suckling, Birmingham; Mr. G. L. Johnson, Upper Norwood; Dr. R. H. Lloyd, London; Mr. A. Wiglesworth, Liverpool; Mr. E. C. Shearman, South Wimbledon; Mr. H. A. Latimer, Swansea; The Editor of the *Christian Million*; The Secretary of the Chelsea Hospital for Women; Mr. E. Harris, Albany, New York; Mr. C. S. Kilner, Bury St. Edmunds; The Secretary of the Apothecaries' Hall, London; The Secretary of the Hospital for Epilepsy and Paralysis, London; Dr. Collins, Sydenham; Mr. Henry Sewill, London; Dr. Styrap, Shrewsbury; Mr. G. B. Starkweather, London; Mr. C. Macnamara, London; Mr. W. L. Blenkarne, Buckingham; Dr. W. H. Day, London; Bookworm; Dr. Kaeser, London; Mr. H. C. Stewart, London; Dr. Kelly, Taunton; Mr. T. Godfrey, Mansfield; Mr. H. Horton, Bromyard; Our Aberdeen Correspondent; Mr. A. Teevan, London; Dr. Cooke, Bognor; A Young Practitioner; Dr. Markham Skerritt, Clifton; Mr. C. Brown, Liverpool; Mr. R. H. S. Carpenter, London; Dr. Foster, Birmingham; Dr. J. H. Aveling, London; Mr. H. Rutherford, London; Dr. G. S. Ryerson, London; Mr. W. T. Cole, Holywell; Mr. W. Hardcastle, Newcastle-on-Tyne; Dr. Armstrong, South Shields; Mr. W. H. Ellis, Shipley, Yorkshire; Our Paris Correspondent; Mr. J. F. Le Page, Salford; The Secretary of the Glasgow Pathological and Clinical Society; Dr. R. E. Carrington, London; Dr. G. E. Herman, London; Dr. J. H. Stowers, London; Mr. A. A. Napper, Cranleigh; Mr. J. W. Downie, Glasgow; The Secretary of the Royal Medical and Chirurgical Society; Our Edinburgh Correspondent; Mr. J. Lloyd Roberts, Denbigh; Mr. James Dixon, Dorking; Mr. Edward Jones, Manchester; Mr. D. Hamilton, Aberdeen; Dr. J. R. Lewis, Bristol; Mr. T. J. Schollick, Guildford; Mr. F. G. P. Neison, London, etc.

BOOKS, ETC., RECEIVED.

Hydatid Disease. By John D. Thomas, M.D., F.R.C.S. Adelaide: E. Spiller.

Bacteria and the Germ-Theory of Disease. By Dr. H. Gradle. Chicago: W. T. Keener.

Dental Medicine. By F. J. S. Gorgus, M.A., M.D. London: J. and A. Churchill. 1884.

An Experimental Investigation of the Physiological Action of Saline Cathartics. By Matthew Hay, M.D. Edinburgh: Maclachlan and Stewart. London: Simpkin, Marshall and Co. 1884.

Experimental Chemistry for Junior Students. By J. E. Reynolds, M.D., F.R.S. London: Longmans, Green and Co. 1884.

Cassell's Technical Educator. London, Paris, and New York: Cassell and Co., Limited.

Burdett's Official Intelligence. Vol. II. Part Second. London: Effingham Wilson. E. Croashman and Co. Sampson Low and Co.

A Practical Introduction to Medical Electricity. By A. De Watteville, M.D. Second Edition. London: H. K. Lewis. 1884.

The Book of the Horse. By S. Sidney, late Manager of the Agricultural Hall Horse Show. London, Paris, and New York: Cassell and Co., Limited.

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THE GULSTONIAN LECTURES,

ON

NEUROSES OF THE VISCERA.

Delivered at the Royal College of Physicians, March 14th, 1884.

By T. CLIFFORD ALLBUTT, M.A., M.D., F.R.C.P.,

Lecturer on Practice of Physic at the Leeds School of Medicine; Consulting Physician to the Leeds Hospital for Women and Children.

Lecture I.

Gentlemen,—When the revered chief of this College bade me to the high place which I now hold, I would fain be released from so great a call. It seemed to me that the leisure in which I should search out and think things worthy of so distinguished an assembly had long been denied to me. But I was assured that, although lectures containing the results of systematic research are of the highest importance, there is a place, nevertheless, for lectures conveying the humbler reflections of working physicians who deal with the daily experience of the sick-room and the consulting-chamber. It remained for me, therefore, to obey, and to deal with some part of the field of practice. Herein I have chosen for my subject those painful disorders which have their seat in the nerves of the viscera, but I have entitled my lectures. The Neuroses of the Viscera, in order that I should be free to enlarge occasionally upon some perturbations of those nerves which are not attended with pain, strictly so called. At the same time, it is with such neuroses as are manifested in pain that I intend more especially to deal. It seems to me that, in our text-books, these affections receive something less than the full treatment which their difficulty and their importance demand, and I find, in general practice, that the part played by the nervous system in visceral disorders is insufficiently seen. To the knowledge and skill of physicians so highly placed as yourselves I cannot hope to add anything, but I would rather seek, through you, and with your aid, to spread abroad a more adequate interpretation of the disorders in question, saying to you, in the words of the Apostle, "Οὐκ ἔγραψα ὑμῖν, ὅτι οὐκ οἴδατε την ἀλήθειαν, ἀλλ' ὅτι οἴδατε αὐτην."

It certainly happens that neuroses above the belt are far more clearly understood than those below. This preference is due in part to the renewed impulse given to the study of thoracic disease by the discoveries of Laennec, partly to the more vivid functions of these parts, functions which excite our admiration and interest in greater measure than the brooding and silent life of the organs of vegetative existence. Of the neuroses, then, of the upper chambers of the body, of migraine, of asthma, of angina pectoris and the like, I shall find but little to say; my attention will be confined almost entirely to the pains and storms of the abdominal regions—to gastralgia, nephralgia, hepatalgia and their allies. Of the neuroses of the pelvic viscera much has been said. Indeed, if thoracic neuroses have been discussed at their actual value, if those of the abdomen have received less than their due meed of attention, surely those of the pelvis have received an attention, if not beyond their importance, at any rate of far too exclusive a bearing. What I say of these last will be little in description, but more in the way of interpretation.

The first strong impression which I received from the facts of the class with which we now concern ourselves was obtained from the index of my case-books. It has been always my custom to index therein the names not only of my patients, but also of their maladies. I have to each volume two indices, one of names, one of diagnoses.

As each year I have prepared the spaces for these tables, I have been struck with the small space occupied by the malady "dyspepsia." Surely, I thought, if there be one malady which above all others should need a large space, it must be dyspepsia. Yet, year by year, as at the end of them I cast my eye over the tables, was I astonished to find my cases entered as "dyspepsia" to be a mere handful. How could this be? I asked myself repeatedly. "Martyrs to dyspepsia" are to be found at every street-corner, and are said to form something little less than the staple of those who drift from consultant to consultant. Moreover, I had some suspicion that I was in repute as a stomach-doctor, and was, at least, conscious of a readiness to receive such cases and to work patiently with them. I thought, also, of that long-suffering organ itself, and its work of the greediness or recklessness which make it the helpless receptacle of all sorts of rubbish; I pictured to myself the contents of the viscus distended with greasy, acid dishes, or trashy matters, sodden in half-fermented gooseberry-juice or sour claret; and I stood amazed that it resists destruction. Yet not only does it survive, but it patiently draws order out of disorder, sweetness out of foulness. Again, as I turned to the journals of the day, I read of men of lofty endowments, whose lives became accursed by dyspepsia; and on other sheets I read many columns of advertised solace, from wind-pills to the pill of the American doctor, whose virtues were thus rendered at Cambridge:

> "Haec jecur instigat, stimulos haec renibus addit,
> Ambulat arcanas haec taciturna vias.
> Attamen haec eadem latebras penetralibus imas
> Mordacis bruxi more modoque petit."

Our medical journals all tell us the same story. Every large drug-house has its pepsines, its dinner-pills, its cordial bitters, testifying not only to the general, but to the medical, cry for help against the demon of dyspepsia. Finally, so confident is the public of the true form of its enemy, that one of this sort who seeks the doctor will dictate his diagnosis, declaring himself an old dyspeptic, and demanding your specific. A hundred doctors have pronounced him dyspeptic; needlessly, for who can know it better than himself! He will condescend, perhaps, to admit some discussion of the respective vices of his stomach and of his liver, but he is offended if you seek further. He half tells you that, if you have yet to learn what is meant by a dyspeptic or by "biliousness," you are no man for him. Patients have positively left me in dudgeon because I ventured to hint that the word indigestion expresses rather an inference than a fact, and pointed out that diagnosis belongs to the physician, and not to the client.

How is it, then? How are we to explain this catholic wailing over a disease which is not; this wealth of balsams for sufferings which cannot be named? Is there no distress to lull, no pain to lenify? In turning our minds to this question, let us, in the first instance, consider the meaning of the word dyspepsia, and ask ourselves if there be in it any such confusion as may account for its indefinite uses, and whether in such uses there be equivocations such as to account for the doubts to which I have referred. I believe that, if I thus follow the origin and paths of my own thoughts in the past, I shall best open out the main subject of my address. Forgive me if I thus approach the subject of visceral neurosis by an indirect method, and in the way of comment upon the affections of the stomach. It is almost trivial to remark that dyspepsia, strictly speaking, is not a disease, but a symptom; it names not the causes nor the processes of the evil, but its consequences; that, as an outcome of the affair, whatever it may be, food is not digested, or is digested imperfectly or painfully. Taken in this sense, no doubt dyspepsia is an exceedingly common complaint. But if the word be used in this sense, does not its meaning become almost futile? As a consequence of various conditions, let us say, persons may find themselves unable to walk far, to walk steadily, to walk painlessly, or even to walk at all. Yet are we to use a word such as dyskinesis, and to say that whosoever comes to us walking ill, whether from general debility, from palsy, from sciatica, from muscular rheumatism, from gout, from disease of foot, ankle, or knee, that he is suffering from dyskinesis? Are we to say, of a patient whose forces are so diminished that he can only walk a mile, and this with fatigue, that he is suffering from atonic dyskinesis? Are we to treat all the above maladies in a chapter under the heading of dyskinesis, and in a few columns of entanglement try to deal intelligibly with such a subject in such a way? We should not be saved from the discredit of foolishness if we were to do so. Then, how are those to be spared who, using the word dyspepsia in this way, devote chapters and books of chapters to such a symptom, and raise that which is accidental and consequent to the place and name of a definite malady? Yet I have only to turn to any modern text-book to find page after page of such writing, pages to which I would willingly refer accurately were it not that I would avoid even the seeming of personal controversy with authors whose industry and thoughtfulness have done so great a work for modern medicine. If, however, we would speak wisely and strictly, shall we not seek to clear away this kind of confusion, and set out in their natural groups, as distinctly as we can, the several classes of symptoms now heaped together unreasonably? Thus we shall better understand the cases which come before us, and taking a larger view of them see better how to cure them. Perhaps, too, by this method, we shall even do away entirely with the word dyspepsia as the name of a malady, and reduce it to the position, for instance, of the word cough, which has no definite connotations, and signifies only an inconvenient and notorious symptom common to many maladies.

Sifting, then, as we must, the heap of affections attended with dyspepsia, we readily enough propose four chief groups of stomach disorders. First, those which are due to grave disease of the stomach itself, such as cancer or ulcer of the organ, dilatations of it, atrophy of its coats, and so forth. Secondly, to diseases of the stomach less grave but still local, such as the simpler catarrhs, acute and chronic gastritis. Thirdly, disorders which depend upon no visible changes in the structure of the stomach, but consist in some disorder of its work or secretions, and which, in accordance with a convenient use of words, we call functional; the dyspepsia of gout may perhaps be taken as an instance of this group. Fourthly, disorders which depend, not upon any primary derangement of the tissues of the stomach, but upon some influence coming from blood or nerve, from which influence visible local changes may or may not ensue. We put aside the first class of cases, without difficulty, as quite foreign to our purpose; and, so far as they can be distinguished, we put aside the second class also. This it is easy to do in the instance, say, of chronic or acute gastritis caused by the excessive use of alcohol; or, again, in the instance of that common and transient catarrh of the stomach attended with loss of appetite, headache, coated tongue, constipation, sickliness and malaise, which is due often to cold, often to improper feeding. This affection accounts for a large number of the cases called bilious attacks, though the majority so called are probably migraine. It is easy to make some such progress as this, but thenceforth it is not easy to plan out our schedules further. We may leap over a score of doubtful cases, and passing at once to another extreme, separate into a class all cases which are obviously neuralgic; but between these positions lie a great number of cases which are hard to classify. Is pyrosis, for instance, some local affection of the coats of the stomach, or is it a neurosis? Is flatulence, are all acid risings in the stomach, due to some irregular transmutation of the contents of the organ, or are some of them consistent with the course of normal, if feeble digestion? In the former case such derangements may fairly be called dyspepsia, for the process of digestion goes wrong, not as a detail or subordinate part of larger or systemic irregularities, but as a simple and local error in the digestive work of the stomach itself. In a word, is stomach-derangement, in a given case, but an expression of some general derangement, or is it a substantial ailment, and the cause rather than the consequence of any more general perturbations. Even these may be very difficult to estimate, or may be decided only on the study of individual cases, but a large number of cases remain which are yet even harder to interpret, cases in which dyspeptic symptoms are no doubt due to disordered work or secretion in the stomach, but in which this disorder of work or secretion may, in its turn, be due, not to any primary defect in that organ, but to some cause lying outside of its peculiar tissues, lying, for instance, in the blood or in the nervous system. Omitting, as I must do, all reference to blood-changes, let us take as an extreme instance a sudden nervous shock, which may arrest digestion completely, and we may thereafter conceive of lesser degrees of nervous perturbation which may bring up a continued interference with digestion, or, in other words, cause a continual dyspepsia. We may conceive indeed that not only in this way digestion may simply be slowed, but also the peptic secretions or processes be positively vitiated, as is the case, say, in neurotic diarrhœa.

Or, to turn to a different point of view, a patient who suffers from many symptoms indicative of nervous derangement tells you that on the empty stomach—generally in the morning, before breakfast—a dense yellow oily fluid gathers, and, lying there all day, would vitiate the viscus, would act as an eccentric cause of headache, and as a foul ferment upon the food in the course of digestion; so that his or her only hope of a comfortable day is to vomit or wash out these dregs at the beginning. Now, such an exudation may be due to some chronic distemper of the coats or glands of the stomach; but I incline to believe it is due rather to some perturbed innervation of a stomach otherwise healthy, seeing that the symptom is one which I have always found in neurotics, and to be curable only by treatment planned mainly upon this diagnosis. Disordered work and distempered secretions, then, may well be due to, and doubtless often are due to neuroses of the stomach; and such neuroses, lying between the more localised disorders and the purer neuralgias, are difficult to classify. There is one more difficulty, though in practice a less embarrassing one; namely, that, as distempered secretion may be the effect of disordered nerve, so, reversely, some slighter catarrh, or other local change, or some offending article of diet, or again some graver local mischief, may, as peripheral irritants, set up nerve-disturbances, which in certain susceptible persons may so wax as to overshadow or conceal the primary cause of their occurrence. We know, for instance, that the touch of a bronchial attack, or of an acute pneumonia, may first reveal an asthma till that moment wholly latent—latent, it may be, till middle or even later life; or latent it might have been, like the unwept tear, for ever. But the sleeping ill, once awakened, rarely recedes again altogether, but, by its own recurrence, tends to rivet upon the sufferer the chains of habit. Thus, it may become difficult to say which is the predominant factor in the consequent group of discomforts. As a practical difficulty, it is most serious in cases in which ulcer may or may not be present; and I do not hesitate to say, gentlemen, even before you, that in some of these the diagnosis between ulcer and pure gastralgia is, in certain stages, impossible. How are we, then, to succeed as ministers to the sick, if we crowd into one chapter, and almost into one point of view, the pure neuralgias of the stomach, the neuralgias awakened by local irritations within the viscus, disordered secretions or metabolisms within it due to perturbed innervation, together with primary dyspepsias of local origin which concern the nervous system but little or not at all? Never can we succeed, I think, if we make such a confusion. We must endeavour, then, not only to separate the pure neuralgias from the dyspepsias or pains of local origin; but, however difficult it may be in any one instance, we must endeavour farther to decide, concerning mixed cases, whether the neuralgic phenomena stand in causal relation to the local disorders of function, or, contrariwise, the disorders of local function have awakened nervous reverberations. That which reason and examination may fail to discern may often be revealed to us by the test of treatment. The relation of asthma to disorders of the lungs has been quoted as an illustration of these difficulties. In some cases, then, we have to deal with a pure neurosis of central origin; in others, with nervous phenomena awakened by persisting or foregone local maladies; and, unless we see with some clearness how these phenomena are related to each other, we shall fall short of a rational therapy.

In order to enter by the plainest route into the more intimate knowledge of neuroses of the stomach, let us advance from the simplest to the more complex. No cases, perhaps, will serve us better as an introduction than those in which disorders of digestion occur as a consequence of general nervous exhaustion. Unlike gastralgia, these disorders may arise in men and women of very various habit of body. No general sketch of the bodily aspect, nor of the temperament of such patients, can be delineated, and accordingly we find the symptoms various.

Omitting, then, persons disposed to gastralgia, we find two kinds of dyspepsia at least arising in persons overworked. In the first class, we find simply a feeble stomach, as we find enfeebled legs and an enfeebled brain. The tongue is clean—too clean; not red, but pallid. Its substance is œdematous, and its edges indented. Such a person has no appetite, and the little he eats causes a weary sense of repletion until the ingesta slowly pass off. We may call this dyspepsia, as we may call the leg-weakness dyskinesis, and so forth; but the whole man is run down—call it general dysergy, if ἀγόραια ὀνόματα are acceptable. But now take another man, equally without marked diathesis, and equally overworked; his tongue is bulky and also indented, and is protruded slowly, spreading forth as it issues. It is thickly coated, especially towards the mid-line, where the fur is brownish, and brownish towards the back also. The complexion is muddy, and the countenance bears the mark of mental depression. The hand is placed fretfully upon the vertex, where there is a pain, or, if not a pain, a peculiar indescribable uneasiness; and this passes backward, surrounding the occiput. The urine deposits lithates, and the liver and stomach not only work feebly, but their functions are aberrant. He is weary and dull, and says he feels like a dead dog of a morning. A like state of tongue, and a like sluggishness and diversion of stomach, liver, and colon, may be seen in most cases of common apoplexy, and are clearly secondary to the troubling of the brain, though the converse view is usually held, and the attack of apoplexy attributed to a foregoing upset of the digestion. Why, of the two overworked men, nervous exhaustion should produce in one a simple atony of the stomach, and in the other an aberrancy, I cannot say. I suspect the latter man has in himself some echo of gout, but yet I know how disappointing are all attempts to clean his tongue and set his stomach aright with the stock rhubarb and soda mixtures, with pepsines, with calomel, colocynth or colchicum, and how that even strong tonics, such as quinine and iron, may be prescribed with benefit, and how rest and upland-air will beat all medicines whatever, and will clean the tongue in a fortnight. Dyspepsia here is a symptom, and the stomach is disordered; but radically the state is a neurosis, vascular or other, and curable only upon this understanding.

That which I have illustrated by the examples of the stomach may be likewise illustrated by examples taken from the other viscera. Jaundice may be set up simply and directly by causes acting upon the nervous system, or it may be due to local causes only. Or, again, it may owe its origin to some admixture of the two sets of causes. So, again, in the functions of the intestines, either constipation on the one hand, or diarrhœa on the other, may be due to nervous causes acting alone, to local causes acting alone, or to local changes reinforced by nervous reactions. I will only refer in this connection to one more organ out of many—to the uterus and its appendages. How intimately this organ, or this system, is associated with the nervous system, is well known, but, unfortunately, the weight of our knowledge all leans one way—it leans to a curious and busy search for every local ill which may arise in the female pelvis, while blind oblivion scatters the poppy over every outer evil, which in its turn might hurt the uterus nay, more, a resolute prejudice would deny that, in the woman, any distress can arise which owes not its origin to these mischievous parts. "L'utérus c'est la femme" is a proverb which has received a new development in these days; for if by courtesy, rather than by conviction, woman be granted the possession of a few subsidiary organs, these, at best, have no prerogative nor any order of their own.

The uterus has its maladies of local causation, its maladies of nervous causation, and its maladies of mixed causation, as other organs have; and to assume, as is constantly assumed, that all uterine neuroses, or even all general neuroses in women, are due to coarse changes in the womb itself, is as dull as to suppose that the stomach can never be the seat of pain except it be the seat of some local affection, or that the face can never be the seat of tic-douloureux unless there be decayed teeth in the jaw. All mucous membranes, indeed, seem readily to betray nervous suffering by relaxation or changed secretion; and I make no doubt whatever that a very large number of uterine disorders which are elevated to the place and name of diseases of the uterine system, are but manifestations of neurosis. All neuroses are commoner in women than in men. Facial neuralgia is commoner in them, migrain is commoner; so is gastralgia, again, and the pseudo-angina. Not only so, but, in the uterus, they possess one organ the more, with its own rich nervous connections, and its own chapter of added neuroses; but to say that all these maladies are due primarily to uterine vagaries, is to talk wide of all analogy. Again, some men as brave as others feel equal sums of pain far more acutely than the others; women, speaking generally, feel pain more than men do; patient as they are, they seem to have less reserve of force and less resistance, more susceptibility and resentment, and less capacity. Yet there is no standard of pain, nor of men, by which you shall say this patient is a coward, and his outcry exaggerated. Men and women are variously organised in respect of resistance to pain, and their fortitude or their despair must be tested, not by their cries, but by the other features of their characters. What right have we to say that a man writhing in the pangs of a toothache is a great sufferer, while, in the same breath, we hint that a woman complaining of a pain in the abdomen is hysterical. The pain is equally invisible, equally unmeasured in the two cases, and the degree of credit to be given to the complaints is to be gauged by other probabilities.

A neuralgic woman seems thus to be peculiarly unfortunate. However bitter and repeated may be her visceral neuralgias, she is either told she is hysterical, or that it is all uterus. In the first case, she is comparatively fortunate, for she is only slighted; in the second case, she is entangled in the net of the gynæcologist, who finds her uterus, like her nose, is a little on one side; or again, like that organ, is running a little, or it is as flabby as her biceps, so that the unhappy viscus is impaled upon a stem, or perched upon a prop, or is painted with carbolic acid every week in the year, except during the long vacation when the gynæcologist is grouse-shooting, or salmon-catching, or leading the fashion in the Upper Engadine. Her mind thus fastened to a more or less nasty mystery, becomes newly apprehensive and physically introspective, and the morbid chains are rivetted more strongly than ever. Arraign the uterus, and you fix in the woman the arrow of hypochondria, it may be for life.

Now, gentlemen, it is time we complete our reaction from this gynæcological tyranny, and that we of this College no longer permit ourselves to be snubbed by these brethren of ours, who calmly tell us, with their superior airs, that our use of such expressions as uterine neuralgia, irritable uterus, ovarian neuralgia, neurasthenia and the like, comes of a shallow sciolism, and is grounded upon the emptiness of our knowledge of uterine diagnosis.

The spirit of meekness alone restrains me from throwing the same stone again, and accusing our gynæcological friends of ignorance of neuropathies, and of the neurotic diathesis. That no man limited by the bounds of human intelligence can have a fine knowledge of medicine, surgery and obstetrics is true, is as true of obstetricians as of physicians, but every man can have, and must have, a good all round knowledge of a kind which will enable him to take the main bearings of any case which may come to him.

For my own part, no conventionalities arrest me when my opinion is asked by a sufferer. The speculum and the uterine sound were invented as much for my benefit as for other people, and I feel it both my duty and goodwill to examine into every detail of a case, whether medical, surgical or pelvic.

This done, I am able to judge under whose care a patient may best be placed, and the more I thus incidentally learn of surgery and gynæcology the more gladly and intelligently I recognise the extensive and dexterous attainments of those of my colleagues who work in those departments, and who can deal with such cases far better than I can. But, I repeat, and repeat again, that the main lines of the diagnosis of any malady whatsoever should be within the province and the abilities of any medical man whatsoever. What should we think of a family practitioner who made no diagnosis of a case of acute pneumonia, because his work lay chiefly with mothers, because he had not a stethoscope, and because he intended to call in a physician. On these grounds, I say that any well educated physician who does his duty to his cases, who does not idly turn them over to specialists, and who is armed with proper instruments of research, should know, as well as another, the main bearings of all his cases, and should claim to be heard on the diagnosis, although he may not and cannot pretend to distinguish minor differences, nor to have complete mastery of all the more refined devices of modern therapeutics. We physicians have been a feeble folk in this, we have shrugged our shoulders and submitted to gynæcological taunts in a way that may be very modest, but in a way that betrays our trust and our art. If the gynæcologists pelt us with stories of long pain and sickness uncured by medical futilities, but rapidly cured under uterine medication, we can mate their stories, and check them by double the number of cases received by the physician from the sofa, the manipulations and mental abasements of narrow uterine specialism. To underrate our debt to gynæcologists, to forget the great work they have done in the past half century, were as foolish as ungracious; but, like all great movements in special fields of enquiry, it must be subject to reaction, and its results must be checked by those which have been obtained by other methods and in other directions. The wisest and most disinterested of gynæcologists now know well how lamentable have been the exaggerations, how narrow the views, and how deceptive the data of many opinions which have passed current in their school, and they are ready to declare that if medicine is not wholly to reclaim a great part of the field occupied by them, its culture must at any rate be shared with the physician. The physician has been at least as much to blame, in that he has contemptuously thrown aside many cases of genuine malady and of genuine suffering as hysteria. Even hysteria is a complaint to be treated and relieved, but the central blunder has been the stupid confusion between the hysteric and the neurotic subject. On adding up the cases in my chamber note-book for the year 1883, I find that under the three heads of neuralgia, neurosis and neurasthenia, 151 new cases were entered in that one year. What a tale of misery does this limited experience of mine indicate! Add together all the patients of all the doctors in the West Riding alone and compute the manifold suffering. Yet I do not hesitate to say, that in our vigorous northern people, hysteria is far from a like extension. On the contrary, if the word be used with due care, I would go so far as to say it is rare.

I remember but one case of hystero-epilepsy in the Leeds Infirmary in the last year or two, no cases of contracture, and of other hysterical affections but a few, and these often paraplegics, who relapse, and, returning twice or thrice to our care, swell the apparent numbers in our books. Take a hysterical person, man or woman, in its common and, so far, proper sense; take it to mean a person of feeble purpose, of limited reason, of foolish impulses, of wanton humours, of irregular or depraved appetites, of indefinite and inconsistent complaints, seeing things as they are not, often fat and lazy, always selfish; or, to take it in less degree, one capricious, listless, wistful, attractive perhaps, yet having always the chief notes of hysteria—selfishness and feebleness of purpose; and if such persons complain of globus, of palpitation which is never perceived by the stethoscope, of sleeplessness of which the nurse has no record, of dyspepsia which does not lessen the labours of the cook, of pains which never flush the cheek; and, if such person have, or have had, anæsthesia, unreal epilepsy, unreal syncope, unreal palsy, unreal cramps, then set down such person as hysterical, but forget not, nevertheless, to [illegible] her mind and body. Such a patient is, no doubt, a member, a degenerate member, of the neurotic family; but it is almost with indignation that I repudiate the application of her adjective to the nervous sufferer, whom we may call the neuralgic member of that group. Why, gentlemen, my neurotic patients, if I can indicate them by a name, are almost the best people in this wicked world. Rarely endowed with the capacity and endurance, and profounder imagination, of the greatest, they form a large number of those in the second rank who are the salt of society. Let us suppose that Mr. Galton had photographed four hundred of these, inside and outside : the resulting ideal neurotic might be much as follows.

His entry into your room tells of him at once. He enters with a brisk step, and a quick observant eye. You see a slightly built, meagre man, of sallow complexion, or, if coloured, with the colour painted high upon the cheek-bone; the cheeks and the temples are hollow, the temporal arteries being visible under the lean skin which often shows tanned markings deepened during attacks of pain ; the hair is straight, fine, and sparse upon the scalp; the features are sharp, often prominent, the lips thin and the skin dry ; with it may be some remnants of eczema about the ears or chin. The tongue is protruded and retired quickly, and is generally narrow and pointed; it is rarely indented, and its tip, even when the health is best, does not cease to be red. There is often a light silvery coating upon the dorsum and mid-line. The bodily frame is lightly and often finely built, the bony fingers and wrists and the visible sinews and radials betraying the absence of fat. Here and there, in later life, a knotty knuckle may tell of gouty parentage. The pulse, when most tranquil, usually ranges between 70 and 80, and accelerates on the least excitement. The clavicles and ribs, in like manner, are prominent, and the heart's apex may be seen to beat sharply before the eye. Its systole to the ear is likewise short and sharp, and the second sound very audible over a wide area. The limbs are small, but often very sinewy; such persons are as active as birds, and the absence of fat in their muscles often gives to these, in states of health, the quality of hardness under the hand. Their conversation, again, is lively and voluble, often keen and brilliant, but impressionable rather than imaginative. Usually, such a patient does not readily come to you; he is brought, half reluctant, by his wife or friend; he says, apologetically, he is an old dyspeptic, and you can do him no good. He has visited all the springs and half the doctors in Europe, and he lays a bundle of old prescriptions upon your desk. Once agate, however, his story will be a long and minute one, but never maundering, wandering, nor whining. His companions will tell you that he is subject to great fluctuations of the animal spirits—gay, even fascinating, in society, brisk, orderly, and thorough in business, but at home dejected or fretful. He is a small eater, a light sleeper, and a worn worker. These persons are the heirs of every true neurosis, from insanity to toothache; and, on the whole, when we consider the infinite perturbations of intermarriage, it is surprising how true they run, or how clearly you may detect the neurotic strain in mixed descendants. Of their visceral neuroses, I shall have to speak hereafter, and would only say now that in both sexes of them migraine, stomach-ache, and windy colic, are frequent and eminent, and receive the name of dyspepsia; and in the women are added to these uterine and ovarian neuralgias and hyperæsthesias. To call these suffering women of the neurotic type hysterical is to confuse all the due acceptance of names, and, what is worse still, it is to confuse the real relations of things. The neurotic woman is sensitive, zealous, managing, self-forgetful, wearing herself for others; the hysteric, whether languid or impulsive, is purposeless, introspective, and selfish. In the one is defect of endurance, but in the other defect of the higher gifts and dominion of mind.

Now if we turn our eyes upon the flock of women who lie under the wand of the gynæcologist, we shall find it so largely composed of the neurotic and hysteric, that we may say in our haste the uterus has no substantial diseases ; that its affections are all neurotic, or so far reinforced by neurosis as to depend for their cure mainly upon neuropathic medicine. Herein we in our turn should be to blame. Many a woman, otherwise robust enough, and many a woman, whose weakness may lie not in her nervous system, suffers from uterine disorder, from painful uterine states, nay even from distant sympathetic pains also, which come of mischief wholly local, or of mischief reinforced by diatheses other than the neurotic. Making, however, the utmost allowance for all these, I contend that a vast number, I will go further, and say a preponderating number, of such sufferers, lie under the scourge of neurosis, and that their uterine and ovarian disorders are either wholly neurotic, or, as I have said, so reinforced by neurosis as to depend chiefly or wholly upon general medicine.

Let me take as an instance a young lady coming of a family in which great mental gifts had thrown into relief the many eccentricities and humours which accompanied them ; a family, too, of which no household had been free from nervous disease. She possessed the gifts and the attractions of the neurotic diathesis, and laboured under its defects. It is possible also that she was in some degree under the stress of what Anstie called the unconscious sexual impulse. She was restless, excitable, and suffering. Her pains were mostly pelvic and abdominal. She never put her feet to the ground, partly because it intensified her pain, partly because she had been forbidden to do so. She had lain on her back for months. Pessaries had often been introduced, but, being intolerable to her, were withdrawn. Her periods were agonisingly painful for the first two days, and were profuse, and she had constant leucorrhœa. Her appetite was almost gone, her stomach queasy, her frame emaciated ; but she was unselfish and full of courage, and would have scorned the wiles and exacting whims of hysteria. Her womb had been incessantly under specular and other examination for a year or two, and, like nearly all such patients, she had uterus on the brain. I found the vagina tender, and the womb exquisitely tender ; its substance was soft, and its attachments lax. Its position, therefore, was somewhat backwards and downwards. Acute suffering was caused in the upper hypogastrium when the fundus of the uterus was pressed upon *per rectum*. The rectum was full of fæces. By the speculum, I noted that there was both uterine and vaginal catarrh, and that the os uteri was excoriated—in the state, that is, of the upper lip of a scrofulous and snivelling little boy.

My most difficult task was to win my patient over to the belief that her disease was not mainly uterine, but mainly neuralgic ; this once accomplished, our progress though slow, was sure. I declined to initiate any treatment whatever until she would get her feet to the ground, and thenceforth cautiously regain the use of her legs. This took three months. Meanwhile, I declined to "cure the ulceration of the womb" for the twentieth time, but made her content with rectal and vaginal astringent douches, first hot and afterwards cold. As soon as she could walk, we perched her upon horseback. She was treated with the phosphide and valerianate of zinc, with bromide of ammonium, iron, quinine, and like remedies, with occasional sedative suppositories. In six months, I found the uterus more compact, the ligaments braced, and the os clean and sound ; the leucorrhœa had ceased, and all the parts could be handled without pain. Menstruation was still painful, but less so than formerly, and there was some menorrhagia. She was mixing, however, in general society, could ride gently to hounds, had regained appetite and looks ; and, although I then lost sight of her, I have every reason to suppose she is as well as she is ever likely to become.

Now, gentlemen, is not this case one which in their degrees could be multiplied a hundredfold from our case-books or our memories, and yet these are they which form a great part of the women who are caged up in London back drawing-rooms and visited almost daily for uterine disease, their brave and active spirits broken under a false belief in the presence of a secret and overmastering local malady, and the best years of their lives honoured only by a distressful victory over pain.

The case I have described was selected by me because it was not one of mere irritable uterus without apparent disorder. Irritable uterus is a genuine malady, in spite of the denial given to it in high places. It corresponds to the hyperæsthesia of the stomach which is found in the same diathesis, and which often simulates ulcer of the stomach.

But I pass over all these as neurotic enough, and I assert that, in such neurotic subjects, uterine laxities, moderate displacements, and catarrhs, owe their continuance, and often their very initiation to an atonic state of body, and to a special instability of nerve-endowment which may show itself in local trophic changes, and in perverted secretions. Such changes or such settlements of perverted action are often, no doubt, called to this spot or the other by some local deviation from the normal, as a consumption may take its beginning from some trivial and forgotten catarrh ; but the essence of the malady is not there, and to try to cure such a malady by local means is as wise as to try to cure a syphilis by antiseptic dressing of its ulcers.

Such subsidiary means are often needed, often indeed necessary ; but in cases like those under discussion should be used as little as possible, because of the tendency of such methods to arouse and perpetuate a morbid possession of mind in the woman. All this our more robust, more clear-sighted, and more upright gynæcologists know well enough ; in the rest, the fault may lie rather with modern fashion than with themselves.

Looking only to the uterine organs, their reason bounded by the confines of the pelvis, they attempt to stem the tides of general and diathetic maladies with little Partington-mops of cotton-wool on the ends of little sticks. That many of the cases we have discussed need a judicious combination of local with general treatment is true, but in most of them the patient and the doctor are fascinated by the local phenomena, while nature herself is performing on a far larger scale. If we are to cure disease, we must be able to fly with her and to run with her, as well as to creep with her. In my later chapters, I shall recall the truth which should be ever before us—that the fundamental difficulty in all neurotics, not hysterics, is their nutrition. More fresh air, without expenditure of the slender store of strength, the permeation of their starved tissues with the fat which they themselves so often loathe in their food—these two reforms accomplished, all their organs will take on a more generous and a more vigorous life, all their tissues will brace and cleanse themselves from a purer and richer fountain of blood, and force will be stored up and energy developed, wherein before was dilapidation and sterility. As a shrewd old Yorkshire doctor once said to me: "It's no use, my lad, putting the hands right upon the clock-face if you haven't cleaned the works."

Gentlemen, we are all one sided; I speak to-day from my own one-sidedness, and my convictions are upon the side of cleaning and repairing the works. Sometimes, no doubt, when the general state of the health is restored, some local trouble set up originally by the constitutional state—be it gout, scrofula, or what not—smoulders on, forgotten, as it were, after the general malady is cured. For such local trouble diathetic treatment no longer avails; it must be wiped out by some local alterative. But, on the other hand, to contend daily with local troubles which daily are regenerated by some vicious habit of the whole system, is to roll up daily the shameless stone of Sisyphus.

A LECTURE
ON THE
RELATION OF MADNESS TO CRIME.

Delivered at the London Institution, February 28th, 1884.

By J. C. BUCKNILL, M.D., F.R.S.,
Late Lord Chancellor's Visitor in Lunacy.

PERHAPS no medico-legal question has been more discussed, and with fewer results, for the last forty years, than the one I have to introduce to you this evening. I have myself taken part in the discussion for nearly all that time, and yet it seems to me fresh and inexhaustible as ever. To say nothing of the mass of volumes, great and small, which have been written on it in this and other countries by men of my own profession, it has engaged and baffled the utmost acumen of the greatest lawyers. It was discussed at length in the House of Lords in 1843. It was argued with the utmost ability by the greatest criminal judges before the Select Committee on the Homicide Bill in 1874; and, again, by the Royal Commission of eminent judges on the Criminal Code Bill in 1879, who declared it to be a "very difficult subject"—so difficult, indeed, that they saw no way out of the difficulty by any definition of insanity which would be both safe and practicable. It has been discussed in two important papers by the late Chief Justice Cockburn, published by order of the House of Commons; and, lastly, it has been fully and ably discussed in the second volume of Sir James Stephen's recent edition of his *History of the Criminal Law of England.*

Sir James Stephen, now one of the justices of Queen's Bench, has made the criminal law his own subject. No other person can speak with anything like his minute literary knowledge of it, and his practical knowledge also has been most wide and varied. The author of the Indian Criminal Code, and of the Homicide Amendment Bill, and one of the Royal Commissioners on the Criminal Code Bill, his special knowledge is unequalled, and all that he has to say on the subject commands the highest respect.

I do not propose this evening to enter at large into the medical aspect of this question—to discuss the nature of the diseases which cloud the reason, or to make any attempt to unravel those trains of deranged emotion and thought which they occasion. What I do propose to show you is that the state of the law of insanity as regards crime, when life is at stake, is as imperfect as the state of the law of homicide and murder generally, of which it forms part, and that, in the words of the Select Committee, "a new definition is urgently needed to rescue the law from its present discreditable state;" for, as they say in their report, "if there is any case in which the law should speak plainly, without sophism or evasion, it is when life is at stake; and it is on this very occasion that the law is most evasive and most sophistical."

What is insanity? Medically, it is disease of the brain affecting the mind. Formerly, medical men recognised only the grosser forms of madness. Dr. Willis, lecturing to the College of Physicians in 1822, recognised only two conditions or varieties of madness, namely, the high and the low state—mania and melancholia.

Now medical men recognise a great variety of forms and degrees of insanity, and physicians do rightly endeavour to recognise the earliest and slightest forms and degrees of insanity, because these forms and degrees are the most curable, and to cure insanity is the physician's especial duty. The physician must, therefore, observe the causes of insanity in order to remove them. But the duty of the lawyer leads him to neglect the causes of insanity, and to regard almost entirely its consequences, in order to ascertain the influence of insanity upon the conduct. Conduct is the outward expression of the mental state; but insanity is frequently of such kind and degree, that it does not influence the conduct so as to make the insane man break the law; and thus it becomes the lawyer's task to discriminate between insanity which makes a man break the law from that which does not. It is admitted that man is not responsible for breaking the law, if his action in so doing be helpless. It is admitted that by responsibility is here meant punishability, and that the punishability of an offender is strictly a legal question to be determined by lawyers, physicians as such having nothing to do with it. But physicians who are conversant with the insane, and who know their characteristics, who can distinguish the forms and degrees of the malady, their causes and consequences, can instruct lawyers so as to enable them to distinguish the different kinds of insane persons, and the different kinds of their conduct; to distinguish that conduct which is the result of insanity from that which is not the result of insanity—that which they can help, and for which they are therefore punishable, from that which they cannot help, and for which they are therefore not punishable.

The physician must distinguish, as the lawyer and the public do, between slight medical forms of insanity and grave legal forms of insanity. The definition of medical insanity as disease affecting a man's mind, he must, therefore, supplement with a medico-legal definition. Definitions of insanity are most difficult and arduous. They are either too narrow, and become meaningless, or too wide, and the whole human race are involved in the drag-net. According to the *Times*, July 22nd, 1854, Lord Blackburn said: "I have read every definition of insanity which I ever could meet with, and never was satisfied with one of them, and have endeavoured in vain to make one satisfactory to myself. I verily believe that it is not in human power to do it."

Since this was said before the Select Committee on the Homicide Law Amendment Bill in 1874, Mr. Justice Stephen has attempted a definition as follows. "Sanity exists when the brain and the nervous system are in such a condition that the mental functions of feeling and knowing, emotion, and willing, can be performed in their regular and usual manner. Insanity means a state in which one or more of the above-named mental functions is performed in an abnormal manner, or not performed at all, by reason of some disease of the brain or nervous system" (page 130). But this is a medical definition, covering the slightest deviation from mental health arising from hysteria or alcohol, from bile or gout. It includes states of feeling as sensation, which may not affect the mind. It includes abeyance of mental functions, which is not insanity; for, when the mental functions are not performed at all, there is no insanity.

It is clear from the context that this definition of insanity would include more than Mr. Justice Stephen could allow to be irresponsible; and no good is gained by thus analysing the mind, and detailing the results of the analysis, more or less complete, as functions which may be separately affected. I shall myself venture to make one more medico-legal definition of insanity. *Insanity is incapacitating weakness or derangement of mind caused by disease.* It seems to me to be practically useful and scientifically accurate to make a distinction beween weakness and derangement of mind. It seems to me also that all insanity which is not weakness will fairly come under the head of derangement in its widest sense; for morbid states of the emotions derange the play of mind. But the all important term in the definition is, of course, the attribute which points to the want of power to do something. In criminal inquiries, it means incapability of abstaining from the criminal act. It means that condition of irresponsibility pointed to by Lord Bramwell in Dove's trial—Could he help it? It means that which has been much insisted upon by medical writers and great legal authorities, the loss of self-control. Lord Chief Justice Cockburn and Justice Stephen have both expressed the strongest opinion that this state of mind caused by insanity ought to remove responsibility.

Other judges, however, have raised strong objections to the term loss of self-control, and not, I think, without reason. As a matter of fact capable of proof, there is more or less of self-control in the condition of the insane, and more or less loss of self-control in the conduct of sane criminals. But the term incapacitating is less dubious. If a man have such mental disease that he is incapable of obeying the law, that man clearly ought not to be punished by the law. Justice Stephen says, "To threaten such a man with punishment is like threatening to punish a man for not lifting a weight which he cannot move" (p. 172).

In the relations of law to insanity, the question of capacity or incapacity seems always to be involved. In all questions, the question is whether a man is capable of taking care of himself and his affairs; in probate cases, the question is whether a man was capable of making a reasonable will; and in criminal trials, whether a man was capable of avoiding the compulsion of disease to crime.

Incapacity therefore is, and must be, the real test of irresponsibility, for otherwise the law would be both foolish and cruel. This principle of law being granted, the working law must go further, and declare what shall be held to constitute incapacity. It does so in other respects; for instance, it declares that a child of such tender years that it has no discretion is not punishable, and that a man under absolute compulsion of any kind is not punishable.

With regard to insanity, the judges have laid down rules, by which they attempt to distinguish an insane offender who is capable of avoiding his offence from an insane offender who is incapable of avoiding his offence on account of mental disease. These rules, which constitute the law of insanity in relation to crime, have varied from time to time. They reflect, more or less, the knowledge of the age in which they are made. From the nature of the case, they cannot precede the knowledge which men have of nature; and the knowledge which men have of the nature of disease has been very slowly acquired, and is still far from perfect. The drugs and the instruments they used but a few years ago are now curiosities, only to be met with in museums; and new discoveries which invalidate old beliefs are still frequently made. Alteration of the law follows slowly in the wake of increasing knowledge; but still it does follow and change as knowledge advances; and I have no doubt that, when the knowledge of insanity possessed by physicians can be shown to be complete, the law of insanity will, after more or less delay, due to professional conservatism, be brought into reasonable agreement with it.

Lord Coleridge, not long ago, said in court that "to adhere too persistently to the old law is to forget that law grows; and that, though the principles of law remain, yet it is one of the advantages of the common law that these principles are applied to the changing circumstances of the time."

No circumstance of the time is so changing or so important as the knowledge which man possesses of the operations of nature; and in no special field of knowledge has this circumstance been more changing or more important of late years than in the pathological explanations of insanity. Unfortunately, theory has oftentimes outrun, obscured, and discredited knowledge; and it is therefore not surprising that the powerful and responsible officials who administer and alter the common law should refuse to make changes, of the reason and necessity of which they have not been convinced.

But we must no longer delay to inquire what the law is. I may fairly claim to omit any reference of its earlier phases, and to come at once to that important statement of the law as it was made by fourteen out of the fifteen English judges in reply to questions put to them by the House of Lords after McNaghten's acquittal on the charge of the murder of Mr. Drummond in 1843. I have the text here, but it would take too long to read *in extenso.* The first and the fourth questions and answers refer to delusion. McNaghten, you may remember, shot Mr. Drummond under the influence of a delusion. The judges declare, with regard to delusion, that it is law that the accused is in the same situation as to responsibility as if the facts with respect to which the delusions exist were real. For instance, he might kill a man whom he madly thought to be going to kill him; but if he killed a man whom he madly thought to have inflicted any injury upon him, it would be murder. The second and third questions and answers deal with the terms in which the prisoner's state of mind at the time when the act was committed ought to be put to the jury; and in these the law of responsibility is tersely declared thus.

"To establish a defence on the ground of insanity, it must be clearly proved that, at the time of committing the act, the accused was labouring under such a defect of reason from disease of the mind as not to know the nature and quality of the act he was doing, or, if he did know it, that he did not know he was doing what was wrong."

This is regarded by the great majority of the judges as the law, and the whole law, on the subject-matter; and I think that the contention of Lord Chief Justice Cockburn and of Mr. Justice Stephen, that it is only such part of the law as sufficed to answer the questions of the House of Lords, leaving other important portions of the law unexpressed, cannot be maintained, for the following reasons.

1. It does not appear that the fourteen judges who concurred in answering the questions of the Lords felt any disinclination to expound the law fully in what has been called an extra-judicial judgment. One judge alone, Mr. Justice Maule, did appear to entertain an objection, and, in consequence thereof, he made separate replies, saying as little as he could.

2. The questions were formulated by members of the House of Lords, who were themselves great lawyers, for the evident purpose of eliciting an explicit declaration of the law.

3. One of the great judges who took an active part in framing the declaration of the law, has left it on record that he meant it to be a full exposition of the law. This was Lord Wensleydale, replying to Mr. Waddington's question before the Royal Commission on Capital Punishment. "You do not think that the sort of insanity which exempts a person from capital punishment in case of murder could be more accurately defined to the jury than it is in the resolutions of the judges in McNaghten's case?" To this, Lord Wensleydale replied: "I do not think it can. I entirely concurred in that judgment, and took a share in the preparation of it, with my late excellent friend, Chief Justice Tindal, who took very great pains, I know, to lay down the law most correctly. I have always acted upon it, and I think it quite right. Whether it could be improved in any respect, I am not prepared to say until this objection shall be made and discussed."

4. Mr. Justice Stephen, who more than anyone contends that the law was, on this occasion, insufficiently expressed, and who maintains that its strict enforcement would lead to "monstrous consequences," fully admits that it is practically the law of the land. "It has been the general practice ever since," he says (p. 153), "for judges charging juries in cases in which the question of insanity arises, to use the words of the answers given by the judges on that occasion. It is a practice which I have followed myself on several occasions; nor, until some more binding authority is provided, can a judge be expected to do otherwise, especially as the practice has now obtained since 1843."

5. And, finally, it is the latest exposition of the law in this country, and in this city, for in two trials at the Central Criminal Court, in its sittings last autumn, this law was declared to the jury in its most unconditional simplicity.

On the trial of William Gouldstone, before Mr. Justice Day, for the murder of his five children, the jury were charged that "if the prisoner, at the time he killed the children, knew the nature and quality of the act he was committing, and knew that he was doing wrong, then he was guilty of wilful murder. The nature and quality of the act meant that the man knew what it was that he was doing, that is to say, that he knew he was killing a fellow-creature. He repeated that, if a man killed a fellow-creature, knowing at the time he was doing wrong, then he was guilty of wilful murder."

At the next sittings of the Central Criminal Court, on the trial of James Cole for murder, Mr. Justice Denman told the jury that "to prove the prisoner was not responsible, it must be shown that he was suffering from such a state of mental disease as not to know the nature and quality of the act he was committing, or that it was wrong." In passing sentence of death upon James Cole, Mr. Justice Denman further said: "An attempt has been made to make out that you were irresponsible; that attempt has failed, and I must express my opinion that, according to the law of England, it has rightly failed. Although it was, I think, established in evidence that you had been suffering from delusions, I cannot entertain a doubt that on the occasion on which you violently caused the death of your child, you knew you were doing wrong, and knew that you acted contrary to the law of this country, and that you did it under the influence of passion, which had got possession of your mind from want of sufficient control, the result being that the poor child came by a sudden and savage death."

The language of this sentence is remarkable as showing with what exact fidelity the judges of the present day adopt and administer the law of their predecessors as it was declared to the House of Lords; namely, that notwithstanding the existence of delusions (the delusions were that he was being poisoned; and that men were hid under the floor and in a cupboard to injure him), the prisoner is punishable if he knew that he was acting contrary to the law of the land. Mr. Justice Denman's language is further remarkable from his employment of the term control. He inferred, not the innocence, but the guilt of a man suffering from delusions, from not having exercised sufficient control over his passion.

Such being the law, so established that the judges cannot be expected to do otherwise than to use the very words of it in charging juries, let us now devote a little time to the inquiry of what the judges themselves think of it; and first let us hear what some of the judges say who approve of the law. The first I shall cite is Lord Blackburn, Chairman of the Criminal Code Bill Commission in 1879, which Commission was satisfied with expressing the existing law with but slight verbal alteration, namely, the change of "not knowing the nature and quality of the act" into "incapable of appreciating the nature and quality of the act." In his evidence before the Select Committee on the Homicide Law Amendment Bill, 1874, Q. 276, Lord Blackburn gave some details of a trial in which "he felt it quite impossible to say that the prisoner ought to be punished, although, on this definition, you would be obliged to say she was guilty." Therefore, he says: "I told the jury that there were exceptional cases, and on that the jury found her not guilty on the ground of insanity, and I think rightly."

But what does this exceptional case of Lord Blackburn's mean if it does not mean that, if you put the law in force, you will hang innocent people?

I, also, in the course of a large experience, can call to mind another exceptional case which is the converse of Lord Blackburn's. I can remember one case, and one only, of a lunatic on trial for murder, who really did not know the nature and quality of the act which she had committed. It was that of a maniacal woman who had drowned her two children in the Exeter Canal. She was so mad when placed in the dock, that Mr. Justice Coleridge, father to Lord Coleridge, saw that she was unfit to plead. He sent for his brother judge from the Nisi Prius Court, and well I remember seeing the two judges standing in their robes of different colour, and talking low to each other as they looked at the prisoner, and formed their own judgment of her mental state, and Mr. Justice Coleridge ordering her removal to the county asylum. Before the next assize she had completely recovered, and I again received an order to produce her in court, and Mr. Justice Coleridge (for he again was the judge), without taking any evidence, directed the jury to find a verdict of Not Guilty, on the ground of insanity; and, upon that verdict having been given, he ordered her to be given into the care of her friends. I fancy this procedure was not quite regular, but it was most sensible and humane, for she was innocent and she was sane.

The case supplementing Lord Blackburn's, which did not come within the law, goes to prove that, when a prisoner is so mad as actually to come within the definition of the law, the formalities of the trial may be superfluous.

Again, before the same select committee, Lord, then Baron, Bramwell said: "I think that, although the present law lays down such a definition of madness, that nobody is hardly ever mad enough to be within it, yet it is a logical and good definition." I know not how it can be logical to make a law of exemption which exempts nobody, or how a definition can be good which includes nothing. But Lord Bramwell's judgment of what, using the words of the law, we may fairly call the nature and quality of the law, will be fully endorsed by every one who really knows lunatics and the motives of their conduct. "Nobody is hardly ever mad enough to be within it." It would be impossible to invent a more sweeping condemnation of the law than is expressed in that pregnant sentence.

And now let us hear what those judges say who do not approve of this law. The late Lord Chief Justice Cockburn, in his memorandum, July 8th, 1874, on the Homicide Law Amendment Bill, says: "I concur most cordially in the proposed alteration of the law, having been always strongly of opinion that, as the pathology of insanity abundantly establishes, there are forms of mental disease in which, though the patient is quite aware that he is about to do wrong, the will becomes overpowered by the force of irresistible impulse. The power of self-control, when destroyed or suspended by mental disease, becomes, I think, an essential element in the question of responsibility." In his memorandum of June 12th, 1879, the Chief Justice, criticises the law of the Code Bill, which repeats that of the fourteen judges. He says that the language of the essential sentence, namely, that the accused did not know the nature or quality of the act, or that it was wrong, is loose and uncertain; and that it is "language not the less loose and uncertain because it is used by learned judges." Wrong, he thinks, must be understood to mean legally wrong; but what is meant by the nature and quality of the act, he says that he really does not know. To this and to much more criticism he subjected the law, so as to leave no shadow of doubt that he thought that law insufficient and bad.

Now hear what Mr. Justice Stephen says, not when he was contending for his Amendment Bill, but since he has become a justice of the Queen's Bench. How much he may feel himself at liberty to declare the existing law to be a downright bad law, I do not know; but I observe that, as one of the Royal Commissioners on the Criminal Code Bill, he says that a judge "is bound to decide in accordance with principles already established, which he can neither disregard nor alter, whether they are to be found in previous judicial decisions, or in books of recognised authority, and that, in consequence, the elasticity of the law is much smaller than it is often supposed to be" (Report, p. 7). I suppose, therefore, that, as a judge, the expression of his opinions is under some restraint.

In his great work on the *History of the Criminal Law*, vol. ii, Mr. Justice Stephen declares his opinion that the "law of England on this subject is insufficiently expressed" (p. 128). Respecting delusion, which, he says, may interfere more or less with every function of the mind, which falsifies all the emotions, alters in an unaccountable way the natural weight of motives of conduct, weakens the will, and enfeebles every part of the mind, he declares that "upon these questions the answer of the judges throws no light at all, because it assumes the man to be insane in respect of his delusion only, and to be otherwise sane; in a word, the prisoner is treated as a sane person under a mistake of fact for which he is not to blame" (p. 157).

With regard to the emotions and the will, he says: "If the answers were meant to be exhaustive, they certainly imply that the effect of insanity, if any, upon the emotions and the will is not to be taken into account in deciding whether an act done by an insane man did or did not amount to an offence; but they do not explicitly assert this, and the proposition that the effect of disease upon the emotions and the will can never, under any circumstances, affect the criminality of the acts of persons so afflicted, is so surprising, and would, if strictly enforced, have such monstrous consequences, that something more than an implied assertion of it seems necessary before it is admitted to be part of the law of England" (p. 159).

Again, he says that, "carefully considered, they [that is, the judges' answers] leave untouched the most difficult questions connected with the subject, and lay down propositions liable to be misunderstood, though they might, and I think ought, to be construed in a way which would dispose satisfactorily of all cases whatever." The propositions, as construed by Mr. Justice Stephen, certainly offer a remarkable example of legal dialectic. Thus construed, wrong may mean either illegally or morally wrong, and knowledge may mean a calm judgment of the circumstances and consequences of the act. If it be really possible to construe the propositions of the judges as Justice Stephen thinks they might and ought to be construed, I can well believe that "to read judicial decisions correctly is," as he says, "an art in itself, to be acquired only by long professional practice, aided by rules well known to lawyers, but unknown to medical men." But I am happy to say the art of construing does not satisfy the sound common sense of Mr. Justice Stephen, who concludes his efforts in that direction by a distinct proposition of his own as to what ought to be the law of England, which is as different as well can be from that which is the law.

I have come, then, to the end of this part of my task, and I claim to have proved, not from the theories and imperfect knowledge of medical men, but out of the mouths of the great judges of the land, that the law of the land is, to use one of their mildest terms, "insufficiently expressed;" and, to use a stronger term, that, if strictly enforced, it would lead to "monstrous consequences." It would, indeed, lead to frequent acts of the most cruel injustice. With much pleasure, I now pass with Mr. Justice Stephen to the consideration of what the law ought to be. He says:

"The proposition, then, which I have to maintain and explain is that, if it is not, it ought to be the law of England, that no act is a crime, if the person who does it is, at the time when it is done, prevented, either by defective mental power or by any disease affecting his mind, from controlling his own conduct, unless the absence of the power of control has been produced by his own default."

I entirely agree with the idea contained in this proposition, but I think it would be difficult to put a good and true idea into language more open to dispute. What is meant by defective mental power which is not conditioned by disease? Is it mere folly which is meant, or is it idiocy? which, as Chief Justice Cockburn pointed out, is omitted from the present law. "No provision is made for original malorganisation; in other words, for idiocy" (Memorandum, 1874). What is meant by "the absence of the power of self-control, produced by the prisoner's own default?" If states of intoxication be meant, they ought to be specified. But, if states of real insanity, caused by evil habits of life of any kind, are meant—as by the context I am led to suppose—then the proposition is, in this respect, impossible to act upon.

Moreover, the phrase "prevented from controlling his own conduct" is liable to objection, and has, indeed, been objected to by many persons, and has not been a little worried by Mr. Justice Stephen himself. How can it be said with accuracy that a man controls his conduct when he refrains from a crime, and does not control his conduct when he commits one? Mr. Justice Denman, as we have seen, condemned James Cole on the ground that he did not control his conduct. Surely, the most undoubted lunatic, who purposes and plans and executes the most insane homicide, does control his conduct, though in an insane fashion, as the sane man who is tempted to crime and refrains from it controls his conduct sanely, from higher or lower motives of duty or selfishness. For my part, after having long used the term "loss of self-control" in this relation, I give it up as altogether too loose, ambiguous, and inaccurate for so grave and precise a purpose as the definition of responsibility. There are many more definite terms to choose from: incapable, unable, compelled to, cannot help, helpless, cannot avoid; and of these, the first seems as good as any, and it is used in the Criminal Code Bill: "incapable of appreciating." I would suggest therefore the following simplification of Sir James Stephen's proposed law of England as it ought to be. *No act is a crime if the person who does it is at the time incapable of not doing it by reason of idiocy, or of disease affecting his mind.* I know not whether Lord Blackburn would think that this definition would be leaving the question "too much at large," as he said; but surely it would be better than any definition which would leave exceptional cases to be provided for. I think it ought not to be objectionable to Lord Bramwell, who, when trying a lunatic who was also an abominable villain, put the law into a nutshell when he said that the real question was, "Could he help it?"

It contains no medical theories or views, but is wide enough to contain all medical knowledge, and is yet definite enough to meet the practical requirements of the lawyers; and it is, I believe, entirely in accordance with Mr. Justice Stephen's own line of thought as to the principle of the needful amendment of the law, although it is expressed more simply and tersely than his own proposition of what the law ought to be.

(To be continued.)

A LECTURE
ON ASIATIC CHOLERA.

Delivered at the Westminster Hospital, March 4th, 1884.

By C. MACNAMARA, F.R.C.S.,
Surgeon to the Hospital.

GENTLEMEN,—My colleague, Dr. Allchin, before completing that part of his course of lectures on medicine which refer to Asiatic cholera, has asked me to address you on this subject. I am glad to accept Dr. Allchin's offer, because I thoroughly appreciate the spirit in which it has been made; and, further, I think the circumstances of the late epidemic in Egypt should be carefully considered. I have never, so far as I can remember, spoken to Dr. Allchin on the subject of cholera; the idea of asking me to address you was entirely his own, arising from a desire on his part that you should hear the impressions formed regarding this disease by one who lived for nineteen years in the "home of cholera," and who, when there, certainly tried to learn something of its nature and properties. I do not purpose referring to the pathology or the treatment of cholera; for in Dr. Quain's *Dictionary of Medicine*, and elsewhere, I have written fully on these subjects.

During the year 1866, with the consent of the British and other governments of Europe, an international conference on the subject of cholera was held at Constantinople. The objects of this meeting were to investigate the cause, and to devise means for preventing this disease from so frequently spreading from India to Europe, especially through the Suez Canal. One of the results of the conference was the appointment of an International Sanitary Board, having its headquarters at Constantinople, with medical officers under it stationed in Jeddha, Suez, Alexandria, and, in seasons of cholera, at Mecca, and other important points. The duty of these officers was, through the aid of constituted authorities, to prevent infected persons or things from carrying the disease into distant parts. Within thirty-three years—that is, from 1830 to 1864—epidemic cholera had extended from India to Europe and America on four different occasions, each invasion of the disease having been attended with a terrible loss of life; but since the establishment of the international sanitary service in 1866, no epidemic outburst of cholera such as those which had previously occurred has visited this Continent. It is true that epidemic cholera of a virulent type spread through Lower Egypt last year, but our military operations in that country in 1882 had practically, for the time being, suspended the working of the sanitary service so far as the Suez Canal was concerned.

In 1874, another international conference on cholera was held at Vienna, with the object of defining more clearly the quarantine regulations which were to apply to vessels arriving in Egypt or Europe from ports affected with cholera. The regulations then drawn up virtually formed a contract between the consenting parties, of which England was one; and these regulations were based unquestionably on the understanding that Asiatic cholera was a communicable disease. This fact had, however, been admitted by our Government previously to the Vienna conference; for, in an Order of Her Majesty's Privy Council, dated August 1871, it is stated that, as Asiatic cholera was "prevailing in foreign ports within a few weeks' voyage of this country, and may probably extend to others which have still quicker communication with England, it is not unlikely that, within the next month or two, cases of the disease may be brought to the ports of this country." This order lays down the principles which guided the Government in its action, as follows:

"Asiatic cholera has a peculiar infectiousness of its own which, when local conditions assist, can operate with terrible force, and at considerable distance from the sick. All matters which the patient discharges from his stomach and bowels are infective; probably the patient has no power of infecting other persons except by means of these discharges, nor any power of infecting even, except in so far as particles of these discharges are enabled to taint food, water, or air which people consume."

These principles not only expressed the opinions of Her Majesty's Privy Council in 1871, but, outside the immediate influence of the Government of India, they accurately expressed the opinions of all the leading medical and sanitary authorities of Europe and America.

We must clearly bear in mind the fact that the above-quoted Order of Her Majesty's Privy Council was issued, because cholera had appeared in places within an appreciable distance of Europe. Nevertheless, in July 1883, Earl Granville (Secretary of State for Foreign Affairs), in a despatch sent to the French Government, complaining of the tone adopted by the press of that country towards England, for our supposed inaction with reference to the cholera in Egypt, remarks that the principles which have guided Her Majesty's Government are based upon the following considerations (the italics are mine). "*Every time there has been an outbreak of cholera, people have invented some story, more or less credible, to demonstrate in what manner the disease was imported. These stories* have been carefully examined in their time and place, and Her Majesty's Government experience no hesitation in affirming that no outbreak of cholera in Egypt, or even in Europe, can be considered as having occurred by the importation of the disease on board ships arriving from the Indies. Supported by this information, *Her Majesty's Government offer a serious and well founded objection to the theory generally admitted, and the custom of quarantine.*" "Sanitary measures have proved to be the only efficacious means of impeding the march of an epidemic." "In spite of some divergence of opinion with regard to the contagium, the avowal that no theory concerning the origin or propagation of cholera should be accepted as true, and the history, the cause, and the nature of the disease, both in its endemic and epidemic forms, are yet to be discovered." We read with infinite regret a statement of this kind, which seems to throw discredit on the work done by Simon, Parkes, N. Radcliffe, and many other able observers, to elucidate the circumstances of this fearful disease. The question, however, arises, How is it that our Government has abandoned the teaching of these authorities, admitting, in 1871, the communicability of cholera with all its consequences, and in 1883 declining to entertain this doctrine? Earl Granville, though responsible for the despatch above quoted, must have been guided by the opinion of the medical men he consulted on the subject. So long as Mr. Simon held office, it would appear that the Government referred to him on these matters. Dr. G. Buchanan succeeded Mr. Simon, but not quite to his office; that was created by statute, and it lapsed when the Local Government Board was constituted by a later statute. Nevertheless, I believe that Dr. Buchanan, and the department over which he presides, helped to work out Mr. Simon's reports, and that the opinions they hold on the subject of Asiatic cholera are in accord with the views so admirably expressed in the report of the Local Government Board, dated 1875. It seems hardly possible, therefore, that Earl Granville's despatch emanated from the health-authorities of the Government, and it is generally assumed that Sir J. Fayrer was authorised by Government to select some one to go out to Egypt, and report upon the cholera prevalent there in 1883. Dr. Hunter, now Sir W. Guyer Hunter, was chosen for this office. If I am not mistaken, Dr. Cunningham, the Sanitary Commissioner with the Government of India, was also in London in the spring of 1883. On referring to the published opinions held by these three physicians upon the subject of cholera, we find that they as closely coincide with the ideas expressed in Earl Granville's despatch as they differ from those of Mr. Simon and the Local Government Board. Sir J. Fayrer states "most emphatically that he does not believe in the contagiousness or communicability of Asiatic cholera"

(*Lancet*, p. 296, February 16th, 1884 ; that he does not believe that cholera ever has been, or ever can be, carried from one place to another by means of human beings, or by merchandise travelling in vessels or in any other way. Dr. Cunningham writes : "Fairs and other gatherings in this country (India) have again and again testified to the truth of the conclusion that cholera is not carried by persons from one locality to another" (*Eighteenth Annual Report of Sanitary Commissioner with Government of India*). Lastly, Sir W. G. Hunter asserts that, "being one of those who do not believe in the contagiousness of cholera, and who, therefore, do not look for a specific entity or germ, and its importation into a country to account for the development and spread of the disease, I turned my attention to the country itself in the search for a cause of the epidemic" (BRITISH MEDICAL JOURNAL, p. 93, January 1884). I wish here to assert that these opinions are at variance with those held on this subject by many of the best known officers in the Indian Medical Service. I have only to mention the names of Mr. Cornish, Surgeon-General, Madras ; Dr. Furnell, Sanitary Commissioner, Madras ; Dr. Payne, head of the Medical Department, Bengal ; and Mr. De Renzy and Mr. Scriven, of the Punjab ; Dr. J. Murray and Mr. C. W. Deakin of the North-West Provinces ; as also Professors Maclean and Aitken of Netley. Unfortunately, the action taken by our Home Government has extended to the Government of India ; and, in almost identical terms to those used in Earl Granville's dispatch, they decline to discuss, and evince impatience at receiving, reports from either civil or medical officers referring to cholera as being a communicable disease ; *because they fear the action of the International Sanitary Board at Constantinople*—a board which, as we have seen, was constituted with the consent of our own Government. It is the fear lest this board should put in force regulations such as those decided on in the conference of 1874, to the supposed disadvantage of the mercantile community of India, that constitutes the real difficulty. Conduct of this kind, however, is eminently short-sighted ; for, let the practice of our Government be what it may, if they repudiate the principles which govern the practice of all the other civilised countries in the world with respect to the communicability of cholera, the time must speedily arrive when the ports of Europe will be closed to our vessels directly there is a rumour of cholera in the Red Sea or in Egypt. This consideration alone should lead our Government to work with, and not against, public feeling. But over and above this consideration, suppose that, after all, Mr. Simon, Dr. Parkes, and the greater number of men who have carefully examined this subject, are right, and that cholera is a communicable disease, how great is the responsibility of the Government in declining to receive and act upon the opinion of such men !

But, it is argued, cholera did not extend to Europe in 1883. Certainly not ; but, so far as we know, small credit is due to England for this ; rather the various countries of Europe refused to allow the disease to be imported into their midst. I say there are no thanks due to England, because, as we have seen above, the latest principles enunciated by our Government are that it is useless to attempt to stop cholera from extending by quarantine-regulations ; "sanitary measures, in their opinion, being the only means capable of impeding the march of an epidemic of this disease. On the other hand, there can be no question that, from 1866 to 1883, the Sanitary Board of Constantinople being in charge of Arabia, Egypt, and the Red Sea, cholera has not extended in this direction to Europe. But during this time it has spread from India westward, where no such means of protection were furnished ; and further, the very year after the operation of the Sanitary Board had been interfered with, and a large body of native troops had been sent from India to Egypt, Asiatic cholera broke out in that country.

Sir W. G. Hunter having gone out to Egypt disbelieving in the communicability of cholera, arrived in that country when the epidemic was at its height, and the people were demoralised by the effects of the disease. Those of you who study the reports issued by the Local Government Board, must be aware of the extreme difficulty there is in tracing an epidemic or *contagium* to its source, even when the inquiry is conducted by trained experts and in a country like England. Such being the case, it was hardly possible for Sir W. G. Hunter to have arrived at ideas respecting the cause of this outbreak of cholera other than those contained in his report. In the circumstances, however, his conclusions can hardly help the profession one way or the other. Having determined in his own mind that cholera was not imported into Egypt in 1882-83, Sir W. G. Hunter proceeds to discuss how the disease commenced in that country. He believes that the epidemic of cholera may have originated in the unsanitary state of Egypt. I can only repeat, through all its long history, the unsanitary condition of that country had never yet been known to give birth to epidemic cholera. Beyond this, such conditions never have produced an epidemic of this disease in any other part of the world. Failing this cause, Sir W. G. Hunter thinks the epidemic of 1883 might have been a revival of the epidemic of 1865. Supposing this had been the case, would not the dreaded Sanitary Board at Constantinople have known of the continued existence of the disease in Egypt? And surely it is a remarkable circumstance that, during our military operations in the country in 1882, nothing was heard of the disease among our troops. But Sir W. G. Hunter assumes that, if neither of these causes produced the cholera of 1883, then it might have developed out of the diarrhœa common in that country. We are left in the dark, however, as to why diarrhœa has not often before given rise to epidemic cholera, either in Egypt or in any other part of the world. The idea is at variance with all that we know of the history of the disease.

It is beyond my power to say what kind of evidence would be necessary to convince those who now disbelieve in the communicability of cholera, that it is a disease which spreads in the manner indicated by Mr. Simon. But I may refer to the reasons which caused me to arrive, as far back as 1866, at a most positive conviction that the disease is a communicable one. At one time, although not denying, I could not subscribe to the opinion that cholera was a communicable disease ; this fact may be substantiated by reference to p. 121, vol. iii, of the *Indian Medical Gazette*. At that time I had proof that the dejecta passed by patients suffering from cholera might be taken into the stomach of human beings and not cause cholera, and that the medical or other attendants on cholera-patients did not, except under well defined conditions, suffer from the disease ; but, as I studied with greater care the histories of the various epidemics, and filled in these histories from the old MS. records of the Calcutta Medical Board, I became convinced that Asiatic cholera had invariably extended from India over the world, along the lines of human intercourse, and that the disease was therefore a communicable one. At this time, as stated in Dr. Quain's *Dictionary of Medicine*, the following circumstance was brought to my notice. "A small quantity of a fresh rice-water stool, passed by a patient suffering from cholera, was accidentally mixed with four gallons of dirty water, and the mixture exposed to the rays of the tropical sun for twelve hours. Early the following morning, nineteen people each swallowed about an ounce of the contaminated water ; they only partook of it once, but within thirty-six hours five of these nineteen persons were seized with cholera. In this case, the cholera-evacuation did not touch the soil ; as it was passed so it was swallowed, but (and this is the most important to remember) it had been largely diluted with impure water, and the mixture had been exposed to the light and heat of a tropical sun for twelve hours." In the year 1872 I was engaged in making some experiments on monkeys. For this purpose I exposed to the sun some fresh cholera-dejecta in a pail full of dirty water. The following morning, at about 6.30 A.M., I and my assistant were shut up in a close room with these monkeys, experimenting upon them with this diluted cholera-stuff. By two o'clock the same day I was suffering from a severe attack of cholera, and the same evening my assistant was seized with the disease ; we were both of us very dangerously ill, passing into a state of collapse in a few hours after the commencement of the symptoms. The monkeys escaped without the slightest ill effects from our endeavour to give them cholera.

With convictions, therefore, formed not only from the evidence afforded me by the history of the disease, but also from an experience of the communicability of Asiatic cholera such as I have referred to, you will agree with me that I was justified in publishing the following statement regarding the epidemic in Egypt of 1883. "Asiatic cholera has never yet visited Egypt unless it has first broken out in Turkey, Arabia, or Europe, whence it could be traced back to India. Last year, for the first time in the history of Egypt, a large body of native troops and camp-followers were brought by steamers and landed in that country from India ; and the following year (at its usual season for development) Asiatic cholera appeared among the Egyptian people. It is worthy of note also that, in consequence of the war, the international sanitary arrangements of Egypt and the Red Sea were suspended during the latter half of 1882-83. With facts of this kind before us, the question of exactly how or when the cholera of 1883 originated in Egypt is a matter of secondary importance."

I have explained in the BRITISH MEDICAL JOURNAL, October 27th, 1883, that in the previous February, before cholera had been heard of in Egypt, I had applied to the Government of India for the services of a young medical officer, then in England, to study, in conjunction with myself, the subject of micro-organisms in connection with cholera. My idea was that, by working together, I should save this gentleman the unnecessary labour of going over much ground that had been explored ; and, subsequently, he might have continued the investigations in Bengal ; but the Secretary of State for India declined to accede to my proposal. I expressed my own opinion very clearly on the contagium of cholera as far back as 1867, holding that we had then no proof of the existence of a specific form of bacteria in cholera, but that the disease depended on the introduction of specific organic matter into the intestinal canal. The Egyptian cholera, however, of 1883 will certainly be connected in the minds of scientific men with the admirable researches commenced by Dr. Koch into the micro-organisms of cholera. This work Dr. Koch has subsequently carried on in Calcutta; and, although no one can receive his admirable reports with greater satisfaction than I do, it is impossible to ignore the fact that this most important work is being effected in our Indian possessions, it is true, by brethren, but nevertheless by rivals. Dr, Koch has found bacteria in the walls, epithelium, and glands of the intestinal canals of persons dying from cholera. He has separated and cultivated these bacteria, and finds they differ from those discovered in cases of diarrhœa and dysentery. The presence of these bacteria, Dr. Koch believes, excites sufficient irritation in the mucous membrane of the intestines to cause the symptoms of cholera. But it is said that heaps of micro-organisms exist in the contents of the intestinal canal and in decaying epithelium in all parts of the body; but this is no reason why some form of specific bacteria may not exist in cases of cholera. We might as well say that no form of pus contains specific qualities because, under the microscope, all pus looks very much alike. By its effects we know that pus differs in its properties in a very remarkable way. Then, again, it is said the micro-organisms are the effect of disease, not the cause. But how can disease produce a living micro-organism? If, on the other hand, you find the mucous membrane of the intestine perforated, and, in fact, its tissues swarming with micro-organisms, which appear to be living at the expense of these structures, surely it is not difficult to imagine that we have in such organisms a sufficient cause of irritation to account for the symptoms of cholera. It is satisfactory, however, to find that, while prosecuting his researches into the micro-organisms found in the walls of the intestines in cases of cholera, Dr. Koch has been led to inquire into the cause of the remarkable diminution in the death-rate from cholera in Calcutta since the introduction of the new water-supply into that city. In my work on the *History of Cholera*, published in 1876, p. 423, I have gone fully into this subject, and the still more remarkable instance of the condition of our troops in Fort William.

In conclusion, I hold with the views entertained by the majority of men who have most thoroughly studied the subject, that it is in the power of England to do very much towards preventing the extension of cholera from India over the world by means of well advised quarantine-regulations applied to vessels arriving from infected ports. I also believe that more might have been effected by our Government in India to lessen the death-rate among our European troops and the natives of that country from cholera; but that, when cholera exists in an epidemic or any other form in a country, there is one, and only one, way of averting its fatal effects, and that is by preventing the water and food which people consume from being contaminated by the organic matter passed by patients suffering from the disease. This infecting matter may retain its deadly influences if kept in a dried condition (as on soiled clothes) for years; but, if it pass into water containing elements which are probably essential to its development, it bursts forth into rapid growth. The life of this organic matter (it very possibly is a micro-organism) is, fortunately, of short duration; so that, if it pass into a river or well containing elements favourable to its growth, it springs into active life, but dies in a few days. Unless such a source of water-supply be again contaminated, it may be consumed with impunity in the course of a few days. The rapidity with which the organic matter passes through its stages of development depends largely upon the conditions of the atmosphere and the amount of sunlight it receives. If the organic infecting matter of cholera pass into water which does not contain elements essential to its development, it may remain sterile. My firm conviction is, that no amount of cleanliness, drainage, or any other means, will preserve a community from epidemic cholera if the food or water people consume be contaminated by the dejecta of cholera-patients. On the other hand, no amount of filth, overcrowding, or other unsanitary conditions, can produce epidemic cholera, if the organic infecting matter be kept out of the food and water. Unsanitary conditions predispose people to cholera. The majority of the world's populations, however, especially the lower class, live in such conditions; and therefore a greater number of the poor die from epidemic cholera than those who are in better circumstances.

SURGEON-MAJOR W. TEMPLE, M.B., V.C., Army Medical Department, has been appointed Secretary to the Surgeon-General Her Majesty's Forces, Bengal, in succession to Brigade-Surgeon R. Wolseley, M.D., who has vacated the appointment on promotion.

NOTES OF THREE CASES OF ARSENICAL POISONING.

By WILLIAM WHITFORD, M.D.,
Honorary Assistant-Surgeon to the Liverpool Cancer and Skin Hospital and to the Stanley Hospital.

IN my capacity of district medical officer to the parish of Liverpool, I was called to see Thomas Higgins, aged 45, on September 25th, 1883, as a probable case of fever. On examining him, I found his temperature and pulse normal. He stated to me that he had diarrhœa and felt "sickish," and that he had been drinking for a couple of days. He strongly smelt of drink. I ordered him a full dose of castor-oil, to be followed by a mixture consisting of opium and liquor bismuthi. I saw him again on the 29th, and found him weaker, and his temperature subnormal. I observed no evidence of drink on this second visit. In the interval between the visits, he had taken miscellaneous food, and there was doubt as to his having taken the mixture, at least regularly. There was tenderness on pressure over the lower abdominal region. The patient complained of vomiting, and "bad" diarrhœa. On October 2nd, three days after my last visit, his wife informed me that he had just died, and requested a certificate. I was surprised to hear of his death, for I had looked on his ailment as a comparatively trivial one. I closely questioned her as to his symptoms before death. She stated that he had frequent "bloody stools," and that he died suddenly. I gave a certificate assigning dysentery as the cause of death, although I had no definite opinion as to the exciting cause of the dysentery. On the evening of October 3rd, Patrick Higgins called on me, and stated that his brother, Thomas Higgins, had been heavily insured by his widow and her sister, Catherine Flannagan. On hearing this, my suspicions were first aroused, and I directed the brother to see the coroner, and to insist on an investigation being held. I called the following morning, and told the coroner that I had now grave suspicions of foul play. The coroner declined to order an inquest, but gave me verbal permission to make a *post mortem* examination, to verify or otherwise my suspicions, and directed his beadle to accompany me. After examining the body, as described below, with the assistance of Dr. Limrick, I gave directions for the funeral to be stopped, and placed a constable in charge of the room. I may here mention some symptoms and circumstances immediately preceding death which were sworn to during the recent trial. The deceased spoke of figures on the wall and around his bed, and yet, a few minutes before he died, he refused a drink offered by Mrs. Flannagan, and subsequently took some water offered by a stranger. He sat erect in bed whilst he drank it, and, having said "God bless you" to her, he lay down and died. The vomiting, purging, and consequent thirst were marked symptoms for the last two days.

The *post mortem* examination was made on October 4th, fifty-eight hours after death. Rigor mortis had disappeared, and slight discoloration was noticeable, but no stains in the depending portions. The conjunctivæ were free from any yellowish tinge. On opening the abdomen, the following appearances were observed. The peritoneum, over its entire surface, presented its normal glistening character. On the anterior wall of the stomach, extending from the lesser curvature, and nearer to the cardiac than to the pyloric opening, a reddish patch, about four square inches in area, was seen through the semitransparent walls of the stomach. The duodenum was intensely inflamed, and it was separated with difficulty from the pancreas and other adjacent structures. The intestines, which were remarkably free from gaseous or other contents, had similar patches to the one described on the stomach. There were six on the small, and two on the large intestine, and these were scattered at irregular intervals over the tube. A most remarkable "cord-like" condition of the intestines was observed in parts for about two inches in length. There were three such cord-like contracted portions in the small bowel, and two in the large, and they presented no constant relation to the patches described. The mesenteric vessels presented an injected appearance in several places; but there was no visible continuity with these vessels and the inflamed patches of bowel. Except as described, the bowels were paler than normal. The stomach, after being tied at each end, was removed unopened, and placed in a clean jar. The intestines were similarly treated. The portal vein and its tributaries were empty, and the viscera generally were more bloodless than normal. The liver had a darkish appearance, but was otherwise normal. The gall-bladder was empty, and there was no biliary or other staining matter in the adjacent viscera. The spleen was enlarged and cirrhotic. The kidneys were deeply congested, presenting a dark colour throughout the entire section; the pyramids were unusually prominent. The bladder was empty, and presented no abnormal appearance. The lungs were pale, and there was no hypostatic congestion in the depending portions.

The heart was firmly contracted, and contained no blood in its several cavities. The left ventricle had a darkish appearance on its inner surface, very pronounced in parts. The main vessels were free from clots or other contents. The pleuræ and pericardium were normal. The brain and its membranes presented in a marked degree the bloodless condition which characterised the various organs of the body, with the exception of the kidneys and the endocardium of the left ventricle. The veins and sinuses were almost empty. No other abnormal appearance presented itself in the cranial contents. A portion of the liver, the spleen, one kidney, and the heart were removed from the body, placed in a jar, and sealed.

On October 6th, I made a detailed examination of the stomach and bowels, and their respective contents, in the laboratory of Mr. Davies, and in his presence. On opening the stomach, we found about two ounces of fluid contents, having no distinctive smell or colour. The inflammatory patch already noticed was confined to the mucous membrane. There were no adhering solid particles on its surface, or in its vicinity. The inflammatory condition of the duodenum rendered it easily torn, but the peritoneum covering it in part was unaffected. The small amount of semifluid matter in the intestines presented nothing unusual. The dark mahogany-like patches were about the size of a florin; and, as in the stomach, the staining was confined to the mucous membrane. The rectum was empty, and the vessels supplying its mucous surface were injected. Through the "cord-like" portions of the bowel a probe was passed, and the lumen of the tube was thus shown to be not entirely obliterated. These cord-like portions were paler than the adjacent bowel; and, as I have already stated, there was no apparent relation between these and the inflammatory patches. We examined microscopically one of the patches, with a low power, for crystals of arsenious acid. I had formed a strong opinion, from the symptoms and the pathological appearances, that arsenic had been the poison administered; and, in consequence, I requested Mr. Davies to first determine if it were present in any of the viscera. He found arsenic in all the abdominal viscera by Reinsch's test. Quantitatively, he determined that in twenty ounces of abdominal viscera there was one-third of a grain of arsenious acid.

Mr. F. W. Lowndes (surgeon to the Liverpool police) and I were jointly commissioned by the authorities to conduct an examination on two exhumed bodies at Ford Cemetery on January 16th, 1884. On our arrival at the cemetery, we were shown a grave in the public portion, from which a coffin had just been raised. The grave was formed of sand and clay, was about five feet deep, and the coffin of pine-deal was intact. The coffin-plate had on it the inscription, "Mary Higgins, died November 29th, 1882, aged 10 years." The coffin was removed to the mortuary of the cemetery, and the body identified in our presence. The grave-clothes were entire, though soiled. The eyes and part of the nose were destroyed by decomposition. The face and the body generally were slightly discoloured. The teeth were in their sockets, and the nails adhered to the fingers and toes. The integuments covering the chest and abdomen were intact. The body was that of a female under the age of puberty. On opening the chest, we found pleuritic adhesions on both sides, and a large quantity of blood-stained fluid in each pleural cavity. The heart and the pericardium presented no appearance of disease, and their respective structures were well preserved. On opening the abdomen, we found over the greater portion of the large and lower portion of the small bowel a bright yellow staining. The mesenteric vessels were similarly stained, and the mesenteric glands were greatly enlarged. The stomach had a pale grey appearance; and on its anterior wall, near to the lesser curvature, two small darkish patches were observed. It was secured with ligatures, removed unopened, and placed in a jar labelled A. The spleen was much diminished in size; the liver and kidneys were shrunken, and all three were paler than normal on section. They were placed in jar B. The intestines, having been ligatured, were removed, and placed in jar C. The other pelvic viscera were normal. We next examined the grave of John Flannagan. It was formed of dry sand and clay, and the coffin was about ten feet below the surface. The coffin-plate bore the inscription, "John Flannagan, died December 8th, 1880, aged 24 years." The pine-deal coffin was intact. On removing the covering from the face of the corpse, the face and body generally were found in a remarkable state of preservation, and were easily identified. The grave-clothes were entire. On the surface of the coverings next to the body, there were black and yellow stains, which we removed, and preserved for chemical examination. We found only slight indications of putrefaction. The features were well preserved, with the exception of the cartilages of the nose. The integuments over the chest and abdomen were intact. We found the lungs and heart much shrunken, but otherwise they and their enveloping membranes were healthy and well preserved. The lungs had a granular feel on section. The stomach was of a whitish-grey colour, and was removed into jar D. The spleen was a mere shred, weighing about a quarter of an ounce. The liver and kidneys were shrunken, but well preserved; in fact, the latter organs might have been used for an anatomical demonstration. The three organs were placed in jar E. The gall-bladder, as in the case of the child Higgins, was empty, and there was no discoloration in its vicinity. The intestines presented externally, throughout most of their length, a characteristic golden yellow appearance; they were ligatured, and placed in jar F. No other abnormal appearances were noticed. The vessels used were clean glass jars. Each was closed with a glass stopper covered with white skin-leather, and securely tied. We each of us affixed a private seal to the jars; and all were labelled with the respective names of the deceased bodies and date of exhumation. On the following day (Thursday, January 17th), we attended at Mr. Davies's laboratory; and, in conjunction with him and Dr. Campbell Brown, we made a more detailed examination of the viscera.

In jar A (stomach of Mary Higgins) we found a brownish substance adhering very closely to the mucous membrane of the stomach, containing several small hard granules. On the removal of the matter, several small reddish patches were noticed, chiefly on the anterior wall. In jar C (intestines of Mary Higgins), we examined the bowels throughout their entire length. The golden yellow appearance was more pronounced on the inner than on the outer aspect. Small reddish spots were distinctly visible scattered over the lower four-fifths of the bowel. The mesenteric vessels were deeply stained yellow, and the mesenteric glands were much enlarged. Small hard granules were found in the contents.

In jar D (stomach of John Flannagan), the walls of the stomach were much attenuated, but entire. Some dark coloured matter tenaciously adhered to its mucous surface. Two small reddish spots on the anterior wall were noticed.

In jar F (intestines of John Flannagan), the intestines presented over nearly their whole extent in a marked degree the golden yellow staining which we had previously observed from the outer aspect. Some small reddish spots were noticed scattered over the mucous membrane, especially at the rectal end. Some granules were found in the contents. The mesenteric vessels were deeply stained yellow and the mesenteric glands were slightly enlarged. The granular particles which we had found in the various viscera of both bodies were examined microscopically, acetic acid being added, and were shown to be of a phosphatic character; evidently the crystallised products of decomposition. Another problem presented itself for solution. Was the yellow pigmentary substance sulphide of arsenic, or was it of a biliary nature? Dr. Campbell Brown doubted its being an arsenical compound, from the amount present, and from its wide diffusion. He and Mr. Davies undertook to determine this point, and I may anticipate so far as to state that they have shown, not only by the amount of arsenic present in the respective bodies, but by direct chemical tests, that the yellow matter is not sulphide of arsenic. I may here mention that the abdominal viscera of Mary Higgins contained one grain of arsenious acid; and that of John Flannagan three grains and a quarter. In none of the cases were crystals of arsenious acid found, so we have assumed the poison had been administered in solution. In each of the exhumed bodies, certificates had been given, assigning the cause of death to bronchitis. It was given in evidence at the recent trial that, in each case, there had been at least a week's illness, and that vomiting and purging were symptoms.

REMARKS.—The case of Thomas Higgins presents many noteworthy features. There are many points of resemblance with the one reported (*Lancet*, February 25th, 1854, p. 224, "Atlee Family"). The bloodless condition of the body, the firmly contracted heart, the enlargement of the mesenteric glands, and the survival of the patient for seven or eight days after the first attack of vomiting and purging, which is most unusual, are common conditions. Further, in both cases it has been fairly shown that the poison had been administered in small doses, frequently repeated. On the other hand, the condition of the stomach and duodenum contrast strongly with their healthy state in the reported case. In the case reported by Dr. Wilks (*Lancet*, March 29th, 1862, p. 325), the person died twelve hours after taking half an ounce of arsenic. Dr. Wilks found an ecchymosed condition of the left ventricular endocardium, and a contracted condition of the [illegible] conditions which strikingly resemble those found in the case of Higgins. The remarkable "cord-like" contractions of portions of the small intestine of Higgins, strongly indicate nervous irritation, and would seem to favour the theory of [illegible] that diarrhœa in general is due to irritation of the intestinal ganglia, and not to paralysis of the splanchnics. Was the firmly contracted condition of the heart due to a similar cause? If so, can we call the mode of death syncope, or shall we attribute the contracted condition of the heart to the want of blood-supply? These are interesting questions, and I do not presume to offer an opinion. Dr. Campbell Brown gave as his opinion at the trial, that the man Higgins had been taking arsenic for several days before death. His reason was that he found six times as much arsenic in a given weight of spleen as in an equal weight of liver. This condition would indicate relatively large hepatic elimination, and this elimination would involve the element of time. I gave a similar opinion, and the pathological reason that I assigned was the uniform distribution of the inflammatory patches throughout the intestinal canal. On this point, see Dr. Harley's note (*Lancet*, November 23rd, 1861, p. 499). Messrs. Lowndes and Davies declined to give an opinion on the point with regard to any of the cases. I shall only make a few remarks regarding the exhumed bodies. The absence of any indication of kidney-congestion, or of marked inflammation of duodenum, contrasts strongly with the condition in the case of Higgins, and resembles the "Atlee Family" case. The nature of this yellow pigment is a matter of much interest, and the profession is indebted to Dr. Campbell Brown and Mr. Davies for the trouble they have taken. It appears strange that a biliary pigment should be absent from the duodenum and upper part of the jejunum, and present in the remaining portion of the bowel. Possibly the pigmentary matter is a product of the intestinal juices and the hepatic secretion; and, as we know the glandular structures vary in the different parts of the tube, we may account for the pigmentary distribution in the two bodies. Further, as arsenic is stored up in the hepatic cells and the intestinal glandular structures, we can readily understand an alteration in the character of their respective secretions, and thus account for the pigment being present in cases of arsenical poisoning. It evidently requires a considerable time to produce these chemical changes, for the pigment is not present until the body has been buried for a considerable period. Possibly an atmosphere developed by putrefactive changes may determine the combination which results in the formation of the yellow pigment.

ON THE YELLOW PIGMENT FOUND IN THE INTESTINES IN CASES OF ARSENICAL POISONING.

BY J. CAMPBELL BROWN, D.Sc., AND
EDWARD DAVIES, F.C.S.

It has frequently been recorded that a yellow colour has been obtained in the stomach and intestines of persons who have died from arsenical poisoning, after long interment. It is not always stated to what this yellow colour is due; but it has sometimes been attributed to the formation of sulphide of arsenic. Thus, in Taylor on *Poisons*, the following passages occur. "White arsenic slowly becomes changed to yellow sulphide by the evolution of sulphuretted hydrogen in the decomposition of the stomach or of its contents. It then forms a deep yellow stain through the coats, and appears on the external surface." "In Mrs. Smith's case, the sulphide of arsenic was discovered in the stomach fourteen months after interment." "In the case of the Cheshams, the coats of the stomach were in both instances deeply dyed with large patches of yellow sulphide nineteen months after interment." "In some cases, the coats of the stomach and intestines, the liver, diaphragm, and even the bones of the spinal column, may be thus deeply stained of a yellow colour."

In *Reports of Trials for Murder by Poisoning*, by Lathom Browne, and Stewart, the following passage occurs. "In bodies long buried, the arsenic is often converted into sulphide by putrefaction, and then appears as a yellow coating."

No proof has ever been adduced, so far as we are aware, that the yellow substance is really sulphide of arsenic. We have recently had an opportunity of examining a yellow substance found in the circumstances referred to, in two bodies exhumed in January last, and think it desirable to place our observations on record.

One of the bodies was that of a young man, aged 22, which had lain in the grave upwards of three years. It was in a state of good preservation, the stomach, intestines, and viscera having decreased in size without losing their usual form and appearance. From the whole of the abdominal viscera, three and a quarter grains of arsenic were extracted. The whole of the small intestines were coated internally with a bright yellow pigment resembling mustard, as were also the greater part of the mesenteric vessels. The colour was visible through the walls of the intestines. It reminded one of orpiment, and in some places of realgar. It was not present near the gall-duct.

The other body was that of a girl, aged 10 years, which had been in the grave more than thirteen months. The viscera were in a good state of preservation, although contracted. From the abdominal viscera one grain of arsenic was extracted. The bright yellow pigment was distinctly present in the intestines and mesentery, although the quantity was not so great as in the previous case.

In another body, which had not been buried, no yellow pigment was found, although there was more than a grain of arsenic in the viscera.

In a fourth body, which had been in the grave less than a year, but in which the quantity of arsenic was probably not more than half a grain, the yellow pigment was perceptible, but the quantity was very small.

We collected a considerable quantity of the yellow pigment, weighing in the moist state between twenty and thirty grains. It was carefully tested for arsenic, and was found to contain no appreciable quantity of arsenic. It certainly was not sulphide of arsenic. Nitric acid produced a play of indistinct colours similar to those produced in bile by nitric acid.

We found that the yellow pigment was readily soluble in chloroform, forming a bright and clear yellow solution; less soluble in alcohol; slightly soluble in strong ammonia, reprecipitated by hydrochloric acid; and insoluble in water. The chloroform-solution left on evaporation a deep yellow residue. This yellow residue was reddened by strong hydrochloric acid, while nascent hydrogen from zinc and hydrochloric acid discharged the colour and dissolved the residue. Nitric acid converted it into a purple, then red, then brown substance. Sulphuric acid gave a temporary violet colour, quickly becoming brown. Sulphuric acid and pure sugar gave the violet purple tint characteristic of Pettenkofer's test.

THE TREATMENT OF GONORRHŒA BY OPEN WIRE BOUGIES.

BY D. C. M'VAIL, M.B.,
Lecturer on Medicine, Western Medical School, Glasgow.

Gonorrhœa is a specific catarrh of the mucous lining of the urethra—a condition in which there is rapid inflammatory cell-proliferation, and exudation of fluid from the mucous surface. These catarrhal changes necessarily begin at the anterior extremity of the urethra, and travel backwards. The fossa navicularis suffers early and severely, and backwards along the course of the passage, another part that is severely affected is the sinus of the bulb. These two parts are wider than the parts of the canal immediately behind each, and so small portions of fluid are apt to lodge more persistently there than in other parts of the canal.

In the local treatment of this affection, it is obviously very desirable to keep separate the inflamed mucous surfaces. The condition is in many respects analogous to a moist eczema intertrigo, where cure is indefinitely postponed unless the surfaces are, by suitable dressing, maintained apart. The injections in gonorrhœa that have been most successful are those that have best fulfilled this indication of treatment, and lately Mr. Cheyne's medicated bougies of cacao-butter have given further aid in this direction. To carry out more effectually the keeping separate the secreting surfaces, I have had made open wire bougies. These are of two forms.

The first form (Fig. 1) is for the effective administration of injections. The part *a* is a short length of catheter-tube, to which are soldered the wires of the open bougie, part *b*, and to the part *a* is also attached a short piece of India-rubber tube *c*. This instrument being introduced until the part *a* is well within the meatus of the urethra, the solution to be injected is introduced by a syringe, and, when quite full, the India-rubber tube *c* is compressed by a spring clip, to prevent the escape of the fluid. Within from twenty to thirty minutes, the injection will be almost wholly absorbed by the urethral walls, and then the instrument may be withdrawn. By this means, the injection is applied to, and kept applied to, any part of the urethra that may require it until entirely absorbed. By the ordinary method at present in use, the contact is at best but very brief; and, as the part of the passage that is most in need of treatment is usually the most irritable, the injection is, by the instantaneous reflex contraction of that part, at once driven from it into other portions of the canal.

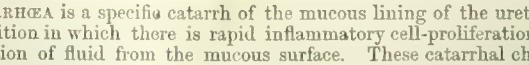

Fig. 1.

The second form (Fig. 2) is an open wire arrangement throughout, and is constantly worn by the patient, so that the discharge may drain freely away, and not lie in the passage and give rise to renewed secretion, as constantly goes on in the ordinary treatment at present. These instruments are well borne in the urethra, and the patient pursues his ordinary avocations while wearing the second form.

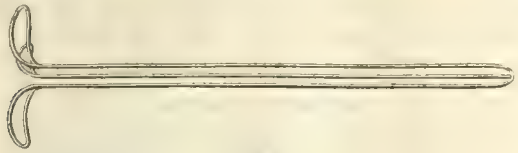

Fig. 2.

The length of the wire bougies is of course in proportion to the distance up the canal to which the catarrhal affection has travelled; in recent cases, an inch and a half may suffice; in older cases, it may be necessary to have it greatly longer.

Mr. Hilliard, of Renfield Street, Glasgow, can supply them to any member of the profession who may be inclined to put this method of treatment to the test.

CLINICAL MEMORANDA.

ONE CAUSE OF MANY TROUBLES.

The sphygmograph is not a trustworthy instrument for clinical investigations of the more delicate and precise characters. It is impossible to determine how much of any particular form of tracing is due to the instrument, and how much to the pulse; but there is an indication which it gives that cannot be too highly valued, if only it be rightly interpreted. I will ask your leave to state the facts very briefly. Practitioners do not need to be reminded that the primary purpose of the muscular contractility of the arteries is to convert the pulsatory current of the blood, as it is pumped into the vessels by the systole of the left ventricle of the heart, from a series of jets or waves to a steady flow, before it reaches the capillary area, where function and nutrition take place. We know, by the old familiar observation of the web of a frog's foot, that, if the blood pulsate in the capillary area, nutrition is disturbed or arrested, and inflammation is imminent. Now, the sphygmograph always shows the state of the arterial contractility, as compared with the arterial dilatation caused by the cardiac impulse; and, by this indication alone, we can judge whether the vaso-motor centre is doing its work. In practice, I find this one of the most valuable tests of the state of the organism, especially in relation to "irritability" and impairment of brain and nerve nutrition. The indication for nerve-tonics, more particularly such as nux vomica, phosphorus, and the *red* cinchona bark, is significant when the arterial wave-marking on the tracing is abnormally slight, or, as often happens, scarcely discernible. This may seem a rule-of-thumb method of selecting a remedy, but it works excellently well in practice; and, whether the patient be depressed or irritable, whether he appear to suffer from capillary congestions of the atonic sort, or from disturbance almost amounting to local "inflammations," the tonic plan of treatment nearly always affords relief. On the other hand, a very high arterial wave-marking—if only its subsidence be sharp—indicates both want of tone and excessive excitability of the vaso-motor centre, calling for a combination of some sedative with the tonic. The best, in my experience, is a few drops of tincture of opium. I use neither morphia, nor chloral, nor bromide of potassium, nor bromide of ammonium, nor strychnia, in these cases; and I believe that, if practitioners would employ nux vomica, etc., and opium, more directly and precisely, they would find it easier to relieve cases of nervous and general disturbance quickly and permanently. J. Mortimer Granville, 16, Welbeck Street.

THE CONNECTION BETWEEN MALARIOUS (NON-TROPICAL DISORDERS AND STRICTURE OF THE URETHRA.

As an addendum to Dr. J. W. Cousins's contribution on this subject in the Journal of February 23rd last, it might not be uninteresting to give some details of a case that came under my care two years ago, and puzzled me considerably at the time, as it had before in previous illnesses. Here it looked as if the converse were sometimes true, of the usual order of the pathology in such cases, *i.e.*, the ague seizures appeared to lead up to and culminate in an acute attack of stricture of the urethra. During the three years preceding this, the patient had on four occasions consulted me on account of lumbago, accompanied with a certain degree of nephritis, more severe in every succeeding attack.

On the third occasion there was a slight paroxysm of ague, and I feel free to confess I did not recognise its nature at the time. On the next, the fourth, its character dawned on me, and my questions elicited the fact that more than forty years before, when a farmer's lad in the fens of Lincoln, he had had ague; but from that time up to the date of the attacks mentioned, he had never suffered from it in any way. Clearly Horace's saying has a very wide application:

> "Quo semel est imbuta recens, servabit odorem
> Testa diu."

Up to this time there had been no difficulty in micturition, only a temporary suspension of the secreting power of the kidney during the attacks, non-obstructive anuria, probably arising from disturbed innervation. But in the last attack for which I attended him, symptoms of an acute stricture soon set in, and he was almost moribund before I succeeded in entering the bladder with a No. 3 metallic catheter. A flexible one was tied in, and he got well again, but rather tediously.

At no time was there any albumen in the urine, nor did catheterism provoke a paroxysm of his ague such as had ushered in the illness. The locality where the patient lived is a very bleak and exposed one. The house is thin walled, and has a northern exposure. In short, the conditions present easily accounted for this waking up of a latent susceptibility.

Of course, a different explanation of this case might be given by supposing an enlarged prostate, or a slight degree of stricture, to have been present all along undetected, bringing it under the head of urinary intermittent fever, as described by Murchison; but nothing, at the time of my attendance or after, in the symptoms or actual history, gave any colour to this assumption.

J. Farquhar, M.D., Harrogate.

THERAPEUTIC MEMORANDA.

MICRO-ORGANISMS IN PURPURA HÆMORRHAGICA.

As I had the honour of bringing this subject before the last annual meeting of the British Medical Association, I was interested in the report of the discussion raised at the Pathological Society, on February 20th, by Mr. Watson Cheyne's communication. If I may be allowed to do so, I shall make a few remarks on the subject.

The clinical history of cases of hæmorrhagic purpura is so distinctive, and its characteristics are of such a type, that I do not think it required more than the ordinary amount of clinical acumen on my part to prove that the phenomena, at the fully developed stage, were only explicable by assuming the presence of a micro-organism. The point of interest is that the vessels are blocked by these organisms, and, thereby, the hæmorrhages, which give the disease its distinctive name, are produced. Clinically, the disease, so far as I am acquainted with it, presents a more or less high degree of pyrexia; and it is this pyrexia which, when there is no local inflammatory condition by which to explain it, leads naturally to the consideration of the probability of the presence of a foreign and deleterious, and probably vital, element in the blood. Of course such a probability can only have weight when all other causes of pyrexia have been carefully excluded. In hæmorrhagic purpura, pyrexia is present before the hæmorrhages are numerous or become a serious element in the case, and it is at this early stage of the disease that it is possible to determine the specific or non-specific part played by the parasite, due regard being given to the possibility of the parasite being present in a less mature form, and thereby able to traverse the capillaries. And I would take the liberty of suggesting the desirability of having observations made on the blood at this early stage of the disease. From two of my own cases I sent specimens of blood to Mr. Watson Cheyne, but they were so unskilfully stained that he would not venture an opinion as to the presence or absence of a micro-organism; and I see that Dr. Angel Money has not found organisms in the blood in two cases he has examined. This is a point of much interest, and might be soon settled if those who had cases under their care at the early stage would have the blood examined by an expert; and from the ready and kind response Mr. Cheyne made to me, when I approached him on the subject, I should predict a like response to others.

It would, of course, be quite absurd to suppose that all capillary hæmorrhages, generally called purpura, were probably due to plugging by a micro-organism; for it seems to be in accordance with fact to hold that in cardiac disease hæmorrhages are due to tension, and that in iodic purpura, upon which Dr. Stephen Mackenzie justly lays stress, there may be a chemical alteration which, whether local and unknown causes, leads likewise to hæmorrhage. Even though capillary hæmorrhage may be but a symptom, as Dr. S. Mackenzie has with much ability and erudition maintained, there is the still remaining question whether there is not a disease which is named, and properly named, purpura simplex? So far, it is a disease of which we know nothing as regards its pathology, although recent discoveries may give us an indication as to a possible development in the future. Yet I have conversed on this subject with practitioners of wide experience and great ability, and I find their experience harmonises with my own, that every now and again such a disease is met with in practice, and that it seems to be unassociated with any other condition; that it is often, if not always, a febrile condition; and that it recovers under treatment, although it is not always easy to predict whether it will not develop into the hæmorrhagic form.

The routine treatment under which such cases recover is the administration of turpentine, which is known to be not only a hæmostatic, but a parasiticide, which suggests a possible harmony between the empiricism of the past and the science of the present. In the perusal, some years ago, of the literature on this subject, my attention was arrested by a wonderful case recorded in 1823 by Dr. E. Gairdner, which was a fully developed and typical case of hæmorrhagic purpura, and which recovered after the bold (even for that time) and repeated abstraction of blood. In such cases, we are inclined to take up the position that the patient recovered "in spite of the treatment." May it not have a deeper significance and a truer explanation?

Wm. Russell, Gayfield Square, Edinburgh.

SURGICAL MEMORANDA.

COLD AND POSITION IN STRANGULATED HERNIA.

There is nothing novel in the use of cold—in the form of baths, douches, ether-sprays, etc.—in the treatment of hernia. The value of position has also long been recognised. What I wish to call attention to is, the simple combination of the two.

I have recently had two cases of strangulated hernia; both were severe, and had lasted many hours.

In the first, taxis, warm bath, opium, and chloroform had been tried without effect; the patient had begun to vomit. The foot of the bed was now raised high enough to rest on an ordinary chair, and an India-rubber bag full of ice was placed over the tumour. After waiting an hour, taxis was again tried, and the tumour had scarcely been grasped, when it began to yield, and the bowel was readily returned.

My second patient had the misfortune to be drunk, when he ruptured himself during a wrestling match. It was not until the next morning that he discovered his condition; and even then, not knowing exactly what was amiss, he waited to try if a dose of castor-oil would cure him. In this case, simple taxis having failed, I at once adopted the same measures as before, and, in about three-quarters of an hour, was able to reduce the hernia with ease.

Geo. C. Kingsbury, M.A., M.D., Blackpool.

The Appetite and the Weather.—According to the brokers of Mark Lane, people eat 20 per cent. more bread when the weather is cold than when it is mild and muggy; hence the present low price of wheat.

Bequests and Donations.—Mrs. Martha Beckingham, of Mildmay Park, Highbury, has bequeathed £500 to the German Hospital.—The Rev. Richard Henry Benyon, of Portman Square, has bequeathed £500 to the Suffolk General Hospital.—Mrs. Anne Tredwell, of Lower Norwood, has bequeathed £300 to the Earlswood Asylum for Idiots.—The Grocers' Company have given £250 to the British Home for Incurables, and £100 to the East London Hospital for Children.—The Trustees of Prison Charities have given a seventh £105 to the National Hospital for Consumption at Ventnor; and £105 to the general fund, and £26 5s. to the seaside branch of the Metropolitan Convalescent Institution.—Mr. John William Wright, of East Morton, has bequeathed £100 to the Bradford Joint Hospital Fund, and £50 to the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, at Lancaster.—The Sussex County Hospital, Brighton, has received £100 under the will of Mr. W. T. Smart.—Mr. Herbert Clarke has given £100 to the Cancer Fund of the Middlesex Hospital.—St. George's Hospital has received £73 14s. 6d., being half the proceeds of a ball given by Lady Wyatt and friends, at the Town Hall, Kensington, on February 25th.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. GEORGE'S HOSPITAL.

A FATAL CASE OF ETHER-INHALATION.

By T. Holmes, M.A., F.R.C.S., Senior Surgeon.

It is my sad duty to record a death from the administration of ether, which occurred in the operating theatre of St. George's Hospital on Thursday, February 28th, 1884.

The patient, a married woman, aged 43, was sent up from the country on account of a fibrous tumour of considerable size growing from the uterus into the vaginal cavity, sloughing and bleeding considerably. She remained in hospital a few days, losing a good deal of blood, and becoming gradually weaker. It was therefore necessary to operate without more delay. In all other respects she seemed healthy, and the removal of the tumour appeared urgently indicated.

The patient was brought into the room behind the operating theatre, where ether was administered. As the woman was feeble from previous hæmorrhage, all possible care was taken. Mr. Davies, who held the cone over her mouth, felt the pulse just as he was beginning the administration, and found it natural. The woman had a goître of considerable size, and this was noticed to become larger while she was taking the ether. A sort of whistling sound was observed in the breathing, which ceased on the chin being raised. When she had become insensible (but before the reflex movements of the eyelids had ceased), the couch was wheeled into the operating theatre, and the lithotomy-shackles were applied; but just as she was about to be lifted on to the operating table, it was noticed that her breathing had ceased, and that the face was very livid; the pulse was beating regularly. The tongue was at once pulled forward, and as this did not restore the breathing, artificial respiration was at once commenced on the Silvester method; but as this produced no result the trachea was rapidly opened and a large tube introduced, the artificial respiration being still persevered in. This seemed, for an instant, to promise success; some exchange of air took place through the trachea-tube, and her face became a little less livid; but this attempt at respiration soon failed. A catheter was now passed down the trachea-tube, and attempts made to inflate the lungs, at first with the mouth, then with a bellows, but all in vain. It seemed impossible to lift the parietes of the chest. For a long time the pulse could be felt in the femoral artery, full and regular at first, then less distinctly till it ceased, and it became clear at length that all attempts at resuscitation were fruitless.

On *post mortem* examination the opening into the windpipe was found to be very free; the tissues in the neighbourhood of the vocal chords seemed slightly œdematous. The calibre of the trachea seemed somewhat diminished by the projection of the goître backwards, and the rings somewhat flattened. There was no ulceration. The bronchocele consisted mainly of a single large cyst. There were no pleural adhesions; on removing the sternum the lungs were seen to fill the pleural cavities, and did not collapse. The lungs were unusually pale, except posteriorly, where blood had gravitated. Their structure was normal.

The heart weighed ten ounces; its muscular structure was firm, and it was in all respects healthy. There was a decolorised clot in the right ventricle extending into the common pulmonary artery. It did not completely fill the ventricle or the artery. The right and left pulmonary arteries were empty. Besides the decolorised clot, there was some black clot and some fluid blood in the ventricular cavity. All the other organs of the body were healthy, except the uterus, from the mouth of which was springing the large sloughing fibrous tumour. It was attached to the uterus by a neck about an inch in diameter.

Remarks.—In the third edition of the *System of Surgery*, published last year (vol. iii, p. 615), Sir Joseph Lister gives an account of a case of death from the administration of chloroform, which he attributes to an "epileptiform spasm of the respiratory muscles," induced, as he believes, partly by extreme nervousness or fright at the time of commencing the anæsthesia. Death in this case was caused evidently by some condition producing asphyxia (or apnœa), which must have been situated below the glottis, since it was in no way relieved by an opening into the trachea, and artificial respiration carried on by direct insufflation. In these respects, the unfortunate case here related is exactly similar to Sir J. Lister's. It differs from his in the fact that the anæsthetic was ether, and not chloroform, and was also complicated by the circumstance that the patient had a goitre. I confess, however, that, for my own part, I attribute no weight at all to the latter circumstance. The goitre produced so little inconvenience, that the patient never mentioned its existence: and the apnœa, from which she died, was not preceded by any, even momentary, dyspnœa, nor was it at all relieved by insufflation of the lungs, carried on through a catheter passed down the trachea far beyond the bronchocele—in doing which, I may remark, no obstruction whatever was felt from the bronchocele.

My case differs also from Sir J. Lister's, in the fact that in mine the persistence of the pulse, in equable rhythm and full volume long after the cessation of the breathing, was ascertained; while in his it was only a matter of inference, though of an inference which is nearly certain. This proceeded from the fact that my case occurred in an operating theatre, with numerous assistants and colleagues present, while his happened in private practice, so that all those present were absorbed in giving the aid necessary to resuscitate the patient.

The case has an important bearing on the controversy which still goes on with regard to the relative safety of the various anæsthetics. Ether was at one time recommended as being absolutely safe. But this assertion was made only by some whose zeal had outrun their discretion and reflection. A very slight knowledge of physiology is required to see that a poisonous agent cannot be administered so as to suspend the functions of the nervous centres as far as to paralyse all sensation, voluntary and reflex motion, without some risk of also paralysing those of respiration and circulation, whatever we may estimate that risk to be.[1] It is certainly true that such risk is very small in the case of ether. No fatal case had occurred at St. George's Hospital since the introduction of anæsthetics, nor had any of my colleagues or friends witnessed one, though some of them have been extensively engaged in the administration of anæsthetics. This shows that experience and care can reduce the risk with ether to a very insignificant danger; and Sir J. Lister believes the same as to chloroform—a belief which, for my own part, I quite share.

But the present case equally proves, I submit, that the risk does exist. No suspicion can rest on the quality of the ether. The very same material had just been used in three previous operations. Nor can there be doubt of the competence of the administrator. The same persons, Mr. Margerison, our surgical registrar, who is the appointed administrator of anæsthetics, and his assistant, Mr. Davies, were both of them present; the latter actually giving the ether, the former superintending; and both of them had administered ether in cases too numerous to count. As regards the extent of the anæsthesia, the patient was hardly sufficiently narcotised for surgical purposes, and would have required a little more ether before the operation was begun. Nor do I think, for reasons above given, that the bronchocele can be regarded as a cause; so that I class this as a simple, uncomplicated, and unavoidable death from ether-inhalation, caused by that expiratory spasm of which Sir J. Lister speaks. Whether such spasm is induced, as he believes, by the fear of operation, is difficult to judge. This woman was no doubt nervous and apprehensive. She passed a restless night before the operation, and her husband and other friends had come up from the country to see her in the morning, very possibly increasing her fears. But she displayed no inordinate terror at the time; and we see every day anæsthesia successfully produced in persons apparently in mortal terror. I fear, therefore, that the present case teaches us no lesson as to how to avoid such a sad event in future.

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[1] See a paper by me in the BRITISH MEDICAL JOURNAL of January 26th, 1884, p. 65, in which this view of the case is insisted on.

INFANT MORTALITY FROM IMPROPER FEEDING.—"A Country Doctor," having written to Sir James Paget, Bart., as Vice-Chairman of the International Health Exhibition, calling his attention to the large infant-mortality due to improper feeding, especially with starchy foods, has received the following reply. "Sir, With reference to your letter of the 2nd instant, which Sir James Paget has handed to me, I would point out that the subject you refer to is one which it would be difficult, if not impossible, to show at the approaching exhibition, but that reference might be made to the question at one of the conferences which it is intended to hold in connection therewith, and I have handed your letter to the subcommittee which has been appointed to consider the question of conferences.—Yours faithfully, E. CUNLIFFE OWEN, Secretary."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 11TH, 1884.

GEORGE JOHNSON, M.D., F.R.S., President, in the Chair.

Fourth Communication on Artificial Respiration in Stillborn Children: Certain Minor Points: An Experimental Inquiry.—By FRANCIS HENRY CHAMPNEYS, M.B.—1. The effect produced by the presence of air in the abdominal viscera on the amount of air capable of being drawn into the lungs by the manipulative methods was tested. A cannula was tied into the navel of a stillborn child, so that the abdominal cavity could be distended at will. Moderate or even extreme distension of the abdomen produced no effect on the amount of air inspired. *Conclusion.*—The presence of air in the abdomen (*e.g.* in the stomach and intestines) in no way impedes the ventilation of the lungs by artificial respiration. N.B.—Its effect on natural respiration is another matter. 2. Certain methods of preventing the entrance of air into the stomach in mouth to mouth inflation were then tested: *a*, by pressing the cricoid cartilage against the spine; *b*, by strongly bending the head back. *Conclusion.*—Both methods are powerless to prevent the entrance of air into the stomach while allowing it to enter the lungs (in infants). 3. The condition of the upper air-passages (as to patency) when the head was strongly bent back was tested by a sagittal section of a stillborn child frozen in this attitude. *Conclusion.*—The soft palate lay against the back of the tongue over a large extent. This attitude therefore cannot be trusted to secure patency of the upper air-passages. The great difficulty is probably lower down; it was suggested to leave a catheter in the trachea during artificial respiration, which will serve for the escape of mucus as well as for securing the patency of the air-passages. It may be secured by an elastic band at the proper length (three and a half inches) from the lips. 4. An improved method of removing mucus from the air-passages was given. 5. The signs of returning life in a deeply asphyxiated child were given from a careful observation.—Dr. MATTHEWS DUNCAN said that he had noticed that the first signs in the resuscitation of stillborn children were an improvement in appearance and a quickening of the pulse. He would ask Dr. Champneys if he had noticed the double form of breathing that took place at first in these cases. There was a spasmodic contraction of the diaphragm, with contortion of the face, which first took place, and which he would call asphyxia-breathing, and which persisted often after the slow regular breathing proper had begun, mingling with it to a less and less extent as the child recovered. The use of a catheter in artificial respiration was an old method—one that he had seen used very often in Edinburgh, and which was now, as a rule, given up, it was hard to say for what exact reason. For himself, he certainly thought he had been able to manage as well without it. A point of great interest was the fact which Dr. Champneys had shown—viz., that the amount of air in the abdomen did not influence artificial respiration—a point, he confessed, he should not have been inclined to believe if it had not been very clearly demonstrated. Some analogy was afforded in the case of a pregnant woman, in whom the respiratory capacity was as great as in the non-pregnant woman; and there the explanation was, that the diminution in vertical diameter of the chest was counterbalanced by the gain in transverse diameter. He congratulated Dr. Champneys warmly for the useful and practical conclusions which could be drawn from his physical researches. Dr. R. L. BOWLES had worked with Dr. Marshall Hall on the methods of recovering the drowned, and, about the time that the Marshall Hall method of inflating the lungs was put forward, had heard perhaps too many stories of its success. He had himself tried on stillborn children the methods both of Silvester and of Marshall Hall without much success, and could not affect to be surprised at this, considering the flaccid nature of the tissues and the complete want of elasticity in the ribs. There was also no cavity in the back of the throat in new-born children who had never breathed, which could give a starting-point for artificial respiration. He did not feel sure that resuscitation was due to respiration entirely—in part, at least, to the reflex action produced by the manipulation of the child, such as would make themselves first apparent in the altered appearance that Dr. Matthews Duncan had mentioned. In an acephalous fœtus upon which no attempt at recovery was made, he had noticed the heart beating for forty minutes after birth without a single act of breathing. We were inclined to abandon our attempts at restoration of the drowned too soon; there was an instance in Paris of recovery after the drowned man had been a quarter of an hour under water, and recovery was considered a matter of course after five minutes' immersion. A small point of anatomy was of some interest in the matter, viz., that in children the epiglottis was more convex than in adults, and had a little valley running down each side into the larynx, and was more completely met by the uvula, so that it was rendered much easier for the child than for the adult to suck and breathe together without interruption. In a case which the method of Marshall Hall had failed to recover, he had found the heart extremely distended, and that led him to realise how useful the pressure on the sternum was in forcing the blood onwards, so that both circulation and respiration were helped by it at the same time.—Dr. Douglas Powell felt doubtful whether the measurements of the manometer in Dr. Champneys' cases were not rather qualitative than quantitative. The analogy between the pregnant woman and the stillborn child could not be pushed far, as the difference between lungs which had once breathed and lungs which had not was very important.—Dr. Silvester explained that the difficulty in the application of his method to stillborn children consisted in inducing the ribs to rise when the arms were drawn up, and not in inducing the lungs to follow the rising ribs; if the ribs rose, the lungs expanded; but, he admitted, the ribs would not always rise; and that was due, probably, to some resistance in the air-cells, which could not be overcome without some start, which might, however, possibly be found in air blown in by a catheter; still, he could not bring himself to like the use of catheters in the larynx. The heart had gone on beating nine months before birth, and he was not surprised at its going on forty minutes after birth; but respiration had to be begun *de novo*, and stood in need of an initial stimulus.—Dr. Champneys, in reply, agreed with Dr. Matthews Duncan in noticing the quickening of the pulse as an improvement in the condition of the stillborn child, and had observed essentially the same forms of breathing that Dr. Duncan had so picturesquely described, and the gradual predominance of the regular over the spasmodic in cases of recovery. He did not in the least pretend that inflation by a catheter was a novel proceeding; but the point he had not seen enforced elsewhere, was the good result that might be attained by keeping it in as he had described. Still, some cases seemed predestined to die and some to recover from causes beyond our knowledge. The difficulty of securing patency of the air-passages, which had led to want of success in Dr. Bowles' cases, was sometimes, as a matter of fact, overcome by the method of Schultze after all others had failed. Marshall Hall's method failed because, after pressure upon the ribs, there was no recoil, and the lung was completely collapsed. Dr. Bowles' remark upon the shape of the epiglottis was interesting; and it was worth notice that in the marsupials there was even a more complete arrangement for enabling them to continue sucking and breathing at the same time. He quite agreed with Dr. Bowles in the help given to the circulation by pressure upon the sternum, and himself was in the habit of employing it.

On the Value of Systematic Examination of Stillborn Children. By J. B. Sutton.—The object of the paper was to show that much valuable information might be gained by the systematic examination of stillborn children, as illustrated by a few selected cases possessing more than an ordinary interest. The first case was an instance of recent endocarditis occurring in an eight months' fœtus. The pulmonary and aortic valves showed soft recent vegetations, and one curtain of the mitral valve was exeeedingly puckered. There was general anasarca, and the pleural, pericardial, and peritoneal cavities were distended with fluid. The mother was healthy; no rheumatism, etc. Was the case an instance of disease attacking the fœtus independently of the mother? The second example was a case of complete stricture of the duodenum above the entrance of the common bile-duct; the specimen was described at full length, and observations were recorded to show that stricture, met with in the fœtus at this spot, was not due, as was supposed by certain authors, to hypertrophied valvulæ conniventes, for these foldings of the mucous membrane did not arise until just before birth. The third specimen was that of a fœtus with lateral curvature of the spine and arrested development of the upper limbs. Other cases were quoted, and the question raised as to the relation (if any) between congenital curvature of the spine and arrested development of the upper limbs. One example of single kidney and two cases of cystic renal disease were described; one of the cases showed conclusive evidence of peritonitis resulting in adhesions between the kidney and testicle, preventing the descent of that organ. A fœtus with congenital deficiency of one-half of the diaphragm was among the cases of interest. The left lobe of the liver passed into the pleural cavity, the lung of that side being in a very rudimentary condition. A sphenoid bone removed from an immature fœtus exhibited a deficiency of the floor of the pituitary fossa, so as to allow meningocele in this situation to bulge into the pharynx. In addition, a new explanation was offered of the occurrence of meningocele and encephalocele in the occipital region of the skull. From the third to the end of the fourth month, sometimes even well into the fifth month of intra-uterine life, there existed a "membranous space," which extended from the foramen magnum well up to, and at the third month even into, the point of confluence of the four centres of the squamo-occipital bone. At the fourth month, this "temporary occipital fontanelle" began to suffer obliteration through the growth of a bony spiculum which extended from the squamo-occipital bone gradually downwards to the foramen magnum. It was urged as a more satisfactory explanation of the occurrence of meningoceles in this situation than that previously offered, that, through this temporary fontanelle, hernia of the membranes of the brain probably occurred very early in intra-uterine life. In conclusion, it was argued that, without doubt, much information might be obtained concerning hereditary diseases if the bodies of stillborn children were systematically examined.—The President thanked Mr. Sutton for his paper, and remarked on the many points of interest which were suggested in it. In the first case, he was interested to notice endocarditis on the right side of the heart in the fœtus, which was so uncommon in the adult, except in cases where the two sides of the heart were in communication, as in fœtal life.—Mr. C. B. Lockwood remarked that some of the cases of what was apparently arrested development were due to disease, as in the case of the undescended testis, which was kept up by adhesions to the kidney from peritonitis; the same was generally the case when the colon had not descended.—Mr. Shattock remarked, with regard to meningoceles, that their protrusion between bones formed from cartilage was easier than between bones formed from membrane; for the cartilaginous bones seemed incapable of exceeding the limits of their parent cartilage, whereas the membranous could spread over and cover up any gap left between them.—Dr. B. O'Connor suggested that the endocarditis in the first case might be due to syphilis shared by the mother.—Mr. Sutton replied that the excellent health of the mother, father, and whole family, put that out of the question. The duodenal obstruction which he had shown he was inclined to connect with the formation of the pancreas and liver out of diverticula of the intestine in the neighbourhood.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 10TH, 1884.

ARTHUR E. DURHAM, F.R.C.S., President, in the Chair.

Presidential Address.—Mr. Arthur E. Durham, on taking the chair for the first time, thanked the Society for the honour which it had done him, and congratulated it on its present flourishing state. The universality and variety of the subjects dealt with lent great interest to the proceedings of the Society.

The Connection between Disease and Defective House-Sanitation.—Dr. W. H. Corfield said that the diseases resulting from pollution of the air of a house were, in his experience, general *malaise* of varying intensity, simple sore-throat, true diphtheria, diarrhœa, and puerperal diseases; there was also some evidence that enteric fever might also originate in this way. The air of a house was liable to be polluted in a variety of ways; a cesspool was one source. In a house with cesspools in the basement, there was a constant liability to disease even when the cesspool was not connected with the drains; where the cesspool was connected with a sewer, there was a liability to the occurrence also of enteric fever. Connection between the drains and the basement of the house, owing to faulty traps, such as the ball-trap, were exceedingly common, and led to pollution of the air. Leaden or zinc soil-pipes were liable to be corroded and perforated by sewer-gas when sufficient ventilation was not provided. Dr. Corfield gave a number of instances of ways in which the air of a house had been polluted by faulty soil-pipes. In some of the instances the fault was due to improper design, but more commonly to careless or dishonest workmanship. Some forms of water-closet were so intrinsically bad, that they were a constant source of bad odour and pollution of the air. Such were the pan-closet of any kind, and bad forms of valve-closet. Dr. Corfield next referred to the frequency with which the waste and overflow-pipes of sinks and baths were directly connected with the drain. Rain-water pipes connected with the drains were a constant source of danger under circumstances which easily occurred and were easily overlooked. He had met with several instances in which the tubes to carry the bell-wires carried foul air from the basement of the house into various rooms in the house. It was proper to observe that there were two smells which were very difficult to distinguish from the smell of sewer-gas, namely, a flue in which there has been a fire and a very slight escape of coal-gas. Enteric fever was commonly caused by drinking foul water, and only rarely by breathing foul air, and then, probably, by swallowing the poison with the saliva. Diphtheria, on the other hand, was commonly caused by breathing foul air. Dr. Corfield next traced the manner in which the drinking-water of a house became contaminated by foul matter or foul air, and observed that food also was contaminated in some instances by foul air passing into the larder through traps in the floor, or from imperfect soil-pipes passing down in the wall. In dairies also connections with the drains were very commonly found in the floor, sometimes trapped, but very often not trapped. The lecture was illustrated by diagrams, and by numerous specimens of unsanitary apparatus.

The **President** said he would like to have heard something from Dr. Corfield of his experience with regard to the influence of foul air on surgical patients.—Sir **Joseph Fayrer** hoped that the facts and arguments brought forward would become more widely known to the public through the influence of the International Health Exhibition to be opened in May next.—Dr. **Heron** commented on the frequency with which sanitary defects were met with in health-resorts in this country, as well as on the Continent, and observed that there seemed to be an extreme disinclination in such places to make sanitary improvements for fear of attracting the attention of the public. Mr. B. **Jessett** could confirm Dr. Corfield's observation that bell-wires could carry foul air from the basement or from a water-closet into various rooms in the house.—Dr. **Isambard Owen** referred to the difficulty of getting sanitary work well done. He feared that the number of architects who understood the details of sanitary work formed but a small proportion. The builder's foreman was still more ignorant, and quite indifferent; even if this were not the case, the minutest supervision of the workmen was necessary. Robust adults, in his experience, suffered as a rule little from sewer-gas, whereas children and old people appeared to be easily affected by it. Mr. **Purcell** and Mr. **Wells** also took part in the discussion; and Dr. **Corfield** replied to the questions asked, and observed that most of the specimens shown by him had been lent by the Parkes Museum, where many other specimens of unsanitary apparatus as well as of improved apparatus could be seen.

MANCHESTER MEDICAL SOCIETY.

Wednesday, February 20th, 1884.

J. **Dixon Mann**, M.D., and subsequently D. J. **Leech**, M.D., President, in the Chair.

Thrombosis from Orbital Cellulitis. Dr. A. H. **Griffith** detailed a case as follows. The patient, a strong healthy man, aged 48, an iron planer by trade, was first seen on July 2nd, 1883, complaining of the left eye. There was swelling of the ocular conjunctiva, with slight protrusion of the globe. He was admitted into the Royal Eye Hospital under the care of Dr. Glascott. On the following morning, the seventh day of the disease, the right eye was found to be protruded, and the patient complained of much pain in his head. The temperature in the axilla was 103°, and he answered questions with difficulty. He died with marked symptoms of asphyxia at mid-day. A *post mortem* examination was made twenty-six hours after death, and disclosed cellulitis of the left orbit, with plugging of all, or nearly all, the veins; also plugging of the veins of the right orbit and of the sinuses of the dura mater within the cranium. The further examination disclosed the right side of the heart full of clotted blood, extending into the pulmonary cavity, and hæmorrhagic infarction of the entire left lung.

Cases of Aphasia. Dr. **Ross** showed several cases to illustrate the different forms of aphasia. He pointed out that cases of aphasia might be divided into (1) those in which there was a disorder of the out-going or expressive faculty, and (2) of the in-going or impressive faculty of speech. The first of these divisions might be called motor, and the second sensory aphasia. He showed a patient who had an attack of right hemiplegia and aphasia five weeks previously. He was gradually recovering from this attack, but ten days ago he became somnolent and partially unconscious a second time, and it was then found that the paralysis of the right arm and leg had become more profound, and that he had become completely aphasic. After the stupor passed off the patient put out his tongue and performed intelligently all actions asked of him, but his only answer to all questions was "No," which, indeed, comprised his whole stock of words. Under energetic antisyphilitic treatment, a considerable degree of motor power was regained, and the aphasia had almost completely disappeared. Dr. Ross pointed out that the aphasia in this case could not have been caused by destruction of the third frontal convolution, otherwise the disorder of speech would have been more or less permanent. The lesion consisted most probably of syphilitic thrombosis of one of the branches of the opto-striate artery, leading to a spot of softening in the lenticular nucleus and partial damage to the fibres of the internal capsule, the latter injury involving the conducting path which connects the third frontal convolution with the nuclei of articulation in the medulla oblongata. Dr. Ross then showed a man, aged 50, who had an attack of right-sided hemiplegia, with complete aphasia, nine months ago. He soon recovered; but five months ago he had an attack of left-sided hemiplegia and aphasia, from which he likewise made a good recovery. His symptoms now consisted of general feebleness, with excess of the tendon-reactions in all the extremities, and a slight degree of paralysis of the soft palate, tongue, and lips, the latter of which closely simulated bulbar paralysis. The lesions in this case most probably consisted of destruction by hæmorrhage or thrombosis of each lenticular nucleus, with partial damage of the internal capsules. Such cases showed that the cortical centre of speech was a centre for regulating not only the special, but also the general movements of the muscles of the articulation. The next case shown was that of a man, aged 56, who was suffering from a complicated disorder of speech, evidently affecting the impressive faculty, and constituting a sensory aphasia. The patient had a large vocabulary of words, and could make complicated statements so long as he avoided the names of objects. The sight of any object failed to call up the corresponding name, each object presented being called either "public-house" or "glass of beer," words which, from the well-known habits of the man, would necessarily be well organised in him. Dr. Ross regarded this as an artificial property superinduced upon objects, and which was consequently represented by a very special organisation in the sensory area of the cortex of the brain. Dr. Ross considered it probable that the lesion in his patient consisted of a thrombosis of the artery of the horizontal limb of the Sylvian fissure, giving rise to partial softening of the angular gyrus and the supramarginal and inframarginal convolutions, and thus causing a partial injury to the sensory centres of sight and of hearing.

Bulbar Paralysis. Dr. **Dixon Mann** exhibited a woman suffering from apoplectic bulbar paralysis, and stated that this disease was exceedingly rare, when, as in the present case, the bulbar symptoms alone were present without hemiplegia. The nuclei of the hypoglossal and the motor fifth nerves, and the accessory facial nucleus, probably had been included in the area of an embolic infarct, all other motor centres having escaped. The attack occurred without any apoplectic "insult," the patient suddenly losing the power of speech without experiencing any sensation or loss of consciousness. After the first week the patient began to improve, and the improvement had continued up to the present time. She was still, however, unable to articulate, although three months had elapsed since the commencement of the attack.

Case of Aphasia. Dr. **Wahltuch** mentioned a case of aphasia in a patient, aged 57, who up to last May always enjoyed good health. His family history was good, there being no hereditary syphilis, gout, or carcinoma. Owing to business-worry, he noticed that in speaking he had to stop for want of finding the word he had in his mind. He had the same difficulty in writing. His illness continued till January 1884; he gradually got hæmiopia, total blindness, loss of smell, twitchings in the extremities, and finally loss of deglutition, and died in a comatose state. No *post mortem* examination could be obtained. It was the history of a progressive brain-tumour, glioma or sarcoma, beginning in the third left convolution, and gradually extending to the occipital region near the angular gyrus. The symptoms of aphasia were marked throughout: unfinished sentences, substitution of one noun for another. If the right word were suggested to him, he at once repeated it. His intellect was intact.

Congenital Cystic Tumour. Mr. **Hardie** showed a specimen which he had removed from a girl, aged six. It was intimately attached to the aponeurosis of the external oblique muscle, and extended from the crest of the ilium to the pubes. It was multilocular, the loculi containing straw-coloured fluid. The patient was also shown.

Dermoid Cyst. Mr. **Hardie** showed a specimen which he had removed from the forehead of a female, aged 22. At birth it was about the size of a walnut, and it had gradually grown to the size of a [illegible]. A cup-shaped hollow had been excavated in the frontal bone. The wall of the cyst was [illegible] than [illegible]; its contents were [illegible] matter, hair, and cholesterine. The patient was also shown.

Double Prepatellar Cyst. Mr. **Hardie** showed the [illegible] of the flexed knee of a young woman, [illegible] presence of a double bursa in front of the knee [illegible]. There was a cystic expansion of the bursa [illegible] the patella, and another cystic tumour [illegible]. These had been growing for about [illegible]. They were excised, and both presented the ordinary appearance of [illegible] bursal tumours. They did not communicate with each other. The tumours were shown.

[illegible] Dr. **Glascott** showed eight patients from whom he had removed pat-

ticles of steel and iron chippings by means of the electro-magnet. In seven cases the piece of metal lay in the vitreous body, and in one, it was situated in the anterior chamber.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 20TH.

Mastoid Inflammation, and the Treatment of Otorrhœa with Powders by Insufflation.—Dr. **WARDEN** argued that a vast number of cases of disease of the ear, although presenting symptoms indicating every evidence of threatened suppuration, did not go on to abscess; but, under appropriate treatment, the inflammation was subdued, the danger averted, and the generally recognised plan of early incision rendered quite unnecessary and useless. The causes, symptoms, and prognosis of the various catarrhal affections of the tympanum and external meatus were detailed, with the modes of extension to the brain. Dr. Warden would escape the sad result of this extension by the early application of strong solution of nitrate of silver (one drachm to the ounce) to the mastoid process, with the application, if necessary, of two or three leeches, followed by hot fomentations. He was convinced that, in a large majority of cases, such treatment, if resorted to early, would render incision unnecessary, and would check the extension of the inflammation. He also cited as a prolific cause of mastoid abscess the treatment adopted by some medical men for otorrhœa, namely, by powders and tight packing of the external meatus.

Treatment of Lupus.—Mr. **TAYLOR** insisted on the scrofulous nature of lupus, and claimed for patients suffering from it more attention to hygienic details, and recommended the compound syrup of the phosphates and cod-liver oil as the best internal medicines, and the curette as the best local agent.

Dr. **NELSON** showed a specimen of fatty kidney.

Dislocation of both Shoulder-joints.—Mr. **HUGH THOMAS** showed a case of this injury. The man, aged 55, fell over a kerb-stone on his hands, with great violence. He was unable to get up without assistance, and his arms were fixed and numbed. One shoulder was easily reduced, the other with much difficulty.

Congenital Defects of Fundus Oculi.—Mr. **PRIESTLEY SMITH** exhibited, by means of his demonstrating ophthalmoscope, two such cases. One case was a coloboma of the right disc, presenting a white circular area, including the disc, but having a diameter three times greater than that of the disc of the other eye. In the second case, the right disc was surrounded by brilliant white radiating patches, due to an extension into the retina of the opaque sheaths of the nerve-fibres, which normally stopped short just behind the disc.

Charcot's Joint-disease in Locomotor Ataxy.—Dr. **SUCKLING** showed a case. The man, aged 50, had suffered from the symptoms of locomotor ataxia for five years. Three years ago, he noticed his right knee to be much larger than its fellow, and it had remained in the same condition. There was great effusion in the right knee-joint, with total absence of pain, and absence of any bony outgrowth; grating could be felt on moving the joint.

ACADEMY OF MEDICINE IN IRELAND.

SUBSECTION OF PUBLIC HEALTH.

THURSDAY, FEBRUARY 14TH, 1884.

T. W. GRIMSHAW, M.D., President, in the Chair.

President's Address.—The **PRESIDENT** delivered an address reviewing the Parliamentary work of the past year conversant with with public health and social questions, and giving his views on pending measures of a kindred nature.—On the motion of Dr. **CAMERON**, seconded by Dr. **J. W. MOORE**, a vote of thanks to the President, for his address, was passed by acclamation.

State Control for Chronic Inebriates.—Dr. **H. C. TWEEDY** read a paper on State control for chronic inebriates. The subject, he said, was beset with difficulties, there being in the minds of many a deeply rooted prejudice against any measures that should interfere with the liberty of the subject, or afford unprincipled persons an opportunity of putting troublesome relatives out of the way. In answer to the first objection, it was urged that the rights of individuals should occupy a secondary place to the peace and well-being of the community. Dipsomania was a form of insanity, as evidenced by the utter absence of moral sense, self-control and self-respect, while duplicity and cunning characterised the diseased. In answer to the second objection, he submitted there was no greater danger of unjust detention for the inebriate than for the lunatic. Having sketched the history of the movement from its origin down to the Habitual Drunkards Act, 1879, he summarised the three reports of the Inspectors of Retreats for 1880-82, showing that, since the passing of the Act, only three licensed under its provisions had been opened, and of these one was now closed, while the number of patients admitted in the three years was 52, for the whole of the United Kingdom. The weak points in the Act were: (1) its purely permissive character; (2) the absence of any provision for the detention of paupers; (3) the limitation of the Act to ten years and the exclusion of the proprietors of lunatic asylums from obtaining licences to receive patients under the Act. An Act partly permissive and partly compulsory, would be more likely than the present to effect good, as many patients would voluntarily submit to be detained if the threat of compulsion were held over them *in terrorem*. Unnecessary publicity would be avoided by the appointment of a committee consisting of the nearest of kin, two physicians, and a magistrate with summary jurisdiction. Early treatment, so essential for cure, could thus be secured as well as by three convictions for drunkenness within six months, proposed by the late Dr. Dalrymple. Detention should be, "until cured," or for a period of at least twelve months.—Dr. **DUFFEY** said nobody was more cognisant of the defects of the Act referred to than the member for Glasgow himself. Unfortunately, in its passage through the House of Lords, it had been considerably emasculated. The next defect in the Act was its limitation to ten years, for it would be absurd to suppose anyone would spend money in starting an institution on the probability of the measure being renewed. If the "homes" could be placed under the same management as existing institutions for lunatics, they would probably be sufficiently numerous.—Dr. **HENRY KENNEDY** remarked that, in the results reported from America, he did not hear of any cases that were really cured; and he asked whether there had been any absolute cures after a year's confinement. The association of inebriates with the inmates of a general lunatic asylum would have a prejudicial effect. He had seen men recover, but in no case a woman who had fallen into the degrading vice.—Dr. **CAMERON** agreed that every facility should be given for the reclamation of the habitual drunkard, but there had been a little exaggeration of the results of habitual drinking. No doubt it often happened that drunkards were thieves, and robbers, and murderers, but it was simply a coincidence that a man who was a robber, a burglar, or a murderer should also be a drunkard. With regard to the plans proposed for the cure of intemperance, he did not think the voluntary system would have the desired effect.—The **PRESIDENT** said the most important provisions of the Bill were destroyed, some, no doubt, in the House of Commons, but the principal in the House of Lords, and its failure was mainly due to the limited period of its operation. The great success of some of the institutions in America was due to the fact that compulsory and voluntary seclusion were combined. Those who did not choose to go in, ran the chance of being put in by their people. As a member of the Commission on Prison Dietary, he visited a great number of prisons in Ireland, and he was astonished at the number of persons confined for crimes which had been produced directly or indirectly by drink. Touching the question of compulsory confinement for drunken habits, he saw in a gaol in the north of Ireland a woman who was in for the two hundred and fiftieth time merely for drunkenness. Instead of imposing the smaller penalties involved on conviction for drunkenness, this was the side wind adopted by the Belfast magistrates for keeping drunkards under control. The woman in question was a lunatic, and ought to be treated as such. She herself said she was sure to get drunk when she went out, and her great desire was to stay in prison. Though not under a sentence compelling her to work, she worked as a matter of taste, and kept herself neat and tidy. Having given an example of a dipsomaniac in the upper ranks of life, he said that, unless means were taken to deal with the disease, the number of dipsomaniacs would steadily increase, believing, as he did, in hereditary dipsomania.—Dr. **TWEEDY** replied, and the meeting adjourned.

EXCISION OF RIBS IN EMPYEMA.—M. Lucas-Championnière, in a case of pleural fistula of two years' duration, with a cavity containing five hundred grammes of pus, recently excised eight to eleven centimètres of the fifth, sixth, seventh, eighth, and ninth ribs; the operation was followed by considerable improvement. In a discussion on this subject at the Société de Chirurgie, MM. Després and Verneuil advised that the operation should not be performed before the thoracic cavity had had time to contract spontaneously as much as possible.

DEATH-RATE OF BRIDGWATER.—Dr. Parsons, the Medical Officer of Health for Bridgwater, in his quarterly report, states that the death-rate was only 11.4 per thousand.

THE Southampton Town Council and Urban Sanitary Authority, in re-appointing the medical officer of health, have increased his salary from £300 to £350 *per annum* for three years.

REVIEWS AND NOTICES.

The Field of Disease: a Book of Preventive Medicine. By B. W. Richardson, M.D., LL.D., F.R.S. London: Macmillan and Co. 1883.

"I have written this work for those members of the intelligent reading public who, without desiring to trench on the province of the physician or surgeon, or to dabble in the science and art of medical treatment of disease, wish to know the leading facts about the diseases of the human family, their causes and prevention." Thus writes the eminent author of this his latest production. Unless we are very much mistaken, the intelligent reading public will hardly be inclined to render adequate thanks for the evident trouble he has expended on its behalf.

"The field of disease" is a title to which no exception can be taken. It expresses, or may be taken as indicative of—for it has acreage enough to contain many hedges, and to include the property of many different masters—one subject, at any rate, which Dr. Richardson has made his own in those conditions in modern society, or, to take it more generally, in any social community, which lead to disease, and the discussion of which would constitute a work of preventive medicine such as Dr. Richardson would have us to consider this book. And in full expectation of something of the kind, from bygone experience of what the author can achieve in this respect, and from his popularity as a writer, we prepare ourselves for an interesting account of some of the many evils of this latter day luxurious life. Considering also the author's championship of the necessity of total abstention from alcohol as one of the first necessities of health, it would hardly come as a surprise to find a prominent position in the field of disease ascribed to alcohol.

A thousand pages is not too much, perhaps, for so wide a subject; nevertheless, it increases a writer's difficulties with the reading public, which is apt to be somewhat exacting in the demand for an inviting presence, so to speak, and no doubt at first sight this volume is too large to be interesting throughout; it rather betokens an earnestness of purpose which foreshadows the development of prosiness. Nor does the opening effort altogether dissipate these doubts, for we read that "in this work we have to study, first, the nature; secondly, the causes; and, afterwards, the prevention of those calamities which have received the title of diseases." Yet, with all our curiosity aroused to see how a talented writer would treat a somewhat adverse position, which, of malice prepense, he appeared to have created for himself, it was a startling surprise (may it not be said an unnecessary tax upon our confidence), to be introduced at once upon the first page to the "Nomenclature of Disease."

Now, for the Nomenclature of Disease it is quite possible for two very opposite opinions to be held, and for it we have the greatest possible respect for several reasons. It was proposed by a very learned body of men; it is a bold attempt to circumscribe infinity; no Tower of Babel was ever a more powerful monument of man's determination to conquer the impossible; the work expended upon it must have been immense. But, once finished, we will undertake to say that not one in a hundred medical men ever looked at it other than accidentally at a respectful distance. And to plunge such a Dryasdust upon the public in the fascinating garb of great expectations, seems to our poor apprehension to display a want of perception of the fitness of opportunity which, in default of any adequacy of reason, has something of the serio-comic about it. Four hundred pages at least are devoted to what may be called a domestic medicine, *minus* the drugs (all reference to which the writer very carefully and properly disclaims), but which does not appear to be ready of reference for the time of trial.

We are at a loss to see of what use this can possibly be. A little knowledge is said to be a dangerous thing, and certainly it is quite reasonable to hold that the intelligent public might be permitted, and even encouraged, to obtain the kind of information, so far as it can be of use to them, from any recognised dictionary of medicine, and would probably find it more readable than from an expurgated edition such as this may be considered. What is the use of talking to the uninitiated, even if intelligent, about ostitis, nodes, acute aneurysm of the heart, the various kinds of arterial aneurysm, not omitting vascular aneurysm (which we suppose is a mistake for saccular), and aneurysm by anastomosis? What use can the public make of a short definition of arteritis, and fatty and calcareous arterial degeneration? What of the various forms of phthisis, acute pneumonic phthisis, chronic pneumonic phthisis, acute miliary phthisis, true tubercular phthisis, mediastinal phthisis, alcoholic phthisis? Moreover, in this epitome of disease, what may be supposed to be the true purpose of the book is sometimes strangely missed. For instance, we have this paragraph: "Abscess of the Brain:—As a result of inflammation and formation of purulent matter, abscess or encysted formation of matter may be present in the hemisphere. The positive diagnosis of brain-abscess is very difficult, and its occurrence comparatively rare." In a work on preventive medicine, it would have been not too much to expect that the public should be informed that abscess of the brain is nearly always dependent upon suppuration elsewhere; and that not unfrequently chronic disease of the ear is the exciting cause. If known, that fact would be a real help towards preventive medicine. Exception might also be taken to other descriptions, either as being incomplete or as perpetuating statements not quite in accord with the knowledge of the day, and we had marked apoplexy, aphasia, spinal atrophy, infantile paralysis, chorea, etc., as all affording scope for criticism; but we shall pass on to the more congenial duty of taking notice of those parts in which the writer seems more at home. This part of the volume we can thoroughly commend to all sorts and conditions of readers, medical or non-medical.

We have here short instructive and useful summaries of disease produced by arsenic, lead, mercury, and various other metals, of diseases from inorganic gases and vapours such as carbonic oxide and chlorine, nitric acid, phosphorus, etc., of disease from organic poisons, absinthe, alcohol, bang, chloral, opium, tobacco, etc. A great deal of information is given here, not easily attainable elsewhere. Thus, we have disease from aniline nitro-benzole, paraffin, soot, turpentine, and next follows acquired disease from physical agencies, dust-diseases. Chapter II of this book deals with acquired diseases from mechanical pressure on the lungs, and very interesting indeed is the account given of the coffer-dam disease. This disease is one of intense muscular pain and other symptoms which is liable to attack those who suddenly change from working under a pressure of three or four atmospheres to that of the normal; and it is held by Dr. Smith to afford a key to the common rheumatic pains which many experience in any sudden lowering of the barometric pressure. Next we come to disease from concussion, shock, muscular overwork, athletics, etc.; and then to two chapters, one on acquired diseases from physical injuries, contusions, wounds, fractures, etc., and the other on surgical operations. Both these chapters, except on some theory of ideal completeness which we fail to realise, might have been omitted without any loss, for the information contained in them is very little, and they strike one as being decidedly unnecessary, if not actually out of place. Diseases of the emotions and habits of life follow, and in Book III is a practical summary of the origins, causes, and prevention of disease. For further information on these heads, we may safely refer our readers to the volume itself; they are all matters of which the author has made himself a legitimate master, and upon which he has a right to speak with authority. The information is put, as we expected of him, in a readable way, and is a valuable summary which could only be obtained, if at all, in its completeness, with difficulty elsewhere; and many interesting questions are raised, and opinions expressed, which will no doubt soon become more prominent in the rapidly heightening interest of the public in matters relating to health.

Happy would that community be that could pursue Dr. Richardson's advice to the end, or, at any rate, much more fully than is done now. To avoid grief, hate, jealousy, unchastity, intemperance, is, no doubt, to bid for long life, with a fair prospect of winning the stakes. But, behind all individual effort, we must remember that the life of large communities is so complex a matter, that even these great commandments of the law are, in their finer ramifications, their ultimate effects, their all-absorbing field, not altogether within the control of the best intentioned; and that until the struggle for existence becomes less keen than it is at present, the individual elements of a selfishness which, united, render the result so chimerical, will baulk the highest aim. Nevertheless, this book will by no means be useless; and it will, let us hope, prepare the unit for those altered habits of life, which will come about in the future, through the agency of a wise, and, we hope, still a paternal Government; and we go fully with the author in his hope that the candid, thoughtful, and original students of the future may be induced to follow out the height of his argument, and, from their more commanding position, to recast it perfected.

Hygiene in Canada.—It is proposed to establish in Montreal a *Journal of Hygiene*, to be the organ of the Canadian Sanitary Association.

Professor Ernest Haeckel, of Jena, has been appointed an honorary member of the Asiatic Society of Bengal, on the occasion of its hundredth anniversary.

Report on Enteric Fever at Stations in the Bombay Presidency. By Deputy Surgeon-General HEWLETT, C.I.E., Sanitary Commissioner for the Government of Bombay.

HERE is another voluminous report on enteric fever in India, extending over 170 folio pages, and bristling with elaborate tables. We cannot withhold an expression of our desire to see, on the part of the authorities in India, if not less activity in "reporting," certainly more in attending to the recommendations of the report-makers. It appears to us that, in all the presidencies alike, the notion prevails that when a question touching the health of the troops or the community arises, the action of Government begins and ends with a "report;" the consequence is, that the literature of sanitation, in that country, is becoming enormous. The tables of editors groan under the load of "reports," and panting reviewers toil after them in vain. Not only have we annual reports from the three presidencies, drawn up with immense labour and ability, but whenever, as in the case before us, any disease appears in a more than usually active form, an expert or a commission is immediately ordered to inquire and report on it. From no fault on the part of the inquirers, there is a wonderful sameness in the result of their labours. "Unsanitary conditions" is the sum of them all.

We have looked through the Bombay Sanitary Commissioner's recommendations in the concluding chapter of his report; they are admirable, one and all of them; but, with a few minor exceptions, there is nothing new in them. In one shape or another they have been urged on the attention of the authorities again and again. This is no fault of the Commissioners'; the same story will have to be told and the same lesson preached until the authorities, instead of calling for more reports, are roused or shamed into taking measures to correct the evils born of neglect of the very elements of sanitation. Unfortunately, this now familiar term, when translated into the vulgar tongue, means money, and, as Mr. HEWLETT plainly puts it, "much of it;" but this is not forthcoming; it is cheaper to issue a report with plenty of tables in it. Let us hope that the time is coming when the Government of India will learn, as we are learning at home, that sanitary defects mean money too, and "much of it."

In this JOURNAL the doctrine has always been maintained that enteric fever in India in its causation, symptoms, and lesions, is the same as its namesake and congener in Europe, modified by the all pervading influence of malaria; this is the doctrine upheld by Dr. Maclean in his paper on the enteric fever of Egypt, published in the last *Army Medical and Statistical Report*, and reviewed in this JOURNAL. We have risen from a careful study of Mr. Hewlett's *Report*, strengthened in the conviction that this is the view most in accordance with the facts, and one that, if energetically acted upon, will do more than any other to bring this costly and destructive disease within the domain of preventive medicine.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW SURGICAL NEEDLE AND THREAD.

SIR,—In the JOURNAL of March 1st, Dr. Cousins publishes what he believes to be an invention of his own. I will endeavour to give a brief history of the needle-suture (as I ventured to call it a quarter of a century ago), a task which Dr. Cousins would, I am sure, have spared me had he found the necessary books at hand and the time to consult them.

In 1617 Fabricius ab Aquapendente published his *Opera Chirurgica.* In the second part of this work and the chapter "De Chirurgiâ, quæ in carne fit, vulnerum curandorum gratiâ," is to be found a very remarkable passage, not only describing this form of needle-suture, but an accurate enumeration of the advantages of metallic over other kinds of suture.

In April 1859, I published a letter in the *Medical Times and Gazette*, proposing the reintroduction of "Fabrician Needle-Sutures," and describing some, made in three sizes, which I had used. Sir James Y. Simpson was aware of my suggestion, and mentions it in his book on *Acupressure.* "My friend, Dr. Aveling, has proposed to reintroduce an old plan of Fabricius ab Aquapendente, and use a strongish steel wire, hardened and sharpened at one end, as at once both a needle to sew with, and then a thread to tie with," p. 97.—Faithfully yours,

Upper Wimpole Street, March 1st, 1884. J. H. AVELING.

SIR,—The needles described and figured in the JOURNAL of March 1st, by Dr. J. W. Cousins, have been made by us for fifteen years for Professor G. H. B. Mac Leod of Glasgow University.

We enclose his note for your perusal and beg you will give this correction the same publicity accorded to the notice of "new invention."—We are, yours obediently, W. B. HILLIARD AND SONS.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 15th, 1884.

MEDICAL LEGISLATION.

THE Government have for the second time introduced a Medical Act Amendment Bill, which embodies the two grand principles: first, that of conjoint examining boards, one in each of the three divisions of the kingdom, thereby framing the "one portal" of admission to the *Medical Register;* and, secondly, that of making, by the addition of direct representatives, the General Medical Council representative of the profession, which defrays all the expenses of its sittings, as well as of the universities and corporations, which contribute nothing towards such expense.

The Bill also aims at strengthening existing penal enactments against the illegal assumption of professional titles by uneducated and unexamined persons; and enacts (Clause 6) that no person shall be entitled to recover in any court of law in the United Kingdom any expenses, charges, or fees for any medical or surgical advice or attendance, or for any operation, unless he prove upon the trial that he is a registered medical practitioner.

Subject to modification in matters of detail, the Association has given unswerving support to the Bill. For the first time in the long history of Medical Reform, the Association has had its action endorsed by the Government. The Association has exerted its influence, and has requested the Government to undertake legislation on the basis of the report of the Royal Commission, with the assurance that it will receive the full support of the British Medical Association. It is, therefore, incumbent on the members of the Association to aid the Government by personally canvassing members of both Houses of the Legislature to support the Medical Bill, and also by signing petitions in favour of it. The Association is undoubtedly pledged to support the Government.

Misgivings are entertained by many well-wishers to the Bill as to its effects on many who are now on the *Medical Register*—for instance, on those who now hold single qualifications. Will they, for instance, be entitled to take the licence of any other corporation without first passing the examination of a conjoint board? Once for all, we would observe that any person who may be a registered medical practitioner at the time of the passing of the Act, will retain in all their integrity every privilege he at present possesses. The Act will in no way affect him. Again, there is in many influential quarters a strong feeling (as shown in a letter from the President of the Irish Medical Association, which is published on another page) that the "direct representatives" to be elected under the Act, should have seats on the local divisional boards; and it is also a question whether the "Crown Nominees" should not equally be placed there. These are important questions. No Bill passes through Parliament unmodified; there is no such thing as ready cut and dried legislation, and these questions will doubtless be debated in committee; and, after full discussion, receive fair consideration, not only from the House, but from the Government.

Details, however, cannot wreck a measure that has been the outcome of discussion extending over more than half a century, during which period the opinion of the profession outside the interests of the licensing bodies has never changed. One bone of contention, the right of the profession to have direct representation in the General Medical Council, the governing body of the profession, has been settled by the Report of the Royal Commission, and conceded by its opponents. In the deputation from the Royal College of Surgeons of Ireland to the Lord Lieutenant, Mr. Rawdon Macnamara stated that the deputation did not want to interfere at all in the reconstruction of the General Medical Council. They were perfectly satisfied to leave that as the Government proposed it, and they did not in the slightest degree hold by the present condition of affairs in that respect. The point to which the College objected was the conjoint scheme set forth in the Medical Bill, which, it was contended by Dr. Kidd, would reduce the College to "poverty." The conjoint scheme is the selected battle-field. In lieu of the conjoint scheme, the deputation proposed to retain the existing powers of all the nineteen existing competing bodies, and as many more as time might develop.

The inspection of the examinations of the several bodies by the Medical Council has hitherto been far from successful; and yet to the Medical Council the duty of visiting them in the future was to be again assigned.

This is a proposal which has long since been discarded by the profession, and repeatedly by the General Medical Council, as impracticable, and needs no further condemnation. The deputation, in appearing before the Lord Lieutenant, expressed pleasure and gratification at appearing before a member of the Government so well acquainted with their College. The thorough knowledge of His Excellency, however, proved fatal to the objects the deputation had in view. The Lord Lieutenant, in reply, stated that the Royal Commission was appointed through his recommendation to Her Majesty. The subject was one which had for many years been under discussion. Bill after Bill had been introduced only to be wrecked on one clause or another, but everybody who dealt with the subject recognised the enormous importance of having it discussed. All were unanimous that the question ought to be settled. In selecting the Royal Commission, the most eminent men, not only in the profession, but men who knew the wants of the country, and whose public sagacity would be likely to lead them to wise conclusions, were chosen. The Bishop of Peterborough, than whom one could not, he told the deputation, have a more able man, or one having more at heart the interests of the country, Mr. Cogan, and Dr. Robert McDonnell were members; and another very eminent man—one of the most eminent men in the kingdom at the time—also consented, at his earnest request, to sit on the Commission, and that was the late Master of the Rolls, Sir George Jessel. A more able man, or a more able representative to gather the diverse opinions of a number of people on this subject, could not be found. The Commission reported; they differed on certain points, as it was likely they should, but on the main point they made a very able report, and on that report the Bill of the Government was founded.

The Royal Commission did not wish to bring all education to a dead level, or to weaken the individuality of the universities and corporations, or to check emulation between the teaching institutions of the country.

The British Medical Association and the profession would not weaken the influence and *prestige* of the Royal Colleges in either division of the country. On the contrary, the present Bill, in raising the status of some, will enhance the estimation in which all are held.

The Royal Commission reported in favour of the principles advocated by the profession and the Association. The Government have introduced a Bill based on the Report of the Commission, and it only remains for the profession and the Association to carry that Bill to a successful issue.

CREMATION.

The recent case of Mr. Price has awakened public interest once more to the consideration of a practice that is in every way to be commended, even from sentimental points of view, for there can be but one opinion as to the hygienic value of cremation; and clean ashes are surely less repulsive to contemplate than mouldering carcases. Indeed, putting aside the overcoming of public prejudices, a task which seldom fails in the long run when undertaken by respected and competent advocates, the only serious objection lies in the supposed facilities which cremation offers for concealing, or rather, obliterating, all traces of violence or poison; but it has been shown that many safeguards could be devised against this social peril. In the *Times* last week, Sir Spencer Wells gave an account of the practical working of cremation in Italy, and spoke very strongly in its favour, and other daily papers spoke on behalf of this method. Some very strong arguments on the evils of burial were put forward by Sir Spencer Wells in a paper read at the annual meeting of the Association in Cambridge, in August 1880. Allusion was then made to Pasteur's experiments, which proved that the specific germs of charbon can be transmitted from the deeply buried carcases of diseased cattle to the surface, by the agency of earthworms. As Darwin has shown, the worm swallow earthy matter, and, after separating the digestible portion, they eject the remainder in little coils or heaps at the mouth of their burrows. In dry weather, the worm descends to a considerable depth, and brings up to the surface the particles which it ejects. Hence, earth infected by contiguity to a diseased carcase, buried with the greatest care, is brought to the surface and can infect a whole pasture, as experiment has proved. Although the specific micro-organisms of charbon may be ultimately destroyed by putrefaction, they may lie latent, especially when rapid decomposition is prevented, as in the case of coffin-burial. In the neighbourhood of cemeteries it is highly probable that germs, capable of propagating specific diseases of different kinds, quite harmless to the earthworm, may be carried to the surface of the soil ready to cause disease in the proper animals. The chance of this evil is increased by the earth-to-earth system advocated by Mr. Seymour Haden. The pollution of pump-water near graveyards, the infected water remaining odourless and pleasant to the taste, is a more certain evil resulting from burial, and liable to increase as cemeteries increase. At the Cambridge meeting, it will be remembered, the address to the Home Secretary in favour of cremation, as given in Sir Spencer Wells' paper, was agreed to and signed by the members of the Association and forwarded to the proper quarter. The legality of the practice was pointed out in this address.

The question of legality has been once more decided, and this time by Mr. Justice Stephen, in his charge to the grand jury at the recent Glamorganshire Winter Assizes. In referring to the case of Mr. Price, after discussing the question as to whether an inquest should have been held, and observing that the depositions in the case did not very clearly show why the coroner considered an inquest necessary, his lordship stated that he knew of no legal decision on the question whether it was a misdemeanour at common law to burn a dead body instead of burying it. Certain popular ideas caused the total discontinuance of cremation and the substitution of burial in Western Europe many centuries ago, so that no laws against funereal burying were made, as it never struck the legislators of those days that the older method would ever be practised or advocated. His lordship then considered English law; and, after discussing the terms of the Anatomy Act, where a clause exists requiring that, after examination, the bodies of subjects legally allowed for dissection should be decently interred, which seemed to imply that, apart from the Act, the obligation to bury did not exist. Mr. Justice Stephen showed, in relation to this part of the main question, that the practice of the "resurrection-men" was a misdemeanour, since a body must not be disinterred for the purposes of dissection, nor for any other purpose, without lawful authority, even if the motive of the offender were pious and laudible, as in the case of Regina *v.* Sharp, where the defendant got access to his mother's grave, by false pretence, and disinterred her, in order to bury her elsewhere, by the side of his father. These cases relate to disinterment, and not to any unusual means of disposing of dead bodies; indeed, dissection comes under the latter category, and is made lawful, under certain conditions, by the Anatomy Act. His lordship then quoted two cases which laid down in unqualified terms that it is the duty of certain specified persons to bury, in particular circumstances; but in one the question was, whether the duty of burial lay upon the parish officers or on some other person; in the second, whether a man who has not the means to bury his child was bound to incur a debt in order to do so. The question of burning was not before the court in either case. The last case quoted by his lordship was that of Williams *v.* Williams, where the defendant had cremated the body of a friend, according to his will, his executors being required by the terms of that will to pay the defendant's, Miss Williams's, expenses. The relatives of the deceased had buried him; the defendant got leave from the Secretary of State to disinter the body, in order, as she said, that it might be buried elsewhere. By this distinct misrepresentation, she obtained possession of the corpse, burnt it, and sued the executors for her expenses. Mr. Justice Kay, who tried the case, held that, in the particular case, the removal of the body and its burning were both illegal. "Giving the lady credit," he said, "for the best of motives, there can be no kind of doubt that the act of removing the body by that licence, and then burning it, was as distinct a fraud on that licence as anything could possibly be." This, then, the nearest case in point, did not entirely coincide with the case of Mr. Price.

Mr. Justice Stephen showed that Mr. Price had lawful possession of the child's body, and it was both his right and duty to dispose of it by burial, or in any other manner not in itself illegal. After full consideration, his lordship could find no authority for the proposition that it was a misdemeanour to burn a dead body. Courts of justice have declared acts to be misdemeanours which had never previously been decided to be so; but in every such case the act involved great public mischief or moral scandal; and his lordship could not apply those objections to cremation, conducted in such a manner as not to amount to a public nuisance of common law; in fact, the whole question of legality turned in this case on the latter point, as to whether the burning of the child's body was conducted in a manner offensive to persons passing by at the time. "As for the public interest in the matter," his lordship remarked, "burning, on the one hand, effectively prevents the bodies of the dead from poisoning the living; on the other hand, it might, no doubt, destroy the evidences of crime. These, however, are matters for the legislature, and not for me. The great leading rule of criminal law is that nothing is a crime unless it is plainly forbidden by law," and his lordship could not find that cremation is so forbidden.

This decision must, as we have already observed, be hailed with great satisfaction, and we are glad to see that the Cremation Society of England has issued a circular, published at page 526, stating that it has considered the decision of Mr. Justice Stephen, and has framed certain regulations destined to counteract the chief evil that would attend the practice of funereal burning.

HIRSCH ON TRANSPORTABLE MIASMS.

THE second volume of Hirsch's *Historical and Geographical Pathology* has already appeared in Germany; but we will postpone any detailed notice of its contents until the English translation, undertaken by Dr. Creighton, is in our hands. The recent warm discussions which have gone on at home and abroad on the origin and transportation of cholera have however lent a fresh interest to the question of those quasi-malarial quasi-contagious diseases of which it is the type, but to which the yellow fever, enteric fever, and some others, may be referred.

Closely connected with certain conditions, known or unknown, of soil and climate, they are capable of being transported from the site of their original development; and are thus distinguished, on the one hand, from the malarious diseases strictly so-called which are rivetted to the place of their birth; and, on the other, from the contagious diseases proper, as scarlatina and small-pox, which are communicable from one individual to another independently of all climatic or other local conditions. Hirsch proposes for such the name of transportable or transmissible miasmata (*Verschleppbare miasmatische Krankheiten*). According to the "Bodentheorie" of the Munich School, the germ of the disease developed out of the body, gaining entrance into the organism, multiplies in it, and after elimination requires, before becoming again capable of infecting the human subject, to undergo certain modifications in a suitable *(siechhaft)* soil; in fact, to pass through a sort of alternate generation, or two phases of evolution in two different media or soils. Recently Pettenkofer has simplified this doctrine, abandoning as unproven the notion of different phases and of any modification beyond active proliferation in the living body; and Hirsch accepts this view, holding that yellow fever, enteric fever, and cholera, with perhaps also the plague, differ from the paludal fevers only in being transportable by human beings, whether healthy or sick, and by other material vehicles or fomites. No one, he says, denies the transmissibility of yellow fever, *i.e.*, that the germ can be carried by ships and merchandise; but transmissibility is not contagion, and if by contagion one understand the infection of a healthy individual by the immediate communication of a morbid germ engendered by and in a diseased organism, he must reject the idea of such contagion for yellow fever, which, while endemic on the littoral, spares the cities of the inland, although in constant communication with the affected population.

This is almost equally true of cholera. There can be no doubt as to the infectious character of the evacuations, but they seem to acquire active pathogenic powers only after having undergone certain undetermined changes out of the body and in a suitable soil. It is not directly contagious in the same sense as small-pox. Of the two hypotheses, namely, that the choleraic subject eliminates a morbid germ incapable in its then state of reproducing the disease, but becoming so under favourable conditions, or that the multiplication of the germ takes place external to and independent of the patient, and, adhering to persons or things, is transported from place to place ready to light up an epidemic where and whenever it finds conditions favourable to its development, Hirsch prefers the former, while Pettenkofer maintains the latter.

The Munich School take their stand on the etiology of enteric fever, the idea of its origin *de novo* being, as they urge, untenable in view of its undoubted specificity and transmissibility. The arguments that have been adduced in favour of its spontaneous origin are, they maintain, of no weight for the great centres of population, where it is impossible in all cases to trace its paths of transmission, and of little more even for isolated localities, if we admit, as we must, the probability of revivification of germs long latent in the soil. This phenomenon is familiar enough in the case of cholera, plague, and yellow fever, which burst out again in their old haunts after the lapse of months, and when all idea of a fresh importation is out of the question; and enteric fever differs from these only in its ubiquity. It is not contagious in the common acceptation of the word, but the germ eliminated from the body by the stools demands for its maturation a process of development in an appropriate soil, *i.e.*, one porous, saturated with organic matter, and with a certain degree of humidity. Such conditions are eminently provided by the alternate rise and fall of the ground-water; a fact on which Buhl based his theory, which has received considerable support from Pettenkofer; but Hirsch rightly holds that too much importance has been attached thereto by the Munich School, and maintains with Lindwurm that equally favourable conditions may be presented by the floors and walls of our houses, and cesspools, and drains; that wherever air, moisture, and organic matter are brought together, the same developments may take place as in the soil, though on a smaller scale.

Pettenkofer's too narrow conception of the etiology of enteric fever, his exclusive pre-occupation with the *Bodengas Theorie*, has from the first met with strong opposition in Germany from the adherents of the *Drinkwasser Theorie*; and here, again, Hirsch takes his place as a mediator, not as a partisan. While giving full credence to the claims of the former as a cause among others, he says: "I know of few points in the etiology of typhoid fever which can be so surely demonstrated as the transmission of the morbid poison by drinking-water," and cites *in extenso* a number of facts which leave no doubt as to its occurrence. He, keeping in view its specificity and transmissibility, concludes that enteric fever cannot have a spontaneous origin, but that the relations in which it stands to the human subject, compel us to think of the poison as an organism capable of reproduction, although it may as yet have eluded our research. This germ, reproduced, no doubt, but incompletely regenerated, in the intestine of the sick man, is passed out with the stools, is diffused by these and by linen, etc., soiled therewith, undergoes further development in foci of putrefaction, whether in the ground or in the house, and again infects other individuals by gaining access to the respiratory or alimentary passages, *i.e.*, by means of the air or of drinking-water.

THE CONTAGIOUS NATURE OF CHOLERA.

THE lecture by Mr. Charles Macnamara, published in another column, will be found well worthy of careful perusal and study. Its author, as is well known, is entitled, by the nature of his researches into the etiology of cholera, to speak with authority, and it was only to be expected that he would feel himself called upon to defend that view of the questions at issue which he has aforetime frequently propounded with so much ability and success. Undoubtedly, the fullest discussion by men of all views is to be encouraged, both in this country and in India. Any attempt to limit discussion, and any action of the authorities which might tend to have this result, are much to be deprecated. It is only by the record of facts from all sources, whether they happen to fit in with popular theories or not, and by the fullest and freeest discussion, that a solution of the question can be hoped for.

The mission of Sir W. Guyer Hunter to Egypt has excited renewed interest in the character of the epidemic prevalence of cholera, and it must be allowed that he has succeeded in reopening the question of the contagious nature of the disease by his recent report and addresses. As to the nature of the contagium, there has been in this country much diversity of opinion; but the existence of some contagium or contagious entity has been very generally taught and received as an axiom.

It has been something of a revelation to very many to find how much there is to be said on the other side, and particularly to discover how extensively the views of which Sir W. Guyer Hunter has made himself the exponent in this country are held by other officers of Indian experience. Not a few of those who go out to India, strong in their faith that cholera is communicated from man to man by the transmission of some pathogenic organism or contagium, return to this country the ardent opponents of that theory. The complexity of the problem is enormous, and it would seem that, to a large number of those who have studied the disease in India, the so called germ-theory is inadequate to solve it. The problem, however, is more complex in India than in Europe, and this may, perhaps, eventually serve to explain the wide diversity of opinion that at present exists. The very frequency and magnitude of Indian epidemics tend to a confusion of the issue.

It is admitted on all hands that, in India itself, the disease requires to be studied from two points of view, since it is necessary to have regard to the conditions which determine its endemic prevalence in a limited area of the country, as well as to those which determine its occasional spread over areas of great but varying extent. "To learn the conditions of that endemicity and its variations is a problem," says Mr. Simon, "of the highest science." With regard, however, to the mode in which cholera travels from country to country, the opinion almost universally held and taught in England has been that cholera is a filth-disease, and that conditions of filth, especially filthy conditions of water-supply, "are the main facilitating conditions for the dissemination of cholera in Europe;" so much would probably be accepted by these who reject the next tenet in the English faith, namely, that cholera is due to a specific contagion. Mr. Simon summarises the conclusions of Mr. Netten Radcliffe's careful study of the European epidemics in these words: "So far as the extension of the disease could be followed in detail, it was found to have had definite relation to personal traffic; in various important cases, the arrival of persons affected with the disease was unquestionably the starting point of local and, perhaps, national epidemics, and no extension of the disease was to be found, where the arrival of human beings from previously infected places was not either proven or probable." Further, it is observed, that the disease appeared to possess "great, though peculiar, power of spreading from the sick to the healthy," and that "human contagion is the one active power in the international spread of cholera."

If now we turn to Indian authorities, we find Dr. Bryden writing as the result of his life-long study of the subject these words, "in communities which we can observe, and in which there is every opportunity of knowing the actual facts, there is little, if any, tendency of the disease which we call cholera, and which we assert primarily to show the effects on the system of an air-borne miasm, to spread from one man to another by mere contact." This conflict of opinion, however, is not so great as might at first sight appear.

Dr. Bryden believed that there was a cholera-germ generated in certain districts of Bengal, which from time to time was carried out of these districts by moist air into countries where it had no permanent abiding place, but died out after a varying time. He regarded the spread of cholera over any area as due not to human intercourse, but to meteorological influences, and he believed that, speaking broadly, the disease could not be carried by human agency beyond the limits of the area naturally occupied by the invasion of the cholera-germ. Nevertheless, he admitted that cholera could be transmitted from persons who had been subject to the choleraic influence, or by fomites impregnated with the virus. Mr. Macnamara, as will be seen, goes further than this, and expresses his belief, which he is able to support by evidence, that the only way in which the disease can be spread is by the contamination of water or food by the excreta of cholera-patients; that is to say, he is in entire accord with Mr. Simon, and the many able observers who have worked with him in preparing the reports presented to the Local Government Board.

It will probably be admitted that the difficulty of explaining all the phenomena of the spread of cholera on the water-borne theory is very great; perhaps not insuperable, but as yet unsurmounted. Cholera is, indeed, strangely like influenza in its epidemic character; but, at the same time, has certain close resemblances to malarious fevers. Malarious fevers are, doubtless, intimately related with the water-supply, yet they are not, in any ordinary sense of the phrase, water-borne. Further, malarious fevers are said to be due to the morbific action of a bacillus, yet it is not contended that they are contagious or communicable, at least, in any ordinary sense attaching to these words.

To hope that the research now being conducted by the German Cholera Commission will afford a complete solution of all the difficulties which surround the question of the mode of propagation of the disease, is, we fear, to take too sanguine a view of the possibilities of the inquiry. To prove that cholera can be produced by the inoculation of the cholera-germ would really only amount to establishing the truth of a proposition already arrived at by Dr. Bryden by a different chain of reasoning.

Whether we are prepared to accept or reject the germ-theory as applied to cholera, it must be admitted that quarantine-regulations must fail to defend a commercial country from the occurrence of epidemics; and they must fail because, in a disease like cholera, they must be inoperative and incomplete. Theoretically, if it be accepted that cholera is a transmissible disease, quarantine would be a rational measure if it could be applied with scientific precision to a country capable of complete isolation, where the paralysis of commerce could be viewed with equanimity; but, to quote again the words of Mr. Simon, "practically speaking, where great commercial countries are concerned, it can scarcely be dreamt that quarantine-restrictions will be anything better than elaborate illustrations of leakiness." Inspection of the passengers and crews of ships arriving from infected countries, and the isolation of persons manifestly affected with the disease, is a precaution which common prudence dictates, and which unquestionably ought not to be neglected, but an elaborate system of quarantine, since it cannot be made so perfect as to exclude the probability of the importation of the disease, must be useless; to those who do not admit that cholera is transmissible, all arguments on the question of quarantine must seem redundant. Quarantine having failed to accomplish the purpose for which it was elaborated, becomes an intolerable nuisance, and, in the fancied security which it affords, a real and fresh source of danger. It has been well said that where, in Europe, typhoid fever is endemic, there cholera may become epidemic. We have learnt that the only means to rid ourselves of the one is by attention to sanitary improvements; may no hideous epidemic of the other be required to convince the public of this truth!

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The Oxford Medical Graduates' dinner will take place on April 4th The hour and place will be hereafter notified.

The President and Committee of the University of Durham Medical Society have issued cards for a *conversazione* in the Wood Memorial Hall, on Monday, March 24th, 1884, at seven o'clock.

The German Cholera Commission will proceed shortly to Goalpara and Darjeeling, India, to prosecute further inquiries. After passing a few days there, they will return to Germany, but they hope to be again in India next winter to carry on their labours.

THE MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

It will be seen by an article in another column (page 525 that the Executive Committee of the Medical Sickness, Annuity, and Life Assurance Society have determined to add to the scheme already elaborated another department, in order to meet the wishes of gentlemen who desire to insure for sickness-pay alone, without annuity.

THE INTERNATIONAL HEALTH EXHIBITION.

On March 7th, King Humbert gave a private audience to Mr. Ernest Hart and Mr. Acton, on the subject of the London International Health Exhibition. His Majesty entered at considerable length into the subject of the housing, feeding, and clothing of the people, and of the sanitary progress now being made throughout Italy. He expressed a desire that it should be known that he took the liveliest interest in the approaching Exhibition, and that he intended to do all in his power to have Italy worthily represented at it. The work of preparing for the Exhibition is now being rapidly pushed on, and we understand that the Executive Council already has in its employment over three hundred persons. The galleries occupied last year by the Fisheries Exhibition are now deserted, as the time for receiving articles for exhibition has not yet arrived; but the buildings in the gardens are swarming with workmen. The Exhibition, though primarily intended to discharge an educational function, will not be devoid of the elements which tend to attract the holiday-maker; it will supply "what leisure hours demand—amusement and instruction hand in hand." "Chepeside," as it presented itself to the eyes of our mediæval ancestors, will be reproduced; and visitors, we presume, will be able to purchase the latest novelties of the nineteenth century from shopmen dressed in the costume of the apprentice lads of the fourteenth. Moreover, the gardens will be lighted with the electric light; and hard by the houses of a generation that knew not Sir Hugh Myddleton, will be found the magnificent fountain constructed by the Metropolitan Water Companies, which will be lighted by a powerful electric light introduced into the interior. The Council of the Society of Arts announce that they are prepared to award the following prizes in connection with the International Health Exhibition:—Under the John Stock Trust, a Society's Gold Medal, or £20, for the best example of sanitary architectural construction, Classes 20, 28, 29, 30, 32. Under the Shaw Trust, a Society's Gold Medal, or £20, for the most deserving exhibit in Classes 41, 42, 43, and 45 (relating to Industrial Hygiene). Under the North London Exhibition Trust, a Society's Gold Medal, or £20, for the best set of specimens illustrating the handicraft teaching in any school—Classes 49 and 50. Under the Fothergill Trust, Two Gold Medals (or two sums of £20), one for the best exhibit in Class 27 (Fire Prevention Apparatus), and one for the best exhibit in Class 26 (Lighting Apparatus). From the Trevelyan Prize Fund, Five Gold Medals (or five sums of £20), for the best exhibit in each of the following Classes—2, 3, 6, 7, and 11 (all comprised within Group 1, "Food"). Each prize will be a Gold Medal, or the sum of £20, at the option of the recipient. The Council propose to ask the juries in each class to recommend for their consideration either two or three exhibits which they might consider deserving a prize.

THE LONDON GOVERNMENT BILL.

The letter of Mr. Gladstone to the Council of the London Municipal Reform League is, we are afraid, not so promising as it appears to have been considered by its recipients. No doubt the mention in the Queen's Speech of a measure for the improvement of the local government of the metropolis is an earnest of the importance which the Cabinet attach to the subject; but we greatly fear that the chances of such a measure reaching the stage of Committee are slender indeed, if it has to wait the pleasure of the Franchise Bill. We are now within a month of Easter, and the serious business of the session can hardly be said to have commenced. The Franchise Bill will infallibly be discussed at great length in all its stages; and if the London Government Bill has to remain in the shadow until the Ministry have fairly got the franchise question off their hands, it stands an excellent chance of being included amongst the "innocents" to be massacred at the close of the session. Looking to the very general interest which any measure for the reform of local administration in the metropolis is certain to excite, and to the discussion on points of detail which is sure to arise upon it both within and without the House, it appears to us more and more desirable that a special effort should be made to fix an early day for the introduction of the Bill, however distant may seem the probable date of its securing a second reading. At present, we are absolutely in the dark as to the nature of the Home Secretary's Bill. No good can come of keeping its provisions screened from the vulgar gaze for an indefinite period, until the Government can see their way clear through all its stages. It would be far preferable that the agitation on the subject should have some definite text and purpose, instead of ranging aimlessly over a vast expanse of debateable ground. It can do no good to the Government, but rather the reverse, to force their Bill rapidly through the House when its energies are exhausted, with the object of endeavouring to fulfil in a measure Her Majesty's legislative promises. Let the Bill, therefore, be introduced and circulated without delay, in order that public opinion may find time to understand and criticise it before it is too late to suggest improvements without imperilling the chances of the Bill passing at all.

THE SANITARY CONDITION OF THE INNER TEMPLE.

We understand that the Committee of Benchers to whom was referred the subject of the recent occurrence of fever in the Inner

Temple, have held a meeting. at which the standing surveyor to the Inn was present. As the meeting was a private one its result has not transpired, but we trust that the importance of a thorough examination and report being made by a competent engineer on the system of drainage and water-supply as a whole, before deciding on any definite course of reform, has not been overlooked. No doubt the temptation to patch and mend by degrees is great. No scheme necessitating an expenditure of the capital funds of the Society is likely to be popular with the majority of Benchers, who eat and drink, but sleep not, within the precincts of the Temple. A report on the other hand recommending gradual improvement, the cost whereof could be defrayed out of income alone, would be cordially adopted by the whole Bench. We trust the Committee will be strong enough to resist this temptation, at any rate until they have had engineers' advice. Otherwise they may find their piecemeal patching incompatible with more comprehensive work that may hereafter become imperatively necessary.

THE WOUNDED FROM THE BATTLE OF TEB.

THE sick and wounded from the Souakim expedition, to the number of 148, and comprising 7 officers and 141 men, were landed at Suez on the 10th instant. On the following day, the officers and 54 of the rank and file were moved up to Suez. Five wounded men, whose condition was serious, were detained at the Suez hospital; there were three amputations, and two compound fractures, both severe. The medical cases were 34. All the wounded are reported to be doing well. We understand that General Baker's wound was more severe than the first accounts seemed to indicate; the bullet was part of a charge of shrapnel fired from a Krupp gun. The bullet entered at the outer part of the right cheek, passed through the antrum, and was arrested at the bridge of the nose. The course the bullet took was nearly parallel to the base of the orbit, and about half an inch below it. The eye was not injured, and the bullet was successfully extracted on board the *Sphinx*, by Surgeon John S. Logan, M.D. Since then, General Baker has been transferred to the *Euryalus*, and the last news was that he was progressing favourably, and that as yet there had been no fever. We hope that no complication may arise. Colonel Burnaby has received a flesh-wound through his left arm, caused by a rifle-bullet, but no danger is anticipated from this. He received the wound while beyond one side of the square which was passing along the flank of the enemy. At first, it was thought from the size of the aperture that it had been caused by a Martini bullet; it is now believed to have been due to a Remington bullet striking diagonally. Colonel Barrow, who was severely wounded by a spear-thrust, is, according to latest advices, progressing favourably. Amongst the officers wounded were Staff-Surgeon Martin, and Surgeon Turner.

BABY-FARMING.

AT the adjourned inquest on the bodies of the two children, Kempton and Reynolds, at Milton, the mother of the latter stated that when she left her child with Green, in November, it was strong and healthy; but when she last saw it, in January, it was fearfully emaciated. Dr. Waring ordered essence of meat for the child, but it was not given, because, as Green said, she was only allowed 5s. a week for each child, and she could not spare the money for such things. The parents of the other children could not be discovered. The coroner summed up, and the jury returned a verdict of "wilful murder" against Green and Williams, and they were fully committed for trial.

INFANT LIFE PROTECTION ACT.

A MEETING of the Committee of the Infant Life Protection Society was held on Wednesday, at the office of Mr. W. T. Manning, Westminster Chambers, to consider amendments to the Infant Life Protection Act. The cases of the women Green and Williams at Milton, and that of Gorney, and the woman at Hammersmith, all of which have recently been brought before the courts, prove the inefficacy of the Act under its present limited powers. Mr. Curgenven read a letter which he had received from the Metropolitan Board of Works in reply to a letter of his urging an amendment of the Act. This enclosed a copy of a letter they had written to the Under-Secretary of State for the Home Department, dated April 26th 1880, in which they entered fully into the reasons for recommending certain amendments to the Act; stating that, "as a result of the additional experience gained, the Board is strengthened in the opinion that in its present form the Act does not touch the great majority of cases in which infants are kept for hire in the Metropolis, all of which should, in the Board's opinion, be provided for." To meet such cases as the above, the Board recommends that "The Act should be extended to infants under five years of age, and to the keeping for hire of one infant." In two or three other points the Board recommends amendments. The Committee readily agreed to support the Board should they bring a Bill into Parliament this session to carry their recommendations into effect, as their amendments are on the lines of the first Bill brought into Parliament through the Society's agency.

IMPROVEMENTS AT WHITEHALL.

IT is said that the new scheme for the improvement of Whitehall will involve the destruction of the old house in which the Army Medical Department have been long accommodated. The scheme includes the pulling down of Lord Carrington's house at the corner of Whitehall Yard, and the formation of a new street, to be called Whitehall Avenue, running from Whitehall Place into the bottom of Whitehall Yard.

A SPECIAL JOURNAL OF LARYNGOLOGY.

DR. FELIX SEMON has announced the approaching appearance of an international journal devoted to laryngological subjects. It will consist entirely of abstracts, no original articles being published, because it is believed that the best specialists will always publish their papers in the general journals; and it is in the best interests alike of the specialty and of the profession that this should be. At the same time, it is difficult for specialists, and impossible for others, to read all the articles which are published, even on so limited a subject as laryngology, and to sift the grain from the chaff. The journal will be published in German, and its full title will be *Internationales Centralblatt fur Laryngologie, Rhinologie, und Verwandte Wissenschaften*. The German language has been selected, because it is thought that it is better understood than any other by the large majority of laryngologists. The international character of the journal, however, will be most rigidly maintained. Dr. Felix Semon brings energy, enthusiasm, and a wide knowledge to his task; and we are glad to learn that the support already received, both in subscriptions and in promised contributions, has assured the success of the journal at starting.

LECTURES AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THREE lectures or demonstrations will be delivered in the theatre of the College, on Monday, Wednesday, and Friday, the 17th, 19th, and 21st March, commencing at 4 o'clock each day, by Mr. Frederic S. Eve, Erasmus Wilson Lecturer. Lectures I and II will comprise a short account of the various forms of Intestinal Obstruction, demonstrated, as far as possible, by specimens from the College Museum. Lecture I will include the subject of Retroperitoneal Hernia, which will be illustrated by specimens and cases. In Lecture III, an account of the Histology of Primary Syphilis will be given, followed by a demonstration of microscopic specimens.

THE WHEATLEY MEMORIAL FUND.

A SUBSCRIPTION has been set on foot among the Fellows of the Royal Medical and Chirurgical Society, and of the other societies which Mr. Wheatley served in the capacity of librarian, to increase the slender provision which he was able to make for those who were dependent on him. Mr. Wheatley was first employed by the Royal Medical and Chirurgical Society in 1841, but it was not until 1855 that he was appointed Resident Librarian; for nine years, moreover, his salary was insufficient to meet ordinary expenses, and had to be eked out by extra work done for other libraries and societies. Until quite recently, Mr. Wheatley was unable to begin making any provision for those dependent upon him, namely, his sister, who, since her brother's appointment, has acted as the housekeeper of the Society's house, and a niece. Mr. Wheatley discharged his duties conscientiously, giving his labour without stint and with a devotedness never measured by mere money-value. There ought to be no difficulty in raising the sum of money required to place those whose welfare was his latest anxiety beyond the reach of poverty. The committee appointed to raise the fund consists of Sir Andrew Clark, Bart., Mr. John Marshall, Dr. George Johnson, Dr. Wilson Fox, Mr. Hulke, Mr. Cooper Forster (Treasurer), and Mr. Berkeley Hill (Honorary Secretary). We have no doubt that the committee will soon be able to publish a list of subscriptions, in which the names of the leaders of the profession in London, and in other parts of England, will appear for good round sums; it is only necessary for a good example to be set for the fund to be quickly successful. Cheques may be sent to Mr. Cooper Forster, or may be paid in to the account of the "Wheatley Memorial Fund" at the Union Bank, Argyll Place, Regent Street.

WESTON'S WALK.

On the 5th instant, in the circus at Portsmouth, Weston was 11 hours on the track without a rest. Next day he did 38 miles on the road, and the remaining 12 at Worthing. On the 7th (Friday) he walked to Brighton (12 miles), and completed the remaining 38 miles in the Victoria Skating Rink there. At the end of the fortieth mile he was examined by Dr. Norman Kerr, who had just walked about 6 miles with him, and who found the indomitable American in much better health than on examination before setting out from London in November last. On Saturday morning, after little more than two hours' sleep, Weston set out at 3 o'clock, walking steadily through Cuckfield, Crawley, and Reigate, to Croydon, 3 miles from which last-named town he was met by Dr. Alfred Carpenter on foot, who walked with him for ten miles. Mounted police escorted the pedestrian from beyond Croydon. At Streatham, Dr. B. W. Richardson, Dr. Howard, and Dr. Kerr, joined the party. From that point the throng kept rapidly increasing, till, supported by the medical men, and accompanied by a now large body of police, Weston, at a rapid pace, passed through a dense and enthusiastic mass of spectators to the Victoria Coffee Hall, which he reached before 6 P.M. Apparently not in the least tired by the extraordinary march of 53 miles without a rest, Weston delivered an amusing and animated address in the large theatre, under the presidency of Dr. Carpenter. Dr. Ridge, Mr. Edwin C. Green, Mr. Wynter Blyth, and other medical men were here added to the professional conclave, but no one could detect any physical defect in Weston. He has continued walking at the Victoria every day, and finishes his stupendous undertaking to-night (Saturday), when an address will be presented to him. Valuable physiological observations have already been recorded during his walking in London.

INJURIOUS EFFECTS OF COTTON-SIZING.

After considerable delay, the joint report of Mr. E. H. Osborn and Dr. Bridges on the practice of cotton-sizing in its relation to the operatives employed (see British Medical Journal, vol. i, 1883, p. 782) has at length appeared in the shape of a Parliamentary paper. In the course of the inquiry, fifty-five factories, some of them containing more than one weaving-shed, were visited in the districts of Todmorden, Bacup, Haslingden, Rawtenstall, Blackburn, Over Darwen, and Nelson. The commissioners found that many changes had occurred in the process of manufacture since 1872, when a similar investigation was conducted by Dr. Buchanan on behalf of the Local Government Board. In response to a steady demand for stiff cloth of a "leathery" description, the practice of sizing has rapidly increased, while at the same time notable alterations have been made in the proportion of the various ingredients used in sizing. China clay enters more largely than formerly into the composition of the size; but no greater diffusion of dust was observed than in the primitive days of clay-sizing. To secure this result, certain substances possessing an affinity for moisture have been added to the size, and the atmosphere of the weaving-sheds has been made artificially damp. On all sides, the evidence pointed conclusively to an extension in the means adopted for damping the atmosphere of the sheds, which was one of the grievances urged by the memorialists when praying for an inquiry. Many complaints were received on this subject. The shawls and wraps worn by the workpeople when they leave their work are in almost all cases hung against the wall of the weaving-shed. If this clothing were penetrated with dust into the composition of which magnesium largely entered, it is certain that it would retain the dampness for a longer time than would be the case after an ordinary wetting. The difficulty is easy of amendment, and can be met by an arrangement by which the outer clothing of the workpeople could be hung outside the weaving-shed, so as to be free from dust and moisture. The condition with which the commissioners find most fault is that of ventilation. Undoubtedly the ventilation of weaving-sheds, many of which cover in a space of more than an acre, is no simple matter; but, as the commissioners pointed out, with few exceptions, no proper effort has been made to meet the difficulty. To maintain a wholesome atmosphere, an allowance of 3,000 cubic feet, or at least 2,000 feet, should be supplied to each person during every hour. This, in the case of weaving-sheds, would imply that the air was changed once in every three-quarters of an hour, or twelve or thirteen times during the working day. It may reasonably be doubted whether during that period it is changed effectively so often as once. Assuredly the slender currents of fresh air which may pentrate through crevices in woodwork, through broken window-frames, or through casually opened doors, would not suffice for this. Modes for effecting ventilation would not be wanting if it were at once recognised as a matter of urgency and paramount necessity; and, with the object of assisting manufacturers, the report contains some practical suggestions on the subject. In considering the question of health-injury, the commissioners had to deal with two distinct classes of operatives, namely, those selected at random, and those selected by the Weavers' Association. As regards the first, there was a not unnatural unwillingness on the part of the workpeople to come forward, lest they should be regarded as troublesome malcontents, and lose their places; while, in respect to the second class, regard must be had to the fact that it was comprised of complainants who were ready with evidence of injury. Altogether, fifty-six persons were examined, of whom twenty-seven were chosen by the commissioners. Out of these, ten stated that they had suffered more or less from damp, principally in the form of bronchitis, rheumatism, and neuralgia; and the remaining seventeen made no complaint. In the majority of cases brought forward by the Association, no doubt was entertained of the reality of the symptoms, which were chiefly rheumatism, bronchitis, dyspepsia, nausea, and vertigo. The commissioners are of opinion that the balance of evidence is in favour of harm resulting, not to strong and vigorous constitutions, but to those who are weak, or that have tendencies to rheumatic or pulmonary disease. One of the important results of the inquiry has been the confirmation of the belief that neither excessive dust nor steam is inseparable from the process of heavy sizing, since, in some instances, processes are known to certain manufacturers by which very large quantities of size can be incorporated into the warp without necessitating the diffusion either of dust or of moisture. The commissioners strongly recommend that these processes should become generally known and applied. They also insist on the great need that exists for improved ventilation, and are convinced that, when this has been recognised, much may be done towards the provision of remedies, or, at least, of effective palliatives, for the evils which are the subject of complaint.

TRANSACTIONS OF THE GERMAN IMPERIAL BOARD OF HEALTH.

THE second volume of this important work has just reached us. The subjects differ from those treated in the first volume, but are for the most part by the same authors. Dr. Koch contributes one article on the Etiology of Tuberculosis; and, in conjunction with Drs. Gaffky and Loeffler, another on the Cultivation of the Anthrax-Bacillus. Dr. Gaffky also writes on the Etiology of Enteric Fever and on the Tubercle-bacillus. From the pen of Dr. Loeffler is a further article on the Micro-organism of Diphtheria in Man, the Pigeon, and the Calf. Other papers are: on Disinfection with Chlorine and Bromine, by Drs. Fischer and Proskauer; on the Decomposition of Milk by Micro-organisms, by Dr. Hueppe; on the Quantitative Estimation of Micro-organisms in the Air, by Dr. Hesse; on the Disinfection of the Expectoration of Phthisis, by Drs. Schill and Fischer; on the Entrance of Fungus-spores into the Respiratory Passages, and the Lung-diseases caused thereby, and on "Tinea Galli," by Dr. Schutz; and a statistical paper by Dr. Wurzburg on the Influence of Age and Sex upon Mortality from Lung-disease. We propose to refer to these subjects subsequently.

THE METROPOLIS WATER BILL.

THE result of the division in the House of Commons, as to the second reading of the Water Bill of the Corporation, is greatly to be deplored. There is no doubt something in the argument about one threatened institution attacking another; but there was really nothing in the Bill that merited the strong language of the champions of the water-companies. To stigmatise as confiscation a proposal to charge people for water according to the amount they consume, is unwarranted and absurd. The sanitary bogey with which it was attempted to frighten the House is equally unsubstantial, since the Bill provided for payment by measure not coming into force until a fixed quantity, sufficient for all domestic requirements, had passed through the meter. No doubt the water-companies may claim to have done something for the metropolis; but it is necessary to remember that most of the improvements have been done under pressure and after threats of restrictive legislation. The supply of a household necessity like water ought clearly to be in the hands of the local governing body, or, failing that, of a trust, which would administer it for the benefit of the entire community, and not of a limited number of stockholders. Gas-companies used to be as recalcitrant as the water-companies are now showing themselves, until they were brought to reason by an Act which put proper restrictions on their dividends, and on their powers of issuing fresh capital. Perhaps the proposal in the Bill to take over the landed estates of the New River Company was an unwise one; but it might easily have been modified in Committee. The rejection of the Bill is another illustration of the tremendous powers that vested interests have amongst us. It is difficult, perhaps, to say where the privileges of shareholders end, and the rights of the public begin; but it is intolerable that London should be held bound for an indefinite period in the shackles of companies whose first care is for their dividends, and whose last for their customers. The result of the debate must inevitably bring again into prominence the question of the purchase of the London water-companies by the Government. Sir William Harcourt has often threatened some action in this direction, and he said on Tuesday that "he had had occasion to consider the subject of the water-supply fully for some years past." The longer the delay, the greater becomes the difficulty of dealing with the subject. It is to be hoped, therefore, that the Government may be able to find time amongst their numerous avocations for devising some means of release from the present deadlock.

THE ANNIVERSARY DINNER OF THE MEDICAL SOCIETY OF LONDON.

A HIGHLY successful year of work was brought to a brilliant close on Saturday last, when Sir Joseph Fayrer, K.C.S.I., presided over the anniversary dinner of the Medical Society of London. General Sir Arthur Herbert, K.C.B., the Chairman of the Army Sanitary Commission, in returning thanks for the Army, mentioned the interesting fact that both Sir Gerald Graham and Sir William Hewett were the sons of medical practitioners. Dr. Crawford, the Director-General of the Army Medical Department, observed that the complete success of the medical arrangements of the Suakim expedition, taken together with the high praise accorded by all who had seen their work to the medical officers of that expedition, served to vindicate the Department from the aspersions which had been cast upon its conduct in Egypt in 1882. The Army Medical Department, he said, had never been in a more healthy state as regards recruiting than at the present time, when there were always three or four candidates for every vacancy. Sir William Mac Cormac complimented Dr. Crawford on the honourable manner in which he had stood up for the officers of his department when they were (as had been proved) unjustly accused. Sir Joseph Fayrer proposed the toast of the evening, and rapidly sketched the fortunes of the Society since its foundation in 1772. He paid a high compliment to Professor Lund, the orator of the year, and to Mr. Brudenell Carter, who had delivered the Lettsomian Lectures, and expressed the earnest hope that Dr. Theodore Williams, who had been nominated orator for the coming year, might soon be sufficiently restored to health to enable him to discharge that duty. The toast of the "Learned Societies" was eloquently proposed by Mr. Brudenell Carter, who called upon Professor Huxley to respond, observing that the President of the Royal Society, who had been happily described as the greatest Professor in the greatest College in the greatest University in the world, was a member of the medical profession. Professor Huxley, in reply, observed that a large proportion of those who founded the Royal Society were members of the profession of medicine, and that down to quite recent years it had been the only portal by which to enter upon the study of the biological science. He expressed the fear that by the new Medical Bill the Universities and Colleges which had done so much for the profession would be sacrificed to the "pedantries of State organisation." Dr. Broadbent, who proposed "The Health of the retiring President," made a good point when he said that, as we had recently lost the Nestor of the profession, so it might, in similar phrase, be said that in Sir Joseph Fayrer we had its Ulysses, only substituting for the old Greek virtue of craft the English virtue of strenuous devotion to duty. The toast of "The Visitors" was proposed by Dr. Frederick Roberts and responded to by Mr. G. R. Stewart, late member of the Supreme Council of India. Among those present were General Sir Samuel Brown, K.C.B., Sir John Watt Reid, K.C.B. (Director-General of the Navy Medical Department), Sir William Smart, K.C.B., Professor Paget, of Cambridge, Dr. Norman Chevers, C.I.E., and the Rev. W. Page Roberts. The health of the Secretaries, responded to by Dr. Isambard Owen in a neat speech, brought the anniversary to a conclusion.

PRESENTATION OF A TESTIMONIAL TO SIR EDWIN SAUNDERS.

THE annual general meeting of the governors of the Dental Hospital, was held on Wednesday last, Mr. Erichsen in the chair; and the meeting was afterwards declared special for the purpose of presenting the portrait of Sir Edwin Saunders to the Dental Hospital of London. Amongst those present were Mr. C. S. Tomes, Mr. Cartwright, Mr. Woodham, Mr. Moon, Mr. Hutchinson, Mr. F. Canton, Mr. Ibbetson, Mr. Smith Turner, Mr. Morton Smale, and Mr. Gibbings. The chairman, in graceful and eloquent terms, presented the testimonial, which took the form of a very excellent portrait, painted by Mr. Macartney. He said that, whether viewed from the private, public, professional, or benefactor point of view, Sir Edwin Saunders was to be admired. He was always tender and considerate, not only to his patients, but to his colleagues in the profession, and well deserved the honour bestowed upon him by Her Majesty. From early life he had secured the very highest in the realm as patients, and must, on many an occasion, have given comfort and solace to those in suffering. To his liberality the success of the Dental Hospital was largely due, enabling the institution to so greatly improve its teaching capacity, that it now could rank as the leading dental hospital in the world. Sir Edwin Saunders, in returning thanks, was much moved, and said that so spontaneous a gift would satisfy the most ambitious. He considered it a great honour and great kindness, but while it was possible to exist without honour, he could not live without friendship, and it was the friendship that he felt most tenderly. He then referred with regret to the fact that it was the last time that Mr. Erichsen would take the chair at the managing committee; and, touching upon the history of the Dental Hospital and his own recent gift to it, he said it had been a great pleasure to him to promote the well-being of the profession of which he was a member.

THE REGISTRATION OF DIPLOMAS.

AT the last meeting of the Executive Committee of the General Medical Council, a letter, which had been addressed by the Secretary to the Commissioners in Lunacy to the Apothecaries' Hall, was read. The letter stated that the Commissioners had lately had before them several cases in which certificates of lunacy had been given by practitioners not registered under the Medical Act. In most instances, the persons signing such certificates were young men who had passed their examinations, but who had omitted to register their qualifications to practise. It was pointed out that such certificates were invalid, and gave rise to much inconvenience and expense. The Executive Committee resolved that printed forms of notice should be sent to all the medical authorities, to be given to each successive candidate; such notice to point out the necessity for registration, in order that the diploma may be a legal qualification to practise medicine. This fact is periodically advertised, and ought to be well known to everybody, without the necessity for this special notice. In future, there can be no excuse for any person who fails to register his qualification, and by that omission puts himself and his clients in the unfortunate position of having illegally committed a lunatic to custody.

BURIAL AND CREMATION.

THE bare fact that two millions of bodies have been interred in compacted areas within the last twenty-five years within the radius of the London postal circle, will suffice to generate in the mind of any thinking man an idea of the amount of pollution to air and earth which must result from such wholesale inhumation; and this resultant has been driven, with more or less pertinacity, into the common mind of our own country for years past. In the report issued by the General Board of Health in 1851, and in previous and subsequent publications, the inadequacy of ordinary soil to resolve the bodies of the dead into harmless elements has been sufficiently proved, and despite all that has been yet attempted, the sore remains as open as ever. Presuming that thirty-two thousand persons died annually per million, as was estimated, and each body required a space of one cubic yard, surely the depurating power of the earth would be abominably overtaxed. It is no uncommon remark to hear it said that the public cemeteries at Brompton and elsewhere are matter-logged, and a disgrace to any Government professing regulation. In other places coffins are actually sunk in subsoil-water, due to the improper sites chosen for the cemeteries. And when one comes to consider that the unregulated burial-grounds averaged twelve hundred interments per acre, the desperate state of things stands revealed, especially taking into consideration the fact that burials succeed burials upon the same allotment in something approaching to hot haste. It is a scandal to think that when the wife of a Rajah on a visit from our eastern empires succumbed to the effects of our climate, no one could afford her the burning of her body demanded by her religion. Until within this last year, cremation in England has also been at a standstill, due to a wise mutual understanding between the Executive Council of the Cremation Society and the Government. Sundry cremations have nevertheless been carried out, outside the recognised Society, with success, by those who have made use of proper means to effect their object. It is a pleasing thing to know that the Cremation Society of England, which is a learned, and not a trading society, possesses an apparatus of its own, built on the best Italian model, which is able for a century or more to perform all the functions of the reformed rite. Everyone who desires to help the Society in its honourable endeavour to effect a most desirable reform, should communicate with the Engineer and Honorary Secretary, Mr. Eassie, at 11, Argyll Street, W. The *Transactions* of the Cremation Society of England are published by Messrs. Smith, Elder, and Co., 15, Waterloo Place, S.W.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A MEETING of Fellows and Members of this college will be held in the theatre of the college, on Monday, March 24th, at 2 P.M., "To report to the Fellows and Members the alterations in the charters proposed by the Council, and to receive from them any suggestions or recommendations with respect to these or any other alterations in the charters which they have to offer for the consideration of the Council." The following are the proposed alterations: 1. That the section of the charter of George IV, which restricts the amount of property in lands or rents to be held by the college to £2,000, be altered so as to provide that such amount be increased to £10,000. 2. That Section 5 of the charter of the 7th Victoria be altered so as to provide that the conditions of admission to the fellowship by examination, and the arrangements for the examinations for the same, be in future determined by resolutions of the Council, and not by by-laws as required by such section. 3. That in Section 7 of the charter of the 7th Victoria, the amount of the fee payable for the fellowship by examination be omitted, leaving such amount to be provided for by by-law. 4. That Sections 15 and 16 of the charter of the 7th Victoria be altered so as to provide that the mode of election to the Council may be by voting-papers as well as in person, the quorum of fellows required to be present at the meeting for election being omitted from such sections, it being desirable that, in future, such quorum be determined by by-law instead of by charter. 5. That in Section 5 of the charter of the 15th Victoria, the words beginning "and the fee," etc., to the end of the section, be struck out, it being undesirable that any fee should be paid by members of twenty years' standing on election to the fellowship. 6. That Section 17 of the charter of the 15th Victoria be abrogated, it being inexpedient to continue the examinations for the licence in midwifery of the College. 7. And that Sections 1 and 2 of the charter of the 23rd Victoria be altered, so as to provide that the number of members of the Board of Examiners in Dental Surgery may, if thought desirable by the Council, be increased beyond six, the present number, and that the section of the Board consisting of persons skilled in dental surgery be restricted to dental practitioners duly registered under the Dentists' Act of 1878. A printed copy of the alterations in the charters proposed by the Council will be forwarded to any Fellow or Member of the College on application to the secretary. Each Fellow or Member of the College desiring to be present at the meeting will be invited, before admission, to hand to the attendant at the door of the theatre his private visiting card, as only Fellows or Members of the College and duly authorised reporters of the public press can be admitted.

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SCOTLAND.

AMONGST those upon whom the University of Aberdeen has just conferred the degree of LL.D. are Archibald Forbes, the famous and intrepid war-correspondent; Dr. George King, Professor of Botany, and Director of the Botanic Gardens, Calcutta; and Professor Lapworth, of Mason's College, Birmingham.

THE meteorological reports just issued show that, with the exception of one severe gale, the month of February has been unusually quiet, and that the temperature has been again above the average in all parts of the country.

ABERDEEN DISPENSARY.

AT the annual meeting of the managers of this institution, it was stated that the financial position, for the present year at least, was satisfactory, there being a clear balance to the good of £130 or thereby.

MEDICAL APPOINTMENT AT CATHCART.

THE election of medical officer for the parish of Cathcart has been decided by voting. The candidates were Drs. Ritchie and Brown. For the former there were 201 votes, and for the latter 185, or a majority of 16 for Dr. Ritchie.

MEASLES IN SCOTLAND.

MEASLES is still prevalent in many parts of Scotland. In Edinburgh, however, the widespread epidemic is well abated. At Prestonpans, the public school has been closed for a fortnight, owing to the prevalence of the disease.

EDINBURGH UNIVERSITY.

THE winter session, which began earlier than usual, terminates on Friday, March 21st. There will then be a busy time with first and second professional examinations in medicine and pass-examination in arts, in order that the ground may be cleared for the tercentenary celebration in the third week of April.

EDINBURGH STUDENTS' UNION.

THE steps being taken in Edinburgh to found and maintain a Students' Union, and the details of which were given in last week's JOURNAL, were on Saturday approved and homologated by a crowded meeting of students. Various students urged the necessity for immediate action in the matter of raising money, and indeed a considerable sum has already been promised. If the appeal be prosecuted as vigorously and as variously as was proposed on Saturday, there can be little doubt of the proposed sum of £12,000 being speedily realised.

ABERDEEN PHILOSOPHICAL SOCIETY.

AT a recent meeting of this Society, Professor Stephenson read a most interesting and important paper on educational over-pressure. He maintained that sufficient data are wanting to enable us to form a correct opinion on the question. The amount of work to be done at home by children is one of the factors that leads to overpressure. Dr. Stephenson insisted that a medical officer ought to be attached to each school-board, and that he should see not only to the efficiency of the hygienic conditions of the schoolrooms, but also to the health of the children. The State steps in to prevent children after school age from being employed in factories, unless they are physically fit for it, and there can be no question that medical knowledge is as essential for the school as for the factory.

THE INTERNATIONAL HEALTH EXHIBITION.

FULLY realising the importance of the forthcoming International Health Exhibition at South Kensington, and being of opinion that many of the industrial and scientific efforts of Glasgow and its surrounding districts bear upon the improved health and comfort of the people, a meeting has recently been held in Glasgow of those interested in the matter. It was presided over by the Lord Provost, and was very largely attended. It was decided that Glasgow should take part in the exhibition, and an influential committee was appointed to promote its objects and to advise with intending exhibitors.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

THE prolonged and varied discussion at the Glasgow Pathological Society, on Albuminuria, has, perhaps, of late rather over-shadowed the meetings of the other societies, but the cases recently brought before the Medico-Chirurgical Society for observation and discussion have been of great interest and importance, especially to surgeons. The first was that of a boy who had been affected with complete paraplegia, motor and sensory, and on whom trephining of the spine was performed, with the result of a complete cure. Two other were patients who suffered from fracture of the patella, and on whom suturing of that bone had been successfully performed. In one of these, a new method of lengthening the muscle was resorted to. A fourth case was one from whom the right kidney was extirpated on account of disease, and who is now quite well. All of these patients had been under the care of Dr. William Macewen, Surgeon to the Royal Infirmary, and, in introducing them to the notice of the Society, the remarks made by that gentleman added materially to the interest attaching to these cases.

THE TEACHING OF THE DEAF AND DUMB.

WE are glad to see that the School Board of Glasgow have been prevailed upon to take some steps for providing education for the deaf and dumb in the city. The Education Act does not directly provide for their tuition, but there can be no doubt that the spirit of the Act entitles them to undertake the work, and relieve parents of the poorer classes of an expense that they cannot well meet. We observe that there has been considerable discussion as to the best system of education suited to these unfortunate children, and while it is very right that the whole matter should be remitted to a committee for consideration, it is to be hoped that it will not be forgotten that the weight of evidence and experience is strongly in favour of what is now known as the oral system, and which has proved so successful in the School Boards of London, Leeds, Sheffield, and Greenock.

THE GLASGOW ROYAL INFIRMARY.

IT is with considerable regret we hear that there is again some friction showing itself in the management of this hospital, and that it has arisen, in a great measure, from the attitude taken up by the chairman of the managers in reference to what must be regarded as a matter on which medical men should be the best judges. We refer to the question of the number of visiting physicians to the infirmary. Taking advantage of a vacancy which has occurred through the unfortunate illness of one of the present staff, the chairman is desirous of permanently curtailing the number of indoor physicians by not filling up the present vacancy. The medical members of the committee do not consider that it would be for the advantage of the hospital to act in this way; and when we mention that this is the view of men of such standing as Professors Gairdner and Cleland, we consider that the committee should not act hastily in the decision they may come to in the matter.

ROYAL MATERNITY AND SIMPSON MEMORIAL HOSPITAL.

THE annual meeting of the supporters of the Royal Maternity and Simpson Memorial Hospital, Edinburgh, was held in the institution on Tuesday, and was well attended; it was presided over by George Harrison, Esq., Lord Provost of Edinburgh. The report submitted showed that the work of the hospital had gone on quietly and satisfactorily during the past year. During that time, 246 patients had been treated in the wards of the hospital, this having exceeded the previous year by thirty; while the outdoor patients who had been attended during their confinement had increased from 446 in the previous year to 510 last year. As showing the value of the hospital as a training establishment, it was pointed out that forty-two nurses had received instruction in the wards; these came from all parts of Scotland, and a few of them came from England. The committee of ladies reported very favourably on the manner in which the house had been managed under the superintendence of the matron. Financially, the report was scarcely so favourable, the expenditure having amounted to £814, and the ordinary income only to £[illegible] 6s. 6d., showing a deficit of about £229. The deficit has, however, been met by means of a special donation, and from a legacy amounting to £430 which had been received. The chairman, in moving the adoption of the report, spoke highly of the benefits derived from the institution by the poor, the students, and the nurses; and urged on those present to interest their friends in the aims of the hospital. Other leading citizens took part in the proceedings. The medical board, the retiring directors, the ladies' committee, and other officials, were then reappointed. At present, the staff of the hospital consists of Professor Simpson and Drs. Keiller, Angus Macdonald, and Halliday Croom.

THE SURGICAL TREATMENT OF CEREBRO-SPINAL LESIONS.

On the evening of the 6th instant, Dr. William Macewen gave a clinical demonstration, in his wards at the Glasgow Royal Infirmary, to the members of the Southern Medical Society, on cerebro-spinal lesions, and their surgical treatment. Fourteen examples of such treatment were presented, and eleven patients shown who had recovered from various cerebral and spinal affections under operative interference. The cases comprised compression of the brain from hæmorrhage in various parts, abscess of the brain and its membranes, epileptiform seizures from tumour of the dura mater, hemiplegia, and paraplegia. Cerebral localisation of function guided the operator to particular lesions, and so successfully, that operative measures were invariably followed by good results. In the majority of the cases, Dr. Macewen employed reimplantation of bone to hasten the cure, and with success. The demonstration excited the greatest interest among those present, and all congratulated Dr. Macewen on his cases; for it was apparent that in his hands the prudent and judicious employment of the trephine, under the guidance of cerebral localisation of function, and backed by rigid antiseptic precautions, had undoubtedly saved many of the patients' lives.

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IRELAND.

VACCINATION.

According to the returns of vaccination received for the fourth quarter of 1883, there were 23,335 persons successfully vaccinated; in 2,866 cases the operation was postponed, and 118 children were reported as unsusceptible to the operation. The deaths of 1,517 unvaccinated children under three months' old were registered during the quarter, making a total of 27,836 children, with regard to whom particulars as to vaccination were ascertained.

WATERFORD DISTRICT LUNATIC ASYLUM.

The forty-ninth annual report of this institution shows that 69 cases were admitted during the past year. Of these, 51 were first admissions —a number below the average—and 18 readmissions. At the commencement of 1883, there were 286 patients in the asylum, and, adding those admitted, shows a total of 355 under treatment during the past twelve months. Twenty-eight were discharged recovered, and 18 as improved. The deaths amounted to 23. The total expenditure was £6,523 1s. 2d., or £171 4s. 10d. less than the year preceding.

POST MORTEM EXAMINATIONS IN HOSPITALS.

An inquest was lately held in St. Vincent's Hospital, Dublin, on the body of a young woman who died of cardiac disease while under treatment for that affection there. The object of an inquest is generally understood to be, we believe, to ascertain the cause of death. In this case, however, the cause was known, and its exact nature had been ascertained by a *post mortem* examination made by the physician under whose care the patient had been. Yet an inquest was held, because the father of the deceased complained to the coroner that a *post mortem* examination of her body had been made, contrary to his desire. Whether such is the proper mode of seeking a legal remedy in such cases we cannot say, nor are we concerned with the rule of the hospital in question, that *post mortem* examinations should not be held in any case except by consent of the relatives of the deceased. Our only object in referring to the inquiry at all—out of which the physician, who took all the responsibility on himself, came with credit—is to call attention to an extraordinary remark the coroner is reported to have made. He is stated to have said that "he had no guarantee that science would be advanced one jot by the holding of a *post mortem* inquest by any individual." That such a statement could be made by any educated man is almost incredible.

THE NORTH DOWN CORONERSHIP.

At a meeting of the Newtownards guardians held last week, the letter received from the Local Government Board, with reference to Dr. Parke's retention of the office of coroner and that of medical officer of the workhouse was under consideration. The Local Government Board stated that they were of opinion that it was not a satisfactory arrangement that a medical officer who had charge of a workhouse infirmary and fever-hospital should hold another office, the duties of which must take him frequently to a distance from the workhouse. Finally, they requested the guardians to inform Dr. Parke that, if he undertook to perform duties which are inconsistent with proper and regular attendance on the sick poor in the workhouse, he must resign the appointment of medical officer. After considerable discussion, the following was adopted, viz., "That the board of guardians of the Newtownards union having, at a special meeting summoned for the purpose, fully considered the letter addressed to them by the Local Government Board on the 22nd February last, desire to state, for the information of the Local Government Board (1) that the board of guardians do not pay Dr. Parke for his entire time; (2) that, since his appointment as medical officer of the union, fourteen years ago, Dr. Parke has discharged the duties of his office to the entire satisfaction of the guardians, and to the advantage of the sick poor; that he was elected to the coronership at the end of last year, since which period no change in his efficiency has taken place; and (3) that the guardians do not consider that Dr. Parke has accepted any office inconsistent with the efficient discharge of his duties as medical officer of the union."

ROYAL COLLEGE OF SURGEONS.

An ordinary meeting of the Council of the College was held on Thursday, the 13th instant. The minutes of the ordinary Council on the 14th ult. were read and confirmed. A report from the President and Vice-Presidents, on the necessary arrangements for the meeting of the Fellows and Members to be convened for Monday, the 24th instant, at 2 o'clock, was presented. In accordance with the usual custom, it was determined that all propositions to be put to the meeting on that day must be handed in writing to the President previously, with the names of the proposer and seconder. A letter was read from Professor Flower, resigning his appointment as Conservator of the Museum. His resignation was accepted, with an expression of regret at his loss, and at the same time of appreciation of the eminent and valuable services he had rendered during his period of office, extending over twenty-two years. It was referred to the Museum Committee to consider if any, and, if so, what, alterations should be made in the conditions of the office; and to report to the Council thereon.

Bequests and Donations.—Mr. John Worrall Walker, of Hawkhurst, bequeathed £1,500 to the Manchester Royal Infirmary and Dispensary, £1,500 to the Salford and Pendleton Royal Hospital and Infirmary, and £1,000 to the Hospital for Incurables, Mouldeth Hall, near Manchester, all payable on the death or marriage of his widow.—Mr. Charles Curtis, of Plaistow, bequeathed £1,000 to the London Hospital.—"A Friend in Yorkshire" has given £1,000 to the National Hospital for the Paralysed and Epileptic.—Mr. Jas. Edwards, of Cavendish Row, Dublin, bequeathed £500 each to the Mater Misericordiæ Hospital, the Jervis Street Hospital, and the Adelaide Hospital.—Miss Harriet Helena Mercy Barber, of Kingston-upon-Thames, bequeathed £300 each to the Cancer Hospital and the Hospital for Consumption and Diseases of the Chest.—"H. M." has given £500 to the Hospital for Women.—Mr. John Griffiths has given £250 to St. Mary's Hospital, Paddington.—Mr. John Bartholomew, of Bishop's Road, Victoria Park, bequeathed £100 to the City of London Hospital for Diseases of the Chest, £50 to Queen Adelaide's Dispensary, and £50 to the German Hospital.—Mr. Charles Cooper, of Bovington, bequeathed £100 to the Hemel Hempstead Infirmary.

THE MEDWAY UNION AND THE CONTAGIOUS DISEASES ACTS AT CHATHAM.

In the Journal of March 1st we noticed, under the head of Parliamentary Intelligence, that Mr. Cavendish Bentinck asked the President of the Local Government Board whether he had received a report from Mr. Buchanan relating to the present state of contagious diseases at Chatham. Sir C. Dilke replied that the report had been received, and that he had seen it, but that it went outside the question of Poor-Law Administration. He did not think it was of a nature to receive general circulation, but he would be happy to let the right hon. gentleman (Mr. Bentinck) see it himself if he desired to do so.

We have received a copy of this report from Mr. Walter Buchanan, Medical Officer of the Medway Union. It was written at the request of the Board of Guardians, who wished for information "on the subject of the suspension of the compulsory clauses of the Contagious Diseases Acts as experienced at Chatham."

Mr. Buchanan states that, having been connected with the Medway Union for many years, he can speak from experience of the disease before the Acts, during their operation, and after their virtual repeal. We make the following quotations from his report.

"Before the Acts were enforced, the workhouse contained four foul wards, containing accommodation for fourteen cases of venereal disease in each sex. These wards were always full of the most distressing and loathsome cases, some of which I shall always remember, literally rotting with disease. In addition to this, during the latter part of the day, no respectable person could walk between the Sun Pier and Hammond Hill, that part of the street being infested with prostitutes of the most troublesome character."

"During the operation of the Acts, only five cases of venereal disease in men were admitted in twelve years. The condition of the town improved, the women who infested the streets disappeared, and with them the drunkenness which always accompanies this evil condition, brothels were broken up, and no streets could have become more ruly in so short a space of time."

"Since the repeal of the compulsory clauses we are occasionally admitting these cases; many have been sent away, having no room for them. Outside the workhouse," says Mr. Buchanan, "and as private patients, therefore, the number of cases on my books is about twelve, some married men, married women, young girls, and boys. I have one little girl, aged 14, with two syphilitic ulcers; two boys, aged 15, with gonorrhœa, attending at my surgery; and, during the past six weeks, four women have been delivered of syphilitic children, and two others were brought with gonorrhœal ophthalmia."

"With regard to Chatham, it is teeming with prostitutes, many married women among them. The town, especially the Military Road and the New Road, is most disorderly. Three localities in the town consist of bad houses."

Mr. Buchanan gives the following fact, communicated to him by a medical friend. "A bricklayer's daughter, aged 17, contracted the disease, and communicated it to two boys, aged 12; these boys communicated it to seven girls, three of whom he is attending, under the age of 13."

This report by Mr. Buchanan shows well the effects of uncontrolled prostitution at Chatham. It is an echo from that place of the outcry which has come from Plymouth, Portsmouth, Aldershot, and other towns which have been accustomed to the tranquility and order which has prevailed through the protection afforded them by the operation of the Contagious Diseases Acts. The inhabitants of these towns are, as well they may be, startled and disgusted at the effects which have so rapidly followed the reintroduction of free trade in vice which has been thrust upon them by the present Government.

The Acts have never been repealed, and the suspension of the compulsory clauses is, without doubt, unconstitutional. It is well known that the four members of the Government who have to administer the Acts, and who understand them thoroughly, are strongly in their favour; we allude to Lord Hartington, Lord Northbrook, Sir W. Harcourt, and Mr. Osborne Morgan. The Government virtually annulled the Acts in consequence of a majority on Mr. Stansfeld's abstract resolution that the compulsory examinations were undesirable, although not a single member voting with him represented a district where the Acts were in force. They would not even wait for a vote to be taken on the estimates, when it was at least highly probable that the majority would have been reversed. And now Sir Charles Dilke, in answering Mr. Cavendish Bentinck, says that the Medway Union Memorial is "outside the question of Poor-Law administration." If this be so, it is desirable that the guardians of the Medway Union should know within what department of administration the question does come, not only for their own information, and to assist them to preserve order in their town, but to promote, as far as may be, the rescue of these wretched victims from the effects of a cruel and fanatical agitation.

THE MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

SICK-PAY ASSURANCE WITHOUT ANNUITY.

The Committee of this Society have, after careful consideration, and laying the whole question before their actuary, determined to add to the scheme a further branch, scarcely contemplated at the outset; namely, a system enabling members who so desire to contribute for sickness-pay alone, without combination with an annuity. This has been decided upon from a wish to meet the views of numerous correspondents, and a desire to make the operations of the Society as elastic and well adapted to the wants of intending members as possible, and with a further view to avoid the exclusion from membership of gentlemen who may possibly find the present system inconvenient or oppressive. It must not, however, be inferred from the course adopted that any doubts exist as to the preferable, and, broadly speaking, more beneficial method—which is undoubtedly that of replacing sickness-pay by an annuity at a given age.

The chief consideration which led to the original adoption of the combined principle was the extreme risk and uncertainty of undertaking contracts for sickness-pay during the whole of life, and the consequent necessity of fixing a period when it should cease. Nothing has occurred to modify this view; and it is not the intention now, or at any future time, to undertake payment for sickness in old age. It should, therefore, be fully understood that, under the new Table, the insurance for sickness-pay must in all cases cease at the age of 65, and that members desiring a more permanent provision should avail themselves of the annuity. While there is no desire to force such provision against the wishes of those who have the undoubted right to choose, it is necessary that the comparatively temporary nature of the assurance for sickness-pay only should be fully understood from the outset, and should not be made the foundation of a grievance later on. Another reason for the adoption of the combined system was the counterpoise it secured for the two funds; inasmuch as it may be fairly assumed that lives presenting excessive sick-experience would, by their comparatively early termination, materially assist the annuity-fund, while the converse would hold good, and, probably, the heavier claimants for annuities would, from health above the average, have afforded compensating relief to the sickness-fund. This, however, is a minor matter, and has been provided for by a slight increase in the sickness-assurance rates when taken separately from an annuity. The following table gives the necessary payments at each age.

Amount payable per quarter to assure the following sums in sickness. All sick-pay and premiums cease at age 65, and the full amount is payable for the first six months of protracted illness, and one-half for the remainder of the same attack of sickness.

Age last Birthday.	£2 2s. per week.	£3 3s. per week.	£4 4s. per week.
20	0 15 4	1 2 11	1 10 7
21	0 15 6	1 [illegible]	1 11 0
22	0 15 9	1 3 7	1 11 6
23	0 16 2	1 4 2	1 12 [illegible]
24	0 16 5	1 4 7	1 12 10
25	0 16 9	1 5 2	1 13 [illegible]
26	0 17 1	1 5 8	1 14 1
27	0 17 [illegible]	1 6 2	1 14 10
28	0 17 10	1 6 9	1 15 8
29	0 18 4	1 [illegible]	1 16 7
30	0 18 9	1 8 0	1 17 6
31	0 19 1	1 8 8	1 18 2
32	0 19 8	1 9 [illegible]	1 19 [illegible]
33	1 0 1	1 10 0	2 0 1
34	1 0 6	1 10 9	2 1 0
35	1 1 1	1 11 7	2 [illegible] 1
36	1 1 7	1 12 [illegible]	2 [illegible]
37	1 2 2	1 1[illegible]	[illegible] 3 4
38	1 2 10	1 14 [illegible]	[illegible]
39	1 3 [illegible]	1 15 1	2 6 10
40	1 4 0	1 16 0	[illegible] 0
41	1 4 8	1 17 0	2 9 [illegible]
42	1 [illegible] 4	1 18 [illegible]	[illegible] 10
43	1 [illegible]	[illegible]	[illegible] 12
44	1 6 10	[illegible] 0 [illegible]	[illegible]
45	1 7 8	[illegible] 1 [illegible]	[illegible] 4
46	1 8 [illegible]	[illegible] 10	[illegible] 1
47	1 9 [illegible]	[illegible]	[illegible] 18 10
48	1 10 [illegible]	[illegible] 8	[illegible] 0 10
49	1 11 4	[illegible] 0	[illegible] 2 8

There are one or two points on which some uncertainty seems to exist. One of these is as to the liability incurred by members. It cannot be too plainly stated that no responsibility whatever is incurred by members beyond the payment of their premiums, and even this they have power to determine at any time. Another matter is the rule stipulating that no payment shall be made for illnesses of less than a fortnight. The Committee, after taking expert opinion on the subject, have determined to recommend the first members' meeting, to which the rules will be submitted, to reduce this to one week. Doubtless before that time further amendments to the rules will suggest themselves; but, as the code printed some weeks back was put forward as the provisional basis of the Society, it is not intended to make any alterations in it until the opinion of the members is obtained in the ordinary and proper manner. In the meantime, however, full discussion of any points that may arise cannot fail to have a beneficial effect.

MEETING OF THE PROVISIONAL EXECUTIVE COMMITTEE.

A MEETING of the Provisional Executive Committee of this Society was held at 38, Wimpole Street, on Thursday, March 6th. The following members were present: Mr. Sibley, Surgeon-Major Evatt, Dr. Clibborn, Mr. Brindley James, Mr. Major Greenwood, Jun., Mr. Radley (Secretary); Mr. E. Noble Smith in the chair.

The minutes of the last meeting were read and passed.

The Secretary reported that letters had been received from Mr. J. Bain Sincock (Bridgwater), and Mr. Behrendt (Burringham), expressing regret that they were unable to attend.

The Secretary presented his report, showing that 300 members had joined, and that the receipts amounted to £185 7s. 2d. The report was received and adopted.

The Chairman stated that a letter had been received from Mr. Ernest Hart expressing his satisfaction at the progress of the Society, and making suggestions with regard to its further extension. It was unanimously decided to adopt Mr. Hart's suggestions.

As it had been decided, after consultation with the consulting actuary, Mr. Neison, to accept members for sick-pay only, who were unwilling to join for sick-pay and annuity combined, the Secretary recommended that the two funds be kept distinct, and that separate Tables be drawn and printed showing the rates for sick-pay only. This was duly proposed and unanimously carried.

A letter was read from Mr. Parsons (Ambleside) asking whether gentlemen retiring from practice, after becoming members of the Society, were open to receive the benefit of the Society. An answer was directed to be sent in the affirmative.

A communication was read from a correspondent who desired to know if members of the Army and Navy Medical Services, liable to be called out of the country on duty, would be eligible as members of the Society. It was decided to reply that the Society was at present too young to undertake the risks this would involve.

The question of holding a general meeting in London was discussed, and its further consideration was deferred.

A discussion arising out of questions connected with proposal-forms referred to the meeting brought the proceedings to a close.

COLLECTIVE INVESTIGATION INTO THE ORIGIN OF ACUTE PNEUMONIA.

THE inquiry upon pneumonia—the first subject undertaken by the Collective Investigation Committee—has already elicited nearly a thousand sets of replies from about five hundred different observers. The points especially selected for inquiry have reference, it will be remembered, to the epidemic prevalence of pneumonia, its asserted communicability, pythogenic origin, association with other diseases, inflammatory or zymotic, as well as to the treatment of the affection, its modes of onset and rate of mortality. Looking to the large number of replies, and to the fact that the investigation is restricted to examples of acute primary pneumonia, it can hardly be that an inquiry of such scope, in which so many competent workers have been engaged, should fail to supply valuable information upon the chief questions at issue.

The forthcoming volume of the Reports will be devoted mainly to this subject. It will contain a tabular statement setting forth, under their several headings, the replies received in reference to the Committee's memorandum issued March 25th, 1882. These tables will, in fact, represent and embody the total experience which has been collected on this subject, and will be available for analysis in their original shape; but, for the sake of those who want the leisure thus to consult the Tables directly, the chief results will be summarised in some form easy of reference. In addition to the Tables and their analysis, some further account will be given of epidemic pneumonia; and reference will be made to the literature upon this branch of the subject, British and foreign. Some meteorological observations bearing upon the relative frequency of pneumonia and bronchitis will also be included.

At the time when the card-forms upon pneumonia were drawn up, it was felt that, for obvious reasons, a multiplicity of questions should be avoided; and now, as the business of collecting and arranging the material proceeds, one or two points of importance suggest themselves in regard to which our information is defective. There is one question in particular, concerning the etiology of pneumonia, which has been thus overlooked, an error which it may not be too late even now to remedy. It has reference to the distinction between the pneumonia which is due to direct exposure, and that which is of more obscure origin. It is fully recognised that, in a certain proportion of instances, the apparent cause of acute primary pneumonia is not exposure, but bodily fatigue, mental strain, alcoholic intemperance *per se*, or, it may be, unwholesome conditions such as are associated with enteric fever, diphtheria, and tonsillitis. Many attempts have been made in the past to classify the disease upon this basis, separating the examples of pneumonia due to exposure from those due either to any of the causes just mentioned, or to some cause unascertained. We would deal with our present material in like manner.

With this end in view, a circular is to-day issued upon this special point to those who have already replied to the other questions, asking if they can specify more distinctly any definite causes of pneumonia among the cases reported, and replies to this question will be welcomed from those also who have not yet reported cases. It is hoped that answers will be returned at once, in order that the publication of the Report may not be delayed.

THE CREMATION SOCIETY OF ENGLAND.

THE following circular has been issued by this Society. "The council of the Cremation Society of England purchased, in the year 1878, a freehold site at St. John's, Woking, in Surrey, especially adapted by position for the purpose, and erected thereon a building, with an apparatus of the most approved kind for effecting cremation of the dead. They next tested it by experiment, and found that it accomplished the purpose required without occasioning nuisance of any kind. Since that time the place has been maintained in perfect order, but has not been used, owing to a doubt raised, soon after the date referred to, as to the legality of adopting the process at present in this country. A recent decision, however, of Mr. Justice Stephen declares that the cremation of a dead body, if effected without nuisance to others, is a legal proceeding. Under these circumstances, the Cremation Society feel it a duty to indicate, without delay, those safeguards which they deem it essential to associate with the proceeding in order to prevent the destruction of a body which may have met death by unfair means. They are aware that the chief practical objection which can be urged against the employment of cremation consists in the opportunity which it offers, apart from such precautions, for removing the traces of poison or other injury which are retained by an undestroyed body. The following, therefore, are the conditions on which the employment of the crematorium will alone be permitted by the Council. 1. An application in writing must be made by the friends or executors of the deceased—unless it has been made by the deceased person himself during life—stating that it was the wish of the deceased to be cremated after death. 2. A certificate must be sent in by one qualified medical man, at least, who attended the deceased until the time of death, unhesitatingly stating that the cause of death was natural, and what that cause was. 3. If no medical man attended during the illness, a necropsy must be made by a medical officer appointed by the Society, or no cremation can take place. These conditions being complied with, the council of the Society reserve the right in all cases of refusing permission for the performance of the cremation, and, in the event of permitting it, will offer every facility for its accomplishment in the best manner.—Signed, on behalf of the Executive Council, WM. EASSIE, C.E., Honorary Secretary, to whom communications may be addressed, 11, Argyll Street, Regent Street, W., March, 1884." We have referred to this circular in the leading article on cremation in the present number of the JOURNAL.

FLATULENT DYSPEPSIA.—Dr. Bruen of Philadelphia recommends a pill containing five grains of bicarbonate of soda and five drops of oil of eucalyptus, two hours after meals, for the relief of flatulence.

ATTAR of rose, one minim to the drachm of iodoform, will, it is said, get the better of the odour of the latter drug.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 20th, June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881. FRANCIS FOWKE, *General Secretary.*

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council-Room of Exeter Hall on Wednesday, the 9th day of April next, at 2 o'clock in the afternoon. FRANCIS FOWKE, *General Secretary.*

161A, Strand, London, March 6th, 1884.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
V. Syphilis, acquired.
Va. ,, inherited.
VI. Acute Gout

URGENT.—*The Committee needs 150 more cases of Pneumonia, and hopes that they will be sent in as soon as possible.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
September, 1883. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH. Meetings are held on the first Friday in every month, at half past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

METROPOLITAN COUNTIES BRANCH: HERTFORDSHIRE DISTRICT.—It is proposed to hold a meeting of the above district at Hertford, one day towards the end of March. Members desirous of reading papers are requested to send the titles as early as possible to the undersigned. R. R. LLOYD, St. Albans, Honorary Secretary.

SOUTH WALES AND MONMOUTHSHIRE BRANCH. The spring meeting will be held at Llanelly, on Wednesday, April 2nd. Further particulars in circulars. Members wishing to read papers or make communications are requested to send titles of the same to Dr. Sheen, Cardiff, not later than March 12th, in order that they may appear in the circulars. ALFRED SHEEN, M.D., D. ARTHUR DAVIES, M.B., Honorary Secretaries.—February 26th, 1884.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT. A meeting of the above district will be held in the Army Medical Department Mess-Room, C. and I. Corps Barracks, Woolwich, on Friday, March 28th, at 4 P.M., Sir James Hanbury, K.C.B., A.M.D., in the chair. The dinner will take place at the King's Arms Hotel at 6.30 P.M. Charge 6s. 6d., exclusive of wine. To facilitate the arrangements, gentlemen who intend to dine are particularly requested to signify the same to James Powell, Esq., Herbert Hospital, Shooter's Hill, Woolwich, not later than March 26th. (Woolwich Arsenal Station, S.E.R., is the nearest station to the place of meeting.) All members of the South Eastern Branch are entitled to attend this meeting and to introduce friends. Papers to be read: G. Pollock, Esq., The Use of Opium as an Aid to Surgery; J. V. Bell, M.D., A Case of Perineal Section for Foreign Body; F. B. Jessett, Esq., Two Cases of Cancer of the Lower Jaw; J. Braxton Hicks, M.D., The Influence of Bodily Movements on Septic Absorption.
A. W. NANKIVELL, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS. A conjoint meeting of the above districts will be held at the Grand Hotel, Brighton, on Tuesday, March 25th, at 3.30 P.M. Dr. Mackey will preside. Dr. Sturges, physician to the Westminster Hospital, will introduce the subject of the Collective Investigation of Disease, with special reference to Acute Pneumonia. Dr. Bagshawe, Dr. Treutler, Dr. Roberts, Dr. Fuller, and some Brighton members have promised to take part in the discussion, if possible. The Chairman will read Brief Notes as to some New Remedies, and will show Cases of Rare Diseases in Children. Dinner at 6.0 P.M. Charge 6s., exclusive of wine. T. JENNER VERRALL, G. B. COLLETT, Honorary Secretaries of above districts, 95, Western Road, Brighton. March 4th, 1884.

SOUTH EASTERN BRANCH: WEST SURREY DISTRICT. The next meeting of the above will be held at the Red Lion, Dorking, on Thursday, March 27th, at 3.30 P.M. Members desirous of making any communications, or reading papers, are requested to write to the Honorary Secretary without delay.—A. ARTHUR NAPPER, Honorary Secretary, Broad Oak, Cranleigh.

SOUTH-EASTERN BRANCH.—A meeting of the Executive Council of this Branch will be held at the Bridge House Hotel, London Bridge, on Thursday, March 20th, at 3.15 P.M.—CHARLES PARSONS, M.D., Honorary Secretary, 2, St. James's Street, Dover.—March 20th, 1884.

NORTH WALES BRANCH. The next intermediate meeting will be held in Denbigh during the last week in March. Members intending to read papers are desired to signify their titles to the Secretary on or before Tuesday, the 11th instant, in order that they may be included in the circular convening the meeting.—J. LLOYD-ROBERTS, Honorary Secretary, Denbigh. March 4th, 1884.

WEST SOMERSET BRANCH.—The Spring Meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 3rd, at 5 o'clock. The subject settled by the Council to be discussed after dinner will be "Chorea," when answers will be invited to the following questions:—"What is your experience as to its pathological anatomy, with special reference to concomitant heart-disease?" "What treatment have you found most useful?" Dr. Long Fox, of Clifton, has promised to open the discussion. The election of a representative of the Branch on the Council of the Association, to hold office for one year from the second day of the next Annual Meeting of the Association, should now take place, in order that his name may be returned within the prescribed time. A copy of the Articles and By-Laws of the Association, as lately altered, will be submitted with a view to the Branch having its By-Laws brought into accordance with the altered Articles and By-Laws of the Association. Members having any communications for the meeting, are requested to send early notice of the title to W. M. KELLY, M.D., Honorary Secretary.

LANCASHIRE AND CHESHIRE BRANCH.—It is proposed to hold an intermediate meeting at Wigan, at the end of March or beginning of April (the exact date cannot be fixed until next meeting of Council). Members desirous of reading papers, or of making communications, are requested to send their names to the Honorary Secretary without delay.—CHARLES E. GLASCOTT, M.D., Honorary Secretary, 23, St. John Street, Manchester.

BRITISH MEDICAL ASSOCIATION.

FIFTY-SECOND ANNUAL MEETING.

THE Fifty-second Annual Meeting of the British Medical Association will be held at Belfast, on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1884.

President: A. T. H. WATERS, M.D., F.R.C.P., Senior Physician to the Royal Infirmary, Liverpool.

President-elect: JAMES CUMING, M.D., F.K.Q.C.P., Physician to the Royal Hospital, Belfast.

President of the Council: C. G. WHEELHOUSE, F.R.C.S., Senior Surgeon to the General Infirmary, Leeds.

An Address in Medicine will be delivered by Sir ANDREW CLARK, Bart., M.D., Physician to the London Hospital.

An Address in Physiology will be delivered by PETER REDFERN, M.D., Professor of Anatomy and Physiology in Queen's College, Belfast.

An Address in Obstetric Medicine will be delivered by GEORGE H. KIDD, M.D., Consulting Obstetric Surgeon to the Richmond and Hardwick Hospitals, Dublin.

SECTION A. MEDICINE.—*President:* J. W. T. Smith, M.D. *Vice-Presidents:* G. F. Duffey, M.D., Dublin; Alexander Davidson, M.D., Liverpool. *Secretaries:* Richard Ross, M.D., Belfast; Thomas Barlow, M.D., London.

SECTION B. SURGERY.—*President:* Sir William MacCormac, London. *Vice-Presidents:* J. K. Maconchy, M.B., Downpatrick; J. W. Browne, M.D., Belfast; John Chiene, F.R.C.S., Edinburgh. *Secretaries:* John Fagan, F.R.C.S., Belfast; Bennett May, M.B., Birmingham.

SECTION C. OBSTETRIC MEDICINE.—*President:* Clement Godson, M.D., London. *Vice-Presidents:* Sir William Millar, M.B., Londonderry; William Stephenson, M.D., Aberdeen. *Secretaries:* W. Walter, M.D., Manchester; Brice Smyth, M.B., Belfast.

SECTION D. PUBLIC MEDICINE.—*President:* Charles Cameron, M.D., M.P. *Vice-Presidents:* John F. Hodges, M.D., Belfast; David Davies, M.R.C.S., Bristol. *Secretaries:* H. S. Purdon, M.D., Belfast; Shirley Murphy, M.R.C.S., London.

SECTION E. OPHTHALMOLOGY.—*President:* W. A. McKeown, M.D., Belfast. *Vice-Presidents:* W. A. Brailey, M.D., London; Edgar Browne, M.D., Liverpool. *Secretaries:* Joseph Nelson, M.D., Belfast; R. N. Hartley, M.B., Leeds.

SECTION F. PHYSIOLOGY AND PATHOLOGY.—*President:* W. S. Greenfield, M.D., Edinburgh; *Vice-Presidents:* J. J. Charles, M.D., Cork; D. C. McVail, M.D., Glasgow. *Secretaries:* A. H. Young, F.R.C.S., Manchester; T. Sinclair, M.D., Belfast; R. S. Anderson, M.D., Galway.

SECTION G. THERAPEUTICS.—*President:* *Vice-Presidents:* Matthew Hay, M.D., Aberdeen; W. Whitla, M.D., Belfast; Walter Smith, M.D., Dublin. *Secretaries:* George Gray, M.D., Castlewellan; W. Murrell, M.D., London.

SECTION H. PSYCHOLOGY. —*President:* G. H. Savage, M.D., London. *Vice-Presidents:* *Secretaries:* A. S. Merrick, M.D., Belfast; S. Rees Philipps, M.D., Exeter.

TUESDAY, JULY 29TH, 1884.

2 P.M.—Meeting of Council.
3 P.M.—General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M.—General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, JULY 30TH, 1884.

9.30 A.M.—Meeting of Council.
11.0 A.M.—Second General Meeting. Address in Medicine.
2 to 5 P.M.—Sectional Meetings.

THURSDAY, JULY 31ST, 1884

9.30 A.M. Meeting of Council.
11 A.M. Third General Meeting. Address in Physiology.
2 to 5 P.M. Sectional Meetings.
6.30 P.M. Public Dinner.

FRIDAY, AUGUST 1ST, 1884.

10 A.M. Address in Obstetric Medicine.
11 A.M.—Sectional Meetings.
2 P.M.—Concluding General Meeting.

SATURDAY, AUGUST 2ND, 1884

Excursions.

FRANCIS FOWKE, *General Secretary.*

SPECIAL CORRESPONDENCE.

ITALY AND THE ITALIAN RIVIERA.—III.

Spezzia: its Site and Climate.—Pisa and the Lung-Arno; its Architectural Beauties and Sanitary Defects.—Rome; the Truth about Typhoid and Roman Fever.—Habits of Visitors.—Clothing, Food, and Personal Precautions.—To see Naples and not Die.

MR. ERNEST HART writes from Rome under date March 3rd: On my way to Rome from Genoa, after passing a day at Spezzia, we spent necessarily a day at Pisa. Of Spezzia I spoke briefly in my last letter. It is rising rapidly into favour as a wintering-place; its site is one of rare beauty, overlooking a vast bay, in which the Italian fleet rides easily at anchor. It is defended by lofty mountain chains, which, on the eastern side, are rich in marble quarries, looking due south, and mostly bathed in sunlight. Protected by its extended seaboard from extreme or rapid changes of temperature, offering facilities unequalled on this coast for sailing, boating, and riding; possessed recently of several well constructed, large, and clean hotels, having its English colony, church, and tennis-club, Spezzia is evidently a competitor among the health-resorts of the Italian Riviera which must now be seriously counted. Its climate is less mild, its sunshine less warming, its atmosphere more bracing than those of such towns as Cannes and Mentone; its shelter is less complete, and the air has a touch of sharpness during the winter, which mark it as more bracing but less suited for the tender and delicate invalids who need continuous summer warmth; while, for more robust constitutions, and for more eager convalescents, it offers peculiar temptations.

Pisa attracts by its exquisitely delicate and harmonious cathedral, its domed baptistery enriched with a marbled font and pulpit of thirteenth century by Nicolas Pisano, which, as "a document" in the history of the revival of sculpture, has not less singular interest than it has peculiar beauty; the leaning tower, and the historic Campo Santo, with its archaic but intensely earnest and pathetic frescoes; these lie altogether, and form one of the most instructive and beautiful groups of sculptured and painted monuments to be found in Italy, and, therefore, anywhere in the world. They belong to the first period of the renewal of art, and denote the sudden spring from Byzantine grotesqueness into classic freedom and beauty of form. But for Pisa as a health-resort I have no words of commendation; it belongs to a bygone period, when the Riviera del Levante e Ponente were alike inaccessible, and to British sojourners uninhabitable. The Arno here drags its sluggish and melancholy length through a long boulevard, of which the southern side is sometimes warm; but for the most part the life of the invalid here must be cabined and confined. The town itself has little of attraction, and the immediate surroundings are to foreign visitors not inspiriting or health-giving. The place is rainy, dull, decaying, the streets dark and cold. Pisa cannot hold its own for those seeking sunshine, warmth, pleasant views, walks, and rides, and to whom atmospheric conditions are of vital importance.

All roads lead to Rome, but the railroad carries you thither with singular slowness, and at hours arranged apparently so as to inflict the greatest amount of discomfort. The "express" between Rome and Pisa figured this year appropriately in the procession of lanterns at the Carnival; a paper train dimly lighted within, dragged by a tortoise, and conspicuously placarded "put on the break;" this was indicated as an improvement yet to be looked forward to, for it was inscribed, "the train of the future." Moreover, what is sarcastically described as "the express" and here typified, makes its journey at night. I shall not say anything here of Rome, except in its prosaic aspect of a resting-place for invalids, the inevitable goal, at some time, of every one who takes to himself from time to time the reasonable and wholesome privilege of a winter instead of a summer rest, and who seeks refreshment for the mind as well as for his vile body. It is so much the fashion for Englishmen to take holidays abroad just when the unrivalled beauties of their own peerless autumn scenery might well keep them at home, and attract all Europe, that travellers are apt to visit even Central and Southern Italy just when they are most full of their own peculiar dangers, in August and September; months when Scotland, Wales, and Ireland are more full of exquisite landscape effects, more lovely, and more healthy, than any other part of Europe. The Western Highlands, the coasts of Cornwall, Donegal, its rivers and its seaboard, the streams and mountains of Wales, are neglected when in the prime of their peerless loveliness for arid landscapes without shade, marshy plains giving off malarious exhalations, and ill-drained cities redolent of putrefactive stenches. Southern Italy should be visited in the winter and spring. But what of Rome? Where lies the truth between those who denounce it as a hot-bed of fever, the fertile mother of agues, and the lurking place of typhoid; and those who look to Rome for health, repose, and unforgettable periods of a vacation, which is in itself a new life and a new inspiration? I have more than once looked into the facts, and each time with the same result. Time, season, place of habitation, and individual habits have to be considered; and, eliminating exaggerations, and looking bare facts in the face, it will be evident that typhoid fever undoubtedly exists in Rome, and is as certainly from time to time contracted by visitors. There is, however, much less typhoid in proportion to the population than in Paris—0.95 per 1,000 in Paris, against 0.50 in Rome—less than in Florence, and much less than in Naples. It would be wearisome for me to go thoroughly into the figures. They were very well analysed in some papers published in the *Sanitary Record* last year, in which the whole basis of figures were given by Dr. Aitken—a competent, calm, and exact observer, and a patient student of figures and facts. I need not quote the analyses; but it is evident that those who speak of Rome as a city peculiarly infected by typhoid fever are out of court. Nor is it the fact that during the spring and winter months there is that prevalence of Roman fever, which has been for so many years the "bogey" with which travellers have been warned off from Rome. No doubt, great improvement has been made of late years. The Romans themselves, it may be said, are penetrated with the popular impression that "febbre" is the proper cognomen of every kind of chill, and of all respiratory or abdominal disorders resulting from it. Dr. Pantaleone, who has had a long lifetime of experience in Rome, broken only by years of honourable political exile in the past, tells me that, in his large experience, the great cause of mortality among the poor is acute pneumonia. This constitutes an enormous percentage of the fatal ailments. This is of interest, because it illustrates a real, and probably the chief, danger of the Roman climate to unwary visitors—the changes from the temporarily fierce heat of the sun to the chilly cold of the shade. The mortality from malarious fever in the whole population, which was in 1877 326, has fallen to 232. Rome is being rebuilt; wide streets are being pierced, such as the Via Nazionale, which is stretching from near the Esquiline Hill (railway-station) through the city, till it will shortly reach the quarter of the Vatican; the soil is being drained, and the physical conditions of the life of the poor—still wretched and unhealthy—are being ameliorated. Meantime, typhoid fever undoubtedly exists. There were, in all, eleven deaths recorded of typhoid and typhus fever last week in Rome. It exists just as it exists in other cities, and to a greater extent than in London. But whom does it attack? The Roman doctors, native and foreign, agree that the visitors suffer most, and especially those living in hotels. One or two of the most experienced of the practitioners in Rome have assured me that they hardly ever see a case in apartments, or among the better class of residents. My advice to visitors must be briefly summed up. Inhabit the highest and healthiest parts of the city—the quarter near the Porta Pia—where the drainage is relatively good, the air fresh, and where you are away from the labyrinths of defiled streets and the maze of old cloacæ and cessi which honeycomb the ground in the old parts of the city. If possible, choose an apartment in a new house (regardless of the picturesque), and having "cessi Inglese;" or go to an hotel, such as the Continental, which has a high situation, and good sanitary fittings. Unfortunately, candour obliges me to say that the cooking, food, and attendance were not up to the proper standard. It was alleged that the cause was temporary; I hope it may prove so.

The next rule which I urge is that English visitors, instead of contenting themselves, as they usually do, with a cup of poor coffee and a roll of spongy, cellular, and unsubstantial bread, should make their British protest against this senseless and heathenish practice, and eat a substantial English breakfast before starting on their day's work or "pleasure," which often is the hardest work done in Rome. A long morning is often spent by unfed and exhausted persons in the museums or in the forum (which is traversed by the huge Cloaca Maxima, now an elongated and dangerous cesspool, constantly supplied with putrefying filth), or about the Ghetto, inhaling bad odours and an air which must be peopled by billions of bacilli. Delicate girls, convalescents, weary-worn and gaunt men of business, pallid and emaciated clergymen, may be seen daily undergoing this dangerous experiment in pathology; and, ignorant of the risks which they voluntarily incur, they often take with them only a hasty, ill-cooked, unsuitable, and unnutritious meal, or "a make-shift" of some sort at a Roman confectioner's—seductive and sweet, but as food illusory—and then recommence their inquisition into those exquisite memorials of the past, which so often brighten the most obscure corners, the most forbidding courtyards, and the least hygienic streets and piazzas. Guides were even long possessed of the popular and dangerous misbelief that the Ghetto is one of the healthiest places of Rome; and they detain you for hours over the gratings of the Cloaca Maxima, which runs through the Forum, and often poisons all the air. Again, the visitor must always wear woollen clothing, and always carry on overcoat or wrapper, to be put on as he passes out of the sunshine. These precautions are not burdensome, they are important. We English are unaccustomed to the great changes of temperature which you will find in Rome. In going from one street to another, or from one side of the street to the other, or in going out of the sunshine into a church, chilled by such changes, exhausted by want of food and overfatigue, the stranger easily falls a victim to malarious, or typhoid, or any other bacilli which may be coming his way. The so-called Roman fever appears to be a peculiar, and as yet unclassed and imperfectly investigated form of febrile and zymotic infection, which, roughly and unscientifically speaking, lies midway between typhoid and remittent fever. Rome is doing much to free herself from the reproach of its prevalence; and it is already greatly declining. Meanwhile, the stranger who visits Rome in the healthy seasons, and who uses reasonable precautions suitable to the climatic and local conditions, may, I think, consider himself as safe as in Paris and Florence.

I have spent my week studying sanitary questions here, in connection with the forthcoming Health Exhibition of London. I am glad to say that the Ministers and the King, who received me last week in private audience, are deeply impressed with the importance of the subject. Professor Corradi, of Pavia, will be sent as a delegate to the South Kensington Exhibition. The Municipality of Rome has taken up my proposals with the most patriotic and earnest activity. A commission, which was appointed without any delay, is making arrangements to send to London archæological collections, illustrating the aqueducts, piscinæ, cloacæ, thermæ, etc., of ancient Rome, as well as objects, plans, and drawings of modern interest. Of Rome, more another day; for I am called away, and I must conclude this letter, which I am finishing in the more grateful and comforting warmth of the sunlight at Posilipo, on the bay of Naples. Former experience has taught me to avoid living in the town when visiting Naples. Posilipo, perched on a height and bathed by the sea, commands a near view of Naples, with which it is connected by tramcars, Torre del Greco, Vesuvius, Sorrento, Capri, and enjoys all day a vivifying warmth, which enables you to spend hours on terraces overhanging the sea, enjoying a landscape of myriad-sided interest and beauty. "See Naples and die" is a saying which has, of course, two edges. I should prefer saying that, in order to see Naples and not die, it is advisable to sojourn at Posilipo amid sea-breezes which blow away the infection of Naples.

ALEXANDRIA.

Organisation of the Medical and Sanitary Department in Egypt.—Difficulties of Sanitary Reform. The Royal Marines.

THE decree of the Khedive for the institution of the new Medical and Sanitary Department of the Egyptian Government has now been published; and its provisions completely reorganise the sanitary administration of the country. The following are the chief features of the scheme as given by the *Wakaieh-el-Masrieh*, the native official organ of the Government.

"This department will be attached to the Ministry of the Interior.

"All the physicians and sanitary officials will be under the direct orders of the Moodeer, who alone will be responsible for all that concerns public health, in each Moodereeyeh.

"The sanitary officials placed under the direct orders of the Moodeer are: the sanitary inspectors, the veterinary inspectors, the physician in chief, the physicians of sections and quarters, the druggists, the midwives, also the civil and military hospitals, with all that belongs to these establishments.

"The Moodeer has to inform the Ministry of the Interior of the sanitary arrangements that he has enforced in his district, and has to see that all the officials under his orders contribute to their execution.

"The Minister of the Interior only has the right to appoint or dismiss the sanitary officials; however, the Moodeer is allowed to appoint and dismiss the subordinate *employés* or to inflict upon them various disciplinary penalties.

"No person is authorised to exercise the profession of physician, of druggist, dentist, veterinary surgeon, or midwife, without having produced certificates or diplomas from known schools or universities, nor without having obtained authorisation from the Ministry of the Interior.

"The physicians who wish to serve in the army, must address a demand to the Minister of the Interior, who will transmit it to the Minister of War.

"The Governors of Cairo and Alexandria have to send every week, or oftener, if circumstances require, sanitary reports to the International Sanitary Board. Similar reports have to be forwarded by the Moodeer once a month. A consultative council will be appointed, composed of the Governor, the Wakeel, the Physicians-in-Chief, and Chemist-in-Chief of the Hospital of Cairo, of the Director of the School of Medicine and his Wakeel, of the Physician-in-Chief of the Army, and of the Chief Professor at the Veterinary School."

It appears that the attention of the department is also to be directed to legal medicine, which has never hitherto been systematically carried out in Egypt. Recent events, as may be expected, have somewhat delayed the practical development of the contemplated reorganisations; but it is to be hoped that when the political horizon clears, many of the proposed reforms in administration will be successfully achieved, and that their results will soon become apparent.

Sanitary reorganisation here has a host of difficulties to surmount, in consequence, chiefly, of the peculiar temperament of the inhabitants, and their rooted objections to innovations affecting their domestic affairs. This is so in all classes of the community, from those enjoying high social position, to the most abject of the fellaheen, all of whom have lived hitherto without enforced sanitary regulations, from the time when Pharaoh's court-physicians, Jannes and Jambres, withstood Moses, to the present day.

No small difficulty in the way of social, and especially sanitary, reforms is caused by the idea, fixed in the mind of every oriental, that any contemplated change by those in authority must be an attempt at oppression in some form, though perhaps guised as a benefit.

"Timeo Danaos et dona ferentes."

An illustration of this is now going on in Alexandria. There is a strike among the public carriage-owners and drivers, in consequence of an attempt to have the vehicles registered and numbered. They will not believe (although frequently and authoritatively informed to the contrary) that this can lead to any other result than the levying of a tax on each vehicle. Indeed, the oriental seems to possess an innate desire to pose as a victim of oppression. I remember a laughable instance of this in India when postal cards were first introduced. A native of good position invested in post-cards, and used them as note-paper for his correspondence, enclosing as many as the length of his letter required in an envelope; and complained of the excessive tax thus laid on letter-writing in having to use stamped paper, and to pay increased postage for the excess in weight.

The wounded from the recent battle of El Teb, who could not be removed, are being treated at the newly erected base hospital at Suakin. A further detachment of the Army Hospital Corps have proceeded from

Alexandria for duty there; and the sisters of the nursing staff who were attached to this division have also gone to the base-hospital at Suez to nurse the wounded. It is expected that, as soon as practicable, those cases which admit of removal will be transferred from Suez to the station-hospital at Cairo, as the accommodation and climate there will be preferable; and in a few weeks more, it will be unpleasantly hot at Suez.

The Royal Marines have been landed for duty here, in place of the troops sent on from this garrison to Cairo. The strength of troops now remaining here is 652, with a sick-rate of 61, or 9 per cent.; thus: enteric fever 2, other fevers 3, dysentery 1, venereal diseases 33, miscellaneous 22. The strength of Royal Marines on shore is 509, with the very small sick-rate of 4, or 0.7 per cent.; thus: pleurisy 1, chronic rheumatism 1, sprain 1, syphilis 1.

PARIS.

[FROM OUR SPECIAL CORRESPONDENT.]

Influence of Compressed Oxygen on the Development of Bacteria of Charbon.—Transfusion in Diabetes Mellitus.—M. Bert's Anæsthetic Method.—Estlander's Operation.—The Corporation of Marseilles and Scientific Publications.—Eulogies of Davaine and Broca.—Translation of Mr. Hutchinson's Work.—Prohibition of Use of Salicylic Acid in Food.—Prizes of the Société de Chirurgie.—Chair of Histology in Lille.—Quarantine at Marseilles.—The Saint Lazare Charity.

M. BERT has presented to the Académie des Sciences, a communication from M. Wosnessenki, in which he states that oxygen at a high tension acts as a deadly poison on the protoplasm of the bacillus of anthrax. Gradual increase of the tension of oxygen does not gradually lessen the vitality of the bacilli. During the first period, and before the tension of the oxygen reaches three atmospheres, the bacilli offer more resistance than at a normal tension; they present still less vitality when the tension is lessened by the influence of heat. The artificial alterations produced under increased tension give different results in thin and in thick layers. A thick layer increases the influence of surrounding conditions. At a temperature of 35° to 38° Cent. (95° to 100.4° Fahr.), development is much more rapid, and the virulence greater, when the layer is thick. At a temperature of 42° to 43° (107.6° to 109.4° Fahr.), development is slower in thin layers; likewise, the virulent properties barely exist.

M. Dieulafoy, in a communication to the Société Médicale des Hôpitaux, describes a case of diabetes mellitus which he treated by transfusion, with negative results. The patient was then allowed to eat only meat and gluten-bread. A complete absence of sugar in the urine resulted, and a large proportion of urea was present. The glycosuria in this case was evidently due to alimentation. The condition of the blood was normal.

M. Richet, at the Académie des Sciences, criticised M. Bert's supposed new anæsthetic method, which consists in administering a mixture of chloroform-vapour and air. He stated that he witnessed three operations; the patients, who were anæsthetised according to M. Bert's method, suffered from sickness, and two were violently excited at the onset. M. Richet personally tested it, and desisted, after one or two inhalations, in consequence of feeling suffocated.

The operation of resection of the ribs has been discussed at length at several of the recent meetings of the Société de Chirurgie. M. Berger, in a report on "deux cas de résections thoraciques", by M. Bouilly, stated that the operation had been performed five times in France; the result was one cure, three cases greatly improved, and one failure. The operation was performed on the five patients for the purpose of inducing a retraction of the thoracic walls. M. Berger, in one instance, resected five ribs. Böckel of Strasburg resected the pleura, and the suppurating area was left exposed; the operation was successful. The question of priority was raised, which is claimed by Roser, of Marburg, Konig and Simon of Heidelberg. Estlander of Helsingfors, in 1877, published *(Gazette de Finlande, Nordiskt Medicinískt Arkiv)* indications for performing this operation, which has since been known as Estlander's operation; but, in 1875, M. Letiérant, of Lyons, had published an observation containing the same indications that Estlander published two years subsequently. M. Berger stated that this operation had been performed twenty-six times; in four cases the results were unknown; among the twenty remaining cases were ten of recovery, five of considerable improvement, four of death, and three were without result. The four deaths which followed the operation were not caused by it, but by lesions pre-existent to the operation (tuberculosis and amyloid degeneration of the kidneys). M. Berger thought that the operation should be decided on at an early stage of the illness, and that resection should not be too limited. It should follow the axillary line, as the muscles there met with are comparatively small. M. Berger condemned circular resection of one or two ribs. The section should represent an oval, being greater in the middle ribs than in the upper and lower. The fistula should be in the centre of the area operated on. M. Berger condemned Max Schede's operation (resection of the pleura), which M. Böckel, of Strasburg, adopted. M. Lucas-Championnière recommended making a large flap in preference to Estlander's method of making several incisions. He agreed with M. Berger on the necessity of extended resection. M. Monod also described a case of resection of the third, fourth, fifth, sixth, and seventh ribs, which promised a perfect success. M. Sée had lately performed this operation; the sixth, seventh, eighth, and ninth ribs were resected; about five centimètres of bone were removed. M. Sée made a vertical incision, and kept the borders well apart. The general condition of the patient rapidly improved; the purulent discharge greatly diminished during a few days, but subsequently became as abundant as it was before the operation. At the meeting of the Académie de Médecine, on February 12th, M. Feréol described a case of *empyème pulsatile totale*, cured by Estlander's operation. The patient, a man, 22 years of age, was attacked, in 1882, by pleurisy on the left side. A puncture was made; three litres and a half of greenish pus was removed. About nine months subsequently effusion recurred; puncture was again proposed, but the patient objected; the effusion increased, and displaced the heart; pulsations, synchronous with the heart-beats, were detected over the whole of the left side; dyspnœa increased, and thoracentesis was performed; two litres and a half of laudable pus was withdrawn; considerable improvement resulted, the heart remained on the right side, but slowly regained its normal condition. Tympanites and succussion-sound had disappeared, except in one spot in the clavicular region. M. Berger operated on the patient for empyema about six weeks after the first operation; pus still continued to escape, and Estlander's operation was performed. Every antiseptic precaution was observed, and the fourth, fifth, sixth, seventh, and eighth ribs were resected. A month after the operation, the only trace was a fistula, six centimètres long; the discharge of pus had ceased. The heart had its normal position; respiration was a little weak at the base of the left lung.

M. Marion, Professor of Zoology in the Faculty of Science at Marseilles, aided by several of his pupils, has completed the first volume of the *Annales du Musée d'Histoire Naturelle de Marseille*. It comprises seven hundred pages of text and thirty illustrations. M. Marion contributes a memoir on the topographical zoology of the Gulf of Marseilles, and the fauna of the depths of the Mediterranean. MM. Köhler, Kowalewsky, Jourdan, and Gourret, describe different groups of invertebrates found in the same region. The corporation of Marseilles defray the expenses of publication. M. Alphonse Milne-Edwards presented a copy of the *Annales* to the Académie des Sciences, and suggested that all the principal French towns should follow the example offered them by Lyons and Marseilles.

M. Laboulbène has delivered an eulogium on M. Davaine at the Biological Society, and M. Horteloup one on Broca at the Société de Chirurgie. M. Laboulbène gave a complete summary of the life and researches of M. Davaine. Naturally his discourse was eulogistic; but, as M. Davaine was the subject, words of praise were words of truth, his scientific worth being only equalled by his modesty and disinterestedness. M. Laboulbène reminded his hearers that the discovery of the bacillus of anthrax is due to M. Davaine. M. Horteloup's discourse may be called a biography of a life full of brilliant successes. He represented M. Broca's election as permanent senator as one of the events in his life most productive of satisfaction.

Dr. Hermet has translated Mr. Jonathan Hutchinson's work on *Ear and Eye Affections in Hereditary Syphilis*. It is accompanied by a preface by Dr. Fournier.

The Minister of Commerce has informed the prefect of police that the Comité Consultatif d'Hygiene has decided that salicylic acid and its compounds must be excluded from all articles of food, and directs that necessary measures be taken for the detection and prevention of its use in connection with food.

The Société de Chirurgie will award, in 1884, the Duval prize to the author of the best surgical thesis published in France in the course of the year. The memoirs are to be sent in on November 1st, 1884. In 1885, will be awarded the Gerdy prize of 2,000 francs (£80) on muscular gangrene, its etiology, pathogeny, and surgical treatment, and the Demarquay prize of 300 francs (£12) on the pathogeny of pathological luxations. The memoirs are to be sent in by November 1st, 1885.

A new chair of Histology has been created in the medical and pharmaceutical Faculty of Lille, and Dr. Tourneux has been appointed to it.

The Sanitary Council of Marseilles has received a ministerial communication stating that vessels coming from the East where cholera exists, and from intertropical countries where there is yellow fever, will undergo three days' quarantine.

The charity known as "L'Œuvre des Liberées de Saint-Lazare," has placed a great many of the unfortunate women, on leaving the Hospital Saint-Lazare, in respectable positions. The special object of this charity is to provide with food, shelter, and clothes patients leaving Saint-Lazare without any means of gaining an honest livelihood. All nations and all creeds receive assistance. The actors of the Comédie Française, Odéon, and other Parisian theatres, recently organised an entertainment for the benefit of this charity.

CORRESPONDENCE.

THE LIVERPOOL POISONING CASE.

SIR,—In reply to Dr. Stevenson's letter in your issue of the 8th instant, and your comments thereon relating to Dr. Campbell Brown's evidence at the recent trial, I desire to make the following remarks. All the Liverpool papers, including the *Courier*, from which Dr. Stevenson quotes, gave only a summary of the evidence, and frequently important qualifying statements were left out. Dr. Campbell Brown did not state that if solid arsenic had been given, he would have found it; but he did state that the absence of solid arsenic in all the cases would point to its having been given in solution.

The data on which I relied to give the positive opinion that Thomas Higgins died from successive doses of arsenic were the symptoms chiefly; and also the *post mortem* appearances, and of these the important conditions were the uniform distribution of the irritation and inflammation throughout the entire extent of the intestinal tube. Had there been no evidence as to the character of the symptoms, I should have declined to formulate an opinion from the pathological appearances only.

Dr. Campbell Brown had heard my evidence, and he had made certain quantitative experiments, and from all the facts, he expressed the opinion that arsenic had been taken for several days.—I am, sir, yours, etc., WILLIAM WHITFORD, M.B.

Liverpool, March 10th, 1884.

THE LATE DR. A. P. STEWART.

SIR,—May we ask your valuable assistance in acquainting the friends of the late Dr. A. P. Stewart that a suitable memorial to him has been instituted in the form of a mission to perpetuate his fourteen years' devoted labour in connection with the mission in Sloane Place, North Street, Sloane Street. The proposal has been cordially taken up by those of his friends whom we have been able to reach. Mr. Hugh M. Matheson has accepted the post of treasurer, and already more than £500 has been subscribed. As we believe there are yet many that would regret to be omitted from participation, we shall be grateful if you will allow us to draw the attention of your readers to the advertisement of the memorial.—We are, sir, yours obediently,

JAMES C. NICOLL, J. MARTYN MILNE, Hon. Secretaries.

67, Cadogan Street, S.W., March, 1884.

THE POSITION OF THE "DIRECT REPRESENTATIVES" UNDER THE MEDICAL BILL.

SIR,—As the Bill has now received its second reading in the Lords, and the necessary amendments will be considered on the 20th instant, I think it right to call the attention of the profession to the humiliating position to which the Bill relegates our elected representatives, in order that immediate steps may be taken to claim for them the influence in medical affairs to which they are entitled. The Medical Reform Bill has been forced upon the attention of the public and of Parliament by the incessant demands of the profession, that they should have some voice in the settlement of their own affairs. That demand was obstructed and made the occasion for sneers at the general practitioner by the majority of the Medical Council, and by those who considered themselves placed above sympathising with the claims of the working men of our profession; but, in spite of this hostility, the point has been carried, and now no one—not even the Medical Council—ventures to challenge the clauses of the Bill which decree the election of "direct representatives." But the same influences have been used, and are still being used, to clip the wings of our future delegates, and prevent them exercising due authority in medico-educational affairs.

As the Bill now stands, the scheme of medical education and examination in each division of the kingdom is to be worked out in all its details—the course of education and standard of examination to be regulated; the examining bodies to be recognised, and the examiners to be appointed by the local boards; and the power of the Medical Council is limited to the registering of the decrees of these boards, or suggesting alterations, if necessary.

But these local boards are to be made up exclusively by the licensing bodies; neither the Crown nominee nor the direct representative being admitted to the conclave, and, consequently, neither of the delegates to the Central Council, who are supposed to be independent of pocket-interests, are permitted by the Bill any more authority than may be exercised during a few days' meeting of the Central Council once a year, convened to supervise arrangements already decreed by the local board.

This concentration of the power in the hands of the delegates of the licensing bodies is the evil which the Bill is constructed to remedy, and yet it perpetuates it in its worst form.

I appeal, therefore, to you, and to the organisations which are entrusted to protect the interests of the profession at large, to exercise all influence to cause each "direct representative" and the Crown nominee to be placed, *ipso facto*, on the local board for his own division of the kingdom. I have every reason to hope that, if an amendment of the Bill to this effect be forcibly urged, the Government will be willing to accede to it; and I know that the opposition is limited to a few who are interested in reducing to a minimum the power of the general practitioner. I trust you will aid me in counteracting that attempt.—I am, sir, yours, etc.,

ARCHIBALD H. JACOB, M.D.Dub., F.R.C.S.I.,
President, Irish Medical Association.

TREATMENT OF CARIES OF THE SPINE.

SIR,—In reply to Mr. Noble Smith's letter, published in the BRITISH MEDICAL JOURNAL of February 2nd, in answer to my letter published in the same, January 26th, I regret to notice that the latest literature upon the application of the plaster-of-Paris jacket in caries of the spine, as I advocate it, has not become sufficiently familiar to him in its minutest details as I now teach it. Had Mr. Smith referred to my second edition of *Orthopædic Surgery*, published in January, 1883 (London publishers, J. and A. Churchill, 11, New Burlington Street), he would there have found that the chapters upon spondylitis and lateral curvature of the spine, have been completely rewritten; as stated in the preface of the work: "In preparing this second edition for the press, I have carefully revised and rearranged the entire work in a more systematic and classified order; and some of the chapters, where new and improved methods of treatment have been developed—viz., those on spondylitis and lateral curvature, have been entirely rewritten."

In reference to the general use of the plaster jacket, both at home and abroad, it is becoming more and more popular every day with those who understand its proper application. In support of this, I would simply refer to the latest notice that I have seen upon the subject; viz., a letter written by Mr. J. Walker Downie, of Glasgow, and published in the BRITISH MEDICAL JOURNAL of February 9th.

I am very much gratified to notice, in Mr. Noble Smith's letter of February 2nd, that it is the principles of treatment in caries of the spine which he desires to advocate, rather than the application of any special instrument. But I had been led to believe, after carefully reading his paper, that the plaster-of-Paris jacket was the one method of treatment which seemed to him most objectionable. I, however, yet remain under the firm belief and assurance that if the method advocated by me in applying the plaster jacket in caries of the spine be faithfully followed out, Mr. Smith will yet find it superior to any other dressing yet devised.—I am, etc., LEWIS A. SAYRE, M.D.

SIR,—Mr. Noble Smith will have done good service to sufferers from Pott's disease, if he has only drawn from some surgeons their experience of Sayre's treatment by the plaster jacket. As mine has been very large, and has extended over seven years, I hope you will allow me space for a few remarks upon the subject.

In the first place, it may be asked, How comes it that a physician should undertake the surgical treatment of patients? My answer is that, for years before Sayre's plan was known, the surgeon could not afford the space for these intractable, unsatisfactory, and often complicated cases; hence, out of pure kindness of heart, the little sufferers were taken charge of by the physicians, who, having more beds, were able to give them a haven of rest

When I saw Sayre's demonstration, I was satisfied that, in the plaster-jacket, we had the perfect splint for carious spine, and I determined to adopt it. At first, I had my failures: sore backs, badly fitting jackets, badly selected cases, etc.; but I felt sure the fault was mine, and the result of inexperience; of this I have since been abundantly satisfied; and now, I may say, I hardly ever have a failure.

Looking over my notes of 132 cases of Pott's disease admitted under my care before I began the use of the plaster-jacket, I cannot find one instance where a cure was effected; and yet most of these had rest in bed, and afterwards the most approved supports the instrument-maker could fit to them. Now, this state of affairs is quite changed; patients who attend at the infirmary with caries of the spine are, almost without exception, put up in a Sayre's jacket, with a jury-mast where required, and with the result that they go away comfortable, able to take air and exercise like healthy persons. Take a mother's report as an instance of what a boy with disease of the lumbar spine can do after the application of a jacket: "Before (1880) the application, he walked on his hands and knees, and suffered great pain; he has since gained flesh and strength; goes to school; he fights with the other boys; he is as rough as any of them." I saw this boy on February 14th, and he is as straight in the back, except at the seat of disease, as a well drilled soldier.

Another, a girl with disease of the mid-dorsal region, who, before the application of the jacket, walked with great difficulty with her hands on her knees, had a jacket put on in 1879, and was allowed to go about at once. In 1881, she was strong, able to walk well, went to school, played with the other children at skipping and hopscotch; both these games are well calculated to test the efficacy of Sayre's method. Compare either of these cases, which are only examples out of a large number, with those treated after any other plan.

I will give one more instance where there was the complication of a large abscess, extending quite across the loins, containing about a pint of pus. "There was disease of the last three dorsal and first lumbar vertebræ. The patient could not walk without leaning the hand on the knee, and slept badly." The abscess was opened antiseptically; and, as soon as the discharge became slight (in three weeks), he was put up in a plaster-jacket by Davy's hammock-method, and sent home to the Isle of Man. This was in 1879; now, in 1884, his abscess discharges hardly at all; he can walk about comfortably without his jacket, and can swing himself on the trapeze without pain, clearly showing that a cure has taken place.

Golfers who visit Hoylake may see a caddy who goes his round of three miles, sometimes three times in a day, wearing a plaster-jacket. Mr. John Ball, who employs him regularly, and Dr. Mitchell Banks, who has had him to carry his clubs for two rounds and eight holes on one day, say he is one of the best on the green. Yet this boy, at ten years of age, came under my care hardly able to move, and then only a few yards at a time, with his hands on his knees; four or five of his lower dorsal carious, and with very considerable deformity. This boy, from the day I put a plaster-jacket on him, was able to walk about at home, and, in a few months, was earning his own living as a caddy.

Some still advocate rest in bed. Dr. Walker, of Peterborough, in the JOURNAL of February 16th, advises it, in some instances, even after the application of the jacket. To this I most emphatically object. If you put a jacket on, get your patient up; do not keep him in bed for a day, except to dry him; this takes about three days, after which he ought to be out of bed on his feet, and in the air as much as possible. In this matter, I must claim to have had so much experience, that I can afford to speak very dogmatically. Here I will mention an instance of an inmate of our workhouse, who had been under steady and uninterrupted treatment, by rest in bed, without any of the difficulties of the ordinary voluntary hospital, where a bed can only be occupied for a limited time. A girl aged 12, had disease of the lower dorsal vertebræ; she suffered so much on trying to walk, that she could not be persuaded to attempt it. She was gently suspended, and a plaster-jacket was applied. She remained in bed three days to dry, and was able to walk about afterwards in the greatest comfort, and has continued to do so since.

In conclusion, if any of your readers have failed with Sayre's jacket, let him be assured that the fault was not in the plan, but in the method of carrying it out. Where Mr. C. H. Golding-Bird and others have succeeded, it has been under exactly similar circumstances, as regards the disease, as with those who have failed; the only difference being that, on the one hand, Sayre's directions have not been carried out in their integrity; while, on the other, every detail of management has been rigidly enforced. In my own practice, I have used Taylor's and Davy's methods, and will do so again under exceptional circumstances; but, on the whole, I give the preference, for many reasons, to Sayre's gentle suspension during the application of the support.—I am, sir, yours truly, MARTIN G. B. OXLEY.

80, Rodney Street, Liverpool, February 16th.

SIR,—Having carefully read Mr. Noble Smith's letter on this subject, and also those of Mr. Golding-Bird and Dr. Walker, in the JOURNAL of February 2nd and 16th, I cordially agree with the latter gentlemen in their adherence to Dr. Sayre's principles for the treatment of the majority of cases of spinal caries. The enthusiasm that was excited by Dr. Sayre's demonstrations in this country, seven years ago, led surgeons at first to apply the treatment to all classes of cases indiscriminately; and it was only natural for this to be followed by a reactionary wave, in consequence of failures, due to several causes; among others, improper application, disregard of constitutional treatment, unsuitable cases, and especially the handing over of the patients to instrument-makers, who, unacquainted with the special circumstances of individual cases, treated them all in a routine manner.

Mr. Noble Smith states that many of the jackets were applied by "hospital-surgeons of high repute in the metropolis, men whose surgical skill precludes the possibility of their neglecting to apply the jackets with great care and accuracy." This is no doubt true, so far as the principles laid down in Dr. Sayre's work are concerned; but I hold that no written laws can govern the application in individual cases, and it is only by constantly applying these jackets, and watching the results of certain (what I may term) "dodges"—trivial to a degree in themselves, but of the utmost importance to the success of the case, and the comfort of the patient—that present themselves to one's mind, that our efforts can be successful.

I have had the opportunity of treating, as assistant-surgeon to the Orthopædic Hospital in this town, every case (with one or two exceptions) that has presented itself for the last seven years, during which time I can safely say I have applied more than seven hundred jackets; and my experience is, that scarcely a case occurs that does not require some deviation from the prescribed rules. I have also met with many cases that have been treated by the most skilful surgeons, and yet were excoriated, or otherwise unsatisfactory, in consequence of some trivial omission in the application. In a few cases, I have attempted the treatment, recommended by Dr. Roberts of New York, of extension and articular motion, and also a modification of my own (BRITISH MEDICAL JOURNAL, January 27th, 1883), but with only partial success, and have now discarded both for the original jacket. The recumbent method of application, suggested by Dr. Walker of Peterborough, is most suitable to many cases, especially when there is total or partial paralysis of the lower extremities; but, for the majority, I prefer the original plan of suspension. I only substitute poroplastic for the plaster as a basis of support for the jury-mast in cases of cervical caries. The laminated splints of Mr. Furneaux Jordan, reaching to the occiput, and passing round the vertex, afford very complete rest to the diseased cervical vertebræ, but are somewhat difficult to apply, especially with young children. When, from any cause (especially among private patients, who often absolutely refuse to have a cuirass applied that will not admit of ablution), it is necessary to make the jacket removable, I have had three circular bands of truss-spring rivetted to the jacket (previously sawn carefully through, after it has set), and adjusted by means of a slot and divided screw (similar to those in the heels of skates), the screw-driver for which I entrust to the parents or friends, with strict injunctions only to unfasten the cuirass when necessary, and to reapply it accurately with the patient extended, either by his hands from a bar above his head, or on a couch. This plan, though to a certain extent departing from the strict principles laid down, I have found to answer admirably in suitable cases. Lacing and buckling are unsatisfactory, as they allow movement between the divided edges of the jacket. Excoriation ought never to occur when the jacket is properly applied; the most frequent place for this is over the prominent spine, or spines. The plan I always adopt to obviate this is to roll up two pieces of wadding into tight pads, like thick sausages, and lay these on each side, and close to the prominent spine, taking care to place them (also the iliac and other pads, except the dinner-pad) between the vest and the first layer of bandage; by so doing, they do not tend to move out of position. Except in the case of abscess, I never now require to cut "windows," as at first instructed.

In conclusion, though many of the remarks I have made may appear trivial to those who have had much experience in the treatment of spinal caries by the plaster-method, I feel confident that it is owing to the omission of many of these minor details, and of a proper consideration of the advantages of rest and constitutional treatment (probably also, I am inclined to think, to an objection, on the part of some surgeons, to the unavoidable "dabbling" required), that this, the simplest and most efficient means of cure for spinal caries, is being discarded by many members of the profession, in favour of the more expensive and less reliable contrivances of the mechanician.—I am, sir, yours faithfully,

EDWARD L. FREER, M.R.C.S.Eng.

7, Newhall Street, Birmingham, Feb. 18th, 1884.

THE DANGERS OF COLLECTIVE INVESTIGATION.

SIR,—As my short paper on this subject, which appeared in the JOURNAL of February 23rd, has evoked some criticism, I shall be glad if you will permit me a few words in reply.

1. My object in preparing the paper was to present "the other side of the question;" and also to combat the rather prevalent idea that a degree of "finality" would attach to the results of the Association's collective investigations. It will be allowed that, in a question of such importance, "the other side" ought to be presented; and that, as actual finality cannot from the nature of the case be attained, so the idea of finality cannot be established without injury and danger.

2. Dr. Octavius Sturges gives me credit for "respecting and fostering individual inquiry," whilst regarding "collective inquiry as worthless." Dr. Sturges has not read my paper with sufficient care. Permit me to quote its opening sentences. "Dr. Potter observed that investigation was the parent of knowledge. Two competent persons investigating the same phenomena would arrive at conclusions more entitled to authority than one person working alone. The value of conclusions was directly proportioned to the number of competent persons who arrived at them under the same circumstances." That is my confession of faith in collective investigation, and I do not think it is lacking in clearness and precision. The most rudimentary knowledge of the history of scientific progress is sufficient to show that hypotheses have been converted into established principles only by the slow accumulation of facts, and that observations have only been accepted as facts after confirmation by many workers. This is collective investigation. If it be worthless, induction is worthless; and if induction be worthless, modern science is without foundation, and Bacon was—the antithesis of a philosopher. But I submit that "collective investigation in general" is one thing, the particular collective investigation now conducted by the British Medical Association is another, and must be judged entirely on its own merits. All investigations, whether collective or individual, are associated with more or less of difficulty. I have endeavoured to point out some of the more obvious difficulties in the present case, and to show the elements of uncertainty which are inherent in the scheme itself, and which cannot by any possibility be separated from it.

3. Dr. Sturges claims me—my paper notwithstanding—as a friend to collective investigation in general, and, I suppose, to this particular example of it. Therein he does me no more than justice. There can be no doubt of the excellence of the movement; and I have endeavoured to contribute my quota to its enduring worth by pointing out what it can not do, as well as what it can. If the collective investigators will be content to claim no more than the modest degree of worth to which their work, by its intrinsic merits, will be entitled, they will deserve all men's praise.—I am, sir, yours faithfully,

GEORGE W. POTTER, M.D.

60, Highbury New Park, March 11th, 1884.

QUARANTINE IN AUSTRALIA.

SIR,—My attention has been called to a letter on above in the JOURNAL of December 1st, 1883, and, though at such a distance, I cannot permit the writer (Dr. Hurry) to promulgate incorrect doctrines about this port without contradiction. At the time the *Sorata* arrived, there could not be found a case of measles throughout the colony, and therefore it was the health-officer's undoubted right to take such steps as he did to prevent introduction of disease. And with regard to the "wretched quarantine-station," it is acknowledged to be one of the best in the colonies for situation and convenient appointments. It consists of quite a village, on an island surrounded by a fine sheet of water; on one side, the continual passing and repassing of the vessels quite breaking the monotony of the existence. The island is covered with trees, and has a staff of people always there to keep it in order; therefore not such a wretched place after all, especially as there is a steam-cutter which visits the place every morning, bearing provisions, fruits, and other supplies.

In another issue of your paper (November 24th), it is affirmed that "quarantine has never yet kept an infectious disease out of a country." Now this is incorrect as regards this colony, for, when I had the honour to serve under the late Dr. Duncan, health-officer in 1875, a ship named the *Taymouth Castle* brought several cases of small-pox; but, by a judicious mode of quarantine, the disease was kept out. Several other cases of small-pox were kept out in a similar way during several years. In 1877, the ship *British Enterprise* brought small-pox, measles, typhus, and scarlatina, and the health-officer had some trouble in enforcing the law at first, by reason of having no shore quarantine-station. The Government at once chartered several vessels, and divided the people into batches, keeping the bulk as a lazarette. The whole process cost the colony something like ten to twelve thousand pounds; but, although there were several fatal cases of small-pox within a mile of the shore, the regulations were equal to keeping it out of the colony. Quarantine is always a matter of trouble and obstruction; but it must be patent that, when we have not yet been scourged by small-pox, the regulations should be carried out, especially as, during the past few years, the increase in ocean-steamers lessened the length of the home voyage, and consequently increased the risk of contagion.

I would point out respectfully that no vessels have any detention here except in cases where sickness has absolutely existed on board. Then, and only then, am I instructed to detain the vessel for the inspection of the health-officer, who gives further orders as to the mode of quarantine.—Yours truly,

R. JAGOE, Assistant Health-Officer, Port Adelaide.

MILITARY AND NAVAL MEDICAL SERVICES.

THE VOLUNTEER MEDICAL SERVICE.

SIR,—There seems to be the stirring of life in the Volunteer Medical Service. It can make itself, if it wish, the most complete branch of the volunteer force of the country. I would offer a few suggestions.

1. *Number of Medical Officers per Battalion.*—In the army in war we post one medical officer per battalion. But it is simply because medical men are expensive and few in number; had we more, we could give more. These objections do not apply to the volunteers. Medical officers can easily be obtained. There should be at least three medical officers to each battalion, one surgeon-major ranking with major, and two or more surgeons.

2. *Dress.*—The absurd cocked-hat should be abolished, and the Army Hospital Corps helmet worn instead. It has a special plate, and is distinctive. In undress uniform a forage-cap, the copy of the army cap, only in silver, should be worn. It is absurd to distinguish a man in full dress, and not to do so in undress. Apart from this distinction, regimental uniform should be worn.

3. *Ambulance Detachment.*—Two men per company are insufficient. They cannot carry a man without relief. Four men per company are needed. A sergeant is needed to look after the whole of the bearers. He should be the ambulance-sergeant. But, in addition to him, a hospital-sergeant is needed to attend to the "detained tent" used by battalions, and he should have one orderly per company—not the bearers—as his staff. This, in a corps of eight companies, would be as follows:—8 stretcher-parties, 32; 1 ambulance-sergeant, 1 hospital-sergeant, 8 orderlies, or 1 per company, 8; in all, 42. These 42 men should be struck off the company-strength and replaced there by new recruits, and be wholly under the medical officer, forming a strong regimental detachment, worked like a company by the surgeon-major and his surgeons.

4. *Ambulance-Equipment.*—Every stretcher-party should have a surgical haversack; so should the ambulance-sergeant, and so should each battalion-surgeon when in heavy marching order. It carries many useful things, and the absurd little pouch is only for ornament. I think each company-orderly (not the bearers) should have a field-companion; and, for the battalion, a pair of mule-panniers is needed for medicines and dressings. The stretchers and the other equipment should be supplied by the State.

5. *Inspection.*—I would abolish the absurd writing to London to get a syllabus of instruction, and to have an examiner named. It should be a general order that the ambulance-detachment should exist in every corps—Artillery, Engineer, Infantry. The commanding officer should have no option to refuse, the surgeon no option to decline. The syllabus should be in the volunteer-regulations, and the course gone through each year, and the detachment inspected by the regimental colonel, and by the principal medical officer of the district, as well as by the general of the district. It should be entirely compulsory on all concerned. The examination should be thorough, by written papers as well as by practical examination of each man and singly. I think the volunteer-surgeons want to be "thorough," if only we give them the chance.

6. *A Medical Corps.*—A distinct volunteer medical corps of officers and men is needed to supply the volunteers with drill and bearer-

companies and field-hospitals. Every county and every regimental division in the large counties should have a divisional bearer-company and a field-hospital. They should be entirely in addition to the regimental help before mentioned, which it is not intended to disturb.

In London, a Volunteer Medical Association is formed; it should have a branch in every county, consisting of the county volunteer-surgeons of every corps and civil sympathisers. These London and county associations should be like the National Rifle Association, and collect funds and information for the Volunteer Medical Service. When a committee in the county is formed, it should find out some active medical man to command a bearer-company and the field-hospital, and should name a head-quarters of the corps. Application should then be made through the general of the district to the War Minister for sanction to form so many companies of a county medical corps. In a county like York or Lancaster, the six or eight companies for the county would make a county medical battalion, and would be entitled to an Army Medical Department adjutant. In smaller counties, the two companies would combine with other counties and form an administrative battalion, and have the share of an adjutant from the Army Medical Department. The officers and men should be dressed like the Army Hospital Corps, and be separate from any volunteer regiment, and should be enrolled for the medical corps only. Each bearer-company should have its four medical officers, one quartermaster, and about seventy non-commissioned officers and men; and the field-hospital company would be about the same. The equipment for both should be granted by the State, as guns are given to Artillery, or rifles to Infantry.

The companies and hospitals should serve under the command of the principal medical officer of the district, as well as under the district general.

If a county committee be formed, it can collect funds, buy material, and urge on Government action.

The student-companies of the London medical schools will, from year to year, it is hoped, supply a body of officers trained fully, and able to undertake any ambulance-duty.

The pressure which county branches of the Volunteer Medical Association could bring to bear upon Members of Parliament would secure the attention of the authorities to the movement.

Horses need not be bought, but only hired for field-days or special reviews. Ambulance-wagons would gradually be acquired by gift or purchase, or from the State. The State should grant the surgery-wagon, equipment, and the water-cart, etc. Each company should be a complete unit in itself, while forming part, at the same time, of a county medical corps, or of a divisional in scattered small counties.

This outline would show the volunteer-surgeons a path upon which to advance.—Yours, A FRIEND.

HOSPITAL AND DISPENSARY MANAGEMENT.

BELFAST HOSPITAL FOR SICK CHILDREN.

DURING the past year 7,244 cases received advice in the extern department, while 313 patients were admitted to the wards; and since the foundation of the hospital the numbers have been 69,173 and 3,008 respectively, facts which show the necessity of an hospital of the kind in Belfast. A large number of operations were performed during the year, while the death-rate was exceptionally low, only three deaths having been recorded. The exceptional opportunities afforded by this hospital for acquiring a knowledge of the diseases of children are, it is satisfactory to find, appreciated by senior students, of whom twenty-four are attending clinical instruction during the present session. A serious item in the expenditure was the cost incurred by painting the inside of the hospital, which amounted to £179, the largest portion of which sum was obtained by a very successful concert, given under the auspices of the ladies' committee. A resolution to the effect that the best thanks of the meeting be given to the medical staff for their services was unanimously adopted, and the proceedings terminated.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA PARK.

AT the annual general meeting of the governors of this institution, Mr. Stephen Olding in the chair, it was announced that the receipts for the past year had been £7,490 6s. 8d. The expenditure had amounted to £10,768 1s. 1d. The receipts for the past year from working men's societies and from the *employés* of firms in the neighbourhood of the hospital had amounted to £1,096 15s. 1d.; 877 in-patients had been admitted during 1883. Of these 89 had died. The chairman moved the adoption of the report, and drew attention to the importance of promoting contributions from the working classes, and of developing local interest in hospitals.

THE NATIONAL ORTHOPÆDIC AND CHILDREN'S HOSPITAL, DUBLIN.

THE annual meeting of the friends and subscribers to this institution was held in the hospital lately, under the presidency of Sir George Owens, M.D., J.P. From the report it appeared that there had been a most satisfactory and considerable improvement in the affairs of the hospital since last year. The receipts were £713 3s. 3d., which, along with a balance of £81 11s. 6d., left the sum of £794 14s. 9d. in the hands of the managing committee at the beginning of the year. The institution is now out of debt, which is largely due to the receipts of the bazaar held in November last, and which brought into the funds of the institution the sum of £170 17s. 6d. The total outlay during the year was £563 1s. The number of patients treated externally was 2,546, the number of attendances was 10,500, and the number admitted was 59. The report stated that though that number, compared with those of the other city hospitals, might at first appear small, yet it was not so when it was taken into consideration that the form and nature of diseases of the little patients in the Orthopædic Hospital rendered it necessary to keep them longer in the institution than any other hospital kept their inmates. Last year the number of extern patients was 1,513, and of intern 44.

ST. JOSEPH'S CHILDREN'S HOSPITAL, DUBLIN.

THE annual meeting of the subscribers to this institution was held on February 2nd, at the hospital. His Eminence the Cardinal Archbishop of Dublin was in the chair. The report showed that the thirty beds in the house were occupied all last year; 267 children were admitted during the year, making a total of 297 patients treated in the house. Of these 252 were discharged, for the most part cured; 15 died, and 30 remained in the wards. The average stay of each patient was thirty-five days. In the dispensary, 4,680 cases had been prescribed for during the year. The debt which rested on the institution had just been cleared off, when the house adjoining the hospital was advertised for sale, and fortunately the purchase was effected on easy terms. Money was borrowed, and a sum of £808 15s. secured the property, and paid the law-expenses. The ground-rent amounted to £9 4s. 6d., and the sum of £526 19s. 6d. represented the full sum due by the institution. A resolution "That the extension of this hospital is urgently needed in the interest of the sick poor, and that this meeting pledges itself to support and assist the sisters of charity in their meritorious work," was unanimously adopted.

ULSTER EYE, EAR, AND THROAT HOSPITAL.

THE thirteenth annual meeting was held lately in Belfast, presided over by the Mayor. During the year 2,008 patients were under treatment, of whom 215 were admitted to the wards. The medical report, which was submitted, stated that the work of the hospital had become more important year by year, the cases requiring operation having been much more numerous in the year than in any previous one. There was great need for further accommodation, as, unfortunately, in the original designs of the institution day-rooms were omitted. The result was that, as all the wards were occupied, the patients were obliged to remain in their sleeping apartments during the day. If they had ward-space for six or eight patients more, and a couple of day-rooms, it was thought they would have ample accommodation. The probable cost for the additions required will not exceed, it is estimated, a sum of £1,000. The board of management in their report referred with regret to the death of Dr. James Moore, consulting-surgeon to the hospital, and a warm friend since its foundation, and expressed their deep sympathy with his widow and family in their bereavement.

EDINBURGH HOSPITAL FOR INCURABLES.

AT the annual meeting of the committee of management of the Hospital for Incurables, the report submitted stated that on December 31st, 1883, the total number of patients was 50, 41 of which were in the general wards (one a child occupying a cot), 4 in special wards, and 5 in private rooms. The patients under treatment came from all parts of the country in, and some out of, Scotland. During the year, applications for admission had been received from 44 males and 58 females, making a total of 126, including those left in the hospital from the previous year, whose cases had been under consideration. There were admitted during the year 14 males and 18 females, 5 males and 5 females of whom have died. The committee expressed continued satisfaction with the system of medical attendance and nursing, and also in the satisfactory increase of the annual subscriptions. Dr. Francis Troup has been appointed assistant medical officer in place of Dr. Jardine, resigned. It may be mentioned that the hospital has been more than fully occupied during the year, as one or two cases of extreme urgency were admitted, and temporarily placed in private rooms until accommodation could be procured for them in the general wards.

WEST CHESHIRE PROVIDENT DISPENSARIES.

THE provident system is being actively carried out in West Cheshire, especially at Birkenhead. The provident dispensary in that town was commenced in 1879. There are now three dispensaries in full working order, with a staff of eight medical officers. Recently, a new branch was opened at No. 408, Price Street. The occasion was celebrated by a popular entertainment at the St. Anne's Schoolroom. The working people were entertained with music and singing, and between the parts Mr. Vacher, the medical officer of health for the district, explained the advantages of the provident system. Provident dispensaries are well suited to a population such as that which Birkenhead contains, and we are glad to learn that the system is being put forward with so much energy.

THE TWICKENHAM PROVIDENT DISPENSARY.

THIS institution differs from most dispensaries of the kind in that it has no central dispensary-house. The patients attend at the houses of the medical officers, and are supplied with medicine from their surgeries. The same plan is in operation at Lewisham, and it seems to work well. At any rate, it saves the expense of a central establishment, and that is a point of great importance, for the complaint against provident dispensaries is that too much is swallowed up in the management.

The seventh annual report of the Twickenham Provident Dispensary shows that it is making steady progress. At the close of 1883 there were 290 families on the books, representing 960 individuals, as against 247 families, representing 810 individuals, in the previous year. At the annual general meeting in the early part of 1883 a third medical officer, Dr. Crichton, was appointed, with the special intention of bringing East Twickenham within the operation of the Dispensary, and the Committee anticipate that this will add much to the usefulness of the institution. The report gives a tabular view of the payments of members since the commencement of the dispensary in 1877. This table shows a steady and most satisfactory growth from £14 9s. 3d. in 1877 to £209 in 1883. This year the sum of £219 16s. 3d. was divided among the three medical officers, for attendance on patients and supply of medicines.

BATTERSEA PROVIDENT DISPENSARY.

IT is now eight years since this dispensary was reorganised and placed upon the provident footing. In their annual report, just published, the committee are able to speak of steady improvement. The number of members is now 9,674, as compared with 9,084 in 1882. There is also satisfactory increase in the amount paid by members. Last year it was £1,218 against £1,104 in the previous year. The confinement-fees amount to £158, against £128 in 1882.

The services of the collector, who calls each week for members' payments, have again proved most valuable. This method clearly tends to keep members on the books, and to increase the amount paid.

The committee are happy to state that, after setting aside £85, which was a first charge on the money divisible among the medical officers (being one half of the cost of alterations made last year in providing increased accommodation for the members), yet the available balance divisible this year is considerably larger than last year.

THE SALISBURY PROVIDENT DISPENSARY.

THE annual general meeting of the Salisbury Medical Club and Provident Dispensary was held recently, and the proceedings were of more than usual interest. The Secretary read the report, from which it appeared that there were 6,968 members, and that the payments amounted to £998 12s. 11d. The Salisbury Provident Dispensary is an excellent example of a dispensary which has its head-quarters in a town, and spreads far into the adjacent villages. Indeed so successful has the dispensary been that it is now proposed to extend the sphere of its operations, and to call it the Salisbury and South Wilts Provident Dispensary. At the annual meeting Dr. Roberts made an admirable speech, pointing out the objections to the out-patient system, and contrasting with it the advantages which the poor might secure for themselves through the provident dispensary. His words carried great weight with the meeting; and we may expect to see the Salisbury Dispensary enter upon a fresh and extended field of usefulness.

THE THREE TOWNS FRIENDLY SOCIETIES' MEDICAL INSTITUTION.

OUR readers will remember that, when this institution was about to be started, it met with a good deal of opposition from the medical men of the neighbourhood. It has now been in operation a year, and we have received the first annual report. The total number of members at the close of 1883 was 7,684. The treasurer's statement, contained in the balance-sheet, was equally satisfactory, showing a cash balance on the current account of £77 10s. 3d., and an asset balance on the capital account of £155 17s. 4d. The financial statement showed an income of £1,732, including £587 received from members, and £257 from their wives and families. The expenditure amounted to £1,665, including £523 for salaries and £238 for cost of drugs. The report of Mr. Kelly, the surgeon for the Plymouth district, stated that 5,753 home visits had been made, and there had been 11,130 attendances at the dispensary. Mr. Rae, the surgeon for the Devonport district, reported having paid 6,170 home visits, and having received 13,221 attendances at the dispensary. The institution has appointed two dispensers to make up the medicines. When the institution was commenced, the committee purchased freehold premises at 2, Albany Villas, Plymouth, for the residence of a medical officer and for a dispensary. They are now negotiating for the purchase of 7, Clarendon Terrace, Stoke, for a similar object; thus securing ample accommodation to meet the growing requirements of the institution.

THE ROYAL FREE HOSPITAL.

AT the recent annual general court of governors, the Secretary reported that the financial condition of the hospital was satisfactory, the receipts from all sources amounting to £10,959 13s. 2d. The committee stated that the hospital had been in full working order throughout the year. The number of in-patients admitted during the twelve months was 1,772, being the largest number ever received. The out-patients numbered 21,142. During the latter part of the year, seven nurses were laid up with typhoid fever, one of whom died. All the nurses who were thus laid up had been engaged in nursing typhoid cases. A discussion ensued with reference to this outbreak of typhoid, and it was suggested that fever-cases should not be received at all. This, however, was negatived; and it was ultimately resolved: "That the medical staff of the hospital be requested to inquire and confer amongst themselves as to the late cases of typhoid fever, and with reference to the regulations for nursing such cases; and report thereon to the weekly board." Certainly the matter calls for serious consideration.

THE EXETER SANATORIUM.

IT is not often that a hospital for infectious diseases can show such excellent work as that of the Exeter Sanatorium for 1883. During the year, 81 cases were under treatment in it, including 28 cases of typhoid fever, 26 of scarlet fever, 12 of small-pox, 3 of measles, 8 of diphtheria, and 4 of rötheln. The deaths were 6 in number, equal to 7.3 per cent. Typhoid fever was again the most fatal disease, 4 deaths occurring out of 28 cases. Of the 12 small-pox cases, 10 had old vaccination-marks (all these recovered), and 2 had no marks (of these one died). None of the cases had been revaccinated. The health-officers of the city speak in high terms of the usefulness of the Sanatorium, and draw gratified attention to its increased appreciation by the public.

THE CLASSIFICATION OF POVERTY. Thomas Delaune published in 1681 a little book entitled *The Present State of London*, and a correspondent has recently sent to the *Pall Mall Gazette* Delaune's classification of "the poor:" 1, The Poor by Impotency; 2, The Poor by Casualty; 3, The Thriftless Poor. He then proceeds to show that each class may be taken as having a triple subdivision, as follows: 1. *a*. The Fatherless Poor Man's Child; *b*. The Aged, Blind, and Lame; *c*. The Diseased Person, by Leprosie, Dropsie, etc. 2. *a*. The Wounded Soldier; *b*. The Decayed Householder; *c*. The Visited with any grievous Disease. 3. *a*. The Rioter, that consumeth all; *b*. The Vagabond, that will abide in no place; *c*. The Idle Person, as strumpets and others. For the first, there were Christ's Hospital, the Gray's Fryers, etc.; for the second, St. Thomas's and St. Bartholomew's, and similar institutions; while for the last class without exception, Bridewell was the fittest and only place.

INDIA AND THE COLONIES.

INDIA.

Are Parasitic Diseases caused by Eating Fish.—In June last year, it was rumoured that much sickness and some deaths had occurred in Pondicherry from eating sea-fish; and, a wide-spread panic existing, or, at least, being supposed to exist, the Government of Pondicherry interdicted sea-fishing. Deputy Surgeon-General M. C. Furnell, Sanitary Commissioner for Madras, was ordered to inquire into the alleged outbreak of disease; and his report, issued in December, is now before us. He was unable to discover that there had been any cases of death or disease; and the panic, if it ever existed, had subsided very quickly. It would appear that the rumour originated in, or was, at any rate, strengthened by, the condemnation of some fish at Pondicherry on account of their being infested with entozoa. As a matter of fact, however, nearly all fish are infested with entozoa, insomuch that Dr. Cobbold said that "fishes are their natural *habitat*." Dr. Furnell has drawn up a list of the parasites infesting man. It is of formidable length; but a careful perusal shows that, in the majority, the occurrence in man of the parasite mentioned is very rare, and may be looked upon as accidental. Further, of this long list, only five—three flukes and two round worms—have ever been supposed to have found their way into the human organism from eating fish. Of the flukes, two have been so rarely met with, that they may practically be omitted from consideration; and, with regard to the third—the *fasciola hepatica*, or liver-fluke—the researches of Mr. A. P. Thomas (British Medical Journal, vol. ii, 1882, p. 1000) seem to us to show very clearly that the true intermediate host of *fasciola hepatica* is the *limnœa truncatula*, an amphibious fresh-water mollusc. It also appeared from this research that development would not go on even in a very closely allied *limnœa*, so that it would seem highly improbable that any fish or any marine mollusc could act as the intermediate host. With regard to the round worms, one is exceedingly rare; but, in the case of the other—*ascaris lumbricoides*—Dr. Furnell mentions some facts in support of the view that its ova may be derived from fish, but does not attach much weight to the evidence, which is, indeed, purely inferential. *Bothriocephalus latus*, which is said to be derived by man from fish, is said to be unknown in Madras; whereas *tœnia solium* is not uncommon. A large number of fish were examined, and numerous entozoa were found; but the report on this part of the inquiry is not yet complete.

AUSTRALIA.

Medical Society of Victoria.—The annual meeting of this Society was held on January 9th. There was a numerous attendance, and the chair was occupied by Dr. James, President of the Society. The committee reported that during the past year the Society had received a large accession of new members. The total number of members at present was 173, of whom 157 were ordinary, 9 corresponding, and 7 honorary. The organ of the Society, the *Australian Medical Journal*, had also passed into fresh management. Dr. Allen and Dr. Moloney had retired from the editorship; and Dr. Jamieson had been elected editor-in-chief, with the assistance of Dr. Bowen and Dr. Webb as departmental editors. On the motion of Dr. Fletcher, seconded by Dr. Jackson, the report was adopted; as were also the Treasurer's and Librarian's reports. The following office-bearers were appointed for 1884: *President*, Dr. Haig; *Vice-Presidents*, Dr. Moloney and Mr. Rudall; *Honorary Treasurer*, Mr. Bowen; *Honorary Secretary*, Dr. Allen; *Honorary Librarian*, Dr. Webb; *Committee*, Dr. Nield, Mr. Girdlestone, Mr. James, Dr. James Robertson, Dr. Jamieson, and Dr. Williams; *Auditors*, Dr. W. Barker and Dr. Le Fevre. Mr. James, the retiring President, congratulated those present upon the healthy and vigorous condition of the Society. Dr. Cutts and Mr. Hewlett, both ex-presidents, had recently returned from a visit to the old country; and he might remark that it was a good thing now and then to re-visit the other side of the world, so as to see with their own eyes the progress which was being made in the science and practice of their profession, and also to keep up that pleasant personal knowledge of the men who, though so far away, were working on in the grand vocation to which they were proud to belong. It behoved him to notice a most important measure, recently passed into law, which intimately concerned the profession, and which could not fail to exercise a wholesome influence on the health of the community. He alluded to the Public Health Amendment Statute, 1883. Sanitary legislation was usually tardy, and often incomplete; but a perusal of this enactment would show that legislators had entered on this task with vigour. They had provided machinery and measures calculated to prevent the spread of disease, and promote the physical strength and well-being of the people, and, as a consequence, the wealth of the State. They had done their duty in conferring extensive powers on the central and local boards of health, and it now remained with the members of those boards to carry out the various hygienic measures contemplated by the Act. After alluding to many topics of local importance, such as that of the *personnel* of the new Central Board of Health, the appointment of medical officers of health, their pay, the pollution of rivers, the prevalence of tuberculosis amongst cattle and its influence upon the public health, vaccination with calf *versus* humanised lymph, and quarantine, the President remarked that one of the most important elements of Victorian medical history was the continued growth and expansion of the Medical School. First opened in 1862, it now embraced about one hundred and eighty students attending lectures, the dissecting-classes alone including a hundred. In the coming year, probably at least twenty would proceed to their final examinations, and the number of graduates annually sent out into the profession bade fair to surpass even recent expectations. Decided improvements were being effected in the curriculum. If proper clinical lecturers and instructors were appointed, with definite status and definite duties, little would remain to complete the organisation of the teaching staff, and doubtless this important step would soon be taken. The growth and multiplication of the classes had rendered necessary a decided extension of the Medical School buildings; and accordingly, the Premier had directed that the £10,000 recently voted by Parliament should be devoted to their completion. A new dissecting-room, a substantial museum, a larger library, with additional lecture-rooms and workrooms, might thus be provided; and, though the plans were not yet perfected, the erection of the new rooms would probably not be long delayed.—A vote of thanks was passed to Mr. James for his address, after which the meeting terminated.

OBITUARY.

JAMES CHRISTIE, A.M., M.D., Dundee.

We regret to announce the death of Dr. James Christie, of Dundee, which took place at Tunbridge Wells on February 27th. About three years ago Dr. Christie was compelled through failing health to give up his general practice. At the beginning of last winter, Dr. Christie and his family left Dundee for St. Leonard's, as it was hoped that the change of air and the waters might have a beneficial effect on his system, but these expectations were not realised. He subsequently removed to Tunbridge Wells, where his illness assumed an acute form, and, after several weeks of much suffering, terminated in death. James Christie was born in Banff in October 1813. Both his father and grandfather were members of the profession, having carried on, in succession, an extensive practice at Huntley, in Aberdeenshire. After graduating in Arts at the University of Aberdeen, he studied for his profession in Edinburgh; and in 1833 took the diploma of the Royal College of Surgeons of England. Some time thereafter, Dr. Christie joined his father, and continued as his assistant for several years. In 1840 he obtained from the University of Aberdeen the degree of M.D. On the completion of his studies, he was invited by the late Sir James Clark to establish himself in London. Family considerations, however, preventing Dr. Christie from availing himself of this advantageous proposal, he remained in practice in Huntley for about eleven years.

The decided part taken by Dr. Christie in the movement which resulted in the formation of the Free Church of Scotland seriously damaged his prospects in the locality. In 1844, accordingly, he removed to Carnoustie, principally in consequence of a friendship existing with the family of the Rev. Dr. Trail of Panbride. After two years' practice in Carnoustie, he came to Dundee; and on the death of his friend Dr. Carruthers in 1847, succeeded to a considerable portion of the latter's practice.

In the years that followed till his retirement in 1882, Dr. Christie was engaged in the active pursuit of his profession in Dundee, and had an extensive practice. He took a leading part in the formation of the Forfarshire Medical Association about twenty-six years ago, and was one of the first in Dundee to abandon the old established practice of the practitioner dispensing his own medicines. He was attending physician in the Dundee Royal Infirmary for the usual term, upon the expiry of which he was elected to the consulting staff. For a number of years he was visiting physician to the Dundee Royal Lunatic Asylum, and latterly he held the appointment of certifying surgeon under the Factory Acts for the eastern district of Dundee. About a year ago, the state of his health became so precarious that he was compelled to resign the appointment, and was succeeded by Dr. J. W. Miller.

Professionally, Dr. Christie took high rank as a consulting physician, and his advice was often asked by his professional brethren. His happy genial manner made him a welcome visitor in the sick-room, and his cheerful words always inspired his patients with hope. Urbanity and frankness of disposition were natural characteristics of the man, and drew around him a large and attached circle of friends. His sympathy with suffering endeared him to the poorer class of his patients. He was ever ready to relieve distress; and where, as it often happened, illness and poverty were found together, he relieved both by adding to his advice some little delicacy which he thought would revive and strengthen the sufferer. Dr. Christie is survived by three sons and two daughters.

CHARLES GREIG, F.R.C.S.Ed., M.R.C.S., L.S.A.

Mr. Charles Greig was the son of Charles Greig, Esq., and was born at Gillingham, in Kent, on November 15th, 1816. He received his early education at Havre de Grace, in Normandy, and Elizabeth College, Guernsey, and pursued his medical studies first as a pupil of Mr. Richard Smith at the Bristol Royal Infirmary, and afterwards at St. George's Hospital, with great perseverance and earnest endeavour to render himself thoroughly and practically efficient in his profession. Immediately upon becoming qualified, he was appointed Resident Medical Officer to the Macclesfield Dispensary, where he soon won the esteem of the governors and patients by the faithful discharge of his duties. But he was not allowed to remain there long, for, the position of House-Surgeon to the Bristol Royal Infirmary becoming vacant, he was unanimously elected to that post, the heavy responsibilities of which he most efficiently discharged for a period of six years. Soon after his appointment, finding the work more than he could singly discharge, he applied to the Committee for an assistant house-surgeon, and, in consequence, an officer bearing that title was created, and has proved ever since to be a valuable and necessary addition to the staff. Mr. Greig resigned his position at the Infirmary in 1846, and, though offered an excellent appointment in St. Petersburg, which would have led him into a position of prominence and wealth, as his uncle, Sir Alexis Greig, was admiral of the Russian fleet and Knight of the Imperial Orders, and his cousin, Woronzow Greig, was aide-de-camp to Prince Menschikoff, and bore a flag of truce from Sebastopol to Lord Raglan, and other relations stood high at court, he decided to remain in his native land, and entered upon private practice in Clifton and Bristol. He rapidly gained a large and high-class practice, and endeared himself to many for a period of thirty-seven years as a most kind, sympathising, and devoted family doctor, and a thorough Christian gentleman, possessed of great talent and judgment and ability as an operator. He once contested a vacancy for surgeon to the Bristol Infirmary, but being unsuccessful, and feeling that he had merited the position from his long and faithful services as house-surgeon, he declined to offer himself for a future vacancy.

From the time of his leaving that institution, numbers of the working classes who had been under him there came to his house seeking his advice, and he fixed hours on two days of the week when he would see them; after a time, he devoted almost the whole of one day each week to giving his highly prized advice to these people, in whom he ever took a great interest. When urged in later years to lessen this strain upon his energies and time, he replied: "We are indebted to the poor for our practice and experience as young men; and I feel that, when I have gained such experience that my opinion is sought for, it is my duty to give them the benefit of it." His acts of benevolence were great and many, and his care was to avoid their becoming known. As an instance, the editor of one of the Bristol newspapers, who had known and respected Mr. Greig for many years, said, at his open grave after the funeral: "I remember a respectable man lying ill with consumption, and Mr. Greig was attending him; but he and his friends were quite unable to pay the doctor's fees, or even to provide the necessary comforts; and it was not till some time after the patient's death that the friends discovered that it was to Mr. Greig himself that they owed the fowls and other good things which constantly arrived for the invalid. One who was in a position to know, when told this, replied, 'I am sure I could recall a hundred such actions of his.'"

Mr. Greig's strength had been failing for a year or more, and though he improved during last autumn, he became markedly weaker since Christmas, and on February 20th gave evidence that his life would soon end; of this he was quite conscious, and with perfect resignation and peace of mind, and free from any pain, he gradually sank and expired on Wednesday [illegible] 27th of February.

Mr. Greig was twice married; his first wife was Emily Lucy, daughter of Admiral Renwick. She had three daughters, two of whom are living, and one died suddenly in 1871. He married secondly Harriet, daughter of Captain Edward Bayliss, of the 9th Lancers, who, with her young daughter and son, survives him. On March 1st Mr. Greig's mortal remains were laid at rest in his vault at Arno's Vale Cemetery, with those of his first wife and deceased daughter. Some relations and old personal friends attended, and a number of private carriages followed the hearse. Many beautiful floral wreaths and crosses were piled on his coffin; but, owing to the heavy rain and cold, a large number of friends and patients who had proposed being present to give this last token of their esteem for this truly excellent man, were prevented from doing so.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Wednesday, March 12th.

Disused Burial-Grounds.—Mr. Hollond moved the second reading of this Bill, the object of which was to enlarge the powers of the authorities to prevent building on disused burial-grounds and for their preservation as open spaces.—Mr. Elton thought some provision should be made for compensation in those cases where individual interests were concerned.—Mr. J. G. Talbot asked that some provision should be taken to meet those cases in which facilities had been granted for the erection of vicarage-houses on disused burial-grounds.—Mr. Bryce supported the Bill.—Lord Folkestone approved of the Bill, but suggested that before building on a disused burial-ground more than one month's notice should be given. The Bill was then read a second time.

Commons and Inclosure Acts Amendment Bill.—Mr. W. James moved the second reading of the Bill, and said that its object was to enlarge and extend the operation of the Commons Acts of 1866 and 1876, with regard both to metropolitan commons and commons in the country.—Mr. Elton moved the rejection of the Bill, and said that it was out of the question to repeal the Statute of Merton after a speech of half a minute's duration. He objected to the Bill on the ground that it would take away the rights of lords of the manor to inclose without compensation.—Lord Folkestone complained that no reasons had been given for the Bill. The noble lord was speaking against the Bill, when, at a quarter to six, the debate was suspended.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

HEALTH STATISTICS OF ENGLAND AND WALES DURING 1883.

The improvement in the general health of England and Wales, which in recent years has become very marked, was fully maintained during 1883. In the first three years of the current decade the annual death-rates were lower than in any previous year since civil registration was established in 1837. The birth-rate, however, showed a further decline from that recorded in recent years, and was lower than in any year since [illegible].

During the year 1883, 889,815 births and 522,662 deaths were registered in England and Wales. The excess of births over deaths, which is the *natural* increase of the population, was therefore 367,153, against 391,707 and 372,504 in 1881 and 1882. The estimated increase of the population of the country, based upon the rate of increase known to have prevailed between 1871 and 1881, was 359,284, or 7,869 less than the excess of births over deaths. This number may be said to represent the balance between emigration and immigration. The number of British emigrants that left the United Kingdom during 1883 was 321,914, of whom 186,273 were English, 31,449 Scotch, and 104,192 Irish. This number showed a further increase upon those recorded in the six preceding years; the increase of emigration during last year, as compared with 1882, amounted to 13 per cent. from England and 37 per cent. from Ireland, whereas from Scotland the emigration showed a decline of rather more than 4 per cent. Of the British emigrants during 1883, 59 per cent. left for the United States, 22 for the Australian colonies, 14 per cent. for British North America, and 5 per cent. for all other places.

The birth-rate in England and Wales in 1883 was equal to 33·2 per 1,000 of the population estimated at 26,770,744 in the middle of the year), and showed a further decline from the rates recorded in the seven preceding years. The death-rate for the year did not exceed 19.5 per 1,000, and, with the single exception of 1881, was lower than that recorded in any year since 1837, when civil registration of births and deaths first came into operation. The remarkable improvement in the health and sanitary condition of the country, as shown by the recent marked decline in the death-rate, is fully maintained, and is mainly to be attributed to the practical operation of the Public Health Acts of 1872 and 1875. The general English death-rate during the thirty years 1841-1870 averaged 22.4 per 1,000. During the last decade, 1871-80, the death-rate in England and Wales declined to 21.5 per 1,000, and in the first three years of the current decade the death-rates have been 18.9, 19.6, and 19.5 per 1,000 respectively, the three lowest rates on record. This signifies that nearly 165,000 persons have survived in England and Wales during the past three years, whose deaths would have been recorded had the mean rate of mortality that prevailed in the preceding decade been since maintained.

The deaths from all causes registered in England and Wales during 1883 included 15,099 which resulted from diarrhœa, 12,415 from scarlet fever, 9,777 from whooping-cough, 8,961 from measles, 7,789 from fever (principally enteric), 3,978 from diphtheria, and 953 from small-pox. Thus, 58,972 deaths were referred to these principal zymotic diseases, equal to a rate of 2.20 per 1,000, showing a considerable decline from that recorded in 1882. With the single exception of diphtheria, the deaths referred to each of these zymotic diseases showed a decline from those returned in the preceding year; the most marked decline occurred in the fatal cases of whooping-cough and measles.

The 522,662 deaths registered in 1883 included 122,303 of infants under one year of age, 261,189 of persons aged between one and sixty years, and 139,170 of persons aged upwards of sixty years. The rate of infant-mortality, measured by the proportion of deaths under one year of age to births registered, was equal to 137 per 1,000; while the proportion of infant-mortality during the ten years 1871-80 averaged 149 per 1,000, during the past three years of the current decade it has not exceeded 136 per 1,000. Among persons aged upwards of sixty years, the rate of mortality during 1883 was equal to 69.6 per 1,000 persons estimated to be living at these ages, and showed a slight further increase upon the rates in the two preceding years.

During 1883 the number of inquest cases registered was 28,448, equal to a proportion of 5.4 per cent. of the total deaths, which somewhat exceeded the average percentage in recent years. The deaths referred to different forms of violence were 17,231, and exceeded by 266 the number returned in 1882; they were equal to 3.3 per cent. of the total deaths, and to a rate of 0.64 per 1,000 of the population.

HEALTH OF ENGLISH TOWNS.—In twenty-eight of the largest English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons, 6,024 births and 3,773 deaths were registered in the week ending the 8th instant. The annual rate of mortality per 1,000 persons living in these towns, which had been 21.1 and 20.3 in the two preceding weeks, rose again to 22.5 during the week ending March 8th. The rates in the several towns, ranged in order from the lowest, were as follow:—Birkenhead, 13.8; Derby, 16.1; Brighton, 17.1; Bristol, 17.7; Wolverhampton, 18.6.; Cardiff, 19.0; Birmingham, 19.6; Bradford, 20.2; Portsmouth, 20.4; Hull, 20.7; Newcastle-upon-Tyne, 20.7; London, 21.3; Leeds, 21.7; Norwich, 21.9; Leicester, 22.0; Huddersfield, 24.3; Sheffield, 24.5; Salford, 25.4; Liverpool, 25.6; Nottingham, 26.2; Halifax, 26.6; Blackburn, 26.9; Sunderland, 28.4; Bolton, 28.7; Manchester, 29.3; Plymouth, 29.7; Oldham, 31.5; and the highest rate, 35.1, in Preston. In the twenty-seven provincial towns the average death-rate last week was equal to 23.5 per 1,000, and therefore exceeded by 2.2 the rate recorded in London. The 3,773 deaths registered last week in the twenty-eight towns included 138 which were referred to whooping-cough, 108 to measles, 94 to scarlet fever, 44 to "fever" (principally enteric), 25 to diphtheria, 25 to diarrhœal diseases, and 15 to small-pox. In all, 449 deaths resulted from these principal zymotic diseases, against 433 and 407 in the two preceding weeks. These 449 deaths were equal to 11.9 per cent. of the total deaths, and to an annual rate of 2.7 per 1,000. The zymotic rate was equal to 2.8 per 1,000 in London, which slightly exceeded the rate in the twenty-seven provincial towns, among which it averaged 2.6, and ranged from 0.0 in Bradford and 0.2 in Bristol, to 4.3 in Oldham, 5.1 in Nottingham, and 5.9 in Sunderland. The deaths referred to whooping-cough in the twenty-eight towns, which in the two previous weeks had been 127 and 121, rose last week to 138; they exceeded the number in any week since the middle of 1882, and caused the highest death-rates in Huddersfield and Bolton. The 108 fatal cases of measles exceeded by 21 the number returned in the preceding week, and showed the largest proportional fatality in Portsmouth, Manchester, Oldham, and Nottingham. The deaths referred to scarlet fever, which had been 99 and 75 in the two previous weeks, rose to 94 last week, and caused the highest rates of mortality in Sheffield, Newcastle-upon-Tyne, and Leeds. The fatal cases of fever, which in the two preceding weeks had been 34 and 40, further increased last week to 44, and caused the highest proportional fatality in Sunderland. The 25 deaths referred to diarrhœal diseases were considerably fewer than those returned in any recent week. The fatal cases of diphtheria in the twenty-eight towns, which had been 29 in each of the two previous weeks, declined to 25 last week, a lower number than has been recorded in any week since the beginning of November last; 12 occurred in London, 3 in Leeds, 2 in Birmingham, and 2 in Manchester. The deaths referred to small-pox in these towns, which in the two preceding weeks had been 11 and 18, declined to 15 last week, of which 7 were recorded in Sunderland, 4 in Birmingham, 1 in London, 1 in Liverpool, and 1 in Wolverhampton. The death-rate from diseases of the respiratory organs, judged by the metropolitan returns, was considerably below the average; the fatal cases of these diseases in London, which had been 345 and 334 in the two previous weeks, rose to 384 last week, but were 107 below the corrected average weekly number, and were equal to an annual rate of 5.0 per 1,000. The causes of 85, or 2.3 per cent., of the 3,773 deaths registered last week in the twenty-eight towns were not certified, either by medical practitioners or by coroners. The proportion of uncertified deaths did not exceed 0.9 per cent. in London, whereas it averaged 3.3 per cent. in the provincial towns, and showed the largest excess in Hull, Salford, Halifax, and Wolverhampton.

HEALTH OF SCOTCH TOWNS.—During the week ending the 8th instant, 881 births and 562 deaths were registered in eight of the principal Scotch towns, having an estimated aggregate population of 1,254,607 persons. The annual rate of mortality, which had been 20.9, 22.6, and 23.2 in the three preceding weeks, further rose to 23.3 last week, which exceeded the average rate for the same period in the twenty-eight large English towns by 0.8 per 1,000. Among these Scotch towns, the death-rate was equal to 15.6 in Leith, 16.3 in Dundee, 20.2 in Edinburgh, 21.4 in Paisley, 21.5 in Greenock, 23.8 in Aberdeen, 27.4 in Glasgow, and 35.3 in Perth. The 562 deaths registered last week in these towns included 81 which were referred to the principal zymotic diseases, against 77 and 84 in the two preceding weeks; of these, 31 resulted from whooping-cough, 14 from diarrhœal diseases, 12 from diphtheria, 8 from scarlet fever, 8 from measles, and 8 from "fever." These 81 deaths were equal to 14.4 per cent. of the total deaths, and to an annual rate of 3.4 per 1,000, which exceeded by 0.7 per 1,000 the average zymotic death-rate recorded last week in the twenty-eight English towns. The lowest zymotic death-rates in the Scotch towns were 0.0 in Leith, and 2.1 in Dundee, whereas the rate was equal to 4.3 in Glasgow and in Greenock, and 5.4 in Paisley. The deaths referred to whooping-cough, which had been 26 and 21 in the the two previous weeks, rose again to 31, of which no fewer than 23 occurred in Glasgow; since the beginning of this year, as many as 154 deaths from this disease have been recorded in this city. The twelve fatal cases of diphtheria were 5 less than the number returned in the preceding week; 3 occurred in Glasgow, 3 in Edinburgh, 2 in Dundee, and 2 in Greenock. The deaths from scarlet fever, which had been 10 and 7 in the two previous weeks, were 8 last week, of which 7 were recorded in Glasgow, and 1 in Edinburgh. The 8 fatal cases of measles showed a decline of 5 from the number in the preceding week, and included 5 in Paisley, and 2 in Edinburgh. The deaths referred to "fever," which in the three previous weeks had risen from 4 to 15, declined last week to 8, of which 3 were recorded in Edinburgh, 2 in Glasgow, and 2 in Aberdeen. The mortality from diseases of the respiratory organs in these Scotch towns continues much below the average, and was equal to an annual rate of 4.8 per 1,000 persons living, which was slightly below the rate from the same diseases last week in London. As many as 83, or nearly 15 per cent. of the 562 deaths registered last week in these towns, were uncertified.

HEALTH OF IRISH TOWNS.—In the week ending Saturday, March 8th, the total number of deaths in the sixteen principal towns in Ireland was 407. The average annual death-rate thus represented was 24.6 per 1,000 of the population, the respective rates for the several districts being as follows, ranging in order from the lowest to the highest: Newry, 7.0; Lisburn, 9.7; Galway, 10.1; Lurgan, 10.3; Sligo, 14.4; Limerick, 14.8; Armagh, 15.5; Drogheda, 16.9; Londonderry, 19.6; Belfast, 23.8; Dublin, 24.9; Kilkenny, 29.6; Dundalk, 30.6; Cork, 37.6; Waterford, 39.4; Wexford, 42.8. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 3.0 per 1,000, the rates varying from 0.0 in Galway, Newry, Wexford, Dundalk, Sligo, Lisburn, and Lurgan, to 20.8 in Waterford; the 17 deaths from all causes registered in the last named district comprising 6 from scarlatina and 3 from whooping-cough. Among the 99 deaths from all causes registered in Belfast are 4 from each of the following diseases: scarlatina, whooping-cough, and diarrhœa. The 58 deaths from all causes registered in Cork comprised 1 from scarlatina, 3 from typhus, and 1 from diarrhœa; and the 11 deaths in Londonderry comprised 3 from scarlatina, 1 from typhus, and 2 from whooping-cough. In the Dublin Registration District, the deaths registered during the week amounted to 175—82 males and 92 females. There were only 15 deaths from zymotic diseases registered, being 4 under the number for the preceding week, and 18 under the average for the tenth week of the last ten years; they comprised 3 from scarlet fever, 2 from typhus, 2 from whooping-cough, 1 from diphtheria, 2 from enteric fever, 2 from diarrhœa, 1 from erysipelas, etc. Thirty-one deaths from diseases of the respiratory system (including 24 from bronchitis and 4 from pneumonia or inflammation of the lungs were registered, being 25 under the average for the corresponding week of the last ten years, and 7 under the number for the week ended the 1st instant.

HEALTH OF FOREIGN CITIES.—It appears from statistics published in the Registrar-General's return for the week ending the 8th instant, that the annual death-rate recently averaged 38.1 per 1,000 in the three principal Indian cities; it was equal to 28.6 in Calcutta, 29.2 in Bombay, and 62.9 in Madras. Cholera caused 5 deaths in Calcutta, 11 in Bombay, and 17 in Madras; in Madras so many as 114 deaths resulted from small-pox, showing an increase upon the numbers in the two previous weeks. According to the most recently received weekly returns, the average death-rate in twenty-two of the largest European cities was 28.8 per 1,000, and was no less than 6.3 above the mean rate last week in the twenty-eight large English towns dealt with in the Registrar-General's weekly return. The death-rate in St. Petersburg was equal to 37.2, and showed a further slight decline from the higher rates in previous weeks; the 62 deaths included 26 from "fever", 24 from measles, and 23 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the mean death-rate did not exceed 20.6, the highest rate being 23.3 in Stockholm; diphtheria and croup caused 4 deaths in Stockholm, and typhoid fever 2 in Copenhagen. In Paris the death-rate rose to 26.5 (against 21.3 in London), and the deaths included 70 from diphtheria and croup, 47 from typhoid fever, and 31 from measles. The 220 deaths in Brussels were equal to a rate of 26.8, and included 4 from small-pox and 7 from whooping-cough. In Geneva the rate was so high as 36.1, and 5 of the 49 deaths resulted from typhus and typhoid fever. In the three principal Dutch cities Amsterdam, Rotterdam, and the Hague the mean death-rate was 24.9, the highest rate being 25.5 in Amsterdam, where 23 of the 177 deaths were attributed to diphtheria and croup. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 27.8, and ranged from 21.7 and 27.2 in Berlin and Hamburg to 35.1 and 40.3 in Prague and Trieste. Small-pox caused 41 deaths in Prague, 4 in Berlin, and 3 in Vienna; diphtheria showed the greatest mortality in Dresden, Berlin, and Hamburg. The death-rate in three of the principal Italian cities averaged 37.7, and was equal to 30.0 in Venice, 36.9 in Rome, and 43.2 in Turin. Malarial fever caused 11 deaths in Rome, and the deaths in Turin included 25 from measles, 9 from typhoid fever, and 5 from small-pox. The 156 deaths in Lisbon, including 3 from typhoid fever, 2 from small-pox, and 2 from diphtheria, were equal to a rate of 40.0. The mean death-rate in three large American cities did not exceed 20.1, the highest rate being 21.3 in Philadelphia. Typhoid fever caused 15, and scarlet fever 20 deaths in Philadelphia; diphtheria was somewhat prevalent in each of these three American cities.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

HELMSLEY RURAL DISTRICT.—Looking to the pains which Dr. Bruce Low bestows on his reports, and their very considerable merit, it must be disappointing to him to find his authority objecting to their length. He should take courage, however, and wait patiently for the change of opinion as to the usefulness of his researches, which is certain to come before long. Dr. Low's reports are indeed models in many respects, and are well worthy of imitation by those health-officers who are content to record a few bald statistics. The Helmsley district has [illegible], a population of 3,971 persons, scattered over an area of 51,598 acres, and yet the report on its sanitary circumstances takes cognisance of a variety of subjects. It discusses at considerable length the causation and etiology of disease, the diffusion of infection, and the progress of, and need for, sanitary work. The spread of scarlatina by a washer-woman, whose daughter when recovering from the disease assisted in taking the linen home, has already been referred to in these columns (see JOURNAL, vol. i., 1883, p. 924). The diffusion of measles was associated with exposure of infected persons in common lodging-houses; but the origin and spread of several cases of diphtheria could not be satisfactorily explained. In referring to the lessened mortality from zymotic disease (which was fatal in two cases only), and to the fact that the general death-rate is the lowest on record, Dr. Low comments on the progress of sanitation, and urges his authority to assist their officers in the good work which is beginning to bear fruit.

PORT OF LIVERPOOL.—Dr. Stopford Taylor, in his last report on this port district, shows very clearly that the inquiry which was commenced some time since by Dr. Blaxall on behalf of the Local Government into the condition of emigrants previous to their departure from these shores was not instituted a moment too soon. During 1882 no fewer than 234,000 emigrants arrived at Liverpool, and the passage of so large a number of persons, brought from all parts of the Continent and the British Isles, cannot but be attended with considerable risk to the inhabitants of the city, more particularly as they undergo no medical examination previous to their arrival. Dr. Taylor observes that it is no unusual circumstance to find some of them in an advanced stage of infectious disease on arriving, when they are immediately sent to hospital. During 1882 197 emigrants were so isolated, nearly all of whom where foreigners, and being under the control of the shipping companies, were easily dealt with. British emigrants, on the other hand, are under no supervision, except such as is exercised over lodging-houses, and they may, therefore, readily spread disease over the city unchecked. With one exception, there was no serious amount of sickness discovered on board vessels visiting the port, the exception being that of the *Arethusa*, in which eleven cases of cholera occurred during the voyage from Calcutta. Amongst 4,820 vessels inspected, 320 required improvements, which were readily carried out by the shipowners.

SIDMOUTH.—Dr. Pullin has evidently the welfare of his district at heart, and he does not fail to draw prominent attention to the many natural advantages which it possesses. The town has an equable temperature; is effectually sheltered from the east, north, and west; and, for its southern aspect, has an uninterrupted seaboard of about fifty or sixty miles, formed by and adjacent to the Atlantic; while its gravelly soil and pure air especially recommend it to sufferers from phthisis and chest-diseases. In this last respect, it should be noted that but two deaths were recorded in 1882 from acute affections of the respiratory organs; and that, of six deaths from phthisis, three occurred in visitors who came to the town with the disease upon them. Zymotic disease was not present at any time during the year, and the obituary does not record a single death from this group of disorders. The infantile mortality represented 60.4 per 1,000 births, and Dr. Pullin again attributes this loss of infant life to carelessness and ignorance on the part of mothers, in substituting the bottle for the breast. With a general death-rate of only 11.75 per 1,000, Dr. Pullin takes exception to the prevalence of pig-nuisances, which he terms the chief blot to good sanitation in the district, and properly advises the preparation of a code of by-laws dealing with the subject.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 6th, 1884.

Cusse, Ernest, Great Ormond Street, W.C.
Humphreys, Francis Rowland, Queen Street, Finsbury, E.C.
Kebbell, Charles, Brunswick Place, Brighton.
[illegible], Arthur Stanley, Metropolitan Free Hospital, E.

The following gentleman also on the same day passed his Primary Professional Examination.

Stericker, George Frederick, Leeds School of Medicine.

MEDICAL VACANCIES.

The following vacancies are announced

BARNSTAPLE UNION.—Medical Officer. Salary [illegible] per annum. Applications by March 18th.

BRIDGNORTH INFIRMARY.—House Surgeon and Secretary. Salary [illegible] per annum. Applications by March 18th.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—House Surgeon. Salary, [illegible] per annum. Applications by [illegible]

CANCER HOSPITAL (Free), Brompton, S.W. Clinical Clerk and Dresser for six months. 20l. for the term. Applications by March 17th.

CANCER HOSPITAL (Free), Brompton, S.W. Resident House-Surgeon. Salary, 75l. per annum. Applications by March 17th.

CITY PROVIDENT DISPENSARY AND SURGICAL APPLIANCE ASSOCIATION 165, Aldersgate Street, E.C. Surgeon. Applications to the Secretary by March 17th.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Applications by March 19th.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Physician. Applications by March 19th.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, 100l. per annum. Applications to the Secretary, Board-Room, Bagillt Street, Holywell, by April 15th.

JERSEY GENERAL DISPENSARY. Medical Officer. Salary, 120l. per annum. Applications by May 1st.

KENT AND CANTERBURY HOSPITAL.—Physician. Applications by March 22nd.

MORPETH DISPENSARY. Resident Medical Officer. Salary, 100l. per annum. Applications by May 5th.

NAVAN UNION. Medical Officer of Workhouse. Salary, 100l. per annum. Applications to March 19th.

NEWCASTLE-ON-TYNE DISPENSARY.—Visiting Medical Assistant. Salary, 120l. per annum. Applications by March 20th.

NORWICH FRIENDLY SOCIETIES MEDICAL INSTITUTE, Norwich. Medical Officer. Salary, 150l. per annum.

PAROCHIAL BOARD OF KIRKCOWAN. Medical Officer. Salary, 52l. per annum. Applications to Mr. P. Gordon, Inspector of Poor, by March 31st.

RUBERY HILL ASYLUM.—Resident Clinical Assistant. Applications to Dr. Lyle, Medical Superintendent.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Surgeon. Applications by March 26th.

ST. PETER'S HOSPITAL FOR STONE AND URINARY DISEASES, etc., Henrietta Street, Covent Garden, W.C. Surgeon. Applications by March 17th.

ST. PETER'S HOSPITAL FOR STONE AND URINARY DISEASES, etc., Henrietta Street, Covent Garden.—House-Surgeon for six months. Honorarium, 25 guineas. Applications by March 24th.

SUSSEX COUNTY HOSPITAL, Brighton.—Assistant House-Surgeon. Salary, 40l. per annum. Applications by March 19th.

THAKEHAM UNION, Sussex. Medical Officer. Salary, 60l. per annum, and 20l. as Medical Officer of the Workhouse. Applications to W. T. Sandford, Clerk to the Guardians, Storrington, Sussex, by March 17th.

WEST LONDON HOSPITAL, Hammersmith. Surgeon. Applications by March 31st.

WEST RIDING LUNATIC ASYLUM, Wakefield. Resident Clinical Assistant. Applications to Dr. Herbert Major, the Medical Superintendent.

MEDICAL APPOINTMENTS.

Booth, E. H., M.B., Lond., appointed House-Physician to the Seamen's Hospital, Greenwich.

Clendinnen, I. G., L.R.C.S.I., re-appointed for three years, Medical Officer of Health to the Coseley Urban Sanitary Authority.

Dingley, Edward Alfred, M.R.C.S., appointed House Physician to the Wolverhampton and Staffordshire General Hospital, *vice* William Collier, M.R.C.S., resigned.

Gabb, J. Percy A., M.D.Lond., appointed Certifying Surgeon under the Factory Act for the Guildford District, *vice* J. R. Stedman, M.D., resigned.

Keelan, Michael, L.R.C.S.I., L.K.Q.C.P.I., appointed Medical Officer to the Dunleer Dispensary of the Ardee Union, *vice* Peter Keelan, L.R.C.S.I., L.K.Q.C.P.I., deceased.

Lacey, W. F., M.R.C.S., appointed House-Surgeon and Dispenser to the West Herts Infirmary, *vice* A. Lofthouse, M.R.C.S., resigned.

Laidlaw, Robert, M.B., C.M., appointed Medical Officer of Health to the Parish of Elie, N.B., *vice* John Kennedy, M.B., resigned.

Lane, William Arbuthnot, M.R.C.S., appointed Assistant-Surgeon to the Hospital for Sick Children, Great Ormond Street, W.C.

Mackay, William, M.B., C.M.Edin., appointed Assistant Medical Officer to the Coton Hill Lunatic Hospital, Staffordshire, *vice* R. W. Hewson, L.R.C.P., promoted.

Mears, W. P., M.D., appointed Examiner in Anatomy to the University of Durham.

Oliver, Vere L., L.R.C.P., appointed Resident Medical Officer to the Boscombe Provident Infirmary, *vice* J. Atkinson Hosker, M.R.C.S.Eng., resigned.

Renton, J. F., M.B., C.M., appointed Medical Officer to the Aberdeen Dispensary, *vice* J. G. Hall, M.D., resigned.

Salter, S. T., M.A., M.B.Camb., appointed House-Surgeon to the Seamen's Hospital, Greenwich, *vice* E. H. Booth, M.B.Lond.

Sinclair, F. W., M.A., M.B., C.M., appointed House-Surgeon to the Memorial Hospital, Jarrow-on-Tyne.

Williams, D. W., M.R.C.P., appointed Honorary Physician to the West Norfolk and Lynn Hospital, *vice* William Dale, M.D.Lond., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

DEATH.

Denton.—On March 9th, at his residence, Ivy Lodge, Hornsey, Samuel Best Denton, M.D.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.......	St. Bartholomew's, 1.30 P.M. Metropolitan Free, 2 P.M. St. Mark's, 2 P.M. Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M. Hospital for Women, 2 P.M.
TUESDAY	St. Bartholomew's, 1.30 P.M. Guy's, 1.30 P.M. Westminster, 2 P.M. Royal London Ophthalmic, 11 A.M. Royal Westminster Ophthalmic, 1.30 P.M. West London, 3 P.M. St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.
WEDNESDAY ...	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M. University College, 2 P.M. London, 2 P.M. Royal London Ophthalmic, 11 A.M. Great Northern, 2 P.M. Samaritan Free Hospital for Women and Children, 2.30 P.M. Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.
THURSDAY ...	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M. Royal Westminster Ophthalmic, 1.30 P.M. Hospital for Women, 2 P.M. London, 2 P.M. North-west London, 2.30 P.M. Chelsea Hospital for Women, 2 P.M.
FRIDAY	King's College, 2 P.M. Royal Westminster Ophthalmic, 1.30 P.M. Royal London Ophthalmic, 11 A.M. Central London Ophthalmic, 2 P.M. Royal South London Ophthalmic, 2 P.M. Guy's, 1.30 P.M. St. Thomas's (Ophthalmic Department), 2 P.M. East London Hospital for Children, 2 P.M.
SATURDAY	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M. Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M. London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

Charing Cross.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

Guy's.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

King's College.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

London.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

Middlesex.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

St. Bartholomew's.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

St. George's.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

St. Mary's.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

St. Thomas's.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

University College.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

Westminster.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Amand Routh: A Case (Adult) of Sporadic Cretinism, with Appearance of Myxœdema (living specimen). Dr. Colcott Fox: On Impetigo Contagiosa. Mr. Astley Bloxam: A Case of Head-Injury.

TUESDAY.—Pathological Society of London, 8.30 P.M. Mr. Roger Williams: Photograph of Congenital Absence of the Femora. Mr. Makins: Obstruction of the Trachea in a Child from Pressure of an Enlarged Gland. Dr. Norman Moore: Natiform Skull. Dr. Goodhart for Dr. Ilott: Cerebral Tumour. Dr. Morrison and Dr. Charlewood Turner: A Case of Porencephalie. Dr. Pye-Smith: Tumour of the Thalamus. Dr. Ormerod: Cerebral Tumour. Dr. Goodhart for Dr. Bevan Lewis: Calcified Angeioma of Brain. Dr. Sainsbury: Tubercle of the Brain. Mr. Morrant Baker: Epithelial Cancer following Syphilitic Ulcer of the Tongue (living card-specimen). Dr. Turner: Defective Brain-Cyst (card); Adenosarcoma of Brain (card). Dr. Sharkey: Primary Cancer of Kidney (card). Mr. Clutton: Congenital Papilloma in Line of Branchial Fissure (card). Mr. Lockwood: Dissected Specimen of Colles's Fracture (card). Mr. Parker: Congenital Absence of the Rectum (card). Dr. Taylor: Tumour of Pituitary Body (card). Statistical Society, 7.45 P.M. Mr. Longstaff: The Recent Decline in the English Death-Rate, considered in Connection with the Causes of Death.

THURSDAY.—Harveian Society of London, 8.30 P.M. Mr. Sewill: A Case of Cataract and Spasm of the Facial Muscles, due to Dental Irritation. Mr. F. Treves: On Certain Forms of Intestinal Obstruction that may follow after Hernia.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT. We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE REGULATIONS OF THE UNIVERSITY OF DURHAM AND ST. ANDREWS.

SIR,—From time to time, both in the BRITISH MEDICAL JOURNAL and in the other medical papers, frequent but spasmodic attention has been drawn to the regulations of St. Andrews and Durham Universities, by which the bestowal of the M.D. degree after examination, but without residence, is fettered by the condition that its recipients shall have attained the age of forty years, and complaint has been made that this restriction is injurious, both to the number of those who seek this distinction by deferring it to so late a period, and also it diminishes the number of those who go in for the examination and degree. It is difficult to see why any restriction of this kind should be insisted upon, unless it be looked upon as penal because the men have preferred some other to their own school. It is no doubt advisable that a portion of the curriculum of those who graduate at any university should be spent in the school of that university; but if it be conceded that students of other schools should be admitted to its degrees after examination, why not reduce the limit of age to one at which it would be of some good to those who seek the distinction? Say thirty, or ten years after the possession of a registrable qualification. The possession of the M.D. degree is without doubt of some benefit to its possessors, but under the present regulation of the examining bodies which require a minimum curriculum of four years for any qualification to practice, which is the same as that required by all the Scotch Universities and by that of Durham, it follows that, granted the same capacity in those who study in London or in the provinces as in those who study in the North, the holders of London qualifications must be at least equal to the graduates of the Scotch Universities. And, indeed, seeing that part of the time spent at the latter is taken up by such subjects as zoology and natural philosophy, it must be at the expense of the purely medical subjects, seeing that the former pass such subjects as part of the preliminary or omit them from the course of study. But still there is a hankering after the possession of a degree in the majority of those who practise without it, and the question is, why should it not be obtainable by those who, from circumstances, perhaps, beyond their control, have studied in London, or elsewhere than at the University whose degrees they wish to obtain. My object in writing is not to discuss the relative merits of the universities and the licensing bodies, but to draw attention, with a view to united action, to the following propositions.

1. There exist a number of men in the profession who, not possessing a degree, are desirous of obtaining one.

2. Those holding qualifications to practice obtained after examination and the same curriculum as is required by the universities, are unable to do so until forty years of age, when its value to the possessor is much diminished.

3. A memorial from those desirous of obtaining degrees should be presented to the universities who now make this restriction, [illegible] that all duly qualified men after the age of thirty be admitted to examination for the degrees under the same conditions as now exist, excepting this change.

Asking the co-operation of those who desire such a change, with a view to united action. I am, yours truly,

THIRTY-ONE.

MR. C. E. ABBOTT (Braintree).—It is inconvenient to have to deal with written matter of the kind to which you refer, and we could not undertake to return or be responsible for MS. sent to us. Perhaps the report has been reproduced in the local paper, in which case a marked copy of the paper can be sent to us, and shall receive attention.

LIGHTING OF DOCTORS' BROUGHAMS.

SIR,—On [illegible] notes on the above subject, I thought it would interest those who are anxious of making the most of their time, to have as much information as possible. I have a window in the roof vertically over the position in which a [illegible] in the centre of the carriage, the hinges are in the front, and the [illegible] to keep open the window (when required) are at the back. The size of the window should be 12 inches by 8½. For the purposes of [illegible] I have the side windows hung raised one inch from the bottom, so that the current goes directly up, and not down on the shoulders and back, as is the case when ventilation is obtained by letting down windows.

The advantages of window ventilation are fully illustrated in Mr. Pridgin Teale's excellent work, *[illegible] to Health*. At night, I have an oil lamp, which [illegible], when sitting to the [illegible]. The glass of the lamp is [illegible] and [illegible] by myself from the inside. The [illegible] has access from the outside. No smell or smoke gets into the carriage. The lamp can be easily removed, and the window slid back into its place. The entire cost of lamp and fittings, [illegible], and the [illegible], about [illegible]. I find the light satisfactory, and cheap. Mr. Brown, coachbuilder, 10, Portobello Road, Notting Hill, who has attended to my [illegible], will be pleased to give any personal information on the subject.—I am, yours truly,

W. STEWART THOMSON.

Ladbroke [illegible], [illegible] Park, W.

THE TREATMENT OF ABORTION.

SIR,—I am always astonished at the passages in letters and other communications in the BRITISH MEDICAL JOURNAL which speak lightly of evacuating the uterus of its contents in cases of abortion. To me, the operation is beset with difficulties, inasmuch as the parts are quite unprepared for the introduction of, at the most, more than three fingers; hence the impossibility of exploring satisfactorily the cavity of the uterus, and of "sweeping out" its contents, and definitely arriving at the conclusion that everything has been got rid of; for seldom do the napkins assist the operator, and the introduction of the hand into the vagina of a primipara, for instance, seems very harsh treatment. The result, I always find, is doubt, delay, and disappointment, and at times danger to the patient.

I was asked recently to attend a woman who, I was told, was threatened with premature labour. On my arrival, I found there had been considerable flooding, and the discharge of a small mole, with a cyst in the centre large enough to contain a walnut. The patient, aged 30, was the mother of two healthy children, and her labours had been natural and easy, with the exception that the perinæum had been considerably torn on the birth of her first child, necessitating two or three stitches. She was under the impression that she was six months gone, but had menstruated up to within seven weeks, and feared something unusual in her condition.

The uterus could not be perceived on palpation through the rather thick walls of the abdomen; but, by digital examination *per vaginam*, it was found to be decidedly larger than natural, and the os uteri dilated, with considerable bleeding going on; but I could not reach far enough to ascertain the condition of the cavity of the uterus, and relieve it of its contents, if any were present.

My object in writing is to ask some associate or associates, who do not experience my difficulties, what are the measures to be adopted to ensure bringing such a case to a satisfactory issue. I may add that I look with a certain amount of dread at a case of abortion, though I have attended hundreds of confinements, and have performed most of the capital operations of obstetrics: and, as good fortune will have it, without the loss of a single mother.—I am, etc.,

A MEMBER.

THE HIND FUND.

THE following additional subscriptions have been received and paid to the account of the "Hind Fund" at Messrs. Coutts's Bank.

	£	s.	d.		£	s.	d.
Clark, Sir Andrew, Bart. ..	5	5	0	Leak, T. L., Esq.	0	10	0
Evans, Robert, Esq... ..	5	5	0	Manton, F., Esq.	2	2	0
Giles, P. B., Esq.	1	1	0	Marsden, Dr. Alex.	2	2	0
Graham, Dr. J. C. (Sumatra)	5	0	0	Pollock, Geo. D., Esq... ..	1	1	0
Hewett, Sir Prescott, Bart.	5	5	0	Roberts, Dr. Lloyd	2	2	0
J. R. J.	1	1	0				

Subscriptions may be paid to Dr. Richardson, F.R.S., Chairman, 25, Manchester Square; John Tweedy, Esq., F.R.C.S., 24, Harley Street, Hon. Treasurer; A. J. Pepper, Esq., F.R.C.S., 122, Gower Street; and Thomas Wakley, jun., Esq., L.R.C.P., 96, Redcliffe Gardens, Hon. Secretaries; or to Messrs. Coutts and Co., Strand.

VIOLENT ITCHING IN AN ELDERLY GENTLEMAN.

SIR,—I have a patient, an elderly gentleman, who is greatly afflicted with violent itching of the skin, particularly in the bends of the elbows and backs of the knees. I have failed so far in affording more than temporary relief. He is afflicted with feeble action of the heart and shortness of breathing, for which he is compelled to take brandy and water several times a day. His quantity of urine is very scanty, not amounting to sixteen ounces day and night. Any information will be thankfully received.—I am, etc.,

[illegible] M.D.

EXTRACTION OF TEETH BY INDIA-RUBBER RINGS.

SIR,—It is to be hoped that neither "M.B.," whose query appears in the JOURNAL of March 1st, nor any of your readers, will be led, by the vague accounts which have been published, to attempt the extraction of teeth by India-rubber bands. This method has probably been suggested by an accident which sometimes happens, mostly from ignorance or carelessness, in the employment of India-rubber bands for drawing irregular teeth into a better position. In such cases, if not watched or if not properly attached to a regulating plate, an India-rubber ring may slip beneath the free edge of the gum; and, if allowed to remain, will quickly give rise to dental periostitis, and suppuration, loosening, and partial extrusion of the tooth. As the tooth, in consequence of the swelling around, rises from the alveolus, the ring, if a tight fit, will slide along the root, especially if this be single and conical. The ring, if left long enough, no doubt may in this way gradually separate the tooth completely from its attachment. This would be most easily accomplished in the case of an upper incisor or canine which, if protruding, would be unopposed by the teeth of the lower jaw; and it might be possible, after days of suffering, to extract one of these teeth by the proposed method. In the case of any other tooth, the suffering would be much more severe. It would be impossible to bring the jaws into contact without pressing on the exquisitely sensitive teeth, and mastication would be impossible. It would need a sad bungler with forceps to inflict so much unnecessary and prolonged suffering, as must be caused in most cases by an attempt to extract a tooth by an India-rubber band.—I remain, your obedient servant,

6, Wimpole Street, March 1st, 1884. HENRY SEWILL.

MAMMARY CANCER AND ENLARGED AXILLARY GLANDS.

SIR,—I have just come upon a case that may be of some little interest. A woman, aged [illegible], recently consulted me about an attack of bronchitis. She had undergone an operation for cancer in the breast about twelve months ago. [illegible] months since, she felt a large swelling in her axilla, which she was told was a fresh cancerous growth. [illegible] to the operation, she left her medical attendant and consulted a [illegible], who pretended to cure cancer. He gave her a lotion, and informed her that it would cure her. She used the lotion most perseveringly, and affirmed that, without doubt, it had made the swelling less; but, as I have only seen her twice, I am unable to form any opinion as to whether there be any change or not. [illegible] examination of the lotion [illegible] sulphide of mercury and [illegible]. I should be glad to have an opinion expressed as to its resolvent properties, [illegible]. She positively insists that the swelling [illegible] less [illegible] the application.—Yours truly,

[illegible]

*** It is possible that the tumour removed a year ago was not malignant, and that simple inflammatory [illegible] glands [illegible]. It is [illegible] that the glands were really cancerous, but had become inflamed, as well as that the lotion has allayed the inflammation and given temporary relief to the patient.

FOUL BEDDING.

SIR,—The friends of a lady suffering from uterine cancer, with profuse discharge, have asked me if there be any danger to any other person who may sleep in the same bed (hair mattress) after it has been exposed in an empty attic for some months; or if the mattress should be stoved, or destroyed. I have advised the middle course as a precaution, but should be glad of your opinion, and should also feel obliged if any of your correspondents would give me the address of a place in London where bedding, etc., can be disinfected by heat. Mackintosh-sheets were used during the whole of the time that the patient used the bed.—I am, sir, yours faithfully, W. L. EMMERSON.

Waltham, Melton Mowbray, March 4th, 1884.

** If there be evidence that the discharges sometimes soaked into the mattress when the mackintosh-sheets were removed or displaced for a time, it would certainly be advisable to destroy the mattress. Septic germs hidden in a horsehair-mattress are not destroyed by exposure of the bedding in an empty attic for several months.

J. C. is desirous of being informed if there is any convalescent hospital on the Lancashire or Yorkshire coasts suitable for a patient recovering from inflammation of one lung. His friends will pay for his support.

HURRY AND WORRY.

MR. S. H. FISHER. The pamphlet with this title, by Mr. T. Pridgin Teale, M.A., is published by C. Goodall of Leeds, and the London publishers are Messrs. Simpkin, Marshall, and Co.

BLUSHING.

SIR, Can you inform me whether there is any cure for blushing? Whenever I meet any of my friends, I give a sort of start, and the blood rushes to my face. Is there any remedy for this?—I am, sir, yours truly, A. B.

A YOUTHFUL MOTHER.

SIR, I also can give an instance of the above; it is this. On January 15th, 1853, I delivered a girl who was on that day exactly 13 years and 3 months old. She was about six hours "in labour," had a very good time, and passed through the after-time very well; the child, a fair sized and apparently healthy one, however, died at the age of ten weeks.

A married woman, now living in this village, was with me when in attendance upon my patient. I was then living in Norfolk. Yours very truly,

HENRY P. LEECH, M.R.C.S.E., and L.S.A.Lond.

TREATMENT OF HYDROCELE AFTER UNSUCCESSFUL INJECTION OF TINCTURE OF IODINE.

SIR,—In answer to "Ultima Thule" (JOURNAL, January 26th, p. 203), I would say this. 1. I would try iodine again (or two drachms of fluid extract of ergot left in the tunica vaginalis, which has always proved successful in my hands). 2. Of iodine, I would use one or two drachms of the strongest tincture, and allow it all to remain. 3. The minimum quantity likely to succeed is not less than one drachm. 4. I have never used it heated. 5. I prefer to operate on one side at once. I should keep the patient in bed, and apply cooling lotions, if much inflammation be produced by the iodine; if ergot be used, there will probably be little or no inflammation.—I am, etc., GEO. A. HETHERINGTON.

St. John, New Brunswick, February 8th, 1884.

THE SHOEING OF HORSES.

SIR,—I have much pleasure in recommending Mr. G. S. Ryerson to read a little book called *Horses and Roads*, by "Free Lance," a reprint of a series of letters published a year or two ago, in one of the agricultural journals. In it, he will find overwhelming evidence (from practical experience; names, places, and dates specified) that the Charlier system is infinitely superior to any other; and that both tools and ready made tips are to be had from W. H. Stevens, M.R.C.V.S., 9, Park Lane, London, W.

Allow me to add, also, that he will find the line of argument pushed to its logical conclusion, viz., that horses work best without any shoes at all. I read the book myself last month, and have since worked one of my horses without shoes, and am eminently well satisfied with the result, though, of course, three weeks' trial is not long enough for a final verdict.—Yours truly,

A LOVER OF HORSES.

MICROSCOPICAL EXAMINATION OF SPUTUM.

SIR,—In reply to Dr. C. P. Coombs, who wishes to know a more ready method of staining the tubercle bacilli in sputum than that commonly employed, I can recommend the following plan, which is now, I believe, often used by mycologists on account of the great saving of time and trouble effected. A thin and even film of sputum is first dried upon the cover-glass in the usual way, and then floated upon the surface of a small quantity of the magenta and aniline solution previously filtered into a watch-glass. Gentle heat is now applied by means of a spirit-lamp, until vapour rises from the liquid. The cover-glass is now removed and carefully washed in methylated spirit, until as much as possible of the stain is dissolved out, and finally dried. A drop of Farrant's solution, on a glass side, forms a suitable mount for the specimen. The whole process need not last longer than five minutes; and it will be seen that the use of chrysoidine and nitric acid is entirely dispensed with, a gain that all must appreciate.—I am, sir, your obedient servant, W. T. LAW, M.D., F.R.C.S.

DANGERS OF FALSE TEETH.

SIR,—On Monday morning, about 1 A.M., I was suddenly called to a single woman, aged about 30, who had woke up out of her sleep, finding that her false teeth had slipped down into the throat. On my arrival, I found her in a considerable state of alarm, but no urgent symptoms of dyspnœa presented themselves. On my passing a probang down the gullet, I could feel some obstruction; and, on introducing the spring-hook end of the probang, succeeded, with some difficulty, in bringing up the offending body, which consisted of four incisor teeth, with gutta-percha plate attached, and a couple of sharp hooks used for securing it to other teeth. With the exception of some soreness of the throat, she recovered without a bad symptom.—I am, etc., J. T. P.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

A System of Obstetric Medicine and Surgery, Theoretical and Clinical, for the Student and Practitioner. By Robert Barnes, M.D., and Fancourt Barnes, M.D. Vol. I. London: Smith, Elder, and Co. 1884.

A Manual of Physiology for the Use of Junior Students of Medicine. By G. F. Yeo, M.D. London: J. and A. Churchill. 1884.

A Treatise on Chemical Constitution of the Brain. By J. L. W. Thudichum, M.D. London: Baillière, Tindall, and Cox. 1884.

A Movable Atlas, showing the Bones and Ligaments of the Human Body. By Professor G. J. Witkowski, M.D. Translated and Edited by A. T. Norton, F.R.C.S.

The Skeleton and Its Articulations. London: Baillière, Tindall, and Cox.

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THE GULSTONIAN LECTURES,

ON

NEUROSES OF THE VISCERA.

Delivered at the Royal College of Physicians, March 14th, 1884.

By T. CLIFFORD ALLBUTT, M.A., M.D.Cantab., F.R.S., F.R.C.P.,
Senior Physician to the Leeds General Infirmary; Consulting Physician to the Leeds Hospital for Women and Children; and Lecturer on Medicine at the Leeds School of Medicine.

LECTURE II.

GENTLEMEN,—We all know the story of the resentful lion who had often been painted by the man, and who longed for the time to come when the man in his turn should be painted by the lion. Is it because all medical books have been written by men that gastralgia, one of the sharpest arrows in the armoury of pain, is in many of them dismissed with a few words as a malady of "hysterical women;" of women, that is, whose sufferings are due in part to effeminate habits and constitution, and in part to a kind of fanaticism which prompts them to cherish or to imagine pain, or to make a bitter cry about small matters.

We all ought to know that gastralgia is common enough in man also, though certain writers appear to deny that this or any other visceral neurosis can exist where no uterus is; and in my first lecture I have endeavoured to formulate a distinction between what I may call the upper class of neurotics and their degenerate relations the hysterics; asserting therein that, in hysterics, pain is not a more but a less common inheritance, and that to neurotics it is chiefly given to suffer pains and the renewal of pain, and to bear all with singular fortitude and spirit. As such a zealous neurotic the Sompnoure posed when he described himself thus:

> "I am a man of litel sustenance,
> My spirit hath his fostring in the Bible,
> My body is ay so redy and so penible
> To waken, that my stomak is destroied."

For of all the neuroses of the stomach gastralgia is the chief; but around it gather, in more or less close association, flatulence, vomiting, hyperæsthesia, and miseries such as distension, sinkings, cravings or loathings of food, and these may exist in various associations, or may exist singly.

As in angina pectoris and the pseudo-angina, so in gastralgia, the spinal nerves may be included in the paroxysms, or may take even a chief part in them, the visceral and overlying spinal nerves being grouped in function and in suffering together. In order to study this class of cases more carefully, I have gone over the case-books of my chamber-consultations for ten years past, namely, from the year 1874 to the year 1883, inclusive. From them I have extracted 139 cases of gastric and abdominal neuralgia. These cases remain after eliminating all that are doubtful or comparatively trivial in degree; all cases attended with important uterine disorder, or complicated with substantial defect in any organ whatsoever, or with disease; all hysterical cases, and all cases of fretful or whimsical persons prone to expand or to exaggerate their symptoms.

The selected cases, then, are the cases of persons of whom I have some tolerable notes, who were straightforward and truthful, and who are, or were, the subjects of neurotic or neuralgic affections lying under the diaphragm and above the pelvis. Now, the great majority of these cases are gastralgics, the region of the stomach being by very far the commonest seat of abdominal neuralgia. Of the gastralgics the majority are women, in the ratio of two to one. In men and women gastralgia is by no means confined to middle life, as Leared supposed, but is found at all ages, from 14 to 60, being most common between 20 and 45. Like migraine it tends to die out in middle life; and, like migraine again, it is attended less and less with vomiting as age increases. Gastralgia comes on earlier in woman than in man, apparently by some ten years. A gastralgic man is rare before the twenties; girls often begin in their teens.

The earlier maturity of the girl sufficiently explains this difference, which is also remarkable, though I think in less degree, in migraine. Migraine may, however, begin at very early ages in either sex. Of associated affections migraine is by far the commonest; and, if we associate migraine and neuralgia of the head and face together, the number of cases in which these are found with gastralgia is very great, seeming to be fully 80 per cent. Fortunately, these affections do not often coincide in time, but rather alternate variably one with the other. A large number of gastralgics, then, include migraine or neuralgia of the head and face in their life-histories. Another disorder commonly associated with gastralgia is asthma, an observation which scarcely needs either explanation or much asseveration. Neurotic vomiting may accompany, or rather alternate with, asthma, as the gastralgia may; and so again may voluminous flatulence, borborygmi, and other such neuroses. Like asthma, gastralgia is not unfrequently nocturnal in its recurrence, and is likewise often aroused by improper food, or by the contact of any food whatever. Hence the persistent confusion of gastralgia with dyspepsia. Asthma and gastric neuroses, moreover, if not concurrent in the individual, are often concurrent in families, one member suffering from the latter, and his brother, sister, or other relative from the former. With both these vagus neuroses run the cardiac neuroses, including true angina. I am now attending a gentleman with Mr. Jessop, who suffered terribly from paroxysmal gastralgia in past years, and in whom we have now to deal with the true angina. In gastralgics occur violent attacks of palpitation, or, more characteristically, attacks of slow or intermittent pulse, as in the following case.

Mrs. ——, aged 24 (No. 371, 1875), suffers from marked gastralgia. She has one child, which she is nursing. She consults me now for pain in the region of the heart of a dull prolonged kind, ending in a sense of exhaustion. The pain may strike to the back and under the left shoulder-blade. At such times, the heart becomes very slow (48 to 50), intermittent and irregular. Curiously enough, such attacks are brought on at once by putting the child to the breast, even before much milk is withdrawn. This sequence is analogous to the sequence of gastralgia after the ingestion of food, the neuralgia being awakened by a peripheral irritant. She soon recovered on appropriate treatment; but, in 1881, after some menorrhagia, the same thing recurred. She again recovered on like treatment. She had had one child between these dates without any disorder of health.

In No. 371 appeared moderately a radiation of pain upon the spinal nerves; this, in other cases, may extend or intensify itself to a degree of pseudo-angina which may even be indistinguishable from real angina.

No. 283, 1878; male, aged 37; of nervous temperament and a zealous worker; is liable more frequently to violent gastralgia, especially after worry and excitement. Less frequently, he has "heart-spasms." In these, he has a sense of swelling at the heart, and pain and numbness down the left arm. At the same time, the pulse becomes "much enfeebled," and is said to be slowed down as low as 20 in the minute, or may even become imperceptible (this from his own doctor). These attacks have come occasionally for many years. Physical exertion does not call them forth. All organic factors seemed normal.

Cases like these may be culled from every year's entries. In one lady, aged 33 (No. 261, 1881), wholly free from menorrhagia or leucorrhœa, an intense aching, with a sense of extreme exhaustion and sinking, would come on at the heart; it recurred then daily, and it was always periodic, appearing about 4 or 5 P.M. She was compelled at such times to lie down and "press the heart," turning over on the left side towards the prone position. These attacks were encouraged especially by any abbreviation of sleep or by fatigue. She herself is subject to gastralgia without dyspepsia, and her mother was mildly epileptic.

Dr. Ramsay, of York, has often consulted me concerning Mrs. ——, aged 43, who more than once, with miscarriage, had lost blood heavily. She is very subject also to menorrhagia, which is scarcely kept in check by close attention to local and general remedies. She is, however, wholly free from any persistent affection of the womb or of other organs. She suffers occasionally from gastralgia, but her great distress consists in attacks of stabbing pain, as if the apex of the heart were pierced by an arrow; the pain thence extends with intense cardiac oppression down the left arm to the fingers, causing a numbness there. The pulse falls from an average of 70 to 60, but is not otherwise much embarrassed. She has the faintness and dread, and, in a word, her symptoms are not in themselves to be distinguished from angina pectoris.

The same difficulty of immediate diagnosis is found in the very similar case of Mrs. ——, a patient of Mr. Lee, of Dewsbury. In her, also, is a persistent disposition to menorrhagia, and [illegible] to white vaginal catarrh. In these and like cases diagnosis depends less upon the character of the attacks themselves, and more upon the other records. The attacks are commonly due to such losses as menorrhagia or severe leucorrhœa, or to prolonged mental distress; they are not directly produced by bodily exertion, but are often caused indirectly by the resulting fatigue. In some of my cases, again, the pains are more extensive than is usual in angina. In some, the pain runs down both arms alike, or runs down both arm and leg of the left side, or again springs upwards from the cervical plexus to the same side of the face and head. Valleix' points may be detected in the course of the spinal nerves, but in many cases of pseudo-angina they are not definitely to be distinguished. In women we may rely on the lesser frequency of true angina in them, though the pseudo-angina is often met with in men. About 20 per cent. of my cases of pseudo-angina were in men. In one gentleman, of neurotic habit and ancestry, and whose family-affairs were laden with sorrow, such attacks occurred, involving seriously the action of the heart itself, and producing the dread, the ashen countenance, and other marked signs of true angina. As his luck in many ways turned for the better, his attacks diminished, and I believe he has now been free from them for nearly ten years. A favourable opinion in his case was founded upon his age (30 to 36), his diathesis, his unhappy circumstances and his organic soundness. The tendency in all these cases to retardation of the pulse brings them, apparently, into the group of vagus neuroses, with asthma and gastralgia; nor will intercostal and cervico-brachial neuralgias cover all their phenomena, such as the dread, the pulse-changes, and the peculiar pains which such patients refer instinctively to the heart (as in Case 261, 1881, *supr. cit.*).

It is perhaps impossible duly to attribute to each nerve or system of nerves its own share in these phenomena; even the essay by Professor Eulenburg seems to me to leave the matter pretty much as any intelligent observer may well have guessed it for himself. Still I think it seems clear that the phenomena of pain and spasm are probably due to the pneumogastric nerve and the intercostal and spinal nerves associated with it; while such other sufferings as faintness, sinkings, cravings, distensions, palpitations, abdominal pulsations, flatulence, retching and vomiting, pyrosis, diarrhœa, lithatic or watery urine, insomnia and so forth, may be attributed to the sympathetic alliances. Pulsations of the abdominal aorta in neurotics, whether men or women, may be so definite, may simulate aneurysm so closely, and do so often appear after some history of effort or strain, that diagnosis upon direct observation may be as difficult as in the case of pseudo-angina, and may, as therein, derive most of its force from the history of the patient and of the family disposition. Avoiding digression, however, and returning to the association of pain in the spinal nerves with pain in the viscera, we observe that cervico-brachial and intercostal pains are found with gastralgia as well as with the pseudo-angina. Out of many cases of the kind I may refer to Miss —— (No. 504, 1883), who suffers from gastralgia of the ordinary type, but severely. The attacks are nocturnal. The pain runs down the left arm, until the arm feels quite benumbed and useless. She has faint feelings, but no anginiform distress, her catamenia are regular and normal, and she has no leucorrhœa. Her family history is very neuralgic. She bore arsenic badly, but was quite cured by a careful use of it.

Mrs. ——, aged 30 (No. 403, 1881), had visceral neuralgia ten years ago, and now for two years past. She has ordinary epigastric gastralgia, unconnected with digestion; and her attacks are usually nocturnal. The pain runs into the left submammary and axillary regions, and into the left arm. At other times, she had suffered from recurrent enteralgia, similar in character to the former, but then running down into the groin. Her uterus and ovaries are normal, and her catamenia regular. She has no leucorrhœa. At the beginning of her attacks, she passes urine frequently—say six times in an hour; then, as the attack subsides, the bladder likewise goes to rest. She came to me on account of frontal and parietal cephalalgia of fourteen days' duration, during which time she had had no visceral pain.

Mrs. ——, aged 30 (No. 38, 1877), has had migraine and cephalalgia for years. Her sister is a pronounced gastralgic. For two years she has been subject to attacks, "pinning the shoulders tight," and girdling her with pain round the waist. The pain almost stops the breathing, and so continues for two hours. She then vomits, and the pain departs. She never had jaundice. She looks worn out with pain, but all the organs and functions seem normal.

Mr. ——, a cashier, aged 28 (No. 86, 1876), had pains as in the preceding case; they were periodical in recurrence. But in his case the attacks culminated not in vomiting, but in diarrhœa. He recovered completely on tonics, with rest and change of air. He had a neurotic history, personal and inherited.

Miss ——, aged 30 (No. 51, 1876), presented symptoms almost identical with those of No. 38, 1877, including the critical vomiting. She was also subject to morning vomiting, attended by frequent micturition. She used to have headache with the vomiting, but not for some time past, though she has severe temporal neuralgia occasionally.

Another very curious symptom which occasionally occurs with gastralgia is yawning I have seen this more than once, and may quote P. T. P., a grocer, aged 33 (No. 571, 1882), who suffered from gastralgia in the usual way, but with an incessant and irresistible tendency to yawn.

Vomiting is a symptom which, in some cases of gastralgia, takes a very prominent place, but in others is never seen. I have already drawn a parallel between the vomiting of cephalalgia and the vomiting of gastralgia. In either case, the vomiting may stand alone—may stand without headache, or, again, without stomach-ache. In such cases, it may only be known from the case-history whether the vomiting belong to the one order of things or to the other; but the vomiting allied to migraine is more commonly in the morning, is more periodic, and recurs at longer intervals; the vomiting allied to gastralgia is more dependent upon the ingestion of food, is irregular in recurrence, and may, indeed, be daily or almost incessant. As an example of the former, of migraine without headache, that is, let us take the following case.

Miss ——, aged 27 (No. 14, 1880), comes of a neurotic family, and she herself had had migraine for nine years. Then the headaches gradually wore off, the vomiting attacks only remaining. These were not very violent, but returned at short intervals. They would last for about two days, during which time she had to keep as quiet as if she had a sick-headache. Mental work or excitement most readily recalled the attacks. Her uterine functions and those of the digestion and bowels were all normal. This patient was a lady of attractions both personal and mental, and her case presented many interesting features. Her vivid perceptions, alertness, incessant and beneficent activity, and utter unselfishness, marked her as a type of the more highly endowed neurotic, and I took much interest in her case. A good deal of amendment was obtained by pointing out to her the truest economy of strength and work, and by insisting upon complete rest at times of malaise.

Mrs. —— (No. 22, 1880), presented similar symptoms. She used to have full migraine; but from it the headache gradually disappeared, and left only intense and prostrating vomiting, which would recur much as the full migraine used to do, and would last, like it, for five or six hours and then vanish away. In her no functional derangement was present, and she derived great benefit from a mixture of bromides and hypophosphites. The same combination was also very valuable in the preceding case (No. 14).

In such cases, the vomiting, though a visceral neurosis, would seem to be of cerebral origin.

Let us now turn to cases in which vomiting seems to be a limb or remnant of gastralgia. The first is such a complex case as we might well expect to find. No. 44, 1875, male, aged 50, for "all his life" has been liable to sick-headaches. But these would often alternate with gastralgic attacks, which were also attended with vomitings. He is of very nervous temperament, has many cares, and no holidays. Facial neuralgia is a common ailment in him; but, for two years past, his trouble has mainly been vomiting in a morning, a little phlegm only being ejected. Day after day, he finds himself unable to retain food until dinner-time. Now, this seems to have been gastralgic vomiting; and he was cured by a course of bromide of ammonium, with hydrocyanic acid, followed by a course of Easton's syrup, with much general good advice. Two years later, he had had no return of the vomiting, nor of the gastralgia. I should add that he was a total abstainer of seventeen years' standing, and is so still. Now, it is somewhat remarkable that, although vomiting is common in gastralgia, and is common, also, in migraine, and although migraine and gastralgia may commonly arise in the same patient, yet migraine and gastralgia seldom or never occur together. I suspect, therefore, that the vomiting of migraine is not identical in mode with that of gastralgia.

Although, as I have said before, vomiting is sometimes a climax-symptom in gastralgia as in migraine, yet in the former case it is perhaps reflex; in the latter it is perhaps allied to the vomiting of encephalic tumour or of concussion. Take again, for instance, No. 25, 1878, male, aged 23. At times of a morning he awakes in low spirits, and feels apprehensive and miserable. His appetite has vanished, nausea comes on, he vomits, and, after free vomiting of nothing, is all right. Now, this young man was quite cured by guarana. I have no history of frank migraine in him, but, like the former cases, I believe it to be migraine *sine cephalalgiâ.*

But Mrs. ——, aged 35 (No. 128, 1878), carries us, on the other hand, towards the stomach. She has leucorrhœa, a soft uterus, and flabby muscles everywhere, her heart-sounds being short and weak. She has no uterine catarrh. Her catamenia are disposed to anticipate, without being any the less in quantity. She is subject at times to intense neuralgia at the supra-orbital notches and in the orbits, "poking her eyes out." Now every morning before rising she has nausea, which proceeds to vomiting. This is especially worse when she is much below par. There is also a great expulsion of inoffensive wind, and clear water runs from her mouth. At the same time, there is pain between the shoulders. Her appetite is never good. She is very temperate in the use of alcohol. The family history is phthisical.

Here we clearly have to do with the stomach, and I regard pyrosis as being for the most part a pure neurosis, probably vaso-motor; for the following case of Mrs. ——, aged 41 (No. 503, 1881), takes us a step farther. Seventeen years ago, she fell ill, as at present, but, on the whole, she had enjoyed fair health in the interval. Her attacks are as follows. A sensation of languor and exhaustion is followed by intense pain at the stomach, and vomiting soon sets in. She heaves up clear water, and clear water only. If food come, it is by chance, for the attacks have no connection with diet, nor with meal-times. The attacks may recur even as often as three or four times in twenty-four hours, and with them she has also a pain in the back, "screwing her to death." But not unfrequently she has the vomiting and ejection of water only, unattended then with either pain. She never has any nausea. Her uterine and other functions are normal, and the attacks do not favour the catamenial periods. All commemorative facts, personal and relating to family, have a neurotic quality. This lady recovered her health at the time under the use of arsenic and like remedies, and remained well until a little while ago, when she called upon me, complaining of some return of the vomiting, but without any gastralgia. The stomach-ache, she said, "used to be terrible."

Here, then, we have in close association, and evidently of one nature, gastralgia, vomiting, and pyrosis or the ejection of water. In the similar case which preceded it, we had the ejection of volumes of wind also. This, I say, would lead us to believe that pyrosis, for the most part, is a gastric neurosis; and if we are then led to inquire into the personal and family histories of the subjects of pyrosis, we shall find that, as a general rule, these persons present evidence of belonging to the neurotic class.[1] Indeed, the regurgitation of food itself is by no means always due to an error of digestion; it occurs in many neurotic persons as a purely reflex neurosis during normal digestion.

Henry B., aged 25 (No. 631, 1881), tells me that for some time he has been unable to prevent the regurgitation of food after all his meals, which is very annoying and unpleasant to him. He is not conscious of any dyspepsia whatever, nor can I find any evidence of it. His tongue is clean, his bowels are regular, and his urine of normal quality. He called upon me because of a severe attack of neuralgia in the infra-orbital and dental branches of the right side of the face. No local source of irritation could be found. The remarkable thing is that, on that day and thenceforth, the regurgitation wholly ceased, and under the use of quinine the facial pain ceased also. He had no return of either disorder during my observation of him.

The grocer, P. T. P. (No. 571, 1882), who yawned so much, had also this vexatious regurgitation of mouthfuls of food after his meals. The symptom is doubtless due to an irritability of the muscular walls of the stomach setting up an excessive, and it may be an inverse, contraction of the viscus under the stimulus of digestion, and is a phenomenon of the same order as painful hyperæsthesia of the inner surface of the organ, of which I shall have to speak at length. Before passing to that symptom, however, I must leave regurgitation to consider another form of vomiting—vomiting, that is, not on the empty stomach, but on the full stomach.

This terrible malady is described commonly enough, yet it seems to me that it is but ill discriminated, being mixed up with hysterical vomiting on the one hand, or handed over to the gynæcologists on the other. Uterine vomiting, on the one side of it, is to be known by due investigation of the case, and is curable by uterine medicine or surgery. Hysterical vomiting, on the other side of it, is not so easy to separate from the malady I have in hand, unless there be, as for the most part there is, the broad difference that hysterical emesis is consistent with fatness, gastralgic emesis never is, but leads straitly to emaciation. In many cases, the vomiting is preceded by pain, more or less severe, and in these ulcer is often suspected, but in others there is no pain whatever. In both cases—in the case of those with pain and those without—the cause is cognate, if not identical. Let me instance a case from Dr. Salter's work on *Asthma* (ed. 1868, p. 256)—one adduced by him as an instance of "perverted innervation of the pneumogastric nerve." Condensed to the utmost, the story is this.

A little girl, aged 8, rejected food of any kind the moment it was swallowed. There was no pain, no tenderness, no feeling of sickness at any other time. After vomiting had emptied the stomach, she would be quite well. The same thing occurred with any little matter, such as blackberries, that she might eat between meals. She fell into weakness and emaciation; all remedies being useless. Some years afterwards, Dr. Salter made inquiries about her, and found that the vomiting had been supplanted by spasmodic asthma. The two maladies had, indeed, alternated with each other at times, the vomiting coming on when the asthma was better.

It is enough to make one's blood boil to hear of a poor girl, wasted to a shadow by such a distress, treated, almost with gibes, as hysterical, when she is the subject of a malady as real as the doctor's own toothache, which, in its turn, might vanish, by the way, the moment he should find himself on the dentist's door-step. I have a case in my mind which was recorded as hysteria by the late Mr. Skey, in the *Medical Times and Gazette*, 1866, vol. ii.[2] In this case, intense suffering followed the ingestion of food. The poor girl had foolishly yielded to the dread of food, and was in a pitiable state of starvation and distress; and yet, because Mr. Skey succeeded, as an entire stranger might well do, in diverting the sufferer by bright conversation on pleasant subjects, he neatly labels her as hysterical. I shall return to these cases presently. Hysteria may simulate gastralgic vomiting, as it may simulate asthma; but we should do ill, for that reason, to treat all asthmatic girls as hysterical, because their dyspnœa is neurotic. Happily, these cases of obstinate gastralgic vomiting, for so I will call them, are not very common, if we carefully separate them from hysterical imitations of them, from gastric catarrh, from alcoholism, from uterine vomitings, and so forth. Still, there are too many of them, small as the class may be; and we may properly call the malady gastralgic vomiting, seeing that the mode of them is the same as of the cases wherein pain is also a factor. In some gastralgics, for instance, the two symptoms are not synchronous—the vomiting and the gastralgia replacing each other, as the vomiting and the asthma replaced each other in Dr. Salter's case above cited; or the vomiting may occur at one hour or under one set of circumstances, and the pain at another time and under other circumstances. For instance, in one of my patients, painless vomiting followed the meals, and soon gastralgia of the ordinary type came on in nocturnal seizures, after the manner of its cousin asthma. I find another case, under No. 112, 1881. Miss ——, aged 20. At sixteen years of age, she was subject to facial neuralgia, then to pain in the left chest and down the left arm. This left her in eight weeks, and she remained well for some months. Then gastralgia appeared. At first, this arose immediately on eating, or within ten or fifteen minutes thereafter. Then this pain vanished, and she became subject to gastralgia on the empty stomach only. This, in its turn, disappeared, and vomiting set in. The vomiting had gained upon her, and now she vomits all her food. It comes up in a mass, as eaten. She never brought up blood nor mucus. She is emaciated, but all functions and organs seem normal. There is no evidence of hysteria. She made a good recovery on arsenic.

We are thus led to the cases which simulate gastric ulcer; and in which, as I have said, diagnosis, often difficult, is sometimes impossible. No doubt, I have at times mistaken a case of ulcer for gastralgia, and at other times have assumed the existence of ulcer when gastralgia and gastralgic vomiting alone were present.

Such cases, if not familiarly known to the profession, are, at any rate, so far known to the closer observers as to make it unnecessary for me to give the long case-histories which such patients afford. Taken shortly, we find this form of gastralgia most frequently in young women; and it is marked by the sequence of ingestion of food, severe pain in the stomach, vomiting and relief. The pain may occur only on taking food, and vomiting may give speedy relief. It is not an uncommon thing, we know, for young women to produce blood in irregular ways by the mouth, sometimes repeatedly or in quantity, even when all parts are free from disease. If such an appearance should be found, the diagnosis of ulcer becomes almost inevitable. Indeed, blood or no blood, it is often hard to come to an opinion which shall be confident enough to justify us in withholding foods on the one hand, or, on the other hand, in pressing stomach-nutrition gently but firmly forward. But according to the correctness of our judgment must our treatment be helpful, or positively mischievous. Probabilities do not aid us much, for I think the ulcerous and the pseudo-ulcerous cases are about equally common. The catamenia may be absent or present in either case; nor do I agree with a writer in Quain's *Dictionary*, that gastric neuroses in women especially frequent the catamenial periods. In so far as these act as general depressants of vitality, they may open the way to an attack, as may any other exhaustion; but I do not find among the genuine gastralgics a consensus of cases showing any more direct or any very frequent association of the kind. Emaciation is, perhaps, rather more usual in the neurotic than in the ulcerous disease, but this cannot go for much; nor can chlorotic anæmia, which may be seen in either form. Pain in the back is as common in gastralgia as in ulcer. In these doubtful cases, we must try to reach safe ground by a careful review of the patient's life-history, diathesis, and associated symptoms; and we can often attain this position by the discovery of neurotic antecedents, and of some previous irregularities in the now associated symptoms. We shall find, perhaps, that vomiting and pain have been dissociated in the past; that the pain has been nocturnal, or otherwise periodic; that there have been voluminous flatulence, cravings, sinkings, and so forth. With such commemorative symptoms, both as regards stomach and other parts, we may sometimes recognise gastralgia clearly enough, even in spite of the occasional appearance of some ejected blood. Hyperæsthesia of the stomach is not of course always, nor even generally, associated with vomiting. Many persons have slighter degrees of such hyperæsthesia, and suffer some discomfort during digestion, either because digestion is slow and defective, or because the stomach resents even a normal digestive process. When such discomfort becomes an ache, the patient calls himself a dyspeptic; when the ache rises into an agony, we have a very grave malady to deal with, even if there be no vomiting nor tendency to vomit. This state of stomach much resembles that of the uterus in the irritable uterus of Gooch, and of the spine in the irritable spine of Teale and the Griffins. It cannot be doubted, I think, that these three maladies, coincident as they often may be with hysteria, are nevertheless essentially independent of it. Irritable spine is found frequently, no doubt, in the plump, listless and egoistical victim of hysteria; but it occurs likewise in the higher class of neurotics. I am attending such a case of spinal irritation at present, with Mr. Richardson, in Leeds. The young lady is not only cheerful, alert, unselfish, and worn in flesh, but she is full of will and energy in her efforts to carry out any troublesome plan of treatment we may suggest. I take her complaints as literally as I do the complaint of any other sensible and temperate person, who says that he is suffering from some unseen distress.[3]

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[1] One of them [illegible] told me, after my lecture, that an hemicrania [illegible] used to resolve itself with a copious watery discharge from the nostril of the same side.

[2] For this reference, and many [illegible], I am indebted to the invaluable labours of Dr. Neale, the compiler of the *Medical Digest*.

Irritable uterus, again, in spite of the mechanical school, is a genuine neuralgia in many persons, as it may be an affected malady in others. Irritable stomach is a grim reality in no less a number, though hyperæsthesia and anæsthesia, as functional disorders, do, no doubt, belong, also, to the hysterical; and it may indeed be hard to say, in a given case, where active neurosis ends, and where a brooding persuasion of pain begins. We have types intermediate between the sleek religious woman, who knits antimacassars, and lives upon her friends; and the hollow-eyed, fiercely active wan woman, who, labouring ever for others, tries to hide the wolf within her, even from herself. Before Lasègue and Sir William Gull published their cases of anorexia nervosa, I had myself collected six cases, with a view to a publication which thereon became unnecessary. For these cases, I would deprecate the stereotyped use of the name anorexia hysterica. In some of these cases, there is great pain on the ingestion of food; in others, there is no pain, but simply a distaste for food. This distaste has arisen in most of them, however, from some discomfort, which at one time accompanied digestion, a discomfort which may have taken its rise either in dyspeptic or neurotic causes. Sometimes, the distaste has taken its origin in a mere shirking of food—in the fear of growing stout, or in a nobler avoidance of self-indulgence. However established, the distaste, as we know, often becomes invincible, even when eating is unattended with gastric hyperæsthesia. If I were to judge by my own original cases, I should fail to see how the word hysterical could usefully be applied to any of them; in three of them, the word would be absurdly out of place unless we are to apply it to any nervous malady in any woman whatever. This anorexia nervosa is no whimsical malady, no inconsistent nor irregular indisposition, but is a definite complex, consisting, in part, of objective symptoms. With more constancy than is commonly found in disease, we find the malady as follows. It occurs in young women, and nearly always in those who inherit a decided neurotic taint. Five objective symptoms are always present, namely, amenorrhœa, constipation, subnormal temperature, slow pulse, and cold extremities. To these we may add a degree of emaciation proportionate to that of the malady, and a tendency to loss of hair from the scalp. The first five symptoms are observable long before they would appear as simple results of inanition. In some of these cases, as in Mr. Skey's, the pain which follows the use of food is agonising. I have a case in my mind of the last degree of severity, for her agony on the reception of a cup of lithed broth was extreme. I mean that she would shrink away unnoticed and uncomplaining into any remote corner, where she might moan to herself, unconscious of any observation. Now, to this lady, like all the sufferers of this class to which I have referred, the airs and humours of hysteria were wholly alien. Her daily life, even in the days of her weakness, was full of energy and of well directed good works. Her habits were punctual and methodical, and her affections stanch and wholesome.[4] She never vomited her food, nor have I found vomiting in many cases of anorexia nervosa. The chief variation in the group of symptoms in these patients is in the presence or absence of pain. Pain, so acute in a few, is in most of them absent or insignificant. In the latter, there exists simply an invincible distaste for food. To yield to such a distaste may seem at first to many high-spirited girls rather a merit than otherwise—it may seem but a distaste for indulgence, a denial of the animal propensities. Thus creeps on, unknown or unconsidered, an aversion from food, and, indeed, an inability to take full meals, which seems, in some cases, almost unconquerable. If the fear of such a state become more prevalent among the public, it is probable that the known results of such mistaken self-denial will serve in future as a timely warning to prevent the full establishment of the distaste.

Hyperæsthesia of the stomach, then, may be found in anorexia nervosa, and to such cases is a grievous addition; in gastralgia of the periodic type, when it may concur with the attacks, or alternate with them; or, again, it may itself constitute a form of gastralgia, a form in which pain occurs only during digestion. These cases are constantly confounded with dyspepsia; but the term can only be applied to them etymologically. For instance, No. 356, 1878, is a solicitor aged 31. He called upon me to complain of "grievous indigestion of long standing." Soon after meals pain would come on at the epigastrium, after a time generalising itself about the chest or waist. It would last from one to two hours, and it never occurred on an empty stomach, not even if the due hour of a meal were overpassed. Now, this surely seemed due to some defect in the peptic process; and, if it were not, how were we to distinguish its cause? Well, his tongue was quite clean, his secretions normal, and he had no offensive flatulence. Nor, again, did he much care what he ate; all things gave him pain alike, except that one thing, beef, which especially tries the neuralgic stomach. But fatigue or annoyance increased his liability to the torment. Sometimes, the pain had given place to a pain in the head, or sometimes it had "pinned him through the body." A year before this stomach-disorder set in, he "was demented with neuralgia in the head," but had suffered thus but little since. Before that, again, he had had a well marked but brief attack of melancholia; his brother had hay-fever badly, and the family-history was neurotic in other respects. Here the gastric pain then seemed to be of the hyperæsthetic form of gastralgia; nor was the diagnosis ultimately difficult unless we are urged to confound it with hysteria. No stomach-medicines could relieve such a patient, and this one was cured with Easton's syrup. In other cases, diagnosis might not be so easy as in his, and in some mixed cases it is very difficult to disentangle the pains which are caused by neurotic hyperæsthesia from the pains which are caused by the presence of products of abnormal digestion. In Miss —— (No. 311, 1879), pain during digestion occurred as in the last case, and there were present also the characteristic nocturnal seizures. Miss —— (No. 31, 1880), suffered in like manner during digestion, but with great severity. It is strange to see that in her case the group of symptoms called anorexia nervosa never arose. She was pallid, emaciated, highly neurotic, and dreaded food. Still her pulse was rather quick, as well as feeble; the catamenia were regular, though scanty and watery; constipation was not well marked; and she manifested no loathing of food, but would gladly have eaten if she had dared. This lady had the abdominal aortic throb, and also, when the pain came on during digestion, her mouth would fill with clear water. It was a great pleasure to me to see this valuable life restored to health and activity after a long illness. A combination of morphia with arsenic and quinine, administered with food, did best service.

In Miss —— (No. 538, 1882), the pain only came on after distinctly improper food, such as tough beef, new bread, sad pastry or cake. Here is a transition towards maldigestion. But the pain was so intense as to point rather to a neuralgia aroused by peripheral causes; and, moreover, pain was not unfrequently aroused by the same cause in the left orbit, or in the brachial plexus. The three pains might come separately, variously combined in pairs, or all together. This case reminds us of Watson's instance, in which a severe pain in the foot was brought on by eating an ice. I may indicate again the curious fact that such gastralgias may be associated with vomiting, or they may not be. In some cases, a tendency to reflex motor spasm is there, in others it is not there. The former cases simulate ulcer, the latter do not; for I presume that vomiting is aroused in all grave cases of ulcer.

Miss ——, aged 22 (No. 416, 1883), came under me for intense pain after food, with vomiting and consequent relief. She was sent to me as a case of ulcus ventriculi, and I could not promise her at first that it was not. But her family history was neuralgic, and she used to be "a martyr to tic." Now, "the food makes her so sore and hurts her so," but she is relieved by vomiting. Whether the point be fit for universal application or not, I cannot say; if it be, it is worthy of a pointed reference—namely, that I found warmth always gave relief in her case. I directed her to drink hot water with her dinner, and after a meal to lie down under a rug, with a hot bottle to the epigastrium. This gave her much comfort, but it probably would not have relieved the pain of ulcer. On the other hand, in her, as in many like her, cold feet would precipitate an attack. This lady was completely and quickly cured by antineuralgic remedies.

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[3] I cannot forbear to refer in this place to the admirable service Dr. Handfield Jones has done in warning us against the delusive phrase of "hysterical pain." Dr. Kent Spender offers the same testimony in his work on *The Relief of Pain*, p. 65.

[4] Lasègue notices the briskness and energy of these patients, and gives a very fanciful explanation of it.

Finally, we must remember, nevertheless, that, in organic disease of the stomach, the pain may be independent of food. Mrs. ——, aged 52 (No. 240, 1882), consulted me for pain, which was independent of food, and thus closely simulated simple gastralgia. There was no neurotic history, nor was the pain periodic. She vomited catarrhal matters; but some gastralgics vomit gummy phlegm with their attacks. The diagnosis was very difficult, until progressive emaciation and loss of complexion compelled us to infer the presence of carcinoma, an inference which was but too surely justified by the result.

One symptom very characteristic of gastralgia next demands our attention, and that is flatulence. The flatulence of a typical gastralgia is a portentous thing. Like vomiting, like hyperæsthesia, it may concur with the pain, or come independently of it. It returns often in attacks as the pain does, striving vehemently, so that the concurrence of this wind and gastralgia make up the malady known as "the spasms." That such distensions and belchings as these are of other origin than the maldigestion of food is, I think, very imperfectly realised by the profession at large. But in its more striking forms, its independence of such causes is obvious. It recurs often with the same periodicity as gastralgia itself, and, like it, has a fondness for the small hours of the afternoon or of the early morning, especially of the latter. The patient awakes, let us say, at 2 or 3 A.M., with a sense of distension which he knows but too well. His body is sometimes flat, but more often has swollen about the epigastric region, and become tight and hard. For a while, restless and distressful, he rolls upon his face, and rubs his belly until "the wind begins to move." This, as it does so, rumbles upwards rather than downwards, and delivers itself by no common eructation, but the working load rises in a series of eruptions, which roll from the throat in successive waves of flatuosity. It is a prolonged storm rather than an explosion, and its tumult will keep the patient raised in bed, heaving in strife with it for an hour or two before he finds ease.

Miss ——, aged 23 (No. 233, 1883) subject to migraine, is liable to violent attacks of flatulency. It awakes her in the night. She has no pain, but great distress; wind works upwards in enormous volumes. Her tongue is clean and tremulous, and secretions normal. The gases ejected are innocent of all odour. The uterine functions are normal. It is not stated that this lady ever had gastralgia at all; certainly she had not at the time of my notes. A like state of things existed in a friend of my own, whose mental and bodily activities are incessant, and who has suffered greatly from gastralgia. He had consulted physicians high and low, home and foreign, and his flatulence had invariably been put down to "indigestion," and he was consequently dieted into still farther emaciation, and still profounder gastric distress.

Miss ——, aged 29 (No. 374, 1881), has gastralgia well marked, but complains as bitterly of flatulence. This always comes on upon an empty stomach, and is sure to be generated on the delay of any meal. It "rifts up voluminously."

Mr. H. (No. 629, 1880), has had psoriasis for years. He is subject to attacks of "sinking in the stomach and bowels, as if actually dying." He never had pain, but he has "rounds of intense and tremendous flatulence......always on the empty stomach."

Again, Mr. ——, aged 47 (No. 72, 1879), always "delicate," has gastralgia, at present daily. It recurs exactly at 4.0 P.M., and he hastens to relieve it by food. It is thus postponed till 7.0 P.M., when it is again put off by dinner. He is thus at rest till 4.0 A.M., when he is always awakened, by "loud noisy and continuous belching, ... with great rollings of wind and most painful distension." He presents no signs of disease anywhere, nor of disordered secretion. He never vomits; he has no discomfort from careful meals, but the reverse. He has had a continuous loss of blood from piles for a long time, and he looks anæmic. This fact he omitted to state until directly questioned, for he believed "that relief to be good for the system," and calculated to clear his "torpid liver." All these people are profoundly convinced that their main enemy is a vicious liver.

I will give but one case more: a solicitor, aged 30 (No. 73, 1878), had been very hard worked. First came dull heavy pain in the left side. Then he became subject to "painful distensions of the body, not by food," and extreme flatulence; with this comes on great dyspnœa like spasmodic asthma, or again dizziness so severe that he fears he may fall. He passes profuse and pale urine at such times, and if a woman he would have been written down a hysteric; whereas he is a man of intellect and good sense, and holds successfully a high professional position. The only difficulty in his case was to secure for him a sufficient rest. It is to be noted that in all these cases the wind is quite inoffensive. Whether it be carbonic acid, common air, hydrogen, or what else I am unable to say, as I have never tested it. By its mode of occurrence, the suddenness and volume of its generation, as well as in its innocence of taste or odour, it is clearly marked off from the foul wind generated by the fermentation of food. It is certainly produced in some way by the agency of the nervous system. Such are the painful symptoms which may be observed and discussed under the head of gastralgia; but a few yet remain.

There is a distension of the body, real or false, which sadly distresses some patients. Women having this distension must, perhaps, go upstairs to remove the corset to obtain ease. The swelling is, for the most part, real and measurable; but I am not prepared to say what is the cause or mode of it. That it is a mere accumulation of wind, I hesitate to suppose. It is often unassociated with any consciousness of the presence of flatulence; and, moreover, it is not confined to the region of the stomach. I am assured by many patients, and their observing friends, that it may extend all over the breast, and even to the neck. It may be vascular, but there is no blush with it.

To the horrible, death-like sinkings which belong to gastralgia, though not always actually coincident with the pain, I have already referred incidentally. No. 80, 1874, a male, aged 28, after a few months' worry, began to have neuralgic pain in the left arm and up the neck. After this, he became subject to nocturnal attacks of "want"—not a craving, nor exactly a faintness, but "an awful emptiness, with a dread at the heart." He was substantially quite healthy, and was soon cured on restorative and tonic treatment. I am now seeing a similar case in Leeds, with Mr. Robson, in a neurotic subject. Vertigo is sometimes associated with this symptom. Slighter degrees of this distress often accompany gastralgia or enteralgia, or, with an unaccountable languor, precede them. These subjective sensations are, of course, to be distinguished from the collapse, sometimes alarming in its degree, which is consequent upon the intenser attacks of abdominal neuralgia. The intensity, indeed, of most severe cases of gastro-enteralgia may be seen in the ashen cold face and blue nails. Finally, most gastralgics are subject, not when actually suffering only, but also at all times, to borborygmi. Few people are ignorant of this phenomenon; but it is in neurotics especially, that it reaches its most lively and garrulous form. An old and valued domestic, who has recently retired after twenty-five years of household service, and who presented all the phenomena of gastralgia in an active form, was so embarrassed by these audible internal questionings that she almost withdrew herself from waiting at table. In some persons, borborygmi are rhythmical, and coincide with the inspiration. The noise is then rather of a churning character, and, I believe, is made in the stomach only. On examination, it will be found that, in these persons, the breathing, when full, is wholly abdominal. Even in women, the thorax may be motionless. In addition to tonic measures, gentle dumb-bell exercises are most potent to remove this disorder.

And now, gentlemen, have I succeeded in enforcing that which you already know—namely, that all the symptoms I have discussed to-day form, not only a consistent, but a very uniform series? Few maladies present a more definite series, or one more capable of rational explanation. Is it not one of the last maladies to be classed with those of irregular, capricious, and fanciful evolution? Shall we then say, as the authors of our text-books do to this moment, that gastralgia is, for the most part, a malady of hysterical women? If we still say so, then it is indeed time for the lion to paint the man.

PERIPHERIC NEURO-TABES.—At a meeting of the Société de Biologie, held in February 1882, Dr. Dejerine made a communication on some lesions of the peripheric nerves found in locomotor ataxy. He said that some of the symptoms, such as the occurrence of localised areas of anæsthesia and hyperæsthesia, were due to a peripheric neuritis, and not to a degeneration of the posterior nerve-roots, or of the spinal cord. More recently the same author has attempted to prove, at a meeting of the Académie des Sciences, that all the symptoms of tabes can be present without myelitis. In two cases where the diagnosis had been made without hesitation, he found after death that the nerve-roots and spinal cord were quite healthy, but that many peripheric nerves presented evident signs of parenchymatous neuritis.

A LECTURE
ON THE
ORGANISATION OF FIELD-HOSPITALS.

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THE subject on which I have undertaken to address you on the present occasion is the organisation and management of field-hospitals; and I feel assured that, in an institution which owes its name to one who began his professional career as an army medical officer, and who subsequently became the greatest authority of this or any other country on all that relates to the preservation of the health of the soldier, it can scarcely be necessary for me to say anything to justify its selection.

In the instructions which Dr. Parkes gave on this subject in his *Manual of Practical Hygiene* and elsewhere, the judicious counsel was enjoined that, just as the individual soldier during peace is drilled and trained for war, so should the various departments of an army, and especially the medical department, so utilise the time of peace as to be able, on the outbreak of hostilities, to take the field at the shortest notice, and be ready to put in action all those measures which are needed to maintain the troops in health, and to minimise the effects of disease or injury when these occur. Dr. Parkes was well aware of the need for that injunction; for, at the end of the long peace of the last generation, he had seen our transports embark an army, which in courage, drill, and discipline, has never been surpassed; and, in a few short months thereafter, he had also seen that army reduced to insignificance and impotence, not by the shot or sword of the Russians—our enemies—but by the starvation, the misery, and the disease, which were due to the inefficiency of our military system. It was then that Dr. Parkes began the second period of his connection with the military service, and from that time to the close of his life he devoted his great abilities to the improvement of the soldier's lot. All those who are conversant with our recent military history must know well how much the soldiers of the present day owe to him for their healthier dwellings, their more comfortable clothing, the diminution of the weight of their packs, and the improved method of carrying them, their better food, and their more generous treatment in sickness. By his labours in these various directions, Dr. Parkes earned for himself a name that will descend to posterity as that of one of the greatest benefactors of his race, and the existence of this institution is one among many lasting tributes to his memory.

During the most active part of Dr. Parkes's life, our military hospitals were based almost exclusively on the regimental system; and although before he died this had undergone many changes, he did not live to witness its entire abolition, or the substitution for it of what is now known as the unification, or general hospital, system. Such a change of system was doubtless inevitable, and was foreshadowed even during the Crimean war; in such hospitals as those at Balaclava, Scutari, Renkioi, etc., ; but it is to be regretted that, consequent upon its introduction, there was an interruption, or, at any rate, a diminution of much of the good understanding that formerly existed between the military and the medical officers. To a certain extent this might have been anticipated, for the army is an eminently conservative institution, and it was natural that its officers should wish to retain in the combatant ranks all those privileges of power and authority of which they have the traditions and the *prestige* from the feudal times. Consequently, when the medical officers said that for the efficient working of the hospitals it was necessary that their hands should be untrammelled, and that they should have control over those to whom they were bound to trust for the execution of their ideas and orders, it was not surprising that the military officers were opposed to the change, and objected that medical officers did not know how to maintain discipline, that they therefore ought not to be entrusted with command, and that they ought to have a military governor in their hospitals for this purpose.

In the discussions which have since taken place in the newspapers and elsewhere regarding the management of military hospitals, it must be acknowledged that the medical officers have been subjected to a good deal of detraction; and it has been authoritatively asserted, not only that medical officers do not know, but that it is not even desirable that they should attempt to learn, the mystery of discipline. It has further been declared that they require the guidance of engineers in sanitary matters; of purveyors, or some similar officials, to decide how their hospitals should be equipped and supplied; and some persons have even insinuated that spies would not be amiss, to see that their patients were treated with due consideration and sympathy. Indeed, I believe I am not far wrong in saying that a very large number—perhaps the majority—of military officers are still of opinion that they could manage the military hospitals far better than the medical officers; whilst the latter, of course, think quite the contrary. In this conflict of opinion between two branches of the public service which must of necessity work together, our best course is to appeal to what has been our actual experience; and, if we do this, we shall find that, when the specially military authority was supreme, as it was at the commencement of the Crimean war, the results were highly disastrous both to the army and to the nation at large; whereas, with every increase of authority entrusted to the medical officers in our subsequent military expeditions, there have always been greater efficiency in hospital administration, more effectual preservation of the health and of the lives of the soldiers, and, as a natural consequence, greater economy. If, then, we would improve our military service still further, there is reason for saying that we ought to proceed upon these lines, and concede to the medical officers, as we do to the military, powers commensurate with their responsibilities. At the same time, it cannot be doubted that there ought to be brought about a more thorough understanding than exists at present, not only between the military and medical branches of the army, but also between them and the general public, as to various sanitary, dietetic, and hospital matters; and, if this could be accomplished, it would be better for all concerned, but especially for those who are the least able to help themselves—viz., the rank and file.

Take, for instance, the subject of the soldiers' food. I believe I am right in saying that the professors of the Army Medical School and the medical officers generally are agreed that the daily ration of meat is insufficient; but such representations as have hitherto been made on the subject have been unavailing, owing, probably, to the great expense which the requisite increase would entail. Then, there is this peculiarity about our system of dieting, both in hospital and in barracks, that by far the largest part of each diet, and of the daily ration, is allotted to the dinner; whilst, for the morning and evening meals, there is generally nothing but tea or coffee, and bread, either with or without butter. Our soldiers are accustomed to have their food distributed in this way, and they rarely complain of it. A short time ago I asked a soldier, whom I met in the street, what he had had for dinner. "Some boiled meat and potatoes," he replied. "And for breakfast?" "Tea and bread and butter." "And what more will you get to-day?" I asked. "Well," he said, "I daresay my mate will have put aside some cold tea for me, and I shall get that and a lump of bread when I go back to barracks this evening." Such is the way in which the rank and file of our army are accustomed to live; and I cannot help thinking that if they had more food, and if it were so distributed as to give them more substantial morning and evening meals, we should effect, in the end, a real economy, if only by preventing, in the young and probably still growing recruit, that sense of emptiness and exhaustion which causes him to have recourse to tobacco, and, still worse, to the beer or other alcoholic stimulants supplied by the canteen. But I need scarcely say that this reform would likewise cost money, and that public opinion must sanction it if it is to be carried into effect.

On the other hand, as regards the equipment of the military hospitals, it must be acknowledged that we have not kept pace with the movement in civil life. The wards of our metropolitan and provincial hospitals are furnished, decorated, and made bright with flowers, pictures, books, etc., to such an extent that even the wealthiest people ought to be satisfied with their accommodation if accident or disease compelled them to take up a temporary residence there. In comparison with these, the wards of our military hospitals look bare, cold, and cheerless; and yet nearly all the foreigners that visit them express astonishment at the comforts with which, according to their notions, our soldiers are surrounded. Indeed, the story is told of a Russian officer who, after being taken round one of our barracks and hospitals some few years ago, exclaimed, "I now comprehend why it is that England, rich as she is, cannot afford to maintain a large army. You house your soldiers like officers, and your officers like princes." Now if it pleases the English people to accustom the soldiers to expensive surroundings, or at any rate to superfluities, that is their affair; but I contend that it is not the duty of medical officers to ask for expenditure on this account. Provided they have what they believe to be essential to the proper treatment of their patients, they ought, as practical men and faithful servants of the public, to refrain from urging any unnecessary expenditure. They have to remember that soldiers are intended for warfare, and that, in warfare, those nations are most likely to prevail whose soldiers are the hardiest, the best able to dispense with superfluities, and who can be contented with the barest necessities of life; that the English army, if it is to contend successfully against that of any other power, civilised or uncivilised, must learn to dispense with unnecessary refinements. The officers, to use the expression of one of our great writers, must "de-fine-gentlemanise" themselves when campaigning. The rank and file also must learn at such a time to put up with the conditions of life which suffice for their enemies or their allies; and it must be obvious that they would find it easier to do this if, in ordinary times, they were accustomed to surroundings of a Spartan-like simplicity. Such, I believe, has been the opinion of all our greatest generals, and such are the traditions of all warlike nations.

Still, if it pleases the tax-paying public that the military hospitals shall be made to resemble our great metropolitan and provincial establishments, well and good; but they ought to count the cost beforehand, and to settle deliberately how far they will go in this direction. It is neither generous nor just to order medical officers to practise the most rigid economy, to tie them hand and foot by regulations, to refuse their requests for what they consider necessary or desirable; and then, all on a sudden, in a time of sensational excitement, such as was witnessed a little more than a year ago, to turn round and blame them for not having their hospitals equipped and garnished upon æsthetic principles.

There is another point to which I think it desirable to advert, namely, the rules for the admission of soldiers to hospital. Our present plan is to admit every man who is unable to perform his full duty. Formerly, when a military hospital was looked upon as an institution akin to a reformatory, the rule was intelligible; but, in the present day, I cannot help regarding it as prejudicial to the moral qualities both of the soldiers and of their attendants. I believe that commanding officers are in favour of the rule, because they consider it injurious to discipline to have a number of men idling about the barracks as convalescents. Still, if such men must be idling, is it better that they should do so in barracks under the supervision of their officers and non-commissioned officers, or that they should be idling in hospital under only such supervision as can be given by hospital-orderlies or female nurses? But why should they be idlers at all? Men having only slight ailments or injuries might, one would think, do much of the police and sanitary work about a barrack or camp; and, if they could do nothing else, they might, at least, attend the regimental school. I am quite convinced that our practice of sending men to hospital for every little ailment tends to make them hypochondriacal, and to engender the habit of going into hospital for trifles, which, when campaigning, is attended with serious inconvenience, both to the military and to the medical officers.

The practice is equally prejudicial to the hospital-orderlies and nurses, who, from having constantly to deal with such cases, are likely to become careless, and to lose that sense of responsibility which they ought to feel in connection with every patient placed in their charge. To a smaller extent, but for similar reasons, it is injurious to the medical officers, especially the juniors; and, lastly, it is unnecessarily expensive to treat in hospital cases which, in any rank of private life, would never be deemed to require hospital care and attendance.

Although the preceding remarks bear, to a larger extent, upon the general economy of all military hospitals, I trust that their special application to field-hospitals will be sufficiently apparent; and I now proceed to explain what the latter are, and what purpose they are intended to serve.

Closely following the troops in the fighting line there comes the "first line of surgical assistance," consisting of the corps of stretcher-bearers and of a certain number of medical officers. It is their duty to collect the wounded and the sick from the battle-field or the fighting line, to render such assistance in the way of arresting hæmorrhage or applying temporary dressings as may be requisite, and to convey them to the second line, viz., that of the movable field-hospitals. These are intended to move with the army, and are supposed to be provided with transport (horses, mules, etc.), for the purpose. They are usually stationed about a mile in rear of the fighting line, in order to receive the sick and wounded brought in by the bearer companies. Their equipment is as light as possible, consisting of bell tents, no bedsteads, chairs, or tables, but merely waterproof ground sheets, bed-cases of thin canvas filled with straw, hay, dry leaves, or the like, some blankets, a certain number of sheets and pillow-cases, cooking-kettles, pans, basins, buckets, lamps, some hospital-clothing, medicines, instruments and appliances, wine, brandy, essence of beef, arrow-root, and so on; the object being to provide for the sick and wounded what is essential for their immediate wants, and to take due care of them until they can be transferred to the rear.

There are, next, "the stationary field-hospitals" placed along the lines of communication, and occasionally at the base of operations. The equipment for these hospitals is just the same as that for the movable field-hospitals as regards the medical and surgical stores, but they are supposed to have marquees instead of bell-tents, with double the quantity of hospital-clothing, and they are not provided with transport.

According to the existing regulations, hospitals of this description are to be established at the base; but there can be no doubt that, whenever it could be managed, it would be better to have a general hospital in this position, fully equipped, with bedsteads, chairs, and, in short, all the furniture, bedding, and appliances that are ordered for the military hospitals at home.

In the movable and stationary field-hospitals, the food consists of the ordinary field-rations, which allow to each patient not less than a pound of meat, a pound of bread, a certain quantity of vegetables, tea or coffee, sugar, salt, pepper, etc.; whilst in the general hospitals there is a special scale of diets, some of which give less, but none give more, food than the ordinary rations.

Now, it is obvious that it must rest with the general in command to decide where he will establish his base and his lines of communication, and that it must be for him and his advisers to determine what description of hospitals shall be sent out from this country, and what number and kind shall be found at any given place within the sphere of his operations. Provided his orders are obeyed, we cannot imagine a general complaining of a movable hospital being where there should have been a stationary one, or of the latter being where there ought to have been a general hospital, any more than we can imagine him complaining of a park of artillery or a pontoon-train being exactly where he had ordered it to be. The executive medical officers of the army have, in fact, no more control over the positions of the hospitals than they have with regard to the disposition of the troops themselves.

Such being the purpose and destination of the field-hospitals, it is necessary to consider what should be the unit in their organisation. In the report of Lord Morley's committee on the organisation of the Army Hospital Corps, much importance is attached to this point, and it is concluded that field-hospitals ought to be distributed by brigades, and made smaller than they now are; the idea being that, by coupling such units, field-hospitals could be made suitable for divisions. I rather doubt the expediency of that arrangement, because, in doubling the establishments, it is impossible to avoid multiplying certain functionaries whose numbers need not be increased. I therefore think it would be better to lay down two or three separate scales—say one for an hospital of fifty patients or less, another for one hundred, and a third for two hundred, which is quite as large as any field-hospital ought to be. But in this connection it is important to consider not merely the number of sick that could be accommodated at a given time, but at what rate the sick could be passed through these hospitals, for it must be obvious that a hospital of two hundred beds in which the admissions and discharges respectively numbered ten daily would have much less strain than one in which the admissions and discharges averaged one hundred daily.

This point has not hitherto received any attention, but its importance is very great, as is shown by what occurred at Ismailia. The hospital there, after August 27th, was at first organised on the basis of one stationary field-hospital of two hundred beds. No. 8 was used for this purpose; and, as it was supposed that the other stationary hospital, No. 7, might be required at a more advanced point on the line of communications, its equipment was at first not taken into use. It almost immediately, however, became apparent that one such hospital was inadequate for a daily exchange of one hundred sick; and, therefore, the stores and appliances of No. 7 field-hospital were gradually absorbed. But it would probably have been more satisfactory if the two stationary hospitals had been at once established there with their full complements of medical officers, equipment, and attendants, or, what would have been better still, had it been possible, if a general hospital had been formed. Still, on the assumption that there were two stationary field-hospitals at Ismailia, my experience is to the effect that they were insufficient for the rapid interchange of a large number of sick. I consider that ten per cent. of admissions and discharges respectively is as much as such hospitals could well undertake from day to day; but if the various subordinates of each hospital were all properly trained, probably twenty per cent. could be managed, which would, of course, be equivalent to a total change of inmates every five days.

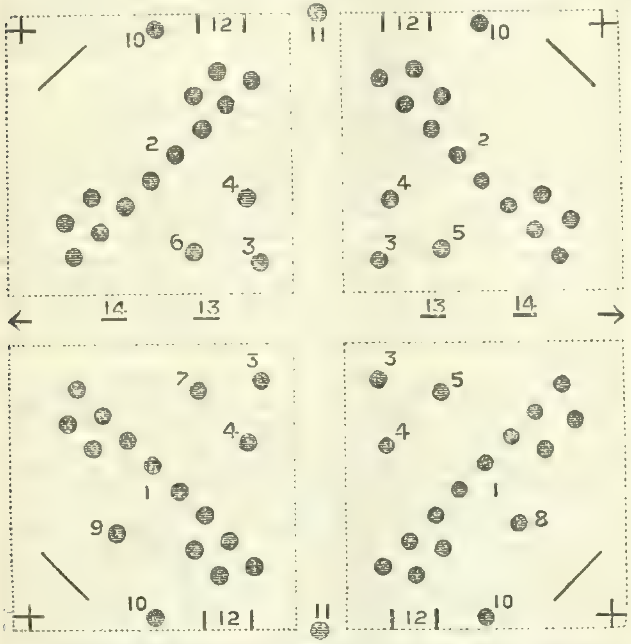
This point ought not to be forgotten when the plans are prepared for the various field and other hospitals of our next military expedition.

I must now explain how a camp should be formed for a field-hospital, if houses be not available.

The regulation plan appears to me to have several defects. The tents are too crowded, and the perflation of the ground-surface is thereby interfered with. The horses are placed too near to the hospital-tents. The medical officer and the hospital attendants are too distant from the sick, and all on one side of the camp. There is no provision for sick officers, for the accommodation of the night-attendants, for an office, or for a mortuary.

For stationary field-hospitals, the plan proposed by the late Surgeon-Major Moffitt has some advantages; but it requires a large space of ground, which cannot always be obtained; the centre is blocked by the hospital staff and stores; and, in any case, the plan is suitable only for marquees.

The plan which I propose is calculated to obviate most of these defects.



Plan of encampment for a field-hospital; movable or stationary (200 sick).

Explanation.—1. Hospital tents (medical division). 2. Hospital tents (surgical division). 3. Medical officers. 4. Army Hospital Corps. 5. Sick officers. 6. Operation-tent. 7. Night-guard and office-tent. 8. Mortuary. 9. Pack-store. 10. Bât-men and drivers. 11. Military guard. 12. Store-wagons. 13. Pharmacy-wagons. 14. Water-carts. ⊳ Kitchens. —— Horse-Lines. + Latrines.

This camp is naturally divisible into halves and quarters—*i.e.*, into medical and surgical divisions and subdivisions. The officers are in the centre, instead of being all at one side. The attendants are near to the sick; and each half of the camp, and even each quarter, is very nearly complete in itself, having its own officers, orderlies, water-supply, kitchen, and transport. There is accommodation for sick officers, for night-attendants, for the kits or packs of the patients, and for the dead; whilst the horses and latrines are as far away as possible. Moreover, this plan will answer equally well with all kinds of tents, and it complies with the principle of dispersing the sick and concentrating the attendants; whereas the regulation plan tends to concentrate the sick and to disperse the attendants.

As to the kind of tent best adapted for campaigning purposes, I believe all medical officers are agreed in condemning the present bell-tent. Its chief advantage is its portability. It is intended to accommodate four sick, and, as it weighs about 65 to 70 lbs., the weight of tentage per patient may be taken at about 17 lbs. Its disadvantages are that one cannot stand upright in it, except in the centre; that its cubic space is small (513 feet), and that it can neither be lighted by daylight in wet weather without letting in the rain, nor ventilated sufficiently for sick men either at night, in cold or in wet weather. Besides, as it cannot accommodate more than four patients, it would be impossible with any reasonable number of attendants to exercise satisfactory supervision over a large number of sick divided into such small parties. This tent ought no longer to be used for hospital purposes, at any rate in its present form; but, if its retention for movable field-hospitals should be considered absolutely necessary on account of its lightness, it ought to be improved by raising the vertical part to a height of three feet. In that case, the tent-pole being ten feet long, the slope of the roof would be brought to 45°, but would still suffice to carry off the rain, whilst there ought to be little or no difficulty in making the junction between the vertical and the sloping parts such that air might readily pass in and out.

The regulation hospital-marquee is a better tent. Its cubic space is about 2,766 feet. It weighs about 500 lbs. (Parkes), and it is intended for eighteen sick, at which rate the weight of tentage per patient would be about 27 lbs. If it were provided with large flaps or windows at the sides, for the admission of light as well as air, it would answer well for all situations to which it could be conveniently carried. It would, therefore, be perfectly suitable for base-hospitals, and for stationary hospitals near the base; but it is too heavy, both as a whole and in its several parts, for movable hospitals, and even for stationary hospitals at a long distance from the base, especially when we have to depend for carriage upon pack-animals or upon rickety country carts.

A far better tent for such hospitals than either of the preceding is the Indian sergeant's tent, which is square, with upright sides, and large enough to accommodate from four to six patients. This tent is used only in India, and I regret that I am unable to give its weight. It has, however, the drawback of being still too small for economical attendance on the sick.

The best tent for movable and advanced stationary hospitals would be one of this pattern, but large enough for ten patients, which is probably the most suitable number for easy attendance and supervision. Its parts might be of such a size and weight as to allow of being carried on any ordinary horse or mule; and I have no doubt it could be made so that the whole might not weigh more than 180 or 200 lbs., say, a weight of tentage of 18 or 20 lbs. per patient. I cannot help thinking that the Government might, with advantage, spend some money in experiments on this subject. To conclude what I have to say regarding it, I should remark that, even when large tents or marquees are used for the ordinary sick, there ought to be smaller tents for sick officers for special cases, for operations, for the night-guard, for an office, for a mortuary, and for a pack-store.

I have next to speak of the *personnel* of a field-hospital; and I here show the establishment that I would propose for a field-hospital of 200 sick.

Proposed Establishment for a Field-Hospital (200 Sick).

1st Class.	No.	2nd Class.	No.	3rd Class (Orderlies).	No.
Brigade-Surgeon (in charge)	1	Chief wardmaster	1		
		Wardmasters	2		
Surgeon-Majors:		Dispenser	1	.. ..	1
For medical division	1	Surgery-man	1		
,, surgical do.	1	Steward	1	.. ..	1
Surgeons:		Assistant steward	1		
For medical division	1	Storekeeper	1	.. ..	1
,, ,, (pathologist)	1	Assistant storekeeper (pack-store)	1	..	1
,, surgical division	1	Head cook	1	. ..	2
		Assistant cook	2		
,, ,, and sanitary duties	1	Clerk	1	(Messenger)	1
		Writer (registrar)	1		
		Mortuary-man (sanitary assistant)	1	(Sanitary)	5
		Laundry-man	1	..	3
		Dressers	14	(Water-carriers, etc.)	5
Total	7		30		20

In this scheme, the number of medical officers is the same as in the regulation establishment, and it is quite sufficient if there is a reserve elsewhere for casualties. The senior should be responsible for everything, subject, of course, to the regulations and to the general officer in command, and his authority over his staff in all disciplinary matters should be as absolute as that of a colonel over his regiment. At least two of his juniors ought to be thoroughly competent operators, and these should also possess special skill in diseases of the eye and ear. To these officers the surgical work of the hospital would be allotted, and the junior should supervise all sanitary matters.

One of the staff ought to be a sound diagnostic physician, and another should be a skilled morbid anatomist. These two should have special charge of the medical cases. In short, as we know that one man can rarely excel in every branch of medical knowledge, we ought to assimilate the staff of a field-hospital to that of our metropolitan hospitals, so that it might be equal to any of the various emergencies that arise on field-service. But, in order to have such a staff available for every field-hospital in war time, it would obviously be necessary that our whole medical department should be reorganised, and divided into general and field-hospital cadres, just as the artillery are divided into batteries and brigades; and then, for foreign service, instead of individual officers relieving each other as they do now, a whole field-hospital abroad would be relieved by one from home, and *vice versâ*. I believe that such a plan would contribute to the efficiency of the medical service, and that it would foster a feeling of generous emulation throughout the department, without in any way impairing the general *esprit de corps*.

As regards the second-class establishment proposed in this scheme, the senior ward-master should be a warrant-officer, and at the head of all the subordinates, both of the second and of the third class. He would be the right-hand man of the senior medical officer in connection with the discipline of the men and the distribution of routine duties. In fact, his position should be somewhat analogous to that of the sergeant-major in a regiment. There would be only one dispenser instead of two as at present, for reasons which I shall explain presently.

The surgery-man, not provided for in our present scale, would have charge of the operation tent, or room, and of all the appliances and instruments belonging to it, and he should have had some instruction as a cutler, so as to be able to keep them in proper order.

The pack storekeeper should be provided with carbon paper, duplicate "receipt and issue books," as well as with tallies and cords for labelling and tying together the arms, accoutrements, and kit of the patients admitted.

There is no part of our military hospital system that more requires improvement than that which concerns the preparation of the food for the sick. Nothing contributes more to the welfare of the sick than good cooking; and yet we are in the habit of entrusting this important function to men who are not known to have any aptitude for it, either natural or acquired. Every soldier ought to be taught how to cook his rations, but the hospital-cooks should receive a more thorough training, so as to be able to turn to the greatest advantage whatever materials might be served out to them; and for this purpose there ought to be a special training-school for cookery at Netley, if not at the other large military hospitals.

The mortuary-man should have a place in the list of all field-hospital establishments, and his duty should be to take charge of the mortuary-tent, to assist at *post mortem* examinations, to prepare the dead bodies for the funeral-parties to take away, and so on. He might also be the sanitary officer's assistant, and in that capacity superintend the sweepers and scavengers.

The laundry-man should take charge of all soiled linen, disinfect it when required, and, under certain circumstances, even superintend its cleansing, washing, pressing, etc.

The dressers should be the nurses or attendants of the sick, and should be specially selected and trained for this troublesome but most important duty.

Each individual in the second-class establishment should be required to learn the duties of the other, more or less, according to his ability and opportunities. In short, each should have enough acquaintance with the other's work to be able to know when it was properly done, and, in case of emergency, even to do it himself. But it must be evident that, if we would have all these functionaries to work harmoniously and expeditiously, they ought to be practised, each at his special duty, as regularly and systematically as the non-commissioned officers and men of a field-battery are drilled at theirs, and we must realise the fact that, without such training and practice, we shall simply invite failure if we send field-hospitals on any future campaign.

The third class of the hospital-establishment should consist of sober, steady, intelligent, healthy men, to be employed on such rough but simple duties as water-carrying, digging, scavenging, cleaning, washing, and packing—duties, in fact, which require no special training, and which might be performed by ordinary labourers, taken either from this country or from that in which the war was being carried on if necessary. Into this class would also come the drivers, if it were decided to hand over to field-hospitals the horses or other cattle necessary for their transport; but on this point I now agree with those who think that this should not be done. If the English army had to be prepared for European warfare alone, it might possibly be as desirable for the movable field-hospitals as for the field-batteries to be provided with horses and transport, in which case conductors and drivers would of course form a part of the hospital-establishment; but when we reflect that we are just as likely, if not more likely, to be required to make war in any part of Asia or Africa, where the means of transport are very variable, I think we should do better to trust to the transport branch of the Commissariat for the conveyance of the hospitals from place to place. It ought, however, to be clearly understood on all sides that the special hospital-establishment should on no account be diverted from their special duties for this purpose, but that the task and the responsibility of all such movements would fall upon the transport branch, acting under the orders of the general officer in command.

Passing now from the *personnel*, I come to the equipment of field-hospitals; but time will not permit me to do more than briefly allude to those articles which most urgently call for modification. The opinion that the present equipment is too heavy is not well founded. It is not the things carried, but the means of carrying them, that are too heavy. We want lighter packing-cases and lighter carts; but the pots, pans, and the like, cannot well be made lighter than they are, if they are to be serviceable.

As to the bedding and clothing, we ought to use cotton instead of linen sheets; they would be lighter, cheaper, and durable enough for any ordinary campaign. At Ismailia, the sheets were of unbleached linen, so stiff and coarse, and so like the canvas of the mattresses in colour, that some persons thought we had no sheets at all in use. Still, in field-hospitals, the use of sheets must always be exceptional. At Ismailia, if every patient had been supplied with sheets, our supply would have lasted about four days, and then we should have had none for the operation and other serious cases. I should even be inclined to diminish rather than to increase the supply of sheets, and to issue, in their stead, loose drawers (*pyjamas*) of twilled calico, with shirts of the same material opening all the way down the front. A patient would be comfortable in such clothing; and over it he might use either blankets or any portion of his regimentals that he required for extra warmth.

The number of slippers ought to be increased; for nothing is more refreshing to a man exhausted by heat, hunger, sickness, or injury, than the removal of his hard, heavy, and probably ill-fitting boots, and giving him loose slippers in their stead.

Turning from the clothing to the utensils, I must first call attention to the absence of small portable cooking-stoves. I tried to get these supplied to my hospital before we went to Egypt in 1882; but the scale of equipment had been fixed at the War-Office, and no alteration could be made in it. At Ismailia, fire was kept in the kitchen all night; but the kitchen was one hundred yards distant from the hospital-wards, and of course the female nurses could not go to it.

Good and portable filters are also a great desideratum, for we can never trust to the purity of the water-supply in the field, and the importance of pure water in hospitals is only second, if second, to that of pure air. The filters hitherto furnished to field-hospitals have been unnecessarily heavy and bulky, owing to the filtering substance being contained in thick earthenware jars; but I have no doubt that, by using block-tin, cemented on the inside, and encased in wood or wicker-work, a spongy iron-filter might be made of less than half the weight of those now in use.

There should likewise be supplied to our field-hospitals a few sweeping-brushes, brooms, and cleaning cloths or dusters; for these cannot be extemporised on the sea-shore, for instance, nor can they always be procured in the localities where the field-hospitals are placed; but it is impossible to keep either tents, huts, or the rooms in houses, decently clean without such appliances.

Instead of the few, heavy, and expensive lanterns allowed by our present scale, we ought to have small tin-candlesticks fitted with shades of glass, talc, or horn, with sockets for small oil-lamps, or for such candles as we call night-lights. Of course, some of the large lamps would be required as well; but, of these small night-lights, there ought to be at least one for every ward and marquee, one for every three or four bell-tents, and one for each latrine; for nothing is more annoying to patients suffering from diarrhœa than to have to grope their way in the dark.

In the matter of close stools, the regulation equipment is defective rather in kind than in number. At Ismailia, where nearly every patient was troubled more or less with diarrhœa, we had at first serious difficulties respecting the latrine accommodation; and the time of the orderlies was too much occupied in carrying about and cleansing the close stools and the extemporised earth-closets. Within the palace, on each story, there were some water-closets; but, when I took charge, the cistern was empty, and could not be refilled; consequently, the closets were a nuisance, and a very dangerous one. I, therefore, after having them cleansed and disinfected, ordered the seats to be screwed down, so as to prevent their further use. This measure caused much annoyance, and I believe many hard things were said about it, but I should unhesitatingly follow a similar course again under like circumstances; for there can be little doubt that much of the peril attending the occupation of houses for hospitals in war time is attributable to the unwholesome condition of the house-closets. The difficulty, however, was to find a substitute for these dangerous closets, and I was pretty nearly at my wits' end until an accident, or, rather, a happy thought, suggested the means of overcoming it. I was conferring, one day, with Captain Gordon, R.E., about making some portable dry-earth boxes, when he told me that he had found, among a lot of Egyptian lumber, some iron-wheelbarrows, which might serve my purpose. The barrows were constructed so that the box might be raised on a pivot, and its contents tipped out beyond the wheel. It was, therefore, only necessary to fit them with a wooden bar or seat between the handles, to make a latrine that could be placed wherever it was most wanted—a latrine that could be wheeled away, cleaned, disinfected, and then replaced, as often as was requisite.

In future, a dozen of these ought to be supplied to every field-hospital; for I scarcely know which conduces most to a patient's happiness—the ingestion of food, or a convenient *lieu d'aisance.* These barrows would meet this important desideratum, and, what is of equal consequence, they would enable us to dispense with the evils of open latrines in the immediate neighbourhood of the sick. Moreover, if not required as latrines, they would always be useful for scavenging, for the carriage of stores, and other similar purposes.

Before I leave this subject, I ought to mention that Professor de Chaumont is of opinion that field-hospitals might be provided with a furnace for burning the excreta, and, perhaps, also for cremating the dead. If this could be done, the furnace might be utilised in various other ways, such as, 1st, for drying and disinfecting the clothes of all patients admitted, which would obviate the objection to their wearing their regimental clothing in hospital; 2nd, for drying the towels, sheets, shirts, etc., washed by the laundryman; 3rd, for boiling water, and thereby affording to the patients the means for efficient ablution.

I must likewise add that latrine-paper ought to be issued to field-hospitals. At present this article has no place in our scale of supplies, but, as a sanitary measure, the defect ought to be remedied without delay.

I have now to say a few words regarding the medicines for field-hospitals. I believe the regulation list is undergoing revision at the present time. In what direction, or to what extent this may be carried, I do not know; but I have long been of opinion that we ought to cease carrying about huge bottles full of tinctures and powders and other bulky drugs. Can we not treat such diseases as we meet with in the field without, for instance, the tinctures of orange-peel, cardamoms, myrrh, senna, and valerian, or such articles as chiretta, cinchona bark, soap-liniment, bruised ginger, and resin-ointment? Would it not be better to have all, or nearly all, the medicines for campaigning made up beforehand in the form of coated pills or globules, and lamels or discs for hypodermic injection? I believe it would be quite possible, by utilising the modern and improved methods of compounding, to put into a very small compass all the drugs that are essentially necessary for field-service; but, of course, it would be necessary that every officer going to a campaign should be aware that dispensing establishments on the scale of those of Savory and Moore, or the Apothecaries' Company, are not to be expected in a field-hospital. By the adoption of this plan, one dispenser for each field-hospital would evidently be sufficient.

Then, as to the means of carrying the medicines and appliances, surely the ingenuity of the country might contrive something lighter and more manageable than our regulation medicine-chests and pharmacy-wagons. In Egypt, the latter gave us an infinity of trouble. It was no easy task to land them from the barges; but, after this difficulty was overcome, and the wheels and shafts had been put on, they had scarcely been moved a few yards before they sank deep into the sand, from which neither men nor horses could extricate them. It was, therefore, necessary to unpack them, and to carry their contents to the hospital piecemeal. I am aware that these wagons were used in South Africa; but it must be obvious that what happened in Egypt might happen elsewhere, and that vehicles which could not at a pinch be taken over a sandy plain or through a ploughed field, ought to form no part of the equipment of a field-hospital, either movable or stationary.

The remarks which I have made upon the field-hospitals, imperfect as I know them to be, will nevertheless suffice, I trust, to show that we ought not to trust to our being able to create such institutions by a mere stroke of the pen at the commencement of a war. Inasmuch, then, as the army ought to be prepared at all times for war, it is desirable that all our military hospitals should be organised on the same principles as those which we should have to adopt in the field. There should be field-hospitals, or at any rate the cadres and *matériel* of them, at Netley, Aldershot, Portsmouth, Woolwich, and all the other large military stations; and advantage should every year be taken of the presence of troops in such camps as Shorncliffe and Aldershot, and of the summer or autumn manœuvres, to establish and work field-hospitals precisely as they should be conducted on a campaign.

And now, before I conclude, I should like to say a few words regarding the hospital work in Egypt in 1882. If the medical service in that campaign was reasonably efficient, how, it may be asked, did it happen that so many complaints were subsequently made about it?

It would be difficult to answer this question without again referring to the fact that the new, or "unified," system of hospital management was certainly not popular with the officers of the army; and I think it is not doing them any injustice to say, that at least some of them would not have regretted to see the system break down. We know also that when people entertain any special dislike, either to an individual or to a system, they are not long in finding, or imagining that they find, causes to justify their aversion. I cannot in any other way account for those absurd but somewhat malicious stories to which some of the newspaper-correspondents gave currency.

Then we must remember that many, even of the senior regimental officers who went to Egypt, had had no experience of actual warfare, and that they probably overrated the hardships which they had to encounter. Besides, I think they did not make due allowance for the difficulties with which the medical department at Ismailia had to contend, owing to the late arrival of the hospital establishments and stores in the *Carthage* and other ships, to the want of transport, and to the rapid increase of the sick-list.

The medical service at Ismailia had to perform the transport-work not only of the hospital stores and equipment, but, nearly every night, the men were engaged for hours in bringing in parties of sick and wounded arriving from the front. It must be evident that there are limits to human endurance, and that if men have to work hard by day under a burning sun, in a temperature of nearly 90° Fahr. in the shade, whilst at night they have a continuance of labour, with only snatches of sleep, they cannot long be in a condition to give that constant, patient, and watchful attention to the sick which good nursing requires.

As to the accusation brought against them of shirking their duty, of coarseness and brutality in dealing with the sick, and of appropriating to their own use the food, stimulants, and other good things ordered for the patients, I would only remark that the men of the Army Hospital Corps are Englishmen like ourselves, and that these are not ordinary English vices. We all know how difficult it is to refute general statements, especially when these are made long after the event; but I can adduce at least one fact to show the unfairness of these complaints. On September 2nd, when the Franciscan Sisters of Mercy came to assist in the nursing at Ismailia, the sick officers were asked if they would like to have one appointed to their ward, and the answer brought to me was that they were almost unanimously opposed to it. Surely this would not have been their reply if there had been among the orderlies either the coarseness, the want of attention, or the dishonesty of which they have been accused.

I will now briefly refer to the bread question about which there has been so much misapprehension. In the evidence given before Lord Morley's Committee it was authoritatively stated that the medical officers made no written complaints about the bread, and that they took no action in the matter until Lord Wolseley called their attention to its bad quality.

Nevertheless, I hold in my hand proof positive, in the shape of copies of official correspondence (which, however, I have no authority to publish), that I wrote to the senior commissariat officer on September 1st, about the bread; that his reply, with other correspondence on the subject, was submitted to head quarters on that same day; and that it was not until the following day that the memorandum was sent from head quarters authorising the commissariat to buy bread in the shops. The correspondence further bears, I think, intrinsic evidence that no complaint had previously been made regarding the bread.

Of course the bread was bad, or I should not have taken steps to condemn it; but the inference that the medical officers gave to their patients without remonstrance bread that was "unfit for human food," would not be justifiable for any part of the time during which the hospital was under my charge. It seems to have been forgotten that the bread issued for the medical officers from August 27th to September 1st, was exactly like that issued for the sick, and I would ask whether you think it probable that, even if the medical staff were indifferent to the welfare of their patients, they would also have been so indifferent to their own as not to notice what the bread was like until their attention was drawn to it by the military officers.

Then, as to the statements that the wards were not all lighted at night, and that there was not an orderly in each ward; I think if you compare the number of rooms in the palace with the number of lanterns provided for the field-hospitals, you will see it was not possible to light them all. But there were lights where they were most needed, viz., in the hall, staircase, and corridors, and wherever they were required for special cases. In short, all that we had were in use; and as regards the complaint that there was not an orderly in each ward at night, the answer is that the whole of the orderlies at my disposal would not have sufficed for such a purpose; moreover, that it was unnecessary.

No medical officer, I imagine, will contend that our present hospital-system is a perfect one. In reality, it is still in the inceptive stage. It is comparatively a thing of yesterday, and its development, even when it has not been actively opposed, has at least been regarded with some disfavour, whereas the regimental system was the product of the combined efforts of several generations of military as well as of medical officers. Nor do we contend that our work in Egypt was faultless. Human endeavours, indeed, rarely meet with absolute success, but it may be fairly questioned whether any other part of our military organisation would have sustained more successfully than the medical service has done the attacks of hostile and unscrupulous critics, and such an investigation as was made by Lord Morley's committee. Opinions may differ regarding the prowess of the army against which our troops had to fight in Egypt in 1882, but there is no room for doubt as to the strength of the enemy against which the medical service had to contend. When it is considered that there were 1,187 cases of fever treated in the military hospitals during that campaign with only 33 deaths, a mortality of 2.77 per cent.; that there were 171 cases of sunstroke with only three deaths; that, with 1,139 cases of ophthalmia, not a man lost his sight; that there were 2,725 cases of dysentery, diarrhœa, hepatitis, and other diseases of the digestive system, with only 31 deaths, or 1.13 per cent.; and that with 691 cases of injury, including those sustained in action, no man lost his life from pyæmia, erysipelas, or hospital-gangrene, results unprecedented in the history of this or any other nation, and attributable to the exertions of medical officers imbued with the doctrines of Lister, and faithful to the teachings of Parkes and the present distinguished professors of the Army Medical School, we may be sure that justice will, sooner or later, be rendered to those who obtained so signal a victory over so dangerous a foe.

A LECTURE

ON THE

RELATION OF MADNESS TO CRIME.

Delivered at the London Institution, February 28th, 1884.

By J. C. BUCKNILL, M.D., F.R.S.,

Late Lord Chancellor's Visitor in Lunacy.

(Concluded from page [illegible].)

Having come to this conclusion, I must still crave your indulgence for a short time, while I make some remarks upon procedure, i.e., upon the manner in which the law, as it stands, is administered, and add some suggestions perhaps as to its possible amendment. In this country, the questions of the commission of a crime and its excuse on the plea of insanity are, as you know, the joint subjects of our judicial investigation at the trial of the prisoner. But this is not the case in other countries; notably it is not the practice in France, where the code of procedure enacts that when the magistrate during the examination perceives, or is informed by attested certificates, that the person accused of crime does not enjoy the full measure of his intelligence, he is to suspend his examination, and to make an order by virtue of which one, two, or three experts are requested to examine the accused. These experts having been sworn, examine into the particulars of the crime, and the prisoner's history, and they examine the prisoner himself as often as need be, either in prison or elsewhere; and they can even have him removed to a lunatic asylum for the purpose of prolonged observation. If they report that the prisoner is insane, the magistrate generally accepts their verdict as final, and issues an order of *non lieu*, or no jurisdiction. It is upon the report of these experts, or on the report of another set of experts whom the court has the power of appointing if not satisfied with the first, that it depends whether the trial for the crime itself does or does not take place. But at the real trial, the question of irresponsibility cannot be raised. Practically the same system prevails in Austria and some other continental countries. In a remarkable paper on insanity as a defence for crime, read by Mr. George B. Conkhill, United States Attorney for the District of Columbia (every one will remember Guiteau's abuse of Conkhill), read last year before the Medical Society of New York, this most experienced prosecutor says:

"My candid opinion, resulting from a very large experience in the trial of these cases, is that, when a prisoner proposes to defend his crime on the ground of insanity, a jury specially selected for their fitness should be chosen to try the special plea; and, if the prisoner be found insane, then he should be confined in an insane prison for a time commensurate with the character of the crime; and, if the verdict of the jury be in favour of his *sanity*, then the plea should not be allowed upon the trial of the cause." (P. 219.)

At the last annual meeting of the English Medico-Psychological Association, which is composed mainly of the superintendents and other medical officers of lunatic asylums, a resolution, proposed by the President, Dr. Orange, was adopted, recommending a medical examination of persons supposed to be insane before the trial. This examination, it was proposed, should be made in each county by the surgeon of the county gaol, the superintendent of the county asylum, and one other local medical man; and their joint report should be given to the counsel for the prosecution. I see many objections to this proposal. Among others, I feel sure that the examiners indicated would not always be competent to the efficient discharge of their difficult task. Our procedure, as you are aware, does not provide for any official examination into the prisoner's mental state before the trial, although an unofficial one does frequently take place in his behalf; but a prisoner is put upon his trial with no official provision for his defence beyond the nomination of a counsel by the judge, if one have not been provided by the prisoner or his friends. If he should have no friends and no means, I am not aware of any manner by which he will be provided with the services of a solicitor, or in what manner evidence can be sought for, or witnesses summoned for his defence. It is true that, in criminal trials, the witnesses for the prosecution are expected to tell the truth without reservation or prejudice; and consequently, in these days, there is no great danger of a man being found guilty of a murder which he has not committed, however poor, friendless, and undefended he may be. But the absence of pecuniary resources or personal interest in the defence of an insane prisoner is very likely to occasion, and, there is no doubt, frequently has occasioned, a wrong verdict, with the chance of being remedied in an irregular fashion by the Royal prerogative of mercy, or the other chance of being hanged in ignorance and mistake.

Lord Sydney Godolphin Osborne, the well known "S. G. O." of the *Times* columns, expressed a strong opinion on this matter to the Royal Commissioners on Capital Punishment, an opinion founded upon his large experience as a prison-chaplain. He said: "I am satisfied that we have hanged many insane people; and that we have let off, on the ground of insanity, very many who were never anything but sane."

The late Dr. Swaine Taylor, also, who had great experience of medico-legal trials of all kinds, entertained and expressed a very strong opinion on the great uncertainty which attaches to the trial of insane criminals, arising from the different degrees of publicity and interest which the offence or the trial has excited. Indeed, we may see that it must be so, if we reflect that the lunatics who commit murders are usually those who are afflicted with some kind of madness the signs of which have not been easily observed, so that they have been left at large instead of being confined in asylums. I have known some instances in which madness has for the first time been discovered at the trial. We need, therefore, be little surprised that a number of persons are condemned to death for murder who have to be reprieved by the Home Secretary on the ground of insanity, or that the cause of these reprieves is, to a great extent, accidental. Take, for instance, the two men already mentioned, who were tried and sentenced for murder at the Central Criminal Court last autumn, William Gouldstone and James Coles. Respecting the first case, Dr. Savage of Bethlem wrote a letter to the *Times*; and, respecting the second case, Dr. [illegible] of Thornton Heath also wrote to the same journal, demanding further inquiry. Each of these gentlemen had personal knowledge of the condemned man, of whose insanity and irresponsibility he was convinced. The medical press and some organs of the [illegible] press of this metropolis backing up these opinions, the Home Secretary was moved to order a medical investigation, with the result that both of these men were reprieved on the ground of insanity, and removed from the condemned cell to the care and protection of Broadmoor Asylum.

There can be little doubt that, if these men had been tried in some remote county, and had not attracted the attention of [illegible] medical men with knowledge of the subject, and spirit to assert their opinions, both of them would have been executed, for the terms in which they were sentenced render it impossible to believe that the judges could have interfered. Indeed, I understand that it is quite an unusual thing for a judge to interfere.

The late Baron Martin is said to have communicated with the Secretary of State about Victor Townley, whom he had condemned, and which was thought quite unusual. Another judge to whom I myself wrote, suggesting inquiry into the mental state of a prisoner whom he had sentenced, replied to me that it was contrary to custom and etiquette for the judge to approach the Secretary of State on that regard.

I suppose that, if a judge had a strong opinion that a prisoner he had condemned was really not responsible, it would be his bounden duty to convey his opinion to the executive. I cannot readily believe that it can be otherwise, but I do not know, as a fact, that it is so. If the judge had not a strong opinion, I suppose he would let the responsibility for the verdict and its consequences rest upon the heads of the jury. With regard to the Home Secretary, he may be moved by individuals or by the press. I have moved him myself on several occasions in both ways; but I understand that he requires to be moved to consider whether it is right for him to order an inquiry. There is, I believe, no one whose duty it is to call the attention of the Home Secretary to any man lying under sentence of death, respecting the grounds for supposing him to be irresponsible from insanity. If there be such a person it should be known, in order to remove in some degree the unpleasant conviction that these proceedings are in the highest degree fortuitous, depending mainly upon the accident of public interest, or rather of the interest of private individuals capable of forming a rough judgment as to the need and justice of an inquiry.

Surely it ought to be the duty of some responsible official to look into the circumstances of every trial in which sentence of death has been passed, and to state whether there be any *primâ facie* ground for the supposition that the condemned man was not responsible on the ground of insanity.

Up to the present reign, the list of persons sentenced to death at each sitting of the Old Bailey was presented to the king in council as the recorder's report, and it was then and there carefully gone through by the king and his council, and who was and who was not to be executed, was considered and decided (Stephen, 88).

The whole burden of this momentous decision is now placed upon the shoulders of the Home Secretary. When this powerful minister has been moved to think it right to order an inquiry into the responsibility of a condemned man on the ground of insanity, he entrusts the inquiry to the medical superintendent of the Criminal Lunatic Asylum at Broadmoor, conjoined with whom is one of the medical officers of prisons.

It would be pleasing to know that the report, that these gentlemen are not paid for their services, is untrue. Those who dispense the Queen's justice are not without their reward, and those who determine the incidence of the Queen's mercy ought not to go without the wages of anxious and difficult work.

I do not know that the order of the Home Secretary is imperative and binding, though I think that it ought to be; for surely it is best to make action in which life or death is in the balance as little voluntary as possible. The order, at least, is obeyed, and the condemned man's mind examined for the first time, it may be, with thoroughness and skill. An ignorant or perfunctory examination of a criminal supposed to be insane is worse than useless; but a systematic examination conducted by skilful and experienced examiners will almost certainly make known the real condition of a man's mind, especially if he be insane. I am not so sure, however, about a sane man who cunningly pretends to be mad.

It must be remembered, however, that this examination takes place some time, often several months, after the murder has been committed, and when the man's state of mind may have more or less changed. The examiners therefore must take into consideration all the circumstances of the crime as signs or symptoms of the mental state which prompted it. They may inquire, moreover, into the conduct of the prosecution and of the defence. Sometimes they may find that the prosecution was unfair so far as the presentment of the mental facts was concerned; sometimes that the defence was weak, ignorant, and casual, some inexperienced barrister having been appointed to conduct it on the spur of the moment, with no evidence on which to rely. And I do not know that they are even debarred from considering the terms in which the judge declared the law in his summing up. And these terms may vary greatly, even to the length of a rope.

The examiners embody their opinion, with the grounds for it, in a report to the Home Secretary, who, so far as I know, invariably acts upon it. If a reprieve be granted, and the condemned man be sent to Broadmoor, or to Pentonville, it cannot accurately be said that the Sovereign has exercised the prerogative of mercy; for the Home Secretary and his examiners in these proceedings constitute an informal court of appeal, or an appeal which is not a court, and the decision of this appeal is a reversal of the sentence of the court below on the ground of its injustice. But, court or no court, these proceedings ought not to be kept secret. It is to my mind monstrous that the reports of these medical examiners, upon which the Home Secretary stays the action of the criminal law, should not be made public.

Moreover, although the greatest confidence may rightly be placed in the examiners, still I maintain that, acting as they do in these inquiries as witnesses, they ought to give their evidence under the same sanctions and conditions as are imposed upon witnesses generally, and which are imposed upon the medical experts who are employed to examine criminals who are suspected to be insane, in France and other continental countries. They ought to make their examinations, and report under oath, and be subjected to cross-examination thereupon.

Surely it is in the highest degree inconsistent that medical opinion, which is placed under such stringent limitations and restrictions in criminal courts, should be so implicitly accepted, without any test of its validity, in the proceedings which reverse the decisions of those courts.

Moreover, as the judge in this informal court, namely, the Home Secretary, is not always a lawyer, and still less frequently a criminal lawyer, it would seem to be adding the climax to the informality and insufficiency of the proceedings that he should act upon the evidence of the medical examiners without the aid of a judge to advise or determine the relevance or bearing of that evidence in regard of the law. The most simple and efficient change in all these respects would probably be to transfer the whole of these proceedings to a limited court of appeal.

But, if it be desired to keep up the fiction of the exercise of the royal prerogative of mercy in these cases, through the action of Her Majesty's Minister, then, at least, let Her Majesty's Minister provide himself with the aid of professional knowledge upon the determination of a question which her Majesty's servants, the judges of the land, are agreed in considering one of the most difficult in the range of their duty.

It is scarcely needful to say that my comments do not apply to the action of any individual Home Secretary past or present. It is the system which I criticise. The judges, I am surprised to find, prefer the system which makes them, as Lord Bramwell says, automatons as to the extreme sentence of the law, and leaves the determination of its execution to the executive. On this account, they object to the restoration of their once discretionary power of recording sentence of death, which means the option of inflicting secondary punishment. But for the judges to have vast pains and troubles in their endeavours to settle a reasonable law of insanity *quoad* responsibility, and to labour with patient industry and care to put that law into execution, and then, without remonstrance or disapproval, to see the result of it all snatched from their hands by a secret and unjudicial proceeding, is an inconsistency which would scarcely be credible if it did not exist.

I trust that I have convinced you that, if the law on this matter is bad, the procedure is worse. It only continues to exist because its most important action is taken in secresy. Once let the report of the examiners be published, and the formalities and sanctions of judicial investigation will necessarily be imposed. The only instance I can call to mind in which the report of such an examination was not kept secret, was that upon George Victor Townley, in whose examination I assisted and the report of which I wrote. The Home Secretary published this report in the newspapers, with the effect of at once allaying a distressing controversy. Whether the examination into the mental facts take place before or after the trial, there can, I think, be no real doubt that it ought not to be secret, or loose and diffuse as to its scope, or the evidence elicited deprived of the usual sanction of fidelity, or released from the test of professional examination as to its real purpose and accuracy, or carried on under no superintending authority.

I do not expect that my comments will be objected to by the experienced and competent examiner who is now employed, for he has himself proposed to the association, over which he is president, the change to an examination before the trial by other examiners. To this change one great objection, in my opinion, is that it would exclude his own services.

I have no objection to an unofficial examination before the trial on behalf of the prisoner, with the concurrence and consent of his solicitor; and a man put on trial for his life ought to have a solicitor, however poor he may be. A solicitor is really more important in such defences as we are considering, than a counsel, for he can collect and prepare evidence. The greatest objection to an examination forerunning the trial is that it would be almost impossible to prevent it from eliciting confession of the deed, which would often be embarrassing and contrary to the spirit of our law (although, in France, as you may know, confession is encouraged or provoked). A solicitor for the defence would decide whether this danger existed or not, and would have a mental examination instituted or not, as he thought best for his client. An official examination, forerunning the trial, which had the misfortune to elicit a confession fatal to the prisoner would, I think, be condemned by English opinion. I do not know what legal right the prosecution or the executive has to order the examination of a prisoner committed for trial.

The examination of a man who has already been condemned to death for murder, and the formation and expression of an opinion as to whether he is insane in such a manner or degree that he ought to be reprieved, or not so, and therefore ought to be executed, imposes such a burthen of responsibility, that it ought not to be laid upon any man without those easements in the discharge of duty which lighten the responsibility of all who take part in judicial investigations.

From every consideration, therefore, of judicial method and consistency, the present mode of dealing with condemned men suspected of insanity, ought to be abolished, and a systematic investigation by sworn examiners, who should give public evidence subject to cross-examination, under the control of a judge, should be substituted.

NOTES OF A SUCCESSFUL CASE OF OPERATION FOR STRANGULATED UMBILICAL HERNIA, IN A PATIENT SIXTY-EIGHT YEARS OLD.

By TREVOR FOWLER, L.K.Q.C.P.I., and L.R.C.S.I.,
District Medical Officer Epping Union, etc.

On the morning of October 20th, 1883, I was called in to see Mrs. B., a very stout lady, aged 68, whom I found suffering from an old irreducible umbilical hernia, which had become strangulated from the previous evening. Pain had been considerable during the night, and there had been some vomiting. Upon the first accession of pain, the patient noticed an increase in size of the hernia, accompanied by an unusual hardness.

In the months of January and February previously, I had attended her for an attack of typhlitis; and in the month of May I was sent for in consequence of the umbilical hernia having become strangulated. The taxis, however, was successful upon this occasion, and a Mocmain truss, with a concave pad, was advised to be worn. All went on well until October 20th, when, as already stated, the hernia again became strangulated; and, upon the taxis failing, the patient was put upon opium, an enema administered, and steps were taken to obtain further assistance, with a view to an operation.

On Sunday, October 21st, Mr. Walsham kindly came down from London, and upon consultation it was decided to give chloroform, and failing then to reduce the hernia, to cut down upon the seat of strangulation. The hernia was about the size of the double fist, and lobulated in shape, a fresh protrusion having apparently occurred at its upper part. It was tense, non-resonant, and painful on handling. There was no impulse on cough, and the skin over it at one part was mottled and dusky. The constipation was complete, no flatus passed, and vomiting occurred after any attempt at taking food. At 8 P.M., the patient being under chloroform and the taxis having again failed, Mr. Walsham made a longitudinal incision over the hernia about three inches in length, in the mesial line, and after cutting cautiously down upon the sac and opening it, the seat of stricture was reached and cut through with a hernia-knife, and the bowel was returned. The latter presented a dark purple or claret colour, but as it was still smooth and glistening, there was no question about the propriety of returning it. The greater portion of the contents of the original tumour, consisting entirely of omentum, was removed in separate pieces, each piece being first ligatured with carbolised catgut. The edges of the wound were brought together with eight silver wire sutures; pieces of gutta-percha tissue were inserted for drainage, and then the whole was covered up with eucalyptus gauze, pads, and bandages. The operation, and the subsequent dressings, were carried out antiseptically. At 9.30, the patient having recovered from the chloroform, thirty minims of tincture of opium were given, and five minims ordered to be repeated every two hours if awake; no food to be taken.

On the 22nd, 9.30 A.M., the patient had passed a good night. Pulse, 112; temperature, 100.4°. There was no abdominal tenderness. At 6 P.M. the temperature was 101.4; at 7.30 P.M., pulse, 112, temperature, 102.1°. The pupils were contracted, and the patient was drowsy. The opium was continued as before. Ice was allowed.

On the 23rd, at 8 A.M., she had passed a good night. Pulse, 100; temperature, 100.3°. There was free diaphragmatic breathing. At 8 P.M. the pulse was 104, and temperature 101°. The pupils were contracted and the patient drowsy. The wound was now dressed for the first time. The lower portion of the remains of the hernial tumour looked decidedly dark; otherwise the wound was going on well. An extra dose of opium was given after dressing, and ordered to be continued as heretofore. Ice was allowed, also soda-water and milk in small quantities.

On the 24th, at 8 A.M., she had passed a good night. Pulse, 96; temperature, 99.2°. Flatus had been passed several times during the night. The wound was dressed again to-day. The pupils were still contracted, and the patient drowsy. Opium, ice, milk, and soda-water were given as before.

On the 25th she was still doing well. Flatus continued to be passed. The wound was dressed again. A considerable portion of old hernial tumour was beginning to slough. Charcoal poultices were applied. The opium, etc., were continued.

On the next three days the pulse and temperature were normal. The wound was dressed daily, and the opium, ice, milk, and soda-water were continued.

On the 29th I began to reduce the opium. Beef-tea was allowed in small quantities.

On the 30th, the bowels acted freely three times, and continued to act almost daily afterwards. From this time the patient steadily improved. The sloughs were slow in separating, and there was some burrowing of pus about the wound, which did not finally heal until November 26th. Recovery was also retarded by the formation of several very painful boils on the back. The patient, however, was able to leave her room on December 2nd, exactly six weeks from the date of the operation. She is now in perfect health, and the operation may be said to have been more than successful, inasmuch as it has effected a radical cure of the hernia by the complete obliteration of the sac.

The case presents several points of interest: 1. The recovery of a patient, at the advanced age of 68, from so serious an operation; 2. The radical cure of the hernia, which appears to have been accomplished by inflammatory adhesions about the neck of the sac sealing up the ring, which then became consolidated by granulation and contraction of the wound; 3. The illustration which the case offers of the value of pushing opium, and of the absolute safety with which this may be done, provided it be only given, as here, in small doses at a time, at frequent intervals, and with strict injunctions to the nurse that the patient is never to be awakened for his dose.

THE LIVERPOOL POISONINGS: CASE OF MARGARET JENNINGS.

By FREDERICK W. LOWNDES, M.R.C.S.,
Surgeon to the Liverpool Police.

In addition to the three cases fully and ably detailed by Dr. Whitford in the JOURNAL of the 16th instant, there was a fourth case, in which the whole responsibility of the exhumation and examination was left to me. The following are details condensed from my report to the authorities and my evidence at the recent trial.

On November 16th, 1883, I attended at Ford Cemetery, near Liverpool, at the request of the police-authorities, to witness the exhumation and to examine the body of Margaret Jennings, who had died ten months previously, under circumstances suggestive of her having been poisoned by some irritant, most probably arsenic. The cemetery is situated four miles from Liverpool, and is for the exclusive use of Roman Catholics. On my arrival, shortly before 9 A.M., I was conducted to the public portion, which stands higher than the other part of the cemetery, is formed of sand mixed with clay, and appeared dry and well suited for its purpose. I was shown a grave which had been just opened, and from which two bodies had been already removed. A coffin was lying at the bottom, from which a plate had been removed; it bore the inscription, "Margaret Jennings, died [illegible] January, 1883, aged 18 years." The coffin was a pine one, and perfectly intact; it and the coffin-plate were identified by the man who made them and conducted the funeral. The death had taken place within the jurisdiction of the coroner of Liverpool (Mr. Clarke Aspinall), and, as the cemetery was in the district of the county coroner, the late Mr. Barker, it was arranged by both gentlemen that permission should be obtained from the Home Secretary to remove the body to Liverpool. The coffin w accordingly removed to the Prince's Dock deadhouse, and opened there in my presence. The grave-clothes were entire, but much soiled by decomposition, and there was some effluvium at first. The face was much discoloured, the hair loosening from the scalp, the eyes and part of the nose had been destroyed, the teeth were loosening, the outer skin was peeling off, but the nails on the fingers and toes were firmly adherent. The body was identified in my presence as that of Margaret Jennings by her father and a female friend. On removing the clothes, I found the surface much discoloured; the outer skin came away with the clothes; the thoracic and abdominal parietes remained intact. The body was that of a female above the age of puberty, of rather short stature, but well developed. There was a considerable quantity of fat in the walls of the chest and abdomen. In the chest I found the lungs much decomposed; they were quite collapsed and broken down; the heart was softened, and it was impossible to form any idea of the condition of it or the lungs at the time of death. In the abdomen, the stomach and duodenum were somewhat softened and were empty. There was a greasy appearance all over the viscera, which reminded me rather of the dissecting-room, and which I have seen described somewhere as characteristic of arsenical poisoning, though I cannot give the reference. There was also a yellowish tinge about some of the large intestines. I removed the whole of the abdominal and pelvic viscera into five glass-stoppered wide mouthed bottles as follows: 1, stomach and duodenum; 2, a large portion of the liver (three-fourths), spleen, and left kidney; 3, the large intestines except the rectum; 4, the small intestines except the duodenum; 5, the rectum, bladder, and uterus. The bottles were all covered with skin-leather, well secured, and sealed with two private seals. I opened the head, and found the brain in a liquid state; the spinal cord at its upper part was well preserved. On examining the viscera more minutely with Mr. Edward Davies at the Royal Institution Laboratory, some days after, I found the stomach and duodenum of a dark red-colour internally, the small and large intestines presented reddened patches at different parts; excepting a small portion of fæcal matter in the large intestine, they and the rest of the intestinal canal were empty. Mr. Davies found arsenic in the stomach and duodenum, liver, and kidney. Subsequently, in conjunction with Dr. Campbell Brown, he found arsenic in the spleen and in the small intestines, and it was estimated by them that the whole quantity present in the viscera was equivalent to a quarter of a grain.

The deceased was attended shortly before her death by Mr. Rafter, who found her suffering from an attack of pneumonia. He was surprised at the death, which was unexpected by him; he certified it as due to pneumonia. It was carefully concealed from him that the deceased suffered from vomiting, purging, and intense pain in the abdominal region. Mr. Rafter expressed his opinion, after hearing all the evidence, that the deceased had died from poisoning by arsenic.

It will be observed that the preservation of the bodies was in almost exact proportion to the amount of arsenic found. Thus, in the case just detailed, there was only a quarter of a grain of arsenic found, and decomposition was advancing, though the body was, it will be seen, fairly well preserved, considering that it been buried ten months (292 days). In the case of Mary Higgins, the viscera yielded one grain of arsenic, and the body was much less decomposed, although it had been buried thirteen months. In John Flannagan's case, three grains and a quarter of arsenic were found in the viscera, and the body was in a most remarkably preserved state, more so than either of the others, though it had been buried three years and five weeks.

A REPORT OF THREE HUNDRED AND FIVE CASES OF HABITUAL AND TEMPORARY CONSTIPATION TREATED WITH CASCARA SAGRADA.

By C. EMILIUS THOMPSON, M.R.C.S., etc.,
Her Majesty's Labour Prison, Dry Creek, near Adelaide, South Australia.

HAVING had an opportunity of making extensive observations on the action of cascara sagrada in constipation, for the past seven months, it may not be uninstructive to others who are making use of this recent addition to our purgative medicines, to record, while attesting its great value, a few cases in which the exhibition of the drug has been followed by untoward effects.

With regard to the form of administration, I have generally used the fluid extract of Messrs. Parke Davis and Co., combined with liq. bismuthi and bicarbonate of soda, in cases of atonic dyspepsia, which have been accompanied with temporary sluggishness of the bowels. In these cases, two or three ten-minim doses are usually sufficient to produce a first evacuation without any preliminary dose of other aperient medicine. The motions are, as a rule, soft, but formed, and unaccompanied by griping or tenesmus. In this kind of case, and in this dose, the best results have been obtained. In confirmed habitual constipation, the fluid extract, in my hands, has, after a time, begun to lose its effect, except in a gradually increasing dose. One grain of the solid extract, however, combined with two grains of extractum berberis aquifolium in a pill, taken night and morning, has successfully reduced the most obstinate habitual constipation of the bowels to regularity of action, though continued in the same dose for a period of five or six months.

Occasionally, however, the remedy is not well tolerated. Among strong men within the prison (whence 229 of my observations have been drawn), I have found violent and almost immediate vomiting follow a ten-minim dose of the fluid extract in three cases. In another man, a single dose of ten minims produced such griping as to render the administration of an opiate necessary; and, in addition, purged the man several times. I subsequently ordered this man half the dose twice daily, which produced two evacuations regularly. In private practice, ten minims, three times a day, has produced, in a man 65 years of age, exhausting diarrhœa (unaccompanied by pain, however), which it was somewhat difficult to arrest; while, in another patient—a young woman of 25 years of age—two doses of ten minims, at an interval of not less than four hours, produced excessive diarrhœa, with vomiting, violent twisting pains around the umbilicus, cramps in the legs, a pinched countenance, and clammy perspiration. The effects in this case were, fortunately, of not long duration (four or five hours), and seemed to pass off as suddenly as they had set in.

I have used the drug in varying doses at all ages, from five months to seventy years; and, with the exception of the instances I have mentioned, have found it extremely useful. At the same time, it is plainly advisable to use some caution in the size of the commencing dose, and to direct the patient to omit the medicine if the first dose causes much pain or other adverse symptom.

Cascara sagrada is said to act chiefly by increasing the peristaltic action of the intestines. It is certainly not the rule for watery stools to follow the administration of the drug, while the griping occasionally experienced points to excessive muscular action of the bowels, raising the hope that it may prove of use in certain cases of fæcal retention, due to or inducing intestinal paralysis. I have not yet met with a suitable case of this kind in which to test the powers of the drug.

OBSTETRIC MEMORANDA.

A CASE OF POST-PARTUM PROLAPSE OF VAGINA.

ON the afternoon of Sunday, November 11th, in last year, I was sent for to a neighbouring village by a midwife. "The child was born, and the after-birth was come, but something was wrong." Such was the message, which certainly was not a very lucid one! I went immediately, and on examining the woman I found a semi-globular protrusion, about the size of the upper part of a six-month fœtus's head, the surface shining, and of a dull reddish colour, not looking at all unlike a fœtal head covered by the amnion. On further examination I found that there was continuity of tissue between this protrusion and the external parts of the mother, that is, of the left buttock. The uterus was in its normal position and well contracted, and there was scarcely any hæmorrhage. The urethra seemed pulled out of position, for, on attempting to pass a silver catheter (I had not a gum-elastic one with me), I could not pass it beyond three-quarters of an inch or so, and it appeared as if that passage were bent upon itself. The thought passed through my mind whether the swelling might be a cystocele; but there was little or no fluctuation in it, and on squeezing it no urine came through the urethra. The rectum was in its normal position. Upon attempting reduction of the tumour, I found that I was unable to do so to any great extent; I therefore went downstairs for a while, and shortly the midwife came down to me to say that the woman had passed some water (this fact was verified afterwards). I then attempted taxis again, but as it caused the woman some amount of pain I sent for my partner (Mr. Robert De'Ath) to bring some chloroform. He came, and after some trouble (and without giving chloroform, as upon consultation we deemed it unadvisable to do so), the tumour, at least the greater part of it, was reduced. I had not an opportunity of examining the parts again, but the midwife informed me that within a day or two they had resumed their natural proportions. I should add that the patient was a multipara, and had "always had good times."

It seems to me a most interesting case. In a pretty extensive midwifery practice, I have never met with a similar case before, neither had my partner, who is some years my senior. It is also interesting from the fact of the entire absence of pain (the woman being quite unaware of the existence of the swelling till the midwife called her attention to it).

I am induced to publish this case, thinking it may be of interest to the profession. Had the poor woman been attended by an ignorant midwife, the chances are that she would have lost her life, for, as stated before, the first and casual appearance was that of a small fœtal head covered by the membranes. It is therefore to the credit of the midwife that she discovered the existence of the "swelling" (when she put a cloth to the woman after the placenta had come away), and that she had the sense to send for me instead of manipulating the protrusion herself.

W. L'Heureux Blenkarne,
M.R.C.S., L.S.A., Buckingham.

HOUR-GLASS CONTRACTION OF THE UTERUS.

I believe an useful chapter could be added to modern works of midwifery on the use and abuse of the binder, enumerating under the latter category the liability of inducing hour-glass contraction by its improper application. The contributions in the Journals of February 16th and March 8th (pp. 312, 456), by Messrs. James and Chappell, serve to confirm a view I have always held as to one of the causes, perhaps the most frequent cause of hour-glass contraction. My experience differs from Mr. Chappell's as to the time when the binder produces its dangerous action. I believe this danger is almost always caused by the irregular pressure of an improperly applied binder on the temporarily inert uterus after the birth of the child, and before the separation of the placenta, and that its production is often purely mechanical (*i.e.*, by constriction), instead of being induced by irregular muscular action, as is usually supposed. This theory would scarcely meet Mr. James's case, unless the binder in that instance had been readjusted on the completion of the second stage. The following brief record of a case which I attended comparatively recently will, I hope, clearly illustrate my meaning.

Mrs. K., who had previously nine children, all with one exception natural labours, sent for me on her tenth confinement. On my arrival at the house, the os and passages were fully dilated, the head presenting at the brim; the membranes had broken an hour before my arrival. After waiting a short time, and seeing that the head had not advanced, I put on the long forceps and delivered, whereupon a second child was found in the uterus. This was turned and delivered, and, in the absence of anything better at hand, I extemporised a binder out of a small shawl, and, after having given a full dose of ergot, I waited for the completion of the third stage. After half an hour, the insertion of the cord into the placenta not being reached with the finger, I introduced my right hand with some difficulty through the os, and, after examination, I found complete hour-glass contraction, with the greater portion of the placenta imprisoned in the upper cavity. I had some difficulty in passing my index and middle fingers through the constriction, so tightly did it embrace the placenta; and, on manipulating with the left hand outside the abdomen, the cause of the mischief became at once apparent. The binder, instead of forming a firm support for the fundus of the uterus, had collapsed, and formed a constricting cord round the abdomen near the umbilicus. On removal of the binder, all difficulty shortly ceased, the placenta was removed *en masse*, and the woman made a rapid recovery.

J. J. Gorham, M.A., M.D., Garstang.

I have read with much interest the communications to the Journal of February 16th and March 1st, in relation to hour-glass contraction of the uterus. As to the cause of the condition, Dr. W. S. Playfair says: "If placental expression were always employed, if it were the rule to effect the expulsion of the placenta by a *vis a tergo*, instead of extracting by a *vis a fronte*, I feel confident that these irregular and spasmodic contractions—of the influence of which in producing hæmorrhage there can be no question—would rarely, if ever, be met with. It is to be observed that, even in these cases, it is not because the uterus is in a state of partial contraction, but because it is in a state of partial relaxation, that hæmorrhage ensues." Dr. Duncan says: "Hour glass contraction cannot exist unless the parts above the contraction are in a state of inertia; were the higher parts of the uterus even in moderate action, the hour-glass contraction would soon be overcome." And Dr. Playfair also remarks: "When they do occur, I believe them almost invariably to depend on defective management of the third stage of labour." Mr. James, in reporting his case, is "at a loss to account for the placenta being caught," but is doubtful whether the ergot had anything to do with it; and Mr. L'Heureux Blenkarne (Journal, March 1st) says: "It passed through my mind whether the ergot was accountable for this spasmodic contraction," but he mentions having used traction on the umbilical cord—the most frequent cause, according to Dr. Rigby.

I have always avoided using a *vis a fronte*, yet I have had three cases of hour-glass contraction, and, like your other correspondents, am inclined to blame ergot, or, still more, the gentle kneading of the uterus after delivery, which I have now replaced by merely holding the uterus in the palm of the hand without irritating it unnecessarily. It seems not an unlikely supposition that the stimulus of either, acting on an exhausted muscle, might bring about a spasm of some of the fibres while the whole uterus was more or less contracted. There is no history of hæmorrhage in any of the five cases. After waiting for spontaneous disappearance of the spasm, I was compelled to dilate gradually with the fingers, and to pass my hand above the placenta in order to bring it down. I have heard that the hypodermic injection of morphia is recommended to reduce the spasm, but have not used it myself.

Alex. W. Stirling, M.B.,
Westfield House, Stapleton, Cumberland.

SURGICAL MEMORANDA.

ON THE IMPORTANCE OF DRAINING A SUPPURATING KIDNEY BEFORE PERFORMING NEPHRECTOMY.

A short note in the British Medical Journal of March 8th, p. 453, relating a case of unsuccessful nephrectomy, induces me again to draw attention to one of the most important points insisted on in my address upon renal surgery, delivered last August before the British Medical Association.

Dr. T. Savage's note is as follows: "A case of nephrectomy; kidney (right) very large and full of pus. A clamp was used to the mesonephron. I think that, if I had used drainage here, the result might have been different." Dr. Savage's criticism of his own procedure is in complete accord with my own experience, and with the conclusion at which I arrived after the study of many cases. All subsequent experience points decidedly to the correctness of this view, and I write under a strong sense of the importance that the safer practice should be widely understood and acted upon.

It is not only that drainage relieves at once the patient, and, in many instances, is alone sufficient for cure, but that it renders a subsequent nephrectomy (when necessary) much less dangerous. Thus a double advantage is obtained. At first the patient is subjected to only a trivial operation, which is certain to give relief and may effect a cure; and secondly, should the course of events later indicate the advisability of removing the shrunken kidney, nephrectomy will have a greater chance of success. I showed in my paper that six cases were all successful in which nephrectomy followed drainage, whereas nephrectomy for pyonephrosis, with these cases abstracted, brings a mortality of 50 per cent.

It is but reasonable to anticipate some such difference in the results; for, apart from the accidents which may happen in the attempts to remove a large and adherent bag of pus, it is evident that a much greater surface must be exposed to injury in removing a distended kidney than in excising a shrunken one. Further drainage gives time and opportunity for the patient to gain strength before being subjected to the major operation.

R. Clement Lucas, B.S.Lond., L.R.C.S.

A Police Ambulance System.—A police ambulance system has been for some time at work in Chicago, with, it is said, excellent results; it is a part of a system by means of which the occurrence of a fire, a burglary, or an accident, can be rapidly communicated to the police-stations. Boxes are placed in the streets for which reputable citizens, as well as policemen, are supplied with keys; and in case of necessity, by the mere pressing of a button, an alarm is sent to the police-stations for assistance. Wagons, carrying twelve men, are kept in readiness, and are fitted with appliances for securing prisoners, and also with medical stores and apparatus, so that in case of accidents immediate aid is rendered to the injured.

Mud in the Sewers.—It is almost incredible that the enlightened municipality of the greatest city in the world should have supposed that the proper way to dispose of mud was to sweep it into the drains; nevertheless, the Lord Chief Justice and Mr. Justice Cave were, on March 7th, called upon to decide that the City Commissioners of Sewers were not entitled to sweep the mud from the streets into the sewers which communicate with the drains of the Metropolitan Board of Works.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

GLASGOW ROYAL INFIRMARY.

LARGE SEBACEOUS CYST UNDER TONGUE.

(Under the care of Dr. W. J. Fleming.)

[Reported by Mr. Archd. G. Faulds.]

The case presented to the Clinical Society of London on June 1st, by Mr. A. E. Barker (see British Medical Journal, 1883, vol. i, p. 1122) was at once so rare and so exact a counterpart of the following, that it has seemed to be well to put this case on record.

B. G., a domestic servant, aged 23, presented herself at Glasgow Royal Infirmary Surgical Dispensary on May 27th, 1882. On examination of her mouth, it was found that the tongue was pressed almost against the roof of her mouth, even when her mouth was open, by a sac, evidently containing fluid, exactly in the usual situation of a ranula, slightly to the left, and of the size of a duck's egg. It was covered by apparently unaltered mucous membrane, and seemed situated in the tissue between the tongue and the floor of the mouth, not in the tongue itself. The depression of the floor of the mouth was well marked externally, but in this situation a considerable amount of tissue intervened between the skin and the tumour. The growth had been noticed ten months before, and at first was most distinctly felt from the outside. Latterly its growth had been rapid; but it was not until the patient became unable to swallow solid food and could scarcely articulate, that she sought relief. Dr. Fleming, thinking it was an enormous ranula, caught the wall of the tumour with catch-forceps, and, with curved scissors, snipped away a piece, including the whole thickness of the wall. Thick porridgy sebaceous matter was at once poured copiously from the wound, and it was evident that a sebaceous cyst had to be dealt with.

As it was too late to attempt removal without opening, it was emptied of its contents, which amounted to nearly two ounces. The cyst-wall was fairly strong, and, with the fingers and the handle of the scalpel, little difficulty was found in separating it from its attachments, except at the very deepest part. Here a very firm connection existed between the wall and the tissues, but of a limited size. As this was very deep, and probably contained the nutrient vessels of the tumour, it was ligatured as far back as possible, and the cyst cut away. There was little or no hæmorrhage. A few stitches in the extreme edges of the incisions were introduced, but the centre was left open for drainage. Hot drinks and a chlorate of potash mouth-wash were ordered. For nearly a month there was more or less swelling about the mouth, but the ultimate recovery was perfect.

NEWCASTLE-ON-TYNE INFIRMARY.

CASE OF EXCISION OF THE PATELLA; RECOVERY, WITH MOVABLE JOINT.

(Under the care of Mr. T. A. Dodd, Assistant-Surgeon.)

Catherine S., aged 29 years, married, was admitted early in September, 1883, suffering from disease of the right patella; the history she gave was that about nine months earlier, she commenced to have great pain and starting in the knee, particularly at night, accompanied by swelling and stiffness in the joint; as far as could be made out from her statements, suppuration afterwards followed over the joint. The condition on her admission was that the skin was irregularly ulcerated over the centre of the patella to about the size of a shilling, with the diseased bone lying *in situ*.

On September 25th, under strict antiseptic precautions, Mr. Dodd proceeded to gouge out the portion, as he expected, of dead bone, and found the whole soft and carious, the instrument passing through the entire thickness and entering the knee-joint. It was then evident that nothing short of excision of the bone would entirely remove the disease. A crucial incision was therefore made, and the skin dissected off; and, after dividing the quadriceps tendon and ligamentum patellæ, the bone, which was exceedingly soft and cheesy, was lifted out. In doing this, the interior of the knee-joint was freely opened, the articular ends of the femur and tibia being fully exposed to view, and the synovial fluid escaped. With the exception of the patella, the rest of the tissues forming the joint were perfectly healthy. A drainage-tube was introduced, and the flaps brought accurately together with catgut sutures, Lister's dressing applied, and the limb placed on a back-splint with foot-piece.

There was not the slightest constitutional disturbance, nor any necessity to take down the limb; however, in a week the dressings were removed, when it was found that the wound into the joint had healed, except where the drainage-tube was inserted; this was now withdrawn; and a week afterwards, when the dressings were again changed, there was only a small superficial sore remaining. This healed rather slowly, but a month after operation had entirely closed up. The splint was kept on for another fortnight, when friction and gentle movements were adopted, and gradually she became able to fully extend the limb, and bend the knee to nearly a right angle; and on November 17th walked out of the house, having an useful movable joint.

Her temperature was never elevated, except on one occasion, the seventeenth day after operation, and then only to 101° Fahr.

Remarks by Mr. T. A. Dodd.—So far as I can learn, this is the first case of excision of the patella followed by an useful joint on record. On December 6th, she walked a mile, without assistance, to be present at a meeting of the Northumberland and Durham Medical Society; and on that occasion I had the pleasure of showing the case to the members of the Society.

ST. THOMAS'S HOSPITAL: ST. THOMAS'S HOME.

CANCER OF ŒSOPHAGUS: GASTROSTOMY.

(Under the care of Dr. Walter Edmunds.)

The patient was a man, aged 50. In July, 1882, he first felt a pain in the lower part of the chest, increased by swallowing solids; this pain gradually became worse, till in March 1883 he had to give up taking solid food. In May the liquids swallowed were partly regurgitated; the amount retained gradually diminished, and on admission on September 12th he had been unable to swallow anything for five days; he could, however, retain nutrient enemata remarkably well, and had been having three daily, of a pint each, for some time.

On September 13th gastrostomy was performed by Mr. Howse's method. The stomach was readily found, though greatly contracted. The stomach was held up by two ligatures passed through it, and was attached by an outer and inner ring of sutures to the abdominal wall; the stomach was not opened. On the third day the wound was dressed, and as the outer ring of sutures were causing irritation, they were taken out. On the fifth day the dressing was removed, and the stomach opened by a fine tenotome, and a catheter introduced; there was considerable difficulty in doing this owing to the two walls of the stomach being nearly or quite in apposition. Two ounces of milk were injected through the catheter. Two hours later the catheter was expelled by the effort of coughing; it was necessary to enlarge the opening into the stomach before reintroducing the catheter, and it was thought advisable to delay doing this for two days for fear of breaking down the adhesions to the abdominal wall. On the seventh day the opening was enlarged, and from that day onwards the patient was regularly fed on a liquid diet of milk, egg, and beef-tea; it was not necessary to keep the catheter in, as it could be readily introduced for each meal.

The wound did not do well, the edges of the skin becoming undermined, but the stomach and abdominal wall continued to adhere. On the eleventh day a severe hæmorrhage took place from the mouth, the blood coming from the growth in the œsophagus. This caused great collapse, which continued till his death the next (twelfth) day.

Necropsy.—The stomach was adherent all round to the abdominal wall, but the adhesions were readily torn through, and at one point a minute abscess was found in the adhesions. No peritonitis was present. The stomach was of full size; the opening in it was two inches from the pylorus. The lower half of the œsophagus was infiltrated all round by a growth which completely closed the passage; microscopically, the tumour was a carcinoma.

Remarks.—The unhealthy action of the edges of the wound was probably due to the late stage at which the operation was performed. Earlier operation would allow still further postponing the opening of the stomach, and would sooner give rest to the diseased œsophagus. It would probably have been better to have made the opening nearer the cardiac orifice, but the stomach was much contracted. How greatly the stomach will sometimes contract may be seen from a specimen recently added to St. Thomas's Hospital Museum. There was a cancerous growth at the lower end of the œsophagus, and it had involved the stomach, which measured in its extreme length only six inches and a quarter; the greatest width was one inch and a half, and the distance from the cardiac to the pyloric orifice was four inches.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 18TH, 1884.

J. WHITAKER HULKE, F.R.S., President, in the Chair.

Congenital absence of Femur. Mr. ROGER WILLIAMS showed photographs of a boy, in whom the femora were absent. No trace of the femur or patella could be found on careful examination on either side; a bony mass in the groin, and apparently articulating with the pelvis, was ascertained to be the head of the tibia somewhat altered. Mr. JOHN WOOD said that, about twenty years ago, a man who went by the name of the man-monkey was well known in London; the femora were absent, but he was exceedingly agile, and this, combined with the fact that his hands reached to the ground, had earned him his *soubriquet.* He thought that one moral might be drawn from such cases, and that was how exceedingly useful one section of a limb might be; it was, he thought, an argument in favour of the operation of excision.

Obstruction of Trachea.—Mr. MAKINS exhibited a specimen removed from the body of a child. The patient had suffered from measles nine months before he came under observation, and subsequently a glandular abscess had formed at the root of the neck on the right side, and had left a small sinus. There was a history of gradually increasing dysphagia and dyspnœa. When admitted into St. Thomas's, dyspnœa on slight exertion, with recession of ribs, was a marked symptom; only the epiglottis and arytenoid cartilages could be seen on laryngoscopic examination. The dyspnœa, which was chiefly expiratory, became more and more severe, and finally it was thought necessary to perform tracheotomy, the trachea being opened low down; the dyspnœa with whistling stridæ remained after this, and local emphysema developed about the wound. The diagnosis of enlarged mesenteric glands was eventually arrived at, and was confirmed by the *post mortem* appearances. The child's body was fairly well nourished; the sinus in the neck led to an abscess-cavity near the anterior border of the sterno-mastoid muscle. There was a large caseating mass of glands breaking down in the centre, at the root of the right lung; the pressure of these glands almost closed the trachea.—Dr. FELIX SEMON, who had examined the patient during life, said that he thought no explanation had been afforded of the fact that the dyspnœa was purely expiratory Dr. Gerhardt had pointed out that, where the obstruction to respiration occurred below the glottis, the respiratory movements of the larynx were very limited, whereas, when the obstruction was above the glottis, the respiratory excursions of the larynx were wide; this symptom, however, had been misleading in this case.—Mr. BLACK suggested that the expiratory dyspnœa might have been due to increased pressure on the glands during the diminution of capacity of the chest in expiration.—Dr. EWART said that perforation of the trachea by suppuration of tracheal glands was not of very infrequent occurrence in the course of chronic phthisis.—Dr. LEES asked if any dulness of percussion could be made out.—Mr. MAKINS said the dyspnœa was not purely expiratory, but there was some recession of the chest on inspiration. Careful examination failed to reveal any physical signs pointing to the presence of a mediastinal tumour. With regard to the obstruction to expiration, he thought it might be dne to mucus accumulating below the tumour.

A Natiform Skull.—Dr. NORMAN MOORE showed a portion of the skull of a child 20 months old; around the anterior fontanelle were four large osteophytes, and on the supra-occipital region several smaller ones; when fresh the osteophytes were of a bright red colour. There was no history, nor were there any symptoms, pointing to syphilis, and no appearances suggesting rickets except that the spleen was large, weighing six ounces; microscopically, however, there was not in the spleen, nor the liver nor kidneys, any overgrowth of connective tissue; there was not any amyloid disease. The child had had whooping-cough at seven months of age, and had been losing flesh from that time, and only weighed ten pounds at death. He thought it difficult in this case to be positive as to the influence which produced the osteophytes in the skull, but it appeared probable that it might be due to malnutrition without any congenital taint.

Cerebral Tumour. Dr. HOTT showed a portion of a brain containing a cerebral tumour. The symptoms were exceedingly obscure, and suggested the occurrence from acute metallic poisoning, a suggestion which appeared to be confirmed by the fact that the patient was a painter. He was 25 years old, and was said to have enjoyed good health up to about six weeks before admission into the Bromley Cottage Hospital. He then began to suffer from anorexia, giddiness, and sickness, and had fallen in the street. When admitted he took to his bed, lying on his back with a vacant expression of countenance; he spoke slowly and with hesitation, his memory was greatly impaired; there was marked tremor of the face and both arms, especially when questioned. The tongue was red and fissured; the temperature was 97.4°. The abdomen was retracted, and the gums were swollen and spongy, with a marked blue line. The tremor became more marked and extensive, and was more easily produced. Finally, after rising to go to the stool, he was noticed to be squinting, and was quickly seized with epileptiform convulsions. When seen two hours later he was in a condition of deep coma, and there was marked rigidity of the right arm. Only the head could be examined after death; the veins of the dura mater were very full of blood, and there was an excess of fluid in the arachnoid; there was distinct bulging of the brain in the parietal regions, and in front of the optic commissure was a purple patch. There was a large excess of fluid and some loose floating clots in the ventricles, and the ependyma was roughened. A large tumour occupied the middle and right side of the front part of the brain, pressing on, thinning the cortex and bulging into the ventricles; it was red, soft, and in parts ill defined. A microscopical examination, made by Dr. Goodhart, showed that the tumour belonged to the class of gliomata; there were many roundish nuclei in an amorphous hyaline faintly granular and round substance; the vascular supply was very free.—Dr. GOODHART observed that the tumour would seem to have pressed back on the island of Reil, and on the motor centres, so hampering their action.

Porencephalie.—Dr. MORRISON showed a specimen of cystic disease of the brain. The patient was a male infant, aged 8 months; when born it was apparently healthy, and without any history of hereditary disease. A few days later, however, it was seized with bilateral convulsions, but recovered in a fortnight. Subsequently it relapsed again and again, and finally died, apparently in a convulsion. An examination after death showed that the arachnoid contained a pint of fluid; the brain was compressed, and there was extreme atrophy of both hemispheres of the cerebrum; in addition, there was hydrorachis, but there was no congestion of the membranes. The right hemisphere was the smaller, probably because the cystic condition was most marked in the left, which presented three cysts on its basal surface, and, in the frontal lobe, three others. On the right side, there was a cyst at the point of the temporal lobe, and, in the frontal lobe, a large cyst subdivided into three parts by septa. The cavities on the upper and basal surface did not communicate. In the cord the changes were those of incipient sclerosis; the appearances were chiefly in the direct pyramidal tracts; the cyst-walls showed microscopical evidence of inflammatory thickening. They appeared to extend by a process of inflammation and subsequent softening. The cystic change appeared to begin in the perivascular sheaths, and took effect at the extremities of its distribution. The other organs were healthy.—Dr. F. C. TURNER said that the walls of the cyst consisted chiefly of the cortical part of the brain. He thought they might have been formed in connection with the lateral ventricles. The sclerotic changes in the direct pyramidal tracts were probably secondary to the changes in the brain.—Dr. HALE WHITE said that in some cases of porencephalie there would appear to be a primary degeneration or nondevelopment of portions of the brain, so that this example would not represent the whole pathology of the condition. The case was further peculiar in the large number of the cavities.—Dr. EWART had reported a similar case before the Society in 1879.—Dr. ANGEL MONEY referred to a similar case where there was extreme atrophy of the right hemisphere, and innumerable cysts between the lateral ventricles and the surface. In that case pigmentation was a very marked feature, and he suggested that the pigmentation was due to hæmorrhage, the result of delivery by forceps; the pigmentation observed by Dr. Morrison might also have been due to hæmorrhage.—Dr. B. O'CONNOR asked if there was any alteration in the form of the skull.—Dr. MORRISON replied in the negative. He did not at all contend that his case explained all the pathology of porencephalie; but it illustrated one form, namely, the extraventricular form; and it was not probable that the cavities in this case were due to extension from the ventricles. There was no hæmorrhage in the case, and delivery was not effected hy forceps.

Tumour of Optic Thalamus.—Dr. PYE-SMITH showed a specimen of tumour limited to the optic thalamus. The patient was a boy aged 12. The earliest symptom was frontal headache, then frequent vomiting occurred; and, shortly before admission, his sight began to fail. When admitted, there was no complete loss of power, but there were paresis of the left arm, ptosis of the right eye, and double optic neuritis. An examination made after death showed that there was in the optic thalamus a large tubercular tumour undergoing caseation. There was also some tubercular meningitis. The tumour occupied the right thalamus, which it had expanded considerably, but it had not involved the corpus striatum, the corpora quadrigemina, nor the geniculata; it had expanded the crus cerebri on the right side. It was worthy of note that there was no loss of power in the left leg, and only some diminution of power in the upper limb, most marked in the hand; further, that there was no diminution or perversion of sensibility, and no convulsions. The name "optic thalamus" was an unfortunate one, since it suggested a functional connection which did not exist. The term was, moreover, a contraction of the name applied by Willis, which was "thalamus nervorum opticorum." The case, so far as it went, bore out the views of the very limited functions of the thalamus.—Dr. ANGEL MONEY commented on the presence of tubercular meningitis, which, in his opinion, minimised the importance of the case as evidence on localisation.—Dr. BEEVOR inquired whether the internal capsule was involved.—Dr. PYE-SMITH said that the meningitis was very slight and recent, and the symptoms had been so long present as to render it probable that they were in existence before the meningitis. The internal capsule was not invaded, though how far it was impossible to answer. There was a moderate amount of pyrexia.—Dr. ANGEL MONEY questioned the validity of the evidence as to the date of the meningitis.

Cerebral Tumour.—Dr. ORMEROD showed a specimen of tumour in the right cerebral hemisphere. It was a fairly well-defined rounded mass, about the size of a walnut; it involved the posterior part of the middle and lower temporo-sphenoidal convolutions, and the adjacent parts of the annectent gyri. It was a sarcoma with scanty stroma and cells of two kinds—small fusiform, and large multinucleated cells; the large cells varied in size and shape, many being rounded, others elongated. The patient was a man aged 41, who had had fits, momentary loss of consciousness, and general tremor for eighteen months. During one fit, much more severe than usual, something seemed to burst in his head, he heard a hissing noise, turned round several times to the right, fell unconscious, bit his tongue, and was convulsed on the left side. He was previously deaf from ear-disease, but his wife asserted that the deafness was worse since the severe fit. Optic neuritis subsequently developed. Dr. Ormerod observed that, though the case, owing to the presence of ear-disease, could afford no conclusive evidence, it was yet of special interest, inasmuch as some physiologists localised the centre for hearing in the temporo-sphenoidal lobe.

Calcified Angeioma of Brain.—Dr. GOODHART showed, for Dr. BEVAN LEWIS, a remarkable cerebral growth discovered in the brain of a woman, aged 61. She had suffered from acute melancholia, with auditory and visual hallucinations, and died of exhaustion. On making a section of the brain, the knife grated upon a hard gritty mass, the size of a pigeon's egg, in the centrum ovale. To the finger, it gave the sensation of closely packed spiculæ projecting from the deeper part of the brain. Minute examination showed that the tumour was composed almost entirely of calcified vessels. It was an exceedingly remarkable specimen, and, so far as Dr. Goodhart knew, without any exact parallel.

Living Specimens.—Mr. H. H. Clutton: Congenital Papilloma occupying the line of the Branchial Fissure.

Mr. Morrant Baker: Carcinoma of the Tongue following Gummatous Ulceration.

Card Specimens.—Dr. R. E. Carrington: Brain and Cord from a Case of Cerebro-spinal Fever.

Dr. Seymour J. Sharkey: Primary Carcinoma of Kidney (the patient died of senile gangrene).

Dr. Frederick Taylor: Sarcomatous Tumour of the Pituitary Body.

Mr. R. W. Parker: Congenital Absence of Rectum; colotomy was performed on the eleventh day, and the child died eight days later.

Dr. F. C. Turner: 1. Ulceration of Ileum and Stomach from a Case of Typhoid Fever; 2. Cysts of Pia Mater with Deformity of Brain.

Mr. Lockwood: Dissected Specimen of Colles's Fracture.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 14TH, 1884.

Sir ANDREW CLARK, Bart., M.D., LL.D., F.R.C.P., President, in the Chair.

Multiple Hepatic Abscess in a Boy aged Eleven Treated by Incision, with Recovery.—Dr. SAMUEL WEST read notes of this case. A Jewish lad, aged 11, who had never lived out of London, had a rigor on January 21st, and pain in the right hypochondrium. He was brought to hospital on February 20th with evident hepatic abscess, extremely ill, and with a temperature of 105°. On February 23rd a large abscess was aspirated, and thirteen ounces of greenish sweet pus were removed. Four days later, a free incision was made, and seven ounces and a half of turbid purulent fluid escaped; a second abscess was discovered and aspirated, when one ounce of blood-stained pus was removed. On March 6th, the two last swellings were again prominent, and were freely laid open, and a drainage-tube was inserted. On April 9th, a fresh abscess was found, explored, and freely laid open. From this time convalescence commenced, interrupted only by a diffuse abscess in the abdominal walls, which healed alone on being opened and washed out. The points of the case were the following: 1, the age, 11 years; 2, the number of abscesses, three or four, and probably more; 3, the absence of any assignable cause; 4, the great relief by evacuation; 5, the rapid fattening during convalescence.—Dr. CARRINGTON, referring to the possible existence of idiopathic abscess of the liver, said he had collected many examples of the disease, and in three could find no primary cause for its occurrence. One of these was that of a policeman, whose liver was riddled with abscesses, and who was but five days ill. Another case, recorded in the *Pathological Transactions*, was that of a woman who died of some other disease, but whose liver was found, *post mortem*, to contain numerous encapsuled abscesses. In a large proportion of these cases, as a rule, clinical symptoms were absent, the chief of these being tumid abdomen with enlargement, and elevated temperature and feverishness. Last year Dr. Wilks had under his care at Guy's Hospital a woman who was supposed to be the subject of suppuration of the liver, her symptoms being vomiting, diarrhœa, and a temperature at times ascending to 103° or 104°. After death, it was found that cirrhosis of the liver existed, and Dr. Carrington concluded that a febrile temperature was probably more common in such cases than was usually supposed.—The PRESIDENT said that his experience did not lead him to expect that abscess of the liver would always suggest itself by the existence of the symptoms alluded to by Dr. Carrington. As an illustration of the meaning he wished to convey, he narrated the history of a case in point. The patient, a clergyman in the country, consulted him on account of illness, from which he had been suffering for three weeks. Sir Andrew Clark concluded that a collection of matter existed in some place, and that to its presence the illness was attributable, but he could not make out its situation until chancing to detect a small area over the liver, in which region a friction-sound could be heard. On this evidence he diagnosed abscess of the liver, and in confirmation thereof thirteen ounces of pus were evacuated on an incision being made. He had four times succeeded in detecting abscess of the liver by means of this method of diagnosis, which offered obvious advantages when taken together with the better known evidence offered by the presence of pneumonia.—Dr. CULLIMORE said he had been himself a sufferer from abscess of the liver, and he concurred in believing that this affection might be present, and unattended by any abdominal enlargement or tenderness. In his own case, the abscess was punctured, and discharged by way of the lung. He would like to know if abscesses of any size had been found to exist in the absence of fever, for in December last he was consulted by a gentleman who came from India, and who was supposed to suffer from abscess of the liver. He had no fever, but some tenderness was present, and a catch in breathing. Having been previously attacked by malarial fever, and there being no rise of temperature, Dr. Cullimore concluded there was no abscess present; and, since the time referred to, the patient had noticed an occasional rise in his temperature, but unattended with sweating or jaundice. The tenderness and enlargement slowly subsided. Dr. Cullimore observed that, in his own case, he could not register any rise of temperature when he suffered from congestion of the liver, but that, when that organ became the seat of abscess, there was a distinct amount of fever. He considered that abscess of the liver might be caused by the guinea-worm, by aneurysm following inflammation of the hepatic artery, and by several other causes.—Dr. J. K. FOWLER remarked that he had drawn attention, twelve months previously, to the importance of sweating and pleurisy as signs of abscess of the liver. He had been led to puncture the organ from the presence of these signs in his own cases, and, as a consequence, obtained a supply of pus. He considered that elevation of body-heat did accompany abscess; and as showing that absence of such rise indicated the absence of the disease, he instanced an experience obtained at the Middlesex Hospital, where a certain patient was supposed to have abscess of the liver, and puncture had been advised accordingly. Death occurred, however, before this was done, and then the liver was found to be the seat of amyloid degeneration, but it contained no abscess.—Dr. MAHOMED considered that two distinct classes of cases had been confused in the discussion, viz., large local abscesses, and simple multiple abscesses, the latter a much more dangerous form, and having pyæmic tendencies. Was not Dr. West's an instance of this class of case? He (Dr. Mahomed) recently saw, at the Fever Hospital, a patient who was recognised by a nurse as suffering from malignant multiple abscess of the liver. This attendant had been in Egypt during the late war, and had seen many cases of a similar nature. Patients so affected avoided lying in a way that led to pressure on the right side of the body.—Dr. PERCY KIDD described a recent case in which, although all the signs of abscess existed, no pus followed puncture. *Post mortem* three abscesses were discovered, the sole cause of which, that could be found, was a caseous vesicula seminalis. The purulent collections were situated in the posterior part of the right lobe, in its lower margin, and a little behind it. The punctures were made both posteriorly and in the epigastrium.—The PRESIDENT said that having diagnosed the presence of an abscess in the lung of a man at the London Hospital, he decided on puncturing for its relief in the axilla, and as high up as the area of dulness would permit. Relief was obtained, but the symptoms recurred so as to demand puncture afresh. This was performed by a surgical colleague, who elected to direct the needle from before backwards. This manœuvre was repeated four times, and each time without result. *Post mortem*, each one of these punctures was found to pass within a quarter to half an inch from the abscess, which would infallibly have been pierced had the axilla been the site selected.—Mr. PARKER suggested that empyema might possibly be mistaken for abscess of the liver.—Dr. W. H. WHITE narrated the case of a gentleman seen by him last July, and who was suffering paroxysms of pain resembling gall-stone colic. The temperature rose to as high as 102°, and the attack eventually subsided. No gall-stones, however, were discovered in the fæces. Subsequently, the same gentleman caught cold, had rigors; the liver became greatly enlarged; rise of temperature occurred, and loss of strength. On inserting a needle upwards and backwards, a small amount of pus was evacuated from the liver; in three or four days, the swelling subsided, and pain diminished, but soon all the urgent symptoms returned, and necessitated cutting down on the tumour, which was then cleared, and a drainage-tube left in the wound. What caused the attack in this case?—Mr. GODLEE insisted on the high importance of keeping the discharges from hepatic abscesses as pure as possible. He had had two cases in which incision was followed by recovery. In tropical forms of these abscesses, portions could be separated and partitioned off, as it were, from the general collection. Mr. H. MORRIS said surgeons were agreed as to the value of free openings and thorough drainage. He inquired if, as a rule, abscesses opened through the intercostal spaces turned out unsuccessfully, and whether such as were reached by puncture below the level of the thorax did well.—Mr. GOLDING-BIRD observed that, of his last three cases, two died, and in each he had selected an intercostal space as the site of opening. In the third, a successful case, the opening was below the chest-level. Death, however, had occurred in one case treated by the latter method.—Dr. WEST, in reply to Mr. Parker's criticism, ventured to place reliance on his own diagnosis of the case, with which, had Mr. Parker seen it, he considered that he, too, would have concurred. In the case recorded, the temperature rose on several occasions to 103°, but he saw no reason why similar conditions should not obtain in this as in other diseases, and its presence be unaccompanied by elevation of temperature. He had seen many cases in which high fever did not accompany collections of pus. Dr. Murchison had published the fact that cirrhosis was attended by an intermittent temperature. The same author had also pointed out the distinction insisted on by Dr. Mahomed between single and multiple abscesses. Dr. West agreed that openings in the intercostal spaces were attended with greater danger than those in the infradiaphragmatic region; and all the operations he had seen in the latter part did well.

Œsophagotomy Performed for the Removal of a Foreign Body from the Gullet.—Mr. BUTLIN gave particulars of this case. The patient, a man, aged 45, swallowed a gold plate, bearing four teeth and having two long pins, during the night. The plate was impacted opposite the cricoid cartilage, where it produced spasmodic attacks of dyspnœa and constant dysphagia. Since it could not be dislodged by means of forceps, etc., œsophagotomy was performed about twelve hours after it had become impacted. The plate was removed without difficulty; the patient progressed well during the first two days after the operation, then rapidly died of acute septic poisoning. Attention was particularly drawn to the difficulty of detecting the nature of an impacted body by sounding; to the difficulty of seizing the plate with forceps; to the results of swallowing fluids after the operation. It was contended that the unfortunate issue of this case ought not to influence the general rule of treatment in similar cases, namely, that œsophagotomy should be performed as early as possible after the impaction of the foreign body, if the body were hard and sharp, and it was evident that it could not be removed by less formidable means. The cases of œsophagotomy for the removal of foreign bodies did not show a large mortality from septic poisoning; indeed, the reverse appeared to be the case, for unless septic poisoning were produced by the presence of the foreign body, it had been rare as a result of the operation. Mr. CRIPPS considered that no doubt could be entertained as to Mr. Butlin's treatment being most appropriate under the circumstances, and that it was the only possible plan to be followed. There was, however, a very important class of cases in which the obstruction occurred at a lower point than in that under discussion—*e. g.*, when a foreign body lodged in the thoracic portion of the œsophagus. In such cases, the question arose, whether it was better to make an opening in the neck, or to push the body on into the stomach? The latter proceeding appeared to him to be more rational, since experience showed that most unlikely articles could be safely passed through the alimentary canal, and expelled *per anum*; as instances might be cited the case of a gentleman, who recently passed a large tooth-plate in this way, without pain; and that of a girl, in St. Bartholomew's Hospital, who, while tickling her fauces with a bonnet-pin, six inches long, and provided with a knob at the end (her object being to induce vomiting), accidentally swallowed the instrument. On admission, pain and tenderness over the abdomen were complained of; but, no foreign body being discoverable, the case was regarded as one of hysteria, and the patient discharged accordingly. A fortnight later, she returned with a small abscess pointing in the epigastrium, which, being opened, the pin was extracted, *minus* its head; complete recovery took place.—Mr. GOLDING-BIRD remarked that an astonishing number of cases had been recorded in which tooth-plates and other formidable objects had been inadvertently swallowed without ultimate ill effects. A patient of his own, two years ago, swallowed such a plate; and, having stuck in the œsophagus, it was pressed into the stomach by a probang, the operation occupying one hour. He was then fed for two days on oatmeal, and at the end of this time the foreign body was passed by the anus. Periœsophageal abscess followed, but recovery ensued.—Dr. GLOVER described a case, in which he was consulted by a lady, who had swallowed a piece of bone with some soup, the accident occurring twenty hours before Dr. Glover was called in. The patient was then in great distress, and quite unable to swallow anything. The obstruction was quite beyond reach, and an emetic, consisting of half a drachm of zinc-sulphate, was administered. This having no effect, a second dose was given, and vomiting immediately occurred; and there was discharged through the mouth a piece of mutton bone, quite an inch long, and having four sharp corners and edges. Dr. Glover advised that that should be the mode of treatment in future cases.—Mr. E. OWEN asked why Mr. Butlin delayed to operate for so long a time. He lately saw a woman who had swallowed a much larger plate than the one exhibited; it had passed into the stomach.—Dr. DUFFIN said that the late Professor Syme, of Edinburgh, once had under his care a boy, who, in the excitement of fishing, swallowed a three barbed hook he was holding in his mouth, a wire being attached to the hook. Professor Syme adapted a wooden ball to fit the barbs, and passing it along the wire succeeded in breaking away the points, after which the hook was easily removed, and recovery ensued.—The PRESIDENT said he also remembered a case of Syme's, in which a man had swallowed a tooth-plate, and in forcibly propelling it on by means of a probang, the surgeon accidentally ruptured the aorta, from which a rush of blood immediately took place, and speedy death of the patient.—Dr. GLOVER mentioned a further case which occurred during the time that he was a student. It was that of a man who had swallowed a bone, and as a result an abscess formed, followed by death.—Mr. BUTLIN said he had purposely confined his remarks to that class of cases in which the foreign bodies were lodged high up in the œsophagus. Abscesses formed in a good many cases, in which the body was removed. He had purposely abstained from inducing sickness in his patient; and his reason for deferring to operate was that he felt disinclined to submit the patient to the necessary risks in his consulting room, and waited, therefore, until he could command the resources of a large hospital in his favour. Further inquiries had convinced him of the abstemious habits of the patient. As a result of recent experiments, he found that gold plate could be easily broken after being submitted to the action of mercury.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 17TH, 1884.

ARTHUR DURHAM, F.R.C.S., President, in the Chair.

A Case of Sporadic Cretinism with Appearance of Myxœdema.—Dr. AMAND ROUTH showed a female, aged [illegible], an inmate of the Home for Incurables. She was the eldest of four children, born near Southampton. There was a distinct family history of phthisis, but no history of insanity, alcoholism, or syphilis. The patient was like other children till seven years old, but plumper than usual, fat, flabby, and of a doughy white colour. At 7 years of age she ceased to grow taller, but grew stouter and flabbier, and her mind became unable to receive impressions after this date. Her sister had an enlarged thyroid. Her height was three feet five inches, the average height of a child of five years of age; her weight four stone two pounds, the average weight of a child of seven. Rickety changes were seen in the curved spine, the epiphyses of the lower limbs, the curved tibiæ, beaded ribs, and dolichocephalic head. Her face was expressionless and swollen; the lips thick, high-coloured, and shapeless; the nose was flattened and the nostrils dilated; the neck was short and thick; the skin dry and pallid, except where chilblains existed; the hands were spade-like; the surface temperature was subnormal, 95° Fahr. Well marked tumefactions were present above both clavicles, and in the posterior axillary fold no thyroid body could be felt. Locomotion was slow and tottering; all movements were slow, but unhesitating. Speech was slow and monotonous, its tone high-pitched. Her memory was a blank since 7 years of age. She passed twenty-five ounces of urine a day; it contained no albumen, casts, or sugar; the daily quantity of urea was 172 grains (10.5 grammes), and the specific gravity 1015. Dr. Montagu Murray had ascertained that there was one white to two hundred and fifty red blood-corpuscles, and that the percentage of red blood-discs to the normal standard was eighty-six, and the percentage of hæmoglobin seventy-seven. She had never menstruated. The pelvis and genital organs were infantile; the uterus was half the normal adult size. The ovaries were twice the normal bulk, soft, and insensitive to pressure. Attention was drawn to the fact that, of Dr. Hilton Fagge's cases, those in which the sporadic cretinism had lasted the longest, had the symmetrical swellings the least well marked. It was suggested that the thyroid gland was probably undeveloped from intra-uterine causes, due to the mother's fright during pregnancy; that the child's general appearance up to 7 years of age was that of a myxœdematous baby; that at that age sporadic cretinism supervened, and that the mucous œdema was now showing signs of subsiding. This view of the series of events was shown to be in accord with the evidence of previous writers on the subject.—The **President** thanked Dr. Routh for bringing so increasing a case before the Society.—Dr. W. M. **Ord** said the case appeared to be one of sporadic cretinism which had come on after infancy and before adolescence, and perhaps for that reason presented symptoms which placed it in a position intermediate between that disease and myxœdema. It differed from myxœdema in several particulars; the swelling of the face was less general, and the flush commonly seen in myxœdema was hardly present; the skin generally was comparatively shrunken, there was arrest and not degeneration of intellect, and there were distinct ricketty changes. He had recently met with a case which he regarded as myxœdema where there was no atrophy of the thyroid, and where well marked exophthalmic goître occurred, and led to the loss of one eye. On the whole it appeared to be probable that there were two conditions, one in which myxœdema was followed by atrophy of the thyroid, and the other in which it was preceded by it.—Dr. F. **Semon** stated that Schiff had recently published the results of excision of the thyroid in dogs in a number of cases; all the dogs so operated on died in from four to six weeks; these results had also been confirmed by Zesar, who contended that the operation of the excision of the thyroid was not justifiable.—Dr. W. B. **Hadden** had seen a case the exact counterpart of Dr. Routh's case, under the care of Dr. Bourneville in Paris; the tendon-reflexes in this case were exaggerated.—Dr. **Angel Money** showed that in Dr. Routh's patient the tendon-reflexes were exaggerated.—Sir **Joseph Fayrer** commented on the frequency with which large goitres were, in India, cured by an ointment of the biniodide of mercury.—Mr. **Sydney Jones** had observed atrophy of the lateral lobes of the thyroid after excision of the isthmus in three cases; the same observation had been made in France.—Dr. Cavafy and Dr. C. H. F. Routh also took part in the discussion, and Dr. Amand Routh replied.

Impetigo Contagiosa.—Dr. **Colcott Fox** read a paper on contagious impetigo. He pointed out that, though independently described by Dr. Tilbury Fox in 1863, and thus made known in America and on the Continent, the affection was really discussed by Willan, Bateman, A. T. Thomson, and Startin. After a brief description of the salient points of the eruption, and a reference to its various phases as it affected the face, or occurred widely disseminated as an umbilicated bulbous eruption, he dealt with its contagiousness, and gave examples of epidemics in streets, schools, and barracks. Dr. Fox proceeded to show that certainly a great number of the slighter cases were entirely local inflammations, excited by contact of pus from some such source as a vaccination-pustule, a festering excoriation, dermatitis from lice, or otorrhœa, and then extended by auto-inoculation. The remainder of the paper was devoted to a discussion of the problem, whether every case, even the acute and general ones, should be considered as belonging to this category; or whether any group of cases was to be regarded as an infectious disease like varicella, or an inoculated affection like acquired syphilis or vaccinia. The conclusion arrived at was that, probably, all cases were merely local affections, and the severe and acute ones brought about by special virulence of the sero-pus, or the presence of micro-organisms. Dr. **Radcliffe Crocker** thought there was no means of drawing a distinction between ordinary cases of inoculation from some suppurating centre, such as vaccine-pustules, and cases where there was some general febrile disturbance. He believed that the cases were always of external origin. In the vesication-stage, he had always found chains of micrococci; and, in the pustular stage, these became more numerous.

HARVEIAN SOCIETY OF LONDON.

Thursday, March 6th, 1884.

George P. Field, M.R.C.S., President, in the Chair.

Some Recent Advances in Pelvic Surgery.—Mr. **Lawson Tait** briefly alluded to the history of abdominal section, and to the great advance inaugurated by Keith in the abandonment of the clamp. He compared the fate of certain recent operations to that of new remedies whose popularity was as short lived as it was excessive for a time. Too frequently, results were published too early. Primary results showed whether an operation was justifiable; late results alone could prove whether it was wholly satisfactory. During the last seven years great innovations had taken place in pelvic surgery, the most marked of all being the increased frequency of abdominal section, and its employment for purposes of diagnosis. The author pointed out the fallacy underlying elaborate diagnoses of intrapelvic disease made *per vaginam.* Such conditions as perimetritis, parametritis, pelvic cellulitis, etc., might be entirely incapable of being distinguished from each other in this way. In the author's series of operations, mere explorations did not exceed 3 per cent., exploration generally leading up to operation. The chief objection urged against such operations as removal of the uterine appendages, was to the effect that they sterilised and unsexed the patient. Matting together of the pelvic organs would produce sterility; and sexual intercourse could no more be tolerated where abscess of the ovary existed, than acute retinitis could permit the reading of fine print. Passing to the subject of suppuration, the author commented upon the advantages of the treatment "from above" by free opening and drainage, in contrast with the method of aspiration *per vaginam*, which allowed matter to collect again. A consecutive series of fifty cases of abdominal sections, performed between March 30th, 1879 and June 13th, 1881, was submitted to the meeting. Three deaths had occurred in the series; one from scarlet fever, the other two from severe hæmorrhages from myomata. The cases operated fell into the following groups: 1, ovarian epilepsy; 2, pyosalpinx; 3, hydrosalpinx; 4, menorrhagia; 5, myoma; 6, chronic adhesions; 7, pelvic abscesses. In hydrosalpinx, somewhat troublesome adhesions had usually been encountered. In a case of intractable menorrhagia, the ovary was studded with numerous small cysts. The author adverted to the occasional development of insanity after removal of the appendages. Relief from the pains and from the nervous symptoms in chronic ovarian affections had generally followed immediately after the operation; but, in one case, complete relief had not been obtained until eight months had elapsed. Immediate stoppage of the menses was the usual result.—Dr. C. **Godson** remarked that swellings previously diagnosed as inflamed ovaries could no longer be accepted as such without hesitation; whilst, as regarded treatment, many such cases, under the ordinary methods, remained practically unrelieved. Dr. Godson entirely agreed with the author of the paper that it was impossible to define strictly the parametritis or perimetritis existing in a patient by examining her, both being frequently associated in the same case.—Mr. **Knowsley Thornton** would first take the points in which he agreed with Mr. Tait. His mind was fully made up as to antiseptics; but he believed in the value of Listerism as firmly as ever. He had not had the same numerical experience as Mr. Tait in the special cases under discussion, but he had now a list of thirty cases, and had not lost one patient. Mr. Tait had always laid much stress on the value of personal experience in operating; and, with a much less experience *plus* Listerism, he (Mr. Thornton) had a clean mortality-bill, while Mr. Tait had, at any rate, a 6 per cent. mortality. Mr. Thornton agreed generally with Mr. Tait as to the difficulty of diagnosis. Mr. Thornton also agreed with Mr. Tait as to the impossibility of teaching how to operate in this class of cases, and as to the sterility following the operations, but not as to the sexual condition remaining unaffected. He had found that the great majority were entirely unsexed; and, putting aside rare cases of third ovary, he believed that it was purely a question of complete or incomplete removal of ovarian tissue. He had also met with insanity after ovariotomy and kindred operations, and had a case in point under his care. He also confirmed Mr. Tait's views as to menorrhagia in some cases being due to cysts in the ovary. He protested against the statement made by Mr. Tait, that the introduction of the ligature was due to Mr. Keith, though he deserved all credit for his brilliant work. Mr. Thornton claimed for himself a good share of whatever value attached to the general use of the short ligature. On the question of exploration, Mr. Thornton expressed the opinion that the doctrine might be and was often carried too far; and he asked Mr. Tait for an opinion on a case which he detailed in which an exploratory operation was performed in a clear case of hepatic cancer. As an illustration of freedom from any risks which might be supposed to arise from strict Listerism in abdominal surgery, he had concluded two years' ovariotomy (73 cases) at the Samaritan Hospital without a single death. He could not understand Mr. Tait's results in abdominal section for pelvic abscess; when he had tried it after Mr. Tait first advocated it some years ago, he had failed to get a good result, which was, however, obtained by returning to the old practice of draining the sac *per vaginam.*—Dr. **Bantock** agreed generally with the views expressed in the paper. He was glad to find that the author agreed with him that the rupture of a hydrosalpinx should not be considered as a harmless accident. Even rupture of an ovarian cyst, though often disastrous, was sometimes unattended with any evil results. The claims of Tyler Smith to the earliest systematic use of the ligature had been forgotten by a previous speaker. He had known menstruation to return after the removal of the healthy ovaries and Fallopian tubes, of cirrhotic ovaries and obstructed tubes, and after double ovariotomy for cystic disease. In his experience, sexual desire was not destroyed by the removal of both ovaries.—Mr. **Bryant** spoke in support of the priority of Dr. Tyler Smith in using the ligature. As evidence of the persistence of sexual appetite, looseness of conduct, and a determination to marry, had been noted in a young woman two years after complete removal of the uterus, and of both ovaries. Cases of insanity, temporary and permanent, had come under his observation after the operation in question. Mr. Bryant considered that in intestinal obstruction a similar rule should obtain to that which guided surgeons in dealing with external hernia. The bladder had also obtained a share in the benefits accruing from exploratory methods.—Mr. **Lawson Tait** stated that acute melancholia was the type of insanity generally observed. He corroborated his statement as to the persistence of sexual feeling by citing an instance in which an uterine tumour and the appendages were completely removed in a woman, who married and was erotic. The continuance of menstruation in some cases, where every portion of the ovary had been excised, entirely negatived the theory as to an interdependence between menstruation and ovulation. In one of the fatal cases mentioned in the paper, death had occurred from the poison of scarlet fever, not owing to a lack of antiseptics, but in spite of every antiseptic precaution. The author had found more risk to life from the employment of carbolic acid than from its abandonment. An operator specially called to a case was often placed in a difficult position with regard to the performance of operations of doubtful promise. Thus, in a case which was detailed to the Society, he had been urged by the medical attendants to operate for the relief of a rotated ovarian tumour in spite of advanced symptoms, but the abdominal section revealed the presence of a large tumour of the kidney.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

Thursday, March 13th, 1884.

Jonathan Hutchinson, F.R.S., President, in the Chair.

Retinal Glioma.—Mr. **Simeon Snell** (Sheffield) related the case of an infant who, when first seen at the age of 18 months, presented at the back of each eye a yellowish-white deposit, which was considered to be of a strumous nature. During the next three months the left globe became filled with deposit, the iris infiltrated, and the anterior chamber partly filled with exudation; the eye subsequently softened and shrank to a small stump. Five months after the child was first seen, the right eye began apparently to go through the same stages as the left; instead of shrinking, however, it continued to enlarge, and finally, twelve months after the child was first seen, the eyeball was excised, and the growth was found to present undoubted evidence of glioma. The child died four months later with tumour of the orbit. The question arose whether the disease, in this case, was from the first glioma; but Mr. Snell inclined to the belief that the original diagnosis was correct, and that the glioma became engrafted on the strumous condition, as sarcoma was engrafted on damaged eyes. In the second case related, also an infant, the glioma in both eyes was probably congenital; the right eye grew worse more rapidly than the left, and was excised. Three years later, the left eye, which had been quiescent, became filled with the growth, and had to be excised. The disease did not recur in either orbit, but, eleven months after the excision of the left eye, a growth began on the forehead, consecutive, as was believed, to a blow, and the child died when four and a half years old.—Dr. W. A. **Brailey** said that he had seen one case which seemed to be quite similar to the first of the two described by Mr. Snell. The patient was a young girl. The right eye was the seat of a genuine glioma; at an earlier date the left eye had presented all the appearance of a pseudoglioma, and was excised; but a microscopic examination afforded no evidence that it was gliomatous. The subsequent occurrence of glioma in the other eye, however, led him to doubt the correctness of his first conclusion. He suggested that there was some relation between tuberculous cases, which formed a large proportion of all the cases of pseudoglioma, and cases of true glioma.

Severe Conjunctivitis from Whisky thrown into the Eyes.—Mr. G. A. **Brown** (Tredegar) communicated this case. The patient was seen the day after a glass of neat whisky had been thrown in his eyes. Both eyes were closed, the lids were much swollen with yellowish sanious semipurulent discharge. The lower half of each cornea was covered by a diphtheritic membrane, which pealed off, leaving the cornea clear. The conjunctivæ were deeply injected, and there were slight ecchymoses, but no chemosis. There was much pain and intolerance of light. Under belladonna-fomentations, and syringing with a warm weak solution of boracic acid, improvement rapidly took place. In two days the membrane had disappeared, and the conjunctivitis and photophobia soon subsided, so that the man was well in a fortnight.

Treatment of Malignant Glaucoma.—Mr. M. **McHardy** advocated an unusually large primary section for iridectomies practised to relieve primary chronic glaucoma. For such cases, he never practised a less incision than he would make were he contemplating the extraction of a full-sized cataract. His ideal incision for primary chronic glaucoma was as nearly as possible the corneal diameter, measured in a straight line, from the outside of the puncture to the outside of the counterpuncture. The incision lay parallel with, but one millimètre posterior to, the margin of the cornea. He endeavoured to remove the entire segment of iris corresponding to the section. He had never seen occasion to regret the extent of these sections. Their size did not appear to increase the frequency of malignant glaucoma from an advance of the lens, a catastrophe which happened in one out of thirty cases, and was then happily relieved by the spontaneous escape of the lens, without any loss of vitreous humour, twenty-two hours after the operation. This eye made a favourable recovery, and subsequently exhibited a far more satisfactory degree of tension than the fellow-eye, which had been since treated by a maximum iridectomy, but from which the lens had not been removed. This patient was exhibited. In the case of a man with recurrent subacute glaucoma, upon the return of glaucomatous symptoms, after a very free upward iridectomy, a similar iridectomy was practised downwards; the lens, presenting in the lips of the wound, was ejected in its capsule at the time of operating; the eye was then treated as after an extraction, and made an uninterrupted recovery. A man, aged 47, was shown, whose two eyes had been treated for primary chronic glaucoma by iridectomies through such large sections as had been described. His better eye possessed $V=\frac{6}{12}$, and showed with how close a union these extensive ocular wounds might heal.

Hyposcleral Cyclotomy in Acute Glaucoma.—Mr. G. E. **Walker** showed a patient who had first applied to him with extreme glaucoma, and the prognosis formed was extremely unfavourable. He, however, recovered after the operation of hyposcleral cyclotomy, which was of the greatest use in acute glaucoma; by relieving the inflammatory tension of the ciliary body, it produced at once great alleviation of all the symptoms; the tension did not fall at once, but gradually sank to the normal. In chronic glaucoma, he believed that any operation which did good acted by producing a subconjunctival fistula, and not by producing a cystoid cicatrix. Glaucoma, he contended, was produced by overtaxed accommodation, and was to be prevented by paying attention to this point. The operation was performed as follows. The eye was fixed and kept open by a speculum; a very narrow [illegible] knife was thrust through the clear corneal tissue about a line from the sclero-corneal junction, the direction of the knife was then altered, and it was made to cut through the ciliary body [illegible] the sclerotic; the knife was then slowly withdrawn without enlarging the wound, so as to prevent prolapse of iris. Mr. McHardy [illegible] the [illegible] of treatment adopted.

Spasm of the Ocular Muscles.—Dr. GOWERS read a paper on certain forms of spasm of the ocular muscles. He first pointed out that these muscles might participate in the spasm of chorea, and that transient diplopia from this cause was not uncommon during the course of chorea. He next described two cases of partial convulsion affecting an ocular muscle. One was that of a man aged 36, whose attacks began with a sensation spreading from the inner canthus of the left eye over the borders of the orbit to the temple. This was followed by dimness or loss of sight in both eyes, accompanied by a movement outwards of the left eye, and sometimes a moment's loss of consciousness. If walking, he deviated to the left during the attack, probably from erroneous projection of the left field of vision. The attack lasted only for a few seconds, but returned many times daily. Except slight amblyopia of the left eye, there was no permanent nervous symptom. The other case was that of a man aged 47, with slight weakness of both internal recti, and of the left external rectus. In the attack, there was spasm of the last muscle, blinking of both eyes; and the attack, which lasted only a few seconds, was followed by slight ptosis of the left upper lid for a few minutes. There was never loss of consciousness, and there were no other nervous symptoms. Lastly, a cases of convulsive nystagmus was described. The patient, suffering from Bright's disease, died a few hours after the onset of apoplectic symptoms; at the necropsy there was an anæmic area in the mesial half of the right side of the pons above the nucleus of the sixth, and extending from near the floor of the fourth ventricle to just in front of the fillet. There were conjugate deviation of the eyes to the left, and paroxysms of increased deviation, accompanied by nystagmus, with quick movement of the legs. It was pointed out that the deviation, although corresponding to the paralysing effect of the lesion, was increased by irritation of the unaffected centres in the left half of the pons Varolii, to which the nystagmus was to be ascribed. The case showed that both spasm and paralysis might coincide in causing a secondary deviation, and also the importance of attending to the direction of the quick movement in nystagmus.

A Scheme for Diminishing the Number of Cases of Blindness due to Ophthalmia Neonatorum.—Dr. DAVID MCKEOWN (Belfast), gave a summary of a paper which he had circulated among the members of the Society, "On the Prevention of Blindness from the purulent Ophthalmia of Infancy, and in Particular on the Utilisation of the Poor-Law and Birth-Registration Organisations of the United Kingdom for that Purpose." Ophthalmia neonatorum was the most fruitful source of blindness, and a vast number of persons had lost from this disease one eye, or had had the vision of one or both eyes permanently impaired. Delay in seeking medical relief was the essence of the question, and arose from want of knowledge (on the part of the public) of the dangerous character of the affection. He proposed to instruct those in charge of new-born infants by a card of directions, in these terms. "If the child's eyelids become red and swollen, or begin to run matter, within a few days after birth, it is to be taken, without a day's delay, to a doctor. The disease is very dangerous, and, if not at once treated, may destroy the sight of both eyes." This card should be distributed by the Government in the following way: 1st. By the utilisation of the Poor-Law organisation of England, Ireland, and Scotland as follows: In England the relieving officer, and in Scotland the inspector of the poor, should in every case of labour under the Poor-Law system read to and leave with the person obtaining the order for medical aid, or the person in charge of the patient, a copy of the card. In Ireland the card should be attached to the order for medical aid in such cases, and the person who gives the order and card should, before doing so, read the card to the applicant. 2nd. The registrar of births should read and hand to each person registering a birth a copy of the card. Much could be done by the profession to spread the necessary information. The etiology, progress, and treatment of ophthalmia neonatorum, and the duties of the medical attendant, should be fully dealt with in every textbook and every course of lectures on midwifery; and for the instruction of midwives, their handbooks, all the institutions where women were trained as midwives, and the various charitable organisations which employ midwives, should be utilised. Dr. McKeown stated that the Saxon Minister of the Interior had issued instructions to midwives and monthly nurses on the subject, and that two voluntary societies in this kingdom had taken some steps in the matter, and it had been suggested to ask the registrars of births to distribute papers. He, however, pointed out that in instructing the public generally only Governmental agency could be effectual. He proposed that a deputation should wait on the Government officials.—Mr. TWEEDY felt satisfaction that opportunity had at length occurred for bringing forward such a proposition, but humiliation that it had taken shape so late. It has been estimated that, of the persons in the blind-asylums, fully 30 to 40 per cent. were blind owing to purulent inflammation in infancy. In twenty-two asylums in Germany, between 1865 to 1874, the number was found to amount to 40 per cent. In his experience, when cases of purulent ophthalmia could be seen early enough, provided the cornea be clear, no case would be lost; and in this statement he would include diphtheritic ophthalmia. Correct ideas were no doubt spreading slowly through the community, and it was the duty of a society such as the Ophthalmological Society to step in and encourage the spread of such knowledge.—The PRESIDENT said the Society was indebted to Dr. McKeown for bringing the subject forward. At his suggestion, a committee was appointed to consider the subject raised.

The Therapeutic Value of Jequirity.—Mr. ARTHUR BENSON (Dublin) gave the results of a clinical investigation into the mode and manner of action of jequirity. He had found that the ophthalmia could be produced by (1) the fresh powdered seeds; (2) the freshly made infusion; (3) the infusion after bacilli had grown in it; (4) the infusion six weeks old, and swarming with micro-organisms of most varied types; (5) the infusion after these bacilli had ceased all motion, and had sunk to the bottom of the liquid, apparently dead. He had examined at all stages of the disease the discharges and membranes from eyes affected with jequirity-ophthalmia, without ever seeing the typical bacillus. The discharges and membranes were entirely devoid of infective qualities. He was thus able to confirm Dr. Klein's researches (BRITISH MEDICAL JOURNAL, p. 476, March 8th). Mr. Benson used the fresh infusion made from the seeds not decorticated, but passed through a coffee-mill. He had a high opinion of the value of the treatment in granular lids, and had never seen any serious injury result from its use. In one case, there was a short attack of iritis after each application, and in others some infiltration of the cornea occurred.

Card Specimens.—Mr. ADAMS FROST exhibited a new artificial eye. The lens had a focus of 40 millimètres, and could be shortened or lengthened at pleasure. There were two retinæ, one of ground glass graduated in millimètres, and there were two clips in front to hold lenses. The other retina represented the normal fundus.

Mr. G. L. JOHNSON exhibited an improved trial frame, contrived to secure greater accuracy and perfection in adjusting spectacles and estimating refraction.

Mr. A. STANFORD MORTON showed a drawing of a case of hæmorrhage into the macula. There was no history of a blow, nor any evidence of disease beyond rheumatic gout, the last attack of which had occurred a year earlier; the urine gave no evidence of disease.

Mr. NETTLESHIP exhibited the following drawings: 1. Central areolar choroidal atrophy; 2. Central senile guttate choroiditis (Tay's choroiditis); 3. Syphilitic retinitis, with retinal hæmorrhages, and growth of new blood-vessels from the disc into the vitreous humour; 4. Glaucoma with retinal hæmorrhages, thickening of retinal veins, and obliteration of arteries; 5. Nævus (?) lymphatic, affecting the brow, orbit, and exterior of the eyeball, with lamellar cataract. There was no cataract in the other eye.

Mr. GUSTAVUS HARTRIDGE showed a drawing of a case of tumour of the choroid.

Mr. ARTHUR H. BENSON (Dublin) exhibited the following ophthalmoscopic drawings: 1. A case of monocular coloboma of the iris lens and choroid, with a bridge of iris-tissue over the coloboma; 2. Central choroiditis, monocular, pigmented; 3. Central choroiditis and retinitis, binocular, slightly pigmented; 4. Choroido-retinitis, extensively pigmented; 5. Choroiditis (myopic) extensively pigmented; 6. Thrombosis (embolism) of central artery of retina.

Living Specimens.—Mr. R. M. GUNN exhibited a little girl, aged 11 years, in whose retina there could be seen a direct arterio-venous communication. She had come under observation for headaches, from which she had suffered for four years. On examining the left eye, it was seen that a branch of the inferior temporal vein sent an offshoot which ran directly into the superior temporal artery. Several of the retinal veins appeared to commence abruptly, doubtless having their origin in the choroid, and piercing the retina vertically.

Dr. ORMEROD showed a man, aged 44 years, suffering from paresis of the upward movement of the eyes. It was most marked in the right eye, especially when the patient looked to the right. There was vertical nystagmus when he tried to look upwards. The other ocular movements were normal; there was no definite neuritis. The symptoms had been present ten months, but he had a similar condition fifteen years previously.

Mr. STREATFEILD showed a man, aged 22 years, the subject of inherited syphilis, who had had disease of the bones of his face since the age of fourteen years, which had led to an eversion of the lower lid on the left side, the cornea being clear when he came under observation. A raw surface having been made beneath the lid, Mr.

Streatfeild transplanted a piece of skin from the forearm, using antiseptic precautions. The upper half of this piece of skin lived, and the deformity had been very much diminished by the operation.

Mr. G. E. **Walker** showed a patient whom he had treated for sympathetic ophthalmia by removal of a portion of iris.—Mr. **Henry Power** said that cases in which sympathetic ophthalmia was confined to the iris to the exclusion of the retina were very rare, and thought that it was only in such cases that any operation for the removal of the iris could result in a restoration of sight.

Mr. F. **Hodges** showed a girl, with an irregular granular looking body on the outer sclera, which had first been noticed in the outer ciliary region, its formation being followed by iritis, hypopyon, and perforation of the sclera.

Mr. M. M. **McHardy** showed a man with a persistent hyaloid vessel in the right eye, and choroido-retinal changes attributable to inherited syphilis.

Mr. **Cowell** showed a woman with a new growth (presumably sarcoma) in the region of the ciliary body.

ACADEMY OF MEDICINE IN IRELAND: MEDICAL SECTION.

Friday, February 15th, 1884.

T. W. Grimshaw, M.D., in the Chair.

Disease of the Spinal Cord.—Dr. **Nixon** read a paper on a case of primary lateral sclerosis, and he exhibited the patient. Dr. J. W. **Moore** pointed out that the deep reflexes were better marked on the side first affected, and on which the disease had apparently made most way. This was of some interest, as the right limb was affected more than two months before the left became implicated.—Dr. **Henry Kennedy** said, there were cases on record where similar symptoms existed, and yet no lesion of the spinal cord. The late Dr. Graves had drawn attention to the fact of paraplegia occurring as the result of external causes, and that persons could get paralysis of the lower limbs from exposure to wet. The boy here being a common labourer, it was not straining a point to suppose that he had been exposed in such a way as to endanger the functions of the lower limbs. In Weir-Mitchell's work there were records of cases, where extraordinary symptoms arose from direct injury to the nerves themselves. A Scotch medical man had given an interesting account of an individual labouring under an affection of the hand, and, after death, the nerves of the hand and arm were found diseased in themselves. Therefore, he would be slow to connect symptoms necessarily with the spinal cord.—Dr. **Nixon**, in reply, concurred with Dr. Moore that the reflexes were more marked in the limb where the paralysis commenced than in the other limb. It was difficult to conceive how any one could adopt the view of the symptoms that existed in the boy's case being due to a peripheral form of paralysis. There were other symptoms which clearly showed that the disease had a central origin. In no other way could be explained the reflex phenomena. Or, assuming there was a motor paralysis, why was there not complete extinction of the reflex, as there should be if the motor nerves were involved? He would be sorry if the Society accepted the view that a case like the present, where the signs of nervous lesion were of so marked an origin, could be due to functional phenomena, or phenomena that had a mere peripheral source.

Scarlet Fever.—Dr. J. W. **Moore** pointed out the strict obedience to the law of seasonal prevalence of scarlet fever which the present epidemic had shown. He illustrated that law by an allusion to the observations made upon the subject by the Registrar-General for England, Dr. Ballard, Dr. J. W. Tripe, and himself. According to the statistics of admissions and deaths from scarlet fever patients, compiled from the register of Cork Street Hospital for ten years 1874-83 inclusive—it appeared that, of 738 patients admitted with the disease, 192 came in during the first quarter of the year, 136 during the second, 194 during the third, and 216 during the fourth. The deaths—149 in number—were similarly distributed, 38 occurring in the first quarter, 24 in the second, 31 in the third, and 56 in the fourth. The continued prevalence of so infectious a disease during the autumn and winter was no doubt due to the facilities for the spread of infection afforded by overcrowding and deficient ventilation. As regarded the present outbreak, the admissions were: April 1883, 0; May, 8; June, 5; July, 9; August, 15; September, 23; October, 27; November, 32; and December, 26. The epidemic reached its greatest intensity about the end of October, and was now subsiding according to the usual law. He presented a table showing the number of male and female patients, with the age, deaths, and mortality in each group. The prevailing type of the disease was scarlatina anginosa, and the mortality, up to the end of January 1884, had been 24 per cent. among males, and 23.3 per cent. among females. The general mortality had so far been 23.6 per cent. Among children under five years of age, it was particularly high—32 per cent. among males, and 35.3 per cent. among females. The chief complications were acute desquamative nephritis and renal dropsy; uræmic convulsions, best treated by pilocarpin; diffuse cellulitis of the neck, followed in one instance by cancrum oris; diphtheria in one case, treated with sulphurous acid spray; rheumatism; and, in a private case, phlegmasia alba dolens.—Dr. J. E. **Kenny** bore out Dr. Moore's statement as to moderate temperature favouring the development of scarlatina. Moisture was an important factor in the production and spread of the disease. Another point was the connection of scarlatina and erysipelas. In the late epidemic in August and September, erysipelas became frequent, and he had a number of cases of diffuse cellulitis of an aggravated form in the North Dublin Union Workhouse Hospital, and scarlatina in the following month became epidemic in the house itself. He connected the action of the atmospheric influence and the alliance between the two diseases. The defective housing of the poor was one of the great causes of epidemics such as scarlatina. In winter time ventilation was an important factor, and that was why the epidemic reached a climax in cold weather, though it commenced in moderate temperature. He asked what was the most rapid case in which death occurred. In a child, aged 13 years, he had known it to follow thirty-six hours after the first symptoms.—Dr. C. J. **Nixon** corroborated Dr. Kenny with regard to the effect of the humidity of the atmosphere influencing the spread of scarlatina. He agreed with Dr. Moore's statement as to the frequency with which epidemics of erysipelas and scarlatina ran together. There was another disease also prevalent in scarlatina-epidemics, namely, typhoid fever; and that was one of the arguments Dr. Harley used for regarding typhoid fever as abdominal scarlatina. He would be sorry to go the length of regarding the two diseases as one, only having a different *locale*. Another point he had no opportunity of verifying was the particular lesions found in very grave cases of scarlatina, that died in a couple of days after the accession of the disease. A little girl was admitted from a house where two of her sisters had died, and she died in the Mater Misericordiæ Hospital. She was unconscious, with a temperature of 106° or 107°, and an exceedingly rapid pulse. She died within twenty-four hours after admission, and within forty-eight after she became ill. On *post mortem* examination the only lesion he found was an extremely well marked condition of psorenteria. He did not, however, think that could be regarded in the smallest degree as establishing any identity between two diseases; because in all cases of pyrexia there was an increased amount of lymphatic function, and the spleen underwent enlargement. He did not think there was anything more remarkable than the varying symptoms in the different epidemics.—Dr. **Doyle** said Bartel had referred to a malignant form of scarlatina, where the throat was principally affected, as the form most complicated with nephritis.—Dr. **Fitzpatrick** related the case of a child whom he was called to see in consultation some years ago. It was in perfect health, and was suddenly attacked with vomiting. He saw no eruption, sore throat, enlarged tonsils, or any indication, except prostration, of the high fever, and he said the child was labouring under congestion of the brain from poisoning, and the poison he could conceive was scarlatina. The child died next morning at seven o'clock. That was the quickest case of fatality he ever saw. A *post mortem* examination was held, and a slight effusion was found on the brain, while there was enormous congestion of the cerebral substance. One solitary gland was enlarged. Two of the family and a lady in the house were attacked with scarlatina. He himself took the disease, and one of his children died of it, making two deaths out of twelve cases. It afterwards transpired that the child had been brought the night before to the wake of a person who had died from scarlatina.—Dr. **Henry Kennedy** observed that in these cases of rapid course, the throat was very little engaged. He seen them several times to succumb between thirty and thirty-six hours. Within six weeks he had been called to two fatal cases which ran rapidly into coma. There was no affection of the throat; but there was evidence of congestion, and the pupil of the eye was wild looking and exceedingly contracted. He had been cognisant of four cases of fatal hæmorrhage from the vessels in the neck giving way.—Surgeon-Major **Gore** mentioned the extreme rarity of scarlet fever in India, where there was a high temperature. In five and a half years' experience in India he reported only four cases, and these in troops coming into the country. The disease never spread. It did not exist among the natives, whereas measles was extremely common.—Dr. J. W. **Moore**, in reply, said during the present epidemic they had had no very rapid case. The shortest was three days from the initial symptoms. The most rapid case of which he was ever cognisant was thirty hours. As to the period of incubation alluded to by Dr. Fitzpatrick, it appeared in his case to be only one day. He was now in the habit of speaking confidently as to the safety of those who had been exposed to the infection, if seven days had elapsed from the exposure. There was no ground for supposing that the period of latency was protracted beyond seven days; it was usually between three and seven. With regard to the coincidence of enteric fever and scarlet fever, or (as Dr. Nixon had put it, in the words of Dr. Harley) the possible connection, he did not believe in that at all. Enteric fever and scarlet fever both arose in autumn. That explained their coincidence. Again, both were accompanied by glandular complication, particularly in children; but the glandular complication was quite distinct. It was usually the solitary glands in scarlet fever that were affected, while in typhoid fever the agminate glands were. There had not been much enteric fever in Dublin. With regard to the infrequency of scarlet fever in India, Dr. Ballard considered that a higher temperature than 60° did not appear to be in itself unfavourable. For its complete development it was necessary that the condition of the atmosphere should not exceed 86°, or be much less than 74°. In India the temperature was exceedingly high, unless at the rainy season, and hence the infrequency of the disease for the reason he had mentioned. The coincidence of erysipelas and scarlet fever was not a new discovery, having been alluded to by Dr. Graves in the terrible epidemics of 1803 and 1832 in Dublin, and James Cusack had also placed the same observation on record. Lastly, it was worth remembering that small-pox and scarlet fever were closely related as regarded their times of prevalence, and there seemed to be a strange susceptibility to the poisoning of scarlet fever by those who were recovering from small-pox, and the converse was equally true. The same observation was not at all applicable in connection with typhus fever.—The CHAIRMAN remarked, as to the parallelism which Dr. Nixon seemed to think existed between scarlatina and enteric fever, that so far as the present epidemic was concerned, there was no parallel whatever. During the fifty-two weeks of 1883, enteric fever was constantly prevalent, whereas, in the early part of the year, the death-rate from scarlatina was returned in most of the columns blank. Six weeks elapsed without a single death from scarlatina being registered, and then only one. In Dublin the epidemic had been as nothing compared with what had occurred in Belfast, where during 1883 the deaths from scarlatina numbered 353 as against 179 in Dublin, and Belfast district was not two-thirds of the size of Dublin district. It was one of the most formidable epidemics there of which he had ever heard. He had a table for ten years, setting out the most important zymotic diseases for each province, and it appeared that scarlatina and several other diseases had regularly ranged throughout the country. It was highest in Leinster in 1874; in Munster in 1872; and in Ulster in 1875. This moving about was a feature common to epidemics, and showed the importance of taking proper measures to prevent by notification the spread of disease. Nearly all the diseases they got from Liverpool, and it was important that the advent of a disease should be noted from Liverpool just as from one part of Dublin to another. The liability of small-pox patients to get scarlatina arose from the great diffuseness of the poison of scarlatina, rather than any predisposing liability of the patients themselves.

MIDLAND MEDICAL SOCIETY.

MARCH 5TH, 1884.

G. F. BODINGTON, M.D., President, in the Chair.

The Treatment of Compound Fractures of the Skull.—Dr. BARLING gave an abstract of nineteen cases of compound fracture of the skull treated by trephining, and drew attention especially to the mortality after operations, when symptoms had arisen, or when the dura mater was wounded. Of the nineteen cases, nine recovered, all being operated upon immediately after the injury, and the dura being unwounded. Immediate trephining was advocated in all cases of compound depressed fractures, and in incised and punctured fractures, whether symptoms existed or not. If there were any doubt as to the condition of the internal table, it was suggested that the external table only might be removed by the trephine, and the state of the deeper layer determined. In the list of cases produced, intra-cranial abscess happened three times—one of the patients recovering. The symptoms of intra-cranial abscess were reviewed, especially with reference to their bearing upon these three cases, and the difficulty in localising the position of the pus. Exploration of the dura mater, and, if necessary, of the brain-substance, was urged, in the presence of indications which might suggest intracranial abscess.

Vertebral Caries.—Dr. BARLING showed a specimen of caries necrotica of the second lumbar vertebra, taken from a male, aged 26, who had been under observation for five years, during most of which time a psoas abscess had been discharging in the usual situation. The remarkable points about the specimen were, that the posterior part of the body of the vertebra was affected; that the sequestrum was of considerable size; and that the abscess arising from it communicated with the interior of the spinal canal, but produced no symptoms. There was no history of injury or of syphilis. The patient died of amyloid disease.

Double Hydrosalpinx.—Dr. SAVAGE showed a specimen of double hydrosalpinx which he had recently removed, and compared it with one of double small parovarian cyst. He thought that sometimes, unless care were taken, a small parovarian cyst might be mistaken for hydrosalpinx.

Fibro-myoma.—Dr. SAVAGE showed a fibro-myoma, of the size of a cocoa-nut, which he had removed by hysterectomy. It was in the case of a patient, aged 58, had been present at least eleven years, and during the last three years had given rise to so much pain as to justify surgical interference.

REVIEWS AND NOTICES.

MEMORIALS OF JOHN FLINT SOUTH. Twice President of the Royal College of Surgeons, and Surgeon to St. Thomas's Hospital (1841-63). Collected by the Rev. CHARLES LETT FELTOE, M.A., Fellow of Clare College, Cambridge, and Professor of Latin in St. David's College, Lampeter. With a portrait. London: John Murray. 1884.

THE nephew of an honoured veteran of the profession, only two years deceased, deserves the thanks of the medical and literary public for publishing these memoirs. The most valuable portion of the work is an unfinished autobiography, extending to February, 1823, which includes many interesting personal recollections of the united hospitals of Guy's and St. Thomas's in the first quarter of the present century. The following graphic description of a hospital-surgeon, Mr. Henry Cline, in 1813, shows how times have changed as far as costume is concerned. "He was a tall, sickly, and very plain man, marked with small-pox, and very shy; but when he spoke, his smile was most pleasing and agreeable; he wore powder, as was the general custom, but his hair was most oddly dressed, a sort of *toupet*, with longish hair combed down straight, and matted with pomatum and powder. An old friend of mine used to say he looked as if he had put his head in the dripping-pan on one side, and the flour-tub on the other; but the simile would have been more correct had he said his hair had been well plastered down with butter and powder, or with oxide of zinc ointment....He too (like Sir Astley Cooper) appeared in the theatre in short knee-breeches and black silk stockings, and a brown coat, for in those good old times it was thought that, though dress in itself might be despised, yet the office of teacher involved a certain sort of attention to the outward garb." Such was still the costume of many hospital-doctors within the memory of some that are yet among us.

The *Memorials* include some amusing anecdotes and word-portraits of Astley Cooper, Abernethy, Cline, and other distinguished men of those days, written in the manner in which old pupils of London hospitals usually speak of their student-days, but in all cases with justice and literary ability. The old hospital apprentice-system was very bad, the absence of the appointment of house-surgeon objectionable, but the demonstrator of anatomy appears to have been at least as diligent as at the present period, working from ten to four daily, on every week-day. Mr. South soon succeeded in overworking himself, and rested awhile in a rural retreat in Buckinghamshire, where he witnessed a peculiarly bad case of underselling at an election of a parish doctor. A practitioner had held the appointment for several years, at a salary of £30, but at one annual election a younger man sent in a tender to do the work for £20, and was appointed; next year the former parish doctor offered to do the business for £10, and was accordingly reinstated. "The system of medical relief to the poor and of payment to the parochial doctor," writes Mr. South, "is not so disgraceful now as it was then; but, as a general rule, I know no class of men who are so ill-recompensed for their toilsome life, and for whom less allowance is made by the public in their rare neglect of their duties."

The professional career of Mr. South has been already described at length in our pages, in an obituary published a few days after his death in January, 1882. It is concisely summed up by the reverend editor of the *Memorials* in one chapter, where the piety and industry of his uncle receives well-deserved commendation. The work concludes with three chapters consisting of extracts from letters, a notice of Mr. Cline taken from an address delivered by Mr. South, thirty years ago, at St. Thomas's Hospital, and a description of the "new" (in 1814) anatomical buildings at St. Thomas's Hospital, also written by Mr.

South. The editor states in his preface, that much information and help in the preparation of these *Memorials* has been given to him by Mr. T. M. Stone, who possesses a vast store of knowledge of the past members of the Council of the College with which he was so long connected, knowledge which should not be lost, for in works like the *Memorials*, where it is preserved, the social characteristics of a great profession at different epochs of our history are saved from oblivion.

NOTES ON BOOKS.

The Roller-Bandage. By W. Barton Hopkins, M.D. With Seventy-three Illustrations. Philadelphia: Lippincott and Co. 1883. —This is an attempt to teach, by illustrations, the different methods of the roller-bandage. Beyond some preliminary remarks on bandaging, there seems to be really very little in this book that is likely to afford much assistance either to the student or to the practitioner. The proper application of the roller-bandage is not to be learnt by looking at illustrations, any more than by the study of elaborate descriptions. It is only by patient practice on the living subject that the student can become expert in bandaging; and a short practical course of minor surgery will be found the most ready means of affording instruction as to the different ways in which bandages may be used. The illustrations, for the most part, are unsatisfactory; and it is difficult to make out from the remarks in the preface whether these are intended to represent bandaging as it should, or as it should not, be.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW SURGICAL NEEDLE AND THREAD.

Sir,—Dr. Cousins has re-invented a surgical needle and thread just a quarter of a century old.

The same idea occured to me when a student at St. Bartholomew's Hospital. I could not, however, get anyone to make them for me, so I was obliged to do the best I could myself. I procured the finest pianoforte-wire I could get, cut it into convenient lengths, and softened it in a gas flame, except about three inches at one end to form the needle. I then rubbed it down with sand-paper as fine as I could, this proved to be a tedious process. You will find them mentioned in Holmes's *Surgery*, 1862, vol. iii, page 14.

I congratulate Dr. Cousins in getting them so nicely made. The nickelling is an improvement, but not absolutely necessary, as the steel wire never rusts in a wound.—Yours, etc.,

T. J. Schollick.

Guildford.

Sir,—I beg to thank Dr. J. H. Aveling for the letter which appeared in your last issue. It is an interesting fact that many modern innovations and improvements are the accidental resuscitations of old notions, which have been long forgotten by the lapse of time.

I made an extensive search through surgical writings before bringing my needle before the profession, but I certainly did not extend my inquiry to the surgical literature of the seventeenth century.

My surgical needle and thread has now been exposed to criticism for a period of nine months. It has been exhibited at many meetings of the Association, including the last annual meeting held at Liverpool; it has been described in all the leading medical journals, and it has also been seen and used by surgeons in different parts of the country; still, I am not surprised to learn—although it has been thus widely regarded as a surgical novelty—that it contains at least the revival of an old suggestion; for the simple idea of continuity must often have occurred to practical minds during the long period in which needles have been employed for the purpose of closing wounds. But, after all, my needle contains a little element of novelty, for I do not think that any reference will be found in surgical writings to a "flexible needle and continuous metallic thread." The flexible needle—made of pure hardened silver, and tipped with a steel point—is intended to facilitate the introduction of sutures in plastic surgery; and, while it is sufficiently rigid for this purpose, it can also be conveniently bent by the hand of the surgeon to any required shape. I have used it with great advantage in vaginal and rectal operations.

In conclusion, I feel much indebted to Messrs. Maw, Son, and Thompson for the efficient manner in which they have executed my designs. The nickelled steel and flexible silver needles will, I am sure, be fairly tested. If they prove to be genuine improvements, and are found to fulfil the special purposes mentioned in my paper, depend upon it they will not be forgotten; but if, on the other hand, the verdict of experience is against them, then most certainly they will pass away into oblivion, like the ancient "Fabrician needle sutures" of 1617. I am, sir, yours faithfully,

J. Ward Cousins.

Portsmouth, March 18th, 1884.

St. John Ambulance Association. H.R.H. the Duchess of Teck presented the certificates recently awarded by the St. John Ambulance Association to a "First Aid" Class, held at Florence. Addresses were delivered by Her Majesty's Consul-General, Mr. D. E. Colnaghi and the lecturer, Dr. A. R. Coldstream.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

Subscriptions to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161a, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 22nd, 1884.

MEDICAL LEGISLATION.

The Medical Bill which was before Parliament last year, would inevitably have become law had it not been crowded out by press of business at the fag-end of the session. This failure has given breathing-time to the corporations which, otherwise, would have been compelled to accept the inevitable. Hopes were doubtless entertained that something might supervene in the political world to defer to an indefinite future the reintroduction of the Bill, and so to prolong the lease of their individual licensing privileges and powers.

The Government Bill has, however, been promptly reintroduced into the House of Lords by the Lord President of the Privy Council, and, having been read a second time on the 6th instant, the corporations have manifested great activity and zeal in looking after their respective corporate interests. Attempts have recently been made by the colleges, both in Ireland and in Scotland, to form conjoint examining boards; but these attempts are so clearly attributable to the pressure of impending legislation, and have come so very late, that they cannot be regarded in a serious light, and most certainly they cannot avail to block the compulsory formation of one examining board in each of the three divisions of the kingdom, under the supreme control of a medical council which will be representative of the profession as well as of the corporations, which will, in fact, represent all interests, including those of the public.

The Government last year received between thirty and forty deputations on the subject of the Medical Bill, and it might be assumed that the time for deputations was past. Certainly no Government has before shown equal readiness and equal patience, in listening to representations from every conceivable quarter. The Irish College of Surgeons, as referred to in the Journal of March 8th, was not satisfied that the last word had been said, and therefore waited on the Lord-Lieutenant. On Tuesday last, the 18th instant, Lord Carlingford received no fewer than three deputations, one from the Irish Universities (Trinity College, Dublin, and the Royal University of Ireland), one from the University of Cambridge, and one from the London Apothecaries' Society.

None of these deputations opposed the Bill; one and all simply made representations to the Lord President bearing on points of detail. It is not for the Association to fight the battle of individual corporations. It has been altogether an exception on the part of any of them to aid the profession and the Association in the arduous struggle to secure the triumph of the broad principles of reform for which they have so long contended, and the corporations are sufficiently powerful to take care of their own interests.

Still, the Association has always distinctly reserved the right to move amendments in matters of detail, and the Government has always evinced a disposition to listen to suggested improvements. The Medical Bill of last year was supposed to err in giving undue facilities for the registration of the holders of colonial and foreign diplomas. In order to meet this objection, the clause relating to them has been made more stringent. In some countries, the possession of a medical degree or diploma does not of itself entitle to practise, a State examination being also indispensable. It is proposed, therefore, that besides proving that he possesses such a degree or diploma and is of good character, the candidate for registration must further show "that he is by law entitled to practise medicine, surgery, and midwifery," in the British possession or foreign country from which he obtained his diploma.

The great contests with respect to the Bill have been fought over the constitution of the divisional boards, each university, each distinct corporation, showing a feverish anxiety as to its own proportional representation on the divisional board; the universities being jealous of the corporations, and the corporations manifestly dreading their own ruin if the university influence should be strong enough to dominate the divisional board.

In England the corporations, in Scotland the universities, are accorded the majority of the seats. In Ireland, in the first instance, the corporations predominated; but, in passing through the House of Lords, the Bill was in this respect altered.

To outsiders, the importance of the contention raised on this point appears unduly magnified. The interests of education can scarcely suffer when all the medical authorities in each division of the kingdom are combined, and are thereby deprived of all special inducements to let candidates, for the sake of their fees or for any other reason, slip through their examinations too easily.

An important alteration in the present Bill, as compared with that of last year, has been made in the constitution of the divisional board for Scotland. In last year's Bill, the universities were given eight representatives, while the three corporations were each given one representative; an university representation of eight in a board of eleven.

In the present Bill, the board numbers thirteen members, eight being still allotted to the universities, giving an university representation of eight in a board of thirteen. The corporation-representatives, numbering five, are made up by giving two to each of the Royal Colleges of Edinburgh, and one to the Faculty of Physicians and Surgeons of Glasgow. We are glad to find that Lord Galloway expressed approval of this arrangement on the part of the corporations, and we trust that it may smooth the passage of the Bill through Committee.

The Bill cannot, indeed no Bill could possibly, conciliate universal approval; very few men exist who have not their own individual crotchets; to every variety of opinion, however, expression has been given on the subject of this particular Bill, and there is no doubt that it has secured a greater amount of general support than any other measure ever placed before the Legislature. Legislation is indispensable; continued agitation must exercise a baneful influence, and legislation is necessary to terminate agitation.

The circular issued in our last number by the Medical Reform Committee, soliciting signatures to a petition in favour of the Bill, was signed by the chief officers of the Association, and should at once be acted upon, particularly in the way of writing to peers and to members of the Commons to support the Government Bill.

The Lancashire and Cheshire Branch of the Association, which, it is confidently believed, will ere long number one thousand members, has invariably proved most loyal in its promotion of medical reform. The Council of the Branch met in Manchester on Tuesday last, the 18th instant, and unanimously passed a resolution, authorising the President and Secretary to sign a petition in favour of the Government Bill, and requiring the Secretary to address all the members of the legislature connected with the district to support the Bill. We trust this excellent example will be speedily followed by the other Branches of the Association.

DR. KOCH'S SIXTH CHOLERA-REPORT.

A FEW weeks ago, we drew attention to the publication of the fifth report of the German Cholera-Commission, which gave an account of its labours in India up to January 8th. The Berlin journals of the 14th instant publish a further instalment—the Sixth Report—which, like its predecessors, is written by Dr. Robert Koch; it is dated Calcutta, February 2nd. The space at our disposal will not permit our giving a verbatim translation of this important document, though we propose giving a very full abstract of it for the information of our readers, and to supplement this with such remarks as the evidence adduced appears to require.

Dr. Koch mentions that, in their last report, the Commission were unable to state definitely that the bacilli which had formed the subject of observation were strictly limited to cholera, and reasons are assigned for the difficulty which they had experienced in doing so. They now, however, consider the matter to be definitely solved in the affirmative, and state that the organisms manifest the following distinguishing characters. "They are not quite straight, as other bacilli are, but slightly curved, comma-like. The curvature may be even so marked that the stave may almost present a semicircular form. From these curved staves, s-shaped figures, and more or less elongated, slightly undulating, linear forms may be developed in 'pure cultivations,' of which the first two segments and the last correspond to the form of the bacilli as found in cholera, and which, continuously increasing in number, remain attached to one another." Furthermore, they manifest very lively voluntary movements, which are best seen when examined in a drop of nutritive fluid suspended from the under surface of a cover-glass. In such a preparation, the bacilli may be seen to swim with the greatest celerity across the field. Their behaviour in nutrient gelatine is particularly characteristic; they form colourless colonies in it, which are closed at first, and look like strongly refringent accumulations of glass-fragments. These colonies gradually liquefy the gelatine, and extend themselves over a limited area. Further, they may be distinguished with tolerable certainty when cultivated in hollowed slides, as they are always found at the margin of the drop of nutritive fluid, and their peculiar movements may be observed as well as their comma-shaped forms after the application of solutions of anilin-dyes.

These bacilli were found in all the intestinal discharges of cholera-cases, and in the contents of the intestinal canal at *post mortem* examinations, but not in any other disease, nor were they to be found in specimens of dirty water from various sources. As it is known that cholera-like symptoms are induced by arsenic, an animal was poisoned with this substance, but cholera-bacilli could not be detected.

Dr. Koch, in discussing the connection of these bacteria with cholera, observes that "the relationship must either be that the growth of the specific bacterium can only be favoured by the cholera-process, or that the bacterium is the cause of the disease, and that the disease is only induced when it has found its way into the intestine of man." The first supposition is believed to be negatived by the circumstance that, in order to account for the presence of the bacilli, it must be assumed that they are always present in the intestine, which, it is stated, is not the case. "Seeing, therefore," he writes, "that the growth of the bacterium cannot be due to the cholera-process, there is nothing left but the inference that it is itself the cause of the disease. Many other circumstances point in an unmistakable manner to the same conclusion, and notably the behaviour of the bacilli during the disease-process. Their presence is limited to the organ which is the seat of the disease,—the intestine." They have only been twice observed in the vomit, and on both occasions the appearance and the alkaline reaction showed that the fluid had come from the intestine. In the earlier dejections of a cholera-patient, so long as they are still feculent, there are but few bacilli, whereas the subsequent watery odourless dejections contain the bacilli in great numbers, and, coincidently, all other bacteria disappear almost completely, so that in this stage of the disease an almost "pure cultivation" of cholera-bacilli is obtained. As soon as the disease subsides and the dejections become feculent, the comma-like bacteria gradually disappear, and are not to be seen after recovery. A like description holds good for the conditions observed at necropsies. When death occurs at the height of the disease, the cholera-bacilli are present in enormous numbers and almost pure, whereas when death occurs later on, masses of putrefactive bacteria are also found.

The foregoing summary will suffice to indicate the character of the observations, and the deductions which the Commission have recorded, and it will be noted that Dr. Koch and his colleagues have come to the conclusion, not only that the organisms in question are strictly limited to the cholera-process, but that they are the veritable cause of the disease. It would be superfluous to say that the statements of such a Commission as this are entitled to the greatest respect; at the same time, it is incumbent on the profession to study the evidence most carefully; indeed, the highest compliment which can be paid to any Commission of this character is to submit the evidence which it has adduced to early and searching inquiry. The time, however, has not come for this as yet in the present instance, seeing that the reports hitherto issued are only summaries of the results. At the same time, it is to be presumed that the most striking of the results have been announced; at all events, the most striking of those which appear to the observers to give support to the view with which they started on their labours, viz., that the disease is due to a micro-organism. It will be remembered that the French Commissioners started with a like idea, and believed that they had found what they were in search of in the blood, whereas the German Commission found it in the intestine. Considering the very rapid advances which have been made within the last three or four years in the study and detection of bacterial organisms, it is to be expected that, from time to time, new kinds will be found in the human body as elsewhere, and the wonder is that the forms of such organisms which are so abundantly found in the mouth and alimentary canal during health, for example, are so constant, seeing that innumerable varieties must pass the lips at every meal. This, to our mind, shows that, under normal conditions, the secretions of the mucous surface are peculiarly adapted for the growth of certain forms of organisms, but that here, as elsewhere, if the character of the nutrient fluid be altered, the forms which previously prevailed will, to a greater or less extent, become replaced by others. The reason for this, as we have on a previous occasion remarked, is variously interpreted by mycologists of the first rank—one class maintaining that the altered medium has caused the micro-organisms to assume a different character; whereas others are equally firmly of opinion that it is not the form of the organism which is modified, but that the change which has occurred in the nutritive fluid has proved to be peculiarly suitable to some one or other of the many kinds of micro-organisms ever present in the alimentary canal, and that these have consequently outgrown all others.

It will be recollected that the French Commission suggested an exexplanation of the latter character with regard to the presence of certain bacteroid forms in cholera; and doubtless the German Commission will have to meet further criticism of this kind, seeing that the only evidence adduced by Dr. Koch in support of the unqualified statement that the bacillus which he describes as present in cholera is the veritable cause of the disease, is the circumstance that the micro-organism has not been detected elsewhere. That this particular form of bacterium may be new, in so far that it has not been specially singled out and named, is, we take it, by no means improbable; but it is quite possible that the evidence which Dr. Koch adduces in support of its being the *cause* of cholera may receive a wholly different interpretation at the hands of other observers.

These bacilli are said to show themselves abundantly only after the dejections have ceased to present feculent characters—ordinary putrefactive bacilli being present until this stage. During the height of the disease, cholera-bacilli predominate very greatly; and, when the dejections begin to assume their ordinary character, the cholera-bacilli disappear, and the ordinary forms return. It might, perhaps, be urged by opponents that it is as plausible to assume that the cholera-form of bacillus was developed because the fluid contents of the intestinal canal underwent a very great change on the advent of the disease, as that the organisms themselves were capable of inducing such changes in the system as would produce fluid material conducive to their growth.

Further, it might be asked whether it would not be as logical to assume that, in their turn, the putrefactive bacteria had resumed their predominance because they had succeeded in counteracting the action of the cholera-bacillus—had, for instance, induced the liver to secrete bile, and the secretions of the alimentary canal to resume their normal character. It must also be remembered, that it is by no means unusual for cholera to run a remarkably rapid course; and that, even in severe cases, complete recovery, as well as death, may take place within, comparatively, a few hours. The choleraic flux may have been equally severe in both cases (though the severity of this symptom is by no means an infallible index of the severity of the disease), and yet, notwithstanding the assumed destruction of the intestinal mucous membrane by the bacilli, the alvine discharges have been known to assume a normal appearance in a remarkably short time. Questions of this character arise whilst studying the document, and others of a like kind will doubtless occur to such of our readers as are accustomed to sift evidence of this description.

In passing, we may also remark that less prominence appears to be given to the presence of micro-organisms in the intestinal *tissues* than was the case in the report submitted from Alexandria; and, with regard to the precise appearance of the organisms themselves, the description now furnished tends to convey the impression that they manifest more of the characters of the organisms which it was formerly the custom to speak of as "very minute vibriones," than the description given heretofore.

The latter part of the report is of a polemical character—arguments being adduced to show that, although all the attempts at inoculation of animals had proved fruitless (no symptoms even simulating those of cholera having been induced), the force of the evidence that the disease was due to the organism was by no means weakened. It had been found that such diseases as typhoid fever and leprosy could not be communicated to animals, notwithstanding that in each of these diseases, likewise, the existence of "a specific bacterium had been demonstrated." As regards cholera, it is added that it is not likely that the disease will ever be communicated to animals, seeing that "cholera-infection material is scattered throughout the length and breadth of Bengal, during all seasons of the year," without a single authenticated case of the disease in them having ever been recorded. To cite typhoid fever and leprosy, however, in this connection, cannot very materially add to the force of the argument that the cholera-bacillus is the cause of the disease, seeing that as regards neither of them has it been unequivocably demonstrated that they are communicable even from person to person; and, with reference to their so-called specific organisms, the profession is by no means unanimous in the opinion that these are the causes of either typhoid fever or leprosy. Typhoid fever, indeed, is somewhat confidently ascribed to more than one micro-organism. It has long been ruled that the question of the causation of cholera cannot be decided by arguments and comparisons, however ingeniously devised, and future observers would do well to bear in mind the remarks made by the *Standard*, in its recent article on Ruskin's "Storm Clouds." "There are not a few researches which might have better stood the test of time had the researchers been less gifted with poetic insight, which gives so large a return of conjecture for so small an investment of fact."

THE DANGERS OF OUR MILK-SUPPLY.

RECENT occurrences have emphasised the importance and necessity of some effectual means being adopted for safeguarding the milk-supply of our towns. This is a matter which has over and over again been urged in our columns, and has more recently been pressed upon the attention of the Government by the Health Section of the Social Science Association. No one who has studied the volume of evidence brought before the Huddersfield Congress of that body can fail to be convinced of the imperfection of our present defences against the distribution of disease by the milk-pail. Even the first step of reform, the placing of dairies and milkshops under the supervision and inspection of the local sanitary authority, has not yet been taken. An attempt in this direction was, indeed, made last session in the House of Lords. It is much to be regretted that, owing to the indifference of the Minister who had charge of the Bill in the Commons, the assent of that House could not be obtained to it, and the attempt had therefore to be abandoned. We have seen as yet no signs of the re-introduction of this most useful and necessary measure, although its principle commands practically universal assent. It will no doubt be necessary that external pressure should be brought upon the Government before they will move again in the matter; and we trust that some of our legislators who are interested in sanitary science will question the Government as to their intentions with regard to the re-introduction of the Dairies Bill of last session.

Special occasion for such an inquiry may be found in certain occurrences at Dover which have just been reported upon by Dr. M. K. Robinson, the local health-officer. Dr. Robinson's attention was directed last month to an extensive and rapidly diffused epidemic of a severe form of sore-throat, accompanied by fever and enlargement of the glands of the neck. The total number of persons attacked is not clearly stated in the report, but the dimensions of the epidemic may be gathered from the fact that no less than one hundred and thirty cases occurred amongst the customers of one particular dairy. The special symptoms of the persons attacked were shivering, followed by headache and fever, pains in the limbs, thirst, parched lips, and a vesicular eruption of the throat: in some instances with a similar eruption on the lips and other parts of the body. Many had enlarged tonsils, going on in some instances to suppuration. The most common accompaniment, however, was the enlargement of the glands of the neck, producing in one instance temporary deafness, and causing a large amount of distress in many cases. There were some cases of erysipelas and other complications, and in one child there was a quantity of ropy mucous discharge from the mouth.

The vesicular character of the eruption, the soreness of the throat, and other symptoms, bear a striking resemblance to the apthous fever of cattle, commonly known as foot and mouth disease. Dr. Robinson's investigations into the circumstances of the attacks shewed conclusively that the only condition common to all the sufferers was the milk-supply, and he accordingly set himself to discover in what manner the milk could have become infective. Nothing wrong could be discovered at the dairy whence the milk was distributed, but it was elicited that the home produce was supplemented from three sources a few miles out of Dover. On one of these three farms the milch cows had been suffering from foot and mouth disease, though this fact was at first stoutly denied. Dr. Robinson appears to entertain no doubt that this outbreak of foot and mouth disease amongst the cows and the subsequent epidemic amongst milk-drinkers stand to each other in the relation of cause and effect; and certainly the facts that he adduces as to the way in which the disease picked out the customers of the implicated dairy are very remarkable.

Hardly a month passes but some "accident" due to the unregulated state of the milk-trade is reported in one or another part of the country. Mr. Ernest Hart, in a paper read before the Social Science Congress last autumn, gave particulars of no less than 82 milk-epidemics, representing some 5,000 cases of disease and 580 deaths, which had been recognised in the course of little more than a decade. The list has since been extended, and is still extending. So far as we are aware, the Dover outbreak is the first extensive epidemic of its kind that has yet been reported, though there are a number of well authenticated instances of animal diseases being transferred to the human subject. The whole question of comparative pathology is worthy of more serious study than has yet been bestowed upon it, and we cannot conceive a more useful and interesting field for the medico-sanitary researches that are being carried on by the Medical Department of the Local Government Board under the title of "Auxiliary Scientific Investigations." But the Dover outbreak has a more immediate lesson to teach us. It cannot be doubted that if the dairy-farm in question had been in proper relations with the local sanitary officers the outbreak need never have taken place. The Order of Council issued in 1879 is to all intents and purposes a dead letter in most parts of the country, and the county magistrates, who are now responsible for the sanitary well-being of dairy-farms, have absolutely no machinery for their effectual regulation. The moral of the present scandalous position of affairs has already been sufficiently pointed out. It is to be hoped that our legislators will not be too blind to see it.

WE understand that Dr. Joseph Coats, of Glasgow, will be a candidate for the chair of pathology in the University of Cambridge.

AT the completion of the twenty-fifth year of his holding office as a professor in the University of Berlin, Professor Frerichs has been raised to the rank of a noble.

A PROVIDENT Dispensary and Medical Club, of which Lord Lilford is the President, and Lady Gunning the Honorary Secretary, has been established at Thrapston, Northamptonshire, for that and the adjoining parishes.

IN connection with the inauguration by the Lord Mayor, on Wednesday, April 2nd, of the new hospital at Gravesend, erected by the Corporation of the City of London, cards of invitation have been issued to a *déjeuner* at the new hospital at two o'clock.

SIR JOSEPH LISTER, Bart., will take the chair at the Parkes Museum on Thursday, March 27th, at 8 P.M., when Mr. Watson Cheyne will give a demonstration of all the principal types of micro-organisms. Tickets for admission can be obtained through members of the museum.

A SECT is said to have been discovered at Rostov, in South Russia, whose object is the poisoning of children by narcotics. It is believed to owe its origin to a woman who murdered her children "in order to deliver them from earthly suffering, and to procure for them celestial happiness."

A MEETING of the St. Bartholomew's Hospital Ambulance Company was held in the great hall of that hospital on Thursday, March 13th, under the presidency of Sir Sydney Waterlow, Bart., M.P. The movement has received the support of most of the members of the staff of the hospital. The Company numbers a hundred members, who are now actively engaged in ambulance-drill.

DR. E. SYMES THOMPSON has taken as the subject of his next course of lectures at Gresham College, "The International Health Exhibition." The first three lectures, on March 25th, 26th, and 27th, will deal with the subject of food; and the fourth, on March 28th, will be a general discourse on "What to look for in each Department." The lectures begin at 6 P.M., and are free.

IT is now arranged that the evening meetings of the Hospitals Association shall be held at the rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square. The first will take place on Wednesday next, when Mr. William J. Nixon, House-

Governor of the London Hospital, will read a paper on "Difficulties Associated with the Administration of the Out-Patient Department, and How Best to Deal with Them." Sir Andrew Clark, Bart., will preside.

WESTMINSTER TRAINING SCHOOL FOR NURSES.

THE Westminster Training School and Home for Nurses, founded by the late Lady Augusta Stanley, at St. Anne's Gate, Westminster, was formally opened by the Prince and Princess of Wales on Wednesday last. An address was read by the Vice-Chairman, Sir Rutherford Alcock, to which the Prince of Wales replied, expressing a hope that the institution would soon be free from all pecuniary liabilities.

DR. J. HALL DAVIS.

WE deeply regret to have to announce the sudden death, on Wednesday morning, of Dr. Hall Davis. This well known obstetrician had, only within the past week, resigned his appointment of obstetric physician to the Middlesex Hospital, which he had honourably filled for many years. He had been ailing for some time, but it was hoped that rest from his official duties would ensure his recovery, and enable him to enjoy many years of well deserved leisure. Dr. Hall Davis was an Honorary Fellow and former President of the Obstetrical Society, and the author of several contributions to the *Transactions* of societies and to medical papers, some of which have appeared in the JOURNAL. The present assistant obstetric physician is Dr. A. W. Edis, who will doubtless be selected to fill the senior appointment.

MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

WE are glad to see that a suggestion which was recently thrown out in our columns, with the view of spreading a knowledge of the benefits of the Medical Sickness, Annuity, and Life-Assurance Society, has already been acted upon in more than one quarter. The subject was brought before the West Kent Medico-Chirurgical Society at their meeting at Greenwich, on the 7th instant, by Mr. Brindley James. The reception given to the subject by members of this Society was, we understand, such as to encourage the hope of further benefit flowing from the discussion of the subject at other societies, or at the Branch meetings of the British Medical Association. We are requested to state that the secretary of the Medical Sickness, Annuity, and Life-Assurance Society has made arrangements to attend any meetings in the country at which it is proposed to discuss the work of the Society. With the view of arranging such attendance, communications should be addressed to Mr. C. J. Radley, Secretary, 26, Wynne Road, S.W.

WESTON'S WALK.

THIS great walk is now a matter of history. On Saturday last, Mr. Edward Payson Weston completed his 5,000 miles at half-past nine o'clock, at the Royal Victoria Coffee-hall, amid the enthusiastic applause of a crowded and representative assembly of Englishmen and Americans. The stage was occupied by an influential company, among whom were at least a score of medical men and an equal number of clergymen. During the week, Weston walked regularly every day from 7 in the morning till half-past 9 at night, with an interval of rest from 5 P.M. till 7.30 P.M. Notwithstanding the loss of sleep during the last two nights, from the excitement on approaching the close of his undertaking, during the week Weston was quite free from the drowsiness which had been so overpowering nearly every morning for the first three-quarters of his tour. He completed 45 years of age with the termination of his walk, when he was found to weigh 9 st. 12 lbs., a loss of exactly 8 lbs. since he started from London four months before. A careful examination proved him to be in excellent health, and quite fit to set out on a task of equal magnitude on the following day. So healthy and vigorous was he, mentally and physically, though the last but one mile had been the fastest of any, having been done in 9 min. 17 sec., that, after the presentation of addresses of congratulation from the Councils of the Society for the Study and Cure of Inebriety, and the Medical Temperance Association, and a special vote of thanks spoken to by Dr. Hare, President of the Metropolitan Counties Branch of the British Medical Association, Weston made a long and spirited reply. The medical framer of the conditions of the walk testified that all these conditions had been honourably observed, and that, on several occasions, more than the stipulated daily distance of 50 miles had been covered. Few walks have ever been begun, carried on, and ended under greater difficulties. The sore on the pedestrian's heel, which was a continual source of irritation for half the time, would have prevented most men from walking five miles a day; while Weston, from repeated pecuniary disappointments, was weighted with the depression of spirits consequent on a regularly increasing deficit, amounting at last to about £700. To these must be added the fact that, contrary to medical remonstrances, he started while out of condition, and suffering from acute catarrh. Weston was accompanied throughout by reliable judges and referees, and the whole journey was done in the public eye, so that there can be no doubt as to the accuracy of the record. The feat thus successfully accomplished is unique. Endowed with no remarkable muscular power, Weston has owed his success in great part to the mode of living he adopted, the chief feature of which was total abstinence from all intoxicating drinks. Whatever may be attempted and executed in future, this remarkable and original experiment has demonstrated that a resort to intoxicating stimulants is not essential to the accomplishment of severe and long continued bodily exertion. We recognise, with peculiar pleasure, the constant support which Weston has received, during his performance, from the medical profession.

FAILURE OF THOUGHT-READING.

QUICKLY following the exposure of a spiritualist, there comes from Vienna an account of the failures of a "thought-reader" named Arthur Cumberland. After several successful private *séances*, he attempted a public performance, which ended in almost complete failure. One of the mediums, Professor Weinlechner, giving his experience to the audience, explained that the essence of the performance lay in the "thought-reader's" influence on the medium, adroitly managing to be led by him, and judging, from the increase or decrease in muscular and pulse movement of the person whose hand he held and whose forehead he touched, whether he was approaching the desired place or not. A private performance in the editorial offices of the *Neue Freie Presse* was still less successful than the public one, Cumberland, it is reported, failing entirely to read a single thought or find anything concealed.

CREMATION.

A LEGAL correspondent writes:—Apart from sentiment and custom, which, however, in considering a question like this cannot be disregarded, the greatest objection to the adoption of cremation lies in the fact that it might undoubtedly render the detection of murders more difficult. There have been several instances within recent years where murders were only suspected some time after the death and burial of the person murdered, and where unmistakable traces of poison were found when the body was exhumed. Such cases are no doubt the exception, and in the majority of cases of suspected poisoning an inquest has been held and examination of the body made before burial. Where this happens, it would make no difference whether the body was disposed of by cremation or by sepulture, as either way the necessary investigation as to the cause of death takes place first, and where there is reason to suspect foul play, the necessary evidences would in either case be preserved. But where there is no suspicion at the time, and a medical certificate of death has been given in the ordinary course, cremation would undoubtedly remove the means of verifying any suspicions that might subsequently arise, and might prevent murders being detected. Such a possibility is a very serious objection to cremation; and if the practice ever became established in this country, it may be necessary to alter our law as to the holding of coroners' inquests, and to insist on their being held in many cases where now they are considered unnecessary. If cremation is to be introduced, it will also be necessary to make laws to regulate it, so as to prevent public feelings being outraged, and to secure proper records being kept. In case of burial, these things are provided for by law, and their observance protected by making those who violate them liable to punishment. As cremation has never been practised in this country, there are no legal regulations applicable to it, except the rule of common law, which forbids it being conducted in such a place or manner as to cause a public nuisance. Mr. Price had selected the top of a mountain for his experiment, and that was held, by the jury, to be a place where no nuisance was created; but a man who burned a body in a populous neighbourhood, unless he did so in a manner different from that observed by Mr. Price, might very possibly be convicted, and if so would be liable to fine and imprisonment, at the discretion of the court before which he was convicted. If cremation is to be practised in this country, it should be regulated by law, so as to secure the due observance of public decency, and safety from irregular or premature destruction of the corpse, and to give security from prosecution to those who properly conduct rites which are now seen to be not illegal.

THE ORIGIN OF THE CHOLERA-EPIDEMIC IN EGYPT.

THE United States Consul-General at Cairo, in a report presented to his Government, attributes the origin of the epidemic to the unrestricted intercourse allowed with India, owing to English influence. He believes that the English Government interfered prejudicially with the action which "the Sanitary Maritime and Qurantine Council at Alexandria" proposed to take when a recrudescence of cholera in Bombay and Calcutta was reported in May and June. Unrestrained commercial intercourse led, he believes, to the importation of the disease. The unwholesome state of Damietta favoured the spread of the epidemic. It is always an exceedingly unhealthy town. "The exhalations there from decaying matter cause, every summer, ophthalmia and dysentery. It is also subject, during spring and summer, to the *khamsin*, a most oppressive hot wind, which carries with it clouds of dust and sand. When the cholera, according to the official report, appeared at Damietta on the 21st of last June, in a very short time it became epidemic. No remedies were employed. There was a thorough absence of medical attendance; and the poor natives, not knowing how to treat it, obstinately abandoned themselves to faith, and perished by thousands. About the middle of last June, a great fair was held at Damietta, which attracted over fifteen thousand visitors from neighbouring and distant villages. At the time this fair was held, several Hindoos visited Damietta for purposes of trade, and also a certain number of coal-men and firemen, employed on English steamers coming from Bombay."

CONFERENCE ON SCHOOL-HYGIENE.

A SPECIAL committee of the National Health Society has been formed to inaugurate a conference on school-hygiene during the International Health Exhibition. It is hoped that the conference may commence on Monday, July 21st, and continue through the week during the afternoons. The conference will deal with all subjects bearing on health in schools, papers being already promised by Professor de Chaumont, F.R.S., on Diet in Schools; Mr. Edgar Browne, on Eyesight in Relation to School-Life; Mr. Thomas Dyke, on the Duties of School-Managers in Relation to Epidemics and Health of Communities; Mr. E. Noble Smith, on Posture in Schools in Relation to Physical Development; and Dr. Farquharson, M.P., on Public School Life and Organisation in its Health-Relations. The committee consists of the following members: Mr. Ernest Hart, Chairman; Professor F. de Chaumont, F.R.S.; Dr. Ralfe; Mr. Pridgin Teale; Dr. Clifford Allbutt; Dr. Farquharson, M.P.; Mr. Noble Smith; Surgeon-Major Evatt; Mr. James Heywood, F.R.S.; the Rev. Harry Jones; Mr. E. N. Buxton (Chairman of the London School Board); Sir Frederick Pollock, Bart.; Mr. Alder Smith; Lady Borthwick; Mrs. Priestley; Mrs. Buckton; Mrs. Lawrence Cane. All those interested in the subject, and who are willing either to read papers or to join the conference, are requested to communicate with the Secretary, Mr. Owen Lankester, 44, Berners Street.

UNIVERSITY OF CAMBRIDGE.

IN May next, a Professor of Pathology will be elected, with a stipend of £800 a year; and we understand that, soon afterwards, four medical and surgical lecturers will be appointed, with stipends of £50; one of these lecturers will be required to take the subject of midwifery. The electors to the professorship are the Vice-Chancellor, Sir James Paget, Dr. J. F. Payne, Dr. Burdon Sanderson, Dr. Paget, Dr. Humphry, Dr. Latham, Dr. Gaskell, and Dr. M. Foster. The lecturers will be appointed by the General Board of Studies.

FOOTBALL: THE KILLED AND WOUNDED.

THE result, on one day recently, of four football-fights—it is a gross misuse of language to call them "games"—was that two young men lost their lives, and two sustained fractures of the leg, in one instance apparently a severe compound fracture; one of the deaths was said to have been due to heart-disease, the other was clearly caused by fracture of the spine in the neck. It is a great pity that what might be a manly and health-giving game should have been allowed to degenerate into a kind of organised faction-fight. The human skull, unlike that of the goat and bull, is not adapted for use as a battering-ram; the death of a young man who perishes in the attempt to emulate the tactics of a goat or a bull may perhaps not be any great loss to the community, but what we complain of is that such conduct should be held up before the eyes of a number of young men and lads as an example to be followed. The constituted authorities of football ought to be able to make regulations sufficiently stringent to prevent the, at present, high percentage of killed and wounded. If they want a precedent, they have only to turn to the action of the cricket legislature, which is to meet at Lord's next month in order to pass laws intended to put a stop to certain dangerous abuses which have crept into the noble game.

PRIVATE BILL LEGISLATION.

AN acute observer of Parliamentary institutions has somewhere remarked that there are three stages in the attitude of the Government of the day with regard to any given reform. When a reform is first suggested from the outside, its acceptance is declared to be impossible; later on, it is admitted to be worthy of consideration, and finally, though after a long interval, it is brought triumphantly forward as something which the Government have long been pining to introduce, and the principle of which they enthusiastically endorse. The subject of private Bill legislation has now reached the second of these stages; and there is a faint hope that it may before long reach the third. Mr. Dodson has indeed promised "that the Government would be not only willing, but anxious to give to the question full consideration, when the House had time and opportunity for dealing with it in a complete and satisfactory manner;" though it is as well to remember that this soothing promise was the climax of a debate which stood between the House and the voting of supply. The facts and figures adduced by Mr. Craig Sellar, in his excellent speech of Friday last, are irresistible arguments against the continuance of our present system of private Bill legislation. It is not within our province to discuss in detail the remedies promised for the scandalous waste of money, power, and public time which appears to be inseparable from the successful conduct of a private Bill through the shoals and quicksands of the committee-rooms. But we are bound to say that Mr. Sellar's suggestion of local inquiries on the spot appears to us to contain many of the elements for the solution of the difficulty. We have repeatedly had to complain of the disabilities to which medical men have had to submit through ignorance of the object and scope of local Bills prosecuted by the corporations of towns in which they may happen to live. The *locus standi* of the profession before Parliamentary committees has often been questioned; and, even where serious trouble and expense have been incurred in resisting the provisions of local Bills, the decisions of committees have been of a very unsatisfactory and contradictory character. Of all tribunals, a committee of three or four members of Parliament, of no special training or experience, is the very worst. It is, perhaps, hardly surprising that the arguments and sophistries of counsel should have before such a tribunal a wholly undue influence; and the fate of a Bill becomes therefore largely a question of length of purse for the employment of the best "talent." It may be argued that companies seeking powers from Parliament know perfectly well beforehand the chances to which they will be subject; and, if their Bill be thrown out, they need not expect that the decision has been wholly guided by the weight of evidence. But these arguments cannot, in any event, have validity in the case of Bills promoted by corporations, and affecting the interests of the medical profession. We observe with satisfaction that a Select Committee has been appointed, under the presidency of Mr. Talbot, to consider the clauses in the several Bills now before Parliament which contain clauses antagonistic or in addition to the general statute-law. It is to be hoped that this committee will interpret the reference to them more more liberally than the committee which sat upon the same question in 1882, so that evidence may be submitted to them on the general question of local legislation in its relations to the medical profession. A remarkable illustration of the haphazard way in which private Bill legislation is now conducted is afforded by the motion made by Lord Salisbury on Wednesday last with regard to Bills which propose to displace any appreciable number of artisans' dwellings. One of the standing orders of both Houses requires that, in the case of every private Bill which proposes to destroy and take compulsorily more than fifteen houses, a statement is to be made as to the method in which the promoters propose to supply the place of the houses so destroyed. It is matter of common knowledge that this standing order is pretty constantly evaded; and Lord Salisbury proposed that, in order to secure a greater check upon local Bills affected by the order, they should be printed and circulated amongst the peers in the same manner as public Bills. We doubt if the noble marquis can have fully gauged the increase of his responsibilities which the perusal of reams of private Bills would entail, nor does the plan he proposes promise to afford any real check to the rapacity of railway companies. The House of Commons have a standing order that requires any deviation from, or addition to, the general statute-law proposed in private Bills to be specially reported by the committees to which they are referred, and to be printed in the proceedings. If this useful order were extended, so as to provide that the mode in which each promoting company proposes to re-house the working-people it intends to displace, shall be specially mentioned in the report of the committee to the House, this would entirely meet Lord Salisbury's objection, and be infinitely more satisfactory than the reprinting, at the public expense, of quires upon quires of clauses of no public interest.

SMALL-POX AT COVENTRY.

THE importance of each and every district being provided with hospital accommodation for cases of infectious disease has been strikingly illustrated at Coventry. During the summer of last year, small-pox appeared in the town in connection with one of the principal hotels, which was closed, and twenty of the attendants re-vaccinated. At the commencement of the outbreak, one ward of the Iron Hospital was occupied by scarlet fever cases, and as it is impossible safely to isolate separate diseases there, it was with the gravest sense of responsibility that Dr. Fenton, the health-officer, decided to remove the female patients from the hotel into the second ward. A greater difficulty still was experienced when a male servant was attacked, for whom there was no place of isolation available. Subsequently the local board decided to utilise a house in the district as a scarlet fever hospital, and the removal of this boy and his mother to the Iron Hospital was followed by the happiest results. The lesson inculcated by the outbreak has not, we are glad to observe, been lost upon the sanitary authority, who are about to provide a new hospital capable of meeting the requirements of their district. The value of re-vaccination was clearly manifested during the prevalence of the disease. Out of twenty persons re-vaccinated, not one subsequently contracted the disease. Those who were attacked, and had been vaccinated in infancy, had the disease in so modified a form, that it was scarcely recognisable. To the influence of vaccination must also be attributed the fact, that the disease was present so long without more serious consequences resulting.

THE ITINERANT SHOWMAN.

THE deputation from nine metropolitan Vestries that waited upon the Home Secretary last week to present a memorial praying for summary power to repress the itinerant showman and his belongings, cannot be congratulated on the success of their mission. Sir William Harcourt did not hesitate to say that he quite disagreed with their views, and promised but scant consideration of their representations. This unsatisfactory result seems to have been due, in a great measure, to the way in which the petitioners presented their grievance. Too much stress was laid on the fact that persons of this kind are free from the calls of the tax-collector, that annoyance was often caused to ratepayers, and that the quality of their entertainment was of a questionable character. Without discussing the measure of enjoyment afforded by "merry-go-rounds" to their patrons, a subject which has been freely ventilated in the daily Press, it is to be noted that from a sanitary point of view the itinerant showman is not a desirable neighbour. But little control can be exercised over his habitation or caravan, which is much more of a castle that the typical Englishman's dwelling, and which cannot, under ordinary circumstances, be brought within the provisions of the Sanitary Acts. On the occurrence of infectious disease in one of these vehicles, the efforts of the local authority to secure isolation or disinfection are next door to hopeless. A few weeks since (see BRITISH MEDICAL JOURNAL, March 1, 1884, p. 458) our columns contained an account of an extensive diffusion of scarlet fever through the agency of a travelling van. This is by no means an uncommon occurrence; and it seems a pity that Sir William Harcourt's attention was not directed to the sanitary aspect of the case against the peripatetic class of roadside entertainers.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT a meeting of the Association of Fellows of the College, held in Birmingham on Thursday, it was resolved, "That the officers of this Association be authorised to state, at the meeting at the College on the 24th instant, that the concessions announced by the Council include all the objects for which the Association has contended, and that it desires to recognise the readiness and grace with which the Council has granted them."

THE LOWER CONGO EXPEDITION.

DR. ROLPH LESLIE, of the University of Toronto and St. Thomas's Hospital, who served in the Russo-Turkish and other recent wars, has been appointed Surgeon-General of the Lower Congo. Dr. Leslie lately returned from the Congo, where he acted as physician to Sir Frederick Goldsmid's expedition, and now he accompanies Sir Francis de Winton, who is governor of the district. Dr. Rolph Leslie was on his way home from Africa at the time of the slaughter of Baker Pasha's troops, when Dr. Armand Leslie was killed; and there have been many mistakes of identity, as both served together in three recent wars.

DEPUTATIONS TO THE LORD PRESIDENT OF THE COUNCIL.

ON Tuesday last, Lord Carlingford received three deputations with reference to the Medical Acts Amendment Bill. The two Irish Uni versities, the University of Dublin, and the Royal University, sent a combined deputation, headed by the Rev. Dr. Samuel Haughton. The University of Cambridge also sent a deputation, which included among its members Dr. Paget, the Regius Professor of Physic, and Professor Michael Foster. The object of the amendments which this deputation urged the Lord President to prepare was to prevent the universities from being hampered by a minimum course of education prescribed by the Medical Board, and to reserve to them the freedom to make and improve their regulations for their own students when aiming at a higher than the minimum standard. A deputation from the Society of Apothecaries of London, consisting of Dr. Byars, Mr. Statham, Dr. Semple, Dr. Randall (Chairman of the Court of Examiners), and Mr. Upton (clerk of the Society), also had an interview with Lord Carlingford on the constitution of the Medical Board for England, and the claim of the Society to be represented on that Board. The Lord President, having explained the difficulties attending that portion of the Medical Acts Amendment Bill, stated that he would consider the observations which had been addressed to him on behalf of the Society of Apothecaries.

EXERCISE FOR GIRLS.

SEVERAL daily papers have recently discussed a letter from Mr. H. P. Dunn, published in the *Standard*, on the use and abuse of gymnastics for young women. The letter, as might be expected, turns attention to the evils of excessive gymnastic training. As violent exercise produces bad results on weak youths, and as girls are, on the average, weaker than young men, it is natural to suppose that injuries to health after gymnastic training may be commoner amongst females than amongst males, and experience shows this to be the case. No doubt the best kind of physical training in youth is voluntary exercise, either in playing at the outdoor sports popular with English boys, or in rambles over fields and hedges. For certain social reasons, not entirely unconnected with physical matters, neither such sports, nor such congenial walking exercise, can be carried out in girls', as thoroughly as in boys' schools, and methodical gymnastics stand to cricket in the same relation as a walk with other fellow-pupils in line and in class does to a pleasant saunter with one or two school-fellows along a country lane. The aim of the authorities at a girls' school should be to allow as much congenial exercise as possible to every pupil, and to encourage physical activity as strongly as cleanliness and deportment; gymnastics are quite secondary to such conditions. Mr. Dunn is right in recommending frequent drilling, but in preferring dumb-bell practice to bar and ladder gymnastics, it must be remembered that severe palpitations are not unfrequently set up by the use of dumb-bells, even when that form of exercise is not disagreeable, and when the subject is apparently free from visceral disease.

ARTIFICIAL RESPIRATION IN STILLBORN CHILDREN.

AT the last meeting of the Royal Medical and Chirurgical Society, on March 11th, an interesting discussion was raised by the fourth of Dr. Champneys' singularly careful papers giving the results of his experiments on artificial respiration in stillborn children. The first step of the admission of air into the lungs was universally regarded as much the most difficult, and strong arguments were adduced in favour of accomplishing this by means of a catheter secured in the trachea by an elastic band, so as to allow of the escape of mucus as well as the entry of air. The importance both of skill and patience in giving the first start to what may very well prove to be a perfectly healthy life certainly needs to be enforced; and at no other time is the separation between life and death so infinitesimal. Later in the evening, Mr. Sutton opened up a tempting prospect for the purely scientific student of medicine in the systematic examination of stillborn children. Their diseases are for the most part undescribed, and need a historian. A solution of the question how far the fœtus must participate in the diseases of the mother, or how far it may be independent, would be a most important addition to our knowledge of inheritance; touching, in fact, not only on its results, but its methods. The effects of fœtal peritonitis and endocarditis on after-life can be shown; and knowledge is a necessary first step towards treatment, though that, at present, may certainly sound chimerical. The opportunities for increasing our knowledge are at present undoubtedly neglected, and there are good reasons for thinking that such an apparently overcurious research may end by being of practical service.

CREMATION IN AMERICA.

THE number of persons who give proof of their approval of cremation is increasing in the United States. There is a Cremation Society at New Orleans which is rapidly growing. Among others who recently sent in their adhesion to the principles of the society was Père Hyacinthe. At the meeting of the society on February 21st, it was decided to proceed to the erection of a furnace on the plan of that in use in Milan. It is believed that the City Council will direct the incineration of the pauper-dead and all dying of contagious diseases as soon as the society is ready to take the contracts.

DR. KOCH'S METHOD OF EXAMINING EXCRETA.

THE *Indian Medical Gazette* reports that on January 16th, Dr. Koch, accompanied by Dr. Fischer and Dr. Gaffky, attended the *conversazione* of the Calcutta Medical Society, and Dr. Fischer gave a demonstration of the methods employed by the German Cholera Commission. The culture-material used consisted of gelatine, meat-juice, and peptone. Water was examined by shaking a small quantity up with some of this prepared gelatine liquefied by heat; the mixture was then poured on to a sterilised glass plate and covered from the air. Separate spots appeared on the glass plate, due to the growth of micro-organisms; each spot was a separate colony, the germs having been distributed throughout the gelatine by the shaking. To the naked eye these spots or colonies differed among themselves. The unfiltered water of the Hooghly, and the filtered water supplied in the hydrants, produced results by this method differing very widely in degree; the hundredth part of a drop of water from the Hooghly produced a greater variety and number of colonies than ten drops of the hydrant-water. In examining excreta, a small quantity was added to the liquefied gelatine in a tube, shaken, and poured out on a plate. Many different colonies grew and could be examined by the microscope, or used for inoculating fresh tubes so as to obtain pure cultivations. The stools of cholera, dysentery, diarrhœa, had thus been examined. One particular bacillus had been found regularly in the wall of the intestines and in their contents, in cases of cholera, but not in any one of the numerous other diseases examined. This bacillus, when growing in a colony on gelatine, was of a white colour in mass, and caused liquefaction of the gelatine.

AN ALLEGED CASE OF STRYCHNINE-POISONING.

AN inquest which was held, on March 18th, at Worksop, near Nottingham, on a death which occurred under somewhat peculiar circumstances, came apparently to a very impotent conclusion. A dose of Epsom salts was administered to a sick child of ten years of age, and this was followed on the next day by another small quantity. Stiffening of the limbs set in, and the child died within four hours of the administration of the second dose. Examination of the residue of the packet of salts showed that it contained three per cent. of strychnine. The salts had been purchased from a local druggist, who had bought them in packets from a London firm. The case had been adjourned for inquiries, but no light could be thrown on the circumstances. The jury found that the deceased had died from the effects of the poison, but that there was no evidence to prove its administration with the medicine. The case, as it stands, is very obscure, and needs some further light to be cast upon it, for the inquest appears to have afforded very little.

ABERDEEN UNIVERSITY CLUB.

A SPECIAL general meeting of the Aberdeen University Club was held on March 12th, at the Inns of Court Hotel. The chair was taken by Sir W. Guyer Hunter, K.C.M.G. It was proposed by Dr. Mitchell Bruce and seconded by Dr. Robert Burnet, that the rules as revised by the provisional committee be adopted. This was unanimously carried. It was announced that the first dinner of the club will be held on May 21st, when the chair will be taken by His Grace the Duke of Richmond and Gordon, president of the club. Gentlemen wishing to join the club can communicate with Dr. Burnet.

FOOT-AND-MOUTH DISEASE AND MILK-SUPPLIES.

CORROBORATIVE evidence of the mischief arising from the drinking of milk from cows suffering from foot-and-mouth disease, to which we refer at length in another column, come from East Dereham in Norfolk. In a recent report to the local board of that place, Mr. Bird Vincent refers to the occurrence of a considerable number of cases of throat-illness amongst young children, of a very obscure nature, which, in one or two instances, proved fatal. Mr. Vincent thinks that these were either ill-defined cases of scarlet fever affecting the throat alone, and not causing any rash on the skin, or else the throat-symptoms were caused by drinking milk from cows with the foot and mouth disease, which has been very prevalent in the district. Such a condition of the mouth and throat has, Mr. Vincent says, been traced in Norwich to the consumption of milk from dairies where cows were known to have had the disease. There is one instance on record of the children of a family, for whose benefit a cow stricken with the malady was kept, drinking the milk undiluted, and shortly afterwards suffering from an eczematous condition of the lips, tongue, and palate.

DRUNKENNESS AND PAUPERISM.

THE Chairman of the General Purposes Committee of the Manchester Board of Guardians has conceived the excellent idea of making some personal inquiries of his own into the causes which lead the poor of that city to apply for parochial relief. The results of these inquiries have been carefully tabulated, and the outcome is sufficiently remarkable to be worthy of special notice. Broadly speaking, one half of the pauperism in the 254 cases noted was brought about by causes directly arising from drinking habits. Twenty-four per cent. of the pauperism was due to the drunkenness of men alone. Very many of these cases were of men who could earn large wages, and support themselves and their families in comfort. Four per cent. of the cases were due to the drunkenness of women. The widows and children of drunkards accounted for about twenty-one per cent., and about one per cent. were widows having drunken sons. The cases not directly connected with drunkenness are classified as under. About fifteen per cent. of the pauperism was due to old age and infirmity. These persons had supported themselves until unable to do so any longer. Many of them were of excellent character, and had not contributed by any improper habits to bring themselves to the workhouse. About sixteen per cent. of the pauperism was caused by disease (not brought on by misconduct), or accidental injuries. A large proportion of these cases were of persons suffering from ailments which precluded the possibility of labour, and many of them were supported by relatives or friends for a considerable time before application was made for relief. Three times as many men as women applied from this cause, a proportion no doubt due to the fact that men, when ailing, cannot follow men's employment, whilst a large number of women work on though suffering with disease. Less than three per cent. of the cases were caused by the head of the family being unable to obtain employment, though willing to work. Sixteen per cent. of the cases were the widows and children of well conducted husbands. In not a single case was pauperism caused by idleness and thriftlessness, apart from drunken and immoral habits, showing the truth of the maxim that idleness seldom exists alone, being either caused by, or being itself the cause of other vices.

THE SALE OF PATENT MEDICINES.

MR. WARTON and Dr. Farquharson have introduced into the House of Commons a Bill to restrict the sale of patent medicines. It proposes that such medicines may be analysed by the Pharmaceutical Society, and until they are so analysed shall be deemed to be poisonous within the meaning of the Pharmacy Act, 1868. If it be found to contain no poison, the proprietor or vendor thereof may place upon the medicine the words "free from poison."

THE MEDICAL AND DENTAL REGISTERS.

We have received copies of the *Medical Register* and of the *Dental Register* for 1884. They contain the usual information, and present evidence of having undergone careful revision at the hands of the Registrar, Mr. W. J. C. Miller. The number of persons whose names appear in the *Medical Register* for 1884 is 24,517. The numbers for the previous seven years have been, in 1876, 22,200; in 1877, 22,713; in 1878, 22,841; in 1879, 22,564; in 1880, 22,576; in 1881, 22,936; in 1882, 23,275; and in 1883, 23,861.

NURSING IN WORKHOUSE INFIRMARIES.

AT a meeting in connection with the Association for Promoting Trained Nursing in Workhouse Infirmaries, held on March 18th at the residence of the Marquis of Salisbury, Sir William Bowman, Bart., who was the first speaker, pointed out that while of late years a great deal had been done to improve the nursing in our public hospitals, comparatively little attention had been paid to the equally pressing necessity of having skilled nurses in parish infirmaries. The association, however, made arrangements with certain large workhouse infirmaries by which nurses might be trained for this important sphere of labour, and it afterwards provided situations for them and guaranteed their efficiency. Dr. S. Benson, Dr. Sieveking, Mr. John Wood, and the Rev. Dacre Craven also spoke in favour of the objects of the Society.

THE WOUNDED IN THE SOUDAN.

IN the special complimentary general order issued after the defeat of Osman Digna, the Army Medical Department came in for its fair share of praise. The words of the order are these. "The arrangements made by the Army Medical Department for the comfort and transport of the wounded and sick were all that could be desired. Many instances of self-devotion, on the part of the medical officers, occurred which will not be forgotten." Among those instances may, no doubt, be mentioned the gallant conduct of Surgeon Prendergast, who was severely wounded during the fight at Tamai. He was attending to the wounded on the field during the action, when he received a spear-wound which penetrated the chest. The 99 wounded from the battle of Tamai, including 6 officers, arrived at Suakim on March 13th safely and without suffering; and, on March 16th, the troopship *Jumna* left Suakim for Suez with 6 wounded officers, 93 wounded men, and 2 officers and 83 men on the sick-list. All the wounded were doing well. Surgeon Cross, R.N., who had received a gunshot-wound of the forehead, was improving, and Surgeon Prendergast was "holding his own," which is perhaps the best report that can be hoped for, and one that augurs well for the future. The *Jumna* arrived at Suez on March 19th.

MR. LANGLEY ON MESMERISM.

THE address which Mr. J. N. Langley delivered on Friday evening, March 14th, before the Royal Institution showed a faculty of clear thinking and clear speaking on a subject where there has been much confusion—viz., the physiological aspect of mesmerism. To the physiologist, the subject grew interesting when he perceived that it included not only men but animals. Mr. Langley spoke of Braid founding its scientific study in 1843 by his experiments on animals, and gratefully accepted his word hypnotism as convenient to distinguish the natural from what he still preferred to call the magical parts of the question. A generation later, Dr. Carpenter, by the vague phrase of "unconscious cerebration," had avoided the acknowledgment of thought without consciousness. But where Mr. Langley most genuinely pleased his audience was by the production of a vigorous young crocodile, about three feet long, which did not at first sight seem amenable to any quieting influence; but, after it had been skilfully laid upon its back and tickled on the flanks, it became "mesmerised"—*i. e.*, perfectly passive, and allowed its legs to be manipulated as might please the lecturer, and would move for no startling noise made close above it. Nevertheless, when it was suddenly turned upon its face again, it was restored at once to its original vigorous intention of eating the audience. In man, Mr. Langley was very careful in explaining nervous stimulus and inhibition, and more especially that inhibition of the will which is so much more easy to describe than to explain. He fully allowed that remarkable *phénomène de transport* which has been so much discussed in France, whereby, if a half-crown is put on the back of an insensitive right hand, the part on which it rests in some cases becomes sensitive, and the corresponding part on the back of the previously normal left hand will become insensitive instead. It is an experiment from which it is almost impossible to exclude expectancy entirely, and expectancy may perhaps be powerful enough to work the result. In an hour's lecture, it was naturally impossible to consider what physiology had to say to every bold or novel claim of mesmerism or its advocates; such as the alleged mesmerism at long distances without expectancy, the immense superiority of one mesmeriser over another, or the supposed influence of unexpressed thought.

SCARLET FEVER AT SANDBACH.

We understand that there has been an epidemic prevalence of scarlet fever at Sandbach in Cheshire since July last, and that the epidemic is at the present time severe. Thirty deaths have already resulted, and there is every reason to fear that this number will be largely exceeded before the epidemic dies out, as the number of cases under treatment at the present is very large. Rubeola was very prevalent from July to December, but the epidemic has now ceased. The schools in Sandbach have been closed, but in the surrounding villages, with one exception, this precaution has not been taken. There is no reason to connect the epidemic of scarlet fever to the bad water or sewage which unfortunately exist in Sandbach, but the severity of the epidemic in its individual incidence is no doubt increased by defective sanitary arrangements.

SCOTLAND.

We observe, in a letter to the daily press, that the financial position of the Western Infirmary of Glasgow is causing the directors considerable anxiety.

Dr. Thomas Barr has been appointed Aural Surgeon to the Glasgow Hospital and Dispensary for Diseases of the Ear, in the room of Dr. Patterson Cassells, who has resigned through ill health.

The epidemic of measles at Duntocher as yet shows no signs of abatement, and has led to the closing of the public school. The disease is of a severe type, especially among the younger children, and a considerable number of fatal cases have occurred.

Sir Lyon Playfair, K.C.B., M.P., has accepted the presidentship of the British Association for the meeting in Aberdeen in 1885. The selection of Sir Lyon Playfair is in every way a happy one, and augurs well for the success of the meeting.

INOCULATION IN PLEURO-PNEUMONIA.

At a meeting of the Executive Committee of the Local Authority for the county of Aberdeen, Mr. Thomson, V. S., reported that experiments had been conducted satisfactorily, proving that cattle inoculated with the lymph of pleuro-pneumonia were less liable to become affected with the malady than those which had not been so treated.

ARTISANS' DWELLINGS ACT.

By an order from the Home Office, a public inquiry was held in Aberdeen, in regard to the proposal to schedule the Shorelands District under the provisions of the "Artisans' Dwellings Acts." Dr. Beveridge, Chairman of the Public Health Committee, and Dr. Simpson, Medical Officer of Health, gave evidence in support of the official representation and as to the sufficiency of the scheme. Dr. Simpson, in speaking of the exceedingly unsanitary condition of the scheduled district, said that, during the year, one at least out of every two persons resident in the district fell ill. During the last five years, the annual death-rate was 33 per 1,000.

POISONING BY HEMLOCK.

Several cases of poisoning occurred last week among the boys belonging to the training-ship *Cumberland* stationed on the Clyde. It appears that a detachment of the boys was on shore for walking exercise, and several of them amused themselves by collecting various roots and herbs growing near the shore. Of one of these roots, a number of the boys partook, believing it to be harmless; but, shortly afterwards, all who had eaten of it were attacked by sickness and other signs of poisoning. No less than ten became seriously ill, the chief symptom being great stupor and loss of power in the limbs. Steps were quickly taken to obtain medical aid, and, under proper treatment, all eventually recovered; but considerable anxiety was felt for some time in reference to five of the cases that were removed to the Helensburgh Infirmary, the state of unconsciousness having lasted for some hours. An examination of the herb showed that it belonged to the umbelliferæ, and was one of the hemlock species.

THE SUSPECTED POISONING FROM TINNED MEATS.

In the **Journal** of February 23rd, we alluded to the two deaths and illnesses of several persons in Glasgow, which were suspected to have been caused by some tinned New Zealand mutton. It is right to state that the report of the city analyst on the tinned mutton submitted to him is, that it contained nothing that might be suspected as injurious to health, except a minute trace of tin, such as is present in all tinned meat. It would be interesting to have this report in detail; for the illnesses and deaths followed so closely upon the eating of the mutton, and were confined so entirely to the families who partook of it, that it was to all appearance a clear case of cause and effect; and we should be inclined to think that the analysis has not so much established the soundness of the meat as it has demonstrated the imperfection of our present skill in detecting animal poisons, many of which are of a subtle kind, and are still the subject of controversy as to their exact nature.

THE SCIENTIFIC INVESTIGATION OF THE FISHERY BOARD.

We recently, in the **Journal**, alluded to the progress made by the Scientific Investigation Committee of the Board of Fisheries for Scotland, and we observed that the results must prove of great value in connection with the fishing industry of the country. From a biological point of view, the work being carried on must also be very important, and this is borne out by some most interesting investigations made by Professor Cossar Ewart, on the habits of the herring. This has hitherto been a very imperfectly understood question in natural history, and a good deal of difference of opinion has prevailed upon the matter. The information obtained by Professor Ewart is new to science, but seems likely to settle the moot point as to how the herring spawns, and how the roe is fertilised. The investigations were conducted over the well known herring-banks at Ballantrae, on the coast of Ayrshire, and in the course of the dredging, not only were live herring-spawn obtained attached to loose stones and seaweed, but herring full and ready for spawning were got in a live state. These were both brought in and placed in the buildings of the Rothesay Aquarium Company, together with numerous specimens of eggs upon glass, impregnated from the living fish by hand. This seems to be the first time that the hatching of herring-spawn will have been conducted to a successful issue under scientific observation, and we shall await with interest the full details of Professor Ewart's report.

ODONTO-CHIRURGICAL SOCIETY OF SCOTLAND.

At the annual meeting of the Odonto-Chirurgical Society of Scotland, held in Edinburgh last week, and presided over by Mr. A. Wilson, a paper on "Chloroform and other Anæsthetics in their relative value in Dental Operations" was read by Mr. Bowman Macleod of Edinburgh. Mr. Bowman expressed a decided preference for chloroform; and, in the discussion, Dr. Smith related several cases in which, without chloroform or any anæsthetic, death had occurred. If it had happened that chloroform had been administered in those cases where death had occurred, doubtless the chloroform would have been considered the cause of death. The financial report of the Society was considered very satisfactory.

THE SCOTTISH METEOROLOGICAL SOCIETY.

At the half-yearly meeting of this Society, held on the 17th instant, the report of the Council dealt chiefly with the erection of the permanent observatory on Ben Nevis, and the establishment of a marine station, with its floating laboratory, at Granton. As regards the former, while the present building is answering admirably, it has been decided to make important additions to it, which will require a further sum of £2,000 to meet the cost. The report very properly contains a warm tribute to the energy and determination of Mr. Omond and his assistants for the manner in which they have carried out their duties, the barometric observations having been continued since November 28th, without the break of a single hour. In the thermometric and other observations there had been occasional interruptions owing to the severity of the weather, which rendered it unsafe, and sometimes impossible, to venture outside. Indeed, the nature of this outside work is brought out in one of Mr. Omond's communications during the winter, where he mentions that, in some of the squalls of wind, it was unsafe for one man to go out alone, and that for taking the observations it was necessary for two of the observers to go out tied together, and with every loose article, such as lamp, pencil, foot-rule, carefully secured with cord, "so that a fully equipped observer looks something like a badly rigged ship, all rope-ends and loose cordage." At the meeting of the Society, Mr. Buchan read a paper on these Ben Nevis observations, and he brought out very clearly that already some important points had been established as to the weather on the mountain itself, with the direction of its winds, and the relation these bore to the rest of the United Kingdom as regards the forecasting of storms. It was announced also that the marine station, with its floating laboratory at Granton, had been placed under a committee, with Mr. Murray, of the *Challenger* Expedition Commission, as chairman. This gentleman's well known ability and knowledge of natural history should render this undertaking a means of obtaining valuable information.

IRELAND.

BREACHES OF DISCIPLINE.

Several students connected with the Queen's College, Cork, have been punished for taking part in certain meetings which reflected on the management of the College, and which were held during the recent election. One student (J. J. Lynch) was sentenced to eighteen months' rustication, and forfeiture of college-fees.

LIMERICK WORKHOUSE.

At a recent meeting of the guardians, Dr. Russell, late resident medical officer, was elected a visiting physician, at a yearly salary of £50. The election for a resident medical officer, with a salary commencing at £150 per annum, will be held on the 26th instant.

RED TAPE IN IRELAND.

It is difficult to convince the bureaucratic mind that, in dealing with sickness and disease, it is absolutely necessary to make provision for exceptional cases; and to recognise that the responsible medical officer is the proper person to decide questions of life and death. A poor woman living at Ballyroughan, near New Ross, was taken ill on February 19th and 20th; on February 25th, Dr. Carey, the medical officer of the St. Mullins Dispensary District, saw the patient, and finding that she was suffering from typhus fever, certified that she was "in a fit state to be removed to the" Fever Hospital at New Ross. The patient's husband had then to walk eight miles across a mountain to the relieving officer, who wrote an order for a van and nurse to be sent from New Ross, nine miles off, to Ballyroughan; the husband, who had to return to his wife and children, for two children were suffering from fever, sent the order to be posted at Borris, a distance of ten miles. Owing to the necessity to observe these formalities, the van did not arrive at the sick woman's house until forty-eight hours after it was ordered, and the patient died in the Fever Hospital on the following day. An attempt was made to cast blame on Dr. Carey on two grounds: firstly, because he was not present when the woman was removed; and, secondly, because he had not ordered her stimulants; but it is quite clear that Dr. Carey acted up to his duty. He visited the patient immediately after the ticket requiring his presence had been presented to him, and, recognising the nature of the case, he acted properly in ordering her removal to hospital as speedily as possible. The patient was certified to be in a fit state to be removed, and the orders of the Local Government Board were complied with. It appears, from the circular letter of the Board of October 9th, 1883, that the medical officer should not, even in a case of urgency, go so far as to recommend the workhouse master to admit the patient, unless the relieving officer could not be found. In this case, the relieving officer was found. In country districts, where considerable distances have to be travelled, and much time occupied, in observing formalities, it would be for the public benefit if the medical officers were authorised to act as they saw fit in serious or urgent cases of illness, with reference to conveyance and admission of patients to hospital; and the sooner the Local Government Board's instructions of October 9th, 1883, are so modified the better. When Dr. Carey issued the order for immediate removal of the patient to hospital, his duty ended, as no objection was made to it; and he does not appear to have been aware of the delay, or he, no doubt, would have visited the patient again. It is not the duty of the medical officer to be present at the removal of a patient, as supposed by the coroner; were it so, the doctor would often have to wait many hours and neglect other cases. If Dr. Carey could have given the order on his own authority alone, the woman could, according to the evidence of the relieving officer, have been removed the same day. With regard to the second point, Dr. Carey stated in evidence that he had no power to order stimulants. From a full review of the facts, it would appear that the patient died on the ninth or tenth day of typhus fever; and it should be remembered that, even the best cared patients, with every comfort and necessary at hand, who have not been removed to hospital or elsewhere, very frequently die of typhus about that day of the disease, especially persons from thirty to fifty years of age. No one can say whether the patient would not have died at home on the same day, in the receipt of every care and attention; but the case discloses a state of things which is a reproach to the Local Government Board of Ireland; and we trust that the Board will take steps to remedy the evil brought so forcibly under their notice by the case of this poor woman.

THE MEDICAL ACT AMENDMENT BILL.

THE IRISH LICENSING BODIES.

DELEGATES from all the Irish licensing bodies have been in London this week in connection with the Medical Act Amendment Bill. The King and Queen's College of Physicians has again signified its approval of the proposal to introduce direct representatives of the profession into the Medical Council, and to grant the Council additional powers of a mandatory nature on matters relating to education and examination. Further, the title to registration required in Clause 3, namely, evidence of the competency of the candidate in medicine, surgery, and midwifery, has the warmest support of the College. The College, however, feels much aggrieved at the alteration in its representation on the Medical Board for Ireland from that originally proposed in the Bill, and has petitioned the House of Lords, praying for an amendment of Clause 9 of the Bill, so as to restore to the College a third representative on the Medical Board for Ireland. The withdrawal of a representative from the College was due to university influence in the House of Lords, which desired to secure a superiority on the Medical Board for Ireland for the University of Dublin and the Royal University, at the expense of either the College of Physicians or the Royal College of Surgeons. At first, it was the latter body that was clipped of one of its three representatives; subsequently, however, on influence being brought to bear, the third representative was restored to the surgeons. But then a representative was taken from the King and Queen's College of Physicians. This College has now again advanced reasons against being treated in this manner, and thus being placed in a position inferior to any of the other medical authorities constituting the proposed Medical Board for Ireland. It urges the following points in its favour:

"The King and Queen's College of Physicians in Ireland have, since their incorporation in the year 1667, possessed the right of granting licences to practise medicine, and have exercised this privilege with fidelity and discretion. They—the oldest medical corporation in Ireland—have aimed at a high standard of examination, in both medicine and midwifery, and have placed on the *Medical Register* a large number of medical practitioners; the yearly average of licentiates in medicine, in the ten years ending with and including 1882, was 89. During the same period, the average yearly number of licentiates in medicine placed on the *Register* by the Royal College of Physicians of London—a corporation which occupies in England a similar position to that of the King and Queen's College of Physicians in Ireland—was also 89. In the year 1883, the number of licentiates in medicine passed by the King and Queen's College of Physicians increased to 124.

"Moreover, if the relative position of the College of Physicians in England to the other medical authorities in that country is compared with the corresponding relation of the King and Queen's College of Physicians to the other authorities in Ireland, the representation of the Irish College on the Medical Board for Ireland should be in the same proportion as the English College on the Medical Board for England.

"Thus, in the year 1882, the English universities granted qualifications to 96 persons, the English colleges to 516, making a total of 612 persons; of these, 113, or 18.5 per cent., were licensed by the College of Physicians of England.

"In Ireland in the same year the universities granted qualifications to 110 persons, the colleges to 204 persons; and of these, 314 in all, 88, or 28 per cent., were licensed by the King and Queen's College of Physicians.

"From this it is apparent that, as a licensing authority in Ireland, the College of Physicians occupies even a relatively more important position than the sister college in England.

"Nevertheless, the Bill allots to the latter body, four out of the sixteen representatives on the Medical Board of England, the representation of the Irish College of Physicians being only two out of eleven.

"As regards medical education, the College have a claim to be considered a teaching body, inasmuch as the 'School of Physic in Ireland' is a medical school formed by an amalgamation of the schools of the College of Physicians and of Trinity College, in conformity with Acts of Parliament.

"Of the medical corporations in the United Kingdom, the King and Queen's College of Physicians were among the first to institute a certificate in sanitary science, to be granted to licentiates in medicine of the College, after a comprehensive and practical examination conducted by specially qualified extern examiners, as well as by Fellows of the College.

"The Irish College of Physicians also were the first medical college in the United Kingdom to admit women to examination on like terms with men—a privilege which has been largely availed of."

In their petition the King and Queen's College of Physicians further pray that strict equality in curriculum of study, standard of examinations (both previous and final), and fees to be charged, under the Medical Boards in the several parts of the United Kingdom, shall be specially provided for in the Bill.

THE MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

THE following letter has been addressed to the Secretary of the above Society.

SIR,—Some time since I had the pleasure of forwarding 2l. 2s. on behalf of the Jersey Medical Society towards the preliminary expenses of the Medical Sickness, Annuity, and Life-Assurance Society. I am thinking of joining as a member, but should like a little more information than is contained in the rules. I notice provision is made for payment of seventy per cent. of full surrender-value of relinquished policies. But suppose after paying, say for ten years, I determine to surrender. Well; but if death happens, then I apprehend the seventy per cent. [illegible] to my family. This does not seem quite equitable. In the Foresters and other friendly societies, some payment is always made at death. I think a scale should be made whereby the sum payable at death should be proportioned to the amount taken out of the funds during life; where nothing has been taken, and the surrender-value of a policy, say seventy pounds, and death happens after a short sickness, or suddenly, then a manifest injustice is done to the family of that member if nothing is paid. I am, etc.,

W. H. SUTCLIFFE.

We have received the following comments on this letter from the Secretary.

As this communication raises a point to which many correspondents have alluded, it is well that the arguments adduced should be fairly and fully examined.

In the first place, to grant any special privileges to the members who have been so fortunate as to escape sickness is fatal to the principle of mutual assurance; and, further, such privileges would be extremely difficult to calculate for on any fairly accurate basis. Nor is any injustice done, as an examination of the whole matter will demonstrate. Each member joins to provide against the risk of a contingency, the average pressure of which can be fairly assumed, but the individual incidences of which are quite uncertain. It might obviously occur that several members of a society of this kind had complete immunity from sickness, which might be more than counterbalanced by excessive sickness in other directions, causing the Society to pay as a general average more than the amount expected. There would thus be a general expenditure larger than was covered by the premiums; and whence, in such case, would the bonuses for the more fortunate members come? Surely the good fortune is on the side of the member who has no affliction on account of which to claim, even though the premiums he has paid to make himself secure be devoted to the help of his less fortunate brethren? The true principle is as follows. The premiums are devoted first, to paying the current sick-claims; and, secondly, to providing reserves sufficient to make the premiums large enough when advancing age will probably render the average outgoings larger than the premium-income; any amount in hand over this is the result of the general average sickness being less than that assumed in the tables, and is a profit-surplus. This, and this only, could be applied in the shape of bonuses, and the method of such application might take the direction indicated; but whether that is the best and most equitable method to apply to such accretion would have to be decided by the members. It is urged that the Foresters' and other societies provide a payment at death. This, however, is not provided out of the sickness-fund. These societies compel every member to take a small life-assurance, and they charge a premium for such in their tables. In the Medical Assurance Society this is purposely avoided, in order that members who have made as much provision of this nature as they desire through other channels, should not be compelled in assuring for sickness to provide for what they do not require. At the same time, the wide range of the life-assurance table offers an opportunity for those who desire it to make sure of a small, or comparatively large, amount being paid to their families at death. It may be well to add that any profit accruing will be ascertained every five years, and may then be appropriated as the members desire. Any suggestion on this or kindred subjects can be fully discussed at the general meeting.

PRESENTATION.—Mr. Donovan, who has for the last seven years been residing in Whitwick, having been compelled through ill-health to resign his practice, a number of the inhabitants presented Mr. and Mrs. Donovan with a very handsome timepiece, as a token of their esteem and regard, and as expressive of their sincere desire for their future happiness and prosperity.

VACCINATION AND THE SMALL-POX EPIDEMIC IN BIRMINGHAM.

The *Birmingham Daily Mail*, an ably edited evening paper, with a very large circulation among the working classes, publishes the following admirable summary of the value of vaccination, as shown by the statistics of the prevailing epidemic of small-pox in that town.

"Mr. William Tebb, writing to a London paper from the Devonshire Club, says the prevailing epidemics at Birmingham and Sunderland show that the theory as to vaccination saving people from small-pox is wholly illusory. Now, it is not contended by the advocates of vaccination that it will prevent people from having small-pox; what they say is, that it very much lessens the severity of the disease, and diminishes its fatality. Since Mr. Tebb has thought it worth his while to refer to Birmingham, we will endeavour to show what mischief has been averted in our midst by the more general enforcement of compulsory vaccination. For this purpose, we have obtained statistics from Dr. Alfred Hill, Medical Officer of Health for Birmingham, and from Mr. Henry May, who holds a similar position in the Manor of Aston, to whose courtesy we are much indebted. Dealing first with Birmingham, we will take the small-pox cases treated in the Borough Hospital during the year 1883. They numbered 1,090, of which 151 were unvaccinated and 939 vaccinated. In order to get at the true significance of these figures, we must go a step further. Of the 151 unvaccinated patients, 49 died, that is, 32.4 per cent.; whereas, of the 939 vaccinated, only 40 died, or 4.3 per cent. This shows that, in the 151 unvaccinated cases, there were nine more deaths than in the 939 vaccinated ones—a most striking proof of the protective influence of vaccination, although much of it was not of the best. The figures show also that the mortality in unvaccinated cases is eight times greater than in vaccinated cases. In 1874, the percentage of deaths in vaccinated cases was 12.9, in unvaccinated it was 47.7; so that the mortality then was, in unvaccinated cases, only four times greater than in the vaccinated. The total mortality in *both* classes together in 1874 was 16.8 per cent.; in 1883, it was 8.2 per cent. The great improvement in the whole mortality, and in the ratio of mortality in the two classes of vaccinated and unvaccinated, is evidence of the great value of improved vaccination and sanitary conditions. Now, taking Aston, we have an equally striking record. The small-pox hospital in Chester Street had been opened for six months on the 9th instant, and, during that period, 134 cases were admitted, of whom 11 died. Of these, 24 were totally unvaccinated, 109 had been vaccinated, and one had had the disease before. Of the 24 unvaccinated, no fewer than nine died, while, among the other 110 cases, there were only two deaths. The large amount of mortality among the unvaccinated is very noticeable, amounting to 37.5 per cent.; and it is the more noticeable, because the other two deaths were in persons of fifty-two and fifty-six years of age respectively, and seriously ill with chronic disease when attacked with small-pox. Most of the unvaccinated cases who survived the disease barely escaped with their lives, and are disfigured. It is noticeable that a large number of unvaccinated and imperfectly vaccinated persons are *attacked*. Probably nine-tenths or more persons in the Aston district have three or more cicatrices, yet 58 had less than three out of 134 attacked; and they had the disease, as a rule, in a severe form, though the effect of the vaccination, however slight, was manifested in modifying the virulence of the disease. In consequence of the increased protection which the *amount* of vaccination is recognised to afford, most persons have now five vaccination-pocks imposed; and it is noticeable that only eight cases were admitted with five marks, and they were slight ones; and often the disease was only recognisable in them by its occurring in other members of the family simultaneously. No genuine case occurred in any person in whom the protection of infantile vaccination had been renewed by revaccination. No member of the staff has contracted the disease, neither has it extended to anyone connected with the institution, in consequence of their having been revaccinated, unless protected by having had the disease previously.

"These facts seem to show conclusively that, so far as the Birmingham district is concerned, the value of vaccination has received a new and striking illustration during the present epidemic."

The Order of the Medjidieh. The *London Gazette* of March 7th announces that Her Majesty has been pleased to give and grant to Theodore Dyke Acland, M.D., her Royal licence and authority that he may accept and wear the Insignia of the Fourth Class of the Order of the Medjidieh, which His Highness the Khedive of Egypt, authorised by His Imperial Majesty the Sultan, has been pleased to confer upon him, in recognition of his services whilst actually and entirely employed by His Highness beyond Her Majesty's dominions.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

Meetings of the Council will be held on Wednesday, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., March 20th, June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

COUNCIL.

NOTICE OF MEETING.

A meeting of the Council will be held in the Council-Room of Exeter Hall on Wednesday, the 9th day of April next, at 2 o'clock in the afternoon.

Francis Fowke, *General Secretary.*

161a, Strand, London, March 6th, 1884.

COLLECTIVE INVESTIGATION OF DISEASE.

Cards for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
V. Syphilis, acquired.
Va. ,, inherited.
VI. Acute Gout.

Urgent.—*The Committee needs 150 more cases of Pneumonia, and hopes that they will be sent in as soon as possible.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
161a, Strand, W.C.
September, 1883.

Notice.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

The North-Western Provinces and Oudh Branch. Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons Shirley Deakin and W. A. Morris, 8, City Road, Allahabad.

Metropolitan Counties Branch: Northern District. The next meeting of this session will be held on Friday, April 4th, 1884, at 8.30 p.m., at the Great Northern Central Hospital. Dr. J. Braxton Hicks, F.R.S., will take the chair. Dr. Grigg will read a paper on Puerperal Pyrexia, the Indication of Treatment. A discussion will follow. George Henty, M.D., Honorary Secretary, 108, Camden Road, N.

Metropolitan Counties Branch: Hertfordshire District. It is proposed to hold a meeting of the above district at Hertford, on a day towards the end of March. Members desirous of reading papers are requested to send the titles as early as possible to the undersigned. R. R. Lloyd, St. Albans, Honorary Secretary.

South Wales and Monmouthshire Branch. The spring meeting will be held at Llanelly, on Wednesday, April 2nd. Further particulars in circulars. Members wishing to read papers or make communications are requested to send titles of the same to Dr. Sheen, Cardiff, not later than March 12th, in order that they may appear in the circulars.—Alfred Sheen, M.D., D. Arthur Davies, M.B., Honorary Secretaries.—February 26th, 1884.

South-Eastern Branch: West Kent District. A meeting of the above district will be held in the Army Medical Department Mess Room, [illegible] Barracks, Woolwich, on Friday, March 28th, at 4 p.m., Sir James Hanbury, K.C.B., A.M.D., in the chair. The dinner will take place at the King's Arms Hotel at 6.30 p.m. Charge 6s. 6d., exclusive of wine. To facilitate the arrangements, gentlemen who intend to dine are particularly requested to give notice to [illegible] Powell, Esq., Herbert Hospital, Shooter's Hill, Woolwich, not later than March 26th. (Woolwich Arsenal Station, S.E.R., is the nearest station to the place of meeting.) All members of the South Eastern Branch are entitled to attend the meeting and to introduce friends. Papers to be read. G. [illegible], Esq., The Use of Opium as an Aid to Surgery; J. A. Bell, M.D., A Case of [illegible]; F. B. Jessett, Esq., Two Cases of Cancer [illegible]; J. Braxton Hicks, M.D., The Influence of Bodily Movements [illegible].—A. W. Nankivell, Honorary Secretary.

South Eastern Branch: East and West Sussex Districts. A [illegible] meeting of the above districts will be held at the [illegible] Hotel, [illegible], on Tuesday, March [illegible]th, at [illegible] p.m. Dr. [illegible] will preside. Dr. Sturges, Physician to the Westminster Hospital, will introduce the subject of the Collective Investigation of Disease, with special reference to Acute Pneumonia. Dr. Bagshawe, Dr. Treutler, Dr. Roberts, Dr. Fuller, and some Brighton members have promised to take part in the discussion, if possible. The Chairman will read Brief Notes as to some New Remedies, and will show Cases of Rare Diseases in Children. Dinner at 5.30 P.M. Charge, 6s, exclusive of wine.—T. JENNER VERRALL, G. B. COLLETT, Honorary Secretaries of above districts, 95, Western Road, Brighton. March 4th, 1884.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.—The next meeting will be held at the Red Lion Hotel, Dorking, on Thursday, March 27th, 1884, at 3.30 P.M.; Mr. Horace Chaldecott in the chair. The following papers, etc., are promised: 1. Dr. Goodhart: A paper on Rheumatism. 2. Mr. Charles Chaldecott: A case of Stomatitis with Pemphigus. 3. Mr. Horace Chaldecott: A case of Idiopathic Tetanus. 4. Dr. T. F. Pearse will show some new Midwifery-Forceps and another new invention. Dinner will be provided at 6 P.M.; charge 6s., exclusive of wine. Members are requested to notify their intention to dine to A. ARTHUR NAPPER, Honorary Secretary, Broad Oak, Cranleigh.

NORTH WALES BRANCH.—The next intermediate meeting will be held at the Crown Hotel, Denbigh, on Thursday, March 27th, at 12 o'clock (noon) precisely, to take into consideration the by-laws of the Branch, in such matters by which they may be affected by the new Articles of Association and By-laws of the Association; also Membership of Homœopaths. Notice of papers and communications should be made to the Secretary. Dr. Mark Williams will read a paper on Pneumonia. After the meeting, the members will, as usual, dine together at 4 P.M.—J. LLOYD-ROBERTS, Honorary Secretary.—Denbigh, March 10th, 1884.

LANCASHIRE AND CHESHIRE BRANCH.—A meeting of this Branch will be held at Wigan, on Tuesday, April 8th. Members desirous of making communications are requested to send their names at once to the Honorary Secretary. CHARLES E. GLASCOTT, M.D., Honorary Secretary, 23, St. John Street, Manchester.

WEST SOMERSET BRANCH.—The Spring Meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 3rd, at 5 o'clock. The subject settled by the Council to be discussed after dinner will be "Chorea," when answers will be invited to the following questions:—"What is your experience as to its pathological anatomy, with special reference to concomitant heart-disease?" "What treatment have you found most useful?" Dr. Long Fox, of Clifton, has promised to open the discussion. The election of a representative of the Branch on the Council of the Association, to hold office for one year from the second day of the next Annual Meeting of the Association, should now take place, in order that his name may be returned within the prescribed time. A copy of the Articles and By-Laws of the Association, as lately altered, will be submitted with a view to the Branch having its By-Laws brought into accordance with the altered Articles and By-Laws of the Association. Members having any communications for the meeting, are requested to send early notice of the title to W. M. KELLY, M.D., Honorary Secretary.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.

A MEETING of the South London District of the Metropolitan Counties Branch was held on March 12th, at the Bethlem Hospital; Dr. DICKSON in the chair.

Communications.—The following communications were read.

1. Dr. Hack Tuke read a paper on Sleep-walking.
2. Dr. J. A. P. Price gave details of a case of Combined Somnambulism and Hypnotism.

Both papers elicited an interesting debate, in which Drs. Mahomed, S. Coupland, Forsyth, Mr. Brindley James, and the Secretary took part. Dr. Mahomed proposed that the subject should be brought under the notice of the Collective Investigation Committee, and the meeting adopted the resolution unanimously. The Secretary was instructed to communicate with the Secretary of the Collective Investigation Committee, with the view of instituting an inquiry on the subject.

METROPOLITAN COUNTIES BRANCH: WEST MIDDLESEX DISTRICT.

A MEETING of this District was held on Friday, February 29th, at Horbury School-room, Notting Hill; Dr. W. TRAVERS (Kensington) in the chair.

Treatment of Deformities.—Mr. NOBLE SMITH read a paper on Mechanical Principles in the Treatment of Deformities, in which he explained some new forms of mechanical appliances, illustrated by an excellent series of diagrams.—In the discussion which followed, Dr. Travers, Dr. Campbell Pope, Dr. Snow, Mr. Roche Lynch, Dr. Saunders, Dr. Thompson, and others took part.—Mr. Noble Smith thanked the members for the interest they had taken in his communication, as proved by the valuable remarks elicited in the discussion; and the meeting then terminated.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

A MEETING was held in the Medical Institute, New Edmund Street, on Thursday, March 13th. The chair was taken by the President, Dr. BALTHAZAR FOSTER.

New Members.—The following members of the Association were elected members of the Branch: Dr. Bernays, Solihull; Dr. Sankey, Hatton Asylum; Mr. J. S. Gettings, Walsall.

Papers.—The following papers were read.

1. Mr. T. F. Chavasse: A Case of Gastrostomy, with Remarks on the operation.
2. Dr. Saundby: Kussmaul's Diabetic Coma and Allied Conditions.

BORDER COUNTIES BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at the Central Hotel, Carlisle, on Friday, February 22nd, 1884; the President, Dr. MACDOUGALL, took the chair at 6 P.M. Forty-one members and visitors were present.

New Members.—Dr. Harris of Dalston was elected a member of the Association and Branch. Mr. Hugh Redmayne of Ambleside, Dr. J. C. Hodgson of Workington, Dr. R. H. Wright of Melrose, and Dr. Maclachlan of Longtown, were elected members of the Branch.

New Secretary.—Dr. W. Russell, having left Carlisle for Edinburgh, formally tendered his resignation as Secretary, and a vote of thanks to him for his services was passed. Dr. TIFFIN moved, and Dr. BARNES seconded, that Dr. Lediard be appointed Secretary in Dr. Russell's stead. This was carried.

Puerperal Pyrexia.—Dr. ANGUS MACDONALD of Edinburgh opened (by invitation) a discussion upon puerperal pyrexia. He read a long and interesting paper upon the causes, nature, varieties, and classification of the disease. The discussion which ensued was shared in by Drs. Macdougall, Henry Barnes, Lockie, I'Anson, Muir, Maclaren, Sanderson, Wotherspoon, Walker, Surgeon-Major Smith, Russell, and Lediard.—Dr. Macdonald made an able reply.

Ovarian Tumours.—Dr. MACLAREN made a few remarks upon some casts of ovarian tumours on the table.

Dinner.—Dr. Macdougall took the chair, and was supported on the right by Dr. Taylor of Penrith, and on the left by Dr. Macdonald of Edinburgh. Dr. Muir of Selkirk, the President-elect, was in the vice-chair. There were present forty-three members and visitors.

Address to Dr. M. W. Taylor.—The President called upon Dr. LEDIARD to read an address, which had been engraved and illuminated, and signed by 150 medical men in the Border Counties area.

"*To Michael Waistell Taylor, Esq., M.D., of Penrith, Cumberland.*

"We, the undersigned members of the medical profession residing in the Border Counties, desire to express to you our appreciation of the very valuable services you have rendered to scientific medicine during your forty years of practice, and to assure you of our hearty good wishes on your retirement.

"During your long and useful career, various subjects of original inquiry have engaged your attention, and have led to important additions to our previous knowledge. Among those which seem to us to be especially worthy of mention are—your Essay on the Pathology of the Urinary Secretion, which obtained for you a gold medal on your graduation; your discovery, in 1844, of the presence of urea in the blood of patients suffering from typhus fever; and your subsequent investigations into the mode of origin and propagation of epidemic fevers. To your clinical sagacity and acute powers of observation is owing our present knowledge that epidemics of enteric fever and scarlatina may be caused by contamination of the milk-supply, and this knowledge has already been of immense service in the prevention of disease.

"The high estimation in which you are held by your professional brethren was evidenced by your unanimous selection as the President-elect of the Border Counties Branch of the British Medical Association, upon its formation sixteen years ago, and the manner in which you fulfilled the duties of this office, the kindly interest you have taken in its welfare, and the number of able clinical papers which you have contributed to its proceedings, have tended largely to its success.

"In addition to your purely professional inquiries, it may not be out of place to refer to your archæological researches. We are assured that your investigations have thrown light upon many important and previously unexplored subjects in your own district, and have obtained for you a foremost place among northern archæologists.

"After such achievements, it has been thought fitting that your professional brethren should express their opinion of the value which they entertain of you and of your services, and of the eminent position which you have so long held among them. In doing so, we wish you health and happiness to enjoy your well merited retirement, and we have pleasure in appending our names to this address."

Dr. MACDOUGALL then, in a long and eloquent speech, presented the address to Dr. Taylor.[1]

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[1] It should be stated that many names for the address were received too late for insertion.

Dr. TAYLOR, in responding, said: I accept this address, and I esteem it as the very highest compliment, as the very greatest honour which I could possibly receive, emanating, as it does, from a profession which I have ever loved, and from the kindly feeling of the members of this Society, and of practitioners with whom I have been more or less associated for many years. I am about to retire from the practice of our profession in the north of England, and that retirement will necessarily be tinged with some degree of sadness to me. The time comes to all of us, if we live as long, when the fatigues, the cares, the responsibilities of practice, particularly if it be an active country practice, induce in us a desire for more ease and leisure. We become, as the poet says,

> "Hackneyed with business, wearied at that oar
> Which thousands, once fast chained to, quit no more."

And in excusing to myself that wish for retirement, my only plea is the plea of long servitude. It is now thirty-nine years since I joined the ranks of the profession, and have been almost from the beginning engaged in laborious work. You have been good enough in this address to refer to my contributions to medical science. In this respect, my regrets are infinitely greater as to material lost and work left undone than any consideration of merit as to what I have done. You have referred to some observations on the history and etiology of fevers, and more particularly to observations on the propagation of fevers by means of milk. These to me present an old and curious story, reaching back to the year 1858, when these observations were first begun. After a time, it seemed to me that the discovery of these facts fell dead and flat, and became wellnigh forgotten, for it failed in receiving corroboration from others, and I myself began to think there might have been some error in my facts or in the logic of my reasoning. But years rolled on; and, twelve or thirteen years after, I had the satisfaction myself of verifying the circumstance for the second time. Soon afterwards, fresh proofs came from many quarters, and it was the source of the greatest gratification to me to find my old supposition corroborated by other observers, and that which had been regarded as a dubious occurrence came to be recognised as a positive and general law of infection in sanitary science. You have thought it worth while to refer to my researches in archæology. On this point, I would only say to those who are working very hard at their profession, do not give a slavish adherence to it entirely. Seek some change, some recreation, something to divert the mind or engage the body as diverse as possible from the routine work. Adopt a hobby. At all events, adopt something in which you have an interest—some literary pursuit, some branch of natural history, the collection of objects of natural history, or of objects in which you are interested, or, on the other hand, as a relief to sedentary and mental work, some out-door amusement—farming, hunting, fishing, or shooting. In this way, you will secure the greatest present advantage to your powers, and may educate yourselves better for the enjoyment of leisure when it comes, and may be providing yourselves with solaces for advancing years.

SPECIAL CORRESPONDENCE.

CAIRO.

[FROM OUR SPECIAL CORRESPONDENT.]

IT is said that Osman Dagna, or Digna, or Da'na, according to the Arabic dialect of the place in which you may be, has given out that the reason of the late defeat was owing to his men attempting to use firearms to which they are unaccustomed. The weather is now warmer, and I hear that nine British soldiers have had sunstroke at Souakin.

The Suez Hospital is now all activity, 7 officers and 111 sick and wounded arrived there on March 9th. Two officers and 54 men, in charge of Surgeon-Major Morgan, are expected at Cairo to-day. These are the slight cases. Captain Green has been here for some days. He has a lame arm, having been bruised on the left elbow by a canister-shot. It was a simple abrasion with considerable swelling, but all that has now passed away, leaving the arm somewhat feeble. Captain Wauchope is also progressing favourably, and will return to Suez on the *Carysfort*. The casualties are chiefly flesh wounds, due to swords and spears, there being very few cases of broken bones. There have, however, been three amputations of limbs of a dangerous nature, and there are two serious cases of compound fractures. Some of the bullet and sword wounds, not implicating bones, are also reported to be dangerous.

Colonel Barrow, who had sustained a spear-wound in the abdomen, with protrusion of the bowel, is doing so well that he is considered out of danger.

The Deputy Surgeon-General at Souakin is Surgeon-Major McDowell, who was a member of the late Board of Health during the cholera time, and who took an active part in the work of the Board.

PARIS.

[FROM OUR SPECIAL CORRESPONDENT.]

Pathology of Dysentery.—Researches on Rabies.

MM. KIENER and Kelsch have contributed to this month's *Archives de Physiologie* a memoir entitled "Etude Anatomo-Pathologique de la Dysentérie, et Recherches sur les Nécroses Expérimentales de la Muqueuse Intestinale." Their researches have induced them to consider that dysentery, and those abscesses of the liver which are special to hot climates, proceed from a primary degeneration, identical in character, and traceable to the influence of a poison capable of producing a gangrenous effect on different organs. The authors append to their article the following. The lesions produced by the action of ammonia, as well as those characteristic of dysentery, proceed from the combination of necroses with inflammation. If the action be sufficiently intense to attack the vascular coat as well as the mucous membrane, gangrene results in both cases; but if the superficial mucous membrane be either partially or totally attacked, dry gangrene results. The dry gangrene of dysentery differs widely from the lesion produced experimentally by injecting ammonia. When ammonia acts on the superficial mucous membrane it becomes disintegrated, and there is formation of a pseudo-reticulated membrane analogous to that observed on the pharyngeal and laryngeal mucous membrane in diphtheria; when the dysenteric virus acts superficially, a special lesion is observed, which the authors compare to a dry eschar. The reticulated formation sometimes observed in the intestinal mucous membrane in dysentery is not constant, and extends over a limited area. The dry eschar of dysentery is analogous to the membrane of diphtheria in one respect only—the transformation which the anatomical elements undergo after death. Ammonia produces sudden and immediate necrosis; a little afterwards sudden and violent inflammation occurs, followed finally by repair of tissue. In the dysenteric area, necrosis goes on slowly, destroying the superficial cells one by one, and gradually attacks the lower strata. Inflammation is slight, and from the onset co-existent with the progress of necrosis. In dysentery, necrosis reappears during the course of the affection, preventing the repair of tissue. The constant regeneration of a specific poison in dysentery gives it a necrotic and atonic character, which is evident from the beginning to the end of the malady.

M. Pasteur, aided by MM. Roux and Chamberland, have made a series of experiments on rabies. In a communication presented to the Académie des Sciences and Académie de Médecine, they state that, when the virus is directly introduced into the circulation, symptoms of paralytic rabies are manifested; but the peculiar noise like barking, accompanied by a state of fury, is absent. The virus has a decided tendency to become deposited in the encephalon and spinal cord; but it is also observed in some peripheral nerves—the pneumogastric and sciatic. It has also been observed in the submaxillary and sublingual glands. Under certain conditions the virus retains its toxic properties. The body of an animal dead from rabies was kept for some weeks at a temperature between 0° and 12° C. (32° and 53.6° Fahr.) Inoculation was made with fragments of the central nerve-substance, and rabies resulted; virus, preserved in sealed tubes, and kept at a low temperature, retained its virulence. M. Pasteur has observed that, when the virus is clear and transparent, it is much more active that when turbid. With regard to the presence of micro-organisms in the virus of rabies, M. Pasteur does not decide either affirmatively or negatively, but says that the blood of animals attacked by rabies presents a special kind of granule, which is the toxic element, inasmuch as rabies is produced by injecting this blood into the veins of healthy animals. Hypodermic injections of small quantities of virus provoke a form of rabies which develops slowly. M. Pasteur thinks that the virus is more quickly absorbed when injected into the circulation than into the lymphatics. After a series of inoculations on animals of different species the virus loses its force, and in the last series of animals the symptoms are greatly modified. M. Pasteur's experiments lead him to hope that rabies will be rendered innocuous by inoculation of attenuated virus. In his laboratory are dogs which are rendered exempt from rabies by having been inoculated with attenuated virus. M. Bouley has communicated to the Académie des Sciences the results of M. Gibier's experiments on the production of rabies in birds. M. Gibier inoculated a fowl, which was attacked by paralysis, but recovered. He therefore supposes it probable that birds may contract rabies but recover. A pigeon and a cock were inoculated with the virus of rabies, and apparently were not affected, but rats inoculated with fragments of the cerebral substance taken from these birds died with all the symptoms of rabies. After twenty-eight days, inoculations made from the birds were without results. M. Gibier has also tested the prophylactic value of garlic and pilocarpin in rabies; and in a communication to the Académie des Sciences he states that he inoculated the cerebral substance of rats with the virus of rabies, according to the directions laid down by M. Pasteur. Those which had been submitted to the influence of garlic and pilocarpin, before and after inoculation, died as rapidly as the others.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

Victoria Dental Hospital.—General Hospital for Sick Children.—Royal Eye Hospital.—Edinburgh University Club.

A MEETING was held in the mayor's parlour, Town Hall, last week, for the purpose of enlisting the support of the inhabitants of Manchester and the neighbourhood in favour of the Victoria Dental Hospital, which has been established in Sydney Street, All Saints. The Mayor of Salford presided. In Grosvenor Square, in the immediate vicinity of All Saints, there already exists the Manchester Dental Hospital, and the supporters of that institution attended in large numbers to oppose the formation of a second dental charity, and led to some strong remarks being made by gentlemen of the two parties. Mr. Alderman Walmsley, a Manchester surgeon, said he had come to the meeting with the intention of supporting the Victoria Dental Hospital, but he thought it was not proper to force on the public of Manchester an institution or two institutions at present so ill-matured. He proposed that the subject that they had been called to consider should be referred for consideration to the two committees of the two hospitals. After a long discussion, it was ultimately agreed that the committees of the two charities should confer together with the view of amalgamation.

At the annual meeting of the General Hospital for Sick Children, a more than passing allusion was made to the loss the Hospital had sustained by the death of Dr. Borchardt, who had rendered unbroken service to the institution for a period of thirty years, and also to the sad deaths of two lady probationers consequent upon disease contracted in discharge of their benevolent duties. The medical report, of which only an abstract has yet been published, is quite up to its usual high standard; the careful analysis of cases admitted into the hospital, and painstaking manner in which a short *précis* of the more interesting cases is given, renders it a valuable addition to statistical medical literature.

The same day the Royal Eye Hospital had its annual meeting, under the presidency of Mr. Goldschmidt, the Mayor of Manchester, who is also the chairman of the hospital; he announced that the workmen were already engaged upon the new building, and that it was hoped the new hospital would be ready for opening in the month of October. He paid a gratifying tribute to the value of the work done in the hospital during the past year, and announced the funds of the charity to be in a satisfactory condition.

The Edinburgh University Club held its annual dinner at the Queen's Hotel, on Thursday, March 13th, about eighty members and guests being present. The great feature of the dinner was the presence of Sir Joseph Lister, who was warmly greeted by the numerous old pupils of his who are members of the club. Most of the speeches were of the usual after dinner type, but that of the president, Dr. Thorburn, must be singled out for its excellence, in which he introduced Sir Joseph, and in terse and well chosen language reviewed his work in connection with the Edinburgh University. The dinner was an excellent one, but it must be confessed that the old social characteristics of the gathering seem to have been somewhat lost, and that there is a danger of its becoming a more stately banquet. In gatherings of this sort there is just the possibility of having too many guests.

CORRESPONDENCE.

TREATMENT OF CARIES OF THE SPINE.

SIR,—Will you allow me to remind your readers and correspondents, that, as regards plaster-of-Paris jackets, I have already acknowledged the services that they have rendered? I have also pointed out certain disadvantages with which their use is attended, and described a plan by which the spine can be fixed without those disadvantages being encountered.

It seems to me unfortunate that, because surgeons have met with a certain amount of success with one plan of treatment, they should ignore all its defects and decline to acknowledge the possibility of any other plan being better.—I am, sir, yours faithfully,

NOBLE SMITH.

SIR,—After nearly seven years of extensive employment of the plaster-jackets in the treatment of caries of the spine in children, I would like briefly to state that I am as firm a believer in its value and necessity as ever I was. In the Harveian Lectures which I had the honour of giving in December, 1879, I wrote: "So unapproached in its simplicity and perfection do I consider this modern treatment to be, that I profoundly regret to see that these jackets are apparently dropping out of fashion, possibly to give place to some other and newer material, of which the expense and difficulty of application will put it beyond the reach of these poor little surgical outcasts." Certainly I did not think then that any form of mechanical spinal support had a future, nor can I think so now. Such apparatus can do no more for a diseased spine than insure rest for it, nor can it fill that essential office with the economy and thoroughness of either the plaster-jacket or the poroplastic corset.

I have applied several hundreds of these plaster-jackets, and my experience is that the objections to the method (and these are, or seem to be, many) exist only in theory. The skin can be artfully and efficiently washed beneath the jackets, and they need not be disturbed for six or eight months; some I have left on for nearly two years, many for fourteen or fifteen months, and always with the greater advantage. Years ago I dreaded the sight of a child with spinal caries; now I know that I can do much for him; and it is within my experience that, since we have been shown how to use plaster-of-Paris jackets, spinal abscesses are of comparatively unfrequent occurrence.—I am, yours truly,

EDMUND OWEN, F.R.C.S.,
Surgeon to the Children's Hospital, Great Ormond Street.

March 15th, 1884.

MILITARY AND NAVAL MEDICAL SERVICES.

RECOGNITION OF THE SERVICES OF THE ARMY MEDICAL DEPARTMENT.

IN recognition of the efficient manner in which the medical service has been carried out in the operations of the Soudan Expeditionary Force, Brigade-Surgeon E. M'Dowell, A.M.D., will be specially promoted to the rank of Deputy Surgeon-General—a rank which at present he temporarily holds while acting as Principal Medical Officer of Major-General Graham's force. Occasion will also be taken to confer upon Surgeon-General J. Irvine, Principal Medical Officer of the British Army of Occupation, the Companionship of the Order of the Bath, for the energy displayed in organising the medical detachments which proceeded from Cairo to Suakim.

BLOCK OF PROMOTION AMONG THE SENIOR SURGEONS-MAJOR OF THE ARMY MEDICAL DEPARTMENT.

SIR,—Can no remedy be found to do away with the present miserable state of things? Surely, a medical officer who has served twenty-five years on full-pay is entitled to a brigade-surgeoncy at least. The average age of the 152 administrative officers who were on full-pay during the past nineteen years was 49.4 years on promotion, and twenty-six years of service. Previous to 1874, the rank of Deputy Surgeon-General was reached at an average age of 48.5 years. Few of the present senior surgeons-major can expect to become brigade-surgeons before 50, and twenty-nine years' service. In 1873, the senior assistant-surgeons were in a very similar relative position—grey-headed men of fifteen or sixteen years' service. Sir Galbraith Logan prevailed upon the then Secretary of State for War to guarantee that all officers above fifteen years' service would be promoted. A long *Gazette* was the result. When a similar block existed among the old regimental surgeons, Sir James McGrigor got the new rank of second class staff-surgeon instituted, and all the seniors promoted. Every lieutenant-colonel in the army who serves in that rank for five years obtains the step of full colonel, but every relative lieutenant-colonel in the Army Medical Department will have to serve nine years at least, and probably longer, before he can expect a step which only gives half-a-crown extra pay at home and in the colonies, but no increase of pay at all in India; and, in any case, no increased relative rank. He is being constantly superseded. A good deal has been written about the generosity of the Government to the Army Medical Department. Well, sir, what are the facts? In the nine years previous to unification, the average annual number of medical officers on full pay was 1,048; in the nine years after, 880, or 168 less. Whatever the department has gained has been at the expense of its own brains, bones, and sinews. Some plan must, then, be devised to accelerate promotion among those particularly concerned in the interests of efficiency and contentment. Can any better be suggested than the one adopted by former Directors-general?—I am, etc.,

X. Y. Z.

STATISTICS OF THE ARMY MEDICAL DEPARTMENT.

SIR,—I am indebted to your kindness for a too favourable notice of my tables in your editorial of January 5th; but I must beg of you to give as early an insertion as you conveniently can to this my protest against the incorrect application of my figures by a correspondent whom you quote on page 36 of the same JOURNAL.

In the paragraph to which I object, there is manifested a hurried examination of my tables, and a misconception of their intention, their scope, and their applicability; with consequent misrepresentation—unintentional, no doubt, but not the less mischievous.

A careful study of the explanatory letterpress which accompanies the tables—ten in number—will effectually prevent the recurrence of such mistakes. Your obedient servant, J. P. H. Boileau, M.D., Surgeon-Major.

Allahabad, January 30th, 1884.

MEDICO-LEGAL AND MEDICO-ETHICAL.

ACTION FOR SLANDER BROUGHT BY A MEDICAL MAN.

An action, brought by Mr. Edward Sutton Page, a medical man in practice at Solihull, near Birmingham, to recover damages for slander uttered by Mr. W. L. Harrison, of Knowle, has been tried in the Queen's Bench Division of the High Court of Justice, before Mr. Justice Hawkins and a special jury. The trial commenced on Tuesday, March 11th, and ended on Monday last.

Mr. Lockwood, Q.C., and Mr. Ernest Page were for the plaintiff, and Mr. Charles Russell, Q.C., and Mr. Crump for the defendant.

Mr. Lockwood, in his opening statement, said that Mr. Page, the plaintiff, had practised as a medical man in the neighbourhood of Birmingham for twenty-five years, and the slander of which he complained charged him with the greatest dereliction of duty that a medical man could be guilty of. The defendant lived at Knowle, five miles from the plaintiff's place at Solihull. He was a man of considerable property. He was fifty years of age. The plaintiff had been his family medical man. This relationship began about the end of August, 1881, when the plaintiff was first consulted by Mrs. Harrison, the defendant's wife, about a hurt to the face of a little girl in a carriage accident. His attendance continued until April in the following year, when Mr. and Mrs. Harrison went to the Mediterranean for two months. When the lady came back she was seriously ill. The plaintiff continued to attend Mrs. Harrison until November, but upon November 5th he received a communication from Mr. Harrison requesting him to furnish his bill for professional services, and cease all attendance on the family. On the following day the plaintiff wrote to the defendant expressing his pain and distress at the receipt of the letter, as such an abrupt termination of acquaintance between a medical man and his patients should have some explanation. He said that, during the time he had acted as medical attendant at the defendant's house, he had always endeavoured to do his duty professionally and socially, and he was not aware that he had done anything to forfeit confidence. On November 7th Mr. Page called on Mr. Harrison for an explanation. In the course of the conversation, the defendant accused him of having given opium and morphia to his wife, contrary to his instructions; and of having visited his house, while he (the defendant) was in Birmingham. The plaintiff replied that he would allow no one to tie his hands in treatment; and that he had never visited the house, except professionally, and when sent for. The defendant also said, "I do not know whether that last child is yours or not; you know." He further said, "I do not believe there is in the house a child that is mine." The plaintiff replied that, after such remarks, he would never enter the house again. It was a dangerous place for any man to enter, especially a medical man. The defendant mentioned the names of two medical men who had formerly visited at his house. He said one had attempted to take advantage of his wife, and he would not trust her alone with the other. Before Mr. Page left the house, Mr. Harrison asked him not to take any notice of what he had said, as he was very excited; and they parted in an apparently friendly manner. The plaintiff heard no more of the matter until November 20th, when the defendant's solicitor wrote to him expressing surprise that he had walked out with Mrs. Harrison on the previous Monday. This the plaintiff denied. Soon afterwards, Mr. Harrison circulated the slanders which were now made the subject of complaint. He said that Mr. Page had seduced his wife, and had procured abortion for her; and that his home had been broken up. He made a speech at a club of which he was chairman, and said that his wife had been seduced by the family-doctor, and under the influence of chloral. On another occasion, he said similar things to Mr. Welford, and requested him to tell it to anybody he chose. Immediately that this came to the ears of the plaintiff, he directed his solicitors to write to the defendant, and the action was brought. He believed that on January 6th, 1883, Mrs. Harrison left the house of her husband; and that since then an unhappy state of things had existed. In August 1883, the defendant commenced proceedings in the Divorce Court.

Mr. Page, the plaintiff, gave evidence in support of the preceding statement. There was no truth whatever in the allegations that he committed adultery with the defendant's wife, that he endeavoured to procure abortion, or that he supplied the defendant's wife with poison to murder her husband. His business had been worth £1,800 to £1,900 a year, but it had suffered since these slanders. In cross-examination, he said that he had not heard until these proceedings commenced that Mrs. Harrison was in 1880 in a home for inebriates. Mr. Harrison told him that his wife was addicted to stimulants; that she took lavender-water, chlorodyne, and so on. He had examined Mrs. Harrison five times alone. Some examinations were in the bedroom, but on one or two occasions the examination was in the dining-room. The examination might occupy five or ten minutes. He had not been shut up in one room with Mrs. Harrison for two hours. He had taken a cup of tea with Mrs. Harrison in her bedroom. He had not been closeted with Mrs. Harrison thirty times with the door locked; it might be fifteen or eighteen times. The door was locked on only some occasions. He had met Mrs. Harrison once or twice at the house of a patient, Miss Robinson. He had also met her about railway-stations by accident, and had travelled with her. In re-examination, he said that there was no truth in the suggestion that he ever took any indecent liberty with Mrs. Harrison. He stayed once at Mrs. Harrison's request to see Mrs. Fisher, and on another to see her boy, who was at school; and these things caused his visits to be long ones.

Mrs. Harrison, the defendant's wife, gave a distinct denial to the charge that at any time Mr. Page had taken liberties with her. One of the slanders was that she had attempted to poison her husband with drugs which Mr. Page had supplied, and to this also she gave a specific denial. Cross-examined, the witness said that she first saw Mr. Page at the defendant's request in August, 1881. She had been in the habit of taking chlorodyne to excess for some years; and in 1880, by her own consent, she was sent to a home for inebriates at Leicester. She came out at Christmas, and after some time resumed the habit. She never told Mr. Page of her propensity. It was not true that she had been previously guilty of adultery, and had been forgiven by the defendant. She knew a person named Martin four years ago, but there was no tenderness between them. The witness said that she was examined by Mr. Page eight or nine times, and every visit was mentioned to the defendant. She had concealed no letters from Dr. Page under the mattress of the bed.

Dr. A. W. Edis gave it as his opinion that the visits paid by Mr. Page to Mrs. Harrison would be necessary and right under the circumstances, and that the treatment he pursued was proper.

Mr. Russell, in addressing the jury for the defendant, said that for some years the marriage was a happy one, but in 1879 the wife confessed to an act of infidelity. The defendant forgave her, and every thing went on quietly, until she contracted the fatal habit of taking opiates. Mr. Page was sent for without any suggestion on his (the defendant's) part, and for four months he was wholly unaware that he was attending her. These visits were far more numerous than the five enumerated by Mr. Page, and set out in his bill, and besides these there were other occasions at Mr. Page's own house and in Birmingham. He agreed it was no light thing to attack the reputation of a medical man; but if sufficient grounds could be shown to exist for such a course, then the defendant was not only right, but had discharged a plain duty, in showing up in his true colours a man who had grossly abused a position of confidence and of trust.

The defendant, Mr. Harrison, gave evidence in justification of the statements which he had made regarding Mr. Page. Several servants were also called, who swore that Mr. Page had visited Mrs. Harrison on various occasions, and had remained with her for periods varying from half an hour, or three-quarters of an hour, up to three hours, the door of the room being locked and the blinds drawn down.

Mr. Crump, in addressing the jury for the defence, contended that the long closetings of Mr. Page with Mrs. Harrison day after day, with drawn blinds and with locked doors, and all the other circumstances of the case, were consistent only with one theory, and that the jury would, in the performance of their duty, come to the conclusion that what the defendant had said of the plaintiff was true.

Mr. Lockwood, in addressing the jury, said that much had been made of the fastened door; but was it not natural and proper that, in a house where a number of children were running about, the door should be closed? He further contended that the evidence of the servants was untrustworthy. From the first, there appeared to have been suspicion and slander among the servants, which never ceased, and two of them watched the clock to see at what time the plaintiff went away. There was suspicion as to the fastened door, and the drawn blinds, and the mounting on to a ladder to look into the [illegible]. As soon as Mr. Page's visits commenced, there also commenced a system of spying upon him which probably was connected with suspicions which were known to exist in Mr. Harrison's mind. All through this class of evidence there were inconsistencies that rendered it untrustworthy. One of the servant-maids said that she had seen Mr. Page sitting in an armchair, whilst Mrs. Harrison was upon a footstool, with her arm upon his knee. Could the jury think that there was anything improper in it, when the witness admitted that Mrs. Harrison herself had told her to take in the tea, and that the parties remained in the same position all the time that she was in the room? The learned counsel commented in detail upon a great deal of the evidence that had been produced, and asked the jury, not only to give a verdict for the plaintiff, but to accompany that verdict with such substantial damages as would effectually clear his character from the imputations which had been cast upon it.

Mr. Justice Hawkins, in summing up, disapproved of the course which had been followed in having the case tried in Middlesex instead of Warwickshire, although, he said, the parties had a right to lay the venue anywhere they chose; he also expressed strong disapprobation of the administration, on the part of the plaintiff, of certain interrogatories to the defendant, some of which insinuated that the defendant might be the father of his own wife. The action was brought for damages for slander; and, though the words complained of might not, on the general rule, be actionable as oral slander, yet they were actionable in this case, because they were spoken of the plaintiff in connection with his calling as a medical man. Still, however, the defendant would be justified in having spoken the words, if they should think that he had proved that what he said was true. His Lordship gave a general history of the case and of the parties, as it had been set forth in the evidence; and he also read to the jury his notes of the most important parts of the evidence, because he said it was important, after the considerable time that had elapsed, that they should hear again the precise words that the witnesses had used. The first question which the jury would have to consider was, whether it had been made out to their satisfaction that there was a criminal intercourse on any occasion between the plaintiff and Mrs. Harrison—because, if so, then the defendant was entitled to their verdict. If they were not satisfied of this, they would then have to consider to what amount of damages the plaintiff was entitled for the slander which it was admitted had been uttered.

The jury, having considered the matter for half an hour, gave a verdict for the plaintiff—damages £150.

Mr. Justice Hawkins said that he should order that all the costs occasioned by the interrogatories should be borne by the plaintiff; and that no further costs should be taxed to the plaintiff other than such as would have been allowed him had this case been tried in Warwickshire.

There was a second case of "Page *v.* Harrison," which was similar to the one which had been tried, and there was an arrangement that a verdict should be taken for the plaintiff—damages 20s.

CRIMINAL ABORTION.

EMMANUEL TRUMAN, an aged man, describing himself as an "Obstetrical Curator," and his wife, were tried on the 19th instant, at the Central Criminal Court, before Mr. Justice Day, on the charges of murdering a Miss West, and of manslaughter, and were convicted of the minor offence. It is to be hoped that this salutary conviction may act as a check upon the, as we fear, growing practice of illegal procuring abortion.

It appeared, from the evidence offered, that Miss West, an assistant in a West End costume-shop finding herself pregnant by the man to whom she was engaged to be married, went with him to a druggist named Titley, and afterwards, as a lodger, to the house of the prisoners, where she had a miscarriage. Her condition becoming alarming, her lover insisted upon a medical man being called in; and the male prisoner then called in an unqualified practitioner, known as "Dr. Sprowle," whom he spoke of as his "co-partner." Sprowle practised in Wells Street, Oxford Street, under the protection of a qualified practitioner named Killingworth, and had his own name upon the door. Subsequently, Miss West's brother brought his own medical attendant, Dr. John Baker, to visit the woman; and he at once diagnosed puerperal peritonitis, and had her removed to the Soho Square Hospital for Women, where she died in the course of a few hours. A *post mortem* examination, made by Dr. Vinrace, revealed septic peritonitis as the cause of death, due to a piece of putrid retained placenta. There were no visible signs of the use of instruments.

The prisoners had boasted to the deceased that they had been successful in two thousand cases of this character. When apprehended, they denied that any instruments were in their possession; but in the house or shop—ostensibly a grocer's—were found several instruments, which were deposed to by Dr. Stevenson as catheters, stilettes, specula, uterine sounds, an uterine probe, and a pair of ovum forceps. The prisoners were sentenced to penal servitude.

In passing a sentence of 15 and 12 years' penal servitude upon the male and female convicts respectively, the judge was no doubt greatly influenced by the statements of the police, that they had kept observation on the prisoners' house for some time past, and that the male convict had been in communication with a druggist who had been tried for selling abortifacient drugs. Mr. Justice Day said that the jury had been very lenient. No one who had heard the case could doubt that they procured the abortion; and the jury would have been perfectly justified in finding them guilty of murder. He, however, would make an example of them. No doubt, the male convict had grown old in the commission of crime of this description, and he thought he probably had told the truth when he spoke of the large number of cases of this kind in which he had been engaged.

A COUNTY COURT CASE.

MR. R. L. ROUTH lately brought an action in the Banbury County Court against Arthur Freeman, labourer, on a claim of £1 3s. 6d. for medical attendance and medicine. The defendant's wife appeared and said she thought the charge was too high. The plaintiff said the defendant's child was ill with diphtheria, and plaintiff made two special journeys to attend it, a distance of five miles, and his assistant went once. These visits were charged at the rate of a shilling a mile. This charge his Honour thought was too much. When the plaintiff was about to remonstrate, saying, "But it is not at all likely that I should—", his Honour curtly observed, "I think it quite likely, from the unjust charges I know have been made in this circuit." Then he said to the defendant's wife, "You must pay the money this time, 1s. 6d. a month; but don't employ him again, as he seems a great charger. It is your own fault for sending for such an expensive gentleman." Defendant's wife: "I shouldn't have done it if I had known." His Honour: "Then don't do it again. Pay the debt 1s. a month." Mr. Routh's charge would not have satisfied a cabdriver for mileage alone, to say nothing of his attendance in a highly infectious case; and it is too bad that, when the bill is brought into court, the judge should speak of the medical man as "an expensive gentleman" and "a great charger," and should recommend persons not to employ him again. In attending such a case as this, at a distance of five miles from his own house, the medical man deserved to be upheld, and such slighting remarks as were passed upon him were very much out of place.

THE ODIUM THEOLOGICUM.

W. C. C. In reference to our correspondent's protesting note, and assuming that there is no other cause than the one therein assigned, viz., the "odium theologicum," there cannot, we think, be any opinion but that the intolerant spirit evinced, and the officious intermeddling by the clergyman's wife, are very reprehensible, and much to be regretted. At the same time, the special question submitted to us is chiefly legal rather than medico-ethical; nevertheless, in the hope of rendering some little assistance to "W. C. C.," we offer the following suggestions.

1. It may be well to write a conciliatory note to the clergyman; and, in calling his attention to the professional injury entailed upon our correspondent by the wrongful proceedings of the wife, courteously suggest the expediency of exerting his restraining influence in the matter; failing which

2. Our correspondent might consult a non-litigious solicitor, with the view of a like conciliatory letter being addressed by him to the aggrieving party herself, with a courteous intimation of ulterior proceedings, if necessary.

3. He might make a friendly call upon his brother practitioner, and confidentially communicate to him the steps he has been legally advised to take; and, as an honourable practitioner, he can hardly fail, when made acquainted with the real facts of the case, to avoid all attempts to unfairly supersede "W. C. C." in his practice, at the instigation of the minister's wife.

4. As a last resource, he might sell or exchange his practice, and move to a more congenial locality.

UNQUALIFIED "OWNERS" OF DISPENSARIES AND QUALIFIED PRACTITIONERS.

SIR,—An advertisement appeared in a daily paper the other day to the following effect: "A medical gentleman wanted for a dispensary practice in a large midland town. Good salary, etc." I communicated with the subscriber, and found that he was unqualified, but that he had been carrying on this dispensary practice in connection with a fully qualified gentleman who has a practice some distance away. He further adds that the dispensary practice is his own, and that he wants a fully qualified gentleman "who would take the complete management of the dispensary, and who would be at the beck and call of no one."

Would the acceptance of such a position affect one's standing with the other medical men in the town, and in what respects? I am, etc., HYPERICUM.

*** Such a step as that suggested in "Hypericum's" note could not fail to prove prejudicial to his local professional and social "standing," and, in our opinion, very rightly so; inasmuch as for a legally qualified practitioner to identify himself, either by a nominal partnership or as a highly [illegible] assistant, with an "unqualified," illegal practitioner, would be injurious to the true interests of the public and of the profession.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE GUARDIANS OF THE POOR OF THE HOLBORN UNION, THE LOCAL GOVERNMENT BOARD, AND MR. ROBERT HEDLEY.

In the House of Commons, on Thursday, the 6th instant, Mr. Biggar asked the President of the Local Government Board whether his attention had been drawn to a letter from the guardians of the Holborn Union, intimating that it was the intention of that board to withdraw from the inquiry they had demanded into the conduct of Mr. Stanton, the master of their workhouse, if the department insisted (as had been officially communicated) in remitting such inquiry to Mr. Hedley, one of the metropolitan inspectors, alleging as their reason their distrust of Mr. Hedley's impartiality, and whether, having regard to the inquiry into the conduct of Mr. J. D. Bliss, master of the Poland Street workhouse, against whom serious charges were established, and Mr. Hedley's subsequent report thereon, whereby that master was and is retained in his office, it was the intention of the department to entrust such inquiry to Mr. Robert Hedley, and whether it was not within the competence of the Local Government Board to appoint some other inspector to conduct such official inquiry in his place.

Mr. G. Russell, parliamentary secretary, said that Mr. Hedley had been for many years an inspector of the Local Government Board, and the Board had every confidence in him. They never had the slightest doubt of his impartiality. He regretted to say that, since the institution of the inquiry with reference to the Holborn Union, Mr. Hedley had received intelligence of the death of his son. In consequence of this, and not on the ground suggested, it would become necessary that the inquiry should be held by one of Mr. Hedley's colleagues. The inquiry would be held by Mr. E. H. Wodehouse.

Although the statement made by Mr. Russell appears on the face of it exculpatory of Mr. Hedley, it is well that it should be remembered that the reply does not meet the merits of the case. The Guardians of the Holborn Union distinctly stated the grounds on which they declined to have the inquiry conducted by Mr. Hedley; and, although not formulated in the clerk's letter, we have every ground for the expression of our belief that the Holborn Board had noted the abortive results of Mr. Hedley's action at the Westminster Workhouse, and did not desire a similar conclusion to the charges which they have made against their master.

It is somewhat disingenuous on the part of the Local Government Board to assign as their reason for yielding to the determination of the Holborn Board not to have Mr. Hedley the sudden death of his son, which, as we understand, occurred on January 24th last. But we will let that pass, contenting ourselves with congratulating the Holborn Board and the public that there is now a probability that the inquiry will be decided on its merits.

DR. RAWSON AND THE CARLOW BOARD OF GUARDIANS.

We have received the particulars of a very painful story, which we feel sure will receive the sympathy, and if necessary, the material support, of the members of the Association. At the last general election, Dr. F. A. Rawson, who for twelve years had been the medical officer of the Carlow Workhouse and Fever Hospital, [illegible] was passing through the streets he was struck by [illegible] on the head, from which [illegible] and thus, at the early age of 46, with a wife and four young children dependent on him, he has become a hopeless invalid. At the last meeting of the Carlow Board of Guardians, Dr. Rawson made application for a superannuation allowance, which the Guardians, under the provisions of the Irish Superannuation Act, are permitted to give. Unfortunately, however, the board decided, by a majority of one, not to grant it. We have been informed that, the attention of Professor Thorold Rogers, M.P. for Southwark, having been drawn to this case, that gentleman has put a notice on the paper that he will [illegible] the Irish Secretary [illegible], with the view of seeing whether the Local Government Board (Ireland) will not [illegible] with the Carlow Board of Guardians, so as to obtain a revision of their hard procedure.

SUPERANNUATION OF MEDICAL OFFICERS.

At a meeting of the Council of the Poor-law Medical Officers Association, held at their rooms, 3, Bolt Court, Fleet Street, on February 19th, it was resolved that a memorial should be addressed to the President and Fellows of the Royal College of Physicians, the President and Council of the Royal College of Surgeons, and the Master and Wardens of the Society of Apothecaries, praying that they will severally memorialise Her Majesty's Government in favour of an amendment of the Poor-law Medical Officers' Superannuation Act, whereby its present permissive clauses may be made compulsory.

Health of English Towns. During the week ending the 15th inst., 6,193 births and 3,796 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons. The annual rate of mortality per 1,000 persons living in these towns, which in the two preceding weeks had been 20.3 and 22.5, further rose to 22.6 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow:—Plymouth, 15.2; Cardiff, 16.2; Brighton, 17.1; Derby, 17.3; Norwich, 19.0; Bradford, 19.2; Sheffield, 19.4; Portsmouth, 20.4; Birmingham, 21.1; Huddersfield, 21.2; London, 21.6; Leicester, 21.6; Nottingham, 21.9; Liverpool, 22.8; Hull, 23.6; Bristol, 23.7; Sunderland, 23.7; Newcastle-upon-Tyne, 24.1; Preston, 25.2; Halifax, 25.2; Bolton, 25.8; Oldham, 25.9; Wolverhampton, 26.0; Salford, 27.3; Blackburn, 29.7; Leeds, 29.8; Birkenhead, 29.9; and the highest rate, 30.5, in Manchester. The average death-rate last week in the twenty-seven provincial towns was 23.5 per 1,000, and therefore exceeded by 1.9 the rate recorded in London. The 3,796 deaths registered last week in the twenty-eight towns included 502 which were referred to the principal zymotic diseases, against 407 and 449 in the two preceding weeks, and exceeded the number returned in any week this year; of these 160 resulted from whooping-cough, 146 from measles, 81 from scarlet fever, 40 from "fever" (principally enteric), 38 from diarrhœa, 20 from diphtheria, and 17 from small-pox. These 502 deaths were equal to 13.2 per cent. of the total deaths, and to an annual rate of 3.0 per 1,000. The zymotic rate was equal to 3.4 in London, whereas it did not exceed 2.7 per 1,000 in the twenty-seven provincial towns, among which it ranged from 0.0 in Plymouth, 0.6 in Cardiff, and 0.9 in Brighton, to 4.8 in Newcastle-upon-Tyne, 6.0 in Oldham, and 6.1 in Blackburn. The fatal cases of whooping-cough in the twenty-eight towns, which had been 121 and 138 in the two preceeding weeks, further rose last week to 160; and exceeded the number returned in any week since May, 1882, this disease caused last week the highest proportional fatality in Bolton, London, and Newcastle-upon-Tyne. The deaths referred to measles, which in the two previous weeks had been 87 and 108, further increased to 146, and caused the highest death-rates in Nottingham, Portsmouth, and Oldham. The 81 fatal cases of scarlet fever showed a decline of 13 from the number returned in the preceding week, and showed the largest proportional fatality in Sheffield, Leeds, and Newcastle-upon-Tyne. The deaths referred to different forms of fever (principally enteric), which had been 34, 40, and 44 in the three previous weeks, delined again last week to 40; the highest death-rates from this disease were recorded in Birkenhead, Hull, and Blackburn. The 38 deaths from diarrhœal diseases differed but slightly from the average. The deaths referred to diphtheria in the twenty-eight towns, which had been 29 and 25 in the two preceding weeks, further declined to 20, and were fewer than those returned in any week since the beginning of September last; 14 were recorded in London, 2 in Salford, and 2 in Leeds. The fatal cases of small-pox in these towns, which in the two previous weeks had been 18 and 15, rose last week to 17; 11 occurred in London, 2 in Liverpool, 2 in Sunderland, 1 in Sheffield; and 1 in Newcastle-upon-Tyne. [illegible] the metropolitan returns, [illegible] below the average, the deaths referred to these diseases in London, which in the two preceding weeks had been [illegible] last week they were 127 below the [illegible] average number, and were equal to an annual rate of [illegible] per 1,000. The causes of 87, or 2.3 per cent., of the 3,796 deaths registered last week in the twenty-eight towns were not certified [illegible] by coroners. In London the proportion of [illegible] did not exceed 1.5 per cent., [illegible] averaged 2.9 per cent., and showed the largest [illegible] Bolton, Leicester, and Norwich.

Health of Scotch Towns. In eight of the principal Scotch towns, having an estimated aggregate population of [illegible], 885 births and 504 deaths were registered during the week ending the 15th instant. The annual rate of mortality, which in the four preceding weeks had risen from 20.9 to 23.3 per 1,000, declined last week to 20.9, which was 1.7 below the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the death-rate was equal to 15.9 in Dundee, 16.4 in Leith, 17.9 in Greenock, 18.5 in Perth, 18.7 in Aberdeen, 21.5 in Edinburgh, 23.2 in Glasgow, and 25.0 in Paisley. The 504 deaths registered last week in these towns included 22 which resulted from whooping-cough, 17 from diphtheria, 13 from diarrhœal diseases, 12 from measles, 9 from "fever," 7 from scarlet fever, and not one from small-pox; in all, 80 deaths were referred to these principal zymotic diseases, equal to 15.5 per cent. of the total deaths, and to an annual rate of 3.3 per 1,000, which slightly exceeded the average zymotic death-rate recorded last week in the twenty-eight English towns. In the Scotch towns the lowest zymotic rates were 0.0 and 0.7 in Perth and Greenock, whereas the rate was equal to 4.2 in Dundee and 4.5 in Paisley. The fatal cases of whooping-cough, which, in the the two preceding weeks, had been 21 and 31, declined to 22, of which 16 were returned in Glasgow and 4 in Edinburgh. The deaths referred to diphtheria, which had been 17 and 12 in the two previous weeks, rose again to 17, of which no fewer than 6 were recorded in Dundee; 5 deaths from this disease were also returned in Glasgow, and 3 in Edinburgh. The 12 fatal cases of measles exceeded by 4 the number in the preceding week, and included 4 in Glasgow, 4 more in Paisley (against 4 and 5 in the two previous weeks), and 3 in Edinburgh. The 7 deaths from scarlet fever were within one of the number in the previous week; 3 occurred in Edinburgh and 2 in Glasgow. The fatal cases of "fever," which had been 15 and 8 in the two preceding weeks, were 9 last week, of which 4 were returned in Glasgow, 3 in Edinburgh, and 2 in Leith. The mortality from diseases of the respiratory organs in these Scotch towns was considerably below the average, and was equal to an annual rate of 4.1 per 1,000, which was 0.7 below the rate last week from the same diseases in London. As many as 71, or 14 per cent. of the 504 deaths registered last week in these towns, were uncertified.

OBITUARY.

SILVESTER EASTES, M.R.C.S., L.S.A., J.P.

This gentleman passed away on Sunday, the 2nd instant, at his residence, Folkestone, aged 71. He was born at Hythe, Kent, and studied his profession at Guy's Hospital, obtaining his qualifications in 1834. After assisting in medical practices at Amersham, in Buckinghamshire, and Canterbury, he settled in Folkestone in 1840, and thenceforth devoted his time to hard work in his profession until within six weeks of his death. He was of very active habits, fond of his professional labours, and abounded in kindly sympathy and benevolence towards the poor. He was joined by Dr. C. E. Fitzgerald as partner in 1857, the partnership lasting about ten years. He was also coroner for the borough for about ten years, and a magistrate for the last twenty years of his life. He was surgeon to the Folkestone Dispensary twenty-two years, and, on resigning that post, was elected consulting surgeon. He was the first Admiralty-surgeon and agent chosen for the Folkestone district—an appointment which he held up to the day of his death. He leaves a widow, two daughters, and four sons, three of whom are in the medical profession; two of these latter succeeding to the practice left by their father. The large gathering of magistrates, town councillors, and other officials of Folkestone, and of members of the medical profession, friends, and patients, at the funeral, fully testified to the high esteem which was entertained for the deceased gentleman.

JAMES HICKINBOTHAM, M.D., F.R.C.S.Ed., M.R.C.P.Ed.

It is with much regret that we record the death of Dr. James Hickinbotham, who died at the early age of 44 years, at his residence Broad Street, Birmingham, on February 22nd, after a short illness. Dr. Hickinbotham was a native of Loughborough, and began the study of his profession as an apprentice of Mr. Edwin Denton of Leicester, and afterwards was an assistant to the well known Rugby surgeon, Samuel Bucknill. Afterwards, he completed his medical curriculum at the Sydenham College, and the General Hospital, Birmingham, where he was the most distinguished student of his year. In 1864, when he became qualified, Dr. Hickinbotham began practice in Nechells, one of the growing suburbs of Birmingham, and soon gained a reputation as a most skilful and attentive practitioner. For twelve years he continued to practise there, all the while taking an active share in the work of the medical societies of Birmingham, and distinguishing himself from time to time by contributions to their proceedings. Always of delicate physique, the unceasing toil of a large general practice in a comparatively poor district, told upon his powers, and a few years since Dr. Hickinbotham decided to move into Birmingham, and devote himself to the special line of work, gynæcology, to which he had always given the largest share of his studies. In a short time he became attached to the Lying-in Charity, and was elected one of the physicians to the Woman's Hospital. His papers in the medical journals, and his contributions to the *Proceedings of the Obstetrical Society of London*, soon showed that he was making excellent use of his new field of observation. His writings generally were marked by honest work, acute observation, and originality, and evinced considerable literary skill. They quickly drew attention to him as a very promising specialist, and he was just winning a high position in his line of practice when the end came.

In the course of his residence in Birmingham, Dr. Hickinbotham had made a very wide circle of friends, to whom he was endeared by the kindliness of his nature, his bright intelligence, and his high personal character.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, March 20th.

MEDICAL ACT AMENDMENT BILL.

Lord Carlingford moved that the House go into Committee on this Bill.—**Lord Balfour of Burleigh** said he wished to make an observation with regard to some of the provisions of the Bill. Last year there were a great many amendments put down against the measure; the Universities of Scotland having entertained a serious objection to some of the proposals, believing that they would be affected by them. As the contentions of the Universities were very fully discussed last year, he had not now placed on the paper the amendments which were then debated, but he thought it necessary to warn the Government that the Scotch Universities did not look with any more favour upon the provisions of the Bill than they did last year. The provisions which were chiefly objected to were those which would, as the Universities believed, lower the general standard of medical education in Scotland—at least as far as they were concerned. What he particularly adverted to was this, that, if the provisions of the Bill were carried into law as they now stood, the Scotch Universities believed that all the candidates for their degrees would have to undergo a double examination. An examination in medicine and surgery was a very long and expensive affair, and if the possession of the degree of medicine given by a Scotch University did not qualify to admission on the *Register*, those who intended to practice and be put upon the *Register*, would have to undergo another qualifying examination under the Bill. It was absurd to suppose that the minimum examination under the Bill would be in any way equivalent to the examination for a medical degree in a Scotch university; and the state of the matter would be this, that although a man, desiring to practise, had obtained an university degree, and therefore possessed a higher qualification for the practice of his profession than if he had undergone the examination under the Bill, he would be debarred from doing so, unless he also underwent a qualifying examination to admit him to the *Register*. He felt, and the Universities felt, that the expense and trouble of the double examination would deter a great many from taking university degrees, who would otherwise do so; and that, instead of making the general standard of the profession higher than it was, there would be a tendency to diminish it. He was sure their lordships were not aware of the great expense and time which was necessary for the present final examination in medicine and surgery. These examinations extended over a period of five or six weeks; and it was impossible that young men who wished to enter the medical profession would be able to devote that amount of time to each of two medical examinations, to say nothing about paying the additional fees which would be required. At the present time, owing to the large number of candidates who came forward for University degrees in the University of Edinburgh, the resources of that University were taxed to the utmost, and if a second examination were to be imposed, he ventured to think it would be unworkable in practice, and he believed inexpedient in theory. He made these remarks now in order that Her Majesty's Government might not say they were not warned of these things when the Bill reached the House of Commons, where it had never yet been debated. There was one other point; it was the only one in which the Bill had been altered from the form in which it had been presented to their lordships last session, namely, as to the constitution of the Medical Board in Scotland. Last year it was proposed that the Universities should be entitled to send eight members to the Medical Board, and the medical corporations to send three, but this year it had been decided to increase the representation of the corporations to five members. If the matter went no further, he did not think there would be any serious opposition or objection on the part of the Universities to that change; but on the part of what he might call outside opinion, and not speaking for the Universities, he might say he was not at all certain that the particular method in which it was proposed to allocate these particular representatives in Scotland, would meet with general acceptance. He ventured to think it would be found that some alteration would be proposed in the House of Commons. The matter, however, was one more or less of detail, which could be satisfactorily dealt with at a later stage. He did not propose to take steps to give effect to the views he had been expressing to-night, but he hoped it would not be said that the fact that no amendments had been brought forward, showed that the Universities were a party to an arrangement to which they had always been opposed.—The Duke of **Richmond** and **Gordon** said he was justified in saying that there was some dissatisfaction in Scotland with regard to the alterations which had been made in the Bill since last year. It was not that the Universities objected to the larger number of representatives given to the corporations, because they thought that was perfectly fair. Upon that matter he was prepared to accept the view of the Lord President of the Council, that it was necessary to increase the representation of the corporations in order to carry out the recommendation of the Royal Commission, but the objection was to the manner in which the additional members were to be allocated. It was believed that an undue preponderance would be given to Edinburgh and the Edinburgh schools. Various suggestions had been made to meet the difficulty, and he was not prepared to say at the moment what should be done; but at the same time it was desirable to call the attention of the Lord President to the fact, and he hoped that the noble lord would see his way to make some arrangement whereby the complaints might be removed. Judging from past experience on these matters, he might prognosticate that innumerable suggestions and complaints would be made before the measure was passed; at any rate, he would strongly urge upon the Government to make every effort to pass the Bill through this Session. It was a very important measure, and he did not think it would be to the interests of the profession or the community that the subject should be allowed to continue to agitate the public mind. It should be brought to a conclusion as soon as possible. It would go down to the House of Commons in good time, and if the Government were really in earnest, there ought to be no difficulty in passing it before many of the other measures which were before the country.—Lord **Carlingford** said he had been anxious, in this Bill, to do full justice to the Scotch medical corporations, and to give them the full amount of representation to which they were entitled. The Scotch Universities, no doubt, had a fair claim to a majority on the Scotch Board, and, in the endeavour to give that, whilst dealing justly with the corporations, he thought he had succeeded. So far, the proposal had met with general acceptance. The Scotch Universities acquiesced in it, from what he could gather; but there now arose a difficulty of another kind. The noble Duke knew how difficult it was, in this matter, to steer through the shoals and quicksands of jealousy and conflicting interests which beset the question. The Government had had to deal with the jealousies of the medical universities amongst themselves, with the jealousies of the corporations, and with the jealousies existing between the whole body of the universities and the whole body of the corporations, and now came the other quicksand of the jealousy between Edinburgh and the provincial cities. He was not wedded to the proposal he had made in this part of the Bill, and should be ready to consider any suggestion for the better attainment of the object he had in view, but he did not think it would be easy to devise a better plan. The Faculty of Physicians of Glasgow was not a first-class medical body. It was a surgical body, and it had been thought a reasonable thing to combine it with the Surgeons of Edinburgh, for the purpose of allowing them to send a member together. As to the Bill itself, he was glad to hear the appeal which had fallen from the noble Duke, because he felt strongly that it was the duty of the Government to take every means in their power to secure the passing of the measure into law before the end of the present session. He should be deeply disappointed if that were not affected. He had been sorry to hear that there was likely to be some opposition on the part of the Scotch Universities, because he could not think that they had any just ground of complaint. They asked that they should be first among all the medical licensing bodies on a footing of exclusive exceptional favour—that among all the bodies their examination alone should be accepted by the State as qualifying for a licence. That, he thought, was too much to ask. The Scotch Universities could not expect to be put in such an exclusive and exceptionally privileged position.—Their lordships then went into Committee on the Bill.—Lord **Carlingford** proposed several amendments, with the object of placing the Irish College of Physicians on the same footing as the Irish College of Surgeons, by giving an additional member to the former. His object, he said, was to retain the balance of voting power in the Irish colleges. The additional member would be elected by Trinity College, Dublin, and the Royal University collectively.—The Earl of **Milltown** said he had an amendment on the paper to the same effect, which, however, he would not move.—The Earl of **Limerick** did not propose to offer any opposition to the amendment, although he trusted the matter would not be considered as settled. The report-stage should be deferred to a day when the Chancellor of the Irish University (Lord Cairns) could be present.—Lord **Carlingford** said his information as to the views of the University of Dublin on this point differed from that of the noble Earl. Before he had placed the amendment on the paper, he had had an interview with some eminent members of Trinity College, Dublin, who had expressed themselves satisfied with the proposal.—The Earl of Limerick could assure the noble lord there was some difference of opinion on the subject.

The amendment was agreed to.

On the motion of Lord **Carlingford**, the following subsection was added to Clause 19. "Any scheme under this section shall be framed in such manner as to secure, so far as is practicable, between the several parts of the United Kingdom, a substantial equality of standard as respects education and examinations."

Some verbal amendments were agreed to, and the Bill passed through Committee.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF EDINBURGH.

Tercentenary Festival.

The following is the programme of the proceedings of the Tercentenary Festival of the University of Edinburgh, which will take place next month.

Tuesday, April 15th.—Ordinary University Graduation Ceremonial, in the United Presbyterian Hall, at 11 A.M. Tickets may be obtained from the Secretary of the Senatus.—Reception of Guests, Members of the University, and others, by the Lord Provost, Magistrates, and Town Council, in the Museum of Science and Art, from 8 to 10.30 P.M.—Students' Torchlight Procession, 11 P.M.

Wednesday, April 16th.—Commemoration Service in St. Giles's, at 11 A.M.—Luncheon in the University New Buildings, by invitation of the Principal and Faculty of Medicine, at 1 P.M.—Dramatic Entertainment by the Students, in the Lyceum Theatre, at 3 P.M.—Organ Recital by Professor Sir Herbert Oakeley, in the Music Class Room, Park Place, at 4 P.M.—*Conversazione* in the Hall of the University Library, 8 to 11 P.M.—Ball given by the Students in honour of the Stranger Guests, in the Assembly Rooms, George Street, at 10 P.M.

Thursday, April 17th.—Tercentenary Academic Ceremonial, in the United Presbyterian Hall, Castle Terrace, at 10.30 A.M. (*a*) Reception of Representatives from Sister Universities and other learned bodies; (*b*) Laureation in Divinity and Laws; (*c*) The Chancellor's Address.—Luncheon by invitation of the President and Fellows of the Royal College of Physicians, at 1.30 P.M.—Reception by the Dean and Faculty of Advocates, in the Advocates' Library, at 2.30 P.M.—Reception by the Royal Medical Society, Melbourne Place, at 3 P.M.—Tercentenary Banquet, Drill Hall, Forrest Road, at 6.30 P.M.

Friday, April 18th.—Breakfast by invitation of the President and Fellows of the Royal College of Surgeons, at 10 A.M.—Visits to Holyrood Palace, the Castle, University Buildings, etc., and Excursions.—Concert, under the auspices of the University Musical Society, in the Music Hall, George Street, at 2.30 P.M.—Reception by the President and Council of the Royal Scottish Academy, at 4.30 P.M.—Illumination in Princes Street, and Fireworks on Castle Esplanade, 9 to 10.30 P.M.

MEDICAL NEWS.

Royal College of Physicians of Edinburgh.—The following gentlemen have obtained the licence.

Messrs. A. Mellagh, Barrow in Furness; J. S. Ward, Lisburn, co. Antrim; E. A. Fell, London; A. F. Stevens, London; G. F. Hare, London; C. W. Howson, Nova Scotia; E. J. Brockless, Banbury; G. Thomas, Manchester; F. L. Luckman, Manchester; A. A. Carr, London.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 13th, 1884.

Charlesworth, George Henry, Tonsley Hill, S.W.
Clark, Simon Prince, Cumberland Street, Glasgow.
Dodd, Walter Harry, Petherton Road, Canonbury, N.
Gould, Ernest Edward, Clifton Hill, Exeter.
Hugill, George Frederick, Rosedale, Chiselhurst.
Jenkins, John, Royal Infirmary, Bristol.
Menzies, James Herbert, Gwendwr Road, West Kensington.
Robbs, Charles Edward, Powis Square, W.

MEDICAL VACANCIES.

The following vacancies are announced.

BETHLEM HOSPITAL.—Two Resident Medical Students. Applications to A. M. Jeaffreson, Esq., Bridewell Hospital, Blackfriars, E.C., by April 5th.

BIRMINGHAM GENERAL DISPENSARY.—Dispenser. Salary, 50*l*. per annum. Applications by March 24th.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—House-Surgeon. Salary, 120*l*. per annum. Applications by April 4th.

CHILDREN'S HOSPITAL, Birmingham.—Dispenser. Salary, 80*l*. per annum. Applications by April 1st.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, 100*l*. per annum. Applications to the Secretary, Board Room, Bagillt Street, Holywell, by April 15th.

JERSEY GENERAL DISPENSARY.—Medical Officer. Salary, 120*l*. per annum. Applications by May 1st.

KENT AND CANTERBURY HOSPITAL.—Physician. Applications by March 22nd.

LEEDS AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Surgeon. Salary, 180*l*. per annum. Applications to C. H. Wilson, 12, Rugby Terrace, Rugby Road, Leeds, by April 1st.

MIDDLESEX HOSPITAL, W.—Obstetric Physician. Applications by March 25th.

MORPETH DISPENSARY.—Resident Medical Officer. Salary, 100*l*. per annum. Applications by May 5th.

NENTHEAD AND TYNEDALE LEAD AND ZINC COMPANY'S (LIMITED) WORKMEN'S MEDICAL UNION.—Medical Officer.—Salary, 100*l*. per annum. Applications by March 29th.

OLRIG AND DUNNET PAROCHIAL BOARDS.—Medical Officer. Salary, 60*l*. per annum. Applications, marked "Medical Officer," to James Brims, Esq., Chairman, by April 8th.

PARISH OF BRACADALE.—Medical Officer. Salary, 108*l*. per annum. Applications to the Rev. John M'Lean, Manse of Bracadale, by Portree.

PAROCHIAL BOARD OF KIRKCOWAN.—Medical Officer. Salary, 52*l*. per annum. Applications to Mr. P. Gordon, Inspector of Poor, by March 31st.

ROTHERHAM HOSPITAL AND DISPENSARY.—Assistant House-Surgeon. Applications to John Barras, Honorary Secretary.

RUBERY HILL ASYLUM.—Resident Clinical Assistant. Applications to Dr. Lyle, Medical Superintendent.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Surgeon. Applications by March 26th.

ST. BARTHOLOMEW'S HOSPITAL, Chatham.—Assistant House-Surgeon. Salary, 100*l*. per annum. Applications addressed to the Clerk to the Trustees, endorsed, "Application for Assistant House-Surgeon," by May 1st.

ST. PETER'S HOSPITAL FOR STONE AND URINARY DISEASES, etc., Henrietta Street, Covent Garden.—House-Surgeon for six months. Honorarium, 25 guineas. Applications by March 24th.

WEST LONDON HOSPITAL, Hammersmith.—Surgeon. Applications by March 31st.

MEDICAL APPOINTMENTS.

BRAND, Alexander Theodore, M.B., C.M., appointed Medical Officer to the Driffield Union and Driffield District, and Public Vaccinator to the Driffield District, both *vice* J. D. Eames, L.R.C.P., resigned.

HYRONS, Ernest A., M.R.C.S., appointed Junior House-Surgeon to the Borough Hospital, Birkenhead *vice* Henry E. Richardson, promoted.

NANCE, H. Chester, M.R.C.S., L.R.C.P., appointed Senior Resident Medical Officer to the General Hospital for Sick Children, Pendlebury, Manchester.

OLIPHANT, E. H. Lawrence, M.B., C.M.Edin., appointed House-Surgeon to the Glasgow Maternity Hospital.

RICHARDSON, Henry E., L.R.C.P., L.R.C.S., appointed Senior House-Surgeon to the Borough Hospital, Birkenhead, *vice* M. Bernstein, M.B., resigned.

WILSON, Alexander, M.R.C.S., L.R.C.P., appointed Junior Resident Medical Officer to the General Hospital for Sick Children, Pendlebury, Manchester.

WYER, Otho F., M.D.Glasg., appointed Honorary Physician to the Warneford, Leamington, and South Warwickshire Hospital, Leamington, *vice* Thomas A. Carter, M.D., F.R.C.P.Lond., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

DEATHS.

HICKMAN.—February 19th, 1884, at Jhansi, Central India, suddenly, the result of an accident at polo, Arthur Hickman, M.D., L.R.C.S., L.R.C.P.E., Surgeon A.M.D., son of the late W. V. F. Hickman, Esq., M.A., Athenry House, Co. Galway. Aged 30. Deeply regretted.

SHARMAN.—On the 10th instant, after a short illness, at his residence, Hollington, Bristol Road, Birmingham, Malin Sharman, Esq., M.R.C.S., aged 59 years.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY ..... St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Cavafy: On Erysipelas with Low Temperature. Dr. D. W. Finlay: On a Case of Opium-poisoning. Dr. A. W. Waters: Meteorological Observations at Davos. Dr. D. W. Cullimore will show a case of Diphtheritic Paralysis at 8 P.M.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. E. Noble Smith: Seventy Cases of Dupuytren's Contraction of the Fingers. Dr. H. Radcliffe Crocker: Three Cases of Xeroderma Pigmentosum (Kaposi). The patients will be exhibited a second time, the morbid growths having been removed.

WEDNESDAY.—Hunterian Society, 8 P.M. Mr. Hutchinson: Somes Notes on Arsenic. Mr. McCarthy will exhibit some Osteotomies. Dr. Stowers: Sequel of a Case of Paget's Disease of the Nipple. Mr. Charters J. Symonds will exhibit a case of Scleroderma with Gangrene of Fingers.—The Hospitals Association (11, Chandos Street). Mr. William J. Nixon: On Difficulties associated with the Administration of the Out-patient Department.

FRIDAY.—Clinical Society of London, 8.30 P.M. Dr. Finlay: Cases of Enteric Fever associated with Rheumatism. Mr. Davies-Colley: Case of Dislocation of the Spine. Mr. Durham: Case of Neuralgia successfully treated by Trephining. Dr. De Havilland Hall: Sequel to case of Perichondritis of the Larynx.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT. We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

PROVIDENT DISPENSARIES.

SIR,—In confirmation of the opinion expressed in my letter on the provident principle, I have before me the fifteenth annual report of the St. George Hanover Square Provident Dispensary, one of those first established in London; or rather one of the first to yield to necessity, and endeavour to supply pecuniary wants of a serious nature by some other plan than that of closing the institution. The rules of that dispensary were practically the same as were later adopted by the Charity Organisation Society, Sir Charles Trevelyan being, like myself, an active member of both committees.

On referring to this report, you will see that the total expenses for the year 1882 were 773*l*. 19s. 4d., of which sum, 200*l*. 17s. only was subscribed by members, and the rest came from donations.

I wish to press strongly on your attention the report of the South London Medical Aid Institute, which I enclose, and from which you will see that it is possible to conduct dispensaries in a most satisfactory way, if the foolish idea of forcing providence upon the working classes is abandoned until they can see the advantages of it, if there be any, for themselves.

South London Medical Aid Institute. Cash Statement for Year ending December 31st, 1883.

	£	s.	d.
Receipts:			
Donations, etc.:			
Hospital Saturday and Sunday	39	0	8
Honorary subscribers	17	17	0
	56	17	8
Members' payments	98	6	7
Non-members' payments	516	14	6
	671	18	[illegible]
Total expenses	577	1	1
Balance . . .	94	17	4

From this it is seen that such an institution can be supported without charity. This success depends upon the fact that, when this dispensary was organised, the provident system was combined with the same system as is now adopted at Guy's Hospital, and sick persons were allowed to receive advice and medicine for immediate payment. It was not considered reasonable to conclude that one system would spoil the other; but, on the contrary, that provident members would tend to come in from casual applicants.

This institution is the only one of the kind in England, and the lesson to be learnt from it is so important, that I am sure you will excuse me for pressing it on your notice.

The remarks in my last letter respecting provident dispensaries applies to London, and, as the profession would recognise the fact that it is more unjust to give advice and medicine to those that can afford to pay for it for nothing at all, than for a small fee, and that the great body of practitioners must suffer less by the latter plan than the former, we shall soon see the question of hospital out-patients satisfactorily settled. If we keep clearly before us the objects for which hospitals are intended, firstly, to relieve suffering, secondly, to improve medical knowledge, and least of all, to pauperise the working classes and the profession, there will, I feel sure, be no want of money from the public, or suspicion of the value of hospitals in the public mind. Yours truly, ROBERT [illegible]

6, Savile Row, W., February 9th, 1884.

QUARANTINE.

ON account, it is alleged, of the want of authentic information concerning the state of health of Bombay, the quarantine regulations against arrivals from that place still continue in force at Jeddah, Hodeida, and Bussorah. At a meeting of the International Sanitary Council held on March 18th at Constantinople, the English delegate was asked if he could furnish a regular bulletin of the condition of Bombay, it being stated that the authorities would then act in accordance with the terms of the report. The delegate replied that he would communicate the Council's desire to the proper quarter.

BOOKS ON VENTILATION.

PERPLEXED asks for the names of good practical treatises on (1) Ventilation, (2) Heating, with special reference to the requirements of large buildings, hospital wards, etc., and strictly up to the present date.

*** "Perplexed" will probably find that *A Practical Treatise on Heat*, by Thomas Box, will give him the information he requires on Ventilation and Heating. It is published by Spon, 16, Charing Cross.

BOWER AND KEATES FUND.

A SUBSCRIBER to the Bower and Keates Fund presents his compliments to the Editor of the BRITISH MEDICAL JOURNAL, and will feel obliged by information respecting the amount collected, and how it was distributed.

*** The amount collected has already been stated in the medical journals. It was, it will be remembered, considerably beyond the sum required. We understand that no further steps can be taken until after the new trial which was threatened by the plaintiffs, and for which notice has been given, has been concluded. The amount of the surplus will then be known, and the question as to how to dispose of it will then be discussed.

PERMANGANATE OF POTASH IN SNAKE-BITE.

THE correspondent who asks us for information with regard to the use of permanganate of potash in cases of snake-bite will find the subject fully discussed by Sir Joseph Fayrer in his address before the Medical Society, published in the BRITISH MEDICAL JOURNAL of February 2nd, p. 208 *et seq.*

THE SHUTER MEMORIAL FUND.

THE Committee announce that the above fund will be closed on the 31st instant. Those gentlemen who wish to subscribe, and have not yet sent in their contributions, are requested to communicate at once with either of the honorary secretaries: Mr. Bruce Clarke, 46, Harley Street, W.; or Mr. Chune Fletcher, 12A, Charterhouse Square, E.C.

CHANGE OF COLOUR OF HAIR.

SIR,—Will one of your correspondents, possessed of chemical knowledge, be kind enough to tell me what I should do in the following circumstance? Three years ago, I put by some white hair, of one who was very precious to me, who died. I put it by, wrapped in paper of a blue colour, not imagining that the colour of the paper could affect the hair; but I opened the packet recently, and found to my grief that the perfectly pure silvery white of the hair—the white of very old age—had been turned of a yellow tinge by contact with the paper, from which the blue colour had disappeared wherever the hair had lain against it. I am, therefore, very anxious to learn how I can now treat the hair so as to take away thoroughly this offensive yellow tinge, and restore to its own perfect silvery purity the colour of the hair, without doing any injury to the hair at the same time. If any of your correspondents can—and will—inform me how I can do this, I shall be very grateful.—Yours faithfully, R. L.

J. W. H.—The matter is under consideration.

SANITAS.—We do not think that the subject is one which can be profitably discussed in our columns.

HOT-WATER INJECTIONS IN POST PARTUM HÆMORRHAGE.

SIR,—In the JOURNAL of January 19th there appeared a letter, under the heading "Obstetric Memoranda," from Dr. W. L. Paget, of Great Crosby, in which he submits a few facts about the treatment of *post partum* hæmorrhage.

The treatment of *post partum* hæmorrhage by the injection of hot water into the uterus is now pretty old and pretty extensively used. I have always seen it used in the Coombe Lying-in Hospital in Dublin, have often used it there myself while pupil midwifery-assistant, and since in private practice with success. I do not, of course, wish to undervalue the importance of the use of hot water-injections; as, judging from my own limited experience, I know of nothing better, of nothing that acts so quickly, and can always, with little thought, be at hand.

Contrasting hot and cold injections, Dr. Paget says hot are superior to cold. I quite agree with him, but I would humbly suggest their alternative use, as I am fully convinced the cold would then have no depressing effect. In the first four facts submitted for our instruction and guidance, we have learnt nothing new nor wonderful; but, in the fifth, we certainly have, although I would anxiously pause before thinking of adopting it. The fifth says: "Do not hurry to extract the placenta, but allow the patient to rally, and rather squeeze it out by pressure with the left hand than pull too much on the cord." I, and I am sure most other students who have studied at one or other of the Dublin hospitals, have been taught to follow the uterus with the hand down into the pelvis during the birth of the child, keeping steady pressure upon it, and having it fully under control for some time after, and then expelling the placenta with the hand on the uterus. The treatment of extracting the placenta (except when from a definite cause it is absolutely necessary, and I fail to expel it), I have never been taught; that of pulling on the cord I shall never adopt, believing that it is both dangerous and unscientific.

I would modestly suggest a few points, which, if followed, might free such cases of their difficulties. First, in a case such as Dr. Paget's, where I would consider the administration of chloroform necessary before the application of the forceps, I would certainly (if possible) call in an assistant. I imagine that, if this had been done, [illegible] it would have saved all his trouble and [illegible] risk there was to both mother and child, as he would then have had an assistant with "an intelligent appreciation of how to hold the uterus." Secondly, keep the hand in the uterus when once introduced for the removal of the placenta until the uterus contracts on both, and do not at once remove them, to be followed "by another torrent of blood," as was the case in this instance. Lastly, do not be in too great a hurry to introduce your hand into the uterus for the removal of clots after the expulsion of placenta and membranes, but rather try pressure and washing out the uterus through the uterine tube. I am, sir, respectfully yours,

EDWARD DUFFY MULLAN, L.R.C.P.I., L. Mid. & Med. K.Q.C.P.I.

30, Carlisle Road, Londonderry.

CERTIFICATES IN MIDWIFERY.

STUDENS.—The Obstetrical Society of London grants certificates to midwives. These certificates are much valued as evidences of acquaintance with the subject, but confer no legal rights. Our correspondent had better communicate with one of the Honorary Secretaries.

COMPULSORY NOTIFICATION OF DISEASE [illegible]

SIR,—I see in your notice of the meeting of the [illegible] of Brighton, with regard to the Compulsory Notification of Infectious Diseases, you state "that several [illegible] were not satisfied." This seems to me to [illegible] that these [illegible] at present [illegible] were [illegible]. [illegible] I am, sir, yours obediently, [illegible] EDWARDS, Honorary Secretary.

3, [illegible] Road, Brighton, March 11th, 1884.

THE YELLOW PIGMENT FOUND IN THE INTESTINES IN CASES OF ARSENICAL POISONING.

SIR, The interesting observations made by Dr. J. Campbell Brown and Mr. Edward Davies, of which an account was published in your last issue, would seem to indicate that the yellow pigment in question is impure bilirubin ($C_9 H_9 NO_2$). At least, this suggestion would be worth bearing in mind in any further investigation of the subject.—Yours truly, C. T. KINGZETT.

Trevenna, Amhurst Park, N., March 15th, 1884.

THE AUDIOMETER.

SIR, In a recent number of a contemporary journal, the "audiometer" is described as having been recently exhibited as a novelty, and been in use prior to exhibition for twelve months. I wrote, mentioning that I showed and described this instrument at the Association meeting at Cork in the year 1879, and that its merits were then fully discussed by such eminent aurists as Dr. Weber-Liel of Berlin, Dr. Beard of New York, Drs. Fitzgerald and Jacob of Dublin, Dr. Pierce of Manchester, Dr. Kirk Duncanson of Edinburgh, Dr. McKeown of Belfast, and Dr. Cassells of Glasgow; the whole being very fully reported in the BRITISH MEDICAL JOURNAL of August 30th, 1879.

Since the editor of the journal in question has not printed my letter, I ask, as an act of justice to a member of the Association, to allow me to note this fact in the JOURNAL.—I am, yours faithfully, LENNOX BROWNE.

36, Weymouth Street, Portland Place, W., March 15th, 1884.

NEW LATIN SYNTAX.

SIR,—The following specimen of doctor's Latin occurs in a prescription of a London physician which recently appeared in a medical journal: "Fiat injectionem, ut bis die utendum."

I would suggest that medical men who are ambitious of writing Latin, after they have forgotten the rules of syntax, should, for the sake of decency, adhere to the usual abbreviations.—I am, sir, yours faithfully,

MEMBER BRIT. MED. AS.

SECOND-HAND FRENCH BOOKSELLER.

DR. C. P. COOMBS asks for the address of a dealer in second-hand medical books in Paris.

*** Leclerc, Boulevard St. Germain, 104; Rey, Rue Monsieur le Prince, 12.

VIOLENT ITCHING IN AN ELDERLY GENTLEMAN.

SIR,—To my mind, one cause of the "itching" is the "brandy and water several times a day." Let him leave this off, and for the "weak heart" take occasionally a glass of cold soup, made of Liebig's extract, or a tumbler of milk-gruel, and observe the result. Alcohol in any shape determines blood to the skin; and, when there is a tendency to irritation, the less blood sent to the surface the better. An aloetic purge occasionally would be useful in this case.—I am, etc.,

Upper Norwood, March 15th, 1884. GEORGE K. POOLE, Surgeon-Major.

CLIMATE OF AUSTRALIA.

DR. J. WARD wishes to learn whether the climate of Australia is suitable for a person suffering from rheumatism, and whether preference is to be given to Melbourne, Adelaide, or Sydney.

GAS-FIREPLACES.

W. R. E. C. writes: Replying to inquiry of "Ne Quid Nimis," the gas-fireplaces are shown by the official report of the Smoke Abatement Committee, page 105, to be superior in heating efficiency to gas-stoves. No smell of burnt gas is to be perceived in the room, as the gas-fireplaces are fitted with a hood and pipe which convey the products of combustion up the chimney, in front of which the fireplace stands.

MY experience is that, with plenty of gas, a good heat can be got, but costly as compared with a coal fire. Unless a good draught up the chimney be maintained, there will be unpleasant smells and injurious effluvia.—I am, etc.,

K.

SIR,—I beg to inform "Ne Quid Nimis" that I have had one of Fletcher's gas-fires in use through the winter in the surgery, and am very much pleased with it. It is instantly red-hot, radiates more heat than the old coal-fire did, and does not give off the slightest odour in the room.

I enclose my address, and shall be glad to give "Ne Quid Nimis" any further particulars. I am, etc., T. H. W.

P.S. I may mention that, when choosing it, I saw several others in action, but none were by any means equal to Fletcher's.

THE TREATMENT OF ABORTION.

SIR,—I have read the letter of "A Member," on the above subject, with some interest, and not without some sympathy for the difficulty he has experienced in the treatment of abortions during the early months of pregnancy. An usual recommendation in books is to introduce the forefinger of the right hand, and sweep out the placenta, making sure that it is wholly cleared out. Now, this is much easier said than done; and I must say that I have usually found it impossible to sweep out the placenta in this or, indeed, any other way until it has become detached from the uterus and is actually in process of being expelled by uterine contraction. To attempt it before is, in my experience, not only useless, but likely to prove dangerous.

I have for some years resorted to the practice of letting the placenta alone, if it do not immediately follow the expulsion of the embryo or fœtus, which it rarely does. I introduce two sponges to prevent hæmorrhage, one applied to the os, and another (a large one) in the vagina, to keep the first in position. I enjoin perfect rest, and give repeated doses of liquid extract of ergot; the sponges are changed daily, and the vagina is washed out with warm water and Condy's fluid. I find that within two days, as a general thing, the placenta has become detached and can be extracted with ease. Rest, with ergot and bromide of potassium for a few days, followed by tonics, bring the case, I should say almost invariably, to a favourable termination. The dangers of delay are the absorption of putrid matter from decomposing placenta, but this is not likely to happen to any extent within three days, and hæmorrhage due to the separation of the placenta, is not to be viewed with alarm within certain limits. I have found the sponges, introduced in the way I have mentioned, very effectual in preventing hæmorrhage, and after their introduction I leave the case for some hours with the utmost confidence.

Another useful method, and one to which I shall resort more frequently in future, is to introduce a compressed sponge-tent into the os; this not only checks hæmorrhage, but also aids in dilating the os.—I am, etc.,

316, Kennington Park Road, S.E. JNO. CAMERON, L.R.C.P.Lond.

COMMUNICATIONS, LETTERS, etc., have been received from:

Our Paris Correspondent; Mr. J. F. Leeson, West Brighton: Mr. J. H. Hough, Leamington; Mr. E. Richard, Newcastle; Mr. G. F. Masterman, Stourport; Mr. G. H. Darwin, Manchester; Mr. J. Brindley James, London; Dr. E. Symes Thompson, London; Mr. E. Gordon, Stockport; Our Glasgow Correspondent; Dr. Burnet, London; Dr. G. Henty, London; Dr. Ward Cousins, Portsea; Dr. Glascott, Manchester; Mr. R. F. Benham, London; Dr. H. Tuke, London; Mr. W. Chisholm, London; Mr. P. Wemish, Edinburgh; Dr. J. H. Stowers, London; Mr. C. H. Hill, London; Dr. J. H. Hill, Liverpool; Mr. G. H. Bailey, London; Mr. P. W. G. Canning, Paignton; The Secretary of the Clinical Society; Mr. J. Brown, Bacup; The Secretary of the Parkes Museum; Mr. T. P. Thomson, Dorrington; Our Dublin Correspondent; Mr. E. Williams, Leicester; Dr. Alfred Newman, Wellington, New Zealand; Mr. Alexander Wilson, Pendlebury; Dr. Paget, Cambridge; Mr. J. Hatton, Weymouth; Mr. William Crean, Brae, Shetland; Mr. Sharman, Birmingham; Dr. Clifford Allbutt, Leeds; Mr. Power, Portsea; Mr. A. W. M. Robson, Leeds; Messrs. Deighton, Bell, and Co., Cambridge; Mr. R. Graveley, Newick; Mr. W. H. Latham, Sandbach; Dr. Sutherland, London; The Secretary of the Hospitals Association; Dr. D. G. Prothero, Malvern; Mr. R. M. Boodle, Cirencester; Dr. P. Boulton, London; Mr. G. Eastes, London; Our Edinburgh Correspondent; Dr. E. Creswell Baber, Brighton; Miss H. Lees, Stalybridge; Dr. G. Mitchell, Templemore; Dr. Humphry, Cambridge; Mr. F. H. Spencer, Exeter; Mr. George Thomson, Oldham; Our Birmingham Correspondent; Mr. W. G. Dickinson, London; Messrs. Seeley and Co., London; Dr. Chavasse, Birmingham; Mr. R. Lindsay, Tisbury; Mr. George Meadows, Hastings; Mr. F. W. Anderson, Kingston, Jamaica; Mr. J. Cargill, Jamaica; Dr. West, London; Mr. Simeon Snell, Sheffield; Dr. J. Irving, London; Dr. Fancourt Barnes, London; Mr. M. M. Cartan, Rostrevor, co. Down; Mr. J. Dixon, Dorking; J. S.; Our Cairo Correspondent; Mr. A. M. Alcock, Innishannon, co. Cork; Dr. Casey, Windsor; The Secretary of the National Health Society; Mr. T. Partridge, Stroud; Mr. C. Biddle, Merthyr Tydfil; Messrs. W. Watson and Sons, London; Mr. C. E. Jennings, Tynemouth; The Editor of the *Medical Times and Gazette*; Dr. J. Foster, Bradford; Dr. Emrys-Jones, Manchester; Mr. J. W. Hamill, Manchester; Mr. J. Cameron, London; Mr. A. T. Mears, Newcastle-on-Tyne; L. G.; Mr. A. Kempe, Exeter; Mr. Lowndes, Liverpool; Mr. P. M. Kelty, Sutton Coldfield; Dr. Joseph Rogers, London; Dr. R. E. Carrington, London; Mr. E. Noble Smith, London; Mr. F. H. Harris, Mildenhall; Mr. Charles Shears, Liverpool; Mr. F. Paul, Liverpool; Mr. Thomas H. Hawkins, Denver; Mr. H. Douty, Powick; Mr. J. Lloyd Roberts, Denbigh; Mr. Hudson, London; Mr. E. Owen, London; Dr. W. Wilson, Manchester; Mr. Arthur Napper, Cranleigh; Dr. Norman Kerr, London; Mr. R. E. Burgess, Kettering; Dr. A. S. Currie, Lydney; Our Aberdeen Correspondent; Mr. Lennox Browne, London; Dr. Styrap, Shrewsbury; Dr. Windle, Birmingham; Mr. J. Smith, Belfast; Mr. Bennett May, Birmingham; Mr. P. Davidson, Liverpool; Mr. W. J. Spence, Bradford; Dr. John McNab, Harris, N.B.; Dr. Suckling, Birmingham; Messrs. Thursfield and Messiter, Wednesbury; The Secretary of the Apothecaries' Hall; Sir Edmund Lechmere, London; Mr. C. T. Kingzett, London; Mr. Shirley Murphy, London, etc.

BOOKS, ETC., RECEIVED.

Atlas of Female Pelvic Anatomy. By D. Berry Hart, M.D. Edinburgh: W. and A. K. Johnston.

Aids to Obstetrics. Double Part. By Samuel Nall, B.A., M.B. London: Baillière, Tindall, and Cox.

Aids to Botany. Double Part. By Armand Semple, B.A., M.B. London: Baillière, Tindall, and Cox. 1883.

The Gold-Headed Cane. By W. Munk, M.A., F.S.A. London: Longmans, Green, and Co. 1884.

A Treatise on Bright's Disease of the Kidney. By H. B. Millard, M.D., A.M. New York: Wood and Co. 1884.

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THE CROONIAN LECTURES

ON

EVOLUTION AND DISSOLUTION OF THE NERVOUS SYSTEM.

Delivered at the Royal College of Physicians, March, 1884.

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Lecture I.

In the first place, I most heartily thank you, Mr. President, for permitting me to give these lectures.

The doctrine of Evolution daily gains new adherents. It is not simply synonymous with Darwinism. Herbert Spencer applies it to all orders of phenomena. His application of it to the nervous system is most important for medical men. I have long thought that we shall be very much helped in our investigations of diseases of the nervous system by considering them as reversals of evolution, that is, as Dissolutions. Dissolution is a term I take from Spencer as a name for the reverse of the process of evolution.

The subject has been worked at for many years. About half a century ago, Laycock applied the doctrine of reflex action to the brain. Sir Charles Bell, in speaking of degrees of drunkenness, and Baillarger, in speaking of aphasia, have pointed out that there is a reduction from the voluntary towards the most automatic. The late Dr. Anstie's researches (*Stimulants and Narcotics*) are perhaps the most valuable of all contributions towards the study of diseases of the nervous system as examples of dissolution, although he did not use that term. I refer, also, with great respect to the most valuable and highly original work which Ross, Ribot, and Mercier have done in the same direction. The brilliant researches of Hitzig and Ferrier, besides their obvious great value in other ways, are of very great value in supporting the doctrines of evolution and dissolution of the nervous system. In this connection, I gladly mention with great respect a recent valuable paper on cerebral localisation by Dr. Sharkey.

Wishing, as soon as possible, to give illustrations of dissolution, I will make the necessary preliminary remarks as short as I can. I speak only of the most striking aspects of evolution and dissolution, leaving entirely out of account some very important factors specially insisted on by Herbert Spencer. I regret that time renders it necessary for me to simplify my subject by serious omissions. Spencer, to whom I am under the deepest obligations, must not be judged by my present application of his doctrines, or, rather, of part of them. I have to ask pardon for the use in this lecture of some popular terms. "Most voluntary," though it has a technical sound, is, when used in contrast to "most automatic," a popular term; later on, it will be discarded. I have also to acknowledge an omission; I speak for the most part of the cerebral system only, almost ignoring all divisions of the cerebellar system. For the present, I neglect the absolute distinction which there really is between mental and nervous states.

Beginning with evolution, and dealing only with the most conspicuous parts of the process, I say of it that it is an ascending development in a particular order. I make three statements which, although from different standpoints, are about the very same thing. 1. Evolution is a passage from the most to the least organised; that is to say, from the lowest well organised centres up to the highest least organised centres; putting this otherwise, the progress is from centres comparatively well organised at birth up to those, the highest centres, which are continually organising through life. 2. Evolution is a passage from the most simple to the most complex; again, from the lowest to the highest centres. There is no inconsistency whatever in speaking of centres being at the same time most complex and least organised. Suppose a centre to consist of but two sensory and two motor elements; if the sensory and motor elements be well joined, so that "currents flow" easily from the sensory into the motor elements, then that centre, although a very simple one, is highly organised. On the other hand, we can conceive a centre consisting of four sensory and four motor elements, in which, however, the junctions between the sensory and motor elements are so imperfect that the nervous currents meet with much resistance. Here is a centre twice as complex as the one previously spoken of, but of which we may say that it is only half as well organised. 3. Evolution is a passage from the most automatic to the most voluntary.

The triple conclusion come to is that the highest centres, which are the climax of nervous evolution, and which make up the "organ of mind" (or physical basis of consciousness) are the least organised, the most complex, and the most voluntary. So much for the positive process by which the nervous system is "put together"—Evolution. Now for the negative process, the "taking it to pieces"—Dissolution.

Dissolution being the reverse of the process of evolution just spoken of, little need be said about it here. It is a process of undevelopment; it is a "taking to pieces" in the order from the least organised, from the most complex and most voluntary, towards the most organised, most simple, and most automatic. I have used the word "towards," for, if dissolution were up to and inclusive of the most organised, etc., if, in other words, dissolution were total, the result would be death. I say nothing of total dissolution in these lectures. Dissolution being partial, the condition in every case of it is duplex. The symptomatology of nervous diseases is a double condition; there is a negative and there is a positive element in every case. Evolution not being entirely reversed, some level of evolution is left. Hence the statement, "to undergo dissolution" is rigidly the equivalent of the statement, "to be reduced to a lower level of evolution." In more detail: loss of the least organised, most complex, and most voluntary, implies the retention of the more organised, the less complex, and the more automatic. This is not a mere truism, or, if it be, it is one that is often neglected. Disease is said to "cause" the symptoms of insanity. I submit that disease only produces negative mental symptoms answering to the dissolution, and that all elaborate positive mental symptoms (illusions, hallucinations, delusions, and extravagant conduct) are the outcome of activity of nervous elements untouched by any pathological process; that they arise during activity on the lower level of evolution remaining. The principle may be illustrated in another way, without undue recapitulation. Starting this time with health, the assertion is that each person's normal thought and conduct are, or signify, survivals of the fittest states of what we may call the topmost "layer" of his highest centres: the normal highest level of evolution. Now, suppose that from disease the normal highest level of evolution (the topmost layer) is rendered functionless. This is the dissolution, to which answer the negative symptoms of the patent's insanity. I contend that his positive mental symptoms are still the survivals of his fittest states, are survivals on the lower, but then highest, level of evolution. The most absurd mentation, and most extravagant actions in insane people are the survivals of their fittest states. I say "fittest," not "best;" in this connection the evolutionist has nothing to do with good or bad. We need not wonder that an insane man believes in what we call his illusions; they are his perceptions. His illusions, etc., are not caused by disease, but are the outcome of activity of what is left of him (of what disease has spared), of all there then is of him; his illusions, etc., are his mind.

After this brief sketch, I mention what may appear to be a drawback. Scarcely ever, if ever, do we meet with a case of dissolution which we can suppose to be the exact opposite of evolution. Often enough, however, do we meet with its near opposites. I will try to dissipate any difficulties that may arise. We make two broad divisions of cases of dissolution, Uniform and Local.

In Uniform Dissolution the whole nervous system is under the same conditions or evil influence; the evolution of the whole nervous system is comparatively evenly reversed. In these cases the whole nervous system is "reduced," but the different centres are not equally affected. An injurious agency, such as alcohol, taken into the system, flows to all parts of it; but the highest centres, being least organised, "give out" first and most; the middle centres, being more organised, resist longer; and the lowest centres, being most organised, resist longest. Did not the lowest centres for respiration and circulation resist much more than the highest do, death by alcohol would be a very common thing. Another way of stating the foregoing is to say that increasing uniform dissolution follows a "compound order;" these stages may be rudely symbolised thus, using the initial letters of, highest, middle, and lowest centres. First stage, or depth, of dissolution, h; second stage, $h + m$; third stage, $h + m + l$, etc. Although I shall say very little, later on, of involvement of middle and lowest centres, in cases of uniform dissolution, it is most important, especially with regard to clear notions on localisation, to recognise that the order of dissolution is a compound order.

The next division is Local Dissolution. Obviously, disease of a part of the nervous system could not be a reversal of the evolution of the whole; all that we can expect is a local reversal of evolution; that there should be loss in the order from voluntary towards automatic in what that part had to represent. Repeating, in effect, what was said on uniform dissolution, it is only when dissolution occurs in all divisions of the highest centres that we can expect a reduction, from the most voluntary of all, towards the most automatic of all. Dissolution may be local in several senses. Disease may occur on any evolutionary level, on one side or on both sides; it may affect the sensory elements chiefly, or the motor elements chiefly. It must be particularly mentioned that there are local dissolutions of the highest centres. It will be granted that, in every case of insanity, the highest centres are morbidly affected. Since there are different kinds, as well as degrees, of insanity (for examples, general paralysis and melancholia), it follows of necessity that different divisions of the highest centres are morbidly affected in the two cases. Different kinds of insanity are different local dissolutions of the highest centres.

I now come to give examples of dissolution. I confess that I have selected cases which illustrate most definitely, not pretending to be able to show that all the diseases of which we have a large clinical knowledge exemplify the law of dissolution. However, I instance very common cases, or cases in which the pathology has been well worked out; they are cases dependent on disease at various levels from the bottom to the top of the central nervous system. Most of them are examples of local dissolution.

1. Starting at the bottom of the central nervous system, the first example is the commonest variety of progressive muscular atrophy. We see here that atrophy begins in the most voluntary limb, the arm; it affects, first, the most voluntary part of that limb, the hand, and, first of all, the most voluntary part of the hand; it then spreads to the trunk, in general to the more automatic parts.

To speak of a lower level of evolution in this case, is almost to state a barren truism; at a stage when the small muscles of the hand only are wasted, there is, centrally, atrophy of the first or second dorsal anterior horn, and the lower level of evolution is made up of the higher anterior horns for the muscles of the arm. This statement, however, is worth making, for it shows clearly that, by higher and lower, is meant anatomico-physiologically higher or lower.

2. Going a stage higher, we come to hemiplegia, owing to destruction of part of a plexus in the mid-region of the brain. Choosing the commonest variety of hemiplegia, we see that there is loss of more or fewer of the most voluntary movements of one side of the body; we find that the arm, the more voluntary limb, suffers the more and longer; we find, too, that the most voluntary part of the face suffers more than the rest of the face. Here, we must speak particularly of the lower level of evolution remaining; strictly, we should say collateral and lower. We note that, although the unilateral movements (the more voluntary) are lost, the more automatic, the bilateral, are retained. Long ago, this was explained by Broadbent; subsequent clinical researches are in accord with his hypothesis. The point of it is that the bilateral movements escape in cases of hemiplegia, in spite of destruction of some of the nervous arrangements representing them; these movements are doubly represented, are represented in each half of the brain. Hemiplegia is a clear case of dissolution, loss of the most voluntary movements of one side of the body, with persistence of the more automatic movements.

3. The next illustration is paralysis agitans. Apart from all speculation as to the seat of the disease, the motorial disorder illustrates dissolution well. In most cases, the tremor affects the arm first, begins in the hand, and in the thumb and index-finger. The motorial disorder in this disease becomes bilateral. In an advanced stage, paralysis agitans is double hemiplegia with rigidity—is a two-sided dissolution.

4. Next we speak of epileptiform seizures, which are unquestionably owing to disease in the mid region of the brain (middle motor centres). Taking the commonest variety, we see that the spasm mostly begins in the arm, nearly always in the hand, and most frequently in the thumb or index-finger, or both. These two digits are the most voluntary parts of the whole body.

5. [The next illustration was by cases of temporary paralyses after epileptiform seizures.]

6. Chorea is a disease in which the limbs (the most voluntary parts) are affected more than the trunk, the more automatic parts; the arms, the more voluntary limbs, suffer more than the legs. The localisation of this disease has not been made out. Symptomatically, however, it illustrates dissolution. Chorea has a peculiar interest for me. The great elaborateness of the movements points, I submit, to disease "high up"—to disease on a high level of evolution. Twenty years ago, from thinking on its peculiarities, it occurred to me that convolutions represent movements—a view I have taken ever since.

7. Aphasia well illustrates the doctrine of dissolution, and in several ways. We consider a case of complete speechlessness. *a.* There is loss of intellectual, the more voluntary language, with persistence of emotional, the more automatic language. In detail, the patient cannot speak, and his pantomime is of a very simple kind; yet, on the other hand, he smiles, frowns, varies the tones of his voice (he may be able to sing), and gesticulates as well as ever. Gesticulation, which is an emotional manifestation, must be distinguished from pantomime, which is part of intellectual language. *b.* The frequent persistence of "yes" and "no" in the case of patients who are otherwise entirely speechless is a fact of extreme significance. We see that the patient has lost all speech, with the exception of the two most automatic of all verbal utterances. "Yes" and "no" are evidently most general, for they assent to, or dissent from, any statement whatever. In consequence of being frequently used, the correlative nervous arrangements are of necessity highly organised; and, as a further consequence, they are deeply automatic. *c.* A more important though not more significant illustration is, that the patient, who cannot get out a word in speech, nevertheless understands all that we say to him. Plainly, this shows loss of a most voluntary service of words, with persistence of a more automatic service of words. *d.* There are three degrees of the utterance "no" by aphasics. A patient may use it emotionally only; most automatic service. Another patient may also be able to reply correctly with it; a less automatic, but still very automatic, service (here there is some real speech). There is still a higher use of it, which some aphasics have not got. A patient who can reply "no" to a question, may be unable to say "no" when told to do so. You ask the aphasic, "Is your name Jones?" He replies, "No." You tell him to "say no;" he tries and fails. You next ask, "Are you a hundred years old?" He replies, "No." You tell him to "say no;" he cannot. Whilst not asserting that the inability to say "no" when told is a failure in language, it is asserted that such inability, with retention of power to use the word in reply, illustrates dissolution. *e.* A patient, who is speechless, may be unable to put out his tongue when told to do so; that he knows what is wanted, is sometimes shown by his putting his fingers in his mouth to help out the organ. That the tongue is not paralysed in the ordinary sense is easily proven; the patient swallows well, which he could not do if his tongue were so much paralysed as "it pretends to be;" besides, on other occasions, he sticks the tongue out, for example to catch a stray crumb. Here is a reduction to a more automatic condition; there is no movement of the tongue more voluntary than that of putting it out when told.

[The lecturer then remarked on swearing, and on the utterance of other and innocent ejaculations by aphasics, remarking that some of these utterances have elaborate propositional structure, but no propositional value; the patients could not repeat what under excitement they uttered glibly and well. He spoke next of the frequent retention of some recurring utterances by aphasics, such as "Come on to me." These were not, from the mouth of the aphasic, of any propositional value, they were not speech. He had no explanation to offer of them; but stated the hypothesis that they were the words the patient was uttering, or was about to utter, at the time he was taken ill.]

8. So far I have spoken of local dissolutions occurring on but one half of the nervous system on different levels. Coming to the highest centres, I speak of uniform dissolutions, of cases in which all divisions of these centres are subjected to the same evil influence. I choose some cases of insanity. In doing this, I am taking up the most difficult of all nervous diseases. I grant that it is not possible to show in detail that they exemplify the principle of dissolution, but choosing the simplest of these most complex cases, we may show clearly that they illustrate it in general. I take a very commonplace example, delirium in acute non-cerebral disease. This, scientifically regarded, is a case of insanity. In this, as in all other cases of insanity, it is imperative to take equally into account not only the dissolution, but also the lower level of evolution that remains. The patient's condition is partly negative and partly positive. Negatively, he ceases to know that he is in hospital, and ceases to recognise persons about him. In other words, he is lost to his surroundings, or, in equivalent terms, he is defectively conscious. We must not say that he does not know where he is, because he is defectively conscious. His not knowing where he is is itself defect of consciousness. The negative mental state signifies, on the physical side, exhaustion, or loss of function somehow caused, of some highest nervous arrangements of his highest centres. We may conveniently say that it shows loss of function of the topmost "layer" of his highest centres. No one, of course, believes that the highest centres, or any other centres, are in layers; but the supposition will simplify exposition. The other half of his condition is positive. Besides his not knowings, there are his wrong knowings. He imagines himself to be at home or at work, and acts, as far as practicable, as if he were. Ceasing to recognise his nurse as a nurse, he takes her to be his wife. This, the positive part of his condition, shows activity of the second layer of his

highest centres, but which, now that the normal topmost layer is out of function, is the then highest layer. His delirium is the "survival of the fittest states" on his then highest evolutionary level. Plainly he is reduced to a more automatic condition. Being, negatively, lost to his present "real" surroundings, from loss of function of the highest, latest developed, and least organised, he positively talks and acts as if adjusted to some former "ideal" surroundings, necessarily the more organised.

I now make some general remarks on the eight illustrations, in order to prevent certain misunderstanding. It is asserted again that each of the eight cases is a different dissolution. All that is meant is, that each shows a reduction from the voluntary towards the automatic, in what the centre, or part of it, which is diseased represents. If we take extreme cases, the case of progressive muscular atrophy, and the case of insanity (delirium in acute non-cerebral disease), we say that the two are alike, because in each there is reduction to a more automatic condition; and we say, too, that they are very unlike, the parts of the nervous system morbidly affected being exceedingly different.

I have so far almost ignored the distinction between nervous states and mental states. Now, if the case of insanity be considered as a series of mental phenomena only, it would be absurd to compare, or even to contrast, it with progressive muscular atrophy, which is a series of physical phenomena only. But no difficulty can arise, if it be understood that insanity or "disease of the mind" is, with medical men, disease of the highest nervous centres, revealing itself in a series of mental phenomena. We compare and contrast disease of the highest centres with disease of some anterior horns (some lowest centres), revealing itself in atrophy of certain muscles. But, acknowledging this, it may be said that the two things are so exceedingly different, that it is frivolous to compare or even to contrast them on any basis. Yet no one denies that each is a morbid affection of the central nervous system. This being granted, the rejoinder to those who insist on the extreme unlikeness is, that the lesion in one is at the very bottom, in the other at the very top, of the central nervous system; two lesions cannot possibly be further apart in the central nervous system. Still, it may be said that classification, on the principle of dissolution, if true, is of no value; that it is of no use making an orderly ascending series, from progressive muscular atrophy to insanity—of no use showing that progressive muscular atrophy is reduction to a more automatic condition, a small corner on the lowest level; that hemiplegia is such a reduction on a larger scale, higher up; and that insanity is such a reduction on the topmost level, and on the largest scale; that, even if this kind of work could be thoroughly well done, it is not worth any one's while to do it. I grant that such a classification is not of direct value, but yet, I think, of much indirect value, for clinical purposes. We require in our profession two kinds of classification. The use of two kinds of classification may be easily illustrated. There is a classification, or strictly an arrangement, of plants by the farmer for practical purposes, and there is a classification of plants by the botanist for the advancement of biology. I submit that there is no more incongruity in classing together progressive muscular atrophy and insanity, upon the basis mentioned, than there is in classifying the bamboo with common grass, or the hart's-tongue with the tree-fern in a botanist's garden. [illegible] of the nervous system, upon the principle of dissolution, would be absurd in [illegible] in the wards of a hospital. I know of [illegible] than that supplied by the doctrine of evolution, on which cases of in[illegible] of the highest centres [illegible] with [illegible] diseases of the nervous system, [illegible] centres.

I [illegible] of different depths of particular [illegible]. The deeper the dissolution, the shallower the level of evolution remaining. In hemiplegia, owing to a lesion of the internal [illegible] according to the gravity of the lesion, [illegible] course, the division into three degrees is arbitrary.) In the first [illegible] The difference between the two degrees is, not that in the second [illegible]

"second" side of his body. I hope later to show that explanations of materialistic states by psychical states are invalid.

I wish here to bring evidence in support of the opinions I have long held—that all parts of both sides of the body are represented in each half of the brain. The view I take is simply an extension of Broadbent's hypothesis, already referred to. My supposition is that the limbs of the two sides are very unequally represented in each half of the brain, whilst the bilaterally acting muscles are very nearly equally represented in each half. Evidence that at least some parts of both sides of the body are represented in each half of the brain is that, consecutive to a negative lesion of one internal capsule, there is wasting of nerve-fibres "descending" into both sides of the spinal cord.

Degrees of epileptiform seizures illustrate different depths of dissolution. [illegible] spasm of the thumb and index-finger to universal convulsion.[1] That these degrees are compound is very evident. The first stage of the fit is, to speak roughly, that the arm is a little affected; the second stage is that the arm is more affected and the face a little; the third stage is that the arm is most affected, the face much, and the leg a little. This compound order of spreading, which any adequate doctrine of localisation has to account for, may be symbolised thus: a, then $a^2+\mathrm{f}$, then $a^3 + \mathrm{f}^2 + \mathrm{l}$, etc. There are degrees beyond this to universal spasm; these cases, I submit, supply further evidence that both sides of the body are represented in each half of the brain. Certain experiments of Franck and Pitres [illegible] in a most important way on the question as to double representation. After exposing the so-called motor region[2] of each half of the brain of a dog, they removed the motor region on one half and then found that [illegible] universal convulsion; they found, too, that the spasm followed a particular order—that it affected the right arm (so to call it), then the right leg, then the left leg, and then the left arm. "L'epilepsie peut [illegible] d'un côté, malgré la section longitudinal complète du corps calleux" (Franck and Pitres). Here seems to be evidence that both sides of the body are represented in each half of the brain, and also that the two sides are differently represented in each half. The distinguished French physicians to whose observations I have referred hold, I must mention, that "Le cerveau commence l'attaque, la protuberance, le bulbe, et la moelle la géneralisent." If this be so, still proof is given that movements of all parts of the body are under command of, if not represented fully in, each half of the brain. This is a matter of extreme importance for the doctrines of evolution and dissolution. The evidence, as I read it, is, that the middle motor centres (a discharge beginning in parts which causes epileptiform seizures) of each half of the brain represent movements of both sides of the body. Other facts will, I think, show that the highest motor centres (frontal lobes) re-represent, in more intricate combinations, all that the middle centres have represented in simpler combinations; a discharge beginning in part of these more evolved centres produces an epileptic seizure, [illegible] form seizure.

[In the remainder of the lecture, many degrees of aphasia were instanced, to illustrate again different depths of dissolution, and different shallows of evolution remaining, and also to illustrate the dual symptomatology of disease. The wrong words uttered by a patient who has "defect of speech," are owing to activities of healthy nervous arrangements, whilst the disease is answerable only for the patient's not saying the right words. The states comparable, in a case of "defect of speech," with the states in the case of another aphasic, and who can only say "no," are (1) negatively, inabilities of the former to say the right words, with the latter speechlessness; and (2) positively, the utterance of numerous wrong words by the former, with the retention of "yes" and "no" only by the latter. In the former, the dissolution is [illegible] lution is deep and the level of evolution very shallow].

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THE GULSTONIAN LECTURES,

ON

NEUROSES OF THE VISCERA.

Delivered at the Royal College of Physicians, March 14th, 1884.

By T. CLIFFORD ALLBUTT, M.A., M.D.Cantab., F.R.S., F.R.C.P.,
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LECTURE III.

GENTLEMEN,—Enteralgia is, perhaps, the most racking torture contained in the curse of mankind; so bitter, so searching is the agony, that more than one sufferer has said to me, calmly regarding his bygone pains, that surely the sting of death had been more welcome. That this malady is one of singular character and marked identity, I had thought it my duty to show at greater length, until I turned but as yesterday to a description of it in Reynolds's *System of Medicine* by Dr. Wardell. In the famous and masterly hand-books of medicine which have been given to the profession of late years, this malady has received so scanty and indistinct recognition, it has been so often confounded with common gripes on the one hand, or contemptuously tossed over to the limbo of hysteria on the other, that Dr. Wardell's clear account of it is eminently valuable.

Before reading this essay, I had also noticed that the two chief points of onset are the umbilicus and the right iliac fossa, or, as I should put it, the umbilical region and the right flank. The central attacks are not strictly umbilical, but arise at a point usually about two inches to the side, generally the right side, of that mark; and the lateral attacks are generally a little higher than the iliac fossa, being nearer the level of the crest of the ilium itself. Another correction I offer is that "females" are not more prone to the disease than "males." My own experience is, of course, inadequate to overthrow an assertion which Dr. Wardell says is "beyond dispute;" for, happily, the disease, if not actually rare, is by very far less common than gastralgia. Gastralgia, I have said, is commoner in women by two to one; but of fifteen marked cases of enteralgia, I find that eight occurred in men and seven in women. I should add that, out of a far larger number, I have selected the fifteen as severe cases uncomplicated with any intestinal derangement, or with any concurrent troubles elsewhere. The four most grievous instances were all in men of ages between 22 and 48. Cases of mere tormina consequent upon irritation of the bowels or constipation, and cases of lead-poisoning, I have excluded, not because they have no element of visceral neurosis in them, as indeed they have, but because I desired to study the malady in its purest form. In this way, we may hereafter carry our judgment more clearly to secondary or mixed cases.

The greater relative frequency of enteralgia in men than of gastralgia may be explained in part by its being more directly allied to gout than is gastralgia, in part by its dependence on the weightier stress of the affairs of men. From my own cases I gather that a family-history of gout, in its heavier and wider operations, is characteristic of enteralgics rather than of gastralgics. Enteralgia, like sciatica, may be a "pure neurosis," but is, like it, not rarely of gouty nature. I gather, also, that enteralgia is aroused rather by the strife of public life than by the teasing of homely worries.

I will cite a few illustrative cases. The Rev. —— (No. 54, 1883) is a minister of religion. He has the bright impetuous manner of a neurotic person, and has expended his energies lavishly in his work. He has suffered from no trace of melancholia nor of hypochondriasis; his knee-jerks and other reflexes are normal.[1] For twelve months he has been subject to attacks of pain in the right flank, which are like the stabs and hacking of a knife. The agony is so frightful that he almost longs for his life to be taken. The collapse and subsequent prostration are very serious. Otherwise his health is good, and physical examination fails to discover any disease of parts, or any morbid state of function. Dr. Daly, of Hull, had seen him and had pronounced the case to be one of neuralgia.

Another case of nearly equal severity was also in a clergyman, who made out for me a very graphic story of his malady. In him the seizure began, and the abiding centre of the pain was fixed throughout all attacks, a little to the right of the navel. Intermittently, however, the pain would strike him "in a semicircular course, and settle in the kidney;" or again, would dash from the centre "right through the liver and lodge under the right shoulder-blade." In these seizures occurred then pains obviously spinal, associating themselves with the enteralgia, as pains of the thoracic nerves may ally themselves with gastralgia. There was always incontinence of urine to a painful degree. "The liver and kidney tracks of pain rarely occurred simultaneously. The character of the pain at the centre was as though a spearhead was trying to force itself out from within." The attacks, in this case, have become rarer and slighter in the years 1879-83 than they were in 1876-78. The patient is a man of stirring life and of a lively and genial temperament. After endless medication for "duodenal dyspepsia," he improved on arsenic and on quinine with belladonna. One day, acting under some irresponsible advice, he took an over-dose of "Mother Siegel's syrup," which floored him for a day or two; but after that event he had a long immunity from pain. There are adequate grounds for the belief of all his many advisers that he suffers from undeveloped gout. I may add that, in the earlier years of the pains, they were at times associated with ordinary gastralgia in the severe form.

In the case of Mrs. ——, a lady, past the menopause, often sent over to me by Mr. Ball of York, severe enteralgia has accompanied, or of late succeeded uterine neuralgia of a violent and intractable kind. All the parts of the pelvis and their functions have been normal. She has shown signs of indistinct gout for the greater part of her adult life. Her enteralgic pains were of a drawing or tightening character, but presented none of the ordinary symptoms of common colic. Sleeplessness and diarrhœa likewise afflicted her, and seemed to spring from the same diathetic cause.

Again, a medical friend writes to me of his own case, that pain in the right flank attacked him during sleep five years ago. It was not very severe, and was relieved by friction and a cordial. Since that time, the attacks have been more frequent, more severe, and more prolonged. Indeed, of late, he has never been free from some sense of pain about the same part, and like a woman with a neuralgic uterus he suffers especially if jolted in riding, or in driving over a rough road. Of all remedial means hypodermic morphia alone relieves him. He has suffered from lithic acid in the urine in past years, but not of late; the regulation of diet and use of alkalies having averted that disorder. There is no sign of any local disease.

In the case of a lady under the care of Miss Ker of Leeds, enteralgic pains set in with a rough periodicity towards the early night. They were preceded by low spirits, irritability, and a distressed expression of face. After times of ease the attacks have been recalled by fatigue or by exposure to cold. They may only return nightly for a week or more, and then disappear for a while; perhaps for nine months little pain would be felt. Bed and hypodermic morphia alone gave her relief. She is much thinner than she used to be. This lady was under my care for gastralgia some years ago. Enteralgia is rarely associated with vomiting, as in gastralgia; but the latter symptom is very prominent in a nurse whom I saw with Mr. Jessop a few weeks ago. It is doubtful, however, whether her case may not be of ovarian origin. Her catamenia are regular and normal, excepting some deficiency in quantity. Her bowels are quite regular, nor do I find constipation more common in enteralgia than we find it to be in many or most cases of atonic disorder.

In Case 320, 1875, the enteralgia was closely periodic, recurring about 3 A.M. during sleep. The patient was a gouty man. Gout also was a marked feature of the family history of a man, aged 53, whose number is 371, 1875. Number 30, 1877, a man, aged 22, was like the last case, but he had suffered from the age of 15 from alternations of gastralgia with definite umbilical enteralgia. Mrs. ——, aged 56 (No. 269, 1877), became the subject of like enteralgia after the cessation of migraine, which passed away about the age of 45. The pain in her case was very severe. In another brother and sister, of whom I have seen a great deal, enteralgia in a definite and violent form is the inheritance of the former, and a gastralgia of equal violence and definition, attacks the latter. Both subjects are pure neurotics without gouty history. Miss —— (No. 508, 1881), was seen first by Dr. William Roberts, and by him her attacks were called neuralgic, as no doubt they were. The attacks were "like a corkscrew going into her flank (side not noted), and transfixing her." The pain often is so sudden in onset, that she "stands like a statue, flushes, and then turns white, but has no loss of consciousness." Afterwards, "she writhes in fearful pain." There is no periodicity. Her hands and feet, as is usual in visceral neuralgia, are very cold, especially near the attacks. Her appetite, digestion, and bowels are normal, as are all the functions of life. Her lips and gums are well coloured. She presents all the qualities of a neurotic, and her family history is markedly neurotic. Physical examination revealed no defects. This young lady, two years later, thanked me very sweetly for curing her. I find, on turning to my books, that she had a course of bromides and arsenic with pills of quinine and belladonna at intervals. After her recovery, she had married, and continued well. Miss ——, aged 46 (No. 618, 1881), had enteralgia arising near the navel. She is a neurotic person, otherwise healthy, and she lost her attacks by transference. She welcomed indeed a series of violent attacks of right supra-orbital pain with muscæ volitantes, which took the place of the abdominal seizures. The attacks of Mrs. B. (No. 639, 1881), were of the enteralgic type, but were followed by slackened bowels with a little mucus occasionally, though rarely. It is curious that in so many of my cases diarrhœa has been associated with gastralgia, and in so few with enteralgia. On the other hand, as I have said, I rarely find in the latter the constipation, the disordered alvine secretions, the flatulent colic, which is described by other writers, I believe, on grounds of probability rather than of direct observation. Flatulent colic is a wholly different affair; and, as a matter of speculation, I hesitate to place the seat of enteralgia in the bowel at all. In Mrs. S., aged 43 (No. 106, 1881), during attacks which correspond to the enteralgia of the other patients, the abdomen is said to become swollen and hard, the aorta throbs, and the heart palpitates; so that some general storm in the sympathetic accompanies the enteralgia, and the flatulence is probably due to that variation. As the attack ceases the abdomen falls, and it was quite soft and normal when I examined it. She was cured or relieved by bromides, belladonna and quinine. The case of Miss B., sent to me by Mr. Knaggs of Huddersfield (No. 274, 1883), presents a good example of the gouty element. Her family history is gouty, and she had podagra at the age of 7. She was subject for many years to facial neuralgia; this left her for twelve months. Then came, and has often returned since, violent neuralgia in the subhepatic region. The attacks last three or four hours; and in her, by the way, some vomiting occurs, with little ejection. The attacks are brought on by fatigue, excitement or worry. She never had the faintest trace of jaundice. Rest and change relieve her. She suffers at times from gouty dyspepsia, but in no connection with the attacks. The pulse-tension is normal, the urine of specific gravity 1022; and all organs and functions were normal. Another very similar case was seen by me in the same year; gouty phenomena, migraine, and facial neuralgia having preceded enteralgia. In a young man sent to me by Mr. H. Wright of Halifax, violent enteralgia was associated with epilepsy, or rather was preceded by it. The enteralgia showed a very remarkable periodicity in this case. A curious series appeared after great mental strain and anxiety in a patient whom I saw for enteralgic seizures with Mr. Holmes of Leeds. First came cervico-occipital neuralgia, with intense hyperæsthesia of the scalp, loss of sleep and appetite, and great debility; then a strange sensibility to cold upon the skin, so that the lightest draught of air distressed him, even the turning of the leaves of his ledger; then periodic coryzas, as intense as if dilute ammonia had been poured over the mucous surface, an abundant fluxion being followed by general prostration; this developed into frequent asthmatic seizures, called forth by cold drinks or by the least change of temperature in his room, but cut short at once by coffee. These symptoms had been relieved by sea-water baths before my visit. I must not linger over these cases, however, many of which do but repeat the symptoms already described. I shall, however, refer to four of them hereafter, which are associated with symptoms on the skin.

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[1] It is better to state also that I have discussed no case of visceral neurosis in which the knee-jerk was absent.

Not included in the list now discussed, but naturally following it, comes a series from which I need not quote largely, if at all; but I may indicate, as not uncommon visitors, certain patients who complain of a pain in the region of the hepatic flexure of the colon; I will go further, and say that I believe it to be seated in that place. It is not severe, nor periodic; it is rather wearisome and abiding. It is found in the melancholic rather than in the brisk neurotic; but, like enteralgia, seems clearly associated with gout. Although not connected with obvious disorder of the bowels, yet a course of blue pill and Carlsbad water generally relieves it—a course which would drive an enteralgic subject into a frenzy. The pain of lead-colic, though probably of immediate nervous causation, is nevertheless not difficult to diagnose from the preceding forms. It has no limited *localisation.* It is more diffused than enteralgia, and more extended than the pain of melancholia just described. It is periodic, doubtless; but it is rarely an excruciating, rarely a lashing pain; it is rather of a grinding or fretful character. The parallel constipation and other circumstances will, I believe, always serve to distinguish it in those few persons who, suffering from lead-poisoning, have no blue line.

On turning to consider the neuralgias of other viscera, we are met by the difficulty, as yet insuperable, of proving definitely in what nerves the pain may lie. We know that all essays to localise abdominal pains in the splanchnic nerves and their paths to the sensorium, in the sensory fibres around the large arteries, or in the deeper connections of the spinal nerves, are mere gymnastics, barren exercises which may stimulate the fancy, but which as yet can neither be proved nor disproved. We can only find our way through those obscure gates and alleys of the body by patient clinical watchings, by grouping and contrasting our cases, and by noting the curious warps of disease. Are there such affections, for instance, as hepatalgia, nephralgia, and so forth? Careful clinical observers, such as Anstie and Spender, say there are such affections; and with them I am disposed to agree. I have careful notes of three cases in which neuralgia seemed to me to be seated in or near the liver, so far as I could judge by the situation of the pain.

Mr. W. A., aged 32 (No. 656, 1881), whose health is habitually good, whose habits are temperate, and who presents no obvious disorder of function, has called upon me at intervals for three years. Four months before his first visit, he was taken with a pain which he precisely refers to the seat and extent of the liver. This pain has often recurred, observing no period of recurrence, save that it always attacks him in bed at night. It is a "miserable pain;" he rises, and paces the floor for hours. He maps out the liver, of whose seat he was previously ignorant, with curious exactness. He has had no jaundice, nor does he suffer from constipation. The pain does not stab nor radiate, as spinal pains would do. On bromides and arsenic he recovered, and was well for twelve months, when worry and overwork recalled the attacks. The family history points to rheumatism. I have about five cases in my books similar to this, all agreeing with Dr. Spender's description of typical cases of hepatic neuralgia, in which the patient suffers from severe pain of the neuralgic type, deep in the region of the liver, with no inflammatory symptoms, and with intermissions of perfect ease. In some cases, a characteristic shoulder-pain is present also. Hydrochlorate of ammonia, he says, will cure it (*Relief of Pain*, p. 125). Anstie's words are to the same effect, if a little less confident; and he also marks as characteristic a peculiar mental depression which accompanies the pain. Now, I wish especially to point out that the case which Anstie quotes is of a girl aged 18, who suffered from repeated attacks of the kind, and that, after one of them, a jaundiced tint appeared, and rapidly disappeared. Subsequently, the pains appeared again without the colour (*Neuralgia*, p. 62).

Let me parallel this with the following. Miss —— (No. 14, 1882), aged 22, consulted me for severe pain in the hepatic region, passing towards the stomach. I was disposed to regard the attacks as gastro-duodenal neuralgia. There was decided evidence of neurotic tendencies in the family history, and in her own a liability to nervous diarrhœa. She presented no signs of disordered function. Her complexion was as clear and pretty as her features deserved, and she showed no marks of anæmia. I fear I did her but little good, the attacks recurred, and she sought other aid. But here comes the point of the case; namely, that on some later date she passed a gall-stone with the usual symptoms, and shortly afterwards she passed a second. Beyond this point, her history is unknown to me. These facts I had from her own medical man. Little as one could dream of gall-stones in a young and clear-skinned girl; in one, too, whose alvine disorders tended rather to looseness than to constipation, and whose habits were alert and active; yet there they were. Again, I saw some months ago, with Mr. Field of Dudley Hill, a woman of later middle age, whose sufferings were hepatalgic. She had never shown any trace of jaundice, the pains were of a neuralgic type, and she was of the neurotic constitution. Yet, on deep and close manual exploration, both Mr. Field and myself became convinced that there were gall-stones palpably in the gall-bladder. Another case I saw with an old pupil and friend, in which like unaccountable hepatalgia persisted, and greatly distressed the patient, also a middle-aged woman. She died some weeks later, of peritonitis due to the perforation of a gall-stone, which was extracted after death. Dr. Anstie evidently took the jaundice in his case to be neurotic; but, put with my own cases, the group of them prove, or strongly suggest, that hepatalgia is, in many cases at least, a subhepatic pain arising in the gall-bladder and the ducts thereof, and due either to the irritation of gall-stones or to some vicious quality of the bile. In this way I have explained other cases I have come across, and which at one time puzzled me [illegible] pains of hepatic and epigastric origin [illegible] at times between attacks which are obviously due to the travelling of gall-stones. At present then, I regard hepatalgia as a pain aroused by the conjunction of [illegible] habit with the presence of gall-stones in the gall-bladder. The pain may not arise in these [illegible] of similar relations, I will not, of course, assert.

The same reflections occur to me when I pass on to consider nephralgia. Anstie asserts that many cases of so-called nephralgia have been cases of pain lying more outwardly. In such a sceptical spirit, I minutely searched into the following case. A lady, aged 41 (No. 528, 1881) was sent to me by Dr. Charles Smith of Halifax. Two months previously, after great harass, she woke at 5 a.m with intense pain in the loins, chiefly on the right side. It was dreadful pain: her aspect became death-like, her finger-nails black, and her lips ashen. Thus she suffered for three mortal hours. The pain also ran round the front of the abdomen on the same side and down the groin into the thick of the thigh. Her micturition was frequent for some hours, and it then fell away to scantiness and rarity. The same series of pains recurred every morning at the same time, though happily with less severity, and slight degrees of it were felt occasionally at other times. Both Dr. Smith and myself sought in vain for any gross cause for such attacks, the only discovery made was of some grey sandy matter of an indefinite kind in the urine. Dr. Smith says: "I never could satisfy myself that there was a calculus in her kidney. When she gets below par, she still has returns of the renal pains, with the same flow and ebb of the urine." "I suppose," he adds, "a visceral is like a facial neuralgia, which, when due mostly to a condition of nerve, is called a pure neuralgia, when mostly due to a condition of tooth is called toothache, but in a large mass of cases is caused by a condition of nerve not bad enough to show itself if not irritated by a condition of tooth. In this category comes no doubt Mrs.—'s case—a nephralgia due not entirely to nerve, but coming partly from the kidney having to perform abnormal work. I wonder whether a neuralgia of the kidney could produce swelling of the testicle, not the epididymis. I have seen a case which I could only interpret thus." I have quoted Dr. Smith's remarks in full, as they apply so well to the mixed cases of gastric and other neuralgias I have tried to interpret on like principles. That in Mrs. —'s case, the conditions of nerve predominated seems probable, because she was a highly nervous woman, and had suffered from other forms of neuralgia, because the attacks showed periodicity, and because no other considerable cause was found.

The small quantity of fine gritty matter seen occasionally in the urine seemed, however, in some of the attacks to be the *causa efficiens.*

Another case is No. 384, 1883. Mr. ——, aged 27, has suffered at times for three or four years from pain in the region of the right kidney, and at times very severely. The pain is then a continuous ache, with exacerbations; it runs, when more acute, down the track of the ureter to, or nearly to, the bladder. At times, its severity causes cramps of the limbs and collapse. There was never a trace of blood, and the differential diagnosis from calculus was carefully considered, and decided against calculus. The urine was wholly negative, not even unduly acid. He improved upon quinine and belladonna.

No. 394, 1882, was a commercial traveller, aged 39. He suffered precisely as No. 384; and the two cases received much attention from me, as they came within a few days of each other. This patient had also neuralgia of the left orbit and cervico-occipital neuralgia with Valleix' points. There was no syphilis, by the way, in any of these cases.

Before dismissing the subject of the kidney, I may remark that, in chronic renal disease, in granular kidney especially, gastralgia may appear with its craving appetite, sensations of want and so forth, as in the uncomplicated form. I think this has been spoken of by previous writers, and so also has the concurrence of gastralgia with aortic regurgitation. This coincidence I had failed to verify until recently, when three well marked instances came under my observation.

Dr. Ralfe has kindly forwarded to me the following account of a form of renal neurosis often associated with valvular disease of the heart.

"In 1878, the late Dr. Murchison gave me the particulars of a peculiar form of neurosal attacks, which he designated as 'renal storms,' and which had frequently occurred in a patient suffering from aortic regurgitation. The attack commenced with excruciating pain over the region of the right kidney, exactly like renal colic, but there was no sickness nor retraction of testicle; the urine passed during the attack and immediately afterwards was perfectly normal (nor was there any jaundice to suggest that the pain was due to biliary calculus). After lasting some hours, the attack passed off as suddenly as it came on.

"In 1880, I saw a man (aged 47), who applied as an out-patient at the London Hospital, solely on account of a severe paroxysmal attack of pain, which, commencing at the angle of the epigastric region where it joins the right hypochondrium, passed deeply downwards into the right lumbar region. No disease of the liver or kidney could be detected, and the urine was normal. On examining the chest, the heart was found diseased (aortic regurgitation).

"The only reference bearing on this form of neurosis or 'renal storm' is in Dr. Habershon's *Lectures (Lettsomian) on Diseases of the Liver*, page 13, in speaking of the neuralgic pain sometimes met with in organic disease of the heart, and which is referred to as being deeply situated behind the first part of the duodenum: 'It is severe, almost like the pain of gall-stones, but it is without jaundice or other symptoms of calculus; it is not connected with the stomach, for it is not affected by food, but paroxysmal, and recurring sometimes with great regularity.'"

I will not pursue these reasonings so far as to consider in like manner the pains of other viscera, such, for instance, as of the bladder and the rest, for the same principles apply to them all. In many cases a neurotic tendency may be aroused by a local irritation which, in robust persons, would be almost, or quite, unfelt; or the neuralgia may be as "pure" as face-ache may be. Neuralgia of the rectum, however, I must not wholly pass by, for it is a definite malady, not very uncommon, and seems almost always to be "pure neuralgia." It is rarely very violent, being more of a thrusting, aching pain. It is mentioned by Anstie and other writers; I have occasionally met with it, and Dr. Myrtle made it the subject of a paper lately read to the Yorkshire Branch of the British Medical Association.

An allusion to neurotic diarrhœa, a somewhat different phase of neurosis, is again but a passing duty. Neurotic diarrhœa is a troublesome affection which, I think, is tolerably well recognised. Many persons owe the frail health of a lifetime to its recurrence, for it is sadly incurable, recurring and again recurring, uncontrolled in obstinate cases by anything less than opiates. Milder cases may be regulated by bismuth and the bromides, followed by pernitrate of iron, or sulphate of iron pills. In this disease (which must be distinguished from catarrh and from diarrhœa mucosa), the stools, though slackened, are rarely watery, and rarely contain much mucus. They may or may not be attended with pain; they are reproduced by nervous causes; they are generally worse in the earlier day, especially before breakfast, and in women they cling to the catamenial periods. Arsenic often does harm in these cases, and, indeed, can rarely be borne. The ailment occurs in both sexes, falling, perhaps, equally upon both. The diarrhœa is generally associated with other neuroses, such as migraine, cardio-vascular instabilities, and the rest. It is found at all ages, for it often begins in early adult life, and is seldom wholly removed. The pathology of the day will attribute it, no doubt, to vaso-motor disturbance, and compare it with polyuria, lacrymation, and night-sweats. It may be the homologue of pyrosis.

I would now pass on to consider the genetic affinities of the class of patients which we have discussed in these chapters. This question is more easily answered by searching among the gastralgics, as they form by far the larger number.

One fact strikes the observer very early in his work; and that is, the frequent association of neuroses of the vagus with certain kinds of eczema, lichen and psoriasis, with eczema and lichen chiefly. Of the alliance of gastralgia with asthma, I have already spoken; and the frequency of eczema in asthmatics is generally recognised. Now eczema and its allies are, I believe, as common in gastralgics as in asthmatics, so that there seems to be some sympathy between the vagus nerve and the cutaneous nerves. The skin-affections and the gastralgia, if concurrent in the family, may not concur in the individual, or if they do, they may not be contemporary in him, nor, if contemporary, parallel in severity. No. 245, 1883, a man, aged 38, came to me four years before for boils; at a later date, he came to me for gastralgia of the ordinary type, without functional stomach-disorder. For this I gave him arsenic, and cured him. Last year he came to me to tell me for the first time that he had suffered for six years from eczema on and off, and that the medicine he took for the gastralgia had removed also the eczema. On this occasion he called to ask for a renewal of the prescription, not for the gastralgia, but for the eczema. Again, No. 226, 1882, male, aged 47, had excellent health till ten years before, which he attributed to the periodic returns of "eczema and psoriasis." Of late years he had seen but little of the eruptions, but his health was broken down by "chronic dyspepsia," for which he had been treated in vain. I found no signs of functional disorder of the stomach; the symptoms were those of ordinary gastralgia, and were cured quickly by arsenic. I find a history of skin-affections in about 18 per cent. of my cases as they stand in my notes, and I suspect this estimate, if we were to take a survey of families, would be found under the mark. As in No. 245, 1883, skin-affections, if not actually present, escape record even in the individual life, unless especially inquired into. It has been fancifully assumed, therefore, that gastralgia is an eczema of the stomach; an assumption with as little of probability as of proof. I have not, however, heard that any writer has called asthma an eczema of the lungs. Are we then led by way of cutaneous eruptions to a recognition of gout as the spring of these, of gastralgia, and of asthma? Not directly, I think, though I lean to the suspicion of some remote affinity herein. But I find that experience justifies the distinction between the eczema, lichen and psoriasis of "dartrous," and those of "gouty" habits. The distinction is partly to be seen in the histories of the patients and of their relations, and partly, though not invariably, in the characters of the eruptions themselves. In the dartrous, no doubt, these eruptions tend rather to be more acute, and more symmetrical; to moisten, to spread and to itch greatly; while, in the gouty, they tend rather to limitation, to dryness, to lack of symmetry, and to a less active tint of hyperæmia.

The dartrous diathesis of Bazin and others has, then, gastralgia among its evolutions, as the gouty may have; but the term dartrous may well be put in a subordinate place, and the term neurotic diathesis used to indicate the family. Healthy persons with dartrous eruptions, if followed home, will often turn out to belong to neurotic families. Two brothers of my acquaintance illustrate this. The one is a very healthy man, with the exception of a continual liability to eczema; the other is an asthmatic. There are other strong neurotic characters in the previous generation. But lately, again, an odd thing happened to me. A young man, seemingly very healthy, came to me for severe gastralgia of a pure type. I pressed him as to skin-eruptions, and he denied their presence in himself and in his family. Within the next six months, there came to my rooms, first, his sister, a healthy looking girl, with recent and vicious eczema around both ears; then the mother, with symmetrical moist spreading eczema of the legs; and, finally, the baby of another daughter, with eczema of the head. These successive cases were almost put down to my ominous inquiries, and, in an earlier century, I might have been burnt. There was no gout in the family, nor any suspicion of its latent presence.

But another diathesis which I find often recorded in my cases is rheumatism—rheumatism of the kind which culminates in rheumatic fever.

Miss ——, aged 17 (No. 350, 1876), had eczema capitis at age 7-8. She was then, and later, a somnambulist. After this, she had "horrible sinkings" in a forenoon for some time, and was treated for "dyspepsia." These vanished in favour of intense neuralgia of the head. In 1875 this again gave way to attacks of gastralgia, so severe at times as to end in a faint. She was treated by several medical men of position for "dyspepsia," and her diet corrected until it became spare and monotonous. She grew so much worse, that she was taken to Sir William Jenner, who reversed all the rules of her dietetics, fed her liberally, and gave her strychnia. She recovered in a few weeks. She called upon me for a new trouble, namely for intense neuralgia of the left orbit, often leading even to ecchymosis of the conjunctiva. Now, in this young lady's family rheumatism and rheumatic fever were well marked on the paternal side. Her father was a "delicate" man, and a martyr to rheumatism; he had had rheumatic fever more than once.

Another such case occurred in Miss [illegible], at 25 (No. 480, 1882). She came of a neurotic family, and one from which phthisis had not been absent. Her consultation was in respect of gastralgia of an intense form. She had been migrainous most of her life, and she had suffered from rheumatic fever at 18 years of age.

Now do these cases, which I can strengthen by many others, lead us to make any direct tie between the rheumatico-gouty diathesis, the eczema, and the visceral neuroses? No, I think no direct tie. To turn aside for a moment, I have to set before you another affinity, which must be considered with these. Perhaps the disease most largely found in neurotic families beyond their neuroses is phthisis. In case after case I find phthisis in parents or kin. This applies to all the neuroses, not to the gastro-abdominal only. I may refer again to the last named case, No. 480, and farther to Mrs. [illegible], aged 35 (No. 128, 1878), who came to me for an uterine ailment. She had had four children. I found some catarrh, both uterine and vaginal, the uterus soft and the surrounding parts relaxed. She had the usual dragging aches of the pelvis, pain on jolting, tenderness to the exploring finger, and so on. She is liable to severe neuralgia in either supra-orbital notch. Although an abstinent woman, she is sick on rising in the morning, and all her symptoms come more about her as the catamenia approach. These return every twenty days or thereabouts. She has gastralgia very often, with voluminous flatulence and pyrosis. In her family there is a strong phthisical history. She made a good [illegible] on sedative and tonic treatment with change of air, and she has continued to enjoy better health. Her uterine troubles vanished as she regained strength, a course of douches only being prescribed.

Mr. H., aged 45 (No. 403, 1883), has suffered acutely from [illegible] angina, but consulted me for enteralgia arising near the umbilicus. His family history is badly phthisical.

Mrs. —— (No. 414A, 1883), aged [illegible], has had [illegible] neuralgia, but now consults me for enteralgia and urticaria. She has had attacks of eczema. Her uterine functions present no special derangement. Her family history is very phthisical.

But I need not multiply cases which present like features merely to record that phthisis belongs to their series. This I may invite you to observe for yourselves. But, for many years, I have noted the frequent coincidence of phthisis and rheumatic fever in family trees; and I think this coincidence has been observed by others. To my mind, then, the natural group is neurosis, phthisis and acute rheumatism. But what of the gout? Rheumatism and gout are certainly akin, the two maladies appearing in the same families, and even in the same persons at different ages. Yet I think gout goes by a different route to its direct work. A pure neurosis goes hand in hand with phthisis and acute rheumatism; but pains which, like migraine, enteralgia, sciatica and so forth, may, in such association, be of the purest type, may, in other instances, be caused by the poison of gout, and thus should be put into a separate class, with the eczema and psoriasis of gout, which, again, are not "dartrous." In the one class, the neuralgias depend upon some congenital defect of nutrition, affecting the nervous apparatus itself; the thing is essential: in the other class, the nervous apparatus, originally healthy enough, and even vigorous, is angered by a circulating poison. Yet is there not some alliance beyond this? Is there not some remoter pathological kinship, unexplained by the humoral theory? Yes, I believe there is. I believe that, farther back, there is some community of nature between the gouty and the neurotic habits; and to this we may ascend when we track out those phenomena which suggest that gout is itself originally a neurosis. Although there is, then, no cross alliance between neuroses, phthisis and gout, yet one may trace the history of gout upwards to a point of union with a divergent stock, which, two, three or four generations back, had branched off into the tuberculo-neurotic. In such cases—and I have notes of several of them—antigouty remedies are of no use whatever. Finally, there is another form of neurosis of gouty origin, for the relief of which antigouty medication is useless; and that is seen in skin-affections or neuralgias which had been directly aroused by the active presence of gout, but which were left stranded after the gouty humours had ebbed. Flotsam and jetsam of this kind [illegible] common in practice, and in such cases we do ill to run upon specific medication. A hemiplegia may remain, forgotten as it were, when the cerebral centre has healed; and will persist, perhaps, unless driven off by faradism. A syphilitic ulcer may remain after the syphilitic state has been wholly counteracted by the usual remedies, and decline to heal until some more general treatment is taken up. In like manner, an eczema or a neuralgia may be set up by gout, [illegible] to be active, leaves behind it some altered or lowered state of tissue, which no longer acknowledges the first disturber of the peace, but lies in a simpler dejection of its own. We must try the specific measures; but, if these fail, we must not therefore assume that our surmises as to the original cause of the ailment were false. These are the remnants which are sometimes suddenly routed by a blister or an acupuncture. Urticaria is not an uncommon [illegible] to [illegible], as is well known; and I forbear to record many of [illegible] in which it was found together with visceral neuroses. One I have cited above, under No. 414A, 1883. Zona is, perhaps, never found with a visceral neurosis, unless there has been some cerebro-spinal nerve-disturbance therewith. Mrs. W., aged 66 (No. 546, 1881), came to me for general and nervous debility. She told me she had suffered repeatedly from angina pectoris whether the [illegible] angina [illegible], but that with the last attack there broke out a violent crop of shingles, after which the angina returned no more.

I saw a very remarkable [illegible] of this kind in [illegible] Stock of Morley. She was a woman somewhat beyond [illegible], whose whole temperament and history afforded a good [illegible] kind of neurotic. When I saw her, the neuralgia of the viscera had extended to the cerebro-spinal system, and [illegible] of the [illegible] that a crop of [illegible] length of the [illegible] aspect of it, [illegible] gouty history in the case.

And now, gentlemen, my [illegible] I [illegible] upon the treatment of visceral [illegible] end. Although the [illegible] of all [illegible] diagnosis, yet, on the other hand, the most elaborate diagnoses are but laborious [illegible] with the child in La Fontaine.

[illegible]
[illegible]

The beginning of all successful treatment must be to convince the patient of the true nature of his malady. Now, your neurotic is one who has no reserve. This want is probably due to a congenital instability of nerve, showing itself as waste, so ceaseless, that the reserve once dissipated is never reaccumulated. This reserve may have been spent in beneficent activities; or it may have been dissipated in fidgets, fretfulness, or shrewishness; in sleeplessness, in anxiousness, or in pain, according to the quality of the person. We are disposed to forget that the silent work of nutrition uses more force perhaps than many people expend in their neuro-muscular life; hence the early failure of the digestive resources in neurotics, hence the fall of the balance of nutrition below the needs even of a controlled expenditure. We know that good nutrition is a chief condition of steady work, good temper and self-control; we know, too, that to trade daily only upon the supplies of the day is to court collapse; we must have more brain, more spinal marrow, more liver, more kidney than we want for the day. We must have stored-up force, partly for greater occasions, partly to secure the equable running of our machinery. A neurotic person is an engine with a light fly-wheel and a small furnace, whose work, therefore, is fitful and unsafe. In the early life of neurotic subjects, especially, we must husband the reserve, we must control expenditure, and cherish nutrition. To heap up again a wasted reserve is always a long and laborious task, and, as years go on, becomes harder and harder. Many people, even when under middle age, never wholly replace their reserve if wasted, let us say, by acute disease; so that this factor of steadfastness and safety is never wholly replaced. In an exhausted neurotic, the secret of treatment, therefore, is—by food, fresh air, exercise, and happiness—to lift up your patient from the invalid-couch, not for the day or for the month only, but to teach him so to manage expenditure and so to promote nutrition as to replace his capital. He must establish in himself the habit of a cool temper and rhythmical work, and root out the habit of wasting volumes of good worry upon forecasts of events which never happen, and on visions of unsubstantial things. Unhappily, however, nine neuralgics out of ten are possessed by the belief that they are dyspeptics, and that the cure of their malady is to be found in some farther defalcation of their diet, in some new arrangement of it, or in the use of some new combination of stomachics. Once convince them that the stomach is the seat of neuralgia, and that any pain caused by food is as accidental as is the increase of pain in tic-douloureux during the act of mastication; once let them realise that, so far from waving their dishes aside, like the physicians of Sancho Panza, you would rather prompt them to indulge as liberally as their impaired forces will permit; once persuade them to throw all their alteratives, their pepsines and their mineral waters to the dogs, and your battle is half won. I cannot read the lives of men like De Quincey or Carlyle without suspecting that a timely or untimely course of Fowler's solution would probably have deprived us of the letters of Mrs. Carlyle and of the *Confessions of an Opium-Eater*. Assuredly a gastralgic can no more eat a good dinner than he can walk a league; but by careful advances, and the repetition of small light, highly nutritious and social meals, he will eat his way upwards. The first dread of food over he will begin to digest *con amore*, and he may perhaps be helped to this end by the aid of pepsine, though my patients seem to do nearly as well without it. In severe cases, the warmth of bed for a few days, or even for two or three weeks, is of great value; economy of work and economy of heat is thus secured. Many a case of neuralgia which had resisted all medicines has been cured by a course of bed alone. The very common association of cold extremities with gastralgia, and indeed the oft noted influence of chilled feet in setting up an attack, is an indication of the need for equable warmth. Dwindled meals fail to supply both heat and nutrition; and, in extreme cases, the Weir-Mitchell system, by stimulating nutrition, may reopen the fountains of warmth and vigour. The visceral neuroses again, like the rest, are aggravated by cares and sorrows, and by depressing conditions of life. Release from toils or worries, and a change of air and scene, take a leading part in the cure. Gastralgics as a rule do better inland than at the seaside. At the sea they are apt to become irritable or sleepless; but these ill effects are lost on withdrawing a mile or two inland. On the other hand, the high mountains are not favourable to neurotics; they fare ill at St. Moritz and Davos. Milder upland airs like Malvern or the Sussex Downs—dry sunny slopes a little remote from the seashore—suit them best. For how many patients can we write the prescription—to take two months' holiday, to withdraw from all toil and care, and to live in good company on refined and delicate food? And yet how potent are such means when all else may fail! Mr. Teale and myself tried in vain to cure a clever, impulsive, and overworked Leeds clothier of gastralgia, mixed with some acid dyspepsia, until we sent him on a sea-voyage. His own words on his return were: "After a few days, bile could'nt live in my stomach, and my tongue was as clean as if I had manufactured it myself." The only things necessarily to be forbidden are tea, coffee, tobacco, and the stronger meats, such as beef. Over many persons thus susceptible, tea has an evil power; it retards the pulse, and creates the horrible empty exhausted feeling, which seems as hard to bear as very pain. Alcohol I do not encourage in neurotics; that there is a little occasional help in it, I admit; but, on the whole, alcohol, drawing as it does upon the reserve fund which we wish to protect, is better away from persons who may learn to take it rather as a dram than as a small addition to meals; this error, in them, is a radical one. A like danger may follow the use of morphia, but severe cases cannot be treated without it. The repeated attacks so exhaust the patient, that it is only by economising his forces with warmth, rest, and morphia that he can retain any for the absorption of his food. Morphia may be given fractionally in ordinary mixtures, or periodically in larger doses, but in either case the remedy should be kept under the control of the doctor; in many cases it is even well to keep the patient in ignorance of the agent. For this reason, I often order Dover's powder in pills, in order that the compound may not be recognised in the prescription as opium. Of other drugs, arsenic in gastralgia takes by far the chief place; indeed, it is hard to say how gastralgia was cured before the time of its introduction by Dr. Leared. Yet, even now, its power is not sufficiently well known, for, on turning to Dr. Ross's work on the *Nervous System*, which I suppose to be the best in our language, I find no record of arsenic as a remedy for gastralgia; and Dr. Spender's rules for the use of the drug are too timid. Yet, after all, with soft nutritious food, warmth, rest, and lenitive or narcotic doses of opium, many cases of gastralgia still resist treatment. Oddly enough, a repetition of small blisters to the epigastrium may then be of service; and of other drugs, quinine, boldly pushed on, with belladonna, form a valuable combination; and so, again, do quinine and bromide of ammonium dissolved in hydrobromic acid. The infusion of the *Prunus Virginiana* makes an excellent vehicle for such mixtures. Not uncommonly, gastralgia is a product of malaria. Of this nature I have two cases before me, and in one of them very large doses of quinine cured a most intractable gastralgia, which had resisted all other measures. Luckily, I knew my friend had travelled in the East, and had had ague there. The silver salts, again, are of undoubted use; with nitrate of silver I cured one case which had defied all my previous measures. Of manganese I have no experience. Of iron, I speak last; it has only been of much use to me in a few cases, for I do not, in fact, observe that anæmia, apart from the general lowering of all nutrition, has been so marked a feature in my cases of gastralgia as many authors definitely assert of their own. Where any distinct anæmia exists, iron, of course, is indicated, and often works a cure. Phosphorus is not so useful in gastralgia as its kinship to arsenic would lead us to expect; but the pharmaceutical compounds of the hypophosphites now sold do, by virtue of some one or more of their constituents, seem to answer well. As the stomach gains vigour, cod-liver oil should be added to the dietary, it will help on nutrition and forward recovery. In a word, arsenic and quinine are the only specifics; and the rest of the treatment may be summed up in rest, sedation, nutrition, and tonics. Some gastralgics find that alkalies give them a temporary relief from pain, even in cases of neurotic and periodic type. It is not generally so, however, and the practice is not a sound one.

When we leave the vagus nerve, when we leave asthma, angina pectoris and gastralgia, we find that the specific powers of arsenic are no longer so trustworthy. In enteralgia it may have some value, but far less than in gastralgia; in enteralgia, quinine and belladonna seem best to forward restoration, though arsenic is, even here, by no means to be despised. In all visceral neuroses a most careful search must be made for any kind of peripheral irritation, and such irritation soothed and its causes averted. Of the infinite pains, moral and dietetic, which are needed for vomiting cases, I need not speak, for the management of them is sufficiently well known. The only unfamiliar drug which I can recommend for these cases is the walnut-spirit sold by Messrs. Corbyn and others; this medicine, which was indicated some time ago in the *Practitioner*, I have certainly found very useful in cases of neurotic vomiting. It must also be remembered that gastralgic vomiting is spasmodic asthma of the stomach, and that a few whiffs of chloroform, or a little subcutaneous morphia, may cut the one short as well as the other.

Mr. President and gentlemen, I must not detain you longer. Happily free as I am from neuroses in general, yet a sinking at the heart has possessed me many a time as I wrote and then read the lectures I have ventured to present to you. How slender is the offering none knows better than I. One while I have comforted myself with the thought that the late Dr. Symonds did not think the subject of Headache too trivial for your thoughts; but again I reflected how much the more must be the talent of the speaker the less striking his subject, and how great the interval between him and me. That I have said nothing new to you I am painfully aware; that my words may not have fallen below the authority of this chair is my single hope.

CASES OF FACIAL ERYSIPELAS WITH LOW TEMPERATURE.[1]

By JOHN CAVAFY, M.D., F.R.C.P.,
Physician to St. George's Hospital.

THERE is probably no disease which presents so great a variety as erysipelas, in the extent, severity, and character of the inflammation of the skin, which forms its essential symptom; and accordingly an extensive nomenclature has been devised in which some attempt has been made by authors to define the different forms of the disease. Thus we meet with the terms erysipelas erythematosum, and e. phlegmonosum, distinguishing the depth of tissue affected; e. glabrum, diffusum, and marginatum, according to the character of the surface and edge of the inflamed part; the presence of vesicles, bullæ, pustules, and crusts, is denoted by the terms e. vesiculosum, bullosum, pustulosum, etc.; while the name e. gangrænosum points to what is fortunately a rare termination. Again, if the affection remain limited to the parts first attacked, it is called e. fixum; while if it extend to fresh tissue, the term e. migrans marks this character; lastly, the names e. multiplex and erraticum signify the simultaneous or successive implication of distant parts of the skin.

It may be doubted whether much is gained by the employment of so many names to designate varieties of what is essentially the same disease; no light is thereby thrown on the nature of the erysipelatous process, and variability, although very striking in erysipelas, is at least equally so in many other diseases; but it may perhaps be admitted that the particular character of the affection is emphasised by the adoption of these diverse appellations, and that an important clinical fact is thereby stamped more firmly on the memory.

Be this, however, as it may, it is not only in aspect and extent of cutaneous inflammation that erysipelas varies widely, but also in the severity and character of the fever which accompanies such inflammation. Cases may be preceded by a rigor or rigors, and the temperature may rise to 104° or more in the first twenty-four hours, or it may reach this point gradually, in the course of two or three days; it may be maintained at a high pitch, with very slight remissions, or the remissions may be as marked as in enteric fever; and there may even be cases of an intermittent type, a morning temperature of normal height being followed by an evening rise to 104° or more, for several days in succession. It may be said that, as a general rule, the fever is directly proportional to the skin-affection, any extension of the process being accompanied by a rise, while quiescence, or temporary diminution of the inflammation, is expressed by a more or less marked fall. Defervescence usually takes place by crisis, a fall to normal or subnormal occurring as suddenly as the rise; or, more rarely, there is a gradual subsidence, extending over several days.

But, although the above-mentioned varieties may be said to include the majority of cases, instances of still greater divergence may be not unfrequently met with. Thus, there may be no initial rigor; the fever may precede the skin-affection by one or two days, or it may follow the inflammation; the remissions or intermissions may last several days; there may be high fever with comparatively slight inflammation; and lastly, the fever may be very slight throughout, and there may be an extension of the inflammatory process in the skin during defervescence, even when a normal temperature has already been reached.

I have had recently a few cases of the latter [illegible] under my care in St. George's Hospital, which seem to me not without interest in some particulars, and I have therefore thought that a condensed account of them might be worth a little attention.

CASE I.—A man, aged [illegible], admitted on September 28th, [illegible], had had two previous attacks of erysipelas: the first, and severest, [illegible] years ago; the second, two years ago. In the afternoon of the day before admission, while feeling quite well, he noticed that the bridge of the nose was slightly swollen and red. The same evening, the swelling extended to the left cheek, and during the night to the right cheek, with slight burning pain; no rigor. On admission (second day), there was circumscribed swelling and redness over the bridge of the nose, and on both cheeks below the eyes; the affected parts were tense, tender, and slightly painful; evening temperature, 100°. The temperatures were: September 29th, morning, 99°; evening, 101°; September 30th, morning, 99°; evening, 100°. October 1st, morning, normal; evening, 100.2°. October 2nd, morning, normal; evening, 99.5°. October 3rd, morning, normal; evening, 99.5°. October 4th, morning, normal; evening, 99°. October 5th (ninth day), morning and evening, normal, and continued so. There was no extension, and the swelling and redness steadily subsided.

CASE II.—A man, aged 39, admitted on September 29th; no previous attack of erysipelas. On the day before admission he felt quite well until the evening, when there was some heat and tingling of the left cheek; on the following morning swelling and redness had appeared, and extended to the nose; no rigor. On admission (2nd day), circumscribed redness and swelling of left side of nose, and neighbouring left cheek, on which are two bullæ near the nose; no pain; evening temperature, 99°. September 30th, temperatures: morning, normal; evening 99.2°. October 1st (4th day), morning and evening normal, and continued so. No extension, but slow subsidence, with much branny desquamation.

CASE III.—A woman, aged 32, admitted on October 1st. About six previous attacks of erysipelas during the last seven years; the last nine months before the present one. On the day before admission she had slight shivering and headache, with smarting and tingling of the face, which began to swell; the swelling had increased and extended next day. On admission (2nd day), circumscribed redness and swelling of both cheeks and bridge of nose, most marked on left side, where it extends to the margin of lower jaw; a good deal of aching pain. Temperatures, morning and evening, normal. October 2nd, morning, subnormal; evening, 99°. No change in face. October 3rd (fourth day), morning and evening subnormal, and continued so. On this day, however, the redness and swelling extended over the upper and inner two thirds of the left concha, where it lasted three days before subsidence, the temperature never rising above 98°. All swelling and redness afterwards steadily diminished, with branny desquamation.

CASE IV.—A girl, aged 12, admitted on October 11th. Three previous attacks of erysipelas. Two days before admission she had a fit of shivering, and the face and nose swelled. On admission (third day), swelling and pale redness of nose and neighbouring cheeks; margin not very sharply marked; very slight sensation of pain and heat. Temperature, morning, 29°; evening, 99.6°. October 12th, morning, 99.7°; evening, 99°. October 13th, morning, normal; evening, 99°. October 14th, morning, normal; evening, 99.5°. October 15th, morning, normal; evening, 99.7°. October 16th (eighth day), morning and evening, normal, and continued so. Steady subsidence throughout; very slight branny desquamation.

CASE V.—A woman, aged 35, admitted on November 22nd. A month ago, having had no previous attack of erysipelas, the right ear became swollen, red, and painful; this subsided in a few days. Eight days ago swelling and redness of right eyelids, increasing so as to close eye; this subsided completely in four days, when she had a rigor, followed by redness and swelling of left side of nose and cheek, with much pain.

On admission (fifth day of relapse), slight branny desquamation of right eyelids and cheek; bright redness and swelling of left side of nose, both left eyelids, and cheek, sharply [illegible] and inwards, more diffused over outer side of cheek. Temperatures: evening, normal. November 23rd, morning and evening, normal. November 24th, morning, 99.5°; evening, 100.2°. Headache; fresh patch of redness and swelling at back of left ear; bulla on cheek. November 25th (eighth day), [illegible] normal, and on following [illegible]. On November 26th, there [illegible] side of forehead and temple. From this time [illegible] with desquamation.

Such are the cases which I have [illegible] think that there is not [illegible] mild or abortive attacks of erysipelas, and [illegible] ter. If this view be held, it still seems to me not without interest that [illegible] that two (Cases I and [illegible] temperature was subnormal.

[illegible]

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[1] Read before the Medical Society of London.

erythema, or non-specialised dermatitis. As the contagiousness of true erysipelas has been placed beyond question by the experiments of Koch, Tillmanns ("Erysipelas," *Deutsche Chirurgie*, p. 9), and especially Fehleisen (*Deutsche Med. Wochenschrift*, 1882, p. 553), as well as by many clinical facts, an accurate diagnosis is obviously of importance. It has been shown that the virus of erysipelas may be collected, cultivated by appropriate methods, and transmitted to animals and to man by inoculation, the resulting disease being often of great severity. The question then arises, can the virus, when inoculated, give rise to a mild affection similar to that under consideration? The experiments of Tillmanns (*loc. cit.*, pp. 14, 18) seem to show that it can. Out of twenty-five inoculations on dogs and rabbits, five were followed by marked erysipelas with high fever; in two there was erysipelatous redness and swelling, but only a slight rise of temperature, while in several others (the number is not stated) the inoculation was followed by spreading redness and swelling, which resembled erysipelas in every particular, but ran their course without fever. Now Tillmanns considers that as these cases were apyretic they were not genuine erysipelas, but I must admit that I fail to see the force of his reasoning. The selection of high fever as the pathognomonic sign of the true disease seems to me altogether arbitrary, and, even if it be accepted, impossible to apply with accuracy. It is surely true that the cases with the highest fever and those with the lowest, or even with none, are connected by transitional forms which establish an insensible gradation between the two extremes, and I am quite unable to see where the line should be drawn, on one side of which we are to place all the genuine cases, and, on the other, all the spurious ones.

If, then, we admit that true erysipelas may occasionally run a mild course, practically without fever, and if we also recognise the fact that some forms of erythema, and even urticaria (*e.g.*, the "acute circumscribed cutaneous œdema" of Quincke), may have a close resemblance to erysipelas, we have to inquire by what means we may distinguish between these affections. I think there is one character of importance which is present in erysipelas and not in the others, and that is rapid spreading at the margins. Mr. Jonathan Hutchinson, in an able paper on Certain Diseases allied to Erysipelas (*Medical Times and Gazette*, January 1883), insists strongly on this point. After pointing out that erysipelas may be often wanting in vesication, in abrupt margin, and even in hyperæmia, he defines as erysipelatous any inflammation which *travels* and is attended by œdema. But, even if we pay attention to this valuable sign, I think we shall still meet with instances in which diagnosis must remain uncertain. Tillmanns, referring to such cases (*loc. cit.*, p. 196), says that it must remain a question how far they are true erysipelas; and, further, that a correct diagnosis has no practical importance; but I do not think it would be wise to accept this view without reserve. Erysipelas is unquestionably contagious; and, although this may not be equally true of all cases, the severe ones being probably far more dangerous in this respect than mild examples, we cannot do wrong in taking all necessary measures to avoid communication of the disease to others. The severe cases shade off into the mild and doubtful ones by such gentle transitions, that it is certainly not always an easy matter to decide as to the rank which should be occupied by any particular case under notice. The difficulty is, perhaps, best solved by Mr. Hutchinson, who concludes that there is a family of erysipelatous affections, rather than a single disease erysipelas—some closely, others remotely, connected with the typical complaint. He holds that, in all, a virus is probably produced, which enables the disease to spread by contagion; and, whenever transmission to another person occurs, the disease, he believes, is intensified.

If these views are correct (and we shall at least be on the safe side if we adopt them), it is plain that there may be a danger of infection from any case, however mild; and caution will be always desirable. This possible danger of infection should, I think, be specially guarded against by those who are engaged in the practice of midwifery, and in the performance of vaccination and other trivial operations. The close relation of erysipelas to a grave form of puerperal fever is well established, and the slightest wound may become the starting-point of erysipelatous inflammation; indeed, it is nearly certain that some breach of surface, however trifling, is a necessary antecedent of all erysipelas. Under these circumstances, I have no doubt whatever that he will be the best practitioner who takes the minutest precautions against the possible conveyance of infection, however remote and improbable such a contingency may appear.

THE Duke of Devonshire has been elected President of the Chesterfield and North Derbyshire Hospital for the ensuing year.

AMONG the candidates for the *externat* of the Paris hospitals, Mddle. Mathieu, a negress, has competed with success.

ON THE YELLOW PIGMENTS FOUND IN THE VISCERA IN CASES OF ARSENICAL POISONING.

By THOMAS STEVENSON, M.D.,
Lecturer on Forensic Medicine at Guy's Hospital.

IN an interesting communication on the above subject (BRITISH MEDICAL JOURNAL, 1884, vol. i, page 506), Dr. Campbell Brown and Mr. Davies record their examination of a bright yellow pigment, met with in three bodies exhumed after death from arsenical poisoning; and conclude that the pigment resembled one of the products of decomposition of bile-pigment. They, moreover, state that "no proof has ever been adduced, so far as we are aware, that the yellow substance" observed in such cases "is really sulphide of arsenic."

This novel and valuable observation accords with what is known of the occasional yellow discharges from the bowels, during the course of cases of arsenical poisoning, referred to in Dr. A. S. Taylor's *Principles and Practice of Medical Jurisprudence* (third edition, edited by myself, vol. i, page 257), where it is stated that "the matters discharged from the stomach and bowels have had in some instances a yellowish colour, as it was supposed, from a partial conversion of the poison into sulphide, but more probably from an admixture of bile."

The authors of the paper in question go too far, however, when they assert that no proof has been adduced that the yellow substance, met with in exhumed bodies, is sulphide of arsenic. Christison *(Poisons)*, in speaking of the solid particles of arsenic found in the stomach, speaks of the brilliant yellowness of the surface of these particles, and adduces four cases of this character which came under his own notice; and adds that, in all these, he found the oxide as well as the sulphuret of arsenic. In one of these cases, besides the oxide and sulphide, he found sulphuretted hydrogen gas in the stomach. In the case of Margaret Warden, yellow arsenical solid particles floated in the stomach fluid. In the case of Regina *v.* Jennings (Berkshire Lent Assizes, 1845), Dr. Taylor describes how, in a case of exhumation, he obtained abundant evidence of the arsenical nature of the yellow substance, by means of general reactions, which are given in detail. *(Guy's Hospital Reports*, 1845, page 187.) In another case, Regina *v.* Garner and Garner, tried at Lincoln in 1863, Dr. Taylor found, in a case of exhumation, arsenic "partly in a soluble and partly in an insoluble form—that is, as orpiment, or yellow arsenic," the quantity of which he put as six or eight grains. *(Pharmaceutical Journal*, 1862-3, page 377.) I well remember seeing these yellow powdery masses of yellow arsenic in one of Dr. Taylor's cases.

To these, I may add an observation of my own on the body of Elizabeth Kittle, exhumed in 1872, six months after burial (Regina *v.* Kittle, Chelmsford Summer and Autumn Assizes, 1872), where there was extensive yellow staining of the stomach, orange-coloured staining of the duodenum, and also a considerable amount of solid yellow matter in the stomach, gritty to the touch. The yellow portion of this was insoluble in water, and could be seen coating the surface of pigments of white arsenic. The yellow matter was conclusively proved by chemical tests to be sulphide of arsenic.

I think there can be no doubt that gritty yellow sulphide of arsenic is not very rarely formed from arsenious oxide in the viscera after death; but this must not be confounded with the yellow substance described by Dr. Brown and Mr. Davies.

EPIDEMIC OF FOLLICULAR TONSILLITIS DUE TO DEFECTIVE SANITARY ARRANGEMENTS.[1]

BY G. ARTHUR CARDEW, M.R.C.S. Eng.
Medical Officer of Cheltenham Training College.

THE following are a few notes on an epidemic of sore-throats which occurred at the Cheltenham Training College (male department) during May and June 1882.

The first man attacked complained of a sore-throat, and stated that the previous day he had a shivering fit and a splitting headache, and, on awaking the following morning, found he had a sore-throat. He had never before suffered from any such affection. The following notes I took of his condition, progress, and treatment, and they are typical of most of the other cases which followed.

He complained of a severe throbbing headache, sore-throat, great thirst, and inability to sleep. The temperature on the second day was 103° Fahr., with a pulse of 130 per minute. The whole of the pharynx, tonsils, soft palate, and uvula were intensely congested. On the tonsils were three white looking ulcers, as large as threepenny-pieces, of an irregular shape, covered with a white membranous material, which gave a raised appearance to them, but, on removal of this, leaving an ulcerating surface, which bled slightly.

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[1] Read before the Gloucestershire Branch.

On the following (third) day similar ulcers appeared on the soft palate, the uvula, and the posterior wall of the pharynx. There was no difficulty in breathing, no hoarseness, or anything to indicate mischief in the larynx. The highest evening temperature was 104.2° Fahr., and defervescence ensued by crisis on the fifth day, followed by rapid convalescence.

The line of treatment adopted was a brisk purge of calomel and colocynth, chlorate of potash internally and locally, and a milk diet. On the fifth day, he was given perchloride of iron solution internally, and the ulcers were painted with a ten-grain solution of silver nitrate. Beyond great weakness, there were no sequelæ of any kind.

This case was followed by thirty-four more, all of which ran similar courses. Twenty were very severe, the temperature averaging 103° Fahr. Eleven were milder, the temperature never exceeding 102° Fahr.; and the remainder were so slight, that they recovered without any treatment beyond a gargle of chlorate of potash. The congestion of the fauces remained in nearly every case two to three weeks after the ulcers were healed. I examined the throats of nearly all the men in the college, and found that most of them were red and congested, but giving rise to no discomfort.

At the first appearance of these cases, I simply attributed them to cold, but, on their increasing rapidly in number, I made a careful search for a more satisfactory cause.

Accordingly, Mr. Darby, the college architect, and I made a thorough examination of the premises. We first examined the drainage, the main sewers being found to be intact, well laid, and disconnected from the town sewer by an efficient trap, but with no ventilation-shaft. All the closets and urinals, which are in the quadrangle on the west side, were found in good working order, and well ventilated, only being half roofed in.

In the large dormitory, containing sixty cubicles, were two water-closets, both of which were found to be badly ventilated, the soil-pipes thin with age, much corroded and pinholed, and without any ventilating shaft. Into one of these pipes an overflow from a large cistern opened direct, without any trap. The pipes from the lavatories were in direct communication with the sewers, and were half filled with a thick black looking mud. The water-supply for drinking and cooking purposes was good, and supplied from special cisterns, but that for the closets and drains was insufficient. The household refuse was not removed frequently enough, but nevertheless had given rise to no apparent nuisance. The ventilation of the institution was very defective, being only that obtained by windows and louvres, which were always securely closed at night, making the dormitories and class-rooms very foul and close when in use.

In making this examination, both the college architect and myself were much indebted to Dr. Wright, the medical officer of health, who gave his assistance and the benefit of his sound experience, and, at our combined recommendation, the committee made all the necessary alterations to put the college into the best sanitary condition.

Fortunately, this outbreak was in the latter half of the term, and ended with the commencement of the holidays, and from that date (Midsummer 1882) till now (Christmas 1883) there has been no reappearance of the disease. This outbreak is reported by Her Majesty's Inspector of Training Colleges for England and Wales, the Rev. T. W. Sharpe, in his report at page 554 of the Report of the Committee of Council on Education (England and Wales), 1882-1883.

OBSTETRIC MEMORANDA.

PREGNANT ANTEFLEXED UTERUS.

I MUST take exception to both the treatment and remarks of Dr. J. Courtenay Haslett, in the JOURNAL of the 8th instant, on [illegible] above treated by the production of abortion. Notes of a [illegible] similar case will illustrate my views on the former. Six years ago, Mrs. K., aged 23, married for eight months, consulted me on account of vomiting, which, she said, had been increasing for three weeks, until she thought she retained positively no food. She had missed two periods, and suspected herself pregnant. She complained of [illegible] down and difficulty in passing urine. Her general health, too, had suffered much. All the usual remedies by the mouth were tried during a week, without the slightest beneficial effect. By this time, she had become so emaciated and weak, that she could not get out of bed. I repeatedly entreated her to allow me to examine the uterus, but she as often flatly refused. Even sucking ice now aggravated the incessant retching and vomiting. The patient continued to become weaker, and with no abatement of the symptoms, for three days longer, except about six hours' partial relief, which minim doses of ipecacuanha wine every quarter of an hour gave her. I then stated that, unless I were permitted to make the necessary examination, my retirement from the case altogether must ensue. The following day, a digital examination of the vagina revealed an anteflexed uterus, evidently pregnant. The fundus was tender, enlarged, and firmly fixed at a lower level than the os. With considerable difficulty, and much pain to the patient, two fingers in the vagina, with the assistance of the other hand over the pubes, served to forcibly push up the fundus until both hands met behind the pubes. The patient [illegible] about a foot. Vomiting ceased at once; and beef-tea and milk, with soda-water, were taken freely. The next day, a cradle-pessary was placed, after the fundus had again been pushed from the position which it had to a comparatively slight degree reassumed. The patient gradually regained her strength and loss of flesh, though it was thirteen months before she had done so entirely. The pessary was removed as soon as the fundus ceased to lean on it; and the patient was safely delivered, at the full term, of a healthy child, which is still alive. She has since borne three children, exhibiting similar symptoms, but in a decreasing degree, in each pregnancy. Identical mechanical treatment has been adopted, with the desired result. I found the uterus slightly anteflexed after the first involution was complete; but she declined treatment, except when driven to submit to it. She has never miscarried. At each labour, the head was very loth to leave the ilio-pectineal line on which it rested, and to enter the true pelvis; this always protracted the first stage. A very determined attempt with the hands alone—under chloroform, if necessary—ought always to be made to restore to the natural position a flexed uterus, more particularly if pregnant; and where there is no adhesion, and the surrounding parts are in a normal state, I fail to see why it should not succeed. The use of the sound at such a time is improper. If the uterus can be erected by dragging at the cervix (which might render an anteflexion more acute), it certainly ought to be as easily replaced by the simpler and less hazardous plan of pushing up the fundus.

With regard to Dr. Haslett's remarks on the rarity of anteflexion in the early stages of pregnancy: since that condition is merely an exaggeration of the normal position of the organ, and so in a less degree in the pregnant state, and considering the varying pressure it is subjected to from above, I am not surprised to find, in practice, that a morbidly anteflexed uterus in the early months of pregnancy is of very common occurrence. But that a womb much bent forwards on its own axis often becomes pregnant, I think most gynæcologists will agree, seldom happens. Were it happily otherwise, a little judicious management would place us in the best position to see the case cure itself in many instances, in a way most gratifying to the patient. Secondly, in the absence of any complication wh[illegible] and [illegible] result of the case show none—Dr. Haslett advances no reason why the treatment should not have included the prevention of abortion, instead of its production. Ought not the difficulties of the operation referred to by Dr. Haslett to be obviated, rather than incurred?

ROBERT D[illegible], [illegible] F.R., G[illegible] Tyne.

CLINICAL MEMORANDA.

BLACK TONGUE.

As far as I am aware, this [illegible] in England, it has been described on several occasions by French writers. Cases are mentioned in the *[illegible]* [illegible] as being reported by Dr. Eulenberg and M. de St. Germain. The former mentions one case, that of a boy, "whose tongue was black from base to apex." The papillæ were much hypertrophied, and the condition continued for three months. Scrapings of the tongue, when viewed under the microscope, showed "numerous thickened brown coloured epithelial cells, and on their borders pigment-granules were enclosed by cell or membrane."

The cases reported by M. de St. [illegible] He "[illegible] times met with a spot of [illegible] black colour in the middle of the organ: 1, a girl, [illegible] ing emaciation and paraplegia; 2, a girl, aged 11, convalescent from enteric fever; 3, an asthmatic [illegible] health was not otherwise impaired; 4, an old man in fair health.

The case I have under my [illegible] he is a painter by trade, but has [illegible] years. He is one of seven [illegible] excellent. He has suffered with [illegible] strokes of paralysis eight years ago. [illegible] his tongue three years ago, [illegible] in the centre of the tongue, it gradually spread until the whole organ was black from base to apex. The tongue on examination is smooth and velvety to the touch, and the ellipse in the centre is of an intense black colour. On microscopic examination, the scrapings of the tongue are seen to be made up of greatly hypertrophied epithelial fringes, evidently detached from the fungiform papillæ. These fringes, which look to the naked eye like hairs, are seen under the microscope to be formed of imbricated epithelial scales, stained of a deep brown colour, but no pigment-granules can be detected. The patient is not an excessive smoker, nor has he been taking any substance, medicinal or otherwise, that would discolour his tongue. He enjoys fairly good health, suffering from slight chronic bronchitis and emphysema. At times the blackness has almost disappeared, and has again returned. The age and temperament of the patient exclude the idea of it being a so-called hysterical or intentional fraud. George Stoker,

Surgeon to the Hospital for Diseases
of the Throat and Chest.

SURGICAL MEMORANDA.

EVULSION OF TONSILS: BORELLI'S OPERATION.

Miss B., aged 28, has for nearly eighteen months been under my care. From childhood, she has suffered from relaxed and inflamed throat; but, soon after residing here, she first became cognisant of a foul secretion forming in her pharynx. This at first occurred two or three times a day for several days, and then an interval of a week. It, however, gradually altered until, as a rule, it was produced one day in the week, the secretion varying in quantity, but always of a most offensive nature. The patient could feel, by the swollen glands and alteration of speech, the collection forming; then, on awakening, the foul smell and expectoration occurred, and would be excited by mastication, so as to prevent her continuing her meals. The expectoration appeared as pus, and sometimes blood-tinged.

Inspection showed a congested pharyngeal membrane, with somewhat enlarged tonsils on the right side; and, with pressure over its surface, I could expel, at various points, an unpleasant mattery fluid.

All treatment, both general and local, appeared useless, but was strictly carried out. I at length persuaded her to have the tonsil removed; and, knowing I could not do this effectually with either knife or guillotine, I administered chloroform, and then commenced to separate the right tonsil from its bed with my right forefinger, and its enucleation gave little trouble. The left, however, was very difficult; it was smaller, and more closely attached to surrounding parts, and also extended by a fringed process down the pharanx. It would occasionally slip, and required to be hooked up with vulsellum-forceps, and then cut off as deeply as I could detach it. Hæmorrhage was troublesome at times. Convalescence was slow, and deglutition for some time difficult; and there was pain in the left side, in connection with the left Eustachian tube. The torn surfaces presented an unhealthy diphtheritic character for a week, relieved only by applying strong caustic, and using opium lozenges. The temperature reached 102°.

The result has, however, been most satisfactory, as she is now perfectly cured of a disease peculiarly offensive, and to a woman most detrimental, in every sense, to her maintaining a situation of a public and lucrative nature.

Cottenham Farmer, M.R.C.S.E., Hexham.

THERAPEUTIC MEMORANDA.

NOTE ON THE USE OF SALICYLIC PLASTER.

At a recent meeting of the Clinical Society, Dr. Thin directed attention to the value of Beiersdorf's salicylic plaster, as used by Dr. Unna of Hamburg, in the treatment of cases of thickened epidermis. Not long afterwards, a patient presented himself at the Aberdeen Royal Infirmary suffering from a peculiar affection of the dorsum of his left foot. The whole anterior half of the foot was brown, rough, and warty-looking, and not unlike hippopotamus-hide. On attempting to detach a small portion of the warty growth from the underlying tissue, it was found to be firmly attached to it, and bleeding followed. The patient stated that the disease had existed for two months, and that it was spreading. As it seemed a suitable case in which to try Unna's treatment, I obtained, with considerable difficulty, a supply of the plaster from Hamburg, and cut it into strips, with which the affected part was accurately strapped. The plaster was left untouched for three weeks; and, on removing it, it was found that a cure had resulted. The warty layer came off with the strips of plaster, and fine soft healthy epidermis was found covering the parts where, previously to treatment, brown changed epithelium had existed. At some points the skin was covered with a thick layer of white softened epithelial matter, resulting from the peculiar solvent effect exerted by salicylic acid on epidermic tissues. One or two small warty portions about the roots of the toes had not been covered by the plaster, and there the wartiness still remained; and an attempt to scrape off the warty tissue, first by a finger-nail, and then by a blunt gum-lancet, was attended by bleeding, a fact which I mention, to show how firmly the tissues were blended together. To these parts fresh strips of plaster were applied, and when they were removed ten days later, the skin presented a perfectly normal appearance. The result in this case was so satisfactory, that I certainly intend to give this means of treatment a careful and extended trial, as it seems to me that there is a very wide field of usefulness for a method which is extremely simple, and apparently effectual in the removal of some morbid conditions of the skin, the treatment of which have hitherto proved extremely difficult.

J. C. Ogilvie Will, M.D., F.R.S.E.,
Surgeon to the Aberdeen Royal Infirmary.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ROYAL HOSPITAL, BELFAST.

A CASE OF A REMARKABLE ERUPTION FOLLOWING THE ADMINISTRATION OF IODIDE OF POTASSIUM.

(Under the care of Dr. James A. Lindsay.)

Ellen S., aged 58, came to the extern department on Saturday, January 12th, complaining of paralysis of the right arm. She was a fine healthy looking woman, the mother of seven children, and, to use her own words, she "had never known pain or ache in her life," and had no recollection of having ever suffered from any serious illness. The paralysis of the arm, which was of some weeks' standing, had come on gradually, and the patient could assign no cause for it. There was no history or evidence of pressure upon the nerves, no ground for suspecting hysteria, no atrophy of muscles, or other evidence of disease of the cord. The diagnosis being thus obscure, I followed the time-honoured custom, and put the patient on iodide of potassium, ordering half-ounce doses of an eight-ounce mixture containing one drachm. The quantity of iodide in each dose was thus 3¾ grains.

The patient again presented herself after the lapse of ten days on January 22nd, and stated that the medicine had brought out a strange rash on the skin. On examination, I found a very remarkable condition. On the arms and shoulders, the patient was marked over with a number of reddish-purple rings, rather larger than half-a-crown. In the centre of each ring, the cuticle was broken and shrivelled, as if from the drying up of a blister. The rings were very uniform in size, perfectly circular in outline, and looked as if they had been produced by the stamp of a die. The history of the case was very carefully taken by one of my clinical clerks, Mr. A. W. Kerr, and was as follows. The patient took one dose of the medicine on the Saturday night after her first visit to the hospital, and another dose next morning. Immediately after the second dose, she felt very sick, and went to bed. A severe headache set in, accompanied by an intense sensation of itching in the skin, which began between the shoulders and spread rapidly thence over the trunk, upper extremities, and face. When she scratched the parts affected, she experienced a feeling like the stinging of nettles. Following the itching, there came an eruption of "blisters," compared by the patient to potato-apples. Each blister was surrounded by two bright red concentric rings, the outer being about as large as a crown-piece, the inner somewhat smaller. Each spot with its encircling rings was said by the patient to look like a "flower." With the exception of two spots on the left thigh, the lower limbs escaped, but elsewhere the body was quite covered with the eruption. On the face, the spots were close round the eyes and mouth, and were even in the nostrils. She suffered severely from sore-throat, and her son, on looking into her mouth, "saw lumps hanging down." There was little, if any, nasal or conjunctival catarrh. The headache, heat of the body, and prostration were intense.

The patient naturally felt much alarmed, and thought she had been poisoned. She sent her son to the druggist who had filled the prescription, but he assured him that the medicine was all right, and said that she should continue to take it, but advised that she should diminish the dose. This the patient did, being encouraged by the fact that she felt her arm improving daily. At the end of a week, while she was still taking the medicine, the eruption began to disappear; and when she presented herself, for the second time, at the hospital, the blisters had dried up, and only the rings still remained. A very extraordinary feature in the case was the fact that the catamenial flow, which had been absent for twelve years, reappeared and continued during the greater part of the week during which she was taking the iodide.

I visited the patient at her own house on Saturday, February 2nd, and found her almost quite well. The paralysis had quite disappeared, and she was evidently much impressed by the fact that her arm, after being paralysed and useless for fourteen weeks, had apparently been quite cured by one bottle of the medicine. The skin had almost resumed its normal appearance. The rings had quite disappeared, and, except a little roughness and reddening of the skin, nothing remained of the formidable eruption which had caused the patient such great and not unnatural alarm.

REMARKS. The first remark I have to make on the above case, is that I think there is no reason to doubt that the eruption was due to the administration of the iodide. There was no trace of eruption present when the patient first presented herself. She had always been healthy, and was perfectly well, except as regards her paralysed arm. Then the eruption came out after two doses of the medicine, and quickly attained its maximum, began to decline when the dose of the drug was reduced, and disappeared altogether when it was entirely stopped. We have the further facts to consider that many varieties of cutaneous eruptions have been universally attributed to the use of the iodide, and that recently several cases of an eruption, closely resembling that present in this case, have been described by such an eminent authority as Mr. Jonathan Hutchinson.

It is more important to describe the physical characters, and to understand the clinical history of this eruption, than to give it a definite name. It is perhaps best simply to rest content with pronouncing it a bullous eruption due to iodide of potassium, rather than to identify it with any specific variety of dermatitis. It was evidently quite distinct from the ordinary iodide eruption, which, so far as physical characters go, is a variety of acne. It was not an urticaria—the large size of the bullæ, the encircling rings, and the severe constitutional symptoms being sufficient to distinguish it from that disease. Probably some of the cases which were described some years ago by M. Bazin of Paris, under the name of "hydroa," were really identical with the eruption which appeared in this patient.

The practical deduction to be drawn from the severer forms of iodide-eruptions is that their appearance shows a marked susceptibility to the action of the drug, and calls either for greatly diminished doses, or for its entire suspension. Mr. Hutchinson has seen several cases where persistence in the drug was the cause of death, but it is more usual for tolerance to be quickly established. Mr. Hutchinson believes that those patients who quickly show signs of extreme susceptibility to the iodide will be found to derive the same benefit from very minute doses as others do from the usual three, five, or ten grain doses, and adds that he has repeatedly cured tertiary ulcerations by doses of half or one-third grain of iodide in patients for whom iodine had been believed to be a poison even in the smallest quantities. The whole question of dosage in reference to iodide of potassium is one on which very eminent authorities have gravely differed. It is remarkable that, in the present case, the patient had taken only seven and a half grains of the drug before violent symptoms of poisoning set in. When we remember how hundreds of patients go on taking ten, twenty, or even sixty grains of iodide of potassium daily for weeks and months without an unpleasant symptom, except perhaps a little touch of gastric irritation, the case teaches us a lesson as to the important part idiosyncrasy may occasionally play.

This patient had evidently other symptoms of iodism, in addition to the eruption; but on these I need not dwell.

It is a singular fact that in this case the drug brought back the menstrual flow after a lapse of twelve years. Whether this was merely a result of the profound constitutional disturbance present, or whether the iodide can be credited with any emmenagogue properties, I must leave for others to decide.

PROPORTION OF DOCTORS TO POPULATION.—The *Siglo Medico* gives the following proportion of Medical men in different nations, to population: France, 9.91 to 10,000 inhabitants; Germany, 3.21; Austria, 3.41; England, 6.; Hungary, 6.10; Italy, 6.10; Switzerland, 7.06; United States, 16.24.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 25TH, 1884.

GEORGE JOHNSON, M.D., F.R.S., President, in the Chair.

Seventy Cases of Dupuytren's Contraction of the Fingers.—Mr. NOBLE SMITH read a paper on this subject. Upon examination of the hands of 700 elderly people, 70 cases of indurated and contracted palmar fascia were found. The points to which attention was chiefly directed were: 1. the supposed immunity of females from the affection; 2. the cause of the malady; 3. its treatment. 1. Among 440 women were found 15 cases of indurated, thickened, and contracted fascia alone, and also 11 cases of well marked Dupuytren's contraction of the fingers. Drawings of some of these cases were shown. 2. As the disease had been attributed to gout or rheumatism, inquiries were directed as to these diseases, and the evidence was against their being the cause. The majority of the individuals were free from common complaints, and seemed tolerably robust; they were mostly old people, the average age being 73; twelve were over 80. Most of them attributed the contraction to some particular kind of work. The much greater frequency with which the right hand was found affected led one to suppose that use had a material influence. In some cases, the hands had, however, been very little used. Some cases occurred from injuries in which the contraction and thickening were exactly similar in appearance to the others. In many cases the hands were affected symmetrically, indicating some other than a local cause. Contraction of the palmaris longus was almost constantly present, and it was thought possible that this might indicate a condition of nerve-irritation in some instances. 3. With regard to treatment, the author of the paper recommended operation upon the contracted bands of fascia by as few incisions as possible, as opposed to the recommendation that many incisions should be made; the object being to separate the cut parts as much as possible, so that recontraction should be prevented. Cases were recorded which prove the value of this recommendation. It was thought probable that section of the palmaris longus tendon might be beneficial in the early states of contraction.—The PRESIDENT thanked Mr. Smith for his communication, and directed attention to a dissection he had brought from the King's College Hospital Museum, showing that the real seat of contracture was in the fascia and not in the muscles.—Mr. WILLIAM ADAMS was very glad to find that more attention than formerly was now being given to this class of cases; for it was not so very many years ago since they were generally regarded as incurable, and amputation sometimes submitted to as the only possible remedy. On May 22nd, 1877, he had himself brought the subject before the Society, but no attention had been paid to his paper, and the Society had declined to print it among their *Transactions*. Since then it had been published, and he had been glad to find considerable interest aroused. Dr. Keen, of Philadelphia, had taken up the subject, and had collected the largest number of cases in the *Journal of the Pathological Society of Philadelphia*, in 1882, and added the most complete analysis of the foreign literature. He should be glad to learn from Mr. Noble Smith whether the 440 women he spoke of in his paper were included in the total 700 [Mr. NOBLE SMITH rose at once to say that it was so], and why, if it were so, so many more women had been examined than men. Further, he remarked two classes of cases distinguished among the women, viz., those with "indurated, thickened, and contracted fascia alone," and "also cases of well marked Dupuytren's contraction of the fingers;" he wished to ask why this division, to which he did not know what importance was thought to attach, had not been carried out among the men. Mr. Noble Smith's cases showed that 10 per cent. of the subjects examined had Dupuytren's contraction. That that was the case with the general population could not for a moment be supposed, and he had no satisfactory account of how Mr. Smith had selected his cases for examination. He had himself said, when speaking in 1877, that he had seen no true case in a female; since then he had seen six and operated on four. But he still considered it to be [illegible], as Keen's tables showed, that the disease was ten times as common among men as among women. As to the cause; Dr. Keen thought it largely due to gout, in which he himself agreed; and, as regards this, he would mention that it was frequently hereditary, he saw it in cases for three generations; that it affected the right and left hands about equally, which showed that it was probably constitutional, also not local in origin; that it was found much more frequently in the middle and upper classes than in the lower; in this it agreed with gout. It was common in the clergy, who never used their hands, in barristers also, but commonest in officers of the army. As to treatment, he could not agree to limiting the number of incisions to two or three, as Mr. Smith suggested. His most successful cases had, as a rule, been those where most incisions had been made, viz., one in which there were eighteen incisions. He quoted details of several cases, and showed many casts of hands, before and after operation. In one of them the operation had been done twenty years ago, and the hand operated upon had remained quite well though the other had become slightly affected. He thought it very satisfactory that the disease had been brought into notice again, and its curable nature demonstrated.—Dr. HUMPHRY remarked that as to the question of the cause between constitutional gout and local irritation, the truth probably was that it was due to both of them; that local reasons determined this exhibition of a gouty condition. It was generally observed first in the ring-finger, and he associated that with the fact that in handling a stick or umbrella the pressure was felt chiefly in the ball of the ring-finger, as compared with the other fingers. To such pressure its local determination was due. The metacarpo-phalangeal was first affected, the others secondarily and less; the palmaris longus probably had very little to do with it, for it was a very small muscle, not having much effect on the fascia, and any effect it might have would influence all the fingers. It was worth notice that similar contractions were extremely rare in the plantar fascia; and that he attributed to the greater and more constant pressure upon the metacarpo-phalangeal joints, keeping them in extension, so that the plantar fascia had hardly the opportunity of contracting that the palmar had. The motion of a toe was hardly ever due to the contraction of the fascia, but to the tension of a tendon. That the ring-finger should be specially affected, was due to the fact that its extensor powers of range were considerably less than in any of the other fingers.—Mr. JOHN CROFT admitted that his experience was not large, but in the majority of cases with which he had had to do, had found a gouty history; but the gouty symptoms were ill marked and the limits of gout ill understood. At any rate, that some cases were entirely free from gout was a fact that should be attended to. Mr. Smith's idea that the palmaris longus was affected he thought very improbable, for the first and chief action of that muscle was to flex the wrist, and not the palmar fascia; it was sometimes completely absent, and Mr. Smith had not even shown its presence in his cases. He agreed with Mr. Adams that treatment by multiple incisions was to be preferred.—Mr. W. J. WALSHAM wished to add his testimony to the value of multiple incisions, which, as he pointed out, were best made in the furrows of the contracted fascia. In the cases under his treatment, he had not met with gout, or been able to distinguish any other cause.—The PRESIDENT observed that what he had heard had reinforced his own impression, that the gouty theory of causation was insufficient. The five old women whom Mr. Smith had brought to the Society that evening had no gouty sign about them. He had noticed with interest Dr. Humphry's remark, that the disease was very rare in the foot; but gout certainly was very much commoner in the foot than anywhere else. Modern fashion was in the habit of attributing more to gout than its just share of the obscurer diseases.—Mr. NOBLE SMITH said that the cases he had examined had been taken from the oldest inhabitants of workhouses. He had asked the medical officers to collect cases where the hands were at all deformed, and had been surprised to find a crowd with deformed hands gathered together, sometimes without any case of Dupuytren's disease. That such cases should be overlooked he thought very probably due to the fact that there was very little inconvenience felt, and no complaint made. Dr. Keen and Mr. Adams had probably chiefly seen cases in the middle and upper classes. He preferred few incisions in treating the contraction, simply because he found a few were sufficient. As to the causation, he wished to point out that he felt himself that the original cause was obscure, and that he had expressed very little opinion of his own.

Three Cases of Xeroderma Pigmentosum (Kaposi), *or Atrophoderma.*—Dr. RADCLIFFE CROCKER read a paper on this subject. The disease, of which the three cases brought forward were examples, was first described by Kaposi in Hebra's *Diseases of the Skin,* in 1870, and, last year, he gave a more extended account of it. These were the first and only cases of the kind known in England, and consisted of two sisters, aged respectively twelve and ten years, and their brother, aged nine, out of a family of four. Besides the above cases, there were thirty-one others known, all bearing to one another a striking resemblance. The disease usually commenced in the first or second year without apparent cause, affecting the exposed parts of the face, neck, and extremities. It spread slowly, reaching as low as the third rib in front and up to the middle third of the upper arm. In the first stage, red blotches or spots appeared, which faded, but left lentiginous pigment-spots; or the freckles might be the first noticed, and tended to increase in number, size, and depth of colour. Soon the skin became very dry, and white atrophic spots appeared between the lentigines, which coalesced into larger areas. The skin in part peeled off in thin lamellæ, and subsequently became contracted and parchment-like. Some years after the onset, superficial ulcerations covered by crusts appeared, and verrucose projections could be felt in the position of some of the pigment-spots. These terminated the second stage. From the fourth to the sixth year the third period began. The verrucose projections and the sores became the starting-point of fungating epitheliomas. The patients, whose general health had previously been entirely unaffected, became marasmic and died exhausted, or, in a few cases, from generalisation of the cancroid tumours. Death usually occurred before puberty, but both onset and termination might be deferred. Of the whole thirty-four cases, the number of males and females affected were equal; but if attacking several members of a family, the disease usually limited itself to the members of one sex only; seven boys having been affected in one family, and five girls in another. Other etiological factors were few. Congenital but not hereditary exposure to the sun had been suggested as a possible exciting cause in a few, but direct evidence was wanting on this point. Treatment, whether to cure or even arrest the fatal course, had been completely futile. The disease was *sui generis,* apparently a primary atrophy of the skin; and, if the history and all the characters of the disease were considered xeroderma pigmentosum could hardly be mistaken for any other affection. In illustration of the paper, many coloured plates were shown of other cases, and some drawings of microscopical specimens, as well as the three children who were the subject of the paper, and who were somewhat changed since they had appeared before the Society in January. The removal, by Mr. Marcus Beck, of the fungating epithelioma, near the right ear of the eldest girl, had considerably improved her appearance. There was a little keloid in the cicatrix.—Mr. MORRANT BAKER had been exceedingly interested in the cases, and was glad that Dr. Crocker was ready to propose some new form for this malady, to which he thought Kaposi's name of *xeroderma pigmentosum* singularly inappropriate. It was clearly allied to states of atrophy of the skin.—Dr. T. COLCOTT FOX, after some careful microscopical examination, had not been able to distinguish any difference between specimens of this disease and of rodent ulcer. On the essential nature of the disease no two observers agreed, and that it was primarily an atrophy it was almost impossible to say, when the earlier stages were so imperfectly known. He would have been glad to discuss the matter more at length had time permitted.—Dr. RADCLIFFE CROCKER very briefly replied that he had not alleged that atrophy was the primary cause of the disease, only that it was a prominent symptom; and he was glad that some attempt at a new name, such as atrophoderma, should be approved. The sections of the tumours removed in his cases were on view on the table, and showed them to be papillomatous.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 24TH, 1884.

ARTHUR E. DURHAM, F.R.C.S., President, in the Chair.

Facial Erysipelas with Low Temperature.—The full text of Dr. CAVAFY's paper on this subject will be found at p. 599.—The PRESIDENT made a few remarks on the importance of the diagnostic question raised by Dr. Cavafy.—Mr. R. W. PARKER had met with cases in children which presented all the appearances of erysipelas without pyrexia; further, he had observed cases which seemed to show that the severity of the constitutional symptoms did not bear any direct relation to the extent of the local lesion.—Dr. CULLIMORE mentioned certain examples of inflammation without pyrexia.—Dr. C. H. ROUTH referred to the occurrence of scarlatina and measles without pyrexia. He had recorded an epidemic in which patients, under the same influences, suffered, some from a contagious ("putrid") sore-throat, others from an erysipelatous affection, and where the temperature rose in some cases and not in others. He thought that Dr. Cavafy had given an instance of a wide law, which was, that the zymotic diseases might or might not be accompanied by pyrexia.—Sir JOSEPH FAYRER had met with several cases of hepatic abscess without pyrexia.—Dr. WYNN WILLIAMS believed that rise of temperature was often to be referred to nervous shock. He had met with a case of pelvic abscess without pyrexia.—Mr. A. P. GOULD observed that all Dr. Cavafy's cases were instances of idiopathic erysipelas, and inquired whether he had seen any cases of traumatic erysipelas running an apyrexial course; idiopathic facial erysipelas differed in so many respects, that many believed that it belonged to a different category. He suggested that, when abscess occurred in the liver or pelvis without pyrexia, it partook of the nature of a cold or chronic abscess.—Sir JOSEPH FAYRER said he wished to be understood to have said that liver-abscesses occasionally formed without discoverable rise of temperature, but with some pain and constitutional disturbance, though not so great as in acute liver-abscess, to which he did not refer; neither did he refer to chronic abscess. Dr. **Cavafy** replied.

Case of Opium-Poisoning Treated with Atropine.—Dr. **Finlay** read notes of a case of opium-poisoning. The patient, a stableman, aged 36, was admitted into the Middlesex Hospital on the night of November 17th, 1883. Twenty minutes before admission he had swallowed a mixture containing a quantity of tincture of opium and compound tincture of camphor, equal to seventeen grains of dry opium. His pupils were contracted. Before the stomach-pump could be used his respiration ceased, and he became deeply cyanosed, but he was restored by faradism and artificial respiration. The stomach-pump was then passed, and the contents of the stomach evacuated. Failure of respiration again occurred, and rendered recourse to artificial respiration necessary a second time. Faradism was also employed again, with compulsory exertion, and flicking the face and chest with wet towels. The stomach was also again washed out, and strong coffee introduced. An enema of brandy was administered, and as, after half an hour's compulsory exertion, it was found that his pulse was failing, he was given a subcutaneous injection of ether. The respiration sank now to two in the minute, and it was decided to try the effect of atropine. Accordingly, $\frac{1}{50}$ of a grain of the sulphate was administered subcutaneously, and repeated in half an hour. The respirations, a few minutes later, were found to be fully doubled on the average, although they continued irregular for some time. The pupils also were soon noticed to be less contracted. A few hours later the respirations reached ten per minute, and he gradually recovered, suffering, however, from headache, vomiting, and slight albuminuria. The pupils became considerably dilated. It seemed that the case had been favourably influenced by the atropia injections. It was certain, at all events, that a marked improvement almost immediately followed them. The patient was in danger more from apnœa than from cardiac failure, and was consequently in the state most likely to be benefited by the antagonistic action of atropia on the respiratory centre. It was worthy of note, in connection with this view, that artificial respiration was not required after the injections.—Dr. **Cholmeley** had met with one case where the use of atropine had had a remarkably beneficial effect in a severe case of opium-poisoning; the quantity of atropine used was so considerable that the patient, a woman, passed into a condition of atropine-poisoning, but though, when admitted, apparently moribund from opium-poisoning, she was out of danger in some three hours.—Dr. **Isambard Owen** thought that the antidotal action of atropine might be confined to its action on the respiratory centre.—Dr. C. H. F. **Routh** made some remarks, and Dr. **Finlay** replied.

The Climate of Davos.—The **Secretary** (Dr. Kingston Fowler) read a paper by Dr. **Waters**, giving an account of meteorological observations at Davos. The author believed that Davos was decidedly suitable for some, though by no means for all, cases of phthisis. It appeared from the paper that the weather does exercise an influence on the temperature of the body of a large number of the patients, the temperatures being taken three times a day; secondly, that the healthy individuals also showed this influence, though in a less marked manner than the invalids; and that the most diseased were most affected by meteorological conditions. It was also found that there were individual differences. It was also further gathered from the paper that the warmer the weather, the higher was the temperature of the patients. The paper concluded with remarks on the incompleteness of the observations, and the consequent necessity for caution in drawing inferences therefrom. Curves and charts illustrated the points of the essay. —Dr. **Fowler** commented on the necessity for more elaborate sanitary precautions to provide for the wants of a rapidly increasing invalid population.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

Wednesday, March 12th, 1884.

Norman Chevers, M.D., C.I.E., President, in the Chair.

The Etiology and Pathology of Cholera.—Dr. **George Gulliver** commenced his paper by observing that, though the mode of origin and propagation of cholera had been raised during the debate on Sir Guyer Hunter's Report, it was in reality a side issue, that paper being concerned only in showing that the disease was not imported into Egypt, the story of its having been so imported having no foundation in fact, and the disease being endemic in the country at a period long antecedent to the outbreak. At the request of the President of the Society, he had brought forward a few of the facts bearing on the etiology of cholera generally, without special reference to Egypt. He thought that few would deny that cholera is a specific disease, probably no great number would object to its being called a specific febrile disease. The ordinary symptoms and pathological appearances necessary to complete the definition were not dwelt upon, as being well known to all. The value of a knowledge of the anomalous and latent cases in investigating the etiology of specific diseases was then dwelt upon, and it was held to be great cause for regret that we knew so little of such cases of cholera, the reason for this being obvious. The consequence was that our knowledge of the etiology of cholera was in a very much more backward condition than of other specific diseases. Assuming that cholera was a specific disease, he had no hesitation in saying that it depended on a specific poison which entered the body from without. The principal views on the mode of propagation of the disease were then enumerated: (1) that it was contagious; (2) that it was never contagious, and that the poison was generated and propagated independently of man; (3) that of Pettenkofer, who considered that it was contained in the excreta, but required the soil to act as an intermediary host before re-entering the body of man; and (4) certain views less definite than the foregoing. Dr. Gulliver then insisted on the great importance of the predisposing and exciting causes of the disease, which were so important that one might almost be in danger of mistaking them for the specific poison itself. Probably, the *rôle* played by them was without parallel in the history of specific diseases in which the poison entered the body from without. A comparison was made with what takes place in gout where the exciting causes play such an important part in rousing into activity the poison latent in the blood, the difference being that in the case of cholera the poison was not in the blood but in the surroundings, only wanting a predisposing or exciting cause to enable it to enter the system. The question of a definite particulate contagium was then dwelt upon, in entering upon the discussion of the first view, which was that the poison was communicated from man to man. For the present, at any rate, Dr. Gulliver considered that we were not in a position to say that this had been demonstrated, but it was pointed out that an apparent apathy existed in the search after similar organisms in enteric fever, the reason being that the contagious nature of that disease was firmly established, apart from the demonstration of any organism. Unwholesome conditions had performed for us many experiments on human beings, and it remained to be asked whether they had not done so in the case of cholera. It was held that they had done so, and the well-known outbreaks in Broad Street and at Theydon Bois, and other facts in relation to its spread in Europe and in America, were adduced as evidence, it being pointed out that one positive fact was worth a great many negatives. The second hypothesis, which denied the propagation of the disease from man to man, was then passed in review; and Dr. Gulliver said that those who held it seemed to regard the poison as of a partly atmospheric, partly telluric, nature, some apparently claiming for it an affinity with the malarial poison. In his opinion no such relation existed, inasmuch as the one was the type of an epidemic, and the other of an endemic poison. The subject of an "epidemic constitution" was then discussed, and it was freely admitted that there were cosmic conditions which at times greatly modified the character of epidemics, but this was just as true of epidemics of diseases which were virulently contagious, such as small-pox, as of those diseases which are less contagious. It was further stated that no hypothesis except that of an epidemic constitution would account for the spread of cholera in 1870-73 through Europe. No doubt such conditions played a very important part in the spread of cholera, which being admitted, prevented the author from believing that the theory of its spread by contagion was inadequate. He thought that the difficulties in explaining outbreaks in the East arose largely from the simplicity of the manner in which the natives lived, the complexity of the problem which presented itself to the sanitary investigator, increasing in exact ratio with the primitiveness of the customs prevailing. For this reason our knowledge of the etiology of enteric fever would probably be still on an unsatisfactory basis if it rested on observations made in Eastern countries alone. In conclusion, the author briefly referred to the Egyptian outbreak, and expressed the opinion that, though it afforded no conclusive evidence on the question to be discussed, yet such evidence as it did afford by no means weakened the opinion that cholera was a contagious disease. In the discussion which followed, Sir Guyer Hunter, Sir Joseph Fayrer, Sir William Smart, Drs. Murray, Lawson, Scriven, Balfour, Acland, and Dennis took part.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

Friday, February [illegible], 1884.

T. O. Dudfield, M.D., President, in the Chair.

The [illegible]—A paper on this subject, by Mr. C. [illegible] and Dr. E. A. Whitelegge, was read. The authors said that the [illegible] of the analyst was to determine the presence or absence of impurities, especially organic, in water, their nature and quantity, and, on the evidence obtained, to form an opinion as to wholesomeness. Every sanitary analysis of water should include the estimation of nitrates and chlorides, and microscopic examination, the latter being far too frequently neglected. The two most important processes to consider as regards estimation of organic matter were the Frankland and the Wanklyn processes, generally looked on as rival ones. As regards the alleged antagonism between these two processes, the authors agreed with Dr. Fox that, when the circumstances were the same, analyses of the same waters made at the same time by the two processes yielded results on which precisely similar opinions were based by the different analysts. The Wanklyn process made the ammonia yielded by the water on boiling with alkaline permanganate of potash a measure of the amount of nitrogenous pollution; the Frankland process consisted essentially in burning the solid residue of a water by measuring the carbonic acid and nitrogen evolved, thus arriving at the quantities of carbon and nitrogen present. The authors dealt with some of the points in favour and against these processes, and pointed out that results from either one or the other could not alone justify the formation of an opinion. They also strongly insisted on the estimation of the nitrates in every case. Dealing with the criticisms to which water-analysis had recently been subjected, they called attention, first, to the report of the Local Government Board for 1881-82 (medical officer), and to Dr. Buchanan's words therein, namely, "That it was necessary to go beyond the laboratory for evidence of any drinking-water being free from dangerous organic pollutions;" secondly, to the assertion that, in cases where the amount of pollution of a water is known, analysis is found to give discrepant results with equal or proportionate amounts; and, thirdly, to the statement that the "cultivation" processes were destined to supersede present methods. As regards the first point, it might be admitted that chemical analysis failed to distinguish between dangerous and "innocent" pollution, if the latter ever occurred; but no merely chemical process could be expected to do this unless it distinguished principles characteristic of injurious and "innocent" pollution respectively. The chemist can only report on the quantity or proportion of organic impurity, be it noxious or not. But, if analysis could tell of specific pollution, it could tell that a water was polluted, and, in such cases, specific pollution may occur. Practically, no cases occurred where specific poison was present without much appreciable filth. The authors considered the conclusions generally drawn from the history of the Caterham case by no means valid, pointing out that it was unlikely that the small amount of poison introduced into the reservoirs of the company was uniformly distributed through them; and that, in the absence of analyses of the actual samples of water that produced disease, no conclusions could be drawn as regards the validity of water-analysis. They also denied that one grain of enteric fever-stool per gallon could be called a large befoulment, admitting, however, that it might be dangerous. As regards the discrepancy in analytical results, the authors called attention to Dr. Cory's report on his experiments with purposely polluted waters. Some of Dr. Cory's results were very fairly proportionate, others were very discrepant; and the authors, therefore, repeated some of his experiments. They pointed out the objections to Dr. Cory's use of enteric stools, healthy stools, and urine for polluting the waters; and indicated the inaccuracy of his plan of further polluting an already dirty water, and calculating results from the increments of ammonia obtained. They maintained that the ammonia obtained in the Wanklyn process was a measure of nitrogenous organic matter, and that it represented a constant proportion for varying quantities of the same polluent. They then pointed out the necessity of a limit for ammonia, etc., yielded, and the way in which such limit was to be used, objecting further to Dr. Cory that a process capable of differentiating between two and three parts of polluting material could not do so sharply between, *e.g.*, 52 and 53. The details of some of Dr. Cory's experiments were then examined and criticised. In repeating experiments with egg-albumen as a polluent, the extreme difficulty of getting an uniform solution, even by repeated filtration, was noticed, as also the liability to error, probably impossible to prevent altogether, and requiring the greatest care in working, arising from coagulation of the albumen; and, further, the fact that, as decomposition of the albumen-solutions advanced, when equal amounts of them were used, the yield of albuminoid ammonia increased. The figures obtained by the authors are in no case far wide of those due to the actual proportions present—these proportions having been in every case unknown to the analyst. The discrepancies in Dr. Cory's albumen-results would be due to the fact that the quantities to be measured were often very abnormal, and determined an already impure water by increments (added to the latter's yield). The cultivation-processes were prematurely credited with the capability of supplanting present methods. All waters contain organisms; the commonest being easiest to cultivate; and, no means of distinguishing between harmless specific organisms being known, the process at present merely forms an additional test for organic pollution. The authors then combated Dr. Cory's conclusions as regarded the combustion or Frankland process, stating that this process could not achieve more than the ammonia-process accompanied by subsidiary analytical evidence could achieve. They considered that nothing in the way of evidence or criticism had been brought forward to detract from the great sanitary value of water-analysis; and that, as regarded absolute safety, that was a thing unknown and unknowable.—In the discussion which followed, the President, Drs. Thursfield, Stevenson, Tripe, and Edmunds, Mr. Wynter Blyth, and Mr. Shirley Murphy, took part.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, FEBRUARY 27TH.

H. D. LITTLEJOHN, M.D., President, in the Chair.

Catheter-Fever.—Sir ANDREW CLARK, Bart., delivered an address on this subject. The speaker, after eloquently reminding the Society of his former connection with the Edinburgh Medical School, ably expounded his ideas on the subject of catheter-fever, which were materially the same as those contained in his address published in a former number of this JOURNAL.—Dr. PATRICK HERON WATSON, after thanking Sir Andrew Clark, said that it seemed to him that catheter-fever, as described by Sir Andrew, had always one antecedent, and that was the introduction of an instrument, possibly only once; on the other hand, however, the patient might have passed through some weeks of catheter-life, before any unfortunate symptoms manifested themselves. Of this fever, the initial symptom was undoubtedly a rigor, which occurred usually upon the first micturition after the catheter had been withdrawn. Then followed a varying degree of febrile disturbance and diaphoresis, and, under favourable circumstances, a more or less complete return to the condition before the occurrence of the rigor. In his experience, this fever did not occur in the female. As regards character, the febrile condition was usually slight and ephemeral; but it might be typhoid in nature, with the temperature sometimes as high as 105° Fahr. Students had been frequently warned never to pass a catheter on a patient in the erect posture, when the passage of the instrument through the prostatic canal often gave rise to a storm in the patient's nervous system, inhibited his heart's action, and produced unconsciousness, often attended by unilateral epileptiform convulsions. In such cases, the patient usually recovered when he reached the horizontal level. These symptoms might be followed by fever or not. Such a condition pointed to the element in the disturbance of the nervous system, which Sir Andrew had indicated, working in such a manner as to disturb the circulation, respiration, and nervous consciousness. Sometimes, for twenty-four hours after the passing of a catheter, there was no disturbance of any kind; then slight rigors, followed by steadily advancing diminution of urine. After the first rigors, death might be very rapid, and that with marked decrease of urine, the urine being perfectly normal, except that it contained a little blood, which, *post mortem* examination showed, probably came from the Malpighian corpuscles. Dr. Watson recited several clinical examples of these conditions: among others, that of a nobleman who died on the day following the passage of a catheter. In this case, the *post mortem* examination revealed a fatty heart and calcareous aorta; and the fatal issue was probably due to the fact, that the entrance upon catheter-life had caused a degree of nervous irritation, in a man with a heart and aorta in a condition incapable of standing a reflex cardiac inhibition. Another symptom, which he had frequently observed in connection with this urethral fever, was a herpetic eruption on the face and lips. Dr. Watson was inclined to deny that the passing of a catheter was essential for the development of any portion of them. Other conditions also give rise to it; *e.g.*, the passage of a calculus along the urethra; the passing, in large quantities, of uric acid, oxalates, a mixture of urine with blood-clot, or of air or gas in the urine (and that without any decomposition of the fluid). Fever-symptoms, ague-like in character, often occurred in cases of advanced stricture. Gonorrhœal rheumatism also was not far dissociated from the subject of consideration; it specially occurred in those in whom the prostatic urethra was involved. Urethral fever was not due to rupture or injury of the urethral canal, nor to absorption of urea, or even to a quasi-pyæmia. Rupture of the bladder was seldom accompanied by such symptoms; nor were these results altogether avoided when an antiseptic catheter had been employed, where, in fatal cases, the condition of so-called interstitial nephritis had resulted. He was inclined to attribute the first step in this condition of urethral fever to the irritation of the prostate acting upon the spinal centre, and producing reflected changes which had most injurious effects upon the Malpighian glomeruli and capsules, and the capillary plexus passing from these towards the renal veins, in which, after death, there were found minute clots, and not only cells of the leucocyte-type occupying the spaces between the tubules, but blood extravasated in this region, and corresponding to the presence of blood in the urine, with marked diminution of the urinary excretion. He preferred to call this fever, not "catheter," but "urethral" fever. It essentially depended upon something which irritated the prostatic urethra. When its effects were trivial and evanescent, he believed it was because it found no diseased internal organ on which to tell. When a fatal or serious result ensued, the patient had been suffering from some serious lesion of some important internal viscus, and that the dangers were chiefly found in connection with a feeble heart, diseased arteries, and kidney-disease, either original or secondary. When this urethral fever was set up as the result, the turning-point in that result was the influence it exercised upon the glomeruli and venous capillary system of the kidney. The prognosis depended on the degree of rise of temperature, and on careful daily examination of the patient's urine. As regarded treatment, Dr. Watson advised that soft instruments should be preferred to hard metallic ones. For some days before the introduction of the catheter, quinine, with bromide of potassium or opium, should be administered, and continued for some time afterwards; and this followed by iron and digitalis during the whole treatment (if fever were established). The vapour- and lamp-baths in suitable cases were also useful auxilliaries.—Dr. **GRAINGER STEWART** stated that, in connection with this subject, he had certainly seen three conditions. 1. Acute rigor followed the introduction of an instrument into the bladder. This attack could not be conceived to be due to anything except reflex nervous influences. 2. In some cases, after such interference, and often from long standing disease of the urinary tract, extensive sloughing, or, at all events, a nasty form of cystitis, occurred, accompanied by the other features of surgical kidney. 3. This class occupied a position intermediate between the other two, when the kidneys were normal, although the bladder was enlarged and inflamed, and the ureters were dilated and congested. He believed also that the causes leading to this febrile condition were various. While, in some cases, it was due to reflex action, and in others to direct inflammatory extension upwards along the urinary tract, yet, in most cases, septicæmia was the cause. He had never seen anything he would call uræmia. Another very important element in such cases was where long habitual overdistension had been removed, and the parts fell together, there must be great congestion and tendency to inflammation, and parts of mucous membrane normally apart coming into contact with each other would afford a ready nidus for the development of such bacteria, etc., as might have been introduced. He heartily advocated rest, quiet, and low diet for those beginning catheter-life. Opium and bromide of potassium were often useful.—Mr. **CHIENE** did not deny that there might be other causes of death, as from irritation of the urethra, etc., but he believed that the great majority of those cases were septicæmic; and he was very pleased indeed to find, in the report of Sir Andrew Clark's London address, what was to him a comforting statement, *i.e.*, "The urine of catheter-fever is always loaded with micro-organisms of various kinds." The septic matter might enter the bladder in four different ways: 1, by an impure instrument; 2, occasionally and rarely by air rushing in along with the catheter which had been introduced; 3, a condition of septic urine, by passing along an inflamed urethra, irritated by the prolonged use of instruments; 4, it might pass between the membrane and the catheter, when the latter had been tied in. He believed it was infinitely safer and better thoroughly to purify the catheter. For this purpose he had used a carbolic solution (1 to 20) until the present year, when, after Koch's experiments, he preferred corrosive sublimate. He had not yet found an antiseptic solution which would irritate the urethra so slightly that they could use an instrument for a long period. He disagreed with Sir Andrew Clark's statement that this subject had not received adequate expression, either in surgical works or in teaching. This point would be found shortly stated in the small University text-book for the first part of the course of surgery, and he himself had spoken of it as a form of septicæmia, ever since he commenced lecturing on surgery in the School of Medicine.—Mr. **ANNANDALE** wished to direct attention to the four causes which Sir Andrew had mentioned as probably producing this condition; and, as a practical surgeon, to give a few hints which might tend to prevent its occurrence. The alleged causes were: 1, local irritation from passing of an instrument; 2, local irritation acting on the general system; 3, septic matter introduced; 4, sudden emptying (in some cases) of the bladder and ureters by the drawing off of urine. A catheter should never be passed on a patient without first inquiring somewhat into his condition and history. The instrument should be properly warmed. The second cause depended mainly on how they treated the first. To obviate the third one, antiseptics had to be employed. He was inclined (with reference to the fourth cause) in some cases of retention from altered prostatic or urethral conditions, to aspirate rather than catheterise the patient when he came for the first time.—Dr. **WYLLIE** had given much attention to the subject since 1868. He would merely say a word or two as regarded the introduction of germs into the bladder. The common method by which this was brought about was their introduction in the oil which anointed the catheter. A second possible cause under certain circumstances was the suction of air into the bladder during the catheterisation—as by withdrawing the pressure of the hand over the pubes before the catheter had been removed. He also detailed a case where this occurred from the patient coughing at the close of the operation.—Mr. **JOSEPH BELL** said that, excluding septic conditions and all causes of supposed kidney-disease, there were still some cases, which had peculiar symptoms after the introduction of a catheter, which could not be explained very well by any of these things mentioned. Ever since Mr. Banks's paper on the subject, he had been extremely cautious about introducing catheters into unknown urethræ, and he had even had a regular drill for all cases in which it was to be employed. In patients treated in the wards, antipyretic doses of quinine were given early in the morning, and the patient put to bed after the operation. In casual out-patients, if swollen eyelids or other suspicious symptoms were present, their catheterisation was postponed until a bed had been got. Bad results had been much fewer since he had adopted these precautions. As Sir Andrew had indicated, there was a personal equation in these cases. Some persons could stand any amount of catheterisation without bad effects, while others would have very rapid effects, ending in pyrexia and even in death. A patient ought to be prepared for catheterisation, and treated as if about to undergo a serious operation.—Dr. **BYROM BRAMWELL** said that, in many cases, before the catheter had been introduced at all, he believed the kidney was in an unhealthy condition. He thought that the fact of one-third of Mr. Marcus Beck's cases presenting well marked structural lesion in the kidney, went conclusively to show that, in many cases of prostatic enlargement with distension of bladder, and probably of ureters also, there must have been some structural change in the kidney before the passage of the instrument, although in the earlier stages it might not perhaps be present. He agreed with Sir Andrew Clark and Dr. Stewart, that the sudden withdrawal of a large quantity of urine sometimes produced a distinct alteration in the structure of the kidney (*e.g.*, acute hæmaturia). The fact that the urine was often copious, too pale, and of low specific gravity, showed that at least the kidney was incompetent. That organisms were present in all these cases seemed to him a point of great importance. Sometimes, as Sir Andrew admitted, the urea excreted in the urine was diminished in amount, and then he took it that there must be some alteration in the local condition, or in the kidney, to account for it. In some cases death was probably due to uræmia, and where a weak or diseased kidney existed, he believed that a slight amount of septic absorption in that person, would be much more serious than it would in a patient whose kidneys were perfectly healthy.—Dr. **JOHN DUNCAN** said that the two questions which Sir Andrew Clark had introduced were—1, Why does a patient die after the introduction of a catheter? 2, What can we do to prevent it? With regard to the first question, he brought all the cases into two categories, one neurotic, the other inflammatory. The extremely important nervous connection of the urinary organs, which was shewn even in the well known shiver which often accompanied the last drops of urine, was illustrated in slight cases by instances of evanescent rigors, beginning almost immediately after the passage of the catheter, and, in severe cases, ending fatally. The neurotic cause might act in various ways. He doubted the cause from removal of undue pressure. All the other cases he was strongly inclined to class under the head of inflammatory. The causes of these were generally septicæmic, although, in some instances, an inflammatory affection independent of septicæmia might exist, and even kill the patient, *e.g.*, prostatitis in an old man, with perhaps cystitis, perhaps pyelitis, and then uræmia, although this last was rare. He attached more importance to the impurity of the catheter, and the entrance of air with it, than to the other two causes to which Mr. Chiene had referred. The introduction of air was very important, especially when cystitis existed. He thought that there was another class of septic cases to be considered, viz., those to which Sir Andrew had referred in a word as arising from within. Local inflammation did a good deal to determine the locality in which wandering germs in the body might breed. It was most likely that these and other causes of septic inflammation might occur, and then lead to death in various ways by inflammatory fever, by passing upwards to the kidneys, or by septicæmia and pyæmia. Possibly other forms of toxæmia of a rheumatoid character existed, as in gonorrhœa. Independently of the general points of treatment already stated, the two points to be attended to locally were the most absolute gentleness in the use of instruments, and the greatest possible care being taken to prevent the entrance of organisms through the catheter.—Sir ANDREW CLARK said that the only point in the address of Dr. Heron Watson which he wished to notice, was Dr. Watson's quarrel with the name catheter-fever. He (Sir Andrew) gave it up entirely. It was only used provisionally and temporarily, and he himself should be very sorry if the name remained in connection with the subject. In replying to Dr. Bramwell's contention that in many cases of catheter-fever, there was previously existing renal disease, and that specially in cases of enlarged prostate and distended bladder, they could know that the kidneys were diseased by a study of the urine, he perfectly agreed with that gentleman. He must add, however, that such cases did not always occur in middle age. In a case recited by him of a fatal issue in the case of a young person, the only thing found after death was the so-called purulent urethritis and the commencement of a slight catarrhal, or, if they pleased, catarrhal and interstitial, nephritis. In many of these cases, the urine assumed the ordinary characters of a febrile urine. Referring to Dr. Bramwell's point in regard to the presence of urea in these cases, he did not mean to suggest that in septicæmic cases there would not be an increase of urea. In many instances, the urea was normal in amount, although the density of the fluid was low, but certainly in other cases there was a deficiency of urea; and in these cases—and he had called attention to this over twenty years ago—any surgical operation was liable to be followed by dangerous consequences. He had called this condition renal inadequacy, and had always endeavoured to teach his students at the London Hospital never to attempt any surgical operation without first examining as to this. Sir James Paget had stated a similar warning. In these cases of renal inadequacy, he had only been able to determine functional inadequacy in consequence of the state of the urine, and no structural change. In acknowledgment, he had more to say than he could express. The first acknowledgment was one of sincere gratitude to the Society for the kindly, he might even say friendly, way in which they had been pleased to receive his imperfect communication. The next he had to make was, to thank the members of that important Society for the great advance which had that night been made in the discussion of the subject. Even to himself, who had thought of it not a little, it had assumed surer proportions, and a clearer position in its relations to other kindred affections, than he himself knew at the beginning; and he felt assured that that discussion would exert a happy and favourable effect upon the mass of the profession throughout the country, and they would no longer be open to the reproach that the body of the profession was ignorant of that which the leaders of it had so well known.—The PRESIDENT, in closing the meeting, expressed the hope that the distinguished Scotchman who had gone to the South would return more frequently than he had hitherto done, and give them the benefit of his experience.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

FRIDAY, FEBRUARY 29TH, 1884.

A. H. CORLEY, M.D., President, in the Chair.

Stricture of Rectum.—Mr. MCARDLE exhibited a specimen of malignant stricture of the rectum taken from a patient who died of peritonitis. The stricture was situated at the junction of the middle and lower third of the bowel, and extended downwards to within two inches of the verge of the anus. The intestine below the seat of disease was smooth and dilated. The stricture with difficulty admitted a No. 9 gum-elastic catheter. The upper opening of the strictured part was surrounded by a large ulcer, which perforated the anterior wall of the bowel, which at this point was attached by bands of adhesion to the recto-vesical fold of the peritoneum.

Connection of Acute Diabetes with Pancreatic Disease.—Dr. DUFFEY reported a case of diabetes occurring in a farm-labourer, aged 24, the duration of which, from the first recognition of the characteristic symptoms of the disease until his death, was two months. There was a sudden onset of abdominal pain, vomiting, and diarrhœa, a week before death; the mode of which was, as is usual in acute cases, by coma. Nothing remarkable was observed by the naked eye at the *post mortem* examination, with the exception of the condition of the pancreas. This gland was hypertrophied, and felt extremely indurated, the hardness being due (as the microscopic sections made by Mr. Abraham showed) to carcinomatous infiltration. It was well known and remarkable that a diseased state of the pancreas should so frequently be found associated with diabetes. In these cases, the pancreas seemed to be more frequently atrophied than hypertrophied. In acute forms of the disease, there might not be sufficient time before the death for the atrophic change, which generally followed the primary inflammatory enlargement of the gland, to occur. There were, on the other hand, numerous records to show that the pancreas might be diseased, apart from any glycosuria. At the same time, there was evidence to show a connection between certain morbid lesions of the pancreas and diabetes constituting a particular type of that disease. He discussed the views of Klebs and Lauder Brunton in explanation of the assumed co-existence, and referred briefly to the subject of carcinoma of the pancreas.

Intestinal Concretions.—Dr. CHARLES B. BALL showed a number of calculi from the intestine of a horse. Two of these were examples of the oat-hair concretion. One was rough and tuberculated on the surface, and, on section, was found to be composed of concentric layers of vegetable hairs, with a considerable quantity of phosphatic matter and portions of the husk of the oat. The second was smooth and uniform both on the surface and in section, and was composed almost entirely of oat-hairs, closely felted together. Microscopic slides of both these calculi, with the hair of the oat-seed for comparison, were exhibited. The author also brought forward a collection of fourteen concretions, composed chiefly of ammonio-magnesian phosphate, the nuclei of which were very various, including iron-nails, small stones, vegetable matter, a piece of leather, etc. Some were much facetted, and illustrated distinctly the two ways in which this appearance was produced. One of the concretions was concavo-convex; and sections showed that this was evidently a portion of a calculus which had undergone spontaneous fracture within the animal. Additional evidence of this was to be found in the extreme brittleness of its structure. Microscopic sections of these calculi were exhibited, which showed well the tubular structures found abundantly in intestinal as well as in urinary concretions, and supposed to be confervæ. Dr. Ball showed several beautiful examples of argagropeles and bezoars from the museums of Trinity College and the Royal College of Surgeons.—Mr. VALENTINE BALL said he had, at his brother's request, brought a specimen, the first impression having been that it might be a fossil calculus, belonging to some extinct animal. But he had obtained information which showed that, within the last year, a number of rounded masses of tribasic phosphate had been introduced into the country for the manufacture of manure. Six months ago, he received two specimens, and he had the sections made which were now exhibited. He noted the absence of concentric rings, but it occurred to him that they might have been obliterated by crystallisation. Having exhibited the specimens to the Geological Society, he learned that masses of the kind were abundant in Podolia and Bessarabia, but unaccompanied by any fossil mammalian bones. They resembled specimens of calculi in the Museum of the College of Surgeons; and he had heard that, twelve or thirteen years ago, similar specimens were described in the *Transactions* of the Geological Society of Vienna as coming from Silurian rocks, thus excluding the hypothesis of any connection with mammalia. They might have been derived from original spherical masses of carbonate of lime, and some of the analyses made showed that they contained carbonate of lime. They might represent sponges or spherical masses of coral, in which the carbonate of lime had been replaced by tribasic phosphates. Or they might be spherical conglomerations of iron pyrites. When obtained from the mother-rock, the specimens were rough; but, when they had been rolled in rivers, they presented a polished surface.—Dr. MOORE had, some years ago, got possession of the remains of a crocodile 11 feet long; and, on examination, he found pendant from the exterior of the intestines, and encapsuled, stones and other refuse which the reptile had evidently swallowed, and which, instead of having been passed out in the ordinary way, had been extruded through the lining membrane of the bowel, lying between it and the peritoneum, apparently without having caused any irritation.—Dr. FRASER said that several years ago he attended an old woman, a cook, for a tumour in the cæcum, of the size of his two hands. From time to time she passed what she thought were the joints of a tapeworm, but on examination they were found to be portions of the ligamentum nuchæ of a calf, which had collected, forming the tumour, and which was got rid of by doses of castor-oil. Some years afterwards he attended another female for a tumour in the same region, and purgatives produced a ball about the size of a wallnut. She had been in the habit of eating her own hair, and the ball was proved to consist of rolled-up hair. Afterwards he attended a young man employed in a shop, who had been in the habit, every time he tied a parcel, of eating a bit of twine. He got the tumour away, and it proved to consist of pieces of twine. Concretions found in cattle were not uncommon in Ireland. These concretions were the result of the animal licking its own skin. Calves did so more than cows, and unless they vomited the concretions so formed, they grew emaciated and died. In the old Natural History Society, Archbishop Whateley read a paper on the licking of bones by cows, in which he stated that perfectly healthy cows did not lick bones. In the old days when Scotchmen ate a great deal of stirabout, the formation of intestinal concretions made of the oatmeal-husk was much more common than now. He had seen numerous specimens of these concretions in the old Hunterian Museum. The nearest approach he had ever seen in Ireland to the bezoar stone of the East, was taken from the body of a lunatic who had been employed in French polishing, and imbibed habitually methylated spirit, containing shellac, which formed a concretion in the stomach. Straw was sometimes swallowed by lunatics and formed concretions. As to the curious phosphatic masses mentioned by Dr. Ball, he had himself obtained specimens from a large manure manufacture, and came to the conclusion that they were metamorphosed tissue of some kind or other, but the curious thing about them was that they were phosphatic.—Dr. BENNETT observed that the essential difference between the concretions which were of animal origin, and those which arose under geological influences, and which they had good authority for believing to be the result of chemical or mineralogical action was, that the latter did not present the concentric arrangements that were observable in the former.—Dr. BENSON mentioned that he saw in the Whitworth Hospital a ball of the size of a pill-box, which was taken from the stomach of a girl 10 years old, and which proved to consist of the pickings of blankets she had eaten.

Fatal Meningitis after Enucleation of the Eye.—Mr. ARTHUR BENSON showed the brain, and read the notes of a case of meningitis which had occurred in a girl aged 17, after enucleation of a shrunken eyeball, the result of second purulent inflammation excited in an old blind staphylomatous eye. Headache, vomiting, etc., began on the day after the operation. On the fourth day a bright erysipelatous-like blush occurred on the eyelids, nose, and both cheeks; it disappeared in thirty-six hours. There was no discharge from the socket of the eye which had been removed; but on the day that the red blush was first seen, there was slight secondary hæmorrhage from the wound. Death by coma occurred on the eighth day, and the necropsy confirmed the diagnosis of purulent meningitis, the whole surface of the pia mater being covered with lymph and pus. A summary of nine other cases, of all of which the author could find records, was given; and, of the nine, only two were known to have occurred after enucleation of the eyeballs in a state of purulent panophthalmitis, while four were known not to have been purulent, and in three the condition of the eye was not stated.—Mr. P. S. ABRAHAM had made sections of the optic nerve and surrounding tissue, taken at a distance of about one cubic centimètre from the foramen. The nerve was profoundly altered. The space which the interfibrillar prolongations enclosed was occupied by a continuous granular material freely interspersed with nuclei. The connective tissue of the framework was itself filled with proliferating cells, massed together in some places. The sheath of the nerve was thickened, and towards the outer boundary the fibrous bundles were separated by spaces containing numerous small cells and nuclei; and, further out still, these were sufficiently abundant to be looked upon as purulent deposits. Some of the sections were treated with methyl-blue, and by this means he thought he could detect micro-organisms among the pus-cells and between the fibrous bundles. A complete examination, however, had not yet been made. Sections of the kidney showed marked hyperæmia, the vessels being largely distended with blood, and bulged in places. No extravasations had been seen. The urinary tubules were quite occluded by the swollen and granular epithelial cells, which had lost their marginal boundary or contour. The ureters were studded with collections of inflammatory cell-growth.—The PRESIDENT asked if erysipelas was present in the hospital at the time.—Dr. BENNETT said the evidence of erysipelas in the case depended largely on the appearance of the patient's face, which prevailed one evening and disappeared next morning, without any desquamation following. His opinion was, that the affection was an erythema, but not an erysipelatous erythema. The rash on the face was due, probably, to nerve disturbance. He did not think there was any other case of erysipelas in the hospital. Dr. STONEY agreed that there was no erysipelas in the case, nor had he thought so at first, until the enormous red swelling and blood appeared after the occurrence of the blood clot. After the rash disappeared, he came to the conclusion that the case was one of meningitis without erysipelas. Dr. Stoney of Abbeyleix had stated that there were some cases of scarlatina in a building next door to where this case had been, and that made them think that this case was the commencement of scarlatina; but that hypothesis was disproved. When the girl came to the hospital, she was dull and stupid; and she put her hand to her head, complaining of headache; so it was possible there might have been cerebral affection independent of the operation altogether. The case was remarkable, there being but few instances of affection of the brain occurring after enucleation of the eye. The operation was a perfectly safe one; he never saw but one case of trouble after it.—Dr. J. W. MOORE saw the patient two days after the operation, and he was struck by the strange combination of symptoms presented—an exceedingly high temperature and a pulse of only 80. He at once suggested meningeal trouble—a view borne out by repeated vomiting and violent cardiac action. The throat was œdematous; it was livid, rather than red, and was covered with an exudation, and very like the throat of a patient suffering from malignant scarlet fever. The tongue also resembled that of a scarlatina-patient; but, on the other hand, the slowness of the pulse was a symptom opposed to the supposition of scarlatina. Again, the respiration was such as to prove there was nothing whatever wrong with the lungs. On all these symptoms, he expressed the opinion that the case was probably one of meningitis, and that at any moment the rate of the pulse might double. Subsequently, the pulse rose from 155 to 160. He could understand the probability of the girl, from the time she came to town, suffering from the initial stage of meningitis. There was a good deal of erysipelas in Dublin at present; but, when he saw the girl, she had no trace of erysipelatous swelling, and he thought the meningeal symptoms sufficient to exclude the idea of erysipelas.

Diabetes Mellitus: Microscopic Sections.—Mr. P. S. ABRAHAM gave a demonstration of sections from two cases of diabetes mellitus.

REVIEWS AND NOTICES.

RUPTURE OF THE URINARY BLADDER. By WALTER RIVINGTON, B.A., M.B., M.S. (Univ. of London), Surgeon to the London Hospital. Pp. 156. London: J. and A. Churchill. 1884.

THIS is a publication, in a revised and extended form, of papers on "Rupure of the Urinary Bladder," read by Mr. RIVINGTON before the Hunterian Society, and subsequently contributed, with some additions, to contemporary medical journals. The work in its latest form presents us with a complete treatise on this lesion, and shows great industry on the part of the author, and a careful and profitable study of the many points relating to its clinical features and treatment. The subject is introduced by reports of four cases, treated by Mr. Rivington; and the statements and views embodied in the work are based on an analysis of a total number of three hundred and twenty-two cases. The value of a long series of carefully observed and reported instances is, probably, more evident in the study of rupture of the bladder than in most other injuries and surgical affections; for, though any practitioner might be called on to deal with such a case, the accident, as Mr. Rivington points out, is rare; and it is only by the recorded experience of many observers, combined into one view, that the want of personal experience in diagnosis and treatment can be remedied.

The author insists much on the fact, that distension of the bladder is a necessary condition of the occurrence of an uncomplicated intra-peritoneal rupture. It is very probable, he holds, that rupture of the viscus, when empty, can only occur in connection with fracture of the pelvic bones, or when such violence is applied to the hypogastric region as to strip off the peritoneum from the anterior abdominal wall. In idiopathic cases, rupture is often preceded by some morbid change in the bladder itself. Rupture from over-distension, it is stated, has certainly occurred in the living body; but, in these cases, either the viscus was not in its normal condition, or the over-distension had been assisted by the action of the abdominal muscles. Ability to micturate has been frequently observed in cases both of intra-peritoneal and extra-peritoneal rupture. In the former lesion, the rent may be closed soon after the accident; and in the latter, the opening may either be small, and become closed for a time, or, being placed in the anterior wall, may allow the urine to return through the bladder into the urethra.

The most important point in connection with rupture of the bladder is its diagnosis. Can we always distinguish rupture of the bladder from some other variety of severe abdominal injury? And, again, in any case of undoubted rupture, can it always be determined whether the lesion be extra-peritoneal or intra-peritoneal? Mr. Rivington, recognising the fact that occasionally errors, and, in exceptional cases nearly all, of the typical primary symptoms of rupture described in text-books may be absent, attaches great importance to the determination whether the bladder was full or not at the time of the injury. Much difficulty will, however, in most cases, attend any endeavour to establish a fact of this kind, since the surgeon can be guided only by the statements of the patient, who, probably through shock or intoxication, is unable to make any reliable statement. Indeed, the extent of this difficulty must be evident to Mr. Rivington himself (see page 71), who questions and criticises very rigorously a statement to the above effect, made by a patient under the care of Mr. Morris, with as much preciseness as might fairly be expected in the majority of cases. The same objection might be made, though with less force, to the determination (as suggested by Dr. Beck, a German surgeon) of the direction of the violence causing the injury (whether from before backwards or the reverse) as a means of diagnosing the situation of the rent.

In the third chapter, Mr. Rivington analyses eight cases that have been reported of recovery, after supposed intra-peritoneal rupture, and endeavours to show that these were really cases in which the rupture had not extended into the peritoneal cavity. Mr. Rivington allows that he cannot expect to convince every one, and, least of all, the surgeons who treated the cases, that these were not instances of intra-peritoneal rupture; but he has certainly proved that the surgeon, when once fully convinced of the presence of urine in the abdominal cavity, is justified in resorting to heroic measures for its prompt removal. He holds that, "if the diagnosis of intra-peritoneal rent be clear at the outset, the urine cannot too soon be evacuated by a supra-pubic incision, and the peritoneal cavity carefully cleansed." He is inclined to think that another opening is needed; and a perineal incision, extending into the bladder, may be made with advantage, "as the most efficient means of securing free exit of urine, and giving perfect rest to the injured organ." The question, whether the rent in the bladder should be closed by sutures or not, is left open; but Mr. Rivington seems disposed to hold that this procedure, which is certainly a very difficult one and not free from risk, is unnecessary. In cases where it is impossible to establish a diagnosis between an intra-peritoneal and an extra-peritoneal rupture, Mr. Rivington suggests that exploration with the finger through a perineal incision would be perfectly justifiable, or that an exploratory incision should be made immediately above the pubes, and the bladder reached before the peritoneum is opened.

In conclusion, we would recommend this work to the notice of surgeons as an able and complete record of all that is known of a very serious lesion, and as being rich in suggestions for a future practice of more promising methods of treatment.

NOTES ON BOOKS.

Diseases of the Bladder, Prostate Gland, and Urethra. By FREDERICK JAMES GANT, F.R.C.S. London: Baillière, Tindall and Cox. 1884.—But little can be written now in reviewing a work which has long been under the notice of the profession, and has just reached a fifth edition. In this edition, the author has certainly attempted to render his work a more complete exposition of the diseases relating to the urinary organs, as he has added one hundred and forty-four pages of new matter. The concluding chapter on urinary deposits and calculi is good and complete; but with regard to many of his subjects, and especially the treatment of diseases and injuries of the bladder, Mr. GANT seems to have paid very little attention to the important contributions on such points that have recently been made, both at home and abroad. The section on internal urethrotomy is very brief; only passing allusions are made to the views and practice of Dr. Otis; and surely, in a special treatise of such size and pretensions as this, the reader might fairly expect to meet with lengthy critical reviews of the questions of direct operation for intraperitoneal rupture of the bladder, of removal of tumours of the bladder by perineal section, and of the treatment of chronic cystitis by cystotomy. We hardly understand the note to Mr. Gant's preface; for surely, if such a course were possible, it would yet be unwise to write a professional treatise in such a form as to render it unintelligible to any well-educated and enlightened layman.

ANCOATS DAY-NURSERY.—In the second annual report just issued it is stated that at this day-nursery there were 2,202 attendances by 26 children, and at the Ordsal Nursery, 1,356 attendances by 37 children. The annual subscription-list scarcely amounts to £60. This sum is entirely inadequate, as the committee are desirous to establish another nursery at Pendleton.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

MEETING OF FELLOWS AND MEMBERS.

A MEETING of the Fellows and Members of this College was held in the theatre on Monday last, to consider certain alterations in the charters of the College adopted by the Council on January 10th. The chair was taken by Mr. JOHN MARSHALL, F.R.S., President of the College. There were present 18 members of the Council, including Mr. J. Marshall, President, Messrs. Cooper Forster and Savory, Vice-Presidents, and Sir J. Paget, Mr. Erichsen, Sir T. Spencer Wells, Messrs. Holmes, Lund, Wood, Power, Cadge, Bryant, T. Smith, Hulke, C. Heath, Croft, Sydney Jones, and Sir W. Mac Cormac. There were also present 56 Fellows (43 in London and 13 provincial), and 49 Members (28 resident in London, and 21 from the country). Among the Fellows present were: Mr. G. O. Pollock, Mr. John Birkett, Mr. S. Cartwright, Mr. W. Adams, Dr. R. Barnes, Mr. Berkeley Hill, Mr. E. Bellamy, Mr. J. C. Wordsworth, Mr. Page (Carlisle), Mr. J. Taylor (Chester), Mr. Charles Hawkins (London), Mr. J. C. Wordsworth, Mr. C. G. Wheelhouse (Leeds), Dr. E. Morris (Spalding), Mr. Henry Morris, Mr. Howard Marsh, Mr. Swain (Plymouth), Mr. Alban Doran, Mr. John Tweedy, Mr. Sympson (Lincoln), Mr. Bartleet (Birmingham), Mr. O. Pemberton (Birmingham), Mr. Manby (Wolverhampton), etc. Among the Members were Mr. Walter Smith, Mr. Joseph Smith (Rickmansworth), Dr. A. Henry, Mr. R. W. Parker, Dr. E. Goddard, Mr. S. Bentham (Southsea), Dr. G. Y. Heath (Newcastle-on-Tyne), Dr. Collum (Kingston-on-Thames), Surgeon A. Faulkner, Mr. Nelson Hardy, Mr. Jabez Hogg, Mr. M. G. Biggs, Dr. Purvis (Blackheath), Surgeon-General R. Cockburn, Mr. W. Hardin (West Drayton), Dr. Pauli (Luton); and many others.

The SECRETARY (Mr. Edward Trimmer) having read the notice convening the meeting,

The PRESIDENT said it would no doubt be expected that at the onset of the meeting he should offer a few remarks. For himself, he might say that he felt at once the honour and the responsibility of the position that he now filled, and would do his best to assist in making the meeting a successful one. The presence of nearly all the members of the Council—in fact, he might say of all those who could possibly be present—was a sufficient evidence of the interest that they took in the proceedings, and he could assure the meeting that they felt perfectly ready that their conduct in the past should undergo the utmost scrutiny and public examination, and in the future there could be no doubt, whatever might be the result of the proceedings that day, that they would do their utmost to promote the dignity of the College, and conduce to its future welfare. [*Applause.*] With regard to the nature of their proceedings, the notice had sufficiently informed them that they were met to discuss questions relating to the charter or charters; and to those who were not familiar, perhaps, with the by-laws under which the meeting was held, he might add the remark that no other business could probably be discussed at that meeting excepting such as related to those charters. That, in fact, was one of the by-laws, and put an obligation upon him, as chairman, to see that the meeting was conducted in accordance with the by-law. With reference to the alterations proposed to be made in the charter, it would be seen that there were two divisions of the subject before them. They had to consider first the alterations proposed by the Council; and then, in the second place, such recommendations and suggestions as the meeting might wish to make to the Council in return. With regard to the first part of the subject, the alterations proposed by the Council, some little misunderstanding had occurred as to the meaning of the word "alteration," and it might be as well that he should explain briefly that the alterations proposed were not verbal alterations in the existing charters; that, in fact, would be entirely contrary to usage, *Litera scripta manet.* The words of a charter could not be altered, but they might be abrogated, and their force more or less modified by some supplementary proceeding. What he had to direct their attention to was the aim and object of those alterations, not the form in which they should be ultimately carried out, and, therefore, it would be simply for the meeting to see whether they agreed with the aim and object of a given alteration, leaving the Council to consider with their legal advisers the mode in which such changes should actually be carried out. Then with regard to the proceedings on the latter part of the programme, that which related to the bringing forward of recommendations or suggestions to the Council, he would leave any remarks that he had to make upon that point to the period when they would be discussed. In the meantime, they had to consider what should be the order of proceeding in relation to the alterations proposed by the Council itself. He would first ask them to hear from the Secretary each one of those proposed alterations read, and it would then be open to the Fellows and Members to raise a discussion upon that proposition, or to move an amendment. He would now call upon the Secretary to read the proposed alterations *seriatim*.

The first alteration was then read as follows.

"1. That the following Section of the Charter of George IV, which restricts the amount of property in lands or rents to be held by the College to £2,000, be altered so as to provide that such amount be increased to £10,000, viz.:

"'SECTION.- AND WHEREAS it appears to Us to be expedient, in order more effectually to promote and encourage the study and practice of the said Art and Science of Surgery, that further powers and privileges be granted to the said Royal College: NOW KNOW YE, that WE of our especial grace and mere motion, at the humble petition of the said Royal College, have willed, ordained, constituted, declared, and granted, and by these Presents for Us, our Heirs and Successors, do will, ordain, constitute, declare, and grant unto the said Royal College, that the said Royal College of Surgeons in London shall and may take, purchase, possess, hold, and enjoy, any Lands, Tenements, Rents, or Hereditaments, wheresoever situate, lying, and being; not exceeding, together with the aforesaid Hall or Council-house and its appurtenances, and the Lands, Tenements, Rents, or Hereditaments now held by them, the yearly value of Two Thousand Pounds, in the whole, without incurring any of the Penalties in any Statute of Mortmain, or any thing, in any Statute of Mortmain, to the contrary notwithstanding.'"

Dr. COLLUM said he would propose that no sum of money should be mentioned, but that the College should be allowed to retain whatever money they had in hand. He would propose that they should not be limited to £10,000, or to any amount.

Mr. TWEEDY was of opinion that it would be necessary to state some amount in the charter. The Crown would not sanction a charter which did not state a specific sum. He must say he did not see the necessity of putting the amendment at all, if it was actually the fact that they must state some sum in the charter.

Dr. COLLUM said that the amendment he would move would be: "That the sum be left an open matter."

Mr. DORAN seconded the amendment.

The PRESIDENT said he was sorry to say that he found the amendment could not be brought before the meeting, because it was a rule of the Crown not to permit an unlimited holding of property. They must name a sum. The question was simply what sum they should name, and therefore the amendment fell to the ground. Perhaps Dr. Collum would prefer to withdraw it.

Dr. COLLUM withdrew the amendment.

A MEMBER asked whether it would not be as well to name a larger sum, such as £20,000. The amendment proposed by Dr. Collum was intended to enlarge the powers of the College; and, if it was thought desirable to have larger powers, why not go as far as £20,000?

Another MEMBER said he presumed that the Council had well weighed the matter before they suggested that the sum should be limited to £10,000 a year.

The PRESIDENT said he did not think it was worth while for anyone to move an amendment on this point, because the Council had considered it very carefully. It was a matter of importance not to mention too large a sum.

The resolution was agreed to.

The second resolution was read as follows:

"2. That Section 5 of the Charter of the 7th Victoria be altered so as to provide that the conditions of admission to the Fellowship by examination and the arrangements for the examinations for the same, be in future determined by resolutions of the Council, and not by by-laws as required by such section.

"'SECTION 5.—That, except as hereinbefore mentioned, no person shall become or be admitted a Fellow of the said College until after he shall have attained the age of Twenty-five years, and shall also have complied with such Rules and Regulations as the Council of the said College shall from time to time consider expedient, and by a Bye-Law or Bye-Laws direct, nor unless he shall have passed such special Examination by the Examiners of the said College, as the Council shall from time to time think fit, and by a Bye-Law or Bye-Laws direct, that Candidates for a Fellowship of the said College shall undergo; but every fit and proper person having attained such age, and complied with such Rules and Regulations, and passed such special Examination, shall be entitled to be admitted a Fellow of the said College.'"

Mr. BERKELEY HILL asked whether [illegible] the Council desired to make this resolution.

The PRESIDENT said the explanation of the proposal was simply this. The obtaining of a by-law was rather a tedious process, and very frequently it had happened in the history of the College that, whilst one particular by-law was really felt to be required, the process that they had to go through of obtaining the necessary authority from the Secretary of State was so troublesome that very often a little delay took place until there was an accumulation of two or three or more by-laws which could be passed at one time; so that, to begin, it was more difficult to obtain a by-law than it was to obtain a resolution. That, perhaps, was not a good argument, and, therefore, he would state another fact. The rules for the examination of Members were carried, all of them, by resolution in the Council; but, on the other hand, those relating to the Fellowship had hitherto been carried by by-law. The Members really stood in a closer relation to the interests of the public, and therefore required greater watching on the part of the State, than the Fellows did; for whilst the Fellowship was an ornamental title, Membership was a title which gave a person a right to practise amongst Her Majesty's liege subjects. If the State was required to be more cautious about any one of their diplomas than another, it would be about the Membership diploma, and not the Fellowship. The inconsistency, therefore, existed that, whilst the State was satisfied to leave in the hands of the Council the requirements for the education and examination of Members, it interfered by their charter, assented to in former times, no doubt, by the College, with regard to the Fellowship. He thought that was a reason why the two things should be brought into harmony, and that the less important title might be governed by the Council if the more important title in a public point of view was, as was the case, entirely left in their hands. As a single illustration of what might happen, he might mention this. The by-laws of the College allowed a M.A. or B.A. a certain privilege in relation to the Fellowship examination viz., that he might come up after five years' study instead of six They had recently introduced into their universities Bachelors of Science, as well as of Arts, and it had been under the consideration of the Council of the College for some time past that Bachelors of Science should also have the same privilege of shortening their period of education to five years instead of six, as was possessed by Masters of Arts or Bachelors of Arts. At present, they had to go through the tedious process of applying to the Secretary of State to get permission to carry this out, and that fact had really hindered the Council from dealing with the question. This was a mere illustration of what they wished to be free to do; to make such changes as should enable the Council, from time to time, to adapt itself, and to adapt the requirements of the Fellowship examination to the necessities of the time. It did seem rather hard that they could go and get a special by-law merely to add Bachelors of Science to Bachelors of Arts, and that was an illustration of the difficulties that sometimes stood in their way with regard to the administration of the College. But he was not putting this change as merely based upon administrative grounds. No doubt the College and Fellows should watch its proceedings carefully, but he might remind them that no change in the Fellowship examination could take place unless by notice of motion at one Council, the discussion of the change at another Council, and the confirmation of it at a third Council. Therefore there were intervals between the commencement of the change and its actually being carried out; and, during that time, such was the publicity with which all the transactions of the Council were now accompanied, that there could be no doubt the Fellows would be informed of every change which was intended or contemplated. They must remember that the Council was gradually becoming composed of members by examination. Changes had been proposed in the Council relating to the rules of Fellowship by the Council, when it contained a larger number of those who were Fellows by election, but the Council was now rapidly approaching the time when all its members would be Fellows by examination. Could they really hesitate to place in the hands of such a Council the requirements of the future Fellows? These were the chief points which had influenced the judgment of the Council. They were not particularly tied to this resolution, and if it were insisted upon they would reconsider their decision; but having maturely considered it they did believe that it would facilitate the working of the business of the College, if this matter were transferred from the by-laws to resolutions of the Council.

Mr. JOHN TWEEDY said the meeting [illegible] indebted to the President for the careful consideration that he had evidently given to this alteration, and he [illegible] which had been said. Unfortunately, he was compelled to draw an entirely different conclusion from the arguments that had been used, and he had [illegible]. "That, in the opinion of this [illegible] the Council to determine the arrangements of the examination of the Fellowship by resolutions of the Council, instead of by by-laws, would be likely to tend to the relaxation of the conditions of admission to the Fellowship, which is not expedient." The reasons which prompted him to move that amendment were these. In the first place, the class of Fellows was instituted for a distinct and specific purpose. The preamble of the charter of the 7th Vic., p. 34 of the Calendar, said, "Whereas, in order more effectually to promote and encourage the study and practice of the art and science of surgery, it appears to us expedient that a new class of members of the College, to be called Fellows, should be created, and, in order to obtain the diploma of their Fellowship, to have attained a greater age than is at present necessary in the case of ordinary members of the said College, and to have complied with such rules and regulations, and passed such examination as herein mentioned." Now, the intention of those provisions was clearly that the class of Fellows should be academically higher, and that their general and professional attainments should be superior to those of the ordinary members, and, in consideration of the special demand made upon candidates for the Fellowship, special privileges were granted to them. They were an electoral body. From the time of the charter, the Fellows had enjoyed the privilege of electing members of the Council, and, in turn, members of the Council had been selected from the body of Fellows, and not self-elected by the Council, as before. Moreover, the Fellowship was now required for most of the higher surgical appointments in the great hospitals; indeed, it was indispensable to many of the surgical appointments—in fact, nearly all—in London. Those who had obtained the Fellowship under the existing regulations, had done so at a great cost of time, trouble, and money. The time was not to be reckoned by the six years' curriculum; for, assuming that a youth entered the medical profession at the age of 17, he was not able to take a Fellowship until he was 25, to all intents and purposes he had a curriculum of eight years. It was true that, under the existing regulations, a Member of the College could pass the examination for the Fellowship at 23, but still he had to wait till he was 25 before he could receive his diploma. This had compelled those who had the ambition to work for the Fellowship to remain at their schools for at least six years, perhaps seven or eight. Six years were compulsory, but, at the expiration of that six years, a candidate was not old enough to take the Fellowship, and either had to continue at his medical school, or to accept some little duties which were not particularly remunerative, and which would not be prejudicial to his chances at the examination. So much for the element of time. Then, with regard to trouble. Most of those who were Fellows had to pass a preliminary examination in extra subjects. They had to have an extra course of study, and to pay the cost of extra lectures and for additional examinations. Then, as to the money-outlay. Those who had hitherto taken the Fellowship had had to make a much larger outlay than many persons imagined. Suppose that a student received a diploma at the age of 21. The cost of his professional education had been a certain sum, which usually fell within certain limits; but if he acquired the Fellowship, there must be at least two years' more sojourn at a medical school, and no man could live in London and attend a medical school at a less cost than from £150 to £200 a year; so that, in many cases the Fellowship cost £300 or £400 more than the Membership. But the additional sum of about £350, only allowed for the compulsory two years' extra attendance at a medical school, to say nothing of the extra course of lectures, comparative anatomy, and so on; and, as a matter of fact, to most men who had taken Fellowships in the ordinary course, the actual cost in money had been £500 or £600 more than the Membership; in fact, the cost of the Fellowship was nearly double that of the Membership. Remembering all these things, and remembering the motive for establishing the Fellowship, the electoral and collegiate privileges which the Fellows enjoyed, and the responsibilities which attached to them, the professional importance that belonged to the Fellowship, and the great sacrifices that those who had hitherto taken the Fellowship had had to make, he thought it was not desirable that the conditions under which these sacrifices had had to be made should be determined by resolution of the Council rather than by charter and by-law, which, as the President had said, required the sanction of the Crown—the Home Secretary—for their adoption or alteration. It was in the highest degree important, for the welfare of the public and the interests of the College, that these conditions should not be liable to be capriciously and unnecessarily disturbed from time to time. [*Hear, hear.*] Moreover, grant that the present Council was not likely to relax the conditions of admission to the Fellowship, they could have no guarantee that a future Council might be so strict. Circumstances might easily arise to tempt the Council to remove some of the obstacles and some of the barriers that at present guarded the dignity of the Fellowship. He was one of the first to allow that it was desirable that every member should also be a Fellow, and it was for the Council to encourage the Members to aspire to the Fellowship, but that encouragement should work in the direction of stimulating Members to higher efforts, and not by fostering a spirit of selfish communism. Hitherto, by maintaining a high standard of examination, the College had made its Fellowship an honour to English surgeons, whereas the sister corporation of Edinburgh, by its base trafficking in its Fellowships, had made them a by-word in the nation, and a reproach to nearly all who possessed them. To show the possibility of a future Council unnecessarily relaxing the conditions of the admission to the Fellowship was not imaginary, he would recall to their recollection an attempt that was made in the Council eleven years ago. At a Council meeting, held on December 11th, 1873, Professor Humphry brought forward a motion, proposing to open the Fellowship to Members of only two years' standing. This was seconded by Mr. Southam; but, on the motion of Mr. Simon, the whole subject of the examinations for Fellowships was referred to a committee. So enormous did this committee find its labours, that it took two years and three months to prepare its report; and, when that report was at length presented, it was so unsatisfactory that it was referred back to the committee for reconsideration. The committee, in the first instance, reported that it was desirable to lower the standard of preliminary examination for the Fellowship, to shorten the time allotted to the study of anatomy and physiology, and to abridge the medical curriculum, by allowing those who had obtained the diploma of Member to complete their six years in any manner they might choose. On April 13th, 1876, this committee presented an amended report, and on that amended report the present regulations relating to the Fellowship were framed. If anyone would take the trouble to compare the existing regulations of the Fellowship with those that were in existence twelve or fifteen years previously, he would find that there was a persistent and steady tendency on the part of the Council to increase the number of Fellows, and to increase them not by encouraging higher general culture and greater professional attainments, but by relaxing the conditions of admission. This tendency was likely to continue, and there was a serious risk that it might eventuate in making the Fellowship an ornamental decoration, instead of the honourable distinction such as Sir Benjamin Brodie, one of its authors, intended it to be. In his autobiography, Brodie said: "The object of this institution is to insure the introduction into the profession of a certain number of young men who may be qualified to maintain its scientific character, and will be fully equal to its higher duties, as hospital surgeons, teachers, and improvers of physiological, pathological, and surgical science afterwards. With this view, if they have not university degrees, they are required to undergo a preliminary examination in classics and mathematics; while their professional education having been continued for a longer period of time, they are expected to show that they have a more perfect acquaintance with those sciences which are the foundation of medical and surgical knowledge than can be expected of the great majority of those who are candidates for practice. If this system be properly and honestly carried out, I apprehend that the result will be that the Fellowship of the College of Surgeons will be the most honourable distinction that is offered to the members of the medical profession." Since Sir Benjamin Brodie wrote those words, this lowering tendency had gradually progressed. The extra preliminary examination had been given up, so that the preliminary examination for the Fellowship was now exactly the same as that for the Membership, and, except in the matter of time, there was very little difference between the curriculum for the Membership and that for the Fellowship. Formerly, Members who had not passed the extra preliminary examination were not allowed to present themselves for Fellowship until they had been Members twelve years. Then the time was reduced to eight years. Eleven years ago Professor Humphry wished to reduce it to two years; and at the present moment any Member might present himself for the examination for the Fellowship at any time after receiving his diploma of Member, and present himself for the second examination for Fellowship at any time after passing the first, provided that he could show that he had been engaged six years in the study of his profession. The persistent attempts to smooth the ways to the Fellowship contravened the spirit and intention of the founders of the class. That intention was to introduce into the profession a certain number of young men who might be qualified to maintain its scientific character. Since then, the examinations for the Membership had improved, but the examinations for the Fellowship had not kept pace. He did not mean to assert that the examinations for the Fellowship were not difficult; they were, perhaps, as examinations, somewhat too difficult; but he maintained that they were rather a test of what a man knew than what he could do. The Council had gradually withdrawn those testimonials of a man's being compelled to associate himself with practical work. Formerly, a house-surgeoncy was required; now a dressership sufficed; and though the examinations had been increased in severity by relaxing the conditions to the Fellowship, those guarantees of culture and actual power had been gradually withdrawn. The point was this. These relaxations had taken place, all these changes had been made, under the existing regulations when the Council had been hampered by the by-law. If the Council could do these things, hampered as it was by the by-laws and difficulties of getting the Secretary of State to accede to these alterations, what would it do when it was perfectly untrammelled? If these things could be done in the green tree, what would be done in the dry? The Council asked that these things should be determined by a resolution of the Council. He should like to know what a resolution of the Council meant. He should like to ask whether it was a fact that it had been held in the Council that the resolution of one Council did not bind another.

The PRESIDENT: Yes.

Mr. TWEEDY said then the resolution of the Council might at any moment become a dead letter.

The PRESIDENT: Not unless it were distinctly rescinded, and no recision of a resolution of the Council could take place without notice, argument, and confirmation. The Council really ought to be treated as gentlemen.

Mr. TWEEDY said that what he wished to say was this. If the resolutions of one Council were not binding on another, the present Council might impose most salutary restrictions; but the future Council could remove those restrictions by a mere vote. Besides, there were resolutions of the Council of very great importance which had never yet been carried into effect. Fourteen years ago, Mr. Quain moved "That it is desirable that not less than four members of the Court of Examiners should be Fellows who are not, and have not been, members of Council." That was passed some time afterwards, on the seconding of the late Sir William Fergusson.

The PRESIDENT: How does this bear upon the question?

Mr. TWEEDY said he wished to show what a resolution of the Council meant. Fourteen years ago, the Council passed the resolution, and it had never been acted upon. [*Hear, hear.*] At the present time, every member of the Court of Examiners was on the Council, and one member of the Board of Examiners, so that the Examiners had eleven members in the Council. He thought, therefore, in the interest of the Fellows and in the interests of the College, it was not desirable that the regulations relating to the Fellowship should be determined by resolution of Council instead of by by-laws; and for that reason he begged to move his amendment. [*Applause.*]

Mr. WICKHAM BARNES seconded the amendment.

Dr. COLLUM suggested the addition of the words "subject to the approval of a general meeting."

Mr. TWEEDY said he thought that would unnecessarily hamper the Council from time to time.

Dr. COLLUM thought that the more public these things were made the better.

Mr. TWEEDY said his opinion was that these conditions should not be liable to change one way or the other. A sacrifice had to be made, and men had to look ahead for years, and it was not desirable that they should be changed one way or the other.

Mr. NELSON HARDY said he should be happy to second Dr. Collum's suggestion.

The PRESIDENT said he could not put the amendment, because it referred the question to the general meeting. There was no such thing yet as a general meeting. A general meeting could only be called for a particular purpose; at present there was no authoritative general meeting. The Council really had the power to say whether they would refer this to a meeting or not, and he thought the result would be that it would never come before a general meeting.

Dr. COLLUM said matters had now so altered in business one way and another, that, as a rule, all these things did come before general meetings.

The PRESIDENT said he should like to say a few words upon the point. First of all, with reference to the resolution passed by the Council that four members of the Court of Examiners should be other than members of the Council, it would really at that time have been contrary to the charter, and was now contrary to the charter. There was no provision in the charter for any such arrangement, and although a resolution of the Council might really express its opinion, and desire that such a thing should be done, and should be done as quickly as possible, still it was found impossible to carry it out. He might mention, however, that there had been instances of persons being appointed on the Court of Examiners who were not members of the Council; for example, his friend on the left (Mr. Savory), and Mr. Holmes, who were examiners before they were on the Council. There was nothing to exclude any Fellow who was not on the Council from being on the Court of Examiners, but there was a distinct difficulty existing from the fact that four of the examiners were to be Fellows not on the Council. Then, with regard to the supposition that the Council were careless about the present rules as to the character of their Fellowship, he might say that a great number of Mr. Tweedy's facts would be easily answered; but he would emphatically state that the interest that the Council had always felt in maintaining the Fellowship had been so great that, so far from its being open with greater facility to persons to acquire, on the contrary, the acquisition of the Fellowship had of late years become rather more difficult than it used to be. There was a certain inconsistency in the desire that all Members, as Mr. Tweedy said, should become Fellows, or a large proportion of them, and the maintenance of such difficult requirements as would limit the Fellowship to a high class of men; and the object of the Council was that the Fellowship should be really a very high diploma indeed. If they had relaxed certain conditions, they had always the charge of that entry to the Fellowship, examinations, and everyone would admit that those examinations for the final Fellowship were certainly not relaxed, on the contrary, they had become more and more difficult to pass. At the same time, he might say, on the part of the Council, that nothing had given them greater pleasure than to hear it advocated, in a public meeting of that kind, that they should have it in their charge to maintain the high character of the Fellowship; it supported those who maintained that view within the Council, and he was sure that the Council, as a body, would really be very grateful at hearing that such was the opinion expressed outside.

Mr. BARTLEET (Birmingham) wished to know whether he was to understand the President as saying that the Council had passed resolutions inconsistent with the provisions of the charter. If that were so, it was a very serious thing, in so important a matter as the examinations for the Fellowship, that the Council should themselves acknowledge, as an argument why they should have this power, that they had themselves passed resolutions inconsistent with the charter.

The PRESIDENT said a clear distinction must be drawn between a resolution of the Council which was intended to be directly operative when it was confirmed, and a resolution of the Council expressing an opinion of what the majority thought might or should be done, but which was not a resolution of an operative kind. It was quite possible to pass resolutions which should be perfectly inconsistent with what they could carry out, because it was only in that way that amelioration could be got. But this resolution that had been referred to was not operative; it could not be operative, because it was inconsistent with the charter, although it was perfectly consistent to pass such a resolution as an expression of opinion.

Mr. BARTLEET suggested that it might be worth while to tell the meeting whether the resolution now proposed was to be an operative or an inoperative resolution. [*Laughter.*] The Council passed a resolution some time since that a certain number of examiners should not be members of Council. That had not been carried out. They might to-morrow pass a resolution that the Fellowship should be made more difficult, or that there should be a more severe examination; and that resolution might not be carried out. He failed to see any guarantee for the carrying out of this resolution, if it were passed.

The amendment was then put to the meeting, and declared to be lost; thirty voting in its favour, and thirty-two against.

Mr. NELSON HARDY then suggested the addition of the words to the resolution, "that it should be subject to confirmation by a general meeting of Fellows and Members."

The PRESIDENT said there was no provision for a general meeting. To what meeting would it be referred, supposing the suggestion was adopted?

Mr. HARDY said to a meeting of Members and Fellows.

The PRESIDENT said of course it must be understood that if the resolution were carried subject to the condition that it should be referred to a general meeting, and it was in the competency of that meeting to declare that opinion, still, when the opinion came before the Council, the Council would have to consider whether any such general meeting should be called. They would, he thought, hardly call it themselves; but on the requisition of so many Members and Fellows [illegible] they would have to take into consideration whether such general meeting should be held, and their decision would be final. They could not force a meeting of the College under the present condition of things; the Council would still have to say whether a general meeting should be called, to which that particular resolution should be submitted. That was going in a circle, because that was the question submitted to the general meeting—the Council were now submitting that very question. What, therefore, would be likely to be the answer of the Council if they were asked to call another general meeting? The question was now submitted to a general meeting, and what, therefore, would be the practical value of another general meeting? Was the present meeting going to ignore its functions, and to say that they dared not give a decision upon the point? Because if it was to be referred to another general meeting, the present was a general meeting called for the express purpose of considering it.

Mr. WALTER HARDIN said he was sure that the Fellows and Members of the College were perfectly of opinion that the Council had thoroughly considered the matter. They had heard certain objections raised by Mr. Tweedy; his amendment had been put and lost; and he thought that they should, without any further discussion, vote upon the original resolution.

Mr. NELSON HARDY said that what the President had stated fully met his views in seconding the amendment. The difference, which, however, the President did not seem to perceive, lay in this—that the Council did not bring before the general meeting the particular alterations which they proposed to make, and all that was asked was that, before those alterations were adopted, they should be before a meeting similar to that for adoption or otherwise.

The PRESIDENT said that was a distinct amendment, and it could be clearly put. It was "That the second proposed alteration in the charter be adopted, subject to the special alterations being submitted for the approval of a general meeting of the Members and Fellows."

Dr. HENRY HICKS said he failed to see the bearing of the amendment. He thought, if it were carried, they would be placing difficulties in the way of the Council; difficulties of which, perhaps, at present, they were scarcely aware.

Mr. JABEZ HOGG said the action of the amendment was asking the Council to do as they had done that day, and nothing more. He took it that that was no amendment at all, and, with their permission, he would move the previous question, and that they proceed to vote for the original resolution.

The PRESIDENT thought the meeting was going rather upon a false assumption. The question before them was whether any changes should be carried out by by-law or by resolution of the Council. The amendment to that was that, supposing any changes were proposed, those very changes should be submitted to a general meeting. It seemed to be a very important question as far as it affected the position and dignity of the Council, for if the Council were not to be trusted to carry out a matter of this kind they had better resign, for it would seem to imply that they were not able to carry out the functions for which they had been elected. At the same time, as the amendment was a mere expression of opinion, he would put it to the meeting, so that they might declare their opinion upon it, and it would then be referred to the Council for deliberate consideration.

The amendment was then put to the meeting, and declared to be lost.

The original resolution was then carried; 42 voting in its favour, and 23 against.

The third alteration as suggested by the Council, was then read: "That in Section 7 of the Charter of the 7th Victoria, the amount of the fee payable for the Fellowship by examination be omitted, leaving such amount to be provided for by by-law.

"'SECTION 7.—That the fee to be paid on the admittance of every such new Fellow as last aforesaid (over and besides the stamp-duty on his admittance or diploma), shall be any such sum, not exceeding the sum of thirty-one pounds ten shillings, as the Council of the said College shall from time to time think fit, and by a by-law or by-laws direct.'"

Mr. BARTLEET said it seemed to him that they were voting away all their liberties; they first put it into the power of the Council, if at any time they wished to lower the examination to any possible limit, to do so, and now they were going to put it in their power, having lowered the examination, to admit men at a guinea a head. He did not suppose it was likely that the present Council, or any succeeding Council, would adopt such a course, but they must not look at probabilities, and he did not wish in this matter to be met by the President saying that the members were not showing confidence in the Council. It was rather too bad to be told that they were not courteous to the Council. He did not wish to be discourteous either to the President or to the Council, but what he said was that there might be some Council some fifty years hence, who, if they were opposed by the Fellows, might take it into their heads to lower the Fellowship examination below that of the Membership, and to admit Fellows at a guinea a head. He moved as an amendment—"That the fee for examination for Fellowship stand as at present."

Mr. MANBY (Wolverhampton) seconded the amendment, and said that he thought that what had been suggested by Mr. Bartleet was neither impossible nor preposterous. After listening to the speech made by Mr. Tweedy, they must all be convinced that, for the past ten years, the tendency for the qualification of the Fellowship had been steadily downwards, *facilis descensus Averni*, and therefore it was neither impossible nor improbable that the Council, if they had the power, should still further depreciate the Fellowship qualification. And they might have very strong inducements to do it in the future, because it was quite possible that when the Medical Bill was passed, the College would find itself in such a position that a five-pound note extra would be a consideration. [*Cries of "Oh, oh."*] He though it was rather peculiar that the Council should come before them at this moment, and ask the meeting to pass these two resolutions, both of them giving them power to depreciate the Fellowship still further than they had already done during the last twelve years. The suggestion was neither impossible nor foolish, and therefore he would oppose such a resolution.

Mr. DORAN said the Council already had power to lower the fee. The charter stated "any such sum, not exceeding the sum of £31 10s., as the Council of the said College shall from time to time think fit and by a by-law or by-laws direct."

Mr. MANBY said the present section had the safeguard of the Home Office; but the resolution of Council might be one of those inoperative resolutions of which they had heard so much that afternoon.

The PRESIDENT said they already had power to lower the fee by Section 7.

Mr. MANBY asked why, if they already possessed the power, the Council wished to alter the by-law.

The PRESIDENT said the explanation was quite easy on the face of it; it was touching the amount. The amount was now fixed. They wished it still to be fixed, but they did not wish it to be fixed at so low a sum as thirty guineas. The fact was, that the examinations for the Fellowship were so onerous, that it actually cost the College more to make a Fellow than he paid, and therefore it was necessary that the fees should be increased. Looking at the efficiency and the character of the examinations, it was only reasonable that the Council from time to time should be enabled to alter the fee, in order to keep up the credit of the Fellowship. There was always the safeguard of the acquiescence and sanction of the by-law, and therefore Fellows would be protected in every possible way.

Mr. BARTLEET said that he was much obliged to the President for this explanation; and if it had been given at first, he thought the time of the meeting occupied in the discussion would have been saved.

The resolution was then carried.

The fourth proposal was then read as follows:

"4. That Sections 15 and 16 of the Charter of the 7th Victoria be altered so as to provide that the mode of election to the Council may be by voting-papers as well as in person, the quorum of Fellows required to be present at the meeting for election being omitted from such sections, it being desirable that, in future, such quorum be determined by by-law instead of by Charter.

"'SECTION 15.—That the members of the Council of the College shall hereafter be elected by the Fellows of the said College, including the members of the Council as such; and such Fellows, whether members of the Council or not, shall be allowed to vote in person only and not by proxy; and that any number of Fellows (not being less than fifteen present), at a meeting convened for the purpose of electing a member or members of Council, shall be competent to proceed to such election.'

"'SECTION 16.—That the chair at every such meeting shall be taken by the President of the said College, or, in his absence, by one of the Vice-Presidents, or in case also of their absence, then by the senior member of the Council of the said College then present. And if it shall so happen that from any cause the business of the day cannot be concluded upon such the day fixed for election as aforesaid, then and in every such case an adjournment of the meeting shall take place to the next day, at an hour to be named by the Chairman (Sundays, Christmas-days, and Good Fridays excepted, and being passed over when occasion shall require) and so from day to day (except as aforesaid) until the business of the meeting shall be completed; but no other business shall be discussed or attended to at any such meeting, besides the election of a member or members of the Council for which the same shall have been convened. Provided also, that if upon the day fixed for any such election there shall not be fifteen or more Fellows assembled and continuing together for the purpose of such election, then at any time after the space of one hour after the time of day fixed for such election the chair may be taken as aforesaid, and it shall be lawful for the chairman to adjourn the meeting to the next day, and so from day to day (except as aforesaid), if necessary, in the manner hereinbefore mentioned with respect to adjournments of such meetings in case of the business thereof not being concluded as aforesaid.' "

Mr. Wheelhouse (Leeds) said that last year considerable irritation had been expressed at the necessity of gentlemen coming all the way to London in order to vote at the election for members of Council. He need not waste the time of the meeting by reminding them that, for many years past, that had been a grievance in the College. On many occasions, that grievance had been attempted to be redressed, but hitherto unsuccessfully. He was now authorised, on the part of the Association of Fellows, to read a resolution passed on Thursday last to the following effect: "That the officers of this Association be authorised to state, at the meeting of the College on the 24th instant, that the concession announced by the Council includes all the objects for which the Association has contended, and that it desires to recognise the readiness and grace with which the Council have acceded to their wishes."

Dr. Collum said the resolution before the meeting was one of the most important that could come before the profession. He found on January 9th last there were 16,258 Members of the College; there were 1,166 Fellows, and 24 members of Council.

The President said that the resolution related to the mode of election.

Dr. Collum said that was what he was speaking to. He thought that every one of the 16,000 Members was as much interested in the College as any member of Council.

The President said Dr. Collum was not in order; the question was as to how the Fellows were to conduct the election, and whether they were necessarily to come to London. If he had anything to say afterwards, it would be by way of suggestion, but he could not say it at that particular time.

Dr. Collum said he did not see why 16,000 gentlemen throughout the world should be disfranchised merely for a select party of 1,100.

The President said the proposition could be brought forward by-and-bye.

The resolution was unanimously agreed to.

The next proposed alteration was then read as follows.

"That, in Section 5 of the Charter of the 15th Victoria, the words beginning 'and the Fee,' etc., to the end of the Section, be struck out, it being undesirable that any fee should be paid by Members of twenty years' standing on election to the Fellowship.

" 'Section 5.—That it shall be lawful for the Council of the said College, by Diploma or Diplomas under the seal of the said College, in such form as the Council may think proper, to admit to the Fellowship of the said College in each and every year from the date of these our Letters Patent, without examination, but subject to such conditions and regulations as the said Council may think fit, and by any Bye-Law or Bye-Laws direct, any two Persons, being at the time of such admittance Members of the said College of not less than Twenty Years' standing; and that the Fee to be paid upon the admittance of each such Fellow as last aforesaid shall be the same as the Fee payable upon the admittance of Members of the said College to the Fellowship under the authority of our said Letters Patent.' "

The alteration was agreed to.

"That Section 17 of the Charter of the 15th Victoria be abrogated, it being inexpedient to continue the examinations for the Licence in Midwifery of the College.

" 'Section 17. And it is our further will and pleasure, That a Board of Examiners be appointed by the said College for the purpose of testing the fitness of persons to practise in Midwifery, and of granting Certificates of such fitness; and that such Board shall consist of not less than three persons. And we do hereby authorise and require the Council of the said College, within Twelve Months from the date of these our Letters Patent, to appoint not less than Three persons to be such Examiners in Midwifery, who shall continue in office for such period, and shall conduct the examinations in such manner, and shall grant Certificates in such form, as the Council of the said College shall determine and from time to time direct. And it shall be lawful for the Council of the said College, from time to time, as vacancies shall occur in such last-mentioned Board of Examiners, to appoint any persons to fill up the same.' "

The President said the object of this was that they might no longer be able to put a person upon the *Medical Register* by virtue of his possessing the licentiateship of the College in midwifery. It must not be understood that they were to abandon examinations in midwifery; they would continue, as of course, to be part and parcel of the examination of the College; but under their charter they had power to examine persons for a licence in midwifery, and that licence admitted them to be placed on the *Register*, exactly as if they were Members of the College, or had ever so many other additional qualifications. Of late years this qualification had fallen entirely into desuetude, and on the whole, the Council thought that such a clause had better be abrogated because the College was really liable to be pressed to carry it out so long as it remained. It was just possible that pertinacious persons might get a mandamus to compel the Council to grant this examination. They, therefore, wished to rid themselves of the power.

The resolution was agreed to.

The next proposition was as follows:

"And that Sections 1 and 2 of the Charter of the 23rd Victoria be altered so as to provide that the number of Members of the Board of Examiners in Dental Surgery may, if thought desirable by the Council, be increased beyond six, the present number, and that the Section of the Board consisting of persons skilled in Dental Surgery be restricted to Dental Practitioners duly registered under the Dentists' Act of 1878."

" 'Section 1. That it shall be lawful for the Council of the said College to appoint a Board of Examiners for the purpose of testing the fitness of persons to practise as Dentists who may be desirous of being so examined, and to grant Certificates of such fitness. And it is our will and pleasure that such Board of Examiners be called the Board of Examiners in Dental Surgery, and consist of not less than six Members, to be appointed as hereinafter mentioned, three of whom shall be Members of the Court of Examiners for the time being of the said College, and the others of them shall be such persons skilled in Dental Surgery as the Council of the said College shall from time to time think proper to appoint.'

" 'Section 2. And we do hereby authorise and require the Council of the said College, within six calendar months from the date of these our Letters Patent, to appoint three persons, being Members of the Court of Examiners of the said College, and also three such other persons skilled in Dental Surgery as they may think, to be such Examiners in Dental Surgery, who shall continue in Office for such period, and shall conduct the Examinations in such manner, and shall grant Certificates in such form, as the Council of the said College shall determine and from time to time direct. And it shall be lawful for the said Council of the said College from time to time, as vacancies shall occur in such last-mentioned Board of Examiners, to appoint any persons to fill up the same, nevertheless so that the said Board of Examiners shall always be constituted as hereinbefore directed.' "

The President said this was an administrative matter. At present the examinations were conducted by a limited number of examiners; they wished to have the opportunity of increasing that number, because it was a rule in the College that every candidate for a diploma should be examined by two examiners, and the awkward number of six was found to embarrass them very much. The Council did not propose to fix the number, because it might hereafter be required to be still more expanded if the dental diploma found increased favour. They had heard a great deal about putting things in charters, and no doubt it was desirable that certain leading principles should be laid down; but here was a matter of detail, the actual number of examiners to be appointed included in a charter. There never was such an egregious error, and the result was that they were obliged to get an alteration to increase the number. The latter part of the clause was a serviceable restriction to be put into the charter, namely, that the examiners must themselves be dental practitioners, part of them surgeons, and part dental practitioners. That involved a principle, but the number did not. The Council, therefore, proposed to have liberty as regards the number, and to tie their hands by the charter in reference to the requirement that the examiners should be registered dental practitioners.

Mr. S. Cartwright asked if the alteration involved in the second section would operate retrospectively or prospectively.

The President said it could not act retrospectively. It would not affect any person at present on the Board.

Mr. S. Cartwright said there were some gentlemen who had practised their profession without taking the degree of L.D.S., and, having practised for a number of years, it was very hard that they should be put on one side by an alteration of the section. He urged that those gentlemen who, having the L.D.S., were in legitimate practice previously to the passing of the Dental Act, should be exonerated from that office.

The President said this only related to the appointment of a certain very small number of gentlemen to act as examiners in the College. There was no great privilege taken away from any one; it was merely that certain gentlemen should be capable of acting as examiners, and certain other gentlemen should not. The College was entitled to require that its examiners, at any rate, should be registered medical practitioners. If any gentleman was injured by the restriction, let him register. It was a very small affair.

The resolution was then agreed to.

The PRESIDENT said that during the remainder of the meeting the Fellows and Members would be at full liberty to propose any recommendation or suggestion they might have to offer with reference to the charters. It must be thoroughly understood that every proposition would have to apply to the charters, and also that it would have to be received in the form of a recommendation to the Council, who would give it every attention. It might even be desirable, in formulating any of the propositions that might be made, to prefix the words "that it be recommended by the meeting;" but, under any circumstances, he should so put the motions from the chair, as to make it quite clear that they were intended as recommendations for the Council. Mr. Swain had handed in a written proposition which would be first discussed; and as it contained a number of distinct proposals, he proposed to submit them one by one to the meeting.

Mr. SWAIN (Plymouth) moved "1. That in the opinion of this meeting, it will materially conduce to the welfare of the College that the Fellows should be invested with a larger share of its management. 2. That it is desirable that no alteration in the constitution or relations of the College shall be effected without the consent of the Fellows convened to discuss such alteration. 3. That there shall be an annual meeting of the Fellows, at which the annual report of the Council shall be presented, received, and adopted. 4. That, at such meeting, the president for the ensuing year be elected by a majority of the Fellows present. 5. That the charters be so altered as to give this resolution effect." He felt quite sure that the meeting would sympathise with him in proposing this motion, and that the Council would do all they could to facilitate matters, and to meet the views of the Fellows and Members. The fact of the Council having called the Fellows and Members together to discuss the alterations, was sufficient to show that they were quite willing to consider any propositions that were made with regard to the management of the College. There was no other great institution of that sort in England in which the sole management of affairs was vested in a small council, without any control on the part of the Fellows and Members. The College of Physicians of London had four meetings of Fellows yearly, besides extraordinary meetings. The President had a right to convene meetings; and the Fellows had a right to convene meetings upon a requisition of ten. The College of Physicians of Edinburgh had quarterly meetings of the Fellows; and they could call special meetings by a requisition of five. The Royal College of Surgeons of Edinburgh had also general meetings of Fellows; and the Faculty of Physicians and Surgeons of Glasgow had meetings of Fellows every month. The Royal College of Surgeons in Ireland continually had meetings of Fellows to pass and to alter bylaws. The Royal College of Surgeons of England was the only medical corporation in the United Kingdom that had not the power of regulating the internal arrangements by the Fellows and Members. He was quite willing to agree in any ruling of the President as to the breaking up of the resolution into different parts. He admitted that the resolution was very comprehensive, and included several most important questions. He thought the Council themselves would agree with the first clause of the resolution: that it would conduce to the interest of the College that the Fellows should have a larger share in the management of its internal arrangements than they had hitherto possessed. But that would naturally lead on to the next clause of the resolution. If it were thought desirable both by the meeting and the Council that the Fellows should have a larger share in the management, it was only a matter of detail as to the manner in which the principle should be carried out; and therefore there could be no better means of carrying the principle out than by calling them together annually, half-yearly, or quarterly, to discuss the important questions that were continually coming before the Council. As a matter of course, if that were done, the annual report of the College would be submitted, as in every other institution, to the Fellows, who would discuss it, and would have the power of adopting, rejecting, or amending it. The question of the the election of the President was a difficult one to speak upon. At present, he believed, the President was elected by rotation; and he ventured to think that that was not the best method that could be adopted. Of the past, it might be said, "De mortuis nil nisi bonum;" and they could all honestly say that there was no single member at present on the Council whom they would not be willing to see in the Presidential chair. That could be said, he believed, without reservation. But, in times to come, no one knew what might happen. In the present progress of education, they might so deteriorate that possibly, by some mischance, a gentleman might find himself on the Council of the College of Surgeons who would be eminently unfit to occupy the Presidential chair; and, when his turn came, he would have to be put in, or passed over, which would be a slur cast upon his reputation from which he could never recover. He therefore thought that the system of election by rotation was exceedingly bad. He should be very glad to see the Fellows enabled at their annual meeting to elect the President for the ensuing year, as in other institutions. He was certain that the confidence would not be misplaced, and that the judgment of the Fellows might be trusted to elect to the chair a gentleman who would worthily fill it, as he might say it was filled in the present instance.

Mr. OLIVER PEMBERTON (Birmingham), seconded the motion.

Dr. COLLUM said he was astonished that such a proposition should be made. There were 16,258 members of the College, and out of all that number the business was to be carried on by 1,100 Fellows. He did not see why the College should not be very much strengthened by enlarging the constituency. He had been a great deal abroad, and he had never heard a word of the College of Surgeons, simply because the Members were severed from the Fellows—he could account for it in no other way. He had never known the College stand up to defend the officers of the Army, the Navy, or the Indian service. Years ago, when it was proposed to refuse naval officers being admitted to presentation to Her Majesty, Mr. Wakley stood up to oppose it, but the members of the Council did not. If they took into consideration the propriety of placing the election of the President in the hands of all the members, instead of in the hands of a certain body of Fellows, the College would stand in a better position with the public. He hoped the matter would be taken up, and that they would have a couple of members of Parliament. [*Laughter.*]

The first clause of the resolution was put, and carried almost unanimously.

On the second clause,

Mr. NELSON HARDY suggested the addition of the words "and Members," after "Fellows."

Mr. SWAIN accepted the suggestion, and said he was quite willing that the Members should have a share in the management of the College, and be consulted together with the Fellows.

Mr. OLIVER PEMBERTON, as the seconder of the motion, assented to the proposed addition.

The second clause of the resolution as amended was then put and agreed to.

Clause 3 of the resolution was also adopted without discussion, with a similar addition of the words "and Members."

On clause 4 (relating to the election of the President by a majority of the Fellows),

Mr. SWAIN declined to accede to the suggestion to add the words "and Members," believing that the privilege of electing the President was one which should be confined to the Fellows. If any Member desired the privileges of Fellowship, let him gain them. [*Applause.*] He did not speak egotistically. He was only one of 1,100. He had spent time and money and intellect in obtaining the privilege. He had the honour of being a Fellow of the College of Surgeons; there were certainly privileges attached to that honour, and he had a right to defend them. Any Member of the College had a right to obtain the same honour if he chose to take the trouble; but, until he did so, he had no right to filch from others that which they had obtained.

Mr. JOSEPH SMITH proposed, as an amendment, that the words "and Members" be added to the clause in the resolution.

Dr. COLLUM seconded the amendment.

Mr. VINCENT JACKSON (Wolverhampton) hoped that Mr. Smith and Dr. Collum would consider the matter carefully in proposing the amendment. He agreed with a great deal of what had been said. He held that the President of the College of Surgeons was not the President of the Fellows, but of the whole College, and as such, he should like to see the Members a little more to the fore; still, when it came to the election of the President, he admitted that, as the Fellows elected the Council, they should also have a right to elect the President from that body. He hoped, therefore, that the matter might be left in the hands of the Fellows themselves.

Mr. JOSEPH SMITH declined to withdraw his amendment.

Dr. PURVIS (Greenwich) moved "the previous question," which was seconded by Mr. JOHN SMITH.

The PRESIDENT explained the effect of "the previous question" to be, that it would be his duty to put from the chair, "that the principal question (viz., the amendment of Mr. Joseph Smith) be now put," and those who objected to it would vote in the negative.

On the question being so put, it was carried by a considerable majority, and the amendment was accordingly not put.

The original motion was then put, and "the previous question was again moved by Dr. PURVIS, and seconded by Mr. JOHN SMITH. This was agreed to, and the original motion was accordingly put and adopted.

The last clause of the resolution (for the alteration of the charters to give effect to the proposals) was adopted without discussion.

Dr. **Collum** asked if there was any appeal from the decision of the meeting. He considered it most unjust that so large a body of members should be disqualified.

The **President** said Dr. Collum could memorialise the Council, or take any other course that he desired.

The **President** said that another proposal had been handed in by Mr. Forrest, to the following effect: "That in any scheme for the investment of the funds of the College, a certain sum be set aside for the establishment of an indemnity fund, to recoup those members of the College who may be called upon to prosecute unqualified persons disturbing them in the exercise of their practice as surgeons." There was no "scheme" for the investment of the funds of the College, but the funds were invested according to the judgment of the Council. The wording of Mr. Forrest's resolution would have to be altered.

Mr. **Forrest** said he would alter his resolution by substituting, for the opening words, "That an indemnity fund be established by charter to recoup," etc. The question, perhaps, did not greatly affect many of the Fellows and Members present, but it affected many junior members practising in out-of-the-way parts of the country. By Section 17 of the by-laws, the Council undertook to protect and defend every Fellow and Member in the exercise of his rights and privileges. He (Mr. Forrest) had been practising near Hull, and, when an unqualified man established himself in the neighbourhood, he applied to the Council for protection; but was informed that the section he had cited did not apply to his case; he accordingly received no help. Under these circumstances, he failed to see what the rights and privileges of a member were. When a man had passed his examination, he was supposed to acquire certain privileges over unqualified persons; and he maintained that he was entitled to protection in the exercise of those privileges.

Mr. **Vogan** seconded the motion, which, on being put to the meeting, was negatived.

Mr. **Hickman** proposed: "That this meeting of Fellows and Members of the Royal College of Surgeons of England begs most respectfully to recommend that the Council of the College do obtain a charter enabling them to combine with the Royal College of Physicians of London, with a view to the amalgamation of the two Colleges into one great College of Medicine to be endowed with authority to examine and grant licences to practise in all branches of medicine and surgery, and to confer on its licentiates the degrees and titles of Doctor of Medicine and Master in Surgery." One of the purposes (he said) for which the meeting had been convened was to receive any suggestions or recommendations from Fellows and Members. That was an act of great liberality on the part of the Council, for which they were all deeply grateful; and he was emboldened by it to bring forward a recommendation which he hoped would meet with the approval of the majority of the meeting. The proposal was not an absolutely new one, but was one which had met with the approval of some of the most eminent members of the College. It was but the extension of a principle which, in the shape of the conjoint examination board, had already been discussed by the executive of both bodies, and it had only been prevented from being carried out by some technical difficulties. The present condition of things had been the cause of widespread discontent amongst English practitioners and the students of the English and especially of the London schools. It was an enormous drawback and disadvantage to the medical schools and teachers of London, and it was a source of great loss of influence and dignity to the Colleges themselves, and had a tendency to paralyse their usefulness in the future, if not to lead to their decay. For many years past, the numbers of the medical students at the various medical schools of London had been diminishing rather than increasing; during the last few years, the decrease had been very rapid, and some of the smaller schools were in danger of having to close their doors. He had not had time to look up the full statistics on the point, but he found from the *Lancet* that, in 1882, the total entries at the eleven medical schools in London amounted to 634, and in 1883 to 508, a decrease of more than 120 and that in spite of numerous advantages which were being constantly held out to students in the shape of exhibitions, entrance scholarships, and other prizes; also in spite of the fact that there was a large increase in the number of students entering the medical profession. Elsewhere the state of things was very different. The number of students at the Edinburgh University in the Faculty of Medicine, in 1883, was 1,781. Of that number, 682 were from Scotland, 620 from England, 33 from Ireland, 264 from the different British colonies, and 52 from foreign countries. He made no complaint against Edinburgh, or any of the Scotch Universities. The facts he had mentioned were most creditable to them, and he entirely sympathised with the tercentenary rejoicing about to take place at Edinburgh over the wonderful success of the university. But, if a credit to all the Scottish schools, the facts and figures he had cited were certainly a great scandal to the London schools of medicine; and if the decay of the schools was to proceed at the same rate, they would soon have no schools left, or but just sufficient to supply teaching to the small knot of men working for the degree of the London University. What was the explanation of the difference between the two sets of schools? Was it that the London hospitals were deficient in materials, or that the London schools were not equal to the task of giving a good and complete medical education? Was it that there was a falling off in the supply of appliances for teaching, or in the energy and teaching capability of the teachers, or in the public estimation of members of the staffs of the hospitals? He believed not. He thought that of late years more than ever their teachers had been energetic, intelligent, and capable, and that the staffs of the various hospitals were equal in eminence and standing to those in any hospitals in the world. The real cause of the difference was that, in Scotland, after going through the curriculum and passing some fair but ordinary examination conducted by professors with whom he had been more or less associated throughout his whole career, the student received not only a licence to practice, but the higher title of a degree of Doctor of Medicine, and commonly that of Master in Surgery. In London, on the other hand, after going through an equally extended curriculum, and not less difficult examinations, the student simply received a licence to practise, and to call himself a registered medical practitioner, consequently being relegated to a second rank by the public, who did not understand the nature and value of his many titles and diplomas, and being liable to be taunted by his professional brethren with having passed only an inferior examination. The degree was thus held out as a bait to attract, and a prize to reward the students at certain particular schools, and they could thus draw away large and increasing numbers of students from the medical schools of London, which were being starved and cramped, and threatened with annihilation. Students would not go, and parents would not send their sons to schools where it was so difficult to obtain a degree as in London. The following advice had been given to students in a lately published medical periodical: "If the student wishes to obtain the medical degree of an university, it will be prudent in him to take out the majority of his lectures under the professor who will be later on his examiner. The soundness of this policy is best recognised in the Scotch universities." It was, however, added in a foot-note: "It is a flaw in the university-system that the man who as professor teaches the student, as examiner tests the value of that teaching. The more teaching, the more knowledge. Hence both examiner and student grow to regard lecture-room attendance as equivalent to knowledge. Hence, also, double courses of lectures, double time spent in the class-room, and less at the bedside; hence also double fees." [*Laughter.*] He imagined that the curriculum required and the examinations necessary to be passed by a man who took the Membership of the Royal College of Surgeons and the Licentiate of the College of Physicians, London, were at least equal in extent and severity to those demanded by any of the qualifying bodies of Scotland, and by most of those in Ireland. The man who had obtained the M.R.C.S. and the L.R.C.P. was as good a man all round as any graduate of Scotland, or of any university, except, perhaps, of Oxford, Cambridge, London, and Dublin. The Scottish and most of the Irish universities were especially great teaching-bodies; all their students were compelled to obtain the greater part of their medical instruction in the single hospital medical school attached to each, and the largest portion of students obtained there their entire medical education. It was, of course, of vital importance to those universities, and especially to their professors, that as many students as possible should be attracted to them. The examiners consisted entirely of the professors or their nominees; and, by means of the class and school examinations, the students easily learned to gauge the requirements of the examiners at the university examinations. Such examinations, however disinterestedly conducted, could not be so good and fair a test as those of the College of Surgeons and the London College of Physicians, the examiners in which were independently chosen from amongst at least eleven different schools, and were commonly unknown to the candidates even by name. The *Lancet* had said: "Inequality of examinations in the different divisions of the United Kingdom, combined with equality of privileges, is about as grossly inequitable a state of matters as could be permitted to continue." Surely the converse equally held good—that inequality of privileges in the various divisions, combined with equality of [illegible], was also grossly inequitable, and should not be permitted to continue. The M.D. degree now, more than in the past, had its social, professional, and commercial value. It had become enhanced by the public discussions of the new Medical Bill, emphasising as it did distinction between licence and mere qualifying titles and the higher titles to honorary distinctions. How the absence of a degree acted to the detriment of English practitioners was well shown by Lord Cairns and Lord Carlingford in the House of Lords on the introduction of the new Medical Bill. The English provincial schools had been agitating for the establishment of local universities mainly with a view of granting degrees in medicine, and thus attracting students to their classes. He had not a word to say against those very legitimate aspirations; but, if degrees were to be the property and monopoly of particular schools, surely some of the London schools were as much entitled to the privilege of conferring degrees on their own students as the schools of Edinburgh, Aberdeen, and Newcastle-upon-Tyne. He made no apology for having brought the subject forward; he was unbiassed in the matter, not being attached to any of the London schools, and not being connected with the London College of Physicians. But he had had the opportunity of conversing on the subject with a large number of medical students and practitioners of all ages, and he was convinced that there was a widespread dissatisfaction with the present state of things, and a general desire for change. He trusted that the resolution would be carried, and he hoped that the Licentiates of the Royal College of Physicians would take an example from that meeting, and address the Council of their own College to the same effect. There could be no doubt that if the Members and Licentiates had any voice in the governing bodies of the two Colleges, such an amalgamation as he had recommended would not be long delayed. The Colleges had the choice before them of remaining separate and gradually waning in authority and dignity and influence, or of uniting in a grand and noble institution representing the whole medical faculty of England, and combining in itself the traditions and memories associated with the brilliant array of illustrious names that had graced the annals of surgery and medicine from Cheselden to Paget, from Linacre to Jenner.

Mr. **Nelson Hardy** said it would be something like acting the play of *Hamlet* without the part of the Prince of Denmark, if the subject to which reference had been made had not been touched upon. It was absurd for the meeting to consider some little alterations in the amount of property to be held under the charter, and overlook the greater changes which were imminent in regard to the powers and privileges of the College, which, if the Medical Bill were passed in its present form, would probably be swept away. According to the schedule of the Bill, all the Acts of Parliament relating to the College, from the 32nd Henry VIII, would be repealed.

The **President** said that the College began in 1800 with its charter, and after that date, the only Act of Parliament which was really proposed to be repealed was that of 1875.

Mr. **Nelson Hardy** said that one of the Acts to be repealed was the Act for separating the barbers and surgeons, from which the College must date back. But apart from that, there could be no doubt that the Bill would take away from the College the right of granting diplomas. Unless the College made some move in the way of combining with the College of Physicians, the Act would be passed practically in its present form, and then any combination would be too late, because none of their diplomas would give a title to practise. If such a combination were formed now, it would cut away the ground from those who urged the necessity of passing the Bill. The Scotch colleges had formed a combination which certainly took away the ground of those who insisted upon a conjoint scheme in Scotland. No one alleged that the College had not done its duty in times past, and its privileges should not be taken away simply because other colleges had failed in their duty.

The motion was then put and carried, there being twelve votes in its favour, and six against.

A vote of thanks to the President, proposed by Mr. **Charles Hawkins** and seconded by Mr. **Wheelhouse**, brought the proceedings to a close.

Hastings and St. Leonard's.—That composite watering-place, Hastings and St. Leonard's-on-Sea, has formed an association in order to attract increased public attention to its many "natural and artificial attractions," especially as a health-resort for invalids. The borough of Hastings, judging by the death-rate, is undoubtedly remarkably healthy, considering its size and the fact that the deaths of visitors materially affect the rate. Its great charm in the colder season of the year is, of course, the Grand Parade, which is sheltered from the north, but enjoys the full benefit of the sunshine, which is more common in Hastings than in London. During 1883, the number of hours of sunshine registered at Hastings was 1,824.7; in London, it was only 1,197.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1884.

Subscriptions to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

THE MEDICAL ACT AMENDMENT BILL.

We desire to call renewed attention to the form of petition to the House of Lords and the House of Commons which was contained in the British Medical Journal of the 15th instant. The Bill introduced by the Government is based on the Report of the Royal Commission; and it is most important that the Government should receive the support of the profession throughout the country, if the Bill is to become law. We would, therefore, urge all our readers, who desire to see needful reforms carried out, to sign the form of petition without delay, and return it to the General Secretary at the Office of the British Medical Association.

The British Medical Journal.

SATURDAY, MARCH 29th, 1884.

PROJECTED CHANGES IN ARMY MEDICAL ARRANGEMENTS.

We were glad to observe that the Marquis of Hartington, when introducing the Army Estimates in the House of Commons on the 17th inst., stated, in the course of his few remarks on the Army Medical Department, that the system of examination for promotion was to be resumed. We know from the correspondence with which we are favoured by medical officers, that there are many among them who think that the reintroduction of examinations before promotion by competent and independent examiners, will greatly conduce to the advancement of the best interests, and at the same time to an increase of the prestige, of the army medical service. We declared our opinion, at the time the change in the regulations was made, that it was a mistake, not only in its direct effect of taking away a stimulus to study, and an inducement to medical officers to keep abreast of the advances which are constantly being gained in professional knowledge, but also in its indirect influence of making it appear to outside observers that the amount of professional acquirements possessed by the medical officers of the army was regarded as a matter of little moment by those in authority compared with the acquirements which were thought to be essential in the purely military parts of the service. Nor was this view confined to persons outside the military ranks, for in numerous instances we have received statements from medical officers that superior professional knowledge and ability were not matters to which any such value was attached as to lead to a medical officer's advancement in the service. Whatever amount of truth there may have been in the complaints which have been repeatedly reiterated on this head during recent years, it is quite evident that the very strong remarks and unanimous recommendation on the subject in the report of the Earl of Morley's committee could not be ignored in any plan for a reorganisation or reform of the department. As the subject is attracting fresh attention in consequence of the recent remarks of the Secretary of State for War in the House of Commons, we think it may be of service to quote the precise terms of the recommendation of the committee. Lord Hartington did not enter into any details regarding the manner in which the future examinations before promotion are to be conducted, nor as to the stages of the medical officer's career at which they are to be applied, but the arrangements under these heads will probably accord with the general principles on which the committee advised that the examinations on promotion should be restored. The paragraph of the committee's report which has a special bearing on the subject, is the following:

> "The authority and responsibility with which the army medical officers are now invested render their training a matter of first importance. As bearing on this subject, we desire to call attention to the fact that, under the present system, the public have less guarantee for the efficiency of the army medical officers than formerly. After the Crimean War, a system of examination for promotion was introduced, but it was abolished in 1874 as regards the army medical officer; and, although in the army such examinations have become more and more extended, in the medical department every test of such a nature has been discarded. Regimental officers are subject to periodical examinations up to the rank of field-officer; whereas medical officers, whose training should be of the most scientific nature, are deprived of any such test, and are promoted by seniority or selection, without the protective and stimulative influence of examinations. We recommend that the system of examinations for promotion should be restored."

The committee have also indicated the period at which, in their opinion, the examinations should take place, and, to a certain extent, the manner in which the examinations should be conducted, as well as the subjects to which the attention of the examiners should be more particularly directed. The recommendations on these points are that "between three and seven years' service any medical officer should pass through an examination, more especially in practical subjects, such as operative surgery, on which shall depend his promotion to the rank of surgeon-major. The proposed examinations should be conducted by independent examiners, and should include, in addition to the strictly professional subjects connected with medicine and surgery, theoretical and practical, all matters relating to army hospital administration, under which head are included nursing, ward-management, purveying, cooking, and sanitary matters." There is also a suggestion "that greater facilities should be given for special courses of study in civil or military hospitals in London or foreign capitals." As these recommendations were signed by Lord Morley, the present Parliamentary Under Secretary of State, and by Dr. Crawford, the Director-General of the Army Medical Department, upon whom the duty of carrying the recommendations into effect would in all probability chiefly devolve, as well as by all the other members of the committee that had been inquiring into the subject of the present system of army medical organisation, the announcement by the Secretary of State for War in the House of Commons, on which we have been remarking, is not calculated to awaken any surprise. One of our correspondents, an army medical officer of considerable experience, states in a letter on the subject that he would hail with satisfaction the introduction of an examination for promotion from the rank of surgeon-major to that of brigade-surgeon, as it is from the latter grade that the administrative officers of the medical service have to be selected, and it is of the utmost importance that these should be the best informed and most competent officers of the service, on account of the very responsible functions which they have to discharge.

Our contemporary, the *Broad Arrow*, has been recently calling attention to the erroneous step which was taken a few years ago in abolishing the competitive examination at the close of the Netley school-course. No reference to this matter was made by Lord Hartington in his observations on the reinstitution of examinations and other projected alterations in the regulations of the Army Medical Corps; and, as far as we have noticed, this particular subject was not alluded to during the inquiries of Lord Morley's committee. There seems to be every reason for believing our contemporary writes with knowledge, when it states that the efficiency of the school course has been much injured by divesting it of the principal of emulation. It is a mere matter of every-day experience that the majority of men in every position of life will work more closely when there is an opportunity of acquiring certain practical advantages by their [illegible], and there is no reason for doubting the statement that the opportunity of obtaining better places at the Netley examination, with consequent beneficial results to themselves throughout their whole career, was a very practical advantage, which many of those who were passing through the Netley course of study, and who had happened to be low down on the London list, knew how to appreciate.

The addition mentioned by Lord Hartington of two hundred men to the present strength of the Army Hospital Corps, will partially meet a need that has been long and sincerely felt in the military medical service. Of this sufficient proof was afforded in the evidence before Lord Morley's committee. The corps has been far below the strength which was necessary to enable it adequately to discharge the numerous duties it was called upon to perform, especially when the demands made upon it for supplying the hospital-requirements of foreign service, such as occurred during the late campaigns in South Africa and in Egypt, were added to the ordinary necessities of service at home and in the colonies. The difficulties in army hospital administration have been greatly aggravated by the contracted numbers of the hospital corps, and the sick have unavoidably suffered in consequence. Another step in a right direction was the reform which Lord Hartington announced of the present relations between the Army Hospital Corps and the officers of the Army Medical Department. Hitherto the Army Medical Department and the Army Hospital Corps have been two distinct bodies, notwithstanding the intimate connection which there is between them in the duties which they have mutually to perform. Lord Morley's committee, after a very full consideration of the subject, and of the anomalies involved in the divided organisation of two corps which were so dependent upon each other for the performance of their daily duties, recommended that the corps should be amalgamated, and that, on thus being merged into a single corps, under a common title, the officers and men of each should be assimilated in respect to uniform. It is to the practical execution of his recommendation which Lord Hartington alluded when he spoke of hoping that before long a complete unity would be established in the Medical and the Hospital Corps. Another satisfactory announcement by the Secretary of War was that schools of cookery have been established at which the men of the Army Hospital Corps may now be trained in the cookery suitable for hospital-patients. This, if rightly conducted, will be an incalculable boon to the army hospitals. One of the complaints most loudly and persistently brought forward against the army medical service during the late hostilities in Egypt, and by no one in stronger language than by Lord Wolseley, was the badness of the cooking and the unattractive forms under which the hospital diets and extra food were supplied to the patients. The medical officers who were questioned by Lord Morley's committee also complained greatly of the ignorance of the hospital-attendants in respect to cookery, and joined in advocating that proper means should be provided for training them in this part of their duties. Indeed, it seems from the evidence put before Lord Morley's committee, that although the men of the Hospital Corps had to do all the cooking in the hospital, they had never had any special instruction on the subject, but had had to pick up such knowledge as they possessed on the subject when and how they could. Considering the very important part that the administration of suitable diet, properly prepared, has in the treatment and restoration to health of the sick, it must be acknowledged that none among the alterations in the arrangements for carrying on the service in military hospitals recently announced by the Secretary of State for War, is likely to conduce more to the [illegible] and well-being of the patients in them, than his statement, that in future there is to be a thorough reform of the kitchen department.

THE INTERNATIONAL HEALTH EXHIBITION.

The Executive Council of the International Health Exhibition have, from the first, put prominently forward their intention to make the Exhibition an agent for spreading a popular knowledge of the scientific aspects of the subjects illustrated in the various classes. The field [illegible] connected with health, but the whole science and art of education; and, while not lacking in those meretricious qualities which will serve to catch the popular love of novelty and amusement, it will not fail to provide educational facilities for those who seek something more than a lounge. Probably the Exhibition will be more complete and representative in the department of Health than in that of Education, in spite of the fact that the latter department will not be open until a date somewhat later than the public inaugural ceremony. Much may however, yet be done in this department, and, when complete in June, it may be found to be larger and more comprehensive than we at present anticipate.

The great interest of the profession of medicine in the approaching exhibition will be in the department of Health, and arrangements now in course of completion will add two sections of peculiar importance as agencies for educating the public to a better apprehension of the aspirations of medicine, and the means by which she hopes to achieve her ends. The one is a library of hygiene and education, and the other is a model laboratory.

The Library will be a somewhat novel feature in exhibitions. It will be open to the public entering the Exhibition, but the regulations sanctioned by the Executive Council show that they intend it to be an implement to be used, and not an ornamental object to be gazed at. Books received will be classified and catalogued, and made available for use. Already steps have been taken to secure a representative collection of works on vital statistics; of reports and regulations relating to public health; of regulations with reference to injurious trades and of works on that subject; and of reports, statistics, and other works on the science of education. Foreign powers have, we understand, been applied to, through the medium of the Foreign Office, to lend their co-operation in this effort to create an international library of works of reference, and several responses have already been received. India and the colonies have also been invited to contribute towards the same end. In asking for reports and regulations concerning public health both at home and abroad, it has been found advisable to limit the request to reports and regulations issued by central or national authorities, and to decline, therefore, those issued by municipal or other local authorities. This limitation has, we understand, been necessitated by considerations of time and space. In addition to the library of reference, there will be a Reading-Room. To this latter room the current numbers of periodical publications of a sanitary or educational character will be admitted; but all books and periodicals sent to the library and reading-room will be for the use of the public, and not merely for exhibition. It is announced that a catalogue of the library will be printed; and there can be no question, if the work be carefully done by some experienced hand, that the printed catalogue will be of great value as a permanent index of the literature of the two subjects embraced. The Exhibition will doubtless be visited by a large number of strangers and foreigners interested in the subjects, who will carry away this catalogue to serve as a work of reference in the future; and it is, therefore, most desirable, so far as this country is concerned, that the library should be made as far as possible a complete collection of works on hygiene, on State medicine, and on vital statistics, especially of those published in the English language.

The arrangements with regard to the Model Laboratory are, we understand, in a less forward state, but steps have been taken which will, it is hoped, ensure success. The Model Laboratory will probably consist of two distinct though related departments; that is to say, it is intended to have a Model Hygienic Laboratory and a Model Biological Laboratory. In the former, which will be under the charge of Professor Corfield, all the apparatus necessary for the physical, chemical, and microscopical examination of water, air, soils, foods, and disinfectants, and also for the examination of sanitary appliances will be exhibited, and demonstrations of the methods used will be given from time to time. Thus the manner in which a microscopical examination of water-sediments, or a chemical examination of mineral and of organic matters in suspension and solution in water, as well as the mode of testing the value of filters, will be explained and illustrated; as will also the methods for the estimation of the carbonic acid and the detection of other gaseous impurities in air, the chemical and microscopical examination of the organic matter in air; and the mechanical, chemical, and microscopical examination of soils will also be illustrated. Special care will be taken to explain the mode in which chemical and microscopical examinations of various articles of food and drink, and examinations of "disinfectants," wall-papers, and articles of clothing, are conducted. The part of the work of a Hygienic Laboratory which is concerned with sanitary investigations strictly so called, will be illustrated by experiments showing the movements of air in pipes and its passage through various materials, and the methods for testing the soundness of drain-pipes and soil-pipes, and the efficiency of traps and other apparatus.

In the Biological Laboratory, which will be under the direction of Mr. Watson Cheyne, will be illustrated the methods, materials, and instruments used in the investigation of the bacteria and fungi associated with various diseases, so far, it may perhaps be well to add, as they can be shown without performing test-experiments on animals, which of course in such circumstances, for mere purposes of demonstration and education, would not be justifiable. In more detail, the objects and methods to be exhibited are, the materials and processes employed in preparing sterilised cultivating media, cultivations of various micro-organisms, especially those associated with disease; modes of demonstrating bacteria by staining, or other means; modes of investigating bacteria in air, water, and soil, and of isolating and studying the organisms found, and methods for testing the power of chemical agents in destroying bacteria; the micro-photographic apparatus in use for obtaining photographs of micro-organisms, microtomes, microscopes, incubators, purifying chambers, and other like apparatu will be shown in working order; demonstrations will be given from time to time, at which several of the matters mentioned above will be illustrated, such as the forms of various micro-organisms, cultivations of some organisms to show their modes of growth, methods of preparing sterilised cultivating materials, and of carrying out a series of pure cultivations, and methods of examining air, earth, and water for bacteria.

We anticipate great benefit from this Biological Laboratory, since it will tend to clear away many misapprehensions as to the nature and mode of growth of micro-organisms, and even contribute something to a due comprehension of their importance; while in some quarters, both within and without the medical profession, there has been an inclination to exaggerate the importance of the part played by "germs" in morbid processes, there has been in other quarters a tendency quite as marked to minimise their importance, and to deride the study of organisms so small and so apparently insignificant.

An acquaintance with these minute organisms, not only as they may be seen under the microscope, but with the results of their development, as they can be traced in the alterations produced in the materials on which they grow, will surely tend to more correct views of the nature of the great question of their pathogenic significance.

THE MEETING AT THE COLLEGE OF SURGEONS.

In another part of the present number of the British Medical Journal, a full account is given of the proceedings of the meeting of Fellows and Members of the Royal College of Surgeons of England, which, by the invitation of the President and Council, was held in the theatre of the College on Monday last. The event was an interesting and important one. The action of the President and Council in summoning the meeting must be recognised as a graceful indication of willingness, on their part, to take counsel on matters affecting the welfare of the College, not only with the Fellows, from whom they directly hold their official authority, but also with the much more numerous class of Members, who, though having no share in the management of the College, are of importance from their numbers and intelligence, and from forming the bulk of the general practitioners of England and Wales. That the act of the President and Council was fully recognised as one of courteous goodwill, was indicated more than once in the course of the meeting; and we may hope that it is the forerunner of more frequent opportunities of friendly conference between the authorities of the College and the holders of its diplomas. An additional proof of the friendly disposition of the Council was given in the fact that the great majority of its members were present; indeed, as the President remarked, all attended who were able to do so. At the same time, they abstained from voting or taking any active part in the proceedings.

The meeting was convened for the purpose of reporting to the Fellows and Members certain proposed alterations in the charters of the College, which had received the approval of the Council; and also of enabling the Fellows and Members to bring forward such suggestions with regard to the management of the affairs of the College, and to make such recommendations, as might seem expedient to them.

The first proposal was one of a technical nature, to the effect that the yearly value of the property capable of being held by the College should be increased from £2,000 to £10,000. A brief discussion took place on the matter, in which it was suggested that the sum should be left indefinite, or that the sum named should be larger. It was pointed out, however, that it was necessary to name a fixed sum in charters, and that it was not advisable to make the amount too high.

The next proposal was that the charter should be so altered as to give the Council power to determine the conditions of admission to the Fellowship by resolutions, and not by by-law, so as to bring the proceedings into harmony with those concerning the admission of members. This gave rise to some discussion, and was opposed by Mr. John Tweedy, who, in a speech at once able and temperate, expressed fear that the change might lead to a relaxation of the conditions of admission to the Fellowship. This, he argued, might not take place while the present Council had the management of affairs; but it was not possible to guarantee that circumstances might occur which might tempt a future Council to act in such a way as to lower the value of the honour of the Fellowship. Mr. Tweedy proposed an amendment in accordance with his views, which, on being put to the vote, was lost by a narrow majority—30 voting for and 32 against it. A second amendment, that there should be appended to the proposal of the Council a provision for submitting any proposed alterations in the regulations for the Fellowship to a special meeting of Fellows and Members, was also negatived; and the original motion was carried.

The third proposal was to the effect that the section of the charter limiting the fee for the Fellowship to thirty guineas should be altered so as to leave the amount undefined. This was opposed by Mr. Bartleet of Birmingham, who argued against the lowering of the fee. As was pointed out, however, Mr. Bartleet's argument was founded on a misapprehension of the intention of the Council, which was, not that they should have power to lower the fee—a power which, in fact, they already possess—but they should be enabled to raise it, if found expedient. After an explanation to this effect had been given by the President, Mr. Bartleet withdrew an amendment which he had proposed, to the effect that the fee should stand as at present; and the proposal of the Council was approved.

The fourth proposal related to the long agitated question of enabling Fellows to vote by proxy at the election of members of Council. The general feeling of satisfaction which is felt at the recent action of the Council in this matter, was expressed by Mr. Wheelhouse, who, on the part of the Association of Fellows of the College, read and handed in a resolution expressive of thanks for "the readiness and grace with which the Council had acceded to their wishes." The proposed change in the charter received the unanimous and hearty approval of the meeting; and the resolution handed in by Mr. Wheelhouse was ordered to be entered on the proceedings of the day.

The fifth proposal was to the effect that the fees payable by members of twenty years standing for admission to the Fellowship should no longer be required. The Council has power to admit only two such members in any one year; and the alteration will give them the opportunity of conferring a distinction on eminent members, without obliging them to pay a fee.

The sixth proposal, which was also approved without discussion, aimed at the abolition of the examinations for the licence in midwifery. This examination, as the President pointed out, has not been held for several years; but at any time its resuscitation might be demanded and enforced, and, to obviate such a danger, it was best that the Council should no longer have the power to grant the licence.

The last proposal of the Council referred to an alteration in the constitution of the Board of Examiners in Dental Surgery, and, after a brief discussion, was approved by the meeting.

The business put before the meeting by the Council having been disposed of, the Fellows and Members present were invited by the President to bring forward any recommendations they might have to offer in reference to the charters. Thereupon, Mr. Swain of Plymouth brought forward a series of resolutions providing for the admission of the Fellows to a greater share in the management of the College than they have at present; that a report should be presented by the Council to an annual meeting of Fellows; and that the President for the ensuing year should be elected by such meeting. At the suggestion of Dr. Collum, Mr. Nelson Hardy, and other members, the words "and Members" were inserted, with Mr. Swain's consent, in those clauses of his resolution which provided for the holding of annual meetings. But when it was proposed that the Members as well as the Fellows should have a share in the election of President, Mr. Swain declined to agree to the suggestion. The matter was disposed of by the adoption of "the previous question," the result of which was that the amendment in favour of giving the Members a direct voice in the election of the President was not put. With the alteration above indicated, Mr. Swain's resolution received the approval of the meeting.

A motion by Mr. Forrest, to the effect that provision should be made by charter to establish an indemnity fund for the benefit of those members of the College who might have to prosecute unqualified persons, was negatived.

The last proposal brought forward was one by Mr. Hickman, in favour of an amalgamation of the Royal Colleges of Physicians and of Surgeons into one great College of Medicine, with power to grant degrees. This was carried by 12 votes against 6; a large number of those present not voting. No doubt there was a difficulty in at once deciding on a proposal of such importance, which, especially in the face of the probability of the passing of a Medical Act Amendment Bill, would require much more careful consideration than could be given to it at the fag-end of a meeting of nearly three hours' duration.

THE INDIAN MEDICAL SERVICE.

HOWEVER wearisome to ourselves and our readers, we must, in Abraham Lincoln's famous phrase, keep "pegging away" at the India Office authorities until we shame them into doing justice to the junior medical officers of the Indian army. We trust those members of Parliament who have taken up the cause of those gentlemen will not relax their exertions in the same direction until success crown their efforts. There is something in a high degree irritating to the sense of justice of inpartial people in the cold, unsympathising, and persistent denial of justice on the part of Mr. Secretary Cross. If the officers whose just claims we advocate belonged to any other branch of the public service, redress of grievances would long ere this have followed the representations made in the press and in Parliament. Unfortunately, it is always safe to treat doctors with injustice, at home and abroad. It takes a long time to destroy the prestige of a service. For a long series of years, the Medical Service of India was the best in the world; and, if the authorities would only be roused to do justice, and to keep faith with its junior branches, it would still stand high in the estimation of the public and the profession, in spite of the many heavy blows it has sustained at the hands of the authorities since the government of India passed to the Crown. The first blow was the abolition of the Medical Funds in the three Presidencies, which constituted the chief attraction. This measure was intended to pave the way for the amalgamation of the British and Indian Medical Services. It was carried out in vain, for no serious effort at amalgamation has ever been made. Sir Charles Wood, who was the first Secretary of State for India, was extremely anxious to bring this measure about; and the readiness with which he abolished the Medical Funds evinced his determination to allow no consideration for the interests of the Indian Medical Service to stand in the way of the contemplated amalgamation. From that time to the present, a process of nibbling has been going on, which has shorn the service of a large number of its best appointments. We are not prepared to say that, under the altered circumstances of the case, it was possible to maintain the exclusive privileges of the old service entirely; but no one can dispute the fact that, in re-organising it to adapt it to new conditions, it has met with little consideration.

Still, to no inconsiderable extent, the *prestige* of the service remains; and we have only to consult the published results of the examinations, in London and at Netley, to see that it still commands, taking one year with another, the best men in the market; and this in the face of the fact that, for the first six years of their service, Indian medical officers draw less pay than their brother officers in the British Army serving in India. So difficult is it, as we have just said, to destroy the good reputation of a service; in this case, the process of deterioration has been going on for more than twenty years. But signs are not wanting that the time is at hand when the eyes of our young medical men, who seek a career in the public service, will be opened; and we warn the authorities that, although it may take a long time to destroy the good name of a service, the process of restoring it is more tedious still. It is with pleasure we see that Mr. Gibson intends to subject Mr. Cross to some further pressure. With a view to assist this able advocate, we venture to give a few hints for questions requiring an answer. 1. Mr. Cross has always maintained that the promises, distinctly conveyed in the official memorandum, placed in the hands of intending candidates for a long series of years, have been fulfilled to the letter; if so, how comes it that the latest *Bengal Army List* records the fact that twenty-eight, out of a total of fifty-nine surgeons, under and up to five years' service, are still drawing only "unemployed pay," although doing duty in responsible medical posts? 2. If, as Mr. Cross maintains, the memorandum above referred to was clear and explicit, why has it been found necessary to withdraw it, and issue another? 3. Was there anything in the original memorandum, on the faith of which so many men entered the service, to lead them to believe that they were liable to be made to serve in responsible positions, on diminished rates of pay, under the pretence that they were only "officiating" in such appointments? 4. Can Mr. Cross deny that, at this time, there are medical officers, in their sixth, seventh, eighth, and ninth years of service, who are drawing such "officiating rates of pay" for medical charge of a regiment? We all know that Mr. Cross assures his questioners that all grievances of this kind are in their nature temporary; but, as the *Army List* tells, they have been in full force for nine or ten years; and any one, who will take the trouble to look into the present rate of retirement of senior officers, will see that they will continue in force for years to come.

It must be understood that we are now, as always, pleading the cause of those who entered the service under the promises of the original memorandum; those who entered under the "amended memorandum" did so with their eyes open, and have no just cause of complaint.

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The Bishop of Exeter has been re-elected President of the Devon and Exeter Hospital for 1884-85.

We observe with much satisfaction that the question of private Bill legislation, to which we referred last week, is likely to be referred, with the assent of the Government, to a Select Committee of the House of Commons for investigation.

Mr. Frederick Treves has been appointed Lecturer on Anatomy at the London Hospital Medical School, in the place of Mr. Walter Rivington, appointed Lecturer on Surgery.

The *Archives of Laryngology*, which was published in America, has ceased to exist; but the *Annales des Maladies d'Oreille, du Larynx, et des Organes Connexes*, edited by Dr. Ladreit de Lacharrière, and published in Paris, has taken a novel departure, for the editor has associated with himself four co-editors, of whom the first is Dr. Morell Mackenzie; and, as a foretaste of the cosmopolitan principle upon which the magazine will in the future be managed, the first number under the new arrangement opens with a careful and practical article on Hypertrophy of the Mucous Membrane of the Nose, by Dr. Morell Mackenzie.

INTERNATIONAL HEALTH EXHIBITION, LONDON.

The Exhibition will be opened by the President, His Royal Highness the Prince of Wales, on Thursday, May 8th, at 3 P.M.

MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

A meeting of the Provisional Executive Committee of the Medical Sickness, Annuity, and Life Assurance Society was held at 38, Wimpole Street, on Thursday last. A report of the proceedings will appear in our next issue.

ITALY AT THE INTERNATIONAL HEALTH EXHIBITION.

The *Opinione*, in mentioning that His Majesty the King of Italy lately received Mr. Ernest Hart of London, a member of the Executive Council of the International Health Exhibition of London, and Mr. H. E. Acton, in special audience, adds: "The King received with interest particulars of the programme of the Exhibition, and entered at length into the details of the part which it was desired that Italy might take. His Majesty referred to the measures in progress for accentuating the sanitary movement in Rome, the Campagna, Naples, Milan, and other parts of Italy; and desired that it might be publicly known that he felt a lively interest in the Exhibition, and a desire that Italy should be adequately represented." We learn by private letters that the Minister of the Interior has communicated to Mr. Hart a copy of a circular letter which he has addressed to the provincial prefects of Italy, desiring their active aid in the matter, and that the Minister of Commerce has addressed a like official request to the local chambers. The city of Rome has named a special commission to prepare for exhibition a series of models and plans of archæological as well as of modern interest, illustrating the aqueducts, thermæ, columbaria, etc., and has voted a sum of money for the purpose. The food-products of Italy will be illustrated by private firms, and a large collection of the wines of North and South Italy will be shown.

MR. SAMUEL CARTWRIGHT.

We are glad to learn that a Cartwright medal or prize has just been founded by "the Association of Surgeons practising Dental Surgery," in honour of its President, Mr. S. Cartwright, of 32, Old Burlington Street. It is to be open for competition for the best essay on dental surgery, by registrable medical practitioners, and to be awarded either biennially or triennially; and Messrs. F. Brodie Imlach (Edinburgh), S. H. Cartwright, and J. H. Craigie have been duly appointed trustees of the fund. We feel sure there are many who may feel disposed to subscribe for such a purpose, knowing the high esteem in which Mr. Cartwright is held in the profession at large. Subscriptions or donations will be received and duly acknowledged by Mr. Hamilton Craigie, of 13, Savile Row, London, W.

GERMAN MEDICAL CONGRESS.

THE third German Medical Congress (*Congress für innere Medicin*) will be held at Berlin on April 21st, and three following days. The first sitting of the Congress will be opened by Professor von Frerichs, and a discussion on the etiology, pathology, and treatment of Acute Pneumonia will be commenced by Professor Jurgensen, of Tubingen. On the following day, Professor Leyden, of Berlin, will begin a discussion on Poliomyelitis and Neuritis; and, on April 23rd, Professor Leube, of Erlangen, will open a discussion on Nervous Dyspepsia, and will be seconded by Professor Ewald, of Berlin. Papers will also be read by Professor Goltz on Localisation of Cerebral Function; by Dr. Herman Weber, of London, on School-Hygiene in England; by Professor Rosenthal, of Erlangen, on Reflexes; by Dr. Pfeiffer on Vaccination; and by Dr. Seegen, of Carlsbad, on Diabetes. The festival dinner, which will be also the festival dinner of the jubilee to Professor von Frerichs, will be held on April 23rd.

ADULTERATION OF FOOD.

THE New York correspondent of the *Standard* telegraphs, under the date of March 22nd, that a Committee of the New York Senate has reported the results of an inquiry into the adulteration of dairy-products. Of thirty samples of butter, two-thirds were only remotely traceable to milk. The refuse fat of pigs and bullocks was the chief and most savoury ingredient, but often spoiled greases were used, which had been deodorised by nitric and sulphuric acids of a strength sufficient to rot a workman's cowhide boots, to cause the finger-nails to fall off, and induce various lingering diseases. The material was also found to contain ingredients which are fatal to infants. Medical evidence proved that the consumption of this compound had a distinct bearing upon the death-rate. The Committee advises the total prohibition of the manufacture of oleomargarine. Under these circumstances, it is a little alarming to learn that the exports in February included nearly one million pounds of butter and over three millions of cheese.

SMALL-POX IN INDIA.

THE epidemic of small-pox which has been prevalent in Madras since the beginning of the year, would seem to have assumed very serious proportions. About twelve hundred deaths from this cause occurred in the town of Madras during the first two months of the year, and telegraphic dispatches state that the epidemic is still raging in the town. In spite of some quarantine-precautions, chiefly the careful inspection of all persons entering Bangalore from Madras by train, and the watching of the main road between the two towns, small-pox has appeared at Bangalore. The latter town is an important military centre. Vaccination with calf-lymph is being extensively performed.

THE EPIDEMIC OF SCARLET FEVER AT SANDBACH.

MR. W. R. DAMBRILL-DAVIES writes to say that he considers the reports which have appeared as to the extent of the epidemic of scarlet fever at Sandbach are exaggerated; he believes that the deaths have been well under thirty in number, and were chiefly due to careless exposure during the desquamating stage; and attributes the spread of the infection to the entire absence of inunction. Since it commenced, last May, he has had fifty-five cases in all, including only three of scarlatina anginosa, and has been fortunate in not losing one. With a large practice, he has now only nine cases under observation, and the last is in her third week.

HYPODERMIC INJECTIONS OF CHLOROFORM.

IN a paper read at the Académie de Médecine of Paris, on February 12th, M. Bouchard stated that in rabbits the subcutaneous injection of one cubic centimètre of chloroform was always followed by drowsiness, diminution of the temperature, albuminuria, and death within forty-eight hours. The albuminuria appeared two hours after the injection, and was generally accompanied by hæmaturia. In dogs, the same phenomena were produced by larger doses. After death, the kidneys were found intensely congested, but the epithelium was healthy, and there was no increase of urea in the blood. The symptoms were apparently due to the action of chloroform upon the kidneys themselves or upon the central nervous system. Albuminuria was also observed in rabbits after inhalations of chloroform. In man, temporary albuminuria may follow inhalations of chloroform, but it has never yet been noticed after the subcutaneous injection of that substance. M. Bouchard thought that repeated injections of three cubic centimetres might prove dangerous.

AN ALLEGED CASE OF "SPONTANEOUS" COW-POX.

ON Christmas-day last, M. Layet and a number of medical men, veterinary surgeons, and others, examined and reported on an alleged case of spontaneous cow-pox occurring in a milch-cow at Cérons near Bordeaux. The animal presented on the four teats and the neighbouring parts of the udder a considerable number of small pustules, most of them already dried and covered with black crusts, but some containing a more or less milky fluid. The eruption was confluent, and there were no umbilicated pimples. It had made its first appearance on December 22nd. On December 26th, six or seven tubes were filled with the fluid from such pustules as had not already burst. The reporters state that an infant fed with the milk of this cow had at the same time presented very similar symptoms (*sic*). On December 26th, a calf was inoculated with the lymph in twelve places, and on December 31st three pimples had appeared, one only being well advanced, and the remaining punctures were marked merely by a little redness. That day a second calf was vaccinated from two of these pimples in thirteen places, new lancets being employed, and on January 4th every puncture was followed by a more or less well developed pimple. By this time those on the first calf had developed similar pimples, with equal success though more tardily. On the strength of this case and of one at Eysines, M. Layet states his opinion that "the vaccinogenous eruption of spontaneous origin is devoid of classic (*i.e.* characteristic) features; the pimples are not umbilicated; umbilication is the essential character of a transmitted vacciniferous eruption." We have already discussed the subject of the relations subsisting between small-pox, cow-pox, and vaccination, in the light of Voigt's experiments, and it is extremely provoking to see Frenchmen thus persistently ignoring or discrediting the successes of Ceely, Badcock, Thiele, Voigt, etc., because their own countrymen have failed. No amount of negative results can be of any value against several positively successful ones, especially when the conclusions to be drawn from the former would be entirely without parallel or analogy in pathology. Voigt has transformed virulent variola into benign vaccinia by a series of inoculations conducted with greater precautions than others have used; it is therefore idle for unsuccessful operators to deny the conversion, and the circumstances under which so-called cases of spontaneous cow-pox arise are rarely such as to preclude retrovaccination or variolation. In this very case, it is at least probable that the cow was infected from the infant. Pasteur employs alternations of the same morbid poison, and not that of some distinct and spontaneous disease, in his prophylactic inoculations for anthrax, etc. The "classic character" of umbilication enunciated above is simply evidence that a disease originally foreign to the bovine race, and therefore imperfectly developed, has become assimilated or naturalised, and attains its full perfection.

THE HOMES OF THE POOR.

THE floodgates of literature on the housing of the poor appear to have been opened by the appointment of the Royal Commission to inquire into the subject. Most medical officers of health refer to the question in their periodical reports, and either seek to acquit their own district of laxity in this respect, or offer suggestions as to the manner in which the evil can most promisingly be dealt with. Reports of local committees and special commissions of inquiry are also beginning to appear. It would serve no useful purpose to attempt to criticise in these columns the very various proposals for amendment contained in this diffuse mass of literature. But we think that the Royal Commission might very profitably appoint a subcommittee to digest the recorded opinions of those whose professional avocations bring them into constant contact with the poor, so that the practical recommendations of those who know most on the subject may receive due consideration. There is a danger that the Commission may be led away by the views of drawing-room sanitarians into the belief that sanitary houses for the very poor can be built as a profitable commercial speculation. The balance of opinion in the report before us is clearly opposed to this view. The Southwark Poor Committee goes so far indeed as to suggest that, for providing the necessary capital for building tenements, "the money invested by the working classes in the Post Office Savings' Bank, or any other suitable funds, should be made available." After all, the financial difficulty is the most serious one that has to be faced. Public opinion is coming strongly round to the belief that the tenement-houses of the poor must be subject to the same regulations and be as systematically supervised as common lodging-houses. It will probably have to be conceded as the duty of the community to provide decent homes for the abject and miserable, and to be prepared for a financial loss on the transaction. We regard it as particularly important that the Commission should devote special attention to this aspect of the case. Time will be wasted if much evidence be taken as to the nature and extent of the unwholesome housing of the poor. All this is universally admitted. The great point is to discover an efficient and workable remedy that shall violate as little as possible the rules of political economy. It appears to be forgotten by some of those who discuss the subject that, as Dr. Bristowe has well put it in a recent report to the Camberwell Vestry, "do what we will, a considerable proportion of the population of our large towns will live in filth, and what others term misery: their habits and tendencies are opposed to all sanitary principles, and they are certain to remain a discredit to themselves and us unless we banish them from our midst, or employ one half to keep the other half clean, or house them and feed them and keep them in idleness at the public expense."

FRANCE, AND THE INTERNATIONAL HEALTH EXHIBITION.

M. HERISSON, Minister of Commerce, has appointed a Commission to make the necessary arrangements for the suitable representation of France at the forthcoming International Health Exhibition to be held at London. The members of the Commission are MM. Wurtz, President; Dr. Favall, Inspecteur-Général des Services Sanitaires, Vice-president; M. Nicolas, Conseiller d'état Directeur de Commerce Exterieur; M. Jacquemart, Inspecteur-Général de l'Enseignement Technique; M. Marie Davy, Président de la Société Française d'Hygiéne; Dr. Proust, Président de la Société de Médecine Publique; M. F. Aure-Dujarric, Architecte Inspecteur du Ministère de Commerce; Dr. Martin, Commissaire-Général de la Section Française.

DUTIES OF LODGERS IN TENEMENT-HOUSES.

THE Vestry of Camberwell have gleefully passed a special vote of thanks to their health-officer, Dr. Bristowe, for a report in which he trenchantly attacks the model by-laws recently issued by the Local Government Board with respect to houses let in lodgings. We shall not follow Dr. Bristowe through his various criticisms on the by-laws; but there is one point in his remarks that appears to merit special attention, and that is the apportionment of duties between the different persons concerned in tenement-houses. If there be one point more than another which the recent discussions on the subject have brought out, it is that houses inhabited by a number of families need some one corresponding to the French *concierge* to keep order and be responsible for the cleanliness of the premises. The by-laws should impose upon this person, and not upon each lodger, the responsibility of performing the duties prescribed in the regulations. How, for instance, is the sanitary authority to enforce on each individual lodger the requirement that he shall cause every window of every sleeping-apartment to be kept fully open for two hours every day; or that he shall cause the room of every floor let to him to be thoroughly swept at least once in every day, and thoroughly washed at least once in every week? As Dr. Bristowe observes, "it is at least as desirable that he should wash himself from head to foot every day, and that his clothing should be frequently changed and cleansed;" but for these desiderata no provision has been made (nor could be expected) in the by-laws. Practically speaking, it is almost impossible that a sanitary authority can exercise any real power over lodgers, except through the people who take them as lodgers; and it appears very unwise to relax the hold on the letters of lodgings by throwing (as the model by-laws do) duties on lodgers which it is the duty of the letter of lodgings to perform, and many of which it is in his own interests that, backed up by the sanitary authority, he should himself enforce.

MR. PRICE AND CREMATION.

HAVING been acquitted of the charge of indecent cremation of the body of his dead infant, Mr. Price accomplished his object on March 14th. He fixed three hurdles on a hill, then piled half a ton of coal within the triangle thus formed, and upon a pair of large iron grates he placed a box containing the body of the child, wrapped in napkins. Petroleum was thrown over the coals, and this served to make the pile a mass of fire as soon as ignition took place. Mr. Price was present during the process, and chanted an ancient sacred song in the presence of a number of spectators. All the materials used in the cremation of his son were half a ton of coals, a gallon of paraffin oil, and sixpennyworth of wood, the total cost being only 8s. 2d. Every vestige of the infant's body was burnt, and the breeze carried away the ashes. The fire was so fierce that it melted the iron of the grate on which the body was deposited. He now announces his intention of erecting a crematorium at Llantrissant, where he desires that he himself and all his family shall be cremated. Persons who intend that their corpses should be consumed on the funereal pyre, or whose executors wish the remains to be so disposed of, will be accorded the requisite facilities. It appears that Mr. Price has received a large number of letters of approval from London, the continent of Europe, and India. Although many will disagree with the Welsh surgeon in matters of detail, he deserves a considerable amount of sympathy for having carried out what he believed to be the right way of disposing of his child's remains in the face of strong social prejudices. The advocates of cremation will do well to bear in mind that all the judges on the English bench may not agree with Mr. Justice Stephen's decision in favour of the practice; and further legal opinion on the subject will be advisable if many persons desire to carry out cremation as an established practice, and therefore on a large scale.

THE CURE OF INEBRIETY.

AN association with this object has been in operation in America since 1879; but only on March 25th was a similar association constituted in England. At a meeting held in London on that day, a new society, entitled the "Society for the Study and Cure of Inebriety," was formed to "investigate the various causes of inebriety, and to educate the professional and public mind to a knowledge of these causes, and to a recognition of the physical aspect of habitual intemperance." The officers for the first year are as follows. *President:* Dr. Norman Kerr, F.L.S. *Vice-Presidents:* Sir George Burrows, Bart.; Sir Spencer Wells, Bart.; Sir Edwin Saunders; Sir George H. Porter; Sir William Miller; Dr. Cameron, M.P.; Dr. Farquharson, M.P.; Professors Maclagan (Edinburgh), Macalister (Cambridge), McKendrick (Glasgow); Drs. W. B. Carpenter, F.R.S., B. W. Richardson, F.R.S., J. S. Bristowe, F.R.S., and C. J. Hare. *Treasurer:* Dr. Drysdale. *Secretary:* J. M. Caw, M.B., C.M. *Council:* Drs. Alfred Carpenter, J.P., Joseph Eastwood, J.P., C. R. Francis, Hart Vinen, Danford Thomas, George Robertson, Alex. Peddie (Edinburgh), Murray Lindsay (Derby), Bridgwater (Harrow), Messrs. Wickham Barnes, Sibley Hicks, F.L.S. (Liverpool), Joseph Smith (Rickmansworth), Balding (Royston), and Hurry. An inaugural address will shortly be given.

METROPOLITAN SANITARY STAFFS.

THE discussion that took place, at the last meeting of the Lambeth Vestry, on the application of Dr. Vernon, the health-officer, for the appointment of an additional sanitary inspector, and of a clerical assistant, reflects but little credit on that body. Notwithstanding the health-officer's statement that, since 1871, when the last permanent appointment to the sanitary staff was made, the population had increased from 208,302 to 258,048; that 10,467 houses had been built; and that six Acts of Parliament had been passed, imposing further duties on the staff, the Vestry refused to grant any additional assistance, beyond that of a youth to perform the clerical work. At present, Lambeth is served by four inspectors, who are supposed to supervise the sanitary circumstances of a district containing a population of more than a quarter-of-a-million inhabitants; and it needs but little consideration to see that this staff is quite inadequate for the growing requirements of the immense area comprised in the parish. As one member well observed, the Food and Drugs Act alone required the services of an additional inspector. The Vestry appears, however, as is too often the case, to be embued by the narrowest parochial spirit, and to be incapable of perceiving the essential necessity of keeping pace with the growth of the district.

OPHTHALMIC SURGERY IN MANCHESTER.

THE Annual Report of the Royal Eye Hospital, Manchester, just issued, contains some interesting statistics compiled by the house-surgeon. Of cataract-operations, 165 extractions were performed during the year. The operation was successful, and the resulting vision good, in 137 cases. In 11 cases, it was partially successful, resulting in closed pupil. The operation was successful, but the vision was defective from diseased state of eye before operation, in 4 cases. The eye was lost in 13 cases, in 8 of these from primary suppuration of cornea, and in the remaining 5 from purulent iritis, followed by atrophy of the globe. In reckoning the successful cases, 3 of the second group may be fairly included amongst them, as the vision resulting from opening up the pupil was $1_2{}^6{}_4$, $1_2{}^6{}_4$, and 4 respectively. Some of the other cases in this group will, by secondary operations, furnish useful eyes. Von Gräfe's modified linear was the operation performed in every case; the incision was purely corneal. Chloroform was only administered twice. There was escape of vitreous in 15 cases, and of these 4 were lost. Iritis occurred during recovery in 31 cases, incarceration of iris in 1, and sympathetic ophthalmitis in 1. Out of a total of 358 cases of purulent conjunctivitis in infants, there were 58 cases in which one or both corneæ were affected. The following is an analysis of the condition in which these cases were first brought to the hospital. One cornea only was affected in 40 cases; among these, the eye was lost in 11 cases, perforation occurred in 6 cases, ulcer in 15 cases, leucoma in 2 cases, haziness in 7 cases. Both corneæ were affected in 18 cases. Both eyes were lost in 1 case, perforated in 2 cases, ulcerated in 6, leucomatous in 2, and hazy in 2. One eye lost, other ulcerated in 1 case. One eye lost, other leucomatous in 1. One eye perforated, other ulcerated in 1. One eye hazy, other ulcerated in 2 cases. There were only 13 cases of shuttle accidents this year, as against 29 in the previous year. In 6 cases, the eye was lost from rupture of the globe, in 5 the injury was confined to the lids, in 1 case there was blood in the vitreous, and in 1 case there was subconjunctival dislocation of the lens. In the refraction department, 3,188 patients were tested for, and ordered, suitable spectacles, 180 of these being cylindrical glasses. Of the 14,702 patients admitted during the year, 7,504 were males, and 7,198 females; 1,090 under 10 years of age, and 14 between 80 and 90 years of age.

SUNSTROKE IN THE SOUDAN.

THE terribly trying nature of the climate of the Soudan was shown in a striking manner by the numbers of men who were obliged to fall out during the march from Suakim towards Tamanieb on the 25th inst.; the official return gives 150 as the number who fell out, of whom twelve were exhausted to a serious degree. The telegram from the *Times* correspondent states that nearly 400 fell out. "A few cases were of a very serious character, but the medical arrangements are so perfect that no case has been fatal. The ambulances carried a ton and a half of ice, without which probably several deaths would have occurred." Another report states that nearly fifty men have had to be sent back to Suakim, but that in only one case were the symptoms of sunstroke very severe. That this has been so, is due no doubt to thorough supervision and prompt attention on the part of the officers of the Army Medical Department.

DR. ALLEN THOMSON.

WE regret to have to announce the death, on Friday, March 21st, of Dr. Allen Thomson, formerly Professor of Anatomy in the University of Glasgow, at the age of 75. Dr. Thomson held a high position in the scientific world as an excellent anatomist, and an able contributor to the science of embryology. He held the professorship of Anatomy in Glasgow from 1849 to 1877; previously to which he had occupied chairs in the Universities of Aberdeen and Edinburgh. He was a member of the General Medical Council from 1859 to 1877; and President of the British Association for the Advancement of Science in 1877. He was appointed the first President of the Glasgow and West of Scotland Branch of the British Medical Association, on its formation in 1875. We hope to be able to give, in our next number, a more complete sketch of the life and works of this eminent man.

THE HOSPITALS ASSOCIATION.

THE Hospitals Association has become a sufficiently organised body to hold its first business meeting last Wednesday evening, March 26th, in the rooms of the Medical Society in Chandos Street. Sir Andrew Clark was in the chair, and there was a good attendance both of ladies and gentlemen. The evening was opened by a paper read by Mr. W. J. Nixon, House-Governor of the London Hospital, on the important subject of "the difficulties associated with the administration of the out-patient department, and how best to deal with them;" and it was followed by a brisk discussion. The difficulties were almost universally admitted to be chiefly two: that there were too many out-patients at present to be satisfactorily dealt with at general hospitals; and that many comparatively well-to-do people availed themselves of this form of charity who ought rather to be obliged to pay in some way for their treatment. To meet these difficulties, three main remedies were advised: 1, inspection of the out-patients, cross-examination as to their financial position, and rejection of those in position to pay; 2, payment by the out-patients of some small sum in proportion to their funds; and 3, the relief of the crowded out-patient room by throwing some, at least, of its work on provident dispensaries. These were proposed in various combinations. The last was urged by Mr. Timothy Holmes in a short and forcible paper, which he was unfortunately unable to be present to defend. He advocated the restriction of the casualty department strictly to accidents, and of the out-patient department to those cases only who came with a certificate from a medical man for a consultation, and advised that after such consultation, they should either be admitted or sent to a provident dispensary or infirmary. This was far the most radical proposal, and undoubtedly struck most directly at the overcrowding of out-patient rooms. It was supported by Sir Charles Trevelyan, but was met partly by the emphatic denial of Dr. Gilbart Smith that the provident dispensaries had become or would become capable of managing so much, and partly by the argument of Sir Andrew Clark, that large out-patient departments were most essential to the medical school for learning the minor diseases, and the early stages of the graver forms. Inspection of some sort was almost universally advised; indeed, it constituted Mr. Nixon's only remedy, or rather prophylactic; but some graduated small payments in addition were advocated by Lord Cork, partly from his American experience at the General Hospital of Massachusetts, by Mr. Henry C. Burdett, who had been converted to the system rather against his will, and finally, in an eminently practical speech, by Dr. Herbert Page, who suggested that everybody should be seen once, but not a second time, unless he could pay something or had a governor's letter, which would give an opportunity for the patrons of the hospitals to continue to exercise certain privileges. It could hardly be denied that there were some disadvantages attending the payment system; the patient might consider himself to have the right of claiming an amount of time and attention which it would be impossible to give, and further it was likely enough, as Dr. Gilbart Smith urged, to fail in the most essential point of diminishing the out-patient attendance, and the total amount of money received would probably be very small. Still some form of inspection and payment was the proposal most in favour; little was known about the provident dispensaries, especially in the provincial towns where their greatest successes have been attained; and the very important question of the relation of the general practitioner to the various schemes of rearrangement seemed hardly to be thought worth attention.

HYGIENE IN DOMESTIC SERVICE.

EVERY practitioner must have remarked the commonness of a certain type among the patients who come to consult him from the ranks of domestic service. We have chiefly in our eye female servants, for these especially exhibit the condition to be considered, though men and boys also, sooner or later, suffer in a similar way. The fagged and irritable heart, the watery but spastic pulse, atonic dyspepsia, and *malaise*, even apart from the evidence of a pasty skin and history of hard house-work, suffice for the diagnosis of anæmia. It is very common to find that the subjects of this condition have but recently come up from the country. They have exchanged the fresh air, regular hours of work and rest, and plain wholesome fare of their former homes or service, for the late work, the early waking, and the small unventilated sleeping-room of a city mansion. The relation between cause and effect is obvious. Hygiene is ignored and health suffers. What, then, is to be done? It is easy to point to the evil, but more difficult to devise its cure. We are convinced, however, that much could be accomplished by a reasonable exercise of common sense on the part both of masters and servants. More space, air, and sleep are required. By means of these the frame will be rendered fitter to meet and overcome the generally moderate fatigue of domestic service. With regard to air-space in servants' bedrooms, it should not be very difficult to allot a minimum of 800 cubic feet per individual. Less than this must lead to impairment of health. Ventilation can, as a rule, be maintained even in our capricious climate, if servants can be taught that the window may be kept slightly open at the top without danger from cold. A room without free communication with the outer air readily becomes impure, and is unfit for habitation; a window is a necessity. Seven hours of sleep for men, and eight for women, are generally admitted to be no more than essential, and might, with but very moderate forethought, be allowed by masters and mistresses to their domestics. We have not spoken of recreation. It is often difficult alike for servants and for comparatively independent persons to make due provision for this important factor of health. Something has, no doubt, been done by timely holidays. Measures like these which we have suggested must, if adopted, help and not hinder work, and must increase the well being and just contentment of that large class on which every other class is, in so great a measure, dependent.

ENDARTERITIS AND GANGRENE OF THE LIMBS IN TYPHOID FEVER.

THE cause of the arterial obstructions sometimes observed in typhoid fever has been the subject of much discussion and of numerous researches during the last few years. Some authors, adopting Hayem's opinion, tried to prove that thrombosis of the arteries is the result of their obliteration by an embolus coming from the heart; but this organ is sometimes found quite healthy, and a paper published recently by Dr. Barié in the *Revue de Médecine* goes far to support an opinion already expressed by Patry de St. Maure, according to which the obliteration is due, in nearly all cases, to endarteritis. Dr. Barié, who bases his conclusions on careful observations and necropsies, states that typhoid fever may produce two forms of endarteritis, the obliterating and the parietal. Both are characterised anatomically by an infiltration of all the coats of the artery with embryonic cells; the internal coat loses its polish, and in the obliterating form the blood coagulates at the diseased spot and plugs the vessel; in the parietal form, small clots are found on the internal coat, but the circulation is not arrested. These lesions occur most frequently in the arteries of the lower extremities, but they may be found also in those of the upper limbs, in the carotid, the arteries of the heart, liver, spleen, etc. They are due, according to Dr. Barié, to an inflammation of the arterial walls, and to a vaso-motor paralysis consequent on the presence of micro-organisms in the blood. They appear generally about three weeks after the onset of the disease. The symptoms of the obliterating form are violent pains along the artery, which is hard and tender to the touch, diminution or disappearance of its pulsations, swelling of the limb without œdema or redness, and diminution of the temperature; after some time, dry gangrene of the limb generally supervenes, and amputation may be required; the prognosis of the operation is of course very unfavourable, but some successful cases have been recorded by Lereboullet, Patry, and others. In the parietal form, there is also pain along the artery and swelling of the limb, but the vessel does not feel indurated, the pulsations are often increased at first and then diminished; the temperature of the limb, is generally lower but sometimes higher than on the sound side. After a few days, the symptoms disappear, and in most cases the patient recovers completely.

BUFALINI ON VIPERINE POISON.

G. BUFALINI records in the *Rivista di Chimica Medica e Farmaceutica*, December 1883, a series of experiments on the nature of the poison of the viperine snakes in contrast with that of the colubrines. He recalls the experiments of Fayrer on the poison of Naja tripudians, by which it was shown that the blood of animals poisoned by that snake was capable of poisoning another animal when it was injected beneath the skin, while, on the other hand, no such effect was produced if the blood of an animal killed by a poisonous alkaloid were used. An opportunity of testing, by similar experiments, the action of blood taken from a fatal human case of viper-poisoning having occured, Bufalini has tried the effect of intraperitoneal injections of the blood on rabbits to determine the question whether the action of the viperine poison resembled that of the colubrine Naja tripudians, or whether, as Albertoni has stated, it was akin to that of an alkaloid poison. In order to prolong the experiment and to ascertain whether any peculiar form of bacillus was developed, a series of animals was employed, the blood from the first rabbit being injected into the peritoneum of the second, and so on. In the first experiment, the blood from the patient who had died from the effects of the viper-bite, was injected into the peritoneal cavity of the first rabbit; it had been taken from the inferior vena cava and was abnormal, the leucocytes being granular and massed together, the red corpuscles distorted and pale; there were no bacteria. In twenty-four hours no toxic symptoms developed; some blood from the first rabbit was then defibrinated and injected into the peritoneal cavity of a second, and again no symptoms of poisoning occurred. In a similar manner the blood of this rabbit was injected into the peritoneum of a third with negative results. This blood was examined microscopically, and found to be normal in appearance. The series of experiments concluded with the injection of a fourth animal, with similarly negative results. Bufalini concludes that these experiments confirm the opinion of Albertoni that the viperine poison is a true poison resembling an alkaloid in its action, and therefore differing from that of the colubrine Naja tripudians.

PATENT MEDICINES.

MR. WARTON has undoubtedly earned the gratitude of the public and of the medical profession by his persistent efforts to obtain more efficient regulations with regard to the sale of so-called "patent medicines." Though the Bill introduced by him on Wednesday was not one which could command the support of the Government, and was therefore negatived without a division, yet the short debate raised has had one good effect, inasmuch as it has demonstrated the exceeding weakness of the arguments used to defend the existing arrangements. Chief among these was the contention that any alteration would injuriously affect vested interests. It was said that there were no fewer than eight hundred or a thousand owners of proprietary medicines, and that nineteen thousand people were employed in their manufacture and sale. If this be so, it can only show the great need that exists for regulating a trade of such magnitude, and liable to have such injurious effects on public health. A still weaker argument was used by Mr. Hopwood, who detected "trade-unionism" in the hostility shown by coroners towards patent medicines. The argument is a little unfortunate, inasmuch as no class of men have a better opportunity of forming a correct opinion as to the injurious results of the present unrestricted sale of these preparations, and as, moreover, the majority of coroners are not medical men, and therefore can have no feeling of "medical trade-unionism." The Attorney-General, though sympathising with the object with which the Bill was introduced, opposed it, but at the same time stated that the Government intended to introduce a Bill into the House of Lords dealing with the whole matter in hand in a broad sense. We have every reason to believe that the interests of the profession and of the public will be regarded by the Government in this measure, which will doubtless be deserving of the loyal support of the medical profession at large.

A DEATH FROM CHLOROFORM.

MR. G. H. SNOWDEN, the Resident Medical Officer of the Portsmouth Royal Hospital, writes that a death, during the administration of chloroform, took place on March 26th at that hospital. The patient, a man, aged 45, had a papilloma of the tongue, which it was proposed to remove by the excision of a part of that organ. Two members of the in-patient staff and some of their medical friends were present. The anæsthetic was administered by Mr. Snowden; the patient had passed through the struggling stage, in this case slight, and was just completely under the influence of the chloroform; the apparatus, flannel stretched on wire, with a single fold of a towel over it, had been removed, and the patient's head slightly raised by the gentleman who was about to operate, in order to get more light into the mouth, when the face became livid, and the heart's action was found to have ceased. The patient was immediately laid quite flat, a bolster placed under the shoulders, artificial respiration resorted to, a galvanic battery brought into use, a cold douche applied to the head, but, unfortunately, with no favourable result. The heart-sounds appeared quite normal, when that organ was examined before commencing to place the patient under the anaesthetic. The time occupied in the latter process was about six minutes. Duncan and Flockhart's chloroform was used as usual, and no more than an average amount was consumed.

WHAT IS A CONSULTING PHYSICIAN?

THE definition of the term "consulting physician" is more difficult than might at first sight appear. The question occupied one of the judges in the Queen's Bench Division of the High Court of Justice for some time last week. Every physician, practising as physician only, aspires to be consulted; and a physician who is habitually consulted is commonly called a consulting physician, though this phrase is probably more frequently heard from laymen than from members of the profession. Yet one of the censors of the College of Physicians, himself a distinguished example of what is commonly understood by the phrase "consulting physician," stated in his evidence that all the leading physicians he knew were content without assuming the word "consulting," though some had so much consulting business that they had no time for ordinary patients. Further, he thought the term was an incorrect one. Confusion has perhaps arisen, because instances have before now been known of aspiring consulting physicians who are not often consulted. Mr. Justice Hawkins expressed a very decided opinion that the term implies that the physician contracts to act only in consultation with another medical man having charge of the case. This ruling was, no doubt, perfectly correct in the particular case in point, but its universal application could hardly hold. With the merits of the particular case we are not now concerned. Mr. Justice Hawkins said that he was quite satisfied that Dr. Carpenter had acted as he believed rightly, and within his strictly legal powers; and the case ended in a friendly arrangement, Dr. Carpenter undertaking to be bound by the view expressed in the judge's ruling.

THE DOVER MILK EPIDEMIC.

DR. M. K. ROBINSON has now supplied the particulars as to the number of cases in the recent epidemic of throat-diseases at Dover, which we indicated last week as being wanting. It appears that 205 persons were attacked during the week ending February 9th by the peculiar affection which he, Dr. Robinson, describes, 51 of the cases being on the 3rd, 64 cases on the 4th, 51 on the 5th, and 22 on February 6th. The number of houses invaded by the disease where the implicated milk-supply was taken in was 82. They were chiefly the best houses in the town, and, for the most part, free from unsanitary defects. They were widely distributed, being situated on the acclivities and lowest levels, on the sea-shore and inland localities. In 31 houses there was only one case each, in 21 houses two cases each, in 15 houses three cases each, in 7 houses four cases each, in 5 houses five cases each, in 3 houses six cases each, in 1 house seven cases, and in another house the extraordinary number of nine cases. In no less than 19 of the 42 streets and separate localities supplied with the particular milk, every house in the street was invaded by the epidemic. All the cases, with the exception of eight, were persons above 17 years of age. This is a very unusually large proportion of adults, which might perhaps have thrown some doubt on Dr. Robinson's conclusions on the milk-origin of the epidemic, were it not that the particular dealer in question had a special service for the supply of nursery-milk, for which a higher charge was made. Those who were supplied with this nursery-milk appear to have escaped any unpleasant symptoms. A point worthy of notice is, that the incubation-period was shorter in those who took milk in the form of cream; many of those who partook of this luxury on the Saturday (February 2nd) sickening on the next and following days. It appears that some doubts have been expressed as to the relation of the milk to the outbreak; but if the sudden and general character of the outbreak be considered, and the intimate relation that existed between the outburst of the disease and the particular milk-supply in question, the conclusion seems inevitable, that the milk was the vehicle of the virus. As Dr. Robinson well observes "if this is admitted, the town is far less likely to suffer in its healthy reputation by the recognition of a known cause, than by clothing such outbursts of preventible disease in some mysterious atmospheric character."

IS IT POSSIBLE?

We learn from the *American Psychological Journal*, that there has been an official inquiry into the condition of the lunatic asylum of Central Kentucky, the result being very discreditable to the institution. We observe that this report dates back so far as September, 1882. The above journal, commenting upon it, observes, "We could give a small volume of testimony of like character, but the above suffices to show that restraints and punishments are not yet abandoned in all American institutions." It would have been more useful to inform the reader whether the state of things in the Kentucky Asylum con tinues at the present time. We infer such to be the case, from what follows. Dr. Gale, the superintendent, who, by the way, read a paper recently before the American Association of Medical Superintendents of Hospitals for the Insane, justified the practices in vogue at his asylum. Such practices include ducking refractory patients ("very beneficial,") and dipping a towel in water and laying it over the face of a patient. This, the doctor says, "produces a sense of suffocation, and the patient soon gives up and is tractable," and he has the assurance to add, "That remedy is used in every institution in the United States." As we do not for a moment believe it, we are surprised that the above Association has not repudiated the calumny, if not Dr. Gale himself. It accepted a paper from him at the last annual meeting, when he frequently spoke; and in a passing reference to the ordeal through which his asylum had passed, he observed, "I think we have come out all right. At least, the population has increased very rapidly in my institution since the investigation. I do not think that we lose anything by the investigations, and they are not very objectionable, except in the annoyance we are put to." At the inquiry, an attendant was asked what treatment he adopted if holding patients under water failed to quiet them, and he replied he could do nothing but restrain them. To the question, "How restrain them?" he replied, "By putting them in the cage sometimes." Question: "What is the cage?" Answer: "It is a wire cage they have." One of the asylum physicians asserted that it was "utterly impossible to conduct an insane asylum without using means of that sort (ducking, etc.) to keep up discipline, unless you get an attendant for every patient. As it is, a man takes his life into his hands every time he goes into a ward." Is it possible that such sentiments can be held and uttered by the physicians of an asylum at the present day? Is it possible that the medical superintendents of other asylums in the United States can hold their peace and not indignantly repudiate such doctrines? If they are silent, they cannot be surprised if outsiders draw an unfavourable inference, however unjust it may be, and, we doubt not, is.

TENEMENT HOSPITALS.

At the present time, many urban districts are considering how they can make adequate arrangements for the infectious sick. Mr. F. Vacher, Medical Officer of Health for Birkenhead, in a paper read at the meeting of the North Western Association of Medical Officers of Health at Manchester, suggests the erection of what he calls "tenement hospitals." Mr. Vacher points out that there are three distinct classes who have to be provided for: 1, voluntary patients who are willing to pay for themselves; 2, nonvoluntary patients, whose maintenance is paid for by their friends or their employers; 3, nonvoluntary patients whose maintenance is paid for out of the rates. These classes will not mix. They cannot be treated in the same wards, and yet it is most desirable that no obstacles should be put in their way, but that they should be induced to apply to the hospital whenever infectious disease arises. Mr. Vacher therefore proposes a building with a common stair and suites of rooms opening off it on each flat. Each suite of rooms would contain accomodation for a patient and a nurse, besides a closet and a linen-cupboard. Such a hospital would, under ordinary circumstances, be five stories high; and ten separate tenements would go to each stair case. As there are no windows looking endwise, a hospital might consist of two, three, and four blocks, placed end to end, according to the requirements of the locality. The cost of a single staircase-block would be about £1,400, and a pair of such blocks, joined and forming one handsome building, £2 700. This, with ground-rent or cost of site, and making a fair allowance for wear and tear, would bring the cost of lodging each patient to about 3s. 6d. a week, which cannot be considered an extravagant sum. The hospital would be under the care of the medical officer of health. Each floor would form a little hospital complete in itself. The nurse would be the person in charge, responsible to the medical officer as far as regards cleanliness and sanitary precautions, and responsible to the practitioner in attendance in all that relates to the nursing and treatment of her patients. Mr. Vacher hopes that by this arrangement separate and suitable accommodation might be offered at a moderate cost to the different classes above mentioned, and that thus they might be induced to isolate infectious cases as soon as illness appeared in the family. It is needless to add that any system which produced this result would be a decided step in advance.

THE MICRO-ORGANISM OF ACUTE INFECTIOUS OSTEOMYELITIS.

Dr. Becker has made, in the laboratory of the Berlin Imperial Sanitary Office, a series of important experiments on the micro-organisms discovered by Schüller and Rosenbach. He collected pus from five cases of acute osteomyelitis in which the abscesses had not been opened, and cultivated the micrococci contained in it on sterilised potatoes, coagulated serum, and gelatine-peptone. In the latter case, the pus was introduced by means of needles into the mass, which was then kept at the temperature of the room during three to five days. After that time, the puncture made by the needles assumed the appearance of white streaks, around which the gelatine liquefied gradually and took an orange-colour. After a few days more, the mass gave out a smell like sour paste, and the microscope revealed the presence of large numbers of micrococci, having the same appearance as those found in the pus. A small quantity of the mass was mixed with sterilised water and injected into the peritoneal cavity of some animals; they died in a very short time of acute peritonitis. The same fluid injected into the jugular vein caused acute septicaemia and death; but nothing abnormal was found in the bones in either case. Dr. Becker then injected a small quantity of the same fluid into the jugular vein of fifteen rabbits, after having, some days before, fractured or bruised the bone of one of their hind legs. On the day after the injection, weakness and loss of appetite were noticed; but after a short time the symptoms passed away, and the animals seemed to have recovered. At the end of the first week, however, a swelling formed at the seat of the bruise or fracture, the animals lost flesh, and died after a few days. On dissection, large abscesses were found around and in the bones, and in several cases metastatic abscesses had formed in the lungs and kidneys. Numerous colonies of micrococci were discovered in the blood and pus of the animals upon which the experiments were made.

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SCOTLAND.

We observe that, among the new code of regulations for education in Scotland just issued, it is very properly laid down that, with regard to sewing, the materials used should not, under any circumstances, be so fine as to strain the eyesight of the children.

PHYSIOLOGY AND TEMPERANCE.

As far back as 1880, the School Board of Glasgow decided that the attention of head masters of schools should be directed to the advisability of giving some instruction, in the physiology classes, on the subject of temperance in the use of alcoholic drinks. When commenting on the fact at the time, in the Journal, we approved of the course proposed; and we are glad to see, from a report just issued, that the Board's suggestion has been very generally adopted, and that the instruction suggested has been more or less carried out. Nothing but good can result from thus early inculcating on children ideas of temperance and frugality, provided it is done in no narrow and illogical manner.

BEQUESTS TO MEDICAL CHARITIES.

We have pleasure in recording the munificent legacies bequeathed to Scottish medical charities by the late Mr. James White of Overtoun. They are as follow:—the Scottish National Institute for the Education of Imbeciles, Larbert, £500; the Glasgow Royal Infirmary, £5,000; the Glasgow Western Infirmary, £5,000; Glasgow Eye Infirmary, £500; Glasgow Training Home for Nurses, £500; Association of Glasgow and West of Scotland for Relief of Incurables, £500; West of Scotland Convalescent Homes, Dunoon, £500. These, with other legacies to church and various charitable schemes, amount to the sum of £35,000.

EDINBURGH UNIVERSITY AND MEDICAL SCHOOL.

THE winter session terminated in the classes of the Medical Faculty in Edinburgh University on March 21st. The preliminary examination in arts for students about to enter the Faculty of Medicine was held early this month, and was more largely entered for than in any previous year. The first professional examination in medicine and in science is now going on, and the second follows in a few days. The winter session in the College of Surgeons and Extramural School also terminated on Friday. It may be noted that in the College of Surgeons the lectureships in Anatomy and in Pathology have become or will soon be vacant, through the resignations of Mr. C. W. Cathcart and Dr. J. B. Buist respectively. Applications for the vacancies are to be sent in as soon as possible to Dr. Moinet, Secretary to the Board of Lecturers, Royal College of Surgeons of Edinburgh.

THE TERCENTENARY OF EDINBURGH UNIVERSITY.

MATTERS are getting well into shape for the celebration of the tercentenary of Edinburgh University. Last week we published the official programme for the event, and there can be little doubt it will be adhered to. In an affair of this kind everyone cannot be pleased, and in the Edinburgh press there has been a correspondence showing a considerable amount of friction. Every effort, however, is being made to reduce causes of dissatisfaction, and there can be no doubt that everyone connected with the University and the Corporation and citizens of Edinburgh will do all that in them lies to make the festival one long to be remembered. It was thought at first that Royalty might have added lustre to the occasion; now, however, that seems impossible, and it cannot be doubted that the concourse of the *élite* of the world of science and art in Edinburgh at the tercentenary, together with the traditions of the occasion, will render the event even more memorable than if a considerable portion of the enthusiasm had manifested itself in the homage (not to use a stronger word familiar to the readers of Thackeray) done to one of the Royal Family. Since last week additional names have been added to the list of those upon whom the honorary degree of LL.D. will be conferred, and our own profession has received a greater share of the honours than at first seemed likely. These names we append, well satisfied that their merit well deserves the honour to be done them:—Dr. G. W. Balfour, President Royal College of Physicians, Edinburgh; Fordyce Barker, M.D., LL.D., President of the New York Academy of Medicine; Dr. John S. Billings, Washington; Dr. John Syer Bristowe, St. Thomas's Hospital, London; Mr. W. H. Flower, F.R.S., Royal College of Surgeons, England; Dr. Edward Henry Sieveking, Physician Extraordinary to Her Majesty the Queen; Professor Rudolph Virchow, of Berlin University; and M. Louis Pasteur, Member of the Académie des Sciences of Paris.

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IRELAND.

ALLEGED OUTBREAK OF CHOLERA IN RICHMOND BARRACKS.

A RUMOUR was circulated in Dublin on Monday last that cholera had broken out in the battalion of the Scots Guards stationed at Richmond Barracks. This statement was, we regret to say, widely circulated by the daily papers on Tuesday without due inquiry as to its authenticity, and naturally gave rise to a feeling of great alarm. It was entirely false, as was also another report that some of the men had died from blood-poisoning owing to the water-supply of the barracks having become impure. The only foundation for any report that could have been invented as regards the health of the regiment probably had its origin in the fact that one of the men died on the 13th inst., and another on the 12th inst., of pneumonia. We have the authority of Surgeon-Major Francis B. Baker, who is in medical charge of the Guards at the Richmond Barracks, for stating that neither cholera nor any epidemic has broken out in these barracks.

LISTOWEL WORKHOUSE.

ON three several occasions, Dr. John Dillon was elected medical officer to the workhouse, in the room of Dr. Fitzmaurice, but this appointment was objected to by the Local Government Board, and at last a sealed order was sent the guardians, stating that if some one else were not selected, the Local Government Board would appoint a medical officer themselves. Last week a fresh election took place, when, out of five candidates, Dr. Cussen was successful. Prior to the election, a letter was read from the Local Government Board, informing the guardians that, pending the result of the action in the Court of Queen's Bench by Dr. Dillon against the Board for refusing to sanction his election, the appointment of a medical officer would be made subject to the decision of the Court of Queen's Bench.

ADULTERATION IN THE CO. ANTRIM.

DR. HODGES, county analyst, in his recent report for the past year, states that the operation of the Adulteration Act in the county has produced an important improvement in the quality of several articles of food sold to the public. He adds that the admixture of milk with water, formerly a common practice, is now seldom observed in samples submitted to him for analysis.

QUEEN'S COLLEGE, CORK.

A MEETING of students was held on the 23rd ultimo, without permission of the College Council, in a room outside the precincts of the College, and resolutions were adopted at this meeting having reference to the regulations of the College. Letters also appeared in the newspapers, signed by the chairman and secretary of the committee appointed at the said meeting, accusing the College Council of injustice and infringement of the College statutes, and imputing dishonourable and sordid motives to the authorities. On the 18th instant, the Council having carefully considered the circumstances of the case, and being fully cognisant of the fact that a serious state of disorder had arisen among the students of the College as a consequence of the aforesaid meeting on February 23rd, inflicted upon Mr. Lynch (the chairman of the meeting), the penalty of rustication from the College until the end of the session of 1884-85. Mr. Hennessy, senior scholar in chemistry, forfeited the remaining term of his scholarship; Messrs. Kearney and O'Callaghan, junior scholars in medicine, were fined £2 each; and minor penalties were inflicted on others, several being reprimanded. An address, signed by nearly 150 students, was presented to the Professor of Anatomy, on the 21st instant. The address referred with regret to the statement that action had been taken to make the class regulations in anatomy and physiology the subject of inquiry before Parliament, and so tend to create an erroneous impression in the public mind regarding the relations existing between the professor and students in these departments. These relations, it was observed, had always been of the most cordial character, and any representation of them as otherwise was erroneous. The address concluded in the following words: "With reference to the implied imputation concerning the monetary and other arrangements in operation here, we need only state generally our conviction that the advantages we enjoy, as regards the zeal and ability of our professor and his assistants, the opportunities for practical instruction afforded by our College, and the very moderate nature of the fees for the different subjects in connection with the above departments, are at least unsurpassed in any similar institution in Ireland."

MOLIMINA MENSTRUALIA AFTER PORRO'S OPERATION.—M. Abel Damour has succeeded in obtaining information on thirty women who have recovered from that operation. In twenty-two cases, the catamenia ceased entirely, and nothing particular [illegible] of the period. Professor Porro observed [illegible] and a mucous discharge from the [illegible] In the remaining [illegible] cases, reported by various authors, [illegible] took place at the time of the catamenia from the vagina, rectum, [illegible] Dr. Ramello's patient who was operated on [illegible] 1880 [illegible] every month from slight epistaxis [illegible]

THE MEDICAL ACT AMENDMENT BILL. 1884.

SUBJOINED is a *verbatim* reprint of the Medical Acts Amendment Bill now before the House of Lords. It is intituled "An Act for the Consolidation and Amendment of the Law relating to Medical Practitioners."

BE it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. *Short Title.* This Act may be cited for all purposes as the Medical Act, 1884.

PART I. ADMISSION TO MEDICAL PRACTICE. LAW AS TO MEDICAL PRACTITIONERS.

2. *Medical Register.* On and after the appointed day, the *Medical Register* shall be continued in the manner in this Act mentioned, and there shall be entered therein the names of all persons entitled in pursuance of this Act to have their names entered therein, and every person whose name is for the time being on such *Register*, and no other person, is in this Act referred to as a registered medical practitioner.

3. *Title to Registration, 39 and 40 Vict., c. 41, s. 1.* On and after the appointed day, a person, whether male or female, who has proved his or her competency in medicine, surgery, and midwifery, by passing such final examination as is in this Act mentioned, and, with the exceptions and reservations hereinafter mentioned, no other person, shall be entitled to have his or her name entered on the *Medical Register* as a registered medical practitioner.

4. *Registered Medical Practitioner entitled to recover Charges.* On and after the appointed day, a registered medical practitioner may, save as hereinafter mentioned, practise the callings of medicine, surgery, and midwifery, or any of the said callings, in the United Kingdom, and (subject to any local law) in any other part of Her Majesty's dominions, and may recover in due course of law in respect of such practice any expenses, charges in respect of medicaments, or other appliances or any fees to which he may be entitled, unless he is a member of a college of physicians, the members of which are prohibited by by-law from recovering at law their expenses, charges, or fees, in which case such prohibitory by-law, so long as it is in force, may be pleaded in bar of any legal proceeding instituted by such member for the recovery of expenses, charges, or fees.

5. *Registered Medical Practitioner exempted from serving in certain Offices.* On and after the said appointed day, a registered medical practitioner shall be exempt, if he so desire, from serving on all juries and inquests, and from serving all corporate, parochial, ward, hundred, barony, and township-offices, and from serving in the militia, and the name of any such person shall not be returned in any list of persons liable to serve in the militia, or in any such office as aforesaid.

6. *Disqualification of Unregistered Medical Practitioner.* On and after the said appointed day, a person shall not be entitled to recover in any court of law in the United Kingdom any expenses, charges, or fees for any medical or surgical advice or attendance, or for any operation, unless he proves upon the trial that he is a registered medical practitioner.

7. *Unregistered Medical Practitioner not to be recognised in Act of Parliament.* On and after the said appointed day, the expressions "medical practitioner," "legally qualified medical practitioner," "duly qualified medical practitioner," "physician," "surgeon," or any expression importing a person recognised by law as a medical practitioner or member of the medical profession, when used in any Act of Parliament, shall be construed to mean a registered medical practitioner within the meaning of this Act.

8. *Unregistered Practitioners not to hold certain Appointments.*—On and after the said appointed day, a person who is not a registered medical practitioner shall not hold any appointment as a physician, surgeon, or other medical officer: *a.* In the military or naval service of Her Majesty; or *b.* In the United Kingdom in any hospital, infirmary, dispensary, or lying-in hospital, not supported wholly by voluntary contributions, or in any lunatic asylum, gaol, penitentiary, house of correction, house of industry, parochial or union workhouse or poorhouse, parish union, or other public establishment, body, or institution, or *c.* In the United Kingdom, to any friendly or other society for affording mutual relief in sickness, infirmity, or old age; or *d.* In the United Kingdom, as a medical officer of health; or *e.* In any emigrant or other vessel registered in the United Kingdom.

MEDICAL BOARDS.

9. *Establishment of Medical Boards.* 1. For the purpose of holding such examinations and for such other purposes as are in this Act mentioned, there shall be established in each part of the United Kingdom a medical board, to be styled the medical board of that part of the United Kingdom to which it belongs, and to consist of such number of members to be chosen by such authorities as in this section mentioned. 2. The members of the medical board for England shall be chosen by the following authorities: two by the University of Oxford; two by the University of Cambridge; two by the University of London; one by the University of Durham; one by the Victoria University, Manchester; four by the Royal College of Physicians of London; four by the Royal College of Surgeons of England. 3. The members of the medical board for Scotland shall be chosen by the following authorities: three by the University of Edinburgh; two by the University of Glasgow; two by the University of Aberdeen; one by the University of St. Andrew's; two by the College of Physicians of Edinburgh; one by the College of Surgeons of Edinburgh voting as a separate elective body; one by the Faculty of Physicians and Surgeons of Glasgow voting as a separate elective body; one by the College of Surgeons of Edinburgh and by the Faculty of Physicians and Surgeons of Glasgow voting collectively. 4. The members of the medical board for Ireland shall be chosen by the following authorities: three by the University of Dublin voting as a separate elective body; three by the Royal University of Ireland voting as a separate elective body; one by the University of Dublin and by the Royal University of Ireland voting collectively; three by the King's and Queen's College of Physicians in Ireland; three by the Royal College of Surgeons in Ireland. 5. A medical board shall be a body corporate by the name of the medical board of the part of the United Kingdom to which it belongs, having a perpetual succession and a common seal. 6. A medical board shall be renewed every five years by the whole of its members retiring, and (subject as in this Act mentioned) their places being filled up by the choice by the constituent authorities of a like number of members, but the corporate existence of a medical board shall continue, and the retiring members shall not vacate their offices until their successors have entered on the duties of their offices, and retiring members shall be eligible for re-election. 7. A casual vacancy in a medical board shall be filled up by the choice of a fresh member on the part of the constituent authority which returned the member who caused the vacancy. In any case of a casual vacancy, the member chosen to fill such vacancy shall retain his office so long as the vacating member would have retained the same if such vacancy had not occurred. 8. Any person of full age shall be qualified to be elected a member of a medical board. 9. A member dying between the time of his being elected a member and the time of his entering on his office shall be deemed to create a casual vacancy. 10. Any member of a medical board may resign by giving notice of his intention so to do in writing to the board. 11. The same person may be a member of more than one medical board. 12. The Privy Council, on the suggestion of the Medical Council hereinafter mentioned, or of their own motion, may at any time, as respects any medical board, report to Her Majesty that an increase ought to be made in the number of authorities entitled to return a member or members to such board, also in the number of the members of such board, by conferring on any medical authority established in the part of the United Kingdom to which such board belongs, and not being one of the constituent authorities for the time being of such board, and being, in the opinion of the Medical Council and Privy Council, or of the Privy Council, of sufficient importance to be worthy of such a privilege, the power of returning a member or members to such medical board. 13. The Privy Council, on the suggestion of the Medical Council, or of their own motion, may also from time to time report to Her Majesty that any constituent authority ought to be deprived of the privilege of returning a member or members to a medical board if the Medical Council and Privy Council, or the Privy Council, are or is of opinion that such authority has so diminished in importance as not to be entitled to such privilege. 14. The Privy Council shall also, at the expiration of every ten years, take into consideration the number of members returned to a medical board by the constituent authorities returning members to such board, and may, where any such authority in their opinion deserves such a privilege, report to Her Majesty that an addition ought to be made to the number of members returned thereby, or in case a constituent authority returns more than one member, that a reduction ought to be made in the number of members returned by such authority. 15. Any report of the Privy Council purporting to be made in pursuance of this section shall be laid as soon as practicable before both Houses of Parliament, if Parliament be in session at the time of the making thereof, or, if not, then as soon as practicable after the beginning of the then next session of Parliament. 16. If either House of Parliament present an address to Her Majesty within forty days next after any such report has been laid before such House that such report, or any part thereof, ought not to be carried into effect, no further proceedings shall be taken in respect of the report with regard to which such address has been presented; but, if no such address is presented by either House of Parliament within such forty days as aforesaid, it shall be lawful for Her Majesty, by Order in Council, to give effect to any such report, and any Order in Council so made shall be of the same validity as if it had been enacted in this Act.

10. *Medical Board to regulate Examinations subject to control of Medical Council and Privy Council.* The medical board of each part of the United Kingdom shall make (and, when made, they may from time to time, by a further scheme, revoke, alter, or add to) a scheme or schemes providing for the following matters: (1) The holding, at such times and places as may be most convenient, final examinations in medicine, surgery, and midwifery, for the admission of candidates to registration as medical practitioners; and (2) The appointment of examiners for such examinations; and (3) The nature and conduct of such examinations, and the qualification of candidates as to age, moral character, and any other matter necessary or expedient to be determined, by rules in relation to such examinations. Provided that (*a*) a candidate shall not be required to adopt, or refrain from adopting, the practice of any particular theory of medicine or surgery; and (*b*) provision shall be made for the admission of women to the examinations, but such distinctions (if any) may be made as may be judged proper between the cases of men and women, so, however, that the examinations of men and women shall be in all general respects equal as regards proficiency in medical knowledge and experience. Any scheme under this section shall be framed in such manner as to secure, so far as is practicable, as between the several parts of the United Kingdom, an equality of standard in each final examination, and an equal capacity for testing proficiency, also care shall be taken that the same comparative value shall be assigned to the importance of different branches of knowledge in the final examination held in each part of the United Kingdom, and that for that purpose the same maximum number of marks shall be assigned to the same branch of knowledge in such examination. At the conclusion of each final examination, the medical board shall certify to the Medical Council the persons who have passed the final examination with such credit as may entitle them to be registered as medical practitioners. Any scheme, revocation, or alteration of or addition to a scheme made by a medical board in pursuance of this section, shall be of no validity until it has been approved by the Medical Council and confirmed by the Privy Council.

11. *Election of Chairman and Vice-Chairman.*—Each medical board shall, at their first meeting, and afterwards from time to time at their first annual meeting, elect one of their members to be chairman, and one other of their members to be vice-chairman, for the year following such election. Any retiring chairman or vice-chairman shall be re-eligible. If any casual vacancy occurs in the office of chairman or vice-chairman, the board shall, as soon as they conveniently can after the occurrence of such vacancy, elect one of their members to fill such vacancy; and every such chairman or vice-chairman so elected as last aforesaid shall continue in office so long only as the person in whose place he is so elected would have been entitled to continue if such vacancy had not happened.

12. *Proceedings of Medical Boards in First Schedule.* The rules contained in the First Schedule hereto with respect to the proceedings of medical boards, and the other matters therein contained, shall be of the same validity as if they were enacted in the body of this Act.

MEDICAL COUNCIL.

13. *Establishment of Medical Council.*—1. For the purpose of exercising due supervision and control over the medical boards, and for the other purposes in this Act mentioned, there shall be established a Medical Council consisting of eighteen persons, to be chosen as follows: Six shall be nominated by Her Majesty the Queen, with the advice of her Privy Council, and such persons are in this Act referred to as Crown nominees; two shall be elected by the registered medical practitioners resident in England; one by the registered medical practitioners resident in Scotland; one by the registered medical practitioners resident in Ireland; four by the medical board of England; two by the medical board of Scotland; and two by the medical board of Ireland. 2. Any person of full age shall be qualified to be a Crown nominee, or to be elected and to sit as a member of the Medical Council, whether he is or is not a member of the medical profession, and the same person

may be a member of any medical board or boards, and also of the Medical Council. 3. The Medical Council shall be a body corporate by the name of the Medical Council of the United Kingdom, having a perpetual succession and a common seal, with a power to acquire and hold lands, for the purposes of its constitution, without any licence in mortmain. 4. The Medical Council shall be renewed every five years by the whole of its members retiring, and their places being filled up by the nomination by Her Majesty and by the election in manner in this Act provided of a like number of members, in the places of the retiring Crown nominees and retiring elected members; but the corporate existence of the Medical Council shall continue, and the retiring members shall not vacate their offices until their successors have entered on the duties of their offices, and any retiring member may be nominated again by the Crown, or be elected again. 5. A casual vacancy in the Medical Council, if it occurs amongst the Crown nominees, shall be filled up by Her Majesty the Queen; and if it occurs amongst the members elected by any medical board, shall be filled up by the medical board by which such member was elected; and if it occurs amongst the members elected by the registered medical practitioners of any part of the United Kingdom, shall be filled up by election by the registered medical practitioners of that part of the United Kingdom from whence the member who created the vacancy was returned. In any case of nomination by the Crown, or of election to a casual vacancy, the Crown nominee nominated, or person elected to fill the vacancy, shall retain his office so long only as the vacating member would have retained the same if such vacancy had not occurred. Provided that a casual vacancy occurring amongst the members elected by the registered medical practitioners of any part of the United Kingdom, if it occurs during the fifth year after the first establishment of the Medical Council, or during the fifth year after any quinquennial renewal of the Medical Council, shall not be filled up unless the Medical Council so direct. 6. A member of the Medical Council dying between the time of his being nominated by the Crown, or being elected a member, and the time of his entering his office, shall be deemed to create a casual vacancy. 7. Any member of the Medical Council may resign by giving notice of his intention so to do, in the case of a Crown nominee to Her Majesty, and, in the case of an elected member, to the Medical Council.

14. *Powers of Medical Council.*—The Medical Council shall have power from time to time, by visitation or otherwise, to inquire into the sufficiency of any final or other examinations conducted or recognised for the purposes of this Act. The Medical Council may also make inquiries of and call for any information from any of the medical boards constituted by this Act, also from any medical authority or medical school, or other medical body taking any part in any medical examination or medical education in pursuance of this Act. The Medical Council shall have power by order to regulate the performance of their duties by each medical board, and a medical board shall conform to any orders so given by the Medical Council, subject to this proviso, that any medical board aggrieved by any order made by the Medical Council under this section, may appeal therefrom to the Privy Council, and the Privy Council may reverse, modify, or confirm any order so appealed against.

15. *Committee of Medical Council.*—The Medical Council shall from time to time appoint a committee or committees of their own body, and may delegate any of their powers except that of approving schemes or making orders regulating a medical board to any such committee. Any committee so formed shall, in the exercise of the powers delegated, conform to any regulations that may be imposed on them by the Council, and, save as is otherwise provided by this Act, any committee formed in pursuance of this Section may consist of such number of members and have such a quorum as is directed by the Medical Council.

16. *Election of President and Vice-President.*—The Medical Council shall at their first meeting, and afterwards from time to time at their first annual meeting, elect one of their members to be president, and one other of their members to be vice-president for the year following such election. If any casual vacancy occurs in the office of president or vice-president, the Medical Council shall, as soon as they conveniently can after the occurrence of such vacancy, elect one of their members to fill such vacancy; and every such president or vice-president so elected as last aforesaid, shall continue in office so long only as the person in whose place he is so elected would have been entitled to continue if such vacancy had not happened. The president and vice-president of the Medical Council shall be *ex-officio* members of every committee of the Council. Any retiring president or vice-president shall be re-eligible.

17. *Proceedings of Medical Council in Second Schedule.*—The rules contained in the second schedule hereto with respect to proceedings of the Medical Council and committees of the Medical Council, and the other matters therein contained, shall be of the same validity as if enacted in this Act.

PART II. MEDICAL EDUCATION.

18. *Course of Medical Education.*—Every candidate, before being allowed to offer himself for final examination in any part of the United Kingdom, shall comply with the following requirements, that is to say. 1. He must have passed such a preliminary examination in general knowledge as may be deemed sufficient to qualify him for admission as a medical student; and, 2, he must have been admitted as a medical student; and, 3, he must have passed through a course of medical education, comprising such experience in the practice of medicine, surgery, and midwifery, and the acquisition of such professional and scientific knowledge as may be necessary for the purpose of securing efficiency in his exercise of the profession of medicine, surgery, and midwifery. A correct register of all the persons admitted as medical students in each part of the United Kingdom shall be kept by the medical board of that part. Women, as well as men, shall be registerable as medical students.

19. *Medical Board to Regulate Course of Medical Education Subject to Approval of Medical Council and Privy Council.*—It shall be the duty of each medical board to make (and, when made, they may from time to time by a further scheme revoke, alter, or add to) a scheme or schemes with respect to the following matters within the part of the United Kingdom to which such board belongs, that is to say. 1. The required preliminary examinations for the admission of persons [illegible] admitted as medical students; and, 2. the required course of medical education. With respect to the course of medical education, the scheme shall [illegible] the schools in the United Kingdom or elsewhere (in this Act referred to as [illegible]) medical schools) which are to be recognised [illegible] of medical students [illegible] and [illegible] time to time [illegible] of medical education, the [illegible] of the students [illegible] study; and [illegible] (in this Act referred to as [illegible] authorities) which are to be [illegible] competent to conduct [illegible] examinations [illegible] this section [illegible]. Any scheme under this section shall be [illegible] practicable, as between the several parts of the United Kingdom, a substantial equality of standard as respects [illegible]. Any [illegible] or alteration of, or addition to [illegible] in pursuance of this section, shall be of no validity until it has been approved by the Medical Council, and confirmed by the Privy Council.

20. *Medical Board to [illegible].*—It shall be the duty of every medical board in that part of the United Kingdom to which it belongs to ascertain, by inspection or otherwise, the sufficiency of the education provided by any schools, for the time being, declared by a scheme of such board to be recognised medical schools, and from time to time, by visitation or otherwise, to enquire as to the examinations held by any recognised examining authority, and from time to time to take, by revocation or alteration of schemes [illegible] provided by this Act, such steps as may be necessary for depriving any medical school of the privilege of being regarded as a recognised medical school, or any authority of the privilege of being a recognised examining authority, in cases where the medical board is satisfied of the insufficiency of the education in such school, or of the inadequacy of the examinations conducted by any such examining authority, the order of the board on this behalf being subject to appeal on the part of such examining authority, or medical school to the Medical Council. Any revocation or alteration of a scheme in pursuance of this section shall not be of any validity until it has been approved by the Medical Council and confirmed by the Privy Council.

PART III. COLONIAL AND FOREIGN PRACTITIONERS.

21. *Registration of Colonial Practitioners [illegible].*—On and after the prescribed day, where a person shows that he holds some recognised colonial medical diploma or diplomas (as hereinafter defined) granted to him in a British possession to which this Act applies, and that he is of good character, and that he is by law entitled to practise medicine, surgery, and midwifery in such British possession, he shall upon payment of the registration fee, and on application to the registrar, be entitled, without examination in the United Kingdom, to be registered as a colonial practitioner in the *Medical Register*, provided that he proves any of the following circumstances: 1. That he was practising medicine or surgery, or a branch of medicine or surgery, in the United Kingdom on the said prescribed day, and that he has continuously practised the same either in the United Kingdom, or elsewhere, for a period of not less than ten years immediately preceding the said prescribed day; or (2) That his diploma or diplomas was or were granted to him at a time when he was not domiciled in the United Kingdom; or in the course of a period of not less than five years, during the whole of which he resided out of the United Kingdom.

22. *Registration of Foreign Practitioners with Recognised Diplomas.*—On and after the said prescribed day, where a person shows that he holds some recognised foreign medical diploma or diplomas (as hereinafter defined) granted in a foreign country to which this Act applies, and that he is of good character, and that he is by law entitled to practise medicine, surgery, and midwifery, in such foreign country, he shall, upon payment of the registration fee, and on application to the registrar, be entitled, without examination in the United Kingdom, to be registered as a foreign practitioner in the *Medical Register*; Provided that he proves any of the following circumstances: (1) That he is not a British subject; or, (2) That being a British subject, his diploma or diplomas was or were granted to him at a time when he was not domiciled in the United Kingdom, or was or were granted to him in the course of a period of not less than five years, during the whole of which he resided out of the United Kingdom; or (3) That being a British subject he was practising medicine or surgery, or a branch of medicine or surgery, in the United Kingdom on the said prescribed day, and that he has so continuously practised the same for a period of not less than ten years immediately preceding the said prescribed day in the United Kingdom or elsewhere.

23. *Medical Diploma of Colonial and Foreign [illegible] Deemed to be Recognised.*—The medical diploma or diplomas granted in a British possession to which this Act applies, or in a foreign country to which this Act applies, which are to be deemed such recognised colonial or foreign medical diploma or diplomas as are required for the purposes of the medical diploma or diplomas as may be recognised for the time being by the Medical Council as furnishing a sufficient guarantee of the possession of the requisite knowledge and skill for the efficient practice of medicine, surgery, and midwifery. If a person is refused registration as a colonial practitioner, or, as a foreign practitioner, on the ground that the medical diploma or diplomas held or stated by such person are not such recognised medical diploma or diplomas as above defined, or on any other ground whatever, the registrar shall, if required, state in writing the reason for such refusal, and the person so refused registration may appeal to the Privy Council, and the Privy Council, after communication with the Medical Council, may dismiss the appeal or may order the Medical Council to enter the name of the appellant on the *Register*, and further, if the refusal to register him has arisen from an unwillingness of the Medical Council to recognise such medical diploma or diplomas, or any of them, the Privy Council may order the Medical Council to recognise such diploma or diplomas, or any of them, and any order made by the Privy Council in pursuance of this section shall be duly obeyed. A person may, if so entitled under this Act, be registered both as a colonial and foreign practitioner.

24. *Privileges of Colonial Practitioners.*—Any person [illegible] entitling him to practise medicine or surgery in a British possession to which this Act applies, shall, if he is entitled to hold such appointment by the law of such British possession, be entitled to hold an appointment as a medical officer on any vessel registered in that possession.

25. *Power of Her Majesty [illegible].*—Her Majesty may from time to time, by Order in Council, declare that this part of this Act shall be deemed, on and after a day to be named in such order, to apply to any British possession or foreign country which, in the opinion of Her Majesty, affords to the registered medical practitioners of the United Kingdom such privileges of practising in such possession or country as to Her Majesty may seem just, and from time after the date of such Order in Council, such British possession or foreign country shall be deemed to be a British possession or foreign country to which this Act applies [illegible] Her Majesty may [illegible]

less, to the right of any persons whose names have been already entered on the *Register*.

PART IV. MEDICAL TITLES, MEDICAL REGISTER, AND MEDICAL AUTHORITIES.

26. *Medical Titles.* On and after the said appointed day, it shall be lawful for any registered medical practitioner who is on that day in possession of, or may thereafter obtain, any medical diploma granted by any authority for the time being authorised to return a member or members to any medical board, or who, being on the *Register* of colonial or foreign practitioners, is on such day in possession of, or may thereafter obtain, any recognised colonial or foreign medical diploma granted in a British possession to which this Act applies, within the meaning of Part III of this Act, or in a foreign country to which this Act applies, within the meaning of Part III of this Act, to cause a description of such diploma to be added to his name in a column of the *Medical Register*, and to take or use any medical title which such diploma authorises him to take or use.

27. *Penalty on Misuser of Medical Titles.* -1. On and after the said appointed day, if any person, whether a registered medical practitioner or not, takes or uses a medical title which he is not entitled to take or use, he shall, on summary conviction, be liable to a penalty not exceeding 20*l*. 2. On and after the said appointed day, if any person, whether a registered medical practitioner or not, who practises or professes to practise, or publishes his name as practising medicine or surgery for gain, or receives any payment for practising medicine or surgery, takes or uses a medical title which is by this Act not permitted to be entered on the *Register*, he shall, on summary conviction, be liable to a penalty not exceeding 20*l*. Provided that a person shall not be liable to such penalty if he shows that he is not ordinarily resident in the United Kingdom, and that he holds a medical diploma which authorises him to use the medical title complained of, and that he is by law entitled to practise in the country in which the diploma was granted. 3. On and after the said appointed day, if any person who is not a registered medical practitioner represents himself to be a registered medical practitioner, or uses any name, title, addition, or description implying that he is a registered medical practitioner, he shall, on summary conviction, be liable to a penalty not exceeding 20*l*. Provided that he shall not be liable to such penalty, if he shows that he has been registered, and continues to be entitled to be registered in the *Medical Register*, but that his name has been erased therefrom, on the ground only that he has ceased to practise, or been deemed to have ceased to practise. 4. On and after the said appointed day, if any person who is not a registered medical practitioner, and who practises or professes to practise, or publishes his name as practising medicine or surgery for gain, or who receives any payment for practising medicine or surgery: (*a*) uses the designation of, or represents himself to be a physician, surgeon, doctor, or apothecary; or (*b*) uses any designation or description denoting that he is qualified by law to practise medicine, surgery, or midwifery, he shall, on summary conviction, be liable to a penalty not exceeding 20*l*. 5. On and after the said appointed day, prosecutions for offences against this section may be undertaken by the persons hereinafter mentioned, but by no other person or bodies of persons; that is say: (1) in any part of the United Kingdom, by any person authorised by the Medical Council; and (2) in England, by the Public Prosecutor, or by the Attorney-General, or Solicitor-General, or by any person authorised by the medical board for England, or any medical authority for the time being authorised to return a member to such medical board, or by any person authorised by the Public Prosecutor, Attorney-General, or Solicitor-General; and (3) in Scotland, by the Procurator Fiscal, or by the Lord Advocate, or by any person authorised by the medical board for Scotland, or by any medical authority for the time being authorised to return a member to such medical board, or by any person authorised by the Procurator Fiscal, or Lord Advocate; and (4) in Ireland, by the Crown Prosecutor, or by the Attorney-General or Solicitor-General for Ireland, or by any person authorised by the medical board for Ireland, or by any medical authority for the time being authorised to return a member to such medical board, or by any person authorised by the Crown Prosecutor, Attorney-General, or Solicitor-General. This section shall not prevent (1) a person from using the designation of midwife; or (2) a person lawfully holding from any of the medical authorities recognised by the Medical Council a licence in midwifery, or a certificate of fitness to practise as a midwife, from taking or using the designation of licentiate in midwifery or certified midwife; or (3) a person registered in the *Dentists' Register* under the Dentists Act, 1878, from taking or using any name, title, addition, or description which he is entitled to take or use under that Act.

MANAGEMENT OF REGISTER.

28. *Contents and Form of Medical Register.*—(1.) The *Medical Register*, as continued on and after the appointed day in pursuance of this Act, shall contain the names and addresses (*a*) of all existing home practitioners, that is to say, of all persons who, on the said appointed day, are registered medical practitioners according to the *Medical Register* then in force, and of all future home practitioners, that is to say, of all persons who, on or after the said appointed day, may become entitled to be registered by reason of their having passed a final examination under this Act; and (*b*) of such colonial and foreign medical practitioners as are entitled to be registered under this Act; and shall be in such form and contain such particulars as the Medical Council may, with the sanction of the Privy Council, from time to time direct: Provided as follows—The names shall be divided into three lists, of which lists the first shall contain the names of the medical practitioners other than the colonial and foreign practitioners, the second shall contain the names of the colonial practitioners, and the third shall contain the names of the foreign practitioners. Each list shall be made out alphabetically, according to the surnames. Subject as in this Act mentioned, applications for registration in the *Medical Register*, and for alterations to be entered in that *Register* of names and addresses or of medical titles, shall be made in such manner, and supported by such evidence, as the Medical Council may from time to time determine. Copies of the *Medical Register* shall be annually printed and published, and offered for sale.

29. *Correction of Medical Register.* -1. On and after the said appointed day, every registrar of deaths in the United Kingdom receiving notice of the death of any registered medical practitioner shall forthwith transmit by post to the registrar of the Medical Council a certificate under his hand of such death, with the particulars of the time and place of death, and may charge the cost of such certificate and transmission as an expense of his office; and on the receipt of such certificate, or on other sufficient evidence of death, the registrar of the Medical Council shall erase the name of a deceased medical practitioner from the *Register*. 2. On and after the said appointed day, the medical registrar may erase from the *Medical Register* the name of a person who has ceased to practise, but not (save as hereinafter provided) without the consent of that person; and the medical registrar may send by post to a person registered in the *Medical Register* a notice inquiring whether or not he has ceased to practise or has changed his residence; and if the registrar does not, within three months after sending the notice, receive any answer thereto from the said person, he may, within fourteen days after the expiration of the three months, send him by post in a registered letter another notice, referring to the first notice, and stating that no answer thereto has been received by the registrar; and if the registrar either within the said three months receives the first notice back from the dead letter office of the Postmaster-General, or receives the second notice back from that office, or does not within three months after sending the second notice receive any answer thereto from the said person, the registrar shall place the name of such person on a separate list for one year, after which period that person shall, for the purpose of this section, be deemed to have ceased to practise, and his name may be erased accordingly without his consent having been obtained. Provided that if any person whose name has been placed on a separate list as aforesaid applies, within a period of one year, to the registrar to have his name restored to the *Register*, such restoration shall be forthwith made without payment of any fee. The name of any person erased (either before or after the said appointed day) from the *Medical Register* shall, subject to the provisions of this Act as to the erasure of a name in case of an incorrect or fraudulent entry, or in case of misconduct, be restored to the *Register* on the application of the persons whose name was erased, and on payment of such fee not exceeding the registration-fee as the Medical Council may from time to time fix.

30. *Erasure from Medical Register.*—On and after the said appointed day the Medical Council shall cause to be erased from the *Medical Register* any entry which has been incorrectly or fraudulently made. Where a person registered in the *Medical Register* has, either before or after the passing of this Act, and eithe before or after the date at which his name was first entered on the *Medical Register*, been convicted, either in Her Majesty's dominions or elsewhere, of an offence which, if committed in England, would be a felony or misdemeanor, or been guilty of any infamous or disgraceful conduct in a professional respect, that person shall, on and after the said appointed day, be liable to have his name erased from the *Register*. On and after the said appointed day, the Medical Council may of their own motion, and upon the application of any of the medical authorities for the time being authorised to return members to a medical board, shall cause inquiry to be made into the case of a person alleged to be liable to have his name erased under this section, and, on proof of such conviction or of such infamous or disgraceful conduct as is in this section mentioned as rendering a person liable to have his name erased from the *Register*, may cause the name of such person to be erased from the *Register*. Where the Medical Council is of opinion that the erasure of the name of a person from the *Register* will be too severe a punishment for the offence of such person, they may, instead of directing his name to be erased, declare that he is suspended, and thereupon direct the word "suspended" to be entered opposite his name in the *Register*. A registered medical practitioner when suspended shall not be deemed, during such suspension, to be a registered medical practitioner. Any person aggrieved by any determination or act of the Medical Council in pursuance of this section may appeal summarily to the High Court of Justice in such manner as may be determined by rules of Court, and such Court may confirm, reverse, or modify the decision of the Medical Council. Provided that the name of a person shall not be erased, nor shall a person be suspended under this section—(*a*) On account of his adopting, or refraining from adopting the practice of any particular theory of medicine or surgery; nor (*b*) on account of a conviction for a political offence out of Her Majesty's dominions; nor (*c*) on account of a conviction for an offence which, though within the provisions of this section, does not, either from the nature of the offence, or from the circumstances under which it was committed, or from the time which has elapsed since its commission, disqualify a person, in the opinion of the Medical Council, for practising medicine and surgery.

31. *Committee for Rectification of Register.*—The Medical Council shall, for the purpose of exercising in any case the powers of erasing from, and of restoring to, the *Medical Register* the name of a person or an entry, ascertain the facts of such case by a committee of their own body, not exceeding seven in number, of whom the quorum shall be not less than three, and a report of the committee shall be conclusive as to the facts for the purpose of the exercise of the said powers by the Medical Council. A committee acting under this section may, for the purpose of the execution of their duties under this Act, employ at the expense of the Council such legal or other assessor or assistants as the committee think necessary or proper.

32. *Penalty for obtaining Registration by False Representations.*—Any person who wilfully procures or attempts to procure himself to be registered under this Act, by making or producing or causing to be made or produced any false or fraudulent representation or declaration, either verbally or in writing, and every person aiding and assisting him therein, shall be deemed guilty of a misdemeanour in England and Ireland, and in Scotland of a crime or offence punishable by fine or imprisonment, and shall, on conviction thereof, be liable to be imprisoned for any term not exceeding twelve months.

MEDICAL AUTHORITIES.

33. *Power of Medical Authorities to grant Diplomas to either Sex.* Any authority in the United Kingdom for the time being authorised to grant medical diplomas may, notwithstanding anything contained in any charter or Act of Parliament, grant medical diplomas to persons of either sex, provided that—A woman who receives a medical diploma from a medical authority which at the date of the passing of this Act has not any obligation to grant a medical diploma to any woman, shall not, in respect of that diploma, except so far as the medical authority otherwise in its discretion provides, be entitled to any share in the government, management, or proceedings of that authority.

34. *Power of Medical Authorities to accept Certificates of Medical Board.* Any authority in the United Kingdom for the time being authorised to grant medical diplomas may, if it thinks it expedient so to do, admit to its lowest qualification, without further examination, any person who has passed a final examination in pursuance of this Act.

35. *Power to Medical Authorities to conform to Act.* Nothing in any Act, or in any charter, statute, or by-law, shall prevent any medical authority or any medical school in the United Kingdom from making any such changes in its constitution or practice as may be necessary to enable such authority or school to conform to any of the provisions of this Act or of any rules made in pursuance of this Act.

PART V.—EXPENSES AND MEDICAL FUNDS.

36. *Expenses of Act and Funds to meet such Expenses.*—For the purpose of defraying the expenses of carrying this Act into execution, the three medical boards and the Medical Council shall respectively form funds to be called "the medical board (England) fund," "the medical board (Scotland) fund," "the medical board (Ireland) fund," and "the Medical Council fund." All sums received by each of the said bodies shall be carried to the account of the fund belonging to such body.

Each medical board fund shall be applicable to the payment of the expenses following, in the order of priority in which they are named, that is to say: 1. The expenses of examinations within the part of the United Kingdom to which such board belongs; 2. The reasonable expenses incurred by members of the medical board in attendance on such board, and the payment of a reasonable remuneration or compensation for attendance to such members; 3. Any expenses in respect of officers and rooms, and any expenses in respect of elections, visitations, or otherwise which the board may properly incur in the performance of their duties under this Act, and subject to the payment of the foregoing expenses, in this Act described as the administrative expenses of each board. 4. The expenses of maintaining any such medical museums and medical libraries belonging to any medical authority for the time being authorised to return a member to the medical board, as may, before the passing of this Act, have been ordinarily maintained for general public purposes by such authority in its capacity of grantor of qualifications for registration under the Medical Act, 1858, and have been so maintained out of fees paid by applicants for such qualifications, and may be of such importance to the promotion of knowledge in medicine or surgery, as to deserve to be maintained out of the funds of the Medical Board. An account of receipts and expenditure shall be rendered by each medical board to the Medical Council at such times and in such form as the Medical Council may direct, and any surplus appearing on such account to be remaining, after leaving a sufficient balance for payment of current expenses, shall be paid to the Medical Council Fund. The Medical Council Fund shall be applied in payment of the following expenses, in the order of priority in which they are named:—1. The reasonable expenses incurred by members of the Medical Council in attending on such council or any committee of the Council, and the payment of a reasonable remuneration or compensation for attendance to the members. 2. Any expenses in respect of officers and rooms, and any expenses which the Medical Council may properly incur in the performance of their duties under this Act. 3. The expenses properly incurred by each medical board in or about the election of members to be returned to the Medical Council by the registered medical practitioners resident in the part of the United Kingdom to which each board belongs. The amount of the remuneration or compensation to be paid for the attendance of members of a medical board shall be determined by that board, with the assent of the Medical Council and the sanction of the Privy Council, and the amount of remuneration or compensation to be paid for the attendance of members of the Medical Council shall be determined by the Medical Council, with the sanction of the Privy Council. An account of receipts and expenditure shall be rendered by the Medical Council to the Privy Council at such times and in such form as the Privy Council may direct, and any surplus appearing on such account to be remaining, after leaving a sufficient balance for payment of current expenses, shall be applied for the benefit of the medical profession, or in such manner as the Medical Council may, with the sanction of the Privy Council, determine. The Medical Council, as respects the medical boards, and the Privy Council, as respects the Medical Council, may cause the accounts of such boards and council to be audited, and may direct to be disallowed any sums appearing to be improperly expended on the accounts rendered to them in pursuance of this Act. For the purpose of supplying moneys to form each medical board fund, each medical board may charge such fees for its examinations and for the registration of medical students within its part of the United Kingdom as that board, with the assent of the Medical Council and sanction of the Privy Council, may determine. In estimating the amount of the fees to be charged by each medical board for its final examination, a distinction shall be made between so much of the fee as is leviable for the purpose of supplying funds for defraying the administrative expenses of the board, and so much as is leviable for the purpose of defraying the expenses of the maintenance of museums and libraries; and the fees to be paid by University graduates or undergraduates holding University certificates of having passed the examinations at their University qualifying for admission to the final examination of the board, shall not exceed the portion of the fee leviable as aforesaid for the purpose of supplying funds for the administrative expenses of the board. For the purpose of supplying moneys to form the Medical Council Fund the Medical Council may, with the sanction of the Privy Council, charge: *(a)* such sums as they think fit for the sale of copies of the *Pharmacopœia* hereinafter mentioned and of the *Medical Register*; and *(b)* a fee for the registration of persons as medical practitioners; and *(c)* fees of small amount for making entries on the *Register* by way of alteration of names or addresses, or of additions of medical titles, or of restoration of names, or otherwise howsoever.

37. *Accounts of Medical Boards and Medical Council to be Laid Before Parliament.* The accounts of the Medical Council, and of each medical board, shall be published annually and shall be laid before both Houses of Parliament at the commencement of the session of Parliament in each year, or as soon thereafter as may be practicable.

PART VI. GENERAL PROVISIONS AS TO MEDICAL BOARDS, MEDICAL COUNCIL, AND PRIVY COUNCIL.

38. *Appointment of Officers by Medical Board.* Subject to the provisions in this Act contained with respect to the existing officers and servants of branch councils, each medical board may, from time to time, with the assent of the Medical Council and sanction of the Privy Council as to the number of offices to be created and the salaries to be attached to each office, appoint and remove a treasurer, and may also from time to time, with the like assent and sanction, appoint and remove a [illegible] and such other officers and servants as the medical board may require for the purposes of this Act.

39. *Appointment of Officers by Medical Council.* Subject to the provisions in this Act contained with respect to the existing officers and servants of the General Council, the Medical Council may from time to time, with the sanction of the Privy Council as to the number of offices to be created, and the salaries to be attached to each office, appoint and remove a treasurer or treasurers, and may also from time to time, with the like sanction, appoint and remove a registrar, secretary, and such other officers and servants as the Council may require for the purposes of this Act; but the same person may fill the offices of registrar and secretary.

40. *Proceedings of Medical Boards and Medical Council.* 1. No act or proceeding of a medical board, or of the Medical Council, or of a committee of the Medical Council, shall be questioned on account of any vacancy or vacancies in their body. 2. No defect in the qualification, nomination, election or appointment of any person or persons acting [illegible] as members of a medical board or of the Medical Council, or of a committee of the Medical Council, shall be deemed to vitiate any proceedings of such board, council, or committee in which he or they have taken part, in cases where the majority of members parties to such proceedings are duly entitled to act. 3. Any minute made of proceedings at a meeting of a medical board or of the Medical Council, or of a committee of the Medical Council, if signed [illegible] at the meeting of the board, council, or committee at which such proceedings took place, or at the next ensuing meeting of the board, council, or committee, by any person purporting, for the time being, to be the chairman of the board, council, or committee, shall be receivable in evidence of such proceedings in all legal proceedings without further proof; and, until the contrary is proved, every meeting of a medical board, or of the Medical Council, or of any committee of the Medical Council where minutes have been so made of the proceedings, shall be deemed to have been duly convened and held, and all the members thereof to have been duly qualified. 4. No member of a medical board, or of the Medical Council, by being party to, or executing in his capacity of member, any contract or other instrument on behalf of the board or council, or otherwise exercising any of the powers given to the board or council, shall be subject individually to any action, suit, trial, prosecution, or other legal proceeding; and the board or council may apply any moneys from time to time coming into their hands for the purpose of paying any costs of legal proceedings or damages they, or any member of their body, may incur in execution of the powers granted to them. 5. Any instrument which, if made by private persons, would require to be under seal, shall, in the case of a medical board, be under the seal of the medical board, and signed by the proper officer of the board, and, in the case of the Medical Council, be under the seal of the Medical Council, and signed by the proper officer of the council. Any notice issued by, or on behalf of, a medical board, or of the Medical Council, shall be deemed to be duly executed if signed by the proper officer of the board or of the council, but, subject as aforesaid, any appointment made by a medical board, or by the Medical Council, and any contract, order, or other document made by or proceeding from a medical board, or from the Medical Council, shall be deemed to be duly executed, in the case of a medical board, either if sealed with the seal of the board, or if signed by two or more members of the board authorised to sign them by a resolution of the board, and, in the case of the Medical Council, either if sealed with the seal of the Medical Council, or signed by two or more members of the Medical Council authorised to sign them by a resolution of the Council; but it shall not be necessary in any legal proceeding to prove that the members signing any document in pursuance of this section were authorised to sign such document, and such authority shall be presumed until the contrary is proved. 6. The proper officer of a medical board shall be any officer authorised by the board to sign such documents as he is required to sign as aforesaid, and it shall not be necesary in any legal proceeding to prove his authority, and such authority shall be presumed until the contrary is proved, and the proper officer of the Medical Council shall be any officer authorised by the council to sign such documents as he is required to sign as aforesaid, and it shall not be necessary in any legal proceedings to prove his authority, and such authority shall be presumed until the contrary is proved.

AS TO APPROVAL AND CONFIRMATION OF SCHEMES.

41. *Approval and Confirmation of Schemes.* 1. Where a scheme is required to be approved by the Medical Council, and confirmed by the Privy Council, the following proceedings shall be taken: (1) The medical board shall, as soon as practicable after making the same, send a copy to the Medical Council; (2) On the receipt of such copy, the Medical Council may either annul or approve the same with or without modification made by the Council, or may remit the same to the medical board for modification by them, until it is brought into conformity with the views of the Medical Council; (3) It shall be the duty of the Medical Council to forward as soon as practicable to the Privy Council for confirmation any scheme approved by the Medical Council; (4) On the receipt of any such scheme, the Privy Council shall take the same into their consideration, and, if dissatisfied therewith, they may either annul the same altogether, or may remit the same to the Medical Council for modification by them until it is brought into conformity with the views of the Privy Council. Any scheme requiring to be confirmed by the Privy Council under this section shall, when so confirmed, be deemed to have been duly made and be of the same validity as if enacted in this Act. The Medical Council before approving, and the Privy Council before confirming, any scheme made in pursuance of this Act, shall hear any objections which may be made to the scheme by any person or body of persons. Any revocation or alteration of, or addition to, a scheme is included under the word "scheme" in this section.

42. *Default of Medical Board.* If any medical board, in the opinion of the Medical Council, makes default in the performance of its duty under this Act, it shall be the duty of the Medical Council to notify to the medical board that it has made such default, and if the medical board fail to comply with any directions of the Medical Council in respect of such default, the Medical Council may by order suspend the medical board or supersede such board and direct a fresh election to be held, and any act or thing which by this Act is authorised to be done by a medical board may, during any suspension or supersession of a medical board, be done by the Medical Council. Any order made by the Medical Council in pursuance of this section shall be of no validity until it has been confirmed by the Privy Council.

43. *Default of Medical Council.* If the Medical Council, in the opinion of the Privy Council, makes default in the performance of its duty under this Act, the Privy Council shall notify to the Medical Council that it has, in the opinion of the Privy Council, made such default; and if the Medical Council fail to comply with any directions of the Privy Council in respect of such default, the Privy Council may do any act or thing in respect of which it considers the Medical Council to have been in default, and such act or thing, when done by the Privy Council, shall be of the same validity as if it had been done by the Medical Council, [illegible] by the Privy Council.

44. [illegible] Any [illegible] the Privy Council [illegible] this Act may be exercised by any two or more of the Lords and others of Her Majesty's Most Honourable Privy Council. Any [illegible] by the Privy Council under this Act may be [illegible] the Privy Council [illegible]. Any act of the Privy Council under this Act [illegible]

[illegible]

[illegible]

Jurisdiction (English) Acts within the meaning of the Summary Jurisdiction Act, 1879; As to Scotland the Summary Jurisdiction (Scotland) Acts, 1864 and 1881, and any Acts amending the same; As to Ireland within the police district of Dublin Metropolis the Acts regulating the powers and duties of justices of the peace of such district or of the police of such district; and elsewhere in Ireland the Petty Sessions (Ireland) Act, 1851, and the Acts amending the same.

AS TO EVIDENCE.

46. *Records as Evidence.* The following copies of any schemes or orders made in pursuance of this Act shall be evidence, that is to say: 1. Any copy purporting to be printed by the Queen's printer, or by any other printer, in pursuance of an authority given by the Medical Council. 2. Any copy of a scheme or order certified to be a true copy by the registrar of the Medical Council, or by any other person appointed by the Medical Council, either in addition to or in exclusion of the registrar to certify such schemes or orders. A copy of the *Medical Register* for the time being purporting to be printed and published by the authority of the Medical Council shall be evidence in all legal proceedings whatsoever, whether civil or criminal, of all matters by this Act authorised or required to be entered therein, and in particular that the persons whose names are therein specified as home, colonial, or foreign practitioners, are registered medical practitioners within the meaning of this Act, and the absence of the name of any person from such copy shall be evidence (until the contrary is made to appear) that such person is not a registered medical practitioner within the meaning of this Act; but in the case of any person whose name does not appear in such copy, a certified copy under the hand of the registrar of the Medical Council of the entry of the name of such person on the *Medical Register*, shall be evidence that such person is a registered medical practitioner within the meaning of this Act. The *Medical Register* shall be deemed to be in proper custody when in the custody of the medical registrar, and shall be of such a public nature as to be admissible as evidence of all matters therein on its mere production from that custody.

AS TO ELECTION OFFENCES.

47. *Appeal in respect of Invalid Election.* It shall be the duty of Her Majesty's High Court of Justice, in cases arising in England, and of the Court of Session in cases arising in Scotland, and of the High Court of Justice in Ireland in cases arising in Ireland, upon the application of any person who may be aggrieved by, or complaining of, the election of any member of the Medical Council or of a medical board, or any proceeding, act, or matter touching the same (reasonable notice having been given by the adverse party to those affected thereby of such intended application) to proceed forthwith, and in a summary way to hear the affidavits, proofs, and allegations of the parties, or otherwise to inquire into the matter or cause of complaint, and either to confirm the election so complained of or to order a new election, or to make such order and give such relief in the premises as right and justice may appear to the court to require; but no such application as aforesaid shall be entertained by the court unless it is made within one month after the election has taken place in respect of which the complaint is made; and no such election shall be declared invalid by reason of any defect in the title of the returning officer.

48. *Penalty on Illegal Acts in Respect of Election.* Any person who personates any person entitled to vote at any election of a member of the Medical Council or of a medical board, or falsely assumes to act in the name or on behalf of any person so entitled to vote, shall be liable on summary conviction to a penalty not exceeding twenty pounds, or, in the discretion of the court by whom he is convicted, to imprisonment, with or without hard labour, for any period not exceeding three months.

MISCELLANEOUS.

49. *Service of Notices by Post.* All notices and documents required or authorised by or for the purposes of this Act to be sent may be sent by post, and shall be deemed to have been received at the time when the letter containing the same would be delivered in the ordinary course of post; and, in proving such sending, it shall be sufficient to prove that the letter containing the notice or document was prepaid, and properly addressed, and put into the post. Such notices and documents may be in writing or in print, or partly in writing and partly in print; and, when sent to the Medical Council, or a medical board, or a medical authority, shall be deemed to be properly addressed, if addressed to the Medical Council, medical board, or medical authority, or to some officer of such council, board, or authority, at the principal office or place of business of such council, board, or authority; and, when sent to a registered medical practitioner, shall be deemed to be properly addressed if addressed to him according to his address registered in the *Medical Register*.

50. *Publication of Proceedings.* The Medical Council may cause any minutes or account of their proceedings or of the proceedings of their committees to be published, and it shall be their duty to record in their minutes the name of any registered medical practitioner whose name has been erased from the *Register*, or who has been suspended for misconduct, together with their reasons for such erasure or suspension.

PART VII.—TRANSITION FROM OLD TO NEW LAW.

51. *Time of Election of Medical Board.* The first election of a medical board in each part of the United Kingdom shall take place in January one thousand eight hundred and eighty-five. Subsequent elections of medical boards shall take place in each part of the United Kingdom in the January of every succeeding fifth year. The returning officer at every election of a medical board shall be such person as the Privy Council may appoint in each part of the United Kingdom. The returning officer of each medical board shall, some time in the first fourteen days of January one thousand eight hundred and eighty-five, and in the first fourteen days of January in every succeeding fifth year, issue a precept to each constituent body, requiring such body, within ten days after the receipt of such precept, to hold an election of members for the medical board, and to certify to the returning officer the names of the members elected as soon as may be after their election has taken place. Each of the medical authorities in each part required to return a member or members to a medical board shall return such member or members in manner following, that is to say, if it be an authority which before the passing of this Act returned a member to the General Medical Council, then in manner in which such authority was accustomed to return a member to such Council; but if it be not such an authority as lastly hereinbefore-mentioned, it shall return a member or members to a medical board in manner directed by the Privy Council. The first medical board in each part of the United Kingdom under this Act shall come into office on the first day of February one thousand eight hundred and eighty-five. Subsequent medical boards in each part of the United Kingdom shall come into office on the first day of February succeeding the day of their election. The first meeting of the medical board in each part of the United Kingdom shall take place in the case of the first election on such day during the first fortnight in February one thousand eight hundred and eighty-five, and at such time and place, and in the case of any subsequent election on such day during the first fortnight in February of the year of their election, and at such time and place as may be determined by the Privy Council.

52. *Time of Nomination and Election of Medical Council.* The returning officer at the election of the Medical Council in the year one thousand eight hundred and eighty-five, shall be such person as may be appointed by the Privy Council, and at subsequent elections shall be the registrar of the Medical Council, or such other person as may be appointed by the Medical Council. The Privy Council shall notify to the returning officer the six members of the Medical Council nominated by Her Majesty on some day in the month of February, one thousand eight hundred and eighty-five, and on some day in the month of February in every succeeding fifth year. For the purpose of the election of members to be elected by the medical boards, the returning officer of the Medical Council shall, some time in the first seven days of March, one thousand eight hundred and eighty-five, and in the first seven days of March in every succeeding fifth year, issue his precept to each of the medical boards, requiring them, within ten days after the receipt of such precept, to certify to him the names of the members elected by each such medical board. The nomination and election of members to be returned by a medical board to the Medical Council shall be conducted in such manner as may be provided by regulations to be made by such board, and confirmed by the Privy Council. For the purpose of the election of members to be elected by the registered medical practitioners resident in England, Scotland, and Ireland respectively, the following steps shall be taken: the returning officer of the Medical Council shall, some time in the first seven days of March, one thousand eight hundred and eighty-five, and in the first seven days of March in every succeeding fifth year, issue his precept to each of the medical boards of England, Scotland, and Ireland, requiring such board to cause the proper number of members to be elected by the registered medical practitioners in the part of the United Kingdom to which such board belongs, within fourteen days after the receipt of the precept of the returning officer. The election of members to be returned by the registered medical practitioners in each part of the United Kingdom shall be conducted in such manner as may be provided by regulations to be made by the Privy Council, provided as follows: 1. The nomination shall be in writing, and the nomination-paper of each candidate shall be signed by not fewer than twelve registered medical practitioners; and, 2, the election shall be conducted by voting-papers, and it shall be the duty of the returning officer to forward by post to each registered medical practitioner, resident in any part of the United Kingdom, at his registered address a voting paper; but the election shall not be rendered void by reason of the omission of the returning officer to forward such voting-paper in any particular case or cases, and any registered medical practitioner to whom a voting paper has not been sent in pursuance of this Act may, on application to the registrar, obtain one from him. Each medical board shall certify to the returning officer of the Medical Council the member or members elected by the registered medical practitioners in the part of the United Kingdom to which such medical board belongs. The first Medical Council under this Act shall come into office on the thirtieth day of April, one thousand eight hundred and eighty-five. Subsequent Medical Councils shall come into office on the thirtieth day of April succeeding the day of their election. The first meeting of the Medical Council under this Act shall take place, in the case of the first election, on such day during the first fortnight in May, one thousand eight hundred and eighty-five, and at such time and place; and, in the case of any subsequent election, on such day during the first fortnight in May of the year of their election, and at such time and place as may be determined by the Privy Council.

53. *Schemes for Examinations and Course of Medical Education.* Each Medical board shall, on or before the first day of August, one thousand eight hundred and eighty-five, submit to the Medical Council a scheme or schemes (1) for the final examination of medical students within the part of the United Kingdom to which such board belongs, and (2) respecting the preliminary examinations and course of medical education of students within the part of the United Kingdom to which such board belongs, care being taken that, in the scheme or schemes for the medical education of students within its part of the United Kingdom, special provisions be made for the admission to the first final examination of medical students who may be undergoing their course of education at the time when the scheme or schemes comes or come into force. The scheme or schemes so submitted to the Medical Council shall be settled by the Medical Council, and forwarded to the Privy Council for confirmation on or before the first day of January, one thousand eight hundred and eighty-six. Any objections that may be made to such schemes, or any of them, shall be considered by the Privy Council before the first day of March, one thousand eight hundred and eighty-six, on which day at latest the scheme or schemes for the first final examination, and for the admission of students to the first final examination, shall be deemed to come into force. The first final examination of medical students under this Act in each part of the United Kingdom shall be held on such day in the year one thousand eight hundred and eighty-six, not later than the first of September, as the Privy Council may direct.

54. *Continuation of old System of Registration to the appointed Day.* Persons may continue to be registered as medical practitioners in manner heretofore in use up to the appointed day, but on and after that day no person shall be registered, except in pursuance of this Act. All persons whose names are on the *Medical Register* on the appointed day shall on that day have their names transferred to the *Medical Register* as continued in manner provided by this Act, without payment of any fees and without any application on their part. Any person who, on the said appointed day, had acquired a title to have his name entered on the *Medical Register* may, after that day have his name entered on the *Medical Register* as continued in manner provided by this Act; and for the purposes of this section a person shall be deemed to be included amongst the persons entitled to have their names entered on the *Medical Register* who was, on or about the said appointed day, passing a qualifying examination, and who completed the same before or after such day in such manner as would, if this Act had not passed, have qualified him to be registered as a medical practitioner.

55. *Transfer of Funds of Branch Councils to Medical Council.*—On and after the day on which the medical board of any part of the United Kingdom comes into office, the branch council in that part of the United Kingdom shall cease to exist, and all funds and property belonging to such branch council shall, subject to all liabilities affecting the same, be transferred to and vest in the Medical Council. Provided that the Medical Council shall, out of such funds, advance to each medical board such moneys as shall be required to defray the expenses necessarily incurred before a medical board fund can be formed. Provided also, that the Medical Council shall, when making such advances, be satisfied as to the terms and other conditions of repayment by the several medical boards.

56. *Transferring Medical Register from General Council to Medical Council.*—On and after the day on which the Medical Council comes into office, the exclusive right of

publishing the *Medical Register*, and the property in such *Register* when published, shall vest in and belong to the Medical Council; but until the said appointed day such *Register* shall be kept in manner provided by the Medical Act, 1858, and any Act amending the same, and for the purpose of so keeping the *Medical Register* up to the beginning of such day as aforesaid, all the powers and obligations of the General Council in relation to such *Register* shall be exercised by and imposed upon the Medical Council, but on and after the said appointed day the *Medical Register* shall be continued in manner provided by this Act.

57. *Transfer of Funds of General Council to Medical Council.*—On and after the day on which the Medical Council comes into office the General Council shall cease to exist, and all funds and property belonging to the General Council and not vested in the Medical Council by any other provision of this Act shall, subject to all liabilities affecting the same, be transferred to and vest in the Medical Council.

58. *As to Officers and Servants of Branch Councils.*—The existing officers and servants of the branch council in each part of the United Kingdom shall, on and after the day on which the medical board in that part comes into office, become the officers and servants of the medical board at the same salaries and with the same tenure of office as they possessed under the branch council.

59. *As to Officers and Servants of General Council.*—The existing registrar officers and servants of the General Council shall, on and after the day on which the Medical Council comes into office, become the registrar officers and servants of the Medical Council, at the same salaries and with the same tenure of office as they possessed under the General Council, and any notice required to be given or act to be done by or to the registrar or other officer of the General Council in pursuance of any Act for the time being in force shall, until such Act is repealed by this Act on the said appointed day, be given by or be done by or to such registrar or officer when acting in the capacity of registrar or officer of the Medical Council.

PART VIII.—PHARMACOPŒIA, SAVING CLAUSES, DEFINITIONS, REPEAL.

PHARMACOPŒIA.

60. *British Pharmacopœia to be Published.*—The Medical Council shall, from time to time, cause to be published under their direction a book containing a list of medicines and compounds, and the manner of preparing them, together with the true weights and measures by which they are to be prepared and mixed, and containing such other matters and things relating thereto as the Medical Council think fit, to be called the "British Pharmacopœia."

61. *Right of Printing Pharmacopœia vested in Council.*—The exclusive right of publishing, printing, and selling the said *Pharmacopœia* shall, on and after the day on which the Medical Council comes into office, vest in the Medical Council, subject to this proviso, that it shall be lawful for the Privy Council, from time to time, to fix the price at which copies of the said work are to be sold to the public.

62. *Notice to be given in Gazettes when* British Pharmacopœia *is Published.*—The *British Pharmacopœia* shall, for all purposes, be deemed to be substituted throughout the United Kingdom for every other pharmacopœia, and any Act of Parliament, Order in Council, or custom relating to any other pharmacopœia, shall be deemed to refer to the pharmacopœia for the time being published by the Medical Council. A copy of the said *Pharmacopœia*, purporting to be printed by such person as may be named in any notice published in the *London, Edinburgh, and Dublin Gazettes*, as authorised by the Medical Council to print the said *Pharmacopœia*, shall be admitted in evidence as being the *British Pharmacopœia*.

63. *Provisions as to Existing* Pharmacopœia.—The *Pharmacopœia* published by the General Council and in force on the day on which the Medical Council comes into office shall, for the purpose of this Act, be deemed to be the *British Pharmacopœia* mentioned in this Act, and to have been published by the Medical Council, and shall remain in force until altered or varied by the Medical Council.

SAVING CLAUSES.

64. *Saving Clause as to Ireland.*—Nothing in this Act contained shall in any way prejudice or affect the lawful occupation or business of chemists or druggists, or, so far as relates to selling, compounding, or dispensing medicines, the rights, privileges, or employment of duly licensed apothecaries in Ireland.

65. *Saving as to Hospitals Exclusively for Foreigners.*—Nothing in this Act contained shall prevent any person not a British subject, who has obtained from any foreign university a degree or diploma of doctor in medicine, and who has passed the regular examinations entitling him to practise medicine, surgery, and midwifery in his own country, from being and acting as the resident physician or medical officer of any hospital established exclusively for the relief of foreigners in sickness, although he is not registered as a foreign practitioner under this Act, provided always, that such person is engaged in no medical practice except as such resident physician or medical officer.

66. *Saving as to 18 and 19 Vic., c. 119.*—Nothing in this Act contained shall repeal or alter any of the provisions of the Passengers Act, 1855.

67. *Saving as to Practice of Existing Practitioners.*—This Act shall not increase or diminish the privileges in respect of his practice of any person who, on the day preceding the appointed day, is a registered medical practitioner, and such person shall be entitled on and after the said appointed day to practise, in virtue of the qualification possessed by him before the said appointed day, medicine, surgery, and midwifery, or in any one or more of them, according as he was entitled to practise in such callings, or any one or more of them, before the said appointed day, but not further or otherwise.

68. *Saving as to Local Law.*—Any person who, at the time of the repeal of any enactment repealed by this Act was, in pursuance of such enactment, legally entitled to practise as a medical practitioner in any colony or part of Her Majesty's dominions other than the United Kingdom, shall, after the date of such repeal, continue to be so entitled as he would have been entitled if no such repeal had taken place.

69. *Saving as to Existing Titles.*—This Act shall not make illegal the use by any person, after the passing thereof, of any medical title which he [illegible] and was entitled to use at the date of the passing of this Act.

DENTISTS.

70. *Amendment of 41 and 42 Vic., c. 33.*—There shall be repealed so much of Section 4 of the Dentists Act, 1878, as provides that a prosecution for any of the offences above in that Act mentioned shall not be instituted by a private person, except with the consent of the General Council or of a branch council, and a prosecution for any such offences may be instituted by a private person accordingly. Notwithstanding anything in Section 5 of the Dentists Act, 1878, the right of any person registered under the Dentists Act, 1878, to practise dentistry or dental surgery in any part of Her Majesty's dominions other than the United Kingdom, shall be subject to any local law in force in that part. It shall be lawful for Her Majesty [illegible] by Order in Council that Section 28 of the said Dentists' Act, 1878, shall be in force on and after a day to be named in such order, but in the meantime, and until such Order has been made, and before such day as last aforesaid, such section shall not be deemed to be in force. On and after such times as the Medical Council and medical boards respectively come into office, and subject to the provisions of this Act, any power given by the Dentists Act, 1878, as amended by this Act to the General Council may be exercised by the Medical Council, and any power given by the said Act as amended by this Act to the branch council of any part of the United Kingdom may be exercised by the medical board of the same part, and the Medical Council, or the medical board, shall respectively be deemed to be substituted throughout the said Act as amended by this Act for the General Council or a branch council; and the expression "medical authorities" in the said Act as amended by this Act shall be deemed to mean the bodies and universities who choose members of medical boards. Save as in this Act mentioned the Dentists Act, 1878, shall not be affected by this Act.

DEFINITIONS.

71. *Definitions.*—In this Act, unless the context otherwise requires, The expression "person" includes a body of persons, corporate or unincorporate. "British possession" means any part of Her Majesty's dominions exclusive of the United Kingdom, but inclusive of the Isle of Man and the Channel Islands. The expression "General Council" means "the General Council of medical education and registration of the United Kingdom" established under the Medical Act. The expression "part of the United Kingdom" means, according to circumstances, England, Scotland, or Ireland. The expression "appointed day" means the first day of January one thousand eight hundred and eighty-six, or such other day in the year one thousand eight hundred and eighty-six as may be appointed by the Privy Council. The expression "diploma" means any diploma, degree, fellowship, membership, licence, authority to practise, letters testimonial, certificate, or other status or document granted by any university, corporation, college, or body, or by any departments of, or persons acting under the authority of, the government of any country or place within or without Her Majesty's dominions. The expression "medical diploma" means a diploma granted in respect of medicine, surgery, and midwifery, or any branch of medicine, surgery or midwifery. The expression "medical title" means any addition to a name, designation, or description, whether expressed in words or by letters, or partly in one way and partly in the other, indicating or implying that a person has obtained a medical diploma.

REPEAL.

72. *Repeal of Acts.*—On and after the said appointed day the Acts mentioned in the Third Schedule to this Act shall be repealed to the extent in the third column of that schedule mentioned, provided that this repeal shall not affect anything done or suffered, or any right or title acquired or accrued, or any offence committed before such repeal takes effect, or any remedy or proceeding in respect thereof.

FIRST SCHEDULE.

Proceedings of Medical Board.

1. The board shall meet for the despatch of business, and shall from time to time make such regulations with respect to the summoning, notice, place, management and adjournment of such meetings, and generally with respect to the transaction and management of business, including the quorum at meetings of the board, as they think fit, subject to the following conditions: *a*, An extraordinary meeting may be summoned at any time on the requisition of three members of the board addressed to the chairman of the board; *b*, the quorum to be fixed by the board shall consist of not less than three members; *c*, every question shall be decided by a majority of votes of the members present and voting on that question; *d*, the names of the members present at a meeting, and, upon a requisition made by any member or members voting on a question, the names of the members voting on that question shall be recorded.

2. In case of an equality of votes at any meeting, the Chairman for the time being of such meeting shall have a second or casting vote.

3. If at any meeting of the board the chairman of the board is not present at the time appointed for holding the same, or within a quarter of an hour afterwards, the vice-chairman of the board shall be the chairman of the meeting; and if neither the chairman nor vice-chairman be present within a quarter of an hour after the time appointed for holding the meeting, then the members present shall choose some one of their number to be a chairman of such meeting.

SECOND SCHEDULE.

Proceedings of Medical Council and of Committees of Medical Council.

1. The Medical Council shall meet for the despatch of business, and shall from time to time make such regulations with respect to the summoning, notice, place, management and adjournment of such meetings, and generally with respect to the transaction and management of business, including the quorum at meetings of the council, as they think fit, subject to the following conditions: *a*, An extraordinary meeting may be summoned at any time on the requisition of three members of the council addressed to the president of the council; *b*, the quorum to be fixed by the council shall consist of not less than three members; *c*, every question shall be decided by a majority of votes of the members present and voting on that question; *d*, the names of the members present at a meeting, and upon a requisition made by any member or members voting on a question the names of the members voting on that question, shall be recorded.

2. In case of an equality of votes at any meeting, the chairman for the time being of such meeting shall have a second or casting vote.

3. A committee may meet and adjourn as they think proper. Every question at a meeting shall be determined by a majority of votes of the members present and voting on that question; and, in case of an equal division of votes, the chairman for the time being shall have a second or casting vote.

4. The president of the council, if present, shall be chairman at any meeting of the council or of a committee of the council; but if at any meeting of the council or a committee of the council, the president is not present at the time appointed for holding the same [illegible] then the members present shall choose some one of their number to be chairman of such meeting.

THIRD SCHEDULE.—ACTS REPEALED.

[illegible]

[illegible] Dentists Act.

32 Hen. 8. c. 42: Concerning Barbers and Chirurgions: Sections two and three, and so much of section five as relates to surgeons.

18 Geo. 2. c. 15: An Act for making the Surgeons of London and the Barbers of London two separate and distinct Corporations: Section eight from "and that they and all such" to end of section, and so much of the residue of the Act as confers any privileges or enacts any restrictions inconsistent with this Act.

55 Geo. 3. c. 194: An Act for better regulating the practice of apothecaries throughout England and Wales: So much of the said Act as confers any privileges or enacts any restrictions inconsistent with this Act.

21 and 22 Vict. c. 90: The Medical Act: The whole Act with the exception of such portion thereof as respects grants to and other privileges of certain medical authorities, that is to say, with the exception of sections forty-seven, forty-eight, forty-nine, fifty, fifty-one, fifty-two, and fifty-three.

22 Vict. c. 21: An Act to amend the Medical Act (1858): the whole Act.

23 Vict. c. 7: An Act to amend the Medical Act: the whole Act.

25 and 26 Vict. c. 91: An Act to incorporate the General Council of Medical Education and Registration of the United Kingdom, and for other purposes: The whole Act.

31 Vict. c. 29: The Medical Act Amendment Act, 1868: The whole Act.

36 and 37 Vict. c. 55: The Medical Act (University of London), 1873: The whole Act.

37 and 38 Vict. c. 34: The Apothecaries' Act Amendment Act, 1874: So much of the said Act as confers any privileges or enacts any restrictions inconsistent with this Act.

38 and 39 Vict. c. 43: The Medical Act (Royal College of Surgeons of England), 1875: So much of the said Act as confers any privileges or enacts any restrictions inconsistent with this Act.

39 and 40 Vict. c. 40: The Medical Practitioners' Act, 1876: Section three.

39 and 40 Vict. c. 41: An Act to remove restrictions on the granting of qualifications for registration under the Medical Act, on the ground of sex: The whole Act.

CONTAGIOUS DISEASES ACTS.

A STATISTICAL return, headed "Contagious Diseases (Army and Navy)," has just been presented, by order of the House of Commons, on the motion of Sir Drummond Wolff.

The return shows the number of soldiers admitted into hospital, on account of venereal diseases, since the abolition of the compulsory examination of women, under the Contagious Diseases Acts in May 1883, till the end of that year; and also the number admitted during a similar period in 1880, 1881, and 1882. The numbers are given for each week; but it will be sufficient if we confine our comments to the totals.

Some similar, though less elaborate, returns are given for the Army and Navy; and, finally, a table showing the number of women treated under the Acts for the same period.

This return contains much useful information; but, if it be meant to show, in at all a complete manner, the real difference between "Acts and No Acts," it is in many respects incomplete and unsatisfactory. In the first place, it treats of "venereal diseases" *en masse—i.e.*, syphilis and gonorrhœa are again mixed up together; and there is nothing to show which of these diseases has caused the great increase, at the formerly protected stations, since the Acts were virtually abolished.

What is really wanting to test the value of the Acts is a comparison between the condition of the protected towns while under the Acts, and their condition now that the Acts have been withdrawn from them. This comparison ought to be made at all the fourteen stations; but, more particularly, at the most important ones—such as Plymouth, Portsmouth, and Aldershot. We trust that full information on all these points will be afforded, both to Parliament and the public, before any further legislation is attempted.

We will now explain as briefly as possible the principal points shown in this return. It covers a period from May 12th, 1883, the date at which the Acts were suspended, to December 28th in the same year. In addition, it treats in similar fashion the three previous years, viz., 1880, 1881, 1882.

We will take first the year of suspension, 1883. In this year, we find, that the average strength at the fourteen hitherto protected stations was 39,104, and that the ratio per 1,000 diseased was 258.8. Finally, taking all the unprotected stations throughout the country, with a strength of 44,804, the ratio per 1,000 diseased was 191.23.

We will now take the average of the three previous years, 1882, 81, 80, when the Acts were in full force. The returns give separately each of these years, but we have worked out the average of the three, both in order to save space, and give a more reliable review of the facts.

At the fourteen protected stations, the average strength was 42,097, with a ratio (calculated, of course, on the number diseased during the three years) of 145.73. At the fourteen unprotected stations selected for comparison, the strength was 18,752, the ratio per 1,000 diseased was 259.44. And taking all the unprotected stations, with a force of 43,040, the ratio was 198.3.

It should be noted that in taking into account all the unprotected stations, a source of fallacy is introduced in comparing them with such places as Plymouth or Aldershot, inasmuch as a large number of these so-called "stations" comprise small detachments from 10 to 30, or 50 men, scattered about in country places, where the amount of disease is almost *nil.*

The fourteen protected stations were, on the contrary, originally selected, both on account of their large size, and because they were notoriously centres of venereal disease; and the fourteen unprotected stations afterwards selected for comparison with the former, were also of considerable size, and with a strength of nearly 19,000 men, none of them being under 500.

The return for the navy is taken differently. It is divided into half-yearly periods, from January 1st, 1880, to December 31st, 1883. The total force averaged about 22,000, and the ratio of disease for the last six months in each of those four years was, for 1880, 129.4; for 1881, 134.9; for 1882, 125.1; and for 1883, 214.7. The last ratio shows the effect of the withdrawal of the compulsory clause of the Contagious Diseases Acts.

The ratios at Haslar (for Portsmouth) with a force of about 7,000, were, for the periods just mentioned, 137.5; 190.8; 191.7; and 283.7 respectively. At Plymouth, with a strength of about 7,500, the corresponding ratios were 129.4; 137.1; 104.1; and 230.7.

With respect to the women, the number admitted into the certified hospitals, from May 12th to December 31st, 1883 (after the suspension), was 720. The number in 1882 for the like period was 2,254; in 1881, 2,476; and in 1880, 2,542. The number of diseased women roaming at large about the streets, is therefore more than three times as great as when the Acts were in force.

These returns, though they demonstrated, to a considerable extent, the effect of the Acts in diminishing venereal diseases, are shorn of half their value by the non-separation of syphilis and gonorrhœa. It is the former which is infinitely the more important, and in which the great increase has taken place since the Acts were suspended.

At the end of the September quarter last year, we took great pains to ascertain what had been the increase of disease at two typical stations—Devonport and Aldershot; one being a garrison town and the other a camp. At Devonport, for the quarter ending September 1883, the admissions for syphilis in the Seamen and Marines, was 133, and in 1882 only 32; there was therefore an increase of rates from 28.5 to 69.9 per 1,000, by the withdrawal of the Acts; in fact a three-and-a-half-fold increase. In the soldiers, at the same place, the ratio of syphilis increased from 43.5 to 135.2; again more than three-fold.

In the female hospital, the admissions were scarcely more than one-third, the percentage of syphilis to gonorrhœa in those who applied had greatly increased, and the cases were much more severe.

The condition of Aldershot closely corresponded with that of Devonport. The annual rates of admissions to hospital having increased to 174 per 1,000 for syphilis and chancrous sores alone, many of them of a severe character and indurated. As regards the women in hospital, they had diminished to less than one-third of their former number. The number of diseased women at large must, therefore, have been three times as great, on the supposition that the whole number remained the same, but it was notorious that it had greatly increased, and young girls and children were again noticeable in the streets.

The point on which it is most essential that full information should be given, is the increase of syphilis at each protected station from May to December last year; and we earnestly hope that no steps may be taken by the Government until every opportunity has been given for the full consideration of this most essential part of the question.

ST. MARY'S HOSPITAL.—Past students of this hospital will hear with great regret that Marsh, the faithful janitor of the Medical School, died on Tuesday, March 11th, of tuberculosis. Having been associated with the hospital even before the school was built, Marsh has been known to every student that has passed through its doors; by every one of them he has been held in respect, by not a few in affectionate regard. Though with increasing years his activity has for some time been on the wane, he has been throughout a valued and trusted servant; and, religious without ostentation, he has had, perhaps without knowing it, an influence for good on many who have been brought in contact with him. To him Carlyle's ejaculation might well be applied, "Sublimer in this world know I nothing than a peasant saint."

A BAD PRECEDENT. At a small town near Denver, Colorado, a man named Eli Madlong, practising as a physician, but without any diploma, prescribed some medicine for a patient, who died, presumably from the effects of the prescription; whereupon, according to the *Chicago Medical Review*, the friends of the deceased, being indignant, hanged the venturesome practitioner by the neck until he was as dead as his unfortunate patient.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

SESSION 1884.

Tuesday, March 25th.

DR. ACLAND, President, took the Chair at 2 P.M.

New Member.—Dr. John Struthers took his seat at the Council Board as the representative of the Universities of Edinburgh and Aberdeen, in the place of Mr. Turner.

President's Address.—The PRESIDENT delivered the following address.

A meeting of the Council has been, as last year, summoned before Easter. It seems desirable now, as then, that the Council should transact its annual business at an early period, lest any question should appear to the Council to demand the immediate attention of the Legislature.

It is not, however, my intention to occupy your time by discussing the prospect of a speedy legislative settlement of the vexed questions of medical examination and education. Nor shall I dwell at any length upon the causes which have led to the lamentable delay in that settlement, extending now over fourteen years. The assertion continues to be made in some quarters that this delay has been owing to the action, or inaction, of the Medical Council. History will show the contrary to be the fact. This must, however, be admitted, that the persistent determination that no Bill, whether for the purpose of educational progress, or for the settlement of matters affecting the profession in its relations to the colonies or to foreign countries, should be permitted to pass, unless the Council were altered in its constitution, has practically produced the result of hampering that educational progress, and causing waste of time, suspense, and uncertainty in all existing medical schools and in the examining boards.

I should not venture to say even this much, but that it seems to me that the time is come when we ought strenuously to endeavour, individually, if not collectively, to bring every influence to bear which may aid in settling medical legislation for some years to come, during the present session of Parliament. The reasons for this course are simple and convincing. The present Government naturally desires to carry out the recommendations of the Royal Commission appointed by themselves. Though the report of that Commission was only a "majority report," yet this very fact proved both the difficulty of the task, and the impossibility of absolute unanimity.

There remains, therefore, either some such Bill as is now before Parliament, or a continuance of unsettlement, misgiving, and agitation.

The main principles of the Bill are four, viz.:

1. To ensure one Final Pass Examination in each Branch of the Kingdom, all three being reasonably uniform.

2. To appoint three medical boards which shall regulate the chief educational details, in the place of the Branch Councils.

3. To alter the mode of appointment of the supreme General Council.

4. To amend or enact divers clauses which experience has shown to need revision or addition.

It may be fairly assumed that the broad principles here laid down will not, with the present tendencies of political action in this country, be departed from.

It seems to me therefore that this Bill is the only way now known of quieting the disturbed state of education in the medical schools, and of getting into a reasonable and more uniform shape the increasing mass of knowledge which our students are required to produce at the examining boards.

Copies of the Bill as it leaves the House of Lords will, it is hoped, be shortly laid before you.

The ordinary business of the office has been carried on as heretofore.

The *Medical Register* for the present year has been printed and issued. The number of practitioners registered in it are 21,517 as against about 16,000 in 1859, viz., on the Branch Register for England, 16,566; for Ireland, 3,906; and for Scotland, 1,045.

The *Dentists' Register* is also published, and contains 5,296 names, by far the largest proportion, viz., 4,428 persons, practising dentistry *bonâ fide*, on their own statement, and only 868 having any other qualification.

The Pharmacopœia Committee will present a full report to you on the progress which has been made by that Committee in the preparation of a new edition of the *British Pharmacopœia.*

Two cases with which the Council is already familiar, viz., those of Murray and Sadgrove, will be brought before you. An application for the removal of their names from the *Dentists' Register* is referred to you by the Executive Committee.

A complaint by Mr. Lewis Wynn, against Daniel Murray O'Hara will have to occupy your attention. There are special difficulties in this case which will be fully laid before you by the solicitor.

Murray, Sadgrove, and O'Hara have been summoned to appear before you on Wednesday afternoon.

On April 25th of last year you directed that certain resolutions, based on the Report of the Committee on the employment of unqualified assistants by Registered Practitioners, passed by the Council on April 21st, should be transmitted to the Lord President of the Privy Council. This was accordingly done, and a promise was received that the matter should have his Lordship's consideration. A letter upon the same subject from the Registrar-General will be laid before you.

The first prosecution under the Dentists' Act was successful on January 30th at the West Ham Police Court. The charge was that of assuming a qualification in relation to dentistry to which the person charged was not entitled. Your Registrar was called on to give evidence valuable in respect both of the facts and the general bearing of the case.

The attention of the Executive Committee has been again called to the desire of certain gentlemen entitled to act as apothecaries in the Indian Medical Service that they may be entered on the *Medical Register* under Clause 46 of the Medical Act. There being some doubt as to the proper interpretation of that clause in a legal point of view, their cases were referred by the solicitor to counsel. As it appeared desirable to have also full information concerning the status and qualifications of persons holding the office of apothecary in India, and appointed from time to time to act as surgeons or honorary surgeons in the Medical Service of India, the President has applied for information on the whole subject to the Secretary of State for India. In order that you may have the matter before you in the completest form, the Government have communicated with India before replying in full, and hence suggested that we should await the reply before arriving at a final decision. The papers connected with this matter will be duly laid before you.

It will be proposed to your consideration to appoint a Committee to consider whether the experience of the office of the Council during the last twenty-five years suggests any improvement in details of business which could be introduced with advantage into a Medical Act Amendment Bill. Some ambiguities have from time to time been found which might be rectified. Should you appoint the Committee, these would be examined and carefully compared with the Bill now before Parliament. Such subjects as that of the unqualified assistants, as well as of the existing form of certificate of death, might also come under the consideration of the Committee.

Notice has been given for a conjoint scheme of examination in Scotland.

An application has been made to your President by the Secretary of State of Foreign Affairs, for an account of the medical education of women in this country, for the Russian Government. A short statement of facts has accordingly been forwarded to Lord Granville.

No further information has reached the Council since your last meeting concerning the elaborate Report on Education by Mr. Teale, and Professors Gairdner and Stokes. Without presuming to suggest the reverting to the many subjects contained in that Report, I cannot forbear from remarking that this fact alone is evidence of the evil result of the continued suspense of legislation.

I have endeavoured thus most briefly to sum up the work already prepared for the present session. It need not, perhaps, detain the Council long. It may be necessary to have another short meeting in July. We may hope that medical legislation will have then been completed. The future position and duties of the Council will have been clearly laid down.

At our meeting last year, when it was expected that a Bill would be passed through the House of Commons, remarks were made by me on the past history of the Council. I have now [illegible] and not to repeat them. At that time I had no expectation of sharing your deliberations again this year. My term of office expires this summer. Till then, when the fate of the Bill will probably be known, I reserve my last expressions of gratitude and esteem.

We have now, as usual, to proceed with vigour and with care to our appointed task.

On the motion of Mr. MARSHALL, seconded by Dr. HUMPHRY, it was resolved that the President's address be entered on the minutes.

Executive Committee.—Sir Henry Pitman, Mr. Simon, Dr. Haldane, Dr. Humphry, Dr. Quain, and Dr. Aquilla Smith were re-elected as the Executive Committee.

Results of Examinations.—A table showing the results of professional examinations held in 1883 for qualifications granted under the Medical Act by the bodies named in Schedule A of the Act was then read. The following is a summary of the table : [I – First Examination ; II – Second Examination ; III – Third Examination ; P – passed ; R – rejected.] The figures after the designation of the degree or diploma denote the number of examinations to be passed before obtaining it.

Royal College of Physicians of London.—Licence (3) : I, R 210, P 282 ; II, R 51, P 45 ; III, R 45, P 182. Membership (1 to 3) : R 16, P 34.

Royal College of Surgeons of England.—Membership (2) : I, R 316, P 777 ; II, R 285, P 491.

Apothecaries Society of London.—Licence (2) : I, R 51, P 72 ; II, R 85, P 300.

University of Oxford.—M.B. (2) : I, R 10, P 11 ; II, R 5, P 10. M.D. (Essay), P 5.

University of Cambridge.—M.B. (4) : I, R 34, P 77 ; II, R 35, P 42 ; III, Part 1, R 6, P 35 ; Part 2, R 1, P 28. M.D. (1) : P 2. B.S. (1): R 1, P 6.

University of Durham.—M.B. (2) : I, R 40, P 49 ; II, R 4, P 37. M.D. (Essay) : R 2, P 6. M.C. (1) : R 11, P 1. M.D. for Practitioners of fifteen years' standing (1) : R 1, P 5.

University of London.—M.B. (3) : I, R 126, P 116 ; II, R 58, P 68 ; III, R 14, P 53. M.D. (1) : R 9, P 24. B.S. (1) : R 8, P 10. M.S. (1), P 1.

Royal College of Physicians of Edinburgh.—Licence (2) : I, R 16, P 26 ; II, R 61, P 147.

Royal College of Surgeons of Edinburgh.—Licence (2) : I, R 5, P 2 ; II, R 21, P 23.

Faculty of Physicians and Surgeons of Glasgow.—Licence (2) : I, R 54, P 49 ; II, R 38, P 49.

Royal College of Physicians and Surgeons of Edinburgh.—Licence in Medicine and Surgery (2) : I, R 120, P 116 ; II, R 140, P 154.

Royal College of Surgeons of Edinburgh and Faculty of Physicians and Surgeons of Glasgow.—Licence in Medicine and Surgery (2) ; I, R 10, P 8 ; II, R 24, P 32.

University of Edinburgh.—M.B. ; also M.B. and M.C. (3) : I, R 200, P 272 ; II, R 167, P 285 ; III, R 62, P 189.

University of Aberdeen.—M.D. (Thesis) : P 20. M.B. and M.C. (3) : I, R 27, P 72 ; II, R 17, P 56 ; III, R 31, P 68.

University of Glasgow.—M.B. and M.C. (Old, 3) : I, R 3 ; II, R 5, P 4 ; III, R 10, P 10. M.B. and M.C. (New, 4) : R. 59, P 111 ; II, R 27, P 108 ; III, R 22, P 81 ; IV, R 12, P 73. M.D. (Thesis) : R 6, P 18.

University of St. Andrew's.—M.B. and M.C. (3) : I, R 1. M.D. (1) : R 1, P 11.

King and Queen's College of Physicians in Ireland.—Licence in Medicine (2) : I, R ; II, R 30, P 124. Licence in Midwifery (1) : R 13, P 120.

Royal College of Surgeons in Ireland.—Licence (7) : I, R 118, P 126 ; II (and subsequent), R 42, P 124 ; Final, R 42, P 124. Licence (New Scheme, 1) : I, R 100, P 17. Licence in Midwifery (1) : P 13. Fellowship (5) : I, R 6 ; Final, P 13.

Apothecaries Hall of Ireland.—Licence (2) : I, R 26, P 32 ; II, R 9, P 36.

University of Dublin.—M.B. (4) ; Anatomy and Institutes of Medicine : R 31, P 55. Botany and Materia Medica : R 10, P 55. Physics and Chemistry : R 15, P 45 ; Final, R 6, P 34. M.C. (Thesis) : P 4. M.D. (Thesis) : P 17. B.C. (5) : Final, R 7, P 34. L.M. (4) : P 2.

Royal University of Ireland.—M.B. (3) : III, R 1, P 3. M.B. (3) : III, R 45, P 82. M.C. (1) : R 50, P 70.

Sir HENRY PITMAN moved, and Mr. MARSHALL seconded : "That the table be entered on the minutes."

Dr. AQUILLA SMITH said the table was one of considerable interest. Similar tables had been furnished to the Council since the year 1861 ; but, on looking at this table, and comparing it with tables presented some years back, he was very much struck with the increased percentage of rejections. In the first instance, taking the Royal College of Physicians of London, the rate of those rejected in 1883 was 30 per cent. Looking back to the table in volume 14 of *Minutes* for 1867, he found the rejections for the College of Physicians in London in that year were only 11.2 per cent. The rejections in the King and Queen's College of Physicians in Ireland in 1867 were 19.4, while they were 22 per cent. last year. There was a very striking difference with regard to the College of Physicians in Edinburgh, because last year the rejections were 29.3, whereas in 1867 they were only 15.7 per cent. Then, taking the College of Surgeons in England, the percentage of rejections was 36 last year, whereas in 1867 it was only 12. In the Royal College of Surgeons of Edinburgh last year, the rejections were 47 per cent., against 17 per cent. in 1867 ; and in the Royal College of Surgeons in Ireland they were 25 per cent., against 15. The Conjoint Board of the Colleges of Physicians and Surgeons in Edinburgh showed 47 per cent. rejections last year, whereas in 1867 they only rejected 20 per cent. The other conjoint body in Scotland—the College of Physicians of Edinburgh and the Faculty of Glasgow—rejected 42 per cent. last year, whereas it was only 14 per cent. previously. Another body presented rather remarkable results. That was the Faculty of Physicians of Glasgow, who rejected 43 per cent. last year, while in 1867 they rejected 44 per cent., or nearly the same. There was a very remarkable difference between that return and those of some of the other bodies, particularly the Scotch bodies, as to the number of rejections. The inference from this was that the standard of education had lately been very much raised. The table also showed a very remarkable result as to the numbers rejected on the first examination. In the University of London they passed 116 and rejected 126, or 52 per cent. The Royal College of Physicians and Surgeons of Edinburgh rejected 120 and passed only 116 ; and the Faculty of Physicians and Surgeons of Glasgow rejected 54 and passed 49. The Royal College of Surgeons in Ireland, under what was called the "new scheme," rejected 100 and passed 17 ; under their old scheme in the same table, they rejected 118 and passed 126. Taking this large proportion rejected at the primary examination, in connection with the very large proportion of candidates rejected by the College of Preceptors in the preliminary examinations, he contended that there was unmistakeable evidence of a great defect in the preliminary education of young men entering the medical profession, and he was very desirous that this subject should engage the serious consideration of the Council. He pointed out the great importance of reconsidering the whole question, and instituting an improved curriculum which might properly be called preparatory. He looked upon the preliminary education now given as being a very useless thing, for the fact was that young men entering the medical profession were not better educated than those entering the Post Office. If a system could be adopted by which a good preliminary education should be given to young men about to become students in medical schools, very great advantages would result. It would, of course, be a rule that no student should be admitted into any medical school without being able to present a certificate as to his preparatory education, and the registration of that certificate would protect the profession, because such registry being kept in the office under the control of the Council, they would be able to see that four clear years elapsed between the date of his certificate and the date of his qualification for registration.

Mr. MACNAMARA said there must be some error as far as his College, the Royal College of Surgeons in Ireland, was concerned ; because the table showed that by their new scheme one hundred men were rejected and seventeen passed. He doubted very much whether more than seventeen had gone in altogether under the new scheme, so that there was clearly some error. He hoped that means would be taken to ascertain where the error lay.

The REGISTRAR said the table had been made from returns furnished by the different bodies, and if the table were not in accordance with the returns, further information would be sought for.

The motion was agreed to.

Exceptional Cases.—A table was read showing the number of exceptional cases that occurred during the year 1883 under Clause 20 of the Council's "Recommendations on Education and Examination," together with a statement of the action taken thereon by the several licensing bodies.

The Royal College of Physicians of London reported 26 cases of colonial (principally) foreign candidates admitted to examination. The Royal College of Surgeons of England reported 22 cases : all being candidates from Indian, colonial, or foreign universities and colleges. The University College of Durham reported one case ; that of a graduate of Seville who entered in 1881 and attended the medical course until December, 1883, in which month he graduated as Bachelor in Medicine. In the Royal College of Surgeons of Edinburgh there were no exceptional cases, except such as might have received authority to be examined from the Medical Council or a Branch Council. In the Faculty of Physicians and Surgeons of Glasgow there were 3. The remaining boards reported that there were no cases in which exceptional action was necessary.

Sir HENRY PITMAN moved, and Dr. HUMPHRY seconded, "That the table be inserted on the minutes."

Mr. MACNAMARA said it would be interesting and gratifying to the

Council to know that the College of Surgeons in Ireland had cordially accepted its recommendations, and any exception that might be desired with reference to education was at once remitted to, and decided by, the Branch Council. The College of Surgeons in Ireland had entirely ceased acting independently of the Council. The College of Physicians of London had twenty-six exceptional cases stated to be "colonial (principally) and foreign admitted to examination." He did not understand what that meant. The College of Surgeons of English had twenty-two exceptional cases, "all candidates from Indian, colonial, or foreign universities and colleges." It did not state whether those exceptional cases had been referred to the Branch Council in England or sanctioned by the Branch Council. His idea was that such exceptional cases should be referred to the Branch Council.

Mr. **Marshall** said it would be in the recollection of the Council that when the College of Surgeons surrendered the practice of instituting its preliminary examinations, it retained to itself the power of accepting preliminary examinations conducted out of this country, and if those particular cases had not been referred to the English Branch Council, they had certainly been separately and most carefully considered. All the candidates were from Indian, colonial, or foreign universities and colleges. He was not aware that the College was obliged to refer such cases to the Branch Councils.

Mr. **Macnamara** said it had been insisted that Ireland should follow that course, and he could not understand why England should not obey the recommendations of the General Medical Council.

Sir **Henry Pitman** said if Mr. Macnamara would refer to volume 18 of the *Minutes*, page 154, he would find that the Council passed this resolution: "That after Recommendation 20 of the Council's recommendations on Education and Examination, a proviso be inserted to the effect that in the opinion of the Council exceptions to Recommendation 20 may properly be allowed in the case of any graduate in medicine of an Indian, colonial, or foreign university or college, or of any student who, having completed the full time required by the Medical Council, and having given satisfactory evidence of general education, shall have spent the whole or three-fourths of that period at an Indian, colonial, or foreign university or college." Acting upon that recommendation of the General Council, the two colleges had admitted foreign and colonial graduates to examination; an entire course of study of course having been completed.

Mr. **Simon** said a subsequent resolution of the same date was this: "That the several licensing bodies be requested to communicate to the Council annually a statement of the action taken by them in regard to exceptional cases." This return was made in consequence. He expressed great pleasure with what he heard of the admirable action taken by the Royal College of Surgeons in Ireland in this matter.

Mr. **Macnamara** asked that the resolution might be read.

The **Registrar**: "No licence shall be obtained at an earlier period than after the expiration of forty-five months subsequent to the registration of the candidate as a medical student." Then followed the proviso as read by Sir Henry Pitman.

The motion was then agreed to.

The Case of A. A. Sadgrove.—The next business before the Council was the reception of certain communications in regard to the case of Arthur Augustus Sadgrove, including the report by the solicitor to the Medical Council, and the resolution adopted by the Executive Committee, after the consideration of the various communications: "That Arthur Augustus Sadgrove be informed that the Executive Committee, as at present advised, see no reason to recommend the restoration of his name to the *Medical Register*."

Sir **Henry Pitman** moved, Mr. **Marshall** seconded, and it was agreed, "That these communications be received and entered on the minutes."

The Provincial Medical Board of Nova Scotia.—A communication from the Provincial Medical Board of Nova Scotia, pursuant to a resolution passed by the Executive Committee, on July 4th, 1883, was then brought before the Council.

Sir H. **Pitman** moved, "That the communication be received and entered on the minutes."

Mr. **Marshall** seconded the motion.

The Rev. Dr. **Haughton** had satisfied himself, by personal visits to a number of American and Canadian bodies, that they were not in at all a satisfactory state with regard to elementary examinations. The southern hemisphere was much more fully advanced with regard to medical preliminary education than the northern. As far as he could make out, all the universities of Australia and New Zealand had a very high standard; the same was the case with the Indian universities and with the Ceylon Medical College. He had previously expressed a different opinion with regard to the Ceylon Medical College, but he now wished to retract anything he had said in that direction. The medical department of that College was under the control of Dr. Vanderdecken, a Dutch surgeon and physician of great eminence, and the preliminary arts examination was on a very satisfactory footing. This communication from the Provincial Medical Board of Nova Scotia stated that the subject of elementary mechanics of solids and fluids had been added to the subjects in the compulsory list. He should hesitate, without further information, to recognise the examination in mechanics and hydrostatics of a medical board in Nova Scotia. There was no guarantee that medical boards knew very much about hydrostatics and mechanics. The Council had gone much too far in the recognition of preliminary arts examinations, over which they had no control and of which they had very little knowledge. He was perfectly certain that there were a number of bodies on that list that ought to be removed or about which inquiry should be made.

Sir H. **Pitman** said the Provincial Board of Nova Scotia was not at present recognised by the Council, nor had any application been made that it should be so recognised.

The Rev. Dr. **Haughton** said in that case the communication before them had no meaning, and no acknowledgment ought to be taken upon it. He would move as an amendment, "That the letter be marked 'read,' and not inserted in the minutes."

Sir H. **Pitman** said he merely proposed that the communication should be entered on the minutes, and not that the examination should be recognised by the Council.

The Rev. Dr. **Haughton** said he was satisfied with that assurance.

Dr. **Lyons** thought it was desirable that they should have some information as to the constitution of this body.

Dr. **Storrar** said there was nothing for which the Council had struggled more firmly than, if possible, to bring all preliminary arts' examinations into examinations conducted by arts' bodies—to take them, in fact, entirely out of the supervision of medical bodies. It seemed to him an inconsistency that the Council should be devoting attention so sedulously to that point at home, and yet should be listening to granting such concessions abroad. The utmost they could possibly do was to allow that communication to appear on the minutes; and he was not sure whether that would not be conceding too much.

The Rev. Dr. **Haughton** seconded the amendment.

After some remarks from Dr. **Henry Watson**,

Sir **Henry Pitman** said he was quite prepared to accept the suggestion that it should simply be stated that the communication was read.

The motion as amended was then agreed to.

False Certificates of Death.—On the motion of Dr. **Humphry**, seconded by Mr. **Marshall**, a communication from the solicitor to the Medical Council, enclosing a copy of Mr. Muir Mackenzie's opinion that the offence of giving a false certificate of the cause of death under Section 40 of the Births and Deaths Registration Act, 1874, is clearly a misdemeanour, was ordered to be placed upon the minutes.

Dr. **Heron Watson** suggested that the legal opinion referred to should also be printed on the minutes.

Mr. **Simon** said it had been found inexpedient to have legal opinions placed upon the minutes.

Dr. **Storrar** thought the application was a very reasonable one—that the opinion of Mr. Muir Mackenzie should be laid before the Council. It seemed an absolute absurdity that the clients of a solicitor and of a Council were not to be entrusted with a knowledge of the opinion that had been given.

Mr. **Simon** said his contention was not that the opinion should not be communicated to the Council, but that it should not be published.

The **President** said the question raised by Dr. Watson was as to whether the Council might receive this opinion; and Mr. Simon had stated that they had been advised that the opinions of counsel should not, as a matter of course, be published. This, of course, was a very different thing from reading the opinion to the Council; and it would be for the Council to say whether they wished to have it read in public or private.

The Council decided to have the opinion read to them in private, and strangers were requested to withdraw.

Personation at Examinations.—A report was received from the Executive Committee with reference to the provisions taken to ensure the impossibility of personation at the examinations of the several bodies, the certificates of which were accepted by the Council as satisfactory evidence of preliminary examination. The report was, after discussion, ordered to be entered on the minutes in the following form. (Answers from the examining bodies were appended to the report.)

[illegible]

cises with that on a small schedule filled up beforehand by the candidate; and in this way two instances of personation were detected.

In other instances, the examinations are at the schools, or the schoolmasters or teachers are present, or are responsible that the candidates are *bonâ fide* pupils in their several schools, and there is, in addition, the security afforded by the signatures of the candidates previously given in.

In the third class of cases, the candidate, previous to the examination, fills up a form with his signature, the handwriting of which may be compared with that of his answers. In the case of the local examinations, moreover, the candidates are usually from schools or centres where they are known.

The Faculty of Physicians and Surgeons of Glasgow, after full discussion, with a view of devising some effective check, forced upon them by the occurrence of two cases of personation at their examinations, came to the conclusion "that the most effectual means of deterring from such a nefarious practice will be found to be the prosecution of the delinquents in every case in which the evidence warrants it."

The Royal College of Surgeons of Ireland has not adopted any special means, but appreciates the necessity for the adoption of precautions.

The Civil Service Commissioners say that they take such measures as they deem necessary.

The Committee recommend to the Council to suggest to all examining authorities that, except so far as they may have in use other and better means of identifying candidates, precautions as follows should be taken:

1. That each person desiring to present himself for examination by any examining authority should be required to make previous application to the authority in a prescribed form, signing his name to the application, and having his signature attested in a way which would suffice for its authentication;
2. That each examining authority should keep a signature-book for the candidates who present themselves for examination, each of whom should be required to sign his name in the book in the presence of an officer of the authority.

The Committee recommend that, if this report be approved, a copy of it, with the "answers," be sent to each of the several bodies, the certificates of which are accepted by the Council as satisfactory evidence of preliminary examination.

Dr. **Banks** said that no answer had been printed from the Royal University, Ireland, but he had placed in the Registrar's hands a memorandum, stating the steps taken by that University to prevent personation. (It was resolved that this statement should be printed with the other answers from the examining bodies.)

The Rev. Dr. **Haughton** said that the bodies that had replied to the circular of the Committee consisted of two distinct classes—examining bodies who had no previous knowledge of the candidates, and bodies like the universities, where the candidates were personally known to the examiners. In the latter case there were guarantees as to the identity of the candidates, and no precautions, therefore, were necessary; but with regard to the first and the much larger class of bodies, some of the answers that had been given were not at all satisfactory. In the third class of cases it was stated that the candidate, previous to his examination, filled up and signed a form, and that his handwriting "may be compared with that of his answers." That was extremely vague and unsatisfactory. The comparison of writing ought to be compulsory. He knew that in some cases a candidate had been represented at the examination by his teacher. The matter was one which ought to be seriously enquired into by the Council. Candidates at the Arts Preliminary Examination should be required to write an English composition, which should be kept for reference at subsequent examinations. He thought that the recommendations of the Committee ought not to be addressed to the examining bodies in which personation was impossible.

On the proposal to enter on the minutes the paragraph respecting the Royal College of Surgeons in Ireland,

Mr. **Macnamara** said he thought the College of Surgeons in Ireland deserved great praise for their candour, which was one of the characteristics of that body, and it deserved special praise from the fact that it was in consequence of the action taken by its representative that the attention of the Council had been called to the subject of personation. Some of the answers were certainly very unsatisfactory. The Civil Service Commissioners, for example, stated "that they take such measures as they deem necessary"—[*laughter*]; and the Assistant Commissioners of Intermediate Education in Ireland stated that students were required to sign their names on the forms of application, and also on the signature-roll, before being admitted, "such roll to be returned to and preserved in the office for a comparison should questions as to identity arise." He had attended one of the examinations held by that body, and had observed that no precautions whatever were taken as to identity. Whatever recommendations might be agreed to by the Council, if any of the Irish bodies did not loyally accept them and carry them out, he could promise that the College of Surgeons of Ireland would not accept their preliminary examinations. The Faculty of Physicians and Surgeons of Glasgow appeared to him to be the only body, with the exception of the College of Surgeons in Ireland, that was alive to the question, and had taken active measures with reference to it. They owed a deep debt of gratitude to that body for the action it had taken, and it was a matter of regret that they had not been more successful in their efforts to inflict punishment on the guilty.

The Rev. Dr. **Haughton** said that the College of Surgeons of Ireland was not quite clear of the suspicion of personation. Evidence had been given at the Branch Council that a large sum of money had been offered in Dublin by a candidate to a well known teacher to personate him at one of the examinations of that body. The police had been put on his track, but he had not been found. The alarm excited by the circumstance had set the representatives of the College in action.

On the proposal to enter on the minutes the two recommendations of the Committee,

The Rev. Dr. **Haughton** proposed to add a third, namely, "That the English language papers of each candidate who is examined be signed by him, and be preserved together with the before named signatures for comparison, so far as may be necessary, with his handwriting at subsequent examinations."

Dr. **Humphry** and Mr. **Simon**, the movers of the resolution, expressed their willingness to accept Dr. Haughton's proposed addition.

Mr. **Teale** said he did not see how Dr. Haughton's proposal would work, if the candidate went before another body for his subsequent examination.

Mr. **Macnamara** said that the Royal College of Surgeons in Ireland had adopted a form of application to be written out by each candidate for the Preliminary Arts Examination. If he were in Dublin, he went for it, and if in the country, he had to write his name in the presence of a clergyman, a magistrate, or a registered medical practitioner, who had to certify that he was the person making the application.

After some remarks from Dr. **Watson** and Mr. **Simon**, the Rev. Dr. **Haughton** withdrew his proposal.

The two recommendations of the Committee were then ordered to be entered on the minutes, with the report as amended, and the Council adjourned.

Wednesday, March 26th.

Dr. **Acland** (President) took the chair at 2 P.M.

Alleged Personation. The first business was the reception of a report by the solicitor of the Council on the case of Daniel Murray O'Hara, which was referred to him by the Executive Committee on January 17th, and upon which the Council, on March 11, passed a resolution instructing the solicitor to take such steps as might be necessary to ascertain the identity of Daniel Murray O'Hara, and to bring the case before the Council.

Dr. O'Hara was summoned to appear at two o'clock, but Mr. Godfrey, a solicitor, produced a medical certificate to the effect that Dr. O'Hara, of Prescot, had had a very severe attack of angina pectoris, and was totally unfit to travel. He added that his object in producing the certificate was to obtain an adjournment of the case.

Mr. **Burrell**, solicitor, of the firm of Farrer and Co. (solicitors to the Council), then stated the facts of the case. He said that on December 15th, 1858, Owen Patrick O'Hare was registered as M.D., and on the January 12th, 1859, Daniel Murray O'Hara was registered with the same qualifications. The latter was removed from the *Register* for not having answered a letter from the registrar, and he had been traced to Victoria as late as 1882. On April 16th, 1878, O'Hare was removed from the *Register* for felony. On October 26th, 1882, he seemed to have applied to Mr. Needes, a medical agent, and through him to have negociated business with Dr. Wynn, of Kirkdale Road, Liverpool. Certain telegrams and correspondence passed between Dr. Wynn and Mr. Needes, and, on November 8th, 1882, O'Hare stated, in a letter to Mr. Needes, that he arrived on the previous Saturday (November 4th) at 42, Kirkdale Road. On November 16th of the same year, Messrs. Quin and Son, solicitors, of Liverpool, applied to register Dr. O'Hara as Daniel Murray O'Hara, of 44, Kirkdale Road, Liverpool, stating that he had been introduced to them by some Liverpool tradesmen, whom they knew very well. His identification was witnessed by a Roman Catholic priest, who, on being interrogated and written to, replied that he did not know anything of O'Hara, but that he knew a friend of his who was with him at the University. On January 18th, 1882, O'Hara was restored to the *Register*, with the address of 44, Kirkdale Road. He continued with Dr. Wynn until June 1883; and, in October 1883, he appeared to be at Prescot, when he wrote a letter in the name of O'Hara, with reference to an operation that he said had been performed by him. The letters, which were now in the solicitor's possession, would show that the handwriting of O'Hare was identical with that of O'Hara.

Mr. **Needes**, medical agent, stated, in answer to the solicitor, that he had letters, two or three days ago, signed D. M. O'Hara, and that very morning the writer of the letter had called at his office, and he recognised him as the same individual who, in November 1882, was O. P. O'Hare. He was certain that it was the same individual.

The Rev. Dr. **Haughton** said he had examined the handwriting of the original letter addressed to him, and compared it with the hand-writings of the letters sent to Mr. Needles, and they were identical, but he thought the handwriting of the letter signed O. P. O'Hare was not the same. But, after the evidence given with regard to personal identity, he believed that the O'Hare letter was written by another person from dictation.

Sir **Henry Pitman** thought it would be an important link in the evidence if Dr. O'Hara produced the qualifications which he held, although it would not be perfectly convincing. The two persons, O'Hare and O'Hara, were at the same medical school, and obtained the same qualification at the Queen's University of Ireland. It was quite possible that, after being convicted of felony, O'Hare joined his old acquaintance in Australia. O'Hara might have died there; and then it might have struck O'Hare that if he possessed himself of O'Hara's qualifications he could pass himself off in England as O'Hara. Whoever he was, he had got himself re-registered in consequence of a letter by a clergyman who knew nothing about him.

Strangers were directed to withdraw. On their re-admission—

The **President** said that the Council had come to the conclusion to adjourn the inquiry, in order to obtain further information.

Report on Personation at Examinations.—Dr. **Heron Watson** moved: "That the Report of the Executive Committee on the provisions to be adopted to prevent 'personation' be restricted to paragraphs 1 and 8, and following recommendations with answers from Examining Bodies, omitting the other paragraphs." He did so in order to reduce the length of the document, which would have to be sent out to all the licensing authorities.

Mr. **Teale** seconded the motion, which on being put to the Council was lost.

The Rev. Dr. **Haughton** said that on further consideration he had come to the conclusion that the proposal he had brought forward on the previous day was impracticable, because the Council had no control over a large number of the preliminary examinations. He therefore desired to withdraw it.

Dr. **Humphry** moved: "That the report be approved, and that a copy of the amended answers be sent to each of the several bodies, the certificates of which are sent to the Council as satisfactory evidence of preliminary examination."

Mr. **Simon** seconded the motion, which was adopted, with the addition, on the suggestion of Mr. **Macnamara**, of the following words after the word "that" in paragraph 2, "For the purpose of comparison with the signatures thus authenticated."

Erasure of Names from the Dentists' Register.—The Council next considered a report from the Dental Committee on the cases of James Patrick Murray and Arthur Augustus Sadgrove, whose names had been removed from the *Medical Register*, but still remained in the *Dentists' Register*. J. P. Murray had been summoned to attend before the Council at four o'clock, but did not appear. The Council deliberated in private. On the reporters being readmitted, the President said that the resolution at which the Council had arrived was—

"That James Patrick Murray is adjudged, after due inquiry, to have been guilty of infamous conduct in a professional respect, and that as it has been proved to the satisfaction of the Council that James Patrick Murray has been guilty of infamous conduct in a professional respect, the Council does, by this order in writing, direct his name to be erased from the *Dentists' Register*, and gives orders to the registrar to erase his name accordingly."

The case of Arthur Augustus Sadgrove was then proceeded with. In response to a summons, Mr. Sadgrove appeared before the Council.

Mr. **Sadgrove** asked in what way he had infringed the Dental Act. Last year he had admitted that he had offended against the Medical Act, and his name was struck off the *Medical Register*, and it seemed a gross insult to him, that after this lapse of time, the Dental Association should have anything to say about it. In deference to the summons he had appeared before the Council, but he was unaware that he had infringed the Dental Act. No one could be more sorry than himself that he had ever infringed the Medical Act, and it had been a source of bitter sorrow to him that his name had been taken off the *Medical Register*. He hoped that the members of the Council would think he had been punished enough, and would kindly restore him to the *Medical Register*, and give him another chance. He would willingly promise never to practise on his own account until he obtained another diploma, if the Council would only consent to his being restored on those conditions. He was continually being hunted up by societies of this kind. Whenever he got settled down into a position of trust, this matter was brought up again, and it really marred his freedom.

The Council again deliberated in private; and subsequently

The **President** announced that the resolution come to with regard to Mr. Sadgrove's case was the same as in Mr. Murray's case.

Personation at Examinations.—Dr. **Struthers** moved:

"That the various licensing bodies be requested to intimate in future to the General Medical Council all cases of impersonation."

He said his reason for moving the resolution was that the Council might not be able to compel the different licensing bodies to send the required information to all the other bodies; and it therefore seemed to him that the simplest plan was to ask that it should be sent to headquarters. There were two classes of cases to be dealt with. The most common probably was when a student was detected in the act of impersonation, and then, of course, did not get on the *Register*, but went to some other body, and again tried to pass an examination by which he could get on the *Register*. The other class was that of persons who had got on the *Register*, but the impersonation was not discovered until afterwards. In this latter case, it would have been the duty of the Council to remove the name from the *Register*; and it therefore appeared to him that the Council should request the various licensing bodies to report any case of impersonation which they discovered.

Dr. **Pyle** seconded the motion.

The Rev. Dr. **Haughton** presumed that the object of the motion was that the Medical Council should send the names of the persons offending to all the other examining bodies.

Dr. **Struthers** said that was his object.

The resolution was agreed to, with the addition of the following words: "with a view to their being communicated to the examining bodies recognised by the Council."

Examination of the College of Preceptors. A communication from the Secretary of the College of Preceptors was read and ordered to be entered on the minutes; and on the proposal of Dr. **Storrar**, it was decided to return the thanks of the Council to the College of Preceptors. The letter gave the results of the preliminary examination for medical students and others, held by the College on the 4th to 6th September. The number of candidates examined was 264, of whom 193 sat at the London centre, 20 at Bristol, 15 at Birmingham, 15 at Leeds, and 21 at Liverpool. Of the total number examined, 82 (or rather less than one-third) obtained certificates qualifying for registration as medical students, and one candidate passed in mechanics as a separate subject. Of the 182 who failed to obtain qualifying certificates, 20 passed in all the obligatory subjects, but did not obtain the minimum total of marks required for a place in the second division of the second class, as required by the Medical Council. Of the remaining 162 rejected candidates, 61 failed in one obligatory subject, 25 in two, 26 in three, and 38 in four (and more) obligatory subjects. Thirty-two candidates were reported for defective spelling, but only one candidate was disqualified on that account alone.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

Meetings of the Council will be held on Wednesday, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

COUNCIL.

NOTICE OF MEETING.

A meeting of the Council will be held in the Council-Room of Exeter Hall on Wednesday, the 9th day of April next, at 2 o'clock in the afternoon.

Francis Fowke, *General Secretary.*

161a, Strand, London, March 6th, 1884.

COLLECTIVE INVESTIGATION OF DISEASE.

Cards for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, local.
IVa. Diphtheria, sanitary.
V. Syphilis, acquired.
Va. " inherited.
VI. Acute Gout.

URGENT.—*The Committee needs 150 more cases of Pneumonia, and hopes that they will be sent in as soon as possible.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
September, 1883. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH. Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT. The next meeting of this session will be held on Friday, April 4th, 1884, at 8.30 P.M., at the Great Northern Central Hospital. Dr. J. Braxton Hicks, F.R.S., will take the chair. Dr. Grigg will read a paper on Puerperal Pyrexia: the indication of Treatment. A discussion will follow. GEORGE HENTY, M.D., Honorary Secretary, 305, Camden Road, N.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The spring meeting will be held at Llanelly, on Wednesday, April 2nd. Further particulars in circulars. Members wishing to read papers or make communications are requested to send titles of the same to Dr. Sheen, Cardiff, not later than March 12th, in order that they may appear in the circulars.—ALFRED SHEEN, M.D., D. ARTHUR DAVIES, M.B., Honorary Secretaries.—February 20th, 1884.

LANCASHIRE AND CHESHIRE BRANCH.—A meeting of this Branch will be held at Wigan, on Tuesday, April 8th. Members desirous of making communications are requested to send their names at once to the Honorary Secretary.—CHARLES E. GLASCOTT, M.D., Honorary Secretary, 23, St. John Street, Manchester.

WEST SOMERSET BRANCH.—The Spring Meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 3rd, at 5 o'clock. The subject settled by the Council to be discussed after dinner will be "Chorea," when answers will be invited to the following questions:—"What is your experience as to its pathological anatomy, with special reference to concomitant heart-disease?" "What treatment have you found most useful?" Dr. Long Fox, of Clifton, has promised to open the discussion. The election of a representative of the Branch on the Council of the Association, to hold office for one year from the second day of the next Annual Meeting of the Association, should now take place, in order that his name may be returned within the prescribed time. A copy of the Articles and By-Laws of the Association, as lately altered, will be submitted with a view to the Branch having its By-Laws brought into accordance with the altered Articles and By-Laws of the Association. Members having any communications for the meeting, are requested to send early notice of the title to W. M. KELLY, M.D., Honorary Secretary, Taunton.

METROPOLITAN COUNTIES BRANCH: HERTFORDSHIRE DISTRICT.—A meeting of the above district will be held in the Council Chamber, Shire Hall, Hertford, on Monday, March 31st. The chair will be taken at 5.30 P.M., by the President, Dr. C. J. Hare. The following papers will be read. 1. Pelvic Hæmatocele and Pelvic Abscess: Dr. Hayes. 2. Some cases of Deformity, with remarks upon Treatment: Noble Smith, Esq. 3. Fracture of the Spine: W. Odell, Esq. 4. Hypodermic Injection of Chloral in Puerperal Convulsions: F. R. Webster, Esq.—R. R. LLOYD, Honorary Secretary, Boroughfield, St. Albans.

METROPOLITAN COUNTIES BRANCH: WEST MIDDLESEX DISTRICT.—The next meeting will be held on Thursday, April 10th, at the Horbury Schoolroom, Notting Hill, at 8.30 P.M. A paper will be read by Dr. Mahomed on the Causation, Recognition, and Treatment of Diphtheria, with a view to discussion, in which Dr. Goodhart, Dr. Stephen Mackenzie, Dr. Barlow, and others, have promised to take part. Gentlemen desirous of joining in the discussion are requested to send their names to the Honorary Secretary, that they may be announced in the cards summoning the meeting.—ED. HART VINEN, M.D., Honorary Secretary, 17, Chepstow Villas, Bayswater.—March 25th, 1884.

SOUTHERN BRANCH: SOUTH-EAST HANTS DISTRICT.—An ordinary meeting of this district will be held at Grosvenor Hotel, Queen's Gate, Southsea, on Thursday, April 3rd, at 3.30 P.M. Agenda: Statement of Accounts.—Pathological Specimens: G. R. Snowden, Esq.; P. H. Gardner, Esq. Tumours of Eyeball and Stomach, Acute Pericarditis: Dr. C. C. Claremont. Microscopic Specimens of Tinea Tonsurans; Casts from Chronic Interstitial Nephritis; Spindle-celled Sarcoma of Brain: Dr. F. J. Driver. Discussion on Paracentesis by Slow Evacuation. Congenital Syphilis of the Larynx; New Inhaler: Dr. Ward Cousins. Notes on Aphasia: Dr. Guillemard. Gentlemen who are desirous of introducing patients, exhibiting pathological specimens, or making communications, are requested to signify their intention at once to the Honorary Secretary. Dinner will be provided at 6.30 P.M. Charge, 5s., exclusive of wine, etc.

BEQUESTS AND DONATIONS. Miss Charlotte Collinson, of York Street Portman Square, has bequeathed £500 each to the Royal Ophthalmic Hospital, St. Mary's Hospital, and the British Home for Incurables.—The Adelaide Hospital, Dublin, has received £500 under the will of Mrs. James Edwards.—The Suffolk General Hospital, Bury St. Edmunds, has received £100 under the will of the Rev. Thomas Burroughes.—University College Hospital has received £100 from the People's Contribution Fund.—Miss E. Mossop has given £100 to the Stamford, Rutland, and General Infirmary.—Charing Cross Hospital has received £50 under the will of Mrs. Tice.

BRITISH MEDICAL ASSOCIATION.

FIFTY-SECOND ANNUAL MEETING.

THE Fifty-second Annual Meeting of the British Medical Association will be held at Belfast, on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1884.

President: A. T. H. WATERS, M.D., F.R.C.P., Senior Physician to the Royal Infirmary, Liverpool.

President-elect: JAMES CUMING, M.D., F.K.Q.C.P., Physician to the Royal Hospital, Belfast.

An Address in Medicine will be delivered by Sir ANDREW CLARK, Bart., M.D., Physician to the London Hospital.

An Address in Physiology will be delivered by PETER REDFERN, M.D., Professor of Anatomy and Physiology in Queen's College, Belfast.

An Address in Obstetric Medicine will be delivered by GEORGE H. KIDD, M.D., Consulting Obstetric Surgeon to the Richmond and Hardwick Hospitals, Dublin.

SECTION A. MEDICINE.—*President:* J. W. T. Smith, M.D. *Vice-Presidents:* G. F. Duffey, M.D., Dublin; Alexander Davidson, M.D., Liverpool. *Secretaries:* Richard Ross, M.D., Belfast; Thomas Barlow, M.D., London.

SECTION B. SURGERY.—*President:* Sir William Mac Cormac, London. *Vice-Presidents:* J. K. Maconchy, M.B., Downpatrick; J. W. Browne, M.D., Belfast; John Chiene, F.R.C.S., Edinburgh. *Secretaries:* John Fagan, F.R.C.S., Belfast; Bennett May, M.B., Birmingham.

SECTION C. OBSTETRIC MEDICINE.—*President:* Clement Godson, M.D., London. *Vice-Presidents:* Sir William Millar, M.B., Londonderry; William Stephenson, M.D., Aberdeen. *Secretaries:* W. Walter, M.D., Manchester; Brice Smyth, M.B., Belfast.

SECTION D. PUBLIC MEDICINE.—*President:* Charles Cameron, M.D., M.P. *Vice-Presidents:* John F. Hodges, M.D., Belfast; David Davies, M.R.C.S., Bristol. *Secretaries:* H. S. Purdon, M.D., Belfast; Shirley Murphy, M.R.C.S., London.

SECTION E. OPHTHALMOLOGY.—*President:* W. A. McKeown, M.D., Belfast. *Vice-Presidents:* W. A. Brailey, M.D., London; Edgar Browne, M.D., Liverpool. *Secretaries:* Joseph Nelson, M.D., Belfast; R. N. Hartley, M.B., Leeds.

SECTION F. PHYSIOLOGY AND PATHOLOGY.—*President:* W. S. Greenfield, M.D., Edinburgh; *Vice-Presidents:* J. J. Charles, M.D., Cork; D. C. McVail, M.D., Glasgow. *Secretaries:* A. H. Young, F.R.C.S., Manchester; T. Sinclair, M.D., Belfast; R. S. Anderson, M.D., Galway.

SECTION G. THERAPEUTICS.—*President:* Thomas John Maclagan, M.D., London. *Vice-Presidents:* Matthew Hay, M.D., Aberdeen; W. Whitla, M.D., Belfast; Walter Smith, M.D., Dublin. *Secretaries:* George Gray, M.D., Castlewellan; W. Murrell, M.D., London.

SECTION H. PSYCHOLOGY.—*President:* G. H. Savage, M.D., London. *Vice-Presidents:* Daniel Hack Tuke, M.D., London; Isaac Ashe, M.D., Dundrum. *Secretaries:* A. S. Merrick, M.D., Belfast; S. Rees Philipps, M.D., Exeter.

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Treasurer: William Whitla, M.D., Belfast.

TUESDAY, JULY 29TH, 1884.

2 P.M.—Meeting of Council.
3 P.M.—General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M.—General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, JULY 30TH, 1884.

9.30 A.M.—Meeting of Council.
11.0 A.M.—Second General Meeting. Address in Medicine.
2 to 5 P.M.—Sectional Meetings.

THURSDAY, JULY 31ST, 1884.

9.30 A.M.—Meeting of Council.
11 A.M.—Third General Meeting. Address in Physiology.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M.—Public Dinner.

FRIDAY, AUGUST 1ST, 1884.

10 A.M.—Address in Obstetric Medicine.
11 A.M.—Sectional Meetings.
2 P.M.—Concluding General Meeting.

SATURDAY, AUGUST 2ND, 1884.

Excursions.

March 7th, 1884. FRANCIS FOWKE, *General Secretary.*

SPECIAL CORRESPONDENCE.

LETTERS FROM ITALY.—V.

ROME.

The Fevers of Rome.—The Hotels: Their Sanitation.—Drains, Baths, and Water-Supply.—Rich and Poor.—The Dietary and Cuisine of the Romans.—Gnocchi.—Risotto.—Contrasts.—Cruelty to Animals.

MR. ERNEST HART writes concerning Rome: The diversity of opinions which prevail concerning the pleasures, perils, advantages, or discomforts of a temporary sojourn in Rome, may be traced to the great variety of habits and experiences of tourists and visitors. The scholar, antiquarian, or lover of art, forgets all danger or inconvenience, and bears, often successfully, every risk in the ecstacy of realising visions and dreams which a few weeks convert into delighted experience and unforgetable impressions. The Sistine Chapel, the museums of the Vatican, the Capitol, the Forum, and the Coliseum, the comparative study of the secular series of Mosaics, the undying and endless charm of the relics of every age and every type of artistic and historic greatness which meet the wanderer in Rome at almost every street-corner, the natural beauties of Tivoli and Frascati, and of the Alban Hills, all combine to weave a magic spell, which casts a glamour over the scene of so many unrivalled glories and inimitable beauties, and leaves neither judgment free to guide nor memory unfettered to judge. The temptations of Rome are myriad; its pleasures, even to the half-educated, are vivid and multiform. Nevertheless, looking only, as a pilgrim in search of personal health and not uninterested in sanitary questions is bound to, at the sanitary aspect of the subject, it must be confessed that a visit to Rome, even in the spring, is not without risks, which must be counted with and avoided.

The mortality of Rome is not so high as that of Naples or of Nice; its inhabitants are alleged by common report of doctors of all nations to be relatively free from typhoid, and the chief sufferers from intermittent and pernicious fevers are the poorer class of inhabitants and the immigrants into the Campagna, and from the Campagna into Rome. Nevertheless, it is beyond question that typhoid levies a rather heavy toll upon visitors, and that not unfrequently hotels of a sumptuous character, and having all the domestic fittings which promise immunity from the diseases bred of the emanations from the sewer, yet rarely see a season pass without many fatal cases of enteric illness among their guests. It is said that residents in apartments are less liable to attack. This observation has been made to me more than once, by competent persons of experience. It is anomalous, and I cannot suggest an explanation. What is the meaning, and what the lesson of the liability of visitors to Rome, and particularly British and American visitors, to enteric disorder? All new comers in a district or locality, in which typhoid is in any degree endemic, are known to be more susceptible than residents; and the chronic endurance by Romans of stenches and sewer-effluvia which would turn the stomach of a less hardy Briton, may have ended in producing an immunity bred of customary influences. But this difference of constitutional susceptibility, if it exist, is not an element of reform. That which concerns the hotel-keepers is to take steps to exclude the poisonous sewer-gas from their corridors and apartments. Is there an hotel in Rome in which the soil-pipes are properly ventilated and disconnected from the sewers? Is there one in which the main ground-pipe terminates in a man-hole, and is flushed by an automatic flushing-tank? I am inclined to believe there is not. Most of the best and newest hotels are indeed provided with excellent cabinet fittings, but this is delusive and incomplete unless the ventilation and disconnection of the soil-pipes are carried out. This is the more important in Rome, because the main sewers are mostly of a labyrinthine character and Brobdingnagian proportions. In some places they are connected with the vast ancient cloacæ, and it is certain from their form and size that they must be very largely elongated cesspools of deposit rather than sewers of transit. Under these circumstances, it is conceivable that the more modern and complete domestic arrangements for water-carriage adopted in the hotels become sources of danger by providing also for a more abundant reflux of sewer-gas, which the heating of the corridors sucks into the atmosphere and disperses throughout the building. Perfect arrangements for disconnection and ventilation would not entail either great difficulty and expense; and it is, in my view, alike the interest and the duty of the principal hotel-keepers to adopt such a plan. Sanitary engineers, in the highest sense, and with the varied experience in house-sanitation which is required for the purpose, are hardly to be found in Rome, or, indeed, in Italy. It is an art and practice which is slowly spreading from our shores to the Continent, but in which not only are our foreign colleagues not proficient, but in respect to which they habitually fall into fundamental errors of principle and practice. It would be well worth the while of a syndicate of the hotel-keepers of Rome to take this matter seriously into consideration, and to charge a British sanitary engineer (and we have many)—Fleeming Jenkin, Roger Field, Eassie, or Ernest Turner for example—to take in hand the sanitation of their hotels, to superintend the work, and to certify its completeness. Such certificates would carry confidence to the British breast, and would yield good returns in health, money, and security. I hesitate to inflict an injury, and fear to commit an injustice, by entering into details; but I could give particulars of hotel-epidemics of a startling and very serious character which came to my knowledge in Rome.

The water-supply of Rome is abundant, and is alleged to be singularly pure. It is conducted by four out of sixteen channels which the ancient Romans constructed and used. The Acqua Marcia is said to be too heavily charged with lime; but the organic purity of the water is highly praised, and its supply is constant, and so abundant that the quantity is estimated at 168 gallons per head *per diem*. Fountains flow night and day in mighty streams in many public places; and in the courtyards of great houses, and of public tenement-buildings, water may be heard for ever splashing over stone "fontane" or reservoirs, into which the overflow-pipes of domestic cisterns are led. But the water-supply is wasted hugely; and, with all this wealth of stream, the houses and apartments are not adequately fitted for purposes of health and cleanliness. The city of Rome has, however, taken sanitary matters in hand on a large scale, and there is reason to hope for much progress. What is the actual constitution and quality of the Roman drinking-water will be better known shortly; for one consequence of the application which I have made to the Municipality to take part in the forthoming International Health Exhibition has been that, at the instance of Mr. Strutt, the Commission appointed by the Municipality to prepare the exhibit of the city of Rome has taken steps for the first time to procure a complete and satisfactory analysis of the water supplied to Rome. This task has been entrusted to the supervisory care of Professor Cannizaro, a chemist of the first eminence. The results of analysis will be communicated for display at South Kensington as quickly as they are obtained.

The Municipality of Rome, headed by the Duca Torlonia, the acting syndic, and impelled by the activity of the Marchese Vitelleschi, have shown patriotic promptitude and liberality in dealing with this matter. They have set aside a liberal sum for the expenses of preparing their exhibit. The plans and models will include not only the modern and projected drainage-system, but the very interesting system of aqueducts and piscinæ (filtering-stations and reservoirs) of the ancient city. Modern Rome has no filtering-beds for her water. The thermæ of the ancient Romans—vast and luxurious provision for the healthy cleansing of the body—will remind us also how little we study the health and happiness in this essential means for soundness of body; and how much we have fallen away from their great example. How much of modern squalor, filth, and intemperance would vanish upon the establishment of such great public places of cleanliness, beauty, mental refreshment, and physical invigoration as the public hot-air and water baths of Caracalla and Diocletian. The splendour, the vastness, the opulent decoration of these thermæ; the stupendous solidity and extent of the aqueducts, the perfection of the cloacæ, and the inexhaustible wealth of the water-supply of ancient Rome, could have left little room for the misery, squalor, and degradation of the poor crowded in modern Rome into habitations which, though larger, are not less filthy than those of outcast London.

The gulf of distance and space which separates poor from rich in London does not exist in Rome; the palace which lodges prince, or cardinal, or banker in its first floor, is not unfrequently set round with little cavernous shops on the ground-floor, burrowing into its vast flanks, with the squalid wounds of a degraded civilisation. Some of the finest palaces, as that of the Massini, have the courtyard in wretched disorder, occupied with sordid trades and dirty kinds of costermongering. But in the very violence of the contrast, and the daily contact of misery and dirt with luxury and refinement, there is matter for hope as well as surprise. Vicinity is a kind of brotherhood; and if the rich man grows thus too familiar and too easily tolerant of the squalor of the poor, he is yet less likely to be indifferent to unusual suffering or heedless of individual appeal. The poor in Rome are never out of sight, except in "the new quarter," where, in our modern and selfish fashion, wealth is building up for itself costly habitations in which the poor have no part, and whence they are thrust away out of the citizens' heaven into nether quarters of dirt and darkness.

The food of the people is always an interesting and instructive inquiry for the sanitarian, as well as for the political economist. The food-supply of the southern cities of Italy is mainly made up of cereals, oil, and cheese; goats' milk takes largely the place of cows' milk. The meat-supply is very deficient; and to this cause Dr. Pietro Balestra, in his highly interesting treatise, *L'Uomo nella Campagna e Città di Roma*, ascribes much of the weakness of the poorer population. He regrets that it can no longer be said, in the words of an Italian poet, that "La pianta uomo cresce in Italia piu robusta che altrove." Beef is especially rare and relatively costly, and he regrets that horse-flesh is not more in use as a comestible, but that it is still held to be *immondo e vituperevole*, as it was by Pope Gregory III. and Zaccaria. He praises greatly the dry red wines of the Campagna, and some of the more generous white wines of the Castelli Romani. Bread and onions, goat-cheese, oil, and wine are the staples of food among the poor. The cheapest meat is very young lamb (a few days old) and kid, both very tender and toothsome, but not so nutritious as the stronger meat of fully grown sheep and oxen. Young lamb of the size of kids are sold at about five to sixpence a pound. The Campagna does not afford good grazing for flocks, and the sheep are kept chiefly for milking purposes. The cheese made with this milk is hard, white, and tasteless. Some lesson may always be learnt from studying the characteristic and popular national diet of each country. The national *cuisine* of Rome is not, however, easily investigated by the visitor, for it tends more and more to be superseded, in those restaurants and trattorie which are most frequented, by imperfect imitations of the French and English dietary and cooking. Combinations of farinaceous oily constituents with cheese are, however, obviously complete as physiological elements of dietary, and might with advantage and economy be introduced into a system of feeding such as our own, which is by far too monotonous, and too exclusively meaty.

In order to become acquainted with the Roman *cuisine*, it is necessary to forsake the hotels and the fashionable restaurants for the Roman *trattorie*, such as the Falcone, Piazza della Sapienza, or Bucci; at the Pescheria delle Coppelle. At the first may be found such characteristic Roman dishes as *gnocchi à la Romaine*, or *con patati*, and *ravioli*; or the very characteristic mixed fry, *fritto misto*, or the wild boar, sour and sweet; *cinghiale agro-dolce*; *zampone di Modena con lenticchie* is an economic and toothsome combination of slices of hot sausage with stewed beans. The restaurant Bucci is celebrated for its fish-soup, *zuppa a la marinara;* and there also may be had the popular *calamaretti fritti*, fried cuttle-fish, and "*polpi*" *sauce piquante*, a preparation of octopus, both of them tough and tasteless. *Anguille arroste*, roast eels, may afford a hint worthy of imitation. Of these, *gnocchi à la Romaine* eminently deserves to be popularised. A good recipe for it is as follows. Put the yolk of four eggs in a shallow saucepan; stir into it with a wooden spoon about half a table-glass of milk; add four ounces of flour, stirring still, and add milk up to a pint; continue stirring on the fire till it attains the thickness of a light batter; prepare a dish with grated Parmesan, and turn the batter into it, and let it get cold; take a second iron dish, buttered and strewn with grated Parmesan cheese, cut the batter, which has been allowed to grow cold, into rounds, and lay it on this dish, which is now put into the oven, and the rounds lightly heated and browned, and strewn with Parmesan cheese and butter. The *gnocchi* should be of a golden-yellow colour, brightened with a rich brown, due to the last added cheese and butter. It is light, nutritious, and obviously well devised as an aliment, and, in the hands of a competent cook, it is most appetising. A customary method of cooking rice in the Italian cities will also recommend itself to the physiologist as well as to the gastronome. Here is one good way of making a *risotto*. Melt about half a pound of butter in a flat saucepan; put in a teacupful of rice, and stir it well and continuously; add by degrees meat-stock, and continue to stir until the rice is cooked, about eighteen minutes; add a glass of red wine, and serve hot. The cooking of rice in butter is here, it will be observed, the basis of the preparation, and the addition of meat-juice or flavouring stock is excellent; it may be varied by substituting grated Parmesan cheeses, or by interspersing fragments of tomato, but this preparation of rice in lieu of our flavourless cooking of rice in water is obviously sound in principle as it is excellent in practice. In a similar sense, the free use by the Italians of grated Parmesan cheese in clear soup supplies to that innutritious fluid elements of solid nitrogen, which are well in place. The best *cuisine* which I found at Rome was at Corradetti, 81 Via di Croce; it deserves this mention, not only for the excellence of the food and the cooking, the cleanliness, order, and civility of the service, but also for that great moderation in price which used honourably to distinguish the Roman *trattorie*, but which is now fast making way for high prices, poor food, and bad French cooking. Excellent wine is served here at fivepence the small flask, good soup is from threepence to fourpence a portion, and the tariff generally is of the same exceptional and surprising moderation, while quality and cooking are alike commendable. This is a descent to very minor and mundane trifles; but the web of travel is woven with warp and woof of very various material and changing hue; and nowhere do sublimity and triviality more intimately mix; the solemn grandeur of the ages, and the ideal glories of genius contrasting in one view with the petty miseries and sordid needs of the meanest of mankind. Beneath the triumphal arches of Roman emperors straggle the ragged paupers and deformed beggars of modern Rome; under the shadow of ruined temples and towering but lovely shafts crouch the disinherited outcasts of what claims to be a higher, but is certainly not a more dignified, perhaps hardly a more humane, civilisation. Up the Aquiline heights toil and strain the wretched animals, asses, oxen, mules, horses, roped in nondescript teams, dragging weights far beyond their strength; the torturing lash resounds; oaths, blows, and kicks fall thickly; and, gentle and kindly as modern Romans are in many of their moods, one can but regret daily, in passing through their streets, that their humanity is not more Catholic and does not extend to beasts of burden. "Non è cristiano" is the not unfrequent but strange reply to remonstrance against the constantly recurring scenes of cruelty to draught-animals in the street. "Cruelty to animals" prevails in the streets to a sickening extent; a society exists to check it. I wish I could hope that these words of protest might quicken it to more effectual activity.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

The Medical Profession and the Abattoirs.—City Improvements.—The Proposed Cathedral.—Uncertified Deaths.—The Children's Infirmary.—A Result of the [illegible] Cases.

On February 25th, a meeting of members of the profession was held at the Medical Institution to consider the question of the renewal, by the Corporation, of the lease held by the Abattoir Company. Our abattoirs are situated in the centre of the city, between the North-Western Railway Station on the west, and the Royal Infirmary on the east. The usual operations and trades connected with slaughter-houses are also carried on in their immediate neighbourhood; and the streets in this district are, many of them, wretchedly narrow, dirty, and confined. At all times of the year, and especially, of course, in hot summer weather, the atmosphere of this part of the city is impregnated with the most horrible and offensive odours, which are conveyed far and wide in various directions, according to the prevailing wind. It appears that, if the lease be renewed, the inhabitants of Liverpool will have to endure this insanitary state of things for many years. The meeting was well attended; resolutions were adopted on the subject; and a deputation of leading members of the profession, including the President of the British Medical Association, Dr. Carter, Mr. Mitchell Banks, etc., was appointed to wait upon the Mayor. At the usual weekly meeting of the Health Committee of the City Council, on March 6th, the matter was brought up for discussion; and it was agreed that a return be prepared by the Medical Officer of Health, showing the death-rate from all causes within a radius of five hundred yards in the immediate vicinity of the Liverpool abattoirs for the last ten years, and as compared with the corresponding rate in the other wards of the city. It is very generally felt amongst medical men, and also amongst laymen who take an interest in sanitary matters, that the danger of the present position of the abattoirs cannot be conclusively shown simply by taking the death-rate of the streets around the slaughter-houses; and, whether the death-rate of a part or of the whole of the city be affected or not by them, no reasonable being can doubt for a moment that the presence in the heart of a great town of such noxious trades must be deleterious to the public health. However, there are many interests involved in the question, and we cannot hope for a solution of the difficulty at once.

On March 20th, at a meeting of the Cathedral Sites Executive Committee, under the presidency of the Bishop, a motion in favour of the St. John's Church-yard site was carried by a large majority. This church stands in a large grave-yard, having a total area of 15,300 yards, and is immediately behind St. George's Hall. The position is a good one; and, all the circumstances considered, the best that could have been selected. The propinquity of St. George's Hall is perhaps a disadvantage, on account of the enormous size of that edifice; but the west front of the cathedral will be quite open, facing towards the river. It is also questionable whether a gothic cathedral would be desirable in such close proximity to buildings in the classic style of architecture. This cathedral question is of interest from a sanitary point of view, for one of the worst quarters of the city is close to St. John's Church. Great improvements have recently been effected here; and, presumably, the erection of the cathedral will tend still further to improve the neighbourhood.

Dr. Carter, the Medical Officer of Health for West Derby, in his annual report, which has just appeared, refers to the large proportion (more than 4 per cent.) of uncertified deaths, and to the very curious returns as to the cause of death in some of them. These facts seem to require serious attention.

Some changes have recently taken place in the medical staff of the Children's Infirmary. Dr. Armstrong has retired, his term of office having expired, and Dr. McClelland, the senior assistant-physician, has been elected physician in his stead. Dr. P. Davidson, formerly resident medical officer, has been appointed to the vacant assistant-physician's post.

There is one aspect of the recent poisoning cases that has not been mentioned in the BRITISH MEDICAL JOURNAL. They have unquestionably influenced the minds of many people, especially of the lower classes, against life-insurance. The writer can testify to this from personal knowledge. Several instances have occurred in which men employed in Government situations have been dissuaded by their friends from insuring their lives.

PARIS.

[FROM OUR SPECIAL CORRESPONDENT.]

Multiple Hemicrania.—Diastatic Ferments of the Blood and Tissues.—On Hospital Negligence.—Medical Responsibility.—Conseil d'Hygiène and Diphtheria.—The Biological Society of Paris and Professor Carpenter.—The Botanical Chair at the Museum of Natural History.—Wounds from Explosives.—Sir W. Guyer Hunter's Report.—Consumption of Alcohol in Paris.—American Cured Food-Importations.

MM. NICATI and Robiolis, in a communication to the Société de Biologie, support the hypothesis that there are many varieties of hemicrania. An olfactory and a gustatory form have been distinguished from each other. Every cerebral function can be disturbed by hemicrania. They class the symptoms under the headings of specific sensory disturbance and general sensory disturbance. The specific include ocular phenomena, namely scotoma; auditory phenomena, chiefly buzzing sensations; olfactory phenomena, the perception of a smell of osmic acid; gustatory phenomena, a taste in the mouth similar to that produced by an electric current. General sensory disturbance is exhibited by pain in the head, pricking sensations in the limbs, and anæsthesia. Special functional disturbance includes anæmia, with trembling, muscular spasms, paresis and paralysis. Psychical disturbances are also observed.

MM. Pignol and Richet have made a series of experiments in the physiological laboratory of the Faculty of Medicine on diastatic ferments. They have observed the following results. A considerable quantity of starch injected into a dog's veins does not provoke any more important change than a large quantity of glucose in the blood, which is not accompanied by an increase of urine. If the arterial blood of a dog be mixed with starch immediately after it is withdrawn, and then kept in a stove forty-eight hours, neither starch nor glucose can be discovered. The starch has been transformed into sugar by the diastase of the blood, and the glucose thus formed destroyed by corpuscles, which have developed in considerable quantities. The other organic tissues can transform starch into glucose. The kidneys (pigs' kidneys in particular) more especially contain diastase.

A few weeks ago, M. Benoit, Juge d'Instruction, inquired into the circumstances which ended in the death of a little girl, aged 10, two or three days after she had taken some powders, given her at the dispensary of the Laennec Hospital. The superintendent of the dispensary and an assistant are on their trial for manslaughter from imprudence. The child was taken by her mother to Dr. Damaschino, who prescribed, among other medicines, the half of a packet of phosphate of lime every day; instead of which, packets of chlorate of potash, intended for another patient, were given. M. Vibert, who performed the necropsy, reported that death was due to poisoning by chlorate of potash. M. Damaschino, on the other hand, asserted that rickets caused the child's death.

The law court of Nimes has lately been called upon to deliver judgment, concerning the responsibility of a medical man, under the following circumstances. On Februry 22nd, Mademoiselle Bescanat fell on her right arm as she was getting out of a carriage. A surgeon, on examination, ascertained that there was dislocation, but no fracture. He applied a bandage, which reached above and below the elbow-joint. The bandage caused great pain, of which the patient several times complained. The surgeon replied that she complained without reason, and refused to touch it. After thirty-six hours, she had the bandage removed by another surgeon, who found that gangrene had appeared in the hand and arm. Mademoiselle Bescanat, who earned her living as a dressmaker, immediately proceeded against the first surgeon, and claimed damages at 30,000 francs (£1,200). The experts appointed to examine the patient stated that the surgeon had committed a serious error in not removing the bandage when the suffering was so acute; and that the gangrene resulted from the pressure of the bandage. The Court condemned the defendant to pay damages of 100 francs (£4), and a pension of 200 francs (£8) to the plaintiff.

In consequence of the prevalence of diphtheria in Paris, the Conseil d'Hygiène et de Salubrité de la Seine have appointed a Commission to draw up a table of preventive measures to be adopted, in order to arrest its course. The Commission is composed of Drs. Ollivier, Levraux, Béclard, Bouchardt, Schutzenberger, and Pasteur.

The Biological Society has received a letter from Dr. W. B. Carpenter, politely acknowledging his nomination as associate member of the Society. The letter is accompanied with a copy of *The Zoology of the Voyage of H.M.S. Challenger.*

The nomination of M. Maxime Cornu for the Botanical Chair at the Natural History Museum has been ratified by the Minister of Instruction.

M. Pozzi, Agrégé Professor of the Faculty of Medicine and hospital surgeon, has given a series of lectures at the Société Française de Secours aux Blessés, "On Modern Explosive Substances, and the Wounds they Produce."

M. Jules Guérin, at the last meeting of the Académie, presented Sir W. Guyer Hunter's report on the last cholera-epidemic with the following remarks. "The author protests, in moderate and dignified terms, against the accusations that have been made, and affirms that he judged with an unbiassed mind throughout the investigation, and only sought to arrive at the truth." M. Jules Guérin advises all sanitarians, whatever theories they hold, to read the documents which accompany Sir W. G. Hunter's report.

The population of Paris spends yearly in alcoholic drinks 575 millions of francs (£23,000,000). In the space of twelve years, five milliards (£200,000,000,000) have been expended on wine and beer, the amount of the French ransom paid to Bismarck.

The delegates from the Havre Chamber of Commerce, who gave evidence before the commission of the chamber appointed to examine the new measure proposed concerning American cured food, expressed their willingness to have the importations examined, provided inspection does not become the equivalent of a prohibition on account of formalities impossible to be observed.

CORRESPONDENCE.

DEATH FROM ETHER.

SIR,—The very careful and able report by Mr. Holmes of "a fatal case of ether-inhalation" is specially instructive to those whose chief work is with anæsthetics. We are all greatly indebted to him for so clear a description of facts. I should like to make two notes.

First; I have always felt that the Marshall Hall or Silvester method of producing artificial respiration was, in these cases, a certain loss of time; the object is to rid the lungs as rapidly as possible of the poisoning vapour. I feel sure this is done best by the Howard method; the forcible compression and then sudden relaxation of the chest-walls, or, in Howard's own words, "grasp the base of the patient's chest, squeeze the two sides together, pressing gradually forward with all your weight for about three seconds; then, with a push, suddenly jerk yourself back." This is the most effectual way of emptying the lungs and obtaining an inrush of air, and can be applied to the patient in any position. No doubt, the other means may be as good when we have to use artificial respiration for a prolonged time; but as a primary effort to resuscitate, I feel perfectly sure this is the best.

Second, as to tracheotomy, do we perform it often enough, especially in these ether cases, when we are sure the respiratory apparatus is paralysed before the circulation, where, also, we pretty nearly always get some kind of spasm of the glottis, precluding the respiratory act, and allowing obstruction? In Mr. Holmes's case, it seems to have been performed rapidly enough, but such events are so important, and fly so swiftly in these distressing cases, that we should be on our guard for the least sign of obstruction, and act with rapidity. I feel sure a case under my own observation was saved thus. It was a case of carcinomatous infiltration of the right tonsil; a little cauterisation had to be done. I gave gas and ether in the usual way; sudden asphyxia arose; after a few compressions of the chest, all went well. I again commenced ether-inhalation; in sixty seconds more fatal results seemed pending; and as the patient did not immediately respond to artificial respiration, Dr. Fenton Jones, whose case it was, performed tracheotomy; and we had the happiness of seeing the patient recover when to all appearance dead. It may be said that in this case we had sufficient warning; perhaps so, but I am sure that the rapidity with which the whole thing was done was the value of the treatment.

One word as to the bronchocele. Mr. Holmes seems to think it had nothing to do with the fatal issue, but another case occurs to me of, within the last fortnight, the removal of a breast. Sudden spasm, with serious asphyxial symptoms, set in; and there was seen a pretty large bronchocele, which had not been spoken of by the patient. If more urgent symptoms had arisen, the experience of my former case would have led me to act promptly. At least, we should remember that these tumours may much complicate matters.

My notes have become long, but I trust they are to the point. These cases sink into our minds, and many questions arise of infinite interest and importance; for instance, one would like much to try faradisation of the phrenic nerve in these cases, but a battery is, perhaps, too rarely ready.

I cannot end without very specially congratulating the staff of St. George's Hospital on their immunity from fatal cases.—Yours faithfully, GEORGE H. BAILEY.

9, Cavendish Place, W., March 18th, 1884.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASE.

SIR,—As you will probably be aware, there is a scheme on foot for introducing the dual system of compulsory notification of infectious diseases into this newly made borough. Medical opinion in favour of the scheme is, as usual, in the minority; but the minority is sufficiently important to prevent it being said that the opposition of the doctors is "almost unanimous." Since the subject has come so near home, I have looked up all the references under the heading "Notification of Infectious Diseases" in the BRITISH MEDICAL JOURNAL since the beginning of 1879. The impression which I have got from reviewing this voluminous literature is one of profound regret. I regret that we of the medical profession who of all others could best have helped in realising an admittedly beneficent scheme—a scheme advocated for years in your columns—should, for one small clause, have been instrumental in thwarting a measure of great sanitary importance.

Now, what are the evil things alleged against this clause? First and foremost, that the medical attendant is made a common informer by it, and consequently the betrayer of the confidence reposed in him by his clients. If this be so, how comes it that no single practitioner, from any of the cities or towns where the clause had been in operation for years, got up at the Worcester meetings in 1882, and bore witness to the truth of the allegation? If, in a representative meeting like that, not one man, out of the many hundreds supposed to be oppressed by the compulsion put upon them, got up and said: "The prophecies of evil have been fulfilled, our self-respect is outraged, and the confidence between our clients and ourselves is come to an end," what inference can we draw but that silence gives consent, that the prophecies of evil have *not* been fulfilled, and that the medical men in the places where the clause is in force practically acquiesce in its operation?

Again, it is urged that the clause leads to concealment of cases, people being afraid that if they send for a doctor they will lose their employment or their custom. Now this argument seems just as strong against compulsion being on the householder; for if a man has sent for a doctor, and is afterwards summoned for not notifying, he cannot plead ignorance; whereas, if he had sent for an unregistered person, or had kept the case perfectly secret, he could plead, with a good chance of success, that he was not aware of the infectious nature of the disease. Take two towns, one of which has compulsory notification by the householder alone, the other by the householder and the medical attendant as well. Is concealment more likely to occur in one town than in the other? In either case, the person who will want to keep the thing secret is he who will dread the visit of the inspector with its consequent publicity. In the former, if such an one is unable or unwilling to carry out the proper precautions under the direction of his medical attendant, it is clearly the duty of the latter to report the case to the medical officer. This person has just as much to dread from a respectable practitioner under the one system as under the other, and is, therefore, as much under temptation to concealment in one as in the other case. But if the householder be willing and able to follow out exactly his doctor's directions, yet dreads the interference of the inspector, then it is conceivable that, where the doctor has no alternative but to put the machinery in motion, he would run the double risk of keeping things quiet. But practically I do not think that this class of people would conceal. The fact of their being able and willing to take every precaution seems a guarantee of their being sufficiently enlightened to see that "the game is not worth the candle."

Referring to the statements that concealment to an appreciable extent has actually occurred in some of the towns where the doctor notifies, the only evidence adduced in their favour, of which I am aware, is contained in a paper read before the Association at Worcester, and published in this JOURNAL (1882, vol. ii, p. 507). Now, to what does this evidence amount? In Bolton, the proportion of deaths from scarlet fever to the number of cases notified was 1 to 6.2. In Blackburn, it was 1 to 4. Similarly, the deaths from typhoid were respectively 1 to 4 and 1 to 4.2 in the above towns. Well, all that this can indicate is that all the cases of scarlet fever and typhoid were not notified. That the former often runs its course without a doctor being called in, everybody knows; that the latter not unseldom escapes diagnosis, is also pretty certain. The figures indicate non-registration; they do not prove concealment.

Another objection raised is, that the clause will produce antagonism between the medical officer of health and his professional brethren. Admitting that this is a thing which *may* occur—although, if it *has* occurred, those on both sides who have felt the friction are singularly silent about it—the natural course for us is to take steps to prevent it. This can be done in more than one way. For instance, we who are in active practice should refrain from forcing the medical officer into antagonism by an unnecessarily hostile attitude, and by persistently regarding him as an "official" who, in his officialism, has lost the instincts of a medical brother. Another way is by united action in favour of combined sanitary districts, and of medical officers being independent of private practice. This will induce good men to "go in" more for public health, and to take degrees or certificates in that department; and, as a consequence, it will tend to keep out men of a lower professional standard.

I come, lastly, to the objection that the local Acts which contain the obnoxious clause have failed in checking the spread of infectious disease. I beg to state that I am not discussing the general principle of compulsory notification; that is granted by the majority of the profession. But I would remind those who use this statement as an argument against notification by the medical attendant, while they are in favour of it by the householder, that it must be ruled out of court till such time as they shall have proved the alleged failure to be due to the action of that particular clause.—I am, yours faithfully,

Croydon, March 1884. J. M. HOBSON, M.D.Edin.

CASE OF STRYCHNINE-POISONING.

SIR,—I beg to draw your attention to a series of errors in an article in your JOURNAL of the 22nd instant, entitled "An Alleged Case of Strychnine-Poisoning." I am about to publish that and a similar case *in extenso*, but meanwhile wish to make the following remarks.

As to the word "alleged," if there ever was a case of undoubted strychnia-poisoning, this was one, as evidenced by the surgeon who saw the girl before death, and by the analytical results. The inquest was not at Worksop, but at Church-Warsop, both places being near Mansfield. A dose of Epsom salts was given on January 4th; but the second, not on the day after, but more than six weeks after. The contents of the stomach I examined; this is not stated in your note. I found .21 of a grain of strychnia, which I obtained in a perfectly white and crystalline condition, and which responded to the usual tests as to purity (strength of solution required to give colour, reaction, and a bitter taste). I also found evidence of a sulphate, and of magnesia, in the stomach. The verdict was not "that the deceased had died from the effects of the poison, but that there was no evidence to prove its administration with the medicine;" but "that the deceased died from strichnine-poisoning, but there was not sufficient evidence to show how the poison became mixed with the salts." That the poison was mixed with the salts appears from my evidence. The question was, Who mixed it? The verdict was an open one, and further action by the police was to be taken. Unfortunately, the police did not seize the stock of Epsom salts in the druggist's shop.—Yours truly,

EDGAR BECKIT TRUMAN, M.D., F.C.S.,
Public Analyst to the Borough and to the County of Nottingham.

⁂ We are glad to have obtained an authoritative statement with regard to this case. The reports which reached us were so meagre, and the verdict as reported so unsatisfactory, that we thought it right to draw attention to the case with the hope of eliciting the facts.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, March 27th.

MEDICAL ACT AMENDMENT BILL.

ON the order for the consideration of the Report of Amendments to this Bill, the Duke of RICHMOND and GORDON remarked on the absence of the Lord President of the Council, and said he presumed it was not intended to proceed with this stage of the Bill to-day.—Earl GRANVILLE, in reply, moved that the report be taken on Monday; and the motion was agreed to.

HOUSE OF COMMONS.—Friday, March 21st.

Private Lunatic Asylums.—Mr. W. CORBETT asked the Home Secretary whether his attention had been called to the case of Weldon *v.* Winslow, as reported in the *Times* of the 19th instant, as follows: "Mr. Baron Huddleston, in giving judgment, after commenting upon what he said was the astonishing fact that, with an order and a statement signed by paupers, and two certificates signed by men whose only qualification need be the possession of diplomas, and the fact that they were not related to the keeper of an asylum to which a patient was to be sent, anybody might be shut up in a private asylum.........He regretted to think that the plaintiff could have no redress for the serious inconveniences to which she had been put, but being clearly of opinion that such was the case, he must hold that she must be nonsuited;" whether he was aware that it transpired at the trial that a sum of £550 a year was to be paid to the proprietor as long as the patient remained in the asylum; and whether, since numerous cases of a similar and even worse kind have from time to time been reported, he proposed to make any change in the law under which such asylums were kept for private gain.—Sir W. HARCOURT: It is a question of great interest and importance. I see that the honourable member, at the end of his question, seems to suggest that there have been numerous cases of a similar and even worse kind from time to time. I do not believe that this is the case. The inquiry was into whether a person could be utterly deprived of his liberty by means of false allegations; and the report was that, although the present system was not free from risks, the allegations of *mala fides* or serious abuses were not substantiated. That was true of these asylums in 1878, and it has been true of them since, so far as I know. But I am not prepared to say that the present system does not require amendment. My honourable friend the member for Swansea has had a Bill before the House for this purpose, and that Bill contained a provision—which, although not very strongly supported, has always recommended itself to my mind—that there should be the authority of a magistrate before a committal is made to a private lunatic asylum, and not solely or merely on certificates. The honourable member concludes his question by asking whether the Government propose to make any change in the law. I should be very glad to make a change on this and many other subjects; but I am sorry to say, and the House knows, that it is absolutely impossible for the Government—or, so far as I can see, for anybody else—to pass any Bill on any subject.

Wednesday, March 26th.

Patent Medicines Bill.—Mr. WARTON, moving the second reading of this Bill, contended that many patent medicines were poisonous, that the official stamp gave them a sort of sanction, and that the Government ought to give up this shameful source of revenue. While it was impossible to ask in any druggist's shop for arsenic or other poison without being obliged to give your name and address as required by the Pharmacy Act, a patent medicine containing large quantities of poison could be obtained without trouble. His Bill would provide that, until these medicines had been submitted for analysis by the Pharmaceutical Society, and certified by them not to contain poisons, they should be deemed poisons, only to be sold under the same conditions as those scheduled in the Pharmacy Act. His Bill provided that any person who was the owner or proprietor of a patent medicine might have his medicine analysed by the Pharmaceutical Society, and so might the grocer or respectable chemist who sold patent medicines, or persons who bought them, might have them analysed by the Pharmaceutical Society. If it was found that the medicine contained poison, let the Pharmaceutical Society pass a resolution similar to that provided by the second section of the Act of 1868, and let them state that "this chemical"—for that was the favourite word—contained poison, and the resolution having been approved by the Privy Council, let it be published in the *London Gazette*, and after that the medicine became a poison subject to the restrictions of the Act. He thought that the Government might put aside their political nostrum of the Reform Bill for a time, and attend to the lives and health of the people.—Dr. FARQUHARSON considered that there was little need for saying much to urge upon the House the necessity for legislation of this kind, as the Government themselves had shown their appreciation of the importance of the subject. It was an absurdity to fence round the sale of poisons when any one could, by putting a Government stamp on the bottle, sell any farrago of poisonous stuff. Great loss of life and health was caused by the sale of these patent medicines, as was shown by the Registrar-General's report. In 1881 there had been twenty deaths from the use of chloral-hydrate, two from Godfrey's cordial, one from anodyne-cordial, eight from chlorodyne, one from aniseed, one from Stather's soothing-syrup, and fifty-one from patent medicines the names of which were not stated. It was certain, moreover, that these deaths could not possibly indicate the amount of loss of life caused by these deleterious substances. There had been a great increase in the consumption of patent medicines since teetotalism had become fashionable. There was a great demand for pick-me-ups and cordials, and there was no doubt that an enormous quantity of chloral was consumed by ladies. It was impossible altogether to check the sale of these patent medicines, although he himself would like to see a sweeping Bill on the subject. There were great vested interests in the way, and the British public was fond of domestic medication, and even of a little quackery. What they had to do then, was to regulate the sale of these medicines as best they could. This Bill was founded on French lines. In that country a medicine could not be stamped until it had been officially analysed, but the regulation was frequently evaded; in fact, unless the analysis were repeated every week or so, it would be of little use. He would suggest one or two alterations in this Bill. The word "proprietary" should follow "patent," so as to include unstamped mixtures, frequently containing deleterious ingredients, which were sold to a large extent in villages where there were no druggists' shops. Then there was the difficulty as to the analysis of the Pharmaceutical Society, that it would only refer to statutory poisons, without including preparations which, without being absolutely poisonous, were on the borderland. Another objection was that the sanction thus given by the Pharmaceutical Society would largely increase the use of these patent medicines. He would recommend that the Government should harden their hearts, and give up the patent medicine stamp, which brought in £154,000. This might, in his opinion, be made up by an increased charge on the licences for the sale of these drugs. Under the present system, the Government stamp implied to many ignorant persons a direct sanction and a patent which did not exist. The stamp might be used for any preparation composed of more than one ingredient and recommended for some specific purpose which was only liable under the excise laws. A second recommendation which he would make would be that every proprietor of a patent medicine containing poison should be obliged to put a label with the word "poison" on the bottle and wrapper, with a direction that such medicine must be prescribed with caution. This caution might be extended to substances of injurious, if not directly poisonous, nature, such as teething-powders, which contained mercury and opium. Then, again, the innocent seller should have a remedy against the proprietor and manufacturer. If the proprietor failed to put the word "poison" on the bottle, the Pharmaceutical Society might be called on to analyse the medicine, the cost to be paid by the proprietor in the event of its being found to contain poison, with penalties recoverable under the Pharmacy Act. The most important part of the Bill was the 5th section. It was absurd that, when such precautions were taken under the Pharmacy Act, anything might be sold when labelled as a patent medicine at any grocer's or at any stores. He thought it was anomalous that the druggists should be hampered by restrictions which were not imposed on stores. He further submitted that powers should be vested in the local authorities to enable them to undertake prosecutions under the Pharmacy Act as under the Adulteration of Food Acts. Those prosecutions at present were undertaken by the Pharmaceutical Society, thereby bringing upon it on occasions unmerited obloquy. In conclusion, although he could not agree to all its provisions, he thought the House owed a debt of gratitude to the honourable member for Bridport for bringing in the Bill.—Mr. W. JAMES thought Mr. Warton had not proved his case in the course of his discursive observations. The subject could only be dealt with by the Government, and the Bill in its present form would be utterly unworkable, and would deal very severely with enormous interests, which included some 1,000 proprietors, 12,000 persons engaged in manufacture, and a revenue of [illegible] to the country. Mr. HOPWOOD, in supporting the motion, doubted whether any legislation of this character had been productive of any real benefit to the community. He believed the Sale of Poisons Act had done no good, its effect being only to delude the public, and to vex a number of honest men in their employment. Such legislation further tended to create a medical monopoly, and something of the feeling of trades-unionism might be detected in the hostility shown by coroners and medical gentlemen towards patent medicines when the deceased had been shown to have lately used them. If these medicines were deleterious, the producers of them ought be answerable to the common law.—The Attorney-General said the Government could not assent to the second reading of the Bill, although it was introduced with objects with which any one might sympathise; but it was necessary to look to the means proposed for the attainment of those objects, and, doing this, the Government could not accept the provisions of this Bill, which would treat as a poison any medicine containing any poison, however innocuous the quantity might be, in the preparation of which it formed part. The Government had the matter in hand, and was prepared to treat it in a much broader sense in a Bill which would be introduced into the other House; and when it reached this House, he hoped the desire of the honourable member for Bridport for legislation on the subject would induce him to stay his obstructive hand, and that his own introduction of a Bill would constitute a sort of implied contract with him for the adoption by him on this subject of a course the novelty of which would be fully appreciated by the House. But the Bill of the hon. member could do no good, and must do evil by harrassing people unnecessarily; for, in this respect, it would constitute one of the most flagrant specimens of the kind of legislation against which the hon. member frequently protested.—Mr. A. O'Connor opposed the Bill, on the ground that Ireland was exempted from its provisions.—Mr. Warton, in reply, said he was glad the Government recognised the importance of this subject being dealt with by legislation. He had done all he could to bring the matter forward. [*Hear, hear.*] He was decidedly of opinion that the Government ought to abandon the revenue upon patent medicines.

The second reading of the Bill was negatived without a division.

INDIA AND THE COLONIES.

INDIA.

The Drug Trade in India.—An official statement has been published concerning the trade of British India for the five years 1878-79 to 1882-3. The value of the imports of drugs and medicines shows an increase, which is mainly due to large imports of camphor and asafœtida. On the other hand, during the last mentioned year, the imports of quinine fell from 10,615 lbs. to 7,585 lbs. This, it is stated in the official report, is not likely to be an increasing trade, although it fluctuates very much. There can be little doubt that, in course of time, quinine will be no longer imported into India, which will supply all her own wants from the cinchona plantations of Darjeeling and the Nilgiris. As matters now stand, imports of quinine on account of Government, have practically ceased. For asafœtida, the principal source of supply is Persia; while camphor is imported almost exclusively from China and the Straits, as are cassia lignea and galangal. Quinine, and the large variety of unenumerated drugs, are obtained chiefly from England. The export of drugs and medicines from India has doubled in five years; its value last year amounted to just over 12½ lakhs of rupees, of which nearly 8 lakhs represented the value of cinchona-bark. Nearly the whole increase is due to the creation of trade in cinchona, which may be expected to develop very largely in future. Seven years ago only 72,452 lbs. were exported; last year 641,608 lbs. were shipped. Most of the exports of the year were from Madras, where the cultivation in private hands is much more extensive than it is in Bengal, the principal estates in the latter province being the property of government, which manufactures the bark locally for use in India, and does not export it, except in a small way. Most of the exports hitherto have been sent to London. Last year, however, there was an export of 33,084 lbs. to Italy, where there is an extensive manufacture of quinine. The Government plantations in Sikkim (near Darjeeling) measure 2,294 acres, and possess upwards of five million plants of all sizes and varieties of cinchona. The private plantations in the same district extend over only 331 acres, and possess about 614,000 plants. In the Nilgiri Government plantations (847 acres), there are about one million plants. Of the private plantations in the Nilgiris no account is forthcoming. Cinchona is cultivated there in combination with coffee, and planters either cannot, or will not, furnish information. The total out-turn of bark from all the Government plantations in 1882-83 amounted to 527,199 lbs.

Sir W. Guyer Hunter.—The Bombay Medical Union and the Grant College Medical Society intend to send addresses to Sir W. Guyer Hunter, congratulating him on his knighthood. The portrait of Sir W. Guyer Hunter, purchased from the Hunter Memorial Fund, has arrived in India, and will be placed in the Common Room of the Grant Medical College.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

ASSOCIATION FOR PROMOTING TRAINED NURSING IN WORKHOUSE INFIRMARIES.

A meeting in furtherance of the objects of this Association was held on Monday the 17th instant, by the kind permission of the Marchioness of Salisbury, at 20, Arlington Street, Piccadilly. The Association originated in 1879 in order to supply boards of guardians with competent and duly trained nurses, and since that time forty-two boards have applied to the Association, and fifty-three nurses have been recommended, and are at work in different metropolitan and country unions. Many applications have had to be refused, owing to the lack of suitable nurses. During the past year twenty-four have been appointed, and additional funds are required in order to train a larger number. The chair was taken by Mr. Bousfield, guardian of the Kensington Board of Guardians. The chairman considered that a great deal of the recent improvement in workhouse nursing was due to the action of the Association. At Kensington Infirmary, the appointment of a trained lady-superintendent had produced a great moral effect.

Mr. S. Benton proposed that it was desirable to promote the appointment of a hospital-trained matron, and of efficiently trained nurses, in all workhouse infirmaries. He considered that every such infirmary should be a nucleus for the training of young women, and, in that direction, the Association was doing a great deal of good.

Sir William Bowman pointed out that, while a great deal had been done to improve the nursing in hospitals, comparatively little attention had been paid to the equally pressing necessity of having skilled nurses in parish infirmaries. In many instances, a large proportion of the women who had the care of the sick were simply other inmates of the workhouse, and were totally unfit for responsible work.

Dr. Sieveking insisted that good nursing was an essential part of a good sanitary system. Even from the ratepayer's point of view, the efforts of the Association were worthy of all support; for though at first additional outlay might be necessary, there would be an immediate saving in consequence of the speedier and more thorough recovery of the patients.

Mr. John Wood was also strongly in favour of the objects of the Association. The resolution was unanimously agreed to.

On the proposal of the Rev. Dacie Craven, seconded by Mr. J. Hardcastle, M.P., a motion was carried, recommending the Association to more extended support. In the discussion which ensued, Mrs. Henry Kingsley mentioned several instances within her own knowledge where the pauper sick were treated with the utmost carelessness. Com. Gen. Downes, Mr. Drew (Chairman of the St. Pancras Infirmary), Miss Andrews (of the St. Pancras Board of Guardians), and Mr. Lunn (medical superintendent of the Marylebone Infirmary), spoke from experience of the immense advantages of a trained matron and trained nurses in infirmary work.

The offices of the Association are at 44, Berners Street, and the Honorary Secretary is Miss Wilson.

Health of English Towns.—In the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons, 6,005 births and 3,709 deaths were registered during the week ending the 22nd instant. The annual rate of mortality per 1,000 persons living in these towns, which had been 20.3, 22.5, and 22.6 in the three preceding weeks, declined again to 22.1 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follows: Plymouth 15.2, Hull 17.3, Birkenhead 18.9, Bradford 19.2, Leicester 19.6, Bristol 19.9, Sunderland 19.9, Bolton 20.1, Salford 20.4, London 20.6, Brighton 20.8, Norwich 20.8, Sheffield 21.0, Cardiff 21.2, Huddersfield 21.8, Birmingham 21.9, Derby 22.0, Blackburn 23.1, Newcastle-upon-Tyne 23.8, Nottingham 23.9, Wolverhampton 24.0, Halifax 25.9, Portsmouth 26.7, Liverpool 27.0, Manchester

27.9, Leeds 28.2, Oldham 30.6, and the highest rate (31.5) in Preston. In the twenty-seven provincial towns, the death-rate last week averaged 23.3, and therefore exceeded by 2.7 per 1,000 the rate recorded in London. The 3,709 deaths registered last week in the twenty-eight towns included 143 which resulted from whooping-cough, 141 from measles, 86 from scarlet fever, 42 from diarrhœal diseases, 33 from "fever" (principally enteric), 28 from diphtheria, and 13 from small-pox—in all, 486 deaths were referred to these seven principal zymotic diseases, against numbers increasing from 407 to 502 in the three preceding weeks. These 486 were equal to 13.1 per cent. of the total deaths, and to an annual rate of 2.9 per 1,000. In London, the zymotic death-rate was equal to 2.9, and exactly corresponded with the average rate in the twenty-seven provincial towns, among which it ranged from 0.0 in Plymouth and in Halifax, and 0.7 in Bradford, to 5.1 in Nottingham, 5.2 in Norwich, and 8.2 in Portsmouth. The deaths referred to whooping-cough in the twenty-eight towns, which in the three previous weeks had been 121, 138, and 160, declined last week to 143, and caused the highest death-rates in London and Bolton. The fatal cases of measles, which had risen in the three preceding weeks from 87 to 146, were last week 141, and caused the largest proportional fatality in Nottingham, Norwich, Oldham, and Portsmouth. The 86 deaths referred to scarlet fever exceeded by 5 the number in the preceding week, and caused the highest death-rates in Preston, Manchester, and Leeds. The deaths from diarrhœal diseases showed a further increase upon those recorded in recent weeks. The fatal cases of "fever," which had been 44 and 40 in the two preceding weeks, further declined to 33, and were fewer than those returned in any week since June last. The deaths referred to diphtheria in the twenty-eight towns, which in the five previous weeks had declined from 39 to 20, rose again last week to 28; 13 were recorded in London, 3 in Leeds, and 3 in Hull. The fatal cases of small-pox in these twenty-eight towns were 4 less than the number in the preceding week; 4 were returned in Birmingham, 3 in London, 3 in Liverpool, and 3 in Sunderland. The rate of mortality from diseases of the respiratory organs, judged by the metropolitan returns, was again considerably below the average; the deaths referred to this disease in London, which had been 384 and 370 in the two previous weeks, were last week 373; they were 146 below the corrected average weekly number, and equal to an annual rate of 4.8 per 1,000. The causes of 108, or 2.9 per cent., of the 3,709 deaths registered last week in the twenty-eight towns were not certified, either by medical practitioners or by coroners. The proportion of uncertified deaths in London did not exceed 2.0 per cent., while it averaged 3.4 per cent. in the provincial towns, and showed the largest excess in Blackburn, Oldham, Wolverhampton, and Halifax.

HEALTH OF SCOTCH TOWNS.—During the week ending the 22nd instant, 891 births and 513 deaths were registered in the eight principal Scotch towns, having an estimated aggregate population of 1,254,607 persons. The annual rate of mortality, which had been 23.3 and 20.9 per 1,000 in the two preceding weeks, rose last week to 21.3, which was, however, 0.8 per 1,000 below the average for the same period in the twenty-eight large English towns. Among these Scotch towns, the death-rate was equal to 10.1 in Perth, 16.6 in Dundee, 17.8 in Aberdeen, 18.5 in Edinburgh, 18.7 in Leith, 20.8 in Greenock, 21.4 in Paisley, and 25.7 in Glasgow. The 513 deaths registered last week included 74 which were referred to the principal zymotic diseases, against [illegible] and 80 in the two previous weeks; of these, [illegible] resulted from whooping-cough, 11 from measles, 11 from diphtheria, 9 from diarrhœal diseases, 9 from scarlet fever, 8 from "fever," and 3 from small-pox. These 74 deaths were equal to 14.4 per cent. of the total deaths, and to an annual rate of 3.1 per 1,000, which somewhat exceeded the average zymotic death-rate recorded last week in the twenty-eight English towns. The lowest zymotic rates in the Scotch towns were 0.3 in Dundee and 0.8 in Leith, whereas the rates were equal to 3.6 in Paisley and 4.7 in Glasgow. The deaths referred to whooping-cough, which had been [illegible] and 22 in the two preceding weeks, were last week [illegible], of which 16 occurred in Glasgow and 5 in Edinburgh. Since the commencement of the present year, no fewer than [illegible] deaths from whooping-cough have been registered in Glasgow. The 11 fatal cases of measles were within one of the number in the previous week, and included [illegible] in Glasgow and [illegible] in Paisley. The deaths referred to diphtheria, which had been 12 and 17 in the two preceding weeks, declined last week to [illegible], of which 5 were returned in Glasgow and 2 in Edinburgh. The 9 fatal cases of scarlet fever exceeded by 2 the number in the previous week, and included 8 in Glasgow. Of the 8 deaths referred to different forms of "fever," 6 were recorded in Glasgow and 2 in Edinburgh. During last week [illegible] fatal cases of small-pox were registered in Glasgow and one in [illegible]; only one death from this disease had previously been recorded in the eight Scotch towns since the beginning of this year. The mortality from diseases of the respiratory organs in these towns was considerably below the average, and was equal to an annual rate of 4.9 per 1,000, which almost corresponded with the rate last week from the same diseases in London. As many as 64, or 12.5 per cent., of the 513 deaths registered last week in these towns were uncertified.

HEALTH OF IRISH TOWNS.—During the week ending March 15th, the number of deaths in the sixteen principal towns in Ireland was 443. The average annual death-rate was 26.8 per 1,000, the respective rates for the several districts being as follow, ranging in order from the lowest to the highest: Armagh, 0.0; Dundalk, 4.4; Sligo, 19.2; Kilkenny, 21.1; Waterford, 23.2; Galway, 23.5; Wexford, 25.7; Cork, 26.0; Dublin, 26.4; Belfast, 28.1; Londonderry, 30.3; Lurgan, 30.8; Limerick, 31.0; Newry, 31.6; Drogheda, 42.3; Lisburn, 48.3. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 3.0 per 1000, the rates varying from 0.0 in Drogheda, Wexford, Dundalk, Sligo, and Armagh, to 13.9 in Waterford; the 10 deaths from all causes registered in the last named district comprising 3 from scarlatina (being 3 under the number for the preceding week), and 3 from whooping-cough. Among the 117 deaths from all causes registered in Belfast, were 3 from scarlatina, 4 from whooping-cough, 1 from diphtheria, 2 from enteric fever, and 4 from diarrhœa. Among the 40 deaths from all causes in Cork were 3 from measles, 1 from scarlatina, and 2 from whooping-cough; and among the 23 deaths in Limerick were 3 from whooping-cough and 1 from diarrhœa. The 9 deaths from all causes in Newry comprised 1 each from typhus, enteric fever, and diarrhœa. In the Dublin Registration District, the deaths registered during the week amounted to 184—98 males and 86 females. Fifteen deaths from zymotic diseases were registered, being equal to the number for the preceding week, but 14 under the average for the eleventh week of the last ten years; they comprise 1 from measles, 3 from scarlet fever (scarlatina), 1 from typhus, 3 from whooping-cough, 3 from enteric fever, 2 from diarrhœa, etc. There were only 29 deaths from diseases of the respiratory system registered, being 23 under the average for the corresponding week of the last ten years, and 2 under the number for the week ended 8th instant; they comprise 19 from bronchitis, and 2 from pneumonia. The deaths of 20 children (including 16 infants under 1 year old) were ascribed to convulsions. Four deaths were caused by apoplexy, 15 by other diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 23 deaths, mesenteric disease 4, and cancer 2. Five accidental deaths and 1 case of suicide were registered. In 3 instances the cause of death was "uncertified," and in 30 other cases there was "no medical attendant."

HEALTH OF FOREIGN CITIES.—It appears from statistics published in the Registrar-General's return for the week ending the 15th instant, that the annual death-rate in the three principal Indian cities recently averaged 32.4 per 1,000; it was equal to 24.9 in Bombay, 29.6 in Calcutta, and 49.3 in Madras. The 108 fatal cases of small-pox in Madras were within 6 of the number returned in the preceding week; cholera caused 5 deaths in Calcutta, 5 in Bombay, and 9 in Madras. According to the most recently received weekly returns, the average death-rate in twenty-three of the largest European cities was 30.0 per 1,000, and was as much as 7.4 above the mean rate last week in the twenty-eight large English towns dealt with in the Registrar-General's weekly return. In St. Petersburg, the death-rate was equal to 42.3 per 1,000, showing a considerable increase upon the declining rates in recent weeks; the 753 deaths included 34 from typhus and typhoid fever, 33 from measles, and 24 from diphtheria. In three other northern cities (Copenhagen, Stockholm, and Christiania) the death-rate averaged only 23.9, the highest rate being 26.6 in Stockholm, where 5 fatal cases of diphtheria and croup were recorded; scarlet fever caused [illegible] deaths in Christiania. In Paris, the death-rate, which had been [illegible] and 26.5 in the two preceding weeks, declined again to 24.5 per 1,000, which, however, exceeded by 2.9 the rate in London; the 1,140 deaths included 75 from diphtheria and croup, and [illegible] from small-pox. The 198 deaths in Brussels, of which 8 resulted from small-pox and 7 from croup, were equal to an annual rate of 24.1. The rate in Geneva was as high as 38.3, and showed a further increase upon the excessive rates returned in recent weeks; 5 of the 52 deaths were referred to whooping-cough. In the three principal Dutch cities, Amsterdam, Rotterdam, and the Hague, the mean death-rate was [illegible], the highest rate being 28.0 in Amsterdam, where [illegible] deaths resulted from diphtheria and croup. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 29.3, and ranged from 23.4 and 24.6 in Berlin and Hamburg, to 39.7 in Prague and 46.3 in Trieste. Small-pox caused 46 deaths in Prague (against 34 and 41 in the two preceding weeks), 4 in Vienna, and 2 in Buda-Pesth; diphtheria was very fatally prevalent in Berlin, causing no fewer than 70 deaths; 14 deaths were referred to this disease in Dresden, and 19 to measles in Vienna. The death-rate in three of the principal Italian cities averaged 37.2, and was equal to 34.0 in Turin, 37.6 in Venice, and 39.5 in Rome; measles caused 24 deaths in Turin; and small-pox 2 in Turin, and 2 in Venice. The 137 deaths in Lisbon included 3 from small-pox, and were equal to a rate of 35.1 per 1,000. The mean death-rate in the four principal American cities was 23.8, the highest rate being 27.2 in New York. Diphtheria caused 24 deaths in New York, and 24 in Philadelphia; 12 fatal cases of measles occurred in Baltimore, and 11 of typhoid fever in Philadelphia.

HEALTH OF IRELAND: QUARTERLY REPORT.—The births registered during the December quarter numbered 26,544, being equal to 21.2 per 1,000, and the deaths, 20,366, or 16.2. The birth-rate, as compared with the corresponding quarter of the previous five years, was 1.1 under the average, and the death-rate 1.2 under the average rate for the same period. On the whole, the state of the public health was satisfactory, although it must be mentioned that scarlet fever proved very fatal in some districts; and there has been but a slight decrease in the mortality from whooping-cough. The deaths from the principal zymotic diseases amounted to 1,956, being 33 under the number for the preceding three months, but 87 over the number for the fourth quarter of 1882. The only deaths from small-pox which occurred during the quarter were 2, one in Glenamaddy and one in Cork Union. Measles caused 142 deaths; scarlet fever, 599, being an increase of 158 as compared with the previous quarter; and whooping-cough, 418. There were 413 fatal cases of fever recorded, viz., typhus, 182; enteric fever, 175; and simple continued fever, 56; while diphtheria caused 59 deaths; diarrhœa, 317; and simple cholera, 6. Three deaths from hydrophobia were registered. During the quarter there were 552 inquests reported to the registrars, this number being equal to 1 in every 37 of the total deaths registered.

HEALTH OF DUBLIN IN 1883.—During last year there were registered in the Dublin registration district 9,955 births, being equal to 1 in 35, or 29 per 1,000. The deaths numbered 10,161, being equal to 1 in 34, or 29.1 against an average death-rate of 27.6 per 1,000 for the preceding ten years. Omitting 256 deaths, which were not chargeable to the district, the death-rate for last year was 28.3 per 1,000. The deaths from zymotic diseases numbered 1,247, being 142 under the number for the preceding year, and 325 under the average for the ten years 1873-82. Omitting 16 deaths of hospital patients admitted from places without the district, the deaths from the principal zymotic diseases amounted to 1,084, equivalent to a rate of 3.1 per 1,000. Measles caused but 27 deaths, as compared with 567 the previous year; scarlet fever, 179; diphtheria, 14; and whooping-cough, 333, as compared with 81 in 1882. The deaths from the several forms of continued fever amounted to 310, being 62 over the number for the preceding year, but not beyond the average for the previous ten years; they consisted of 141 from typhus, 132 from typhoid, and 37 from simple continued fever. Diarrhœa and dysentery combined caused 237, a number slightly under the average, and erysipelas, 42. To consumption 1,330 deaths were ascribed, a number considerably above the average, while diseases of the respiratory organs, other than phthisis, caused 2,131 deaths; these comprise 1,393 from bronchitis, 399 from pneumonia, 71 from croup, and 23 from pleurisy. The deaths of 823 children were attributed to convulsions. Diseases of the circulatory system rose from 515 in 1882 to 647 last year. One hundred and forty-three deaths were due to apoplexy, 496 to other diseases of the brain and nervous system, 135 to liver-diseases, 276 to diseases of the digestive system, and 154 to diseases of the urinary organs. Cancer caused 212 deaths, mesenteric disease 236, and tubercular meningitis 188.

VACCINATION BY DEPUTY.

SIR,—Would you kindly inform me how I should act in this matter, and what should be my guide in future?

I applied to my board of guardians to be relieved from duties for a few weeks, securing the services of a qualified gentleman, whose appointment they sanctioned. After the first vaccination day had passed over, I received notice from the clerk that vaccination fees would not be allowed for that day's work, as the gentleman was not the proper deputy, that I was only relieved of the duties of Medical Officer.

My object in engaging a qualified gentleman was, that the duties could be undertaken without troubling deputies,—I am, etc. M.B.

*** Guardians are only authorised by their contracts with public vaccinators to pay for vaccinations performed by the contractor or by his duly authorised deputy. Any fees paid for vaccinations not so performed are liable to be disallowed by the government auditor. In future our correspondent must arrange with his duly appointed deputy for the performance of public vaccination at any period when it may be impossible for him to attend in person.

LEAD-POISONING BY SERVICE-PIPES.

SIR,—Will you kindly inform me, through your columns, whether the supply of water through lead service pipes has ever given rise to an action being brought against the local authority on account of lead poisoning; and, if so, whether such action has resulted in a verdict for the plaintiff? Yours truly,

M. O. H.

*** We think not; at any rate, we find no mention of such a case in any of the usual works of reference.

A MEMBER.—It is legal for an urban sanitary authority to reappoint their medical officer for a period of three years. A board of guardians can change their public vaccinator if the majority of them so desire.

THE WESTMINSTER UNION.

THE publicity we have given to the proceedings of the Board of Guardians of this union, who are alleged to have supported the master of this workhouse in a harsh treatment of the sick and aged inmates, has evoked a most unusual outbreak of opinion, as shown by a paper transmitted to us, from which we learn that in St. Anne's, Soho, one of the parishes of the union, gentlemen have come forward as candidates for the office of guardian who are nominated by the clergy of every denomination, the leading employers of labour in the parish; whilst in the other parish—that of St. James's—a still more remarkable expression has been shown. Leading bankers, large brewers, and gentlemen of high position have consented to stand, and these have been nominated by the Bishop of London, the Marquises of Waterford and Bristol, the Earl Cowper, Sir Stafford Northcote, Sir W. Bowman, Baron Henry de Worms, and several of the leading commercial firms of this important parish.

Such an expression of public interest in the righteous administration of our Poor Laws is an evidence that, whilst persons of inferior social standing may be (through the apathy of the general body of ratepayers) allowed to put themselves forward as guardians of the poor, when their mismanagement and positive condonation of heartlessness is exposed, the great English public will endeavour to put matters straight.

We sincerely hope that the ratepayers of both parishes will do their duty, and vote for the candidates thus powerfully recommended.

OBITUARY.

HENRY WALKER, M.A., M.D., J.P., Brierley Hill, Staffordshire.

MUCH regret is felt in Brierley Hill and neighbourhood at the death of the above named practitioner, which took place somewhat unexpectedly at his residence on the 5th instant from a low form of enteritis.

The deceased gentleman was the son of Captain Henry Walker of Charlestown, Inverness-shire, and was born in 1819. He studied arts at the University of Aberdeen, and graduated M.A. in 1837, afterwards proceeding to the University of Edinburgh, where he graduated M.D. in 1840, and also obtained the diploma of the Edinburgh College of Surgeons.

Dr. Walker had been practising at Brierley Hill for about thirty years, and much confidence was felt in the district in his professional judgment and skill. He was a sound and able physician, and a skilful surgeon, and had performed all the major operations frequently while practising in a district abounding in mines and iron-works, which were sure to furnish numerous and severe accidents.

It was mainly due to his unwearied care and attention that the survivors of the inundation at Earl Dudley's Nine Locks Pit, in March 1869, made good recoveries after their five days' fast and incarceration. About a year ago, when alighting from a train, Dr. Walker met with a severe fall which shook him greatly, and from the effects of which he never fully recovered, and it was with deep concern that his relatives and many friends noticed his health declining, and his handsome and commanding figure drooping. During his last illness he was assiduously attended by his partner, Dr. Ashmead, with whom Dr. Rickards of Birmingham was in consultation; but, unfortunately, medical skill was unavailing.

Dr. Walker was a Justice of the Peace for the county of Stafford, and took an active part in magisterial duties, as also in politics, being considered the Conservative leader of the district. He was certifying surgeon under the Factories Act, and held other important appointments. His loss will be greatly felt in the neighbourhood, where he was held in high esteem.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE DENTAL HOSPITAL OF LONDON.

THE twenty-sixth annual meeting of this institution was held on March 12th, at the Hospital, Leicester Square, under the presidency of Mr. Erichsen, F.R.S., one of the vice-presidents. In the report, which was unanimously adopted, the Managing Committee congratulated the Governors on the continued success and prosperity of the institution; also on the great benefits which the Hospital continues to afford to the suffering poor; 35,622 cases having been treated during the year 1883, a large number of them painlessly (under anæsthetics). Sir Edwin Saunders had made a munificent gift to the charity of the lease for over ninety years of the "Tower House," adjoining the Hospital, valued at £2,400, for the purpose of its enlargement. This generous gift made the amount of the contributions of Sir Edwin Saunders exceed £4,000. A special appeal had been issued for the funds necessary for fitting up and adapting the new wing, and for redeeming the mortgage debt of £5,000 on the Hospital building, and the Managing Committee gratefully acknowledged £1,132 4s. in response. There was still a deficit of £3,865 6s. 6d. in the extension account, and the committee made a further special appeal for the funds necessary to pay off this debt.

ABERDEEN ROYAL INFIRMARY.

THE quarterly meeting of the managers of this institution took place lately. It was intimated that several subscriptions had been obtained towards the purchase of ambulances for the hospital—one for ordinary cases, and one for infectious cases. Dr. Struthers brought forward a motion that the physicians' and surgeons' assistants be in future selected by competitive examination, conducted respectively by the physicians and surgeons to the infirmary. Unfortunately, the motion was negatived. This is much to be regretted, as undoubtedly the proposed course would enable the best men to be selected for these important posts. Many men will not undertake to canvass a host of local electors; but, were an open competitive examination the portal of admission to the much-to-be-prized appointments, undoubtedly there would be a larger number of the best men of the year compete for these posts. At the same meeting, a committee was appointed to inquire into the growing expenditure of the institution.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 20th, 1884.

Cropley, Alfred, Swaton, Lincolnshire.
Evers, Charles John, Kidderminster Street, Stourbridge.
Harris, Arthur Wellesley, Exmouth Street, W.C.
[illegible]
[illegible], Edwin Walter, Southsea.
Morris, Richard John, Thornton, Bradford.
Rocks, John, Elvin House, Andover.
Smith, Stephen [illegible], Holloway Road, N.
[illegible], Church Street, [illegible].
Walker, Harry Victor, Windsor Terrace, Plymouth.

The following gentlemen also on the same day passed their Primary Professional Examination.

[illegible]
[illegible], St. Bartholomew's Hospital.

MEDICAL VACANCIES.

The following vacancies are announced.

BETHLEM HOSPITAL.—Two Resident Medical Students. Applications to A. M. [illegible], Esq., Bridewell Hospital, Blackfriars, E.C., by April [illegible].

BIRMINGHAM AND MIDLAND COUNTIES ORTHOPÆDIC AND SPINAL HOSPITAL.—Honorary Assistant Surgeon. Applications by April [illegible].

BRIGHTON AND HOVE LYING-IN INSTITUTION.—House-Surgeon. Salary, 150l. per annum. Applications by April 8th.

CHILDREN'S HOSPITAL, Birmingham.—Dispenser. Salary, [illegible] per annum. Applications by April 1st.

DENTAL HOSPITAL OF LONDON AND SCHOOL OF DENTAL SURGERY.—[illegible]. Salary, 40l. per annum. Applications by April [illegible].

DURHAM COUNTY HOSPITAL.—House-Surgeon. Salary, 100l. per annum. Applications to the Honorary Secretary, 10, South Bailey, Durham, by April 15th.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, 100l. per annum. Applications to the Secretary, Board Room, Bagillt Street, Holywell, by April 15th.

JERSEY GENERAL DISPENSARY.—Medical Officer. Salary, 120l. per annum. Applications by May 1st.

LEEDS AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Surgeon. Salary, 180l. per annum. Applications to C. H. Wilson, 12, Rugby Terrace, Rugby Road, Leeds, by April 1st.

MORPETH DISPENSARY.—Resident Medical Officer. Salary, 100l. per annum. Applications by May 5th.

NENTHEAD AND TYNEDALE LEAD AND ZINC COMPANY'S (LIMITED) WORKMEN'S MEDICAL UNION.—Medical Officer. Salary, 100l. per annum. Applications by March 29th.

OLRIG AND DUNNET PAROCHIAL BOARDS.—Medical Officer. Salary, 60l. per annum. Applications, marked "Medical Officer," to James Brims, Esq., Chairman, by April 8th.

PADDINGTON GREEN CHILDREN'S HOSPITAL.—Surgeon. Applications by April 9th.

PAROCHIAL BOARD OF KIRKCOWAN.—Medical Officer. Salary, 52l. per annum. Applications to Mr. P. Gordon, Inspector of Poor, by March 31st.

ST. BARTHOLOMEW'S HOSPITAL, Chatham.—Assistant House-Surgeon. Salary, 100l. per annum. Applications addressed to the Clerk to the Trustees, endorsed, "Application for Assistant House-Surgeon," by May 1st.

THE GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Junior Resident Medical Officer. Applications by April 1[illegible].

WEST LONDON HOSPITAL, Hammersmith.—Surgeon. Applications by March 31st.

MEDICAL APPOINTMENTS.

BARR, Thomas, M.D., F.F.P.S., appointed Aural Surgeon and Lecturer on Aural Surgery to the Glasgow Hospital and Dispensary for Diseases of the Ear, *vice* J. Patterson Cassells, M.D., resigned.

BRANFOOT, H. S., M.B., appointed Assistant Physician to the Sussex County Hospital, *vice* J. Rutter, M.D., resigned.

CREAN, W., L.R.C.P., appointed Medical Officer to the Parochial Board of the Parish of Torosay, *vice* C. McLean, M.B., resigned.

DAVIDSON, P., M.A., M.B., appointed Assistant Medical Officer to the Infirmary for Children, Liverpool, *vice* J. McClelland, M.D., promoted.

DAY, J. Roberson, M.R.C.S.Eng., L.R.C.P.Lond., appointed Clinical Assistant to the Brompton Hospital for Consumption.

DEVLIN, T. P., L.R.C.P., appointed Medical Officer to the Birsay, Harray, and Sandwick Medical Aid Association, *vice* J. Clouston, M.B., resigned.

ELLIS, Richard, F.R.C.S.Edin., appointed Consulting Surgeon to the Sheffield and South Yorkshire Ear and Throat Hospital.

ERSKINE, James, M.A., M.B., C.M., appointed Assistant Aural Surgeon to the Glasgow Hospital and Dispensary for Diseases of the Ear.

FITCH, R. A., M.R.C.S., appointed Resident-Surgeon to the Birmingham General Dispensary, *vice* Harry Green, M.R.C.S., resigned.

GARMAN, Walter, M.B., C.M.Edin., appointed Resident Physician to the Queen's Hospital, Birmingham, *vice* C. Sanders, M.B., resigned.

HARPER, Gerald, M.B., appointed Assistant-Physician to the Chelsea Hospital for Women.

HARRIS, Spencer C., M.R.C.S., L.S.A.Lond., appointed Deputy-Surgeon to the Militia, also Surgeon to the Dispensary of the City of Ely.

HAYDON, E., M.B., appointed Medical Officer to the Newton Abbot Union Workhouse, *vice* N. F. J. Haydon, L.R.C.P.

JACKSON, A., M.R.C.S., appointed Assistant House-Surgeon to the Hull General Infirmary, *vice* E. F. Potter, M.R.C.S., resigned.

KIRBY, E. D., M.B., C.M.Edin., M.R.C.S.Eng., appointed House-Surgeon and Secretary to the Bridgnorth Infirmary, *vice* T. Lambert Hall, M.R.C.S.Eng., L.S.A.Lond., resigned.

RUTTER, J., M.D., appointed Physician to the Sussex County Hospital, *vice* E. F. Fussell, M.B., resigned.

[illegible], J. Benstead, M.D., appointed Consulting Physician to the Hearts of Oak Benefit Society.

SCOTT, John Walter, late Surgeon Royal Navy, appointed Second Assistant Medical Officer to the Hampshire County Asylum.

SUNDERLAND, Septimus, M.D., L.R.C.P., M.R.C.S., appointed Resident Medical Officer to the Royal Hospital for Children and Women, Waterloo Bridge Road, S.E., *vice* J. E. [illegible], M.R.C.S., resigned.

WALTERS, R., M.D., appointed Physician to the [illegible] General Dispensary.

WINDLE, C. A. Bertram, M.D., B.Ch.Dublin, appointed Resident Medical Officer to the General Hospital, Birmingham, *vice* J. W. [illegible], M.D., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

[illegible]

BIRTHS.

[illegible]

[illegible]

DEATH.

[illegible]

OPERATION DAYS AT THE HOSPITALS.

MONDAY........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY .....St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY .... King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Norman Chevers: On Febris Exanthematica Orientalis, otherwise [illegible] Fever.

TUESDAY.—Pathological Society of London, 8.30 P.M. Mr. Lane: Spine from a Case of Spastic Contraction of Sterno-mastoid (card). Mr. Davies-Colley: Juvenile Osteo-malacia. Mr. Sutton: Bone-disease in Animals. Dr. Norman Moore: Ulceration of Small Intestine and Disease of Skull, probably Syphilitic. Mr. Roger Williams: Acne Keloid. Dr. Hale White: True Cystic Disease of Liver, with Yellow Fever and Tuberculosis. Dr. West: Three Cases of Malignant Disease of the Bronchial Glands; Obstruction of One Coronary Artery (card). Dr. Turner: Cirrhosis of Liver; Free Coagula in Pulmonary Vein (card); Extreme Obstruction of Coronary Artery (card). Dr. Taylor: Chondro-epitrochlearis Muscle on both Sides (living specimen).

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be shown by Dr. Godson and others. Mr. Alban Doran: The Relation of Prolapse of the Vagina to Hernia, illustrated by Two Pedigrees. Dr. Kilner: Upon the Benefits derived from the Induced Current during Parturition. Dr. Arthur Mitchell: Strong Mental Emotion affecting Pregnant Women as a Cause of Idiocy in the Offspring.

THURSDAY.—Harveian Society of London, 8.30 P.M. Discussion on Scarlet Fever, opened by Mr. H. Cripps Lawrence: 1. Etiology; 2. Surgical; 3. Puerperal; 4. Differential Diagnosis.

FRIDAY.—West London Medico-Chirurgical Society, 8 P.M. Mr. Noble Smith: The Treatment of Talipes. Dr. Robert Lee: On the Antiseptic Treatment of Bone-diseases.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT. We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE REGULATIONS OF THE UNIVERSITIES OF DURHAM AND ST. ANDREWS.

SIR,—In the BRITISH MEDICAL JOURNAL of March 15th appeared a communication signed "Thirty-one," respecting the above regulations. The suggestion [illegible] united action by the members of the profession [illegible] them.

Seeing the difficulties at present surrounding [illegible] who desires to obtain the degree of M.D., I believe a memorial asking that members of ten years' standing might be admitted to the examinations, restricted to duly registered medical men of forty years of age, would [illegible] an overwhelming number of signatures, that the university to which it was presented would feel it their duty to the profession to give the practitioners a chance of obtaining the coveted degree, and not, as at present, compel them to go abroad for the distinction, or do without it until they have attained an age or position when it is not of so much importance to them. I think, [illegible] that such a man should have qualified ten years, and not be simply thirty years of age. Numbers are not admitted until they are twenty-five years of age, or even older; so that after four or five years, if the above regulation were not in force, the degree would be open to them, and thus probably detract from the number taking degrees at an earlier stage.

The reasons why so many are in practice without a degree have been so often laid before the profession, that it is scarcely necessary to go over them again. The principal reason is, no doubt, the fact that many at first decide, or have it decided for them, that they are to enter at the London centre, and are thus to a great extent debarred from taking any university degree; the London University course being out of the question for a great many men, owing to the time and expense it takes to qualify by that channel. When qualified, we begin to see the mistake; but, urged frequently by our friends and family to get into practice, we naturally do so; and then, where are we? Those in practice know too well how difficult it is to stir away; therefore, it is an impossibility to keep any further terms at an university, unless living in the immediate neighbourhood of one, without the [illegible] up one's practice and [illegible], at some future period, the difficulties encountered in working another up.

Another point, I think, deserves attention, and that is the high fees that are demanded for admission to the examination, viz., 50 guineas, compared to the fees charged at an earlier stage.

I hope that this attempt may have nothing spasmodic about it, and that some member who can spare the time will prepare a memorial and [illegible] signatures for attachment, so that it may be presented in due course.—I am, yours truly,

M.R.C.P.

SIR,—With the letter of "Thirty-one," in your issue of March 15th, concerning "The Regulations of the University of Durham and St. Andrews," I entirely agree. When I was a student it was impossible to obtain the Durham degree without residence at the University; and when the present regulations came into force I was doubly qualified, engaged in practice [illegible], and unable to take advantage of them. I believe that the possession of M.D. has a distinct monetary value in practice, and by the present regulations eight years must elapse before I am eligible for it.

I consider a man with two London qualifications to be hardly treated by the fact that, after all his trouble and expense, on commencing practice he finds that socially and professionally his rank is lower than that of another, who, having gone through almost the same curriculum, has had the good fortune to be educated at some Scotch university instead of an English school.

I shall be glad to co-operate with "Thirty-one" in endeavouring to obtain the desired change.—I am, sir, yours truly,

THIRTY-TWO.

SIR,—I have read, with much interest, the letters in two recent numbers of your JOURNAL, complaining of the hardship of the rule which insists that all applicants for the M.D. degree of Durham, who have not studied at the Newcastle School of Medicine, should, in addition to having been in practice for fifteen years, have attained to 40 years of age. Many members of the profession are obliged to qualify early, and pass at once into general practice. Is it not, then, unjust to impose upon those gentlemen who are desirous, after fifteen years' hard work, to obtain a higher qualification, a further period of expectancy, simply because they have not reached the age fixed upon by the Durham authorities? Surely this rule might be relaxed in favour of those in other respects well qualified, without lessening the dignity or value of the degree, and thus a boon conferred upon many hard-working men who are willing to submit to the stringent examination of the University rather than seek a foreign diploma.—I am, sir, your obedient servant,

SURGEON.

ETIOLOGY OF CONGENITAL TUMOURS.

ZEETONE asks for an explanation of the very frequent occurrence of the congenital pea-like tumour which is situated just in front of the tragus. It seems to be much the commonest of all congenital tumours. Will embryology or comparative anatomy throw any light on the subject?

Determination of Sex.

Sir,—My attention has only recently been called to the very interesting correspondence in your columns on the above question, and, as it is intimately connected with the subject of my recent work, *The Law of Sex* (Churchill), I should be much obliged by your permitting me to take part in the discussion.

In the work referred to, I have reviewed several of the principal theories which still have currency, and, among others, that advanced by Dr. Shelly (September 29th, 1883), viz., that the sex of offspring depends on the time elapsing between the extrusion of the ovum and its fertilisation. This is the theory propounded, as another correspondent (M. A. Geddes, September 29th, 1883) points out, by Professor Thury, in 1863, in his *Mémoire sur la Production des Sexes*, and it has long been associated in this country and in America with the name of Dr. Napheys, the author of *The Physical Life of Woman*.

I believe that, in my book, I have shown the utter insufficiency of this theory to account for many of the commonest facts of experience, though I should at the same time be much interested to know what new evidence in support of it your correspondent, Dr. A. Wilson, has lighted on in the course of his independent investigation on this subject, as mentioned in his letter (September 15th, 1883).

In a letter dated November 10th, 1883, Dr. Campbell quotes a practical opinion which deprives the theory in question of all value. He also states that the Jews have no such amazing excess of sons as, according to this theory, they ought to have; and he details the facts connected with the process of salmon-breeding, which are certainly not in favour of the Thury hypothesis.

It may be remarked that it is a general opinion (particularly in Germany) that no fertilisation of an ovum takes place after the expiration of a certain period, variously estimated at from seven to fourteen days. This is held by some to be due to the death of the ovum.

On the other hand, if the non-fertilisation be due to the escape of the ovum altogether, then the Jews, at least while obeying the Levitical precepts, should have very small families indeed, since the larger proportion of the ova would be unfertilised; and this is nearer the fact than is the other result required by this theory, as remarked by Dr. Campbell, viz., that Jewish families should consist almost exclusively of sons.

The remarkable circumstance brought to light by the correspondence is, however, that different contributors appear to have arrived independently at conclusions which agree with the theory laid down in my *Law of Sex*, so that it is possible to construct an important part of that theory from your correspondents' own opinions and admissions. This I take to be a striking and valuable confirmation of the truth of what I have advanced. Let me briefly show how this appears.

Dr. Shelly himself (September 29th) admits that the superior vigour of the ovum or sperm-cell in any given case influences the result.

Dr. Gillespie (same date) goes a step further, and enunciates what I firmly believe to be true, and have contended for at some length in my work, viz., the original and natural equality of the sexes; and he states his opinion that, if the potentiality of either be modified, the balance of force tells for the other. Now this is precisely my theory of relative superiority, though I have been at some pains to examine what this is, and in what it consists, and I have given a number of indications whereby it may be recognised. Dr. Gillespie adds, however, that the female, as the more impressionable, is more likely than the male to vary in potentiality, which may well be the case.

Dr. Shelly, in the letter of September 29th, arrives at the conclusion that the superior potentiality of the germ-element tends to produce sons, and that of the sperm-element to produce daughters, an idea put forth long ago (first, I believe, by Professor O. S. Fowler), and embodied in a modified form in my theory of superior opposites, that is, that the superior parent in any given case determines the opposite sex. Dr. Shelly calls this cross-heritage, when speaking of the inheritance by daughters of the characteristics of their fathers, and of the likeness of sons to their mothers, and the term is an apt one, since it explains itself.

Dr. Gillespie states it as the result of his observation, that older women are often barren, but that, if they have children, they are usually sons; and further, that great men have great mothers, as I have laboured to show.

Dr. Shelly mentions the common opinion that daughters usually resemble the father, and *vice versâ*, and instances the curious and striking facts relating to the issue of a white mother and coloured father in the West Indies. He also complains of the want of [illegible] which would elucidate this question of cross-heritage.

Now in my above-named work, I have collected a large number of facts which go to prove this; and I have devoted a chapter to the examination of the same phenomenon on a large scale in society. It is noticed by Dr. Campbell (September 15th, 1883) that families sometimes show a majority of sons for [illegible] generations, and sometimes of daughters. I believe I have shown that such preponderance does appear in families, but in alternate and in successive generations. [illegible]

I [illegible]

I should [illegible]

Dr. Shelly [illegible]

With Dr. Gillespie I [illegible]

But I go [illegible] either sex in the offspring of any given marriage; and this power of prognostication I have myself tested by a long series of practical applications with almost uniform success.

I go even beyond this, and maintain that, in the great majority of cases, the sex of their offspring is within the control of parents; and I have no doubt that when the attention of professional men has been longer directed to this question, with the clue afforded by this theory, the control will become still more effectual.

The essentials of the true theory of sex as laid down in my book are (1) equal share of the sperm and germ elements in the production of sex; (2) the determination of sex by the superior potentiality of one or the other element; and (3) the determination of the opposite sex in the offspring by the superior parent, or element.

This theory also explains many apparent anomalies, such as the continual small excess of male births among western nations, the marked excess of female illegitimates, the temporary large male excess after wars, pestilences, etc., and many others, but I must not trespass on your space with further details.—Yours truly,

George B. Starkweather.

Perchloride of Iron in Post Partum Hæmorrhage.

Inquirens asks if there be any ground for the opinion that sterility not unfrequently follows the use of the above drug. In two cases which have come under his notice, neither female has ever proved pregnant since. Undoubtedly they both owed their life to the operation at the time, now five years ago. The females are apparently in good health, and have been so, and their children are strong and robust.

Treatment of Diphtheria by Eucalyptus-Inhalations.

Sir,—The treatment of diphtheria by eucalyptus inhalations, about which your correspondent makes enquiry, is merely a powerful development of the antiseptic principle. The eucalyptus globulus, or blue gum tree, is a native of Tasmania and Australia generally, but the plan of treatment did not originate there.

The treatment of diphtheria by inhalations of eucalyptus, was introduced by Professor Mosler, of Griefswald, in 1879. His plan is to add a teaspoonful of a mixture of equal parts of eucalyptol with rectified spirit, to the water used in a steam-atomiser, and he directs the inhalation to be kept up twenty minutes in each hour. This treatment, he says, causes no irritation of the bronchi, and acts as a powerful disinfectant; the antiseptic action in the atmosphere of the room being almost continuous.

Another way of using it is to add from ten to thirty drops of eucalyptol with half the quantity of light carbonate of magnesia to the hot water, and use as before. An account of this method will be found in the *Transactions of the International Medical Congress*, 1881.

The chief Australian exponent of the eucalyptus steam is Dr. J. Murray Gibbes, of Adelaide, South Australia. His plan seems in some respects superior to that of Professor Mosler. His idea is to convert the sick room into a eucalyptus antiseptic chamber for some days continuously. His results so far as they go are perfect, and if his experience should be corroborated by that of others, it is easy to see in what a number of diseases such a plan might be used, such as croup, acute bronchitis, laryngitis, scarlatina, and perhaps the continued fevers; indeed, in any disease supposed to depend on germs. Dr. Gibbes's plan is also more simple, and can be carried out without any trouble. He prepares the disinfectant by pouring boiling water on eucalyptus leaves in a tub or jug placed close to the bedside, changed every half hour. His experience of this drug in diphtheria is limited to one epidemic at New Plymouth, Taranaki, New Zealand. He treated thirty-seven cases without any other [illegible], and without alcohol. The patients were kept in the disinfectant atmosphere for several days. Every case recovered without a bad symptom.

However, in most of these cases he mopped the throat with liquor ferri perchloridi and glycerine every eight hours, and then covered the pharynx with [illegible] thorough trial has been given to the eucalyptus, no other treatment will be found to give such satisfactory results. He has also tried it in croup, bronchitis and laryngeal phthisis, with most satisfactory results. [illegible] all these cases internally,—I am, Sir, yours faithfully,

27, Greenmount Road, Belfast. John Strahan, M.D., M.Ch.

Wirtzung's "Practice of Physicke."

Sir,—On February [illegible] appeared in this Journal asking for information as to the value of Mosan's translation of Wirtzung's *Practice of Physicke*. Although I can give [illegible] the late [illegible] 1617 [illegible]

[illegible] Union Street, Aberdeen. Matthew Hay, M.D.

Maternal Impressions.

Sir,—A [illegible]

M.D.

A CORRECTION.

SIR,—My attention has been drawn to the fact, that in the report on the discussion of Mr. Makins's case of obstruction of the trachea, which took place at the last meeting of the Pathological Society, I am made to say the following: "Dr. Gerhardt had pointed out that, where the obstruction to respiration occurred below the glottis, the respiratory movements of the larynx were very limited, whereas, when the obstruction was above the glottis, the respiratory excursions of the larynx were wide; this symptom, however, had been misleading in this case."

The latter part of this report rests on a misunderstanding of my words; I said, on the contrary, that though I did not arrive at a correct diagnosis of the nature of the tracheal obstruction, yet the course of events entirely proved the correctness of Professor Gerhardt's statement, so far as the differential diagnosis between laryngeal and tracheal obstruction was concerned.

Considering the great importance of this differential diagnosis with regard to the propriety of performing tracheotomy, and with regard to the prospects of this operation, I should be very sorry if the erroneous report of my statement led to disregarding Professor Gerhardt's axiom, the value of which will be found greatest just in the most difficult cases. I therefore hope you will find space for the insertion of this correction.—I am, sir, yours faithfully,

March 23rd, 1884. FELIX SEMON.

SECRETION OF MILK IN THE MALE.

SIR,—I have remarked with much interest the record of a case of "secretion of milk in the male," by Mr. Mitchell, in the JOURNAL for March 8th; and I welcome the publication of so well authenticated and recently observed an instance of a rare and singular aberration in the usual dormancy of function in the mammary glands of man.

With your permission, I shall be glad to be allowed to avail myself of this opportunity to invite members of the profession who have met with similar cases, to favour me with any facts they may have observed respecting them, as I am seeking examples of gynæcomastia in the male, whether of mankind, in the apes or monkeys, or in creatures yet lower in the scale of being.

In an essay already prepared for publication upon the custom of the "lying-in of husbands," or, as the French call it, "la couvade," I have considered the origin of this strange custom—a custom, I may add, not yet extinct—by the light of evolution; and there are grounds for believing that the facts I have gleaned justify the inference deducible from them as to the origin of this widely spread and singular practice. Corroborative facts in evidence of functional activity in the breasts of males, not being infants or young children, will be gratefully appreciated by me.

A case I have met with during the past two years in the person of a distinguished naturalist well illustrates the kind of evidence desired. This gentleman informed me that, at the age of puberty, he observed activity in his breasts, accompanied by a secretion of milky fluid, and that the same phenomena have recurred every spring since it was first remarked, lasting on each occasion for a period of about six weeks. I have also abundant evidence of a comparative kind of illustration of my hypothesis.—I have the honour to be, sir, your obedient servant, ALFRED WILTSHIRE, M.D., F.R.C.P.Lond.

57, Wimpole Street, Cavendish Square, W.

ELECTRICAL INSTRUMENTS.

SPES.—It is difficult to give "the name of the instrument or instruments that would suit" our correspondent without his going into more details as to the conditions to be fulfilled by the battery and coil in his case. He will, however, find these matters discussed, and every information given, in the second edition of Dr. de Watteville's *Medical Electricity*, just published by H. K. Lewis, 136, Gower Street. The use of a "current combiner" is preferable to having the galvanic and faradic apparatus immovably united in one box.

EXCISION OF THE PATELLA: RECOVERY WITH MOVABLE JOINT.

SIR,—May I call Mr. T. A. Dodd's attention to the following cases of excision of the patella "on record," followed by an useful joint "without antiseptic precautions?"

One is related in Professor Gross's work on surgery; another is to be met with in an analogous work of Professor Eve; and a third by Dr. Knode, in May 1860, related in the *North American Medico-Chirurgical Review*.—I am, sir, yours faithfully, ARTHUR JACKSON.

Sheffield.

ASSOCIATE B.M.A.—The death-rate during 1882 from the principal zymotic diseases was equal to 2.73 per 1,000 in England and Wales, to 2.76 in the twenty-eight great towns dealt with in the Registrar-General's weekly return, and to 2.84 per 1,000 in fifty other large town-districts.

THE TREATMENT OF ABORTION.

SIR,—I would wish to direct "A Member's" attention to the use of "Thomas's dull wire curette" in cases of abortion, where he apprehends that the uterus is not entirely cleared of its contents (see JOURNAL, March 15th, p. 541). This extremely useful little instrument may be employed both for diagnosis and treatment. You can ascertain by its use whether the endometrium is smooth or rough; and, if rough, you can scrape away the rough places. The instrument is so flexible, and of so peculiar construction, that it cannot perforate the uterine wall.

In cases of hæmorrhage after abortion, I introduce Reid's speculum, and scrape out all the *débris* from the uterine cavity (with the curette); then apply thoroughly Churchill's tincture of iodine to the interior. The iodine acts as a styptic and antiseptic, and destroys what the curette fails to remove. The after-treatment should include warm antiseptic vaginal injections, repeated as often as is necessary. By following this line of treatment, I fear no abortion.

I attended a lady the other day who had distinct symptoms of septicæmia, following abortion: high temperature, foul lochia, etc. I removed from her uterus about an eggcupful of stinking shreds of placenta and membranes; and applied the iodine to the endometrium, with the result of immediate defervescence and a rapid recovery.

The curette may be obtained, in three sizes, from Archibald Young, of Edinburgh, with Mundé's pamphlet on the use of the same.—Yours, etc.,

80, Broad Street, Pendleton, Manchester. W. WILSON, M.D.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

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THE LUMLEIAN LECTURES
ON
THE ÆTIOLOGY OF PHTHISIS.

Delivered at the Royal College of Physicians.

By J. ANDREW, M.D., F.R.C.P.,
Physician to St. Bartholomew's Hospital.

Lecture I.

The ætiology of phthisis covers so wide a field, requires for its complete discussion so many different lines of inquiry, so many different methods of research, that it would be absurd to attempt to teach it in detail within the time at my disposal here. Nor was such my intention in adopting these words for the title of these lectures. It was convenient to have a short heading, and yet one which would allow me the fullest liberty to choose, from any quarter, whatever facts or arguments there may be available for my more limited purpose. Far from attempting an exhaustive treatment of so vast a subject, I shall regard it from one comparatively narrow point of view—viz., the communicability of the disease immediately or mediately from the sick to the healthy. Is or is not phthisis contagious?

And here it is my duty at once to confess myself to be an anticontagionist, and to admit that, in spite of the sincerest wish and endeavour to state the case fairly and without prejudice, my argument must have been, in form if not in matter, more or less biassed by its being framed rather to attack a given proposition than to establish any other in its place.

This question of contagion, wherever it arises, whether in the case of phthisis or of other diseases, has rarely been discussed with judicial calmness. The practical issues are so important, and appeal so strongly to the imagination, whilst facts lend themselves so readily to contradictory theories and *ex parte* treatment, that the opposite sides too often deal out to each other but scant courtesy, or even justice. And thus the argument is carried on by arguments unsound and tainted from the very first—by ingeniously manipulated statistics, by facts incompletely given, and by utterly irrelevant appeals to feeling. It may be in part from this emotional element in the controversy that the very idea of contagion has often been rejected in cases which seem to us now scarcely to admit of even speculative doubt. Thus, Dr. John Armstrong hotly denied the contagiousness of typhus fever in his *Lectures on the Morbid Anatomy, Nature, and Treatment of Acute and Chronic Diseases* (posthumous edition by Joseph Rose, 1834), and this, too, in cases where glandular swellings and a petechial rash were present which it is impossible to believe to have been cases of typhoid fever. I am well aware that very different opinions were held of Dr. Armstrong's character and of the value of his opinions; but, by the testimony of friends and foes alike, he was the most popular teacher of his day, a careful observer, who had enjoyed special opportunities for studying fevers; and yet in so plain a case as the spotted fever of London and Edinburgh he renounced his belief in its contagiousness.

At the very outset of the inquiry, a difficulty confronts us which has never hitherto been satisfactorily met, which I, at any rate, cannot hope to remove, but over which I must somehow contrive to stumble. It is the definition of phthisis. All that I can do is to state the sense which I myself attach to the term phthisis, and to beg that my argument may be judged of by reference to that and not to any other description. Of course, it must be so framed as not to beg the question under discussion, and must, therefore, be imperfect. By phthisis, then, I mean a specific disease, characterised, anatomically, by a new growth, which may wear very different aspects at different periods of its existence, and in different organs or tissues, especially, according as it is found in the interior of organs, or as it presents upon a free serous, mucous, or cutaneous surface. The new growth may occur in almost any organ or tissue, but does so most frequently in the lymphatic tissues and in the lungs. Generally it proceeds from numerous different points, the growths from which may or may not coalesce, thus leading, *e.g.*, in the lungs to two different types of lesion, viz., miliary tuberculosis, and to more or less extensive areas of infiltration and consolidation.

Further, in the case of the lungs, this new growth does not follow the general law of distribution or localisation of pulmonary diseases. It has some special affinity for the apices, and descends in levels, attacking the upper portion of the lower before it has reached the base of the upper lobes. It kills by the disturbance and disorganisation which its presence works in some vital organ, and thus the disease answers roughly to the old definition of Joannes Marifeldus, in the fourteenth century, in his *Breviarum Bartolomæi*, the earliest medical work by any member of the staff of St. Bartholomew's Hospital, with which I am acquainted, "ptisis est ulcus pulmonum cum consumpsione totius corporis," (*Anecdota Oxoniensia*, vol. i, part i, 1882). But its clinical history is that of a general rather than of a local disease; the constitutional symptoms, especially in the earlier stages of the disease, bearing no definite relation to any ascertainable structural lesions.

In the words of Dr. P. M. Latham, "pulmonary consumption is no more than a fragment of a great constitutional malady, which it would be in vain to think of measuring by the stethoscope, and which it belongs to a higher discipline than any mere skill in auscultation rightly to comprehend" (*Latham's Works*, New Sydenham Society, vol. ii, p. 171).

I know, only too well, that this definition, if I may call it so, bristles with controversies of fact and of theory. Let it be taken then as the expression of my belief, that consumption, phthisis, tuberculosis, is a specific disease occurring in both acute and in chronic forms; that it is not a mere catarrhal inflammation, a peribronchitis, a chronic apex-pneumonia, but a disease as distinct in its nature as scarlatina, or as gout. And further, let me here add, that a very large, if varying, proportion of deaths caused by chronic lung-diseases are rightly attributed to it.

No doubt it is impossible to get any large statistics of tubercular phthisis which are not more or less vitiated by the intrusion of non-tubercular cases, but the broad general conclusions which may be chosen from those statistics are trustworthy; and perhaps in the presence of other than tubercular cases is to be found the explanation of some of the apparent anomalies and inconsistencies which make it so difficult to formulate the general laws of its causation and natural history.

The question of the contagiousness of phthisis must be beset by peculiar difficulties, for in no other cases has the discussion raged so long without even yet leading to any generally accepted conclusion. To this conclusion it is now necessary for me to mention the well-known names of those who, at different periods, have taken, some one, some the other, side in the dispute. The recent discovery of the tubercle-bacillus, and the consequent addition to the old stock of arguments of a fresh fact of the utmost importance, must be my excuse for venturing to bring so trite a subject before you. It seemed to me all the more allowable to do so, because the bacillus has been looked upon by many as a conclusive proof of the doctrine of contagion in its most extreme form; and, as often happens when some striking discovery, some fruitful generalisation, has just been made, a strong tendency has been shown to treat the older views and observations with contempt. In order to estimate the influence of our knowledge of the bacillus upon the doctrine of phthisis, I shall endeavour, first, to state the position of that doctrine with the value of the facts on which it was based, prior to Dr. Koch's discovery; and, secondly, to discuss the modifications which that discovery may render necessary in the older views. In this way only can we expect to arrive at a safe conclusion. In carrying out this plan, however, I must ask your forbearance, when, as must often be the case, you find me traversing well-known paths. An advocate would surely do his duty in a strange fashion who omitted to state an argument because it was an old one and hitherto unanswered.

It will be convenient to consider, first, one argument in favour of contagion, apparently of great weight, which was very strongly stated by Dr. Wm. Budd of Clifton, in his famous Memorandum on Phthisis which appeared in the *Lancet* for October 12th, 1867. He says: "Among the data relating to geographical distribution the following striking facts may be here mentioned. 1. When the South Sea Islands were first discovered, phthisis did not exist there. Since the aborigines have come into intimate contact with Europeans, the disease has not only made its appearance among them, but has become so widespread as to threaten their extermination. The contrast between original entire immunity and present extreme fatality is very striking, and can only be rationally explained by the introduction of a new and specific morbid germ. Try every other hypothesis, and the facts are inexplicable; make this one supposition, and they are at once explained. 2. The late Dr. Rush, of Philadelphia, who made very accurate inquiries to determine the point, ascertained that, when America was first discovered, phthisis was unknown among the native American Indians; now it is very fatal to them. The very significant contrast here exhibited between the past and present history of these two races, in respect of phthisis, is exhibited at once; and at the present time among the negro races in Africa, in different parts of the area of that great continent. It is well known that negroes are peculiarly liable to phthisis. Now, everywhere along the African seaboard, when the blacks have come into constant and intimate relations with the whites, phthisis causes a large mortality among them. In the interior, where intercourse has been limited to casual contact with a few great travellers or other adventurous visitors, there is reason to believe that phthisis does not exist. Dr. Livingstone and other African travellers have given me the most positive assurance on this point."

It would be impossible to exaggerate the importance of this statement if it could be established. Fortunately or unfortunately, this seems to be impossible. To take, first, the case of America.

The oft quoted authority of Dr. Rush, when analysed, is very far indeed from being decisive of the question of the importation of phthisis into North America. It is known that in his "Inquiry into the Natural History of Medicine among the Indians of North America, and a Comparative View of their Diseases and Remedies with those of Civilised Nature," he does not mention consumption. "Fever," he says (p. 20 of London edition of 1789), "constitutes the only disease among the Indians;" and under the head of these fevers he mentions specially "pleurisies and peripneumonia." On p. 21 he asserts that small-pox and the venereal disease were communicated to the Indians in North America by the Europeans, but he did not, so far as I can find, take the same view of consumption. In point of fact, what Dr. Rush states is not merely that consumption was unknown in the north-west of the New World before its discovery by Columbus, but that it was still unknown among the Indians at the time when he was writing in the latter half of the eighteenth century; *i.e.*, nearly three centuries after Columbus, consumption had not been communicated by Europeans to the natives. He gives not the slightest hint of believing in its foreign origin, but regards it, even in its incidence on the Whites, as one of the results of advancing civilisation. This he says in "Thoughts on Consumption" (*Op. cit.*, p. 159):

"I shall begin my observations upon the consumption by remarking: (1.) That it is unknown among the Indians in North America. (2.) It is scarcely known by those citizens of the United States, who live in the first stage of civilised life, and who have lately obtained the title of the first settlers. The principal occupations of the Indian consist in war, fishing, and hunting. Those of the first settlers are fishing, hunting, and the laborious employments of subduing the earth, cutting down forests, building a house and barn, and distant excursions, in all kinds of weather, to mills and courts, all of which tend to excite and preserve in the system something like the Indian vigour of constitution. (3.) It is less common in country places than in cities, and increases in both with intemperance and sedentary modes of life. (4.) Ship and house carpenters, smiths, and all those artificers whose business requires great exertions of strength in the open air in all seasons of the year, are less subject to this disorder than men who work under cover, and at occupations which do not require the constant action of their limbs. (5.) Women, who sit more than men, and whose work is connected with less exertion, are most subject to the consumption."

It is clearly unnecessary to draw from this passage any more stringent conclusion than this: that the climate of North America had not sufficed to prevent the development of an hereditary tendency to phthisis among certain of the settlers living under conditions which would have produced the same effect in Europe. It must further be remembered that Dr. Rush writes of the savage tribes of the West and North; but there is reason to believe that phthisis existed in Mexico before the arrival of Europeans. N. M. Bancroft (*Pacific States*, vol. ii, p. 592), speaking of the Nahara natives, the leading tribe among the Aztecs, says: "The diseases most prevalent were acute fevers, colds, pleurisy, catarrh, diarrhœa, and, in the coast-districts, intermittent fevers, spasms, and consumption, aggravated by exposure." Even if this statement is not literally true, if some other disease has been mistaken for phthisis, it is still an apt illustration of the uncertain character of the evidence relating to the diseases of the American aborigines. Yet phthisis might easily exist among barbarous races, and escape the notice of even the most competent observer. A savage stricken with phthisis would rarely live to develop the later and more striking features of the disease. The value of his life in the earliest stage would be a vanishing quantity, like the "prairie-value" of land. With the first serious failure in strength of lung or of muscle, the struggle for existence would be promptly decided against him. In the words of Dr. Rush, speaking of deformed children, the severity of the Indian manners destroys them. And thus civilisation, with its care for the sick and weakly, allowing time and opportunity for the full evolution of the disease, would sometimes appear to have introduced that which it had only preserved and, so to speak, cultivated. An almost necessary consequence of this artificial survival of the unfit would be the spread of the phthisical taint, in virtue of its hereditary character (to say nothing of the unwholesome influences of a nascent civilisation), and a great increase, both absolute and relative, in the number of cases of phthisis. From this point of view, it is interesting to note even indistinct traces of the existence of phthisis among the people who had attained the highest degree of civilisation in the New World, who kept trustworthy records, and even established hospitals for the sick. Nothing can be more unsatisfactory than the reports of the first visitors of any newly discovered land on the diseases of its inhabitants. The writers themselves seem to have been very often singularly unfitted for such a task, and the opportunities at the disposal even of the best qualified observer most insufficient. It could not be possible to learn much during a stay of a few weeks, or it may be only days, among a newly found people, speaking an unknown and unwritten language. Taking the three vast regions specially mentioned by Dr. Budd—regions containing among them nearly every variety of climate and of natural productions—I trust I have sufficiently illustrated the difficulty, if not impossibility, of proving that phthisis was introduced into America from Europe.

In the Pacific, the first European visitors of many of the islands were South Sea whalers, escaped convicts, or, at best, intelligent sailors, like mariners, without any special medical knowledge; certainly not persons well qualified to conduct a very difficult scientific inquiry. It is impossible, in the absence of trustworthy records, to come to any certain conclusion; it is easy enough to meet with statements on either side. A friend, a member of the Melanesian Mission, who has known many of the islands well for some years past, assures me that he believes consumption to have existed among them before the arrival of Europeans. At any rate, twenty years ago, he saw natives dying of what seemed to him to be consumption, in islands which had been visited only by the mission-ship, in which no infection had been conveyed. The case is very different with regard to a highly contagious disease like syphilis. There seems little room for doubt that it was in part brought to the islands by European vessels, and that it is still being constantly reintroduced. Unhappily, it is impossible to deny the great mortality now caused by phthisis among the Melanesians. In the mission-establishment in Norfolk Island, there are about 150 young natives, who stay there for one or two years, to be trained as teachers. Even there, the mortality from phthisis is about two per cent. annually, and in the islands themselves it is probably much higher.

In the case of Africa, it has to be remarked that, although very few white men penetrated into its interior, regular caravan-routes have existed for ages, by which, *e.g.*, starting from the Mediterranean coast, with its thickly set European colonies, any disease so contagious as some believe phthisis to be, must have been spread over the whole interior, even before the time of the Romans. Such a disease, once started, would have travelled surely, if slowly, from one trade-centre to another. By the medium of neutrals, it would pass freely between hostile tribes, and penetrate into the remotest districts. So that the distribution of phthisis in Africa, its prevalence on the coast, and its rarity inland; its being confined to certain parts only of wide regions traversed for centuries by largely used trade-routes, is a strong argument not for, but against, its contagiousness. If its spread depends upon the conveyance of any material germ along the lines of human intercourse, it is difficult to believe that the interior of Africa could have escaped. In a general way, a better explanation of its unequal incidence is to be found in the fact that, in other countries to which phthisis has been long known, and where no question of restricted intercourse arises, it stills prevails to a much greater extent near the sea than in the interior. Further, it is not true that phthisis rages among the natives along the entire coast-line. There are singular exceptions to this general rule, even in the case of districts, such as the Gold Coast, being the seat of large foreign trades, exceptions which it is very difficult to explain on the contagium-theory.

Granted, however, for the sake of argument, that it could be established as a certain fact that phthisis has made its appearance among a certain number of savage tribes after the arrival of Europeans, and that it was unknown before that event, surely the importation of a new and specific morbific germ is not the only rational explanation which can be offered.

If, for the time, we adopt the view that phthisis is a diathetic disease, the outcome of unhealthy conditions of life, especially those connected with the two prime necessities of mankind, shelter from the weather, and food, then it is well known that the first contact of civilisation with barbarism subjects the savage to many most unwholesome influences. He is tempted to indulge to excess in alcoholic liquors, often of the vilest quality. He forsakes his old free life of hunting or fishing for one of comparative inactivity and indolence, hanging about the white settlements, and seeking shelter in the most unsanitary of huts.

What room for surprise is there if, under such changed circumstances, he becomes liable to new forms of diathetic disease? If, however, we accept the doctrine, the true doctrine, that phthisis requires for its production not only predisposition, but also the action of an external agent, probably organic, then a reference to its world-wide distribution on the one hand, and, on the other, to the complete immunity from it which some races, so long as they follow certain modes of life, enjoy, even though like the North American Indian, in Dr. Rush's time, they are in contact with phthisical communities—such a reference will meet the supposition that the impaired vigour of the savage has subjected him to external agents, always present although hitherto impotent, at least as probable as that of an "imported germ."

In the case of the South Sea Islands, the coming of the white man was also followed before long by a great change of diet, by the introduction not only of stronger alcoholic drinks, but also by that of pork in place of their former uncertain supply of flesh-food.

The introduction of European clothing also is attended by grave dangers to health, especially those arising from the intermittent way in which the natives use it, not only at first, but even when civilisation has made considerable progress among them. A ludicrous instance of this fell under the notice of a near relation of my own, who settled in New Zealand thirty years ago. Soon after landing, he went up the country in search of a suitable district for a sheep-run, taking with him a native as guide and porter. This man, very lightly clad, carried with him a large parcel, of which he took the utmost care, but for some days was never seen to open it. At last Sunday came round, and then he appeared dressed in the contents of his parcel, viz., a full dress suit of black cloth, with white shirt and necktie. On the Monday he resumed his scanty rags.

It is admitted on all sides that civilisation at first brings to bear upon the savages some of the most powerful predisposing causes of phthisis, causes which many of us would have said, a few years ago, are sufficient to produce it in certain constitutions. Surely, then, it is a begging of the question to say that the facts cannot be explained, except on the "imported germ" theory. The same statement might be made with equal truth of gout, or of ague.

I must apologise for having dwelt at perhaps too great length on this historico-geographical argument, but it forms so important a part of the contagionist statement, it has been regarded as so decisive of the whole question, it made so deep an impression upon myself until in self-defence I was driven to examine the grounds on which it rested, that it seemed necessary to begin by dealing with it. It is also a most insidious argument; one which lies outside ordinary medical studies, and is often stated confidently, and accepted thoughtlessly. If the history of the earliest appearance of phthisis among savages can only be explained on the theory of contagion, there is an end of the matter. All that remains is to endeavour to discover the nature of the contagion, and the mode in which it gains access to its victims, whether in New Zealand or in London. But I trust I have shown good reason for believing that this is not the case; that the facts have come to us in so imperfect and distorted a form as to be worse than useless; for, while they can be made to harmonise equally well with either the [illegible] or the contagion theory, they are absolutely worthless for the proof of either.

I shall now review the statements which have been made, with more or less truth, as to the influence of certain conditions on the prevalence of phthisis. It is impossible to give in detail the enormous number of facts by which these statements have been supported; but it will be my endeavour, by fairly chosen illustrations, to point out the kind and value of the evidence on which they rest, and their bearing on the doctrine of contagion.

The geographical distribution of phthisis, the degree in which it depends upon climate, as determined by latitude or by [illegible] lines, admits only of the most general treatment. It exists in all climates—tropical, temperate, and arctic—and apparent exceptions to this serve only to bring into strong relief the much greater dependence on local than on general influences. According to the common statement, it is more prevalent in the tropics, and, as far as the absolute number of cases is concerned, this is no doubt true, as the population is many times more dense there than in the north. Whether it is relatively more frequent is a very different question, the final answer to which will require vast statistics yet to be compiled, the labour and the record of many generations. But there are facts which prove that arctic rigours do not prevent consumption.

Moose, or Moosonee, a trading station on the north shore of Hudson's Bay, is in the latitude of London, but enjoys a typical arctic climate, viz., a short hot summer, and a seven or eight months' winter, with the thermometer frequently as low as – 40° Fahr. Mr. Walter Haydon, just returned from five and a half years' service there, has favoured me with the following table of causes of death from 1811 to June 1882. It illustrates both the scanty population of the north, and the extreme difficulty of getting facts even under apparently favourable circumstances; for the register, though an efficient one, is, he says, imperfect and badly kept. Of 162 entries of the cause of death, an average of a little over 2.4 a year,

68	were	due to	consumption.
22	,,	,,	old age.
16	,,	,,	cold and starvation.
14	,,	,,	whooping-cough.
7	,,	,,	bronchitis.
6	,,	,,	teething.
15	,,	,,	paralysis, epileptic fits, peritonitis—5 each.
3	,,	,,	gastric fever.
2	,,	,,	influenza.
6	,,	,,	apoplexy, hydrocephalus, hemiplegia, strangulated hernia, croup, heart-disease—1 each.
3	were	infants under two days old.	

It is interesting to observe the presence of some members of the class of "specific febrile diseases" dependent upon morbid poisons, and the absence of others, *e.g.*, small-pox, typhus, and scarlet fever. Mr. Haydon further told me that, during his stay there, he used nine different consignments of vaccine-lymph, all without success. This he was disposed to attribute to their having all reached him during the winter, and thus been exposed to intense cold for some weeks.

Of the cases of phthisis which he himself observed, all occurred among the native Indians or half-breeds, and their symptoms were the same as among ourselves—cough, hæmoptysis, night-sweats, diarrhœa, in chronic cases "clubbed nails." The duration varied also from a few months to years. Syphilis and gonorrhœa are unknown among the natives. The greatest possible care is taken to prevent their introduction; and as the ship which brings supplies visits the station only once a year, or, not unfrequently, in consequence of the ice, only once in two years, this care is effectual. The lung-disease, therefore, which causes such large mortality among the natives, is not syphilitic phthisis.

Here, then, is an Arctic climate where the percentage of phthisis in the general death-rate is enormous, and where it seems almost exclusively among the natives. On the other hand, there are tropical countries where phthisis is all but unknown among the natives. This is the case in Senegambia and on the Gold Coast within [illegible] degrees of the Equator. A fellow-student of my own, Dr. Thomas Jones of Mansfield, spent five years on the Gold Coast. He tells me that among 4,000 cases of sickness annually, he never saw a single case of phthisis in a native. It is, however, of frequent occurrence among the West Indian soldiers stationed there, and their families; although in their own country they are said to possess an almost complete immunity from it. I wish to draw your special attention to this and similar exceptions to the general statements which have been made, as to the conditions which favour or arrest the spread of phthisis, for I believe that these exceptions furnish a most useful clue to the nature of the disease.

In [illegible], the Director of the Medical Department of the Norwegian Government, Dr. L. Dahl, published a pamphlet on the distribution of phthisis in Norway, in which he gave statistical proof that it is most destructive in the extreme south and in the extreme north, regions separated by more than 10 degrees of latitude, but which, with many differences, agree in one respect, viz., that the climate of each is more severe than that of the parts lying between them. There is, however, a very striking exception in the district of Röros, one of the highest and coldest in the country, and [illegible], whilst the town of Röros in its centre is entirely free. But this most curious anomaly will come before us [illegible] in connection with the effect of [illegible].

On the whole, the facts, so far as they [illegible]

As to the influence of [illegible] in diminishing the phthisis death-rate, no reasonable doubt exists; the higher we ascend, the greater is the immunity from phthisis, until at last it becomes almost if not quite complete. But the conditions on which this result depends are by no means equally clear. It cannot be the mere effect of the climate proper to the elevation upon non-microscopical plants or animal life; for, in the north, phthisis prevails in regions clothed with a flora, among which, on the Alps or Andes, it it would be practically unknown.

It is difficult to believe that it can be due to the difference in the level of subsoil-water at varying heights on a steep mountain-side, when we see that not only slopes, but high mountain valleys, which often contain lakes, are equally exempt.

Is it due to diminution of atmospheric pressure? or to freedom of the air from impurities common at lower levels? My own belief is, that this last is the real explanation; and that, as Professor Tyndall's flasks remained clear and unaltered, when freely exposed to the air at the Bel Alp in the absence of the bacillus of putrefaction, so, too, at certain heights, the micro-organism, whatever it may be, which excites phthisis, is no longer met with.

In Norway, phthisis, as already stated, is most prevalent when the winter is most severe, and to this rule the district of Röros as a whole forms no exception. But the town of Röros escapes, although it is probably the coldest inhabited place in the country, from its situation on a dreary and inclement plateau, where winter prevails for fully eight months in the year. From personal inquiry which I had the opportunity of making last summer, I have no doubt of the reality of this immunity as far as the town itself is concerned, and it is generally attributed to its elevation, for it is the highest as well as the coldest town in the country. But, on a closer scrutiny of the facts of the case, this explanation seems to me untenable. Röros lies in an elevated district, on the watershed between the river Glommen and the streams flowing to the north and east, but not by any means on its highest point. The whole district is an elevated one, there are in it no deep valleys but little above the sea-level; and it is difficult—on the direct contagion-theory impossible—to believe that a slight difference in elevation—sometimes in one, sometimes in the other direction—should preserve the town from phthisis in the midst of a deeply infected neighbourhood, especially when it is remembered that the deep, narrow, level valleys at the head of the west coast fjords—*e. g.*, the Hardanger and Sogne fjords escape, by comparison, almost entirely. It may, however, be that in the industry of the mining town of Röros *i. e.*, copper-smelting, is to be found the cause of this absence of phthisis. At any rate, in this connection, it is interesting to note that in the West Indies, in the sickly island of St. Lucia, the sulphureous localities are the only salubrious localities; that, immediately round sulphur-works and factories for making gunpowder and sulphuric acid, the vegetation and the ague disappear together, and that in Cornwall ague is said to have been almost unknown in the neighbourhood of copper-smelting works. However this may be, the district of Röros supplies a twofold exception to general statements about phthisis: 1, the district, as a whole, although elevated, is extremely phthisical; and 2, notwithstanding this infection, a portion of it is almost entirely free.

Another exception is to be found in the prevalence of phthisis in Spain on the high plateaux of Castile and Estremadura (*Journal de la Soc. de Statistique de Paris*, October 1867; *Repartition Geographique de la Phthisie Pulmonaire*, par M. le Docteur Gross of Berne.)

But, whilst in the case of climate it is difficult to say what is the rule and what the exception, there is no doubt that, as regards altitude, the prevalence of phthisis at considerable heights, although instances of it do exist, is exceptional. We shall have to consider again the effects of these exceptions on the doctrine of phthisis; but it would be a waste of time to dwell longer now on the general law of altitude, or to parade a long list of writers whose labours have established it.

It must, however, be borne in mind that a residence at a high altitude not only prevents phthisis, but also cures many persons suffering from it.

Dampness of Soil.—In the ninth report of the Medical Officer of the Privy Council for the year 1866, appeared Dr. Buchanan's classical report "On the Results which have hitherto been general in various parts of England and Wales, by Works and Regulations Designed to Promote the Public Health." In this he establishes this fact, at that time an unexpected one, that the drying of the soil effected by sewerage works is generally followed by a great reduction in the mortality from phthisis. In the following year Dr. Buchanan submitted another report, "On the Distribution of Phthisis as affected by Dampness of Soil." The conclusions arrived at here are so important to my argument, that I may be permitted to remind you of them. They are as follows.

Reduction in Phthisis-Mortality.

Salisbury	— 49 per cent.	Much drying.
Ely	— 47 ,,	,,
Rugby	— 43 ,,	Some drying.
Banbury	— 41 ,,	Much drying.
Worthing	— 36 ,,	Some drying.
Macclesfield	— 31 ,,	Much drying.
Leicester	— 32 ,,	Drying (*see text*).
Newport	— 32 ,,	Local drying.
Cheltenham	— 26 ,,	Some drying.
Bristol	— 22 ,,	,,
Dover	— 20 ,,	Local drying.
Warwick	— 19 ,,	Some drying.
Croydon	— 17[1] ,,	Much drying.
Cardiff	— 17 ,,	,,
Merthyr	— 11 ,,	Some recent drying.
Stratford	— 1 ,,	Some local drying.
Penzance	— 5 ,,	No change.
Brynmawr	+ 6 ,,	No notable change.
Morpeth	— 8 ,,	No change.
Chelmsford	+ 0 ,,	Slight drying.
Penrith	— 5 ,,	No change.
Ashby	+ 19 ,,	Some drying.
Carlisle	+ 10 ,,	Drying, with local defects.
Alnwick	+ 20 ,,	No drying.

[1] This includes phthisis and lung-disease.

(Tenth report of the medical officer of the Privy Council, 1867, p. 109.)

The following general conclusions, then, result from the present inquiry.

1. Within the counties of Surrey, Kent, and Sussex, there is, broadly speaking, less phthisis among populations living on pervious soils than among populations living on impervious soils.

2. Within the same counties, there is less phthisis among populations living on high-lying, pervious soils, than among populations living on low-lying, pervious, soils.

3. Within the same counties, there is less phthisis among populations living on sloping impervious soils, than among populations living on flat impervious soils.

4. The connection between soils and phthisis has been established in this inquiry; *a*, by the existence of general agreement in phthisis mortality between districts that have common geological and typographical features, of a nature to affect the water-holding quality of the soil; *b*, by the existence of general disagreement between districts that are differently circumstanced in regard of such features; and *c*, by the discovery of pretty regular concomitancy in the fluctuation of the two conditions, from much phthisis with much wetness of soil to little phthisis with little wetness of soil. But the connection between wet soil and phthisis came out last year in another way, which must here be recalled; *d*, by the observation that phthisis had been greatly reduced in towns where the water of the soil had been artificially removed, and that it had not been reduced in other towns where the soil had not been dried.

5. The whole of the foregoing conclusions combine into one—which may now be affirmed generally, and not only of particular districts—that wetness of soil is a cause of phthisis to the population living upon it.

6. No other circumstance can be detected, after careful consideration of the materials accumulated during this year, that coincides on any large scale with the greater or less prevalence of phthisis, except the one condition of soil.

7. In this year's inquiry, and in last year's also, single apparent exceptions to the general law have been detected. They are probably not altogether errors of fact in observation, but are indications of some other law in the background that we are not yet able to announce.

Some years earlier, in 1862, Dr. Henry J. Bowditch delivered, at the annual meeting of the Massachusetts Medical Society, an address "On Consumption in New England, and elsewhere, or Soil-moisture one of its chief Causes." In this, he anticipates Dr. Buchanan's conclusions, and also makes certain statements as to the very narrow area within which a most intense phthisis-infection may be confined, which have a most important bearing on the question of direct contagion. In the preface to the published essay, he says: "The force of facts presented to me by correspondents compels me to resign the commonly received opinion that consumption is equally diffused throughout New England, and to adopt the new one of the address, viz., that there are some spots which have very little of that scourge of the human race, while in other places, and even in particular houses, it prevails to a frightful degree; and, moreover, that these spots may be, perhaps, within a very short distance from each other. Again, facts, as I believe, indicate that dryness of the soil in the surroundings of any places is the prominent characteristic of the former, or of places comparatively free from consumption; while dampness of the soil characterises the latter, or, as they may be aptly called, consumption-breeding districts."

In reviewing the evidence which has been adduced in proof of direct contagion, Dr. Bowditch's essay will be again referred to. At present, I wish to point out that the influence of dampness of the soil in increasing phthisis-mortality, although it rests on unusually trustworthy facts, is yet not an universal law. Dr. Buchanan's list of towns in which more or less drying of the soil had taken place, supplies, as he himself acknowledges, exceptions to his general conclusions. The most striking is that of Ashby, where, with "some drying," an increase of 19 per cent. in the deaths from phthisis took place. It is true that the numbers in this and in other exceptions which I shall mention are small, and, if included in large tables, could make only a fractional difference in the percentages. But statisticians are apt to overrate the power of figures. A single real exception is sufficient to invalidate the claims of any supposed universal law; and the study of these exceptions, numerically so insignificant, is absolutely necessary if we would reach a final generalisation. The present registration-districts are so large, and many of them include localities differing so widely from each other in important particulars, that it is impossible to investigate satisfactorily the true causes of diseases by the aid of figures which do not deal separately with the subdistricts. In 1866, Mr. G. A. Rowell, of Oxford, published a pamphlet on the *Effects of Elevation and Floods on Health.* He was a man of deservedly high local reputation, spent immense labour on his task; and his facts, remarkable as many of them are, are probably trustworthy. Unfortunately, their verification is extremely difficult; for he compares single parishes and small districts which it is impossible to pick out of the Registrar-General's tables. Here is his account of two villages a few miles from Oxford, up the Thames valley, given with some verbal alterations and omissions of unimportant details (*op. cit.*, p. 24). "Cassington and Wolvercot are both situate on gravel; both have excellent water for drinking purposes; and both in the same poor-law union, and within two or three miles of each other. Cassington is not situate on a hill, but upon a bed of gravel which projects into the valley towards the river, but is high and dry above it. The village is fully exposed to the currents of air which sweep through the valley from west to east, having but little protection from trees or other shelter. The roads through the village are wide and well kept; the cottages appear to be much better than in most villages; are well distributed; and, although I saw it in wet weather, during a flood-season, I thought it one of the cleanest villages in the neighbourhood. Wolvercot presents appearances as reverse as possible to those of Cassington. It is protected from the east wind, and Lower Wolvercot is well sheltered by trees on the north and north-east. Along the bottom of the rising ground in Upper Wolvercot there is a ditch of stagnant water; and the ground between the lower houses and the canal is liable to flood in winter, presenting at all times the nearest approach to a swamp that I know of in the Oxford valley. In Lower Wolvercot, some of the houses are at times flooded, and all of them are but little above high flood-level. There are stagnant ditches around the village, and stagnant pools within it, except in dry summer-time. Even the road through the village, till very recently, was generally impassable for carts in flood-seasons, and partially flooded at all times. The cottages are certainly not better than they are at Cassington, while they are much more crowded together. At Wolvercot, a great many ducks and geese are bred; and the early broods, in cold spring seasons, are often kept within doors in the cottages. Thus, in accordance with general opinion, the condition of Wolvercot is much less favourable to health than that of Cassington; but statistics for the twenty years from 1841 to 1860 show that in Cassington the death-rate was 27 per cent. higher than in Wolvercot, and the average of life 25 per cent. in favour of the latter village also. The actual figures given by Mr. Rowell are as follows.

Cassington	Annual deaths......	1 in 40.2 persons.
	Average age........	25 years 10 months.
Wolvercot	Annual deaths......	1 in 51.3 persons.
	Average age........	31 years 7 months.

Allowing for the difference in the population of the two villages, more than double the deaths from consumption occurred in Cassington than there were in Wolvercot. Classing that disease with all others of the respiratory organs, the deaths were 70 per cent. in excess in Cassington."

Whatever may be the relation between dampness of the soil and phthisis, it is clearly one which may be overpowered or masked by other forces.

Of the three conditions so far considered, two—viz., altitude and soil-dampness—have, undoubtedly, great influence; the first in preventing, the second in developing phthisis; and, in both, the facts indicate that there is a something, in large measure independent alike of the constitution and social habits of the population subject to it, but without which phthisis cannot exist. It is certainly improbable that altitude acts by producing, sooner or later, a race of men which is proof, or all but proof, against certain morbific conditions. For, on the one hand, natives of the hills readily contract phthisis in the lowlands; and, on the other hand, the lowlanders recover when removed to the hills. The antiphthisical constitution, if it be in any way due to altitude, must be a very temporary affair, easily acquired and easily lost; and yet there is no *a priori* improbability against the formation of such an antiphthisical constitution, or against its acquiring a permanent character. Indeed, we know that there are races which remain comparatively unharmed by phthisis in the midst of deeply infected localities, *e.g.*, the Chinese in Melbourne.

Since, then, at a certain height above the sea, phthisis ceases to occur, and affected cases recover without affecting injuriously their friends and neighbours, whilst there is no reason to suppose that these latter possess any special protection against phthisis, other than what may be temporarily due to residence at a certain altitude, it is surely reasonable to suggest that the cause of this immunity is to be found in the supposition that some external agent, essential for the development of phthisis, is here inert or absent. In the case of soil-dampness, the probability of the existence of some such agent is even greater. It is difficult to understand in what way the drying of the soil, by the execution of sewerage-works, could have so profoundly and so rapidly altered the constitution, occupation, habits, and vitality of the people of Salisbury for example, and of other towns, as at once to reduce, by a very large percentage, the number of cases of a developmental disease, if phthisis be recognised as developmental, or of a directly contagious disease, if it be recognised as directly contagious. Surely here, too, as in the case of altitude, a reasonable, perhaps the best, explanation of the facts is that phthisis is produced by some external agent, but yet, not spread in the ordinary course of things by direct contagion. The evidence from the effect of climate pointing in the same direction is less strong, for the affirmative facts are less certain and less striking. The exception, however, under all three heads, climate, altitude, and soil-dampness, permits even a stronger proof than can be drawn from the general laws to which they are related. It is, I believe, all but impossible to explain these exceptions on either the developmental theory or on that of direct contagion; but this will be treated of in greater detail in the final summing up of the conclusion to be drawn from the nature of the so-called causes of phthisis. At present, I would only add that these three conditions are, in themselves, entirely independent of any human agency; that, so far as man's action modifies the unwholesome influence of any one of them, it will be to minimise it by the use of suitable clothing, food, fire, and shelter, and that therefore, their real power, as gauged by statistics, is probably under rather than over stated.

EXTREME LOWERING OF TEMPERATURE IN HÆMORRHAGE INTO THE MEDULLA OBLONGATA. M. Lemcke has reported, in the *Deutsch. Arch. für Klin. Med.* for 1883, p. 84, the case of a man, aged 38, who had been for many years given to drink, and who was suddenly seized with shivers and delirium. When admitted into the Rostock Hospital, his pulse was 38, respiration 18, and rectal temperature 23° C. (73.4° F.) after a warm bath. On the following days, it reached 26° and 28° C.; but the patient died without recovering consciousness. At the *post mortem* examination, the signs of a recent hæmorrhage were found in the left half of the medulla oblongata, above and on the outer side of the origin of the vagus. M. Lemcke thinks that the extreme lowering of the temperature cannot be wholly explained by the action of alcohol, but that the thermic centres had been injured by the hæmorrhage.

TO PREPARE CORROSIVE SUBLIMATE GAUZE. In the New York Hospital, corrosive sublimate is used almost exclusively as an antiseptic upon gauze or jute. The sublimated gauze is prepared by immersing the bleached material in a solution as follows: corrosive sublimate, 20 parts; water, 4,480 parts; glycerine, 500 parts, for twelve hours; then wringing out, and allowing to dry, as far as the glycerine will permit. At the time of operation, a sublimate solution [illegible] is allowed to trickle slowly but nearly continuously over the incision. Bleeding vessels are tied with sublimated catgut. No impervious protective is used over the dressings, as, by retaining the moisture of the discharges and the sweat, it is thought to [illegible] as a poultice. Metallic instruments must [illegible] carbolic solution, as the bichloride will form amalgams with them. In the New York Hospital, not only is the part to be operated upon washed with soap and water, but also with turpentine and alcohol, two ounces to the pint.

THE CROONIAN LECTURES

ON

EVOLUTION AND DISSOLUTION OF THE NERVOUS SYSTEM.

Delivered at the Royal College of Physicians, March, 1884.

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LECTURE II.

For incidental reference in this lecture, I will state what I believe to be the hierarchy of nervous centres, which accords with the doctrine of evolution. I used to arrange them according to the morphological divisions of the nervous system—spinal cord, medulla oblongata, etc. I now arrange them on an anatomico-physiological basis, that is, especially as to degree of indirectness with which each represents the body, or part of it. The lowest motor centres are the anterior horns of the spinal cord, and also the homologous nuclei for motor cranial nerves higher up; they extend from the lowest spinal anterior horns up to the nuclei for the ocular muscles. They are at once lowest cerebral and lowest cerebellar centres; hence lesion of them cuts off the parts they represent from the whole central nervous system. I am ignoring the cerebellar system. The lowest centres are the most simple and most organised centres; each represents some limited region of the body indirectly, but yet most nearly directly; they are representative. The middle motor centres are the convolutions making up Ferrier's motor region. These are more complex and less organised, and represent wider regions of the body doubly indirectly; they are re-representative. The highest motor centres are convolutions in front of the so-called motor region. I say "so-called," as I believe, and have urged for many years, that the whole anterior part of the brain is motor, or chiefly motor.[1] I speak more in detail of this in another lecture. The highest motor centres are the most complex and least organised centres, and represent widest regions (movements of all parts of the body) triply indirectly; they are re-re-representative. That the middle motor centres represent over again what all the lowest motor centres have represented, will be disputed by few. I go further, and say that the highest motor centres (frontal lobes) represent over again, in more complex combinations, what the middle motor centres represent. In recapitulation, there is increasing complexity, or greater intricacy of representation, so that ultimately the highest motor centres represent, or, in other words, co-ordinate, movements of all parts of the body in the most special and complex combinations. It is needless to give the scheme of sensory centres. The main conclusions are (1) that the highest (chiefly) sensory centres—parts behind Ferrier's sensory region—and also the highest (chiefly) motor centres—parts in front of the so-called motor region—make up the physical basis of consciousness; and (2) that just as consciousness represents, or is, the whole person psychical, so its anatomical basis (highest centres) represents the whole person physical—represents impressions and movements of all parts of his body; in old-fashioned language, the highest centres are potentially the whole organism. States of consciousness attend survivals of the fittest states of centres representing the whole organism.

I have several times insisted that the symptomatology of all nervous diseases is duplex; that in every case there is a negative, and that there is also a positive element. I shall further illustrate this by certain cases of insanity. I ought to have mentioned before that Dr. Monro, many years ago, pointed out that, in insanity, there is both a negative and a positive element. Dr. Mortimer Granville, who has for some years applied the doctrine of dissolution, uses the term denudation, and takes note of the "exposure" of the lower layers (which I call the lower levels of evolution remaining).

I consider post-epileptic states, which are, scientifically regarded, some cases of insanity; for they are, however slight or however transitory, departures from normal mental states. I wish to show three things: (1) that, after epileptic fits of different degrees of severity, there are different "depths" of dissolution, and, consequently, different "shallows" of evolution remaining; (2) to try to account for the existence in some of the cases of increased excitability of the nervous arrangements of the different lower levels of evolution remaining: in this double attempt, I shall make use of a principle essentially stated long ago by Laycock, but much more explicitly by Anstie, and, later, by Thompson Dickson; (3) that negative lesions of the highest centres cause paralysis.

It is well known that some epileptics, after their fits, are maniacal. The condition is called "epileptic mania," but it should be called "epileptic unconsciousness with mania." Plainly the condition is double; there is a negative, and there is a positive element. Since the fit is over, and as the patient remains unconscious, there is of necessity, on the physical side, loss of function of some of the highest arrangements of his highest centres—let us say, of the highest two layers. The coexisting mania is, I contend, the outcome of greatly raised activity of the next lower level of evolution remaining, the third layer, which is normal, except for hyperphysiological activity. But now comes the question, Why is an unconscious man furiously active? Why, on the loss of function of the highest two layers, is the next, the third, layer in the state of hyperphysiological activity spoken of? In order to consider this question methodically, I must begin by speaking of the prior epileptic paroxysm.

An epileptic paroxysm depends upon a sudden and excessive discharge, or liberation of energy, beginning in some *part* of the highest centres.[2] There is, in other words, a "physiological fulminate;" certain cells, by abnormal nutrition (pathological process), gradually attain very high tension—high instability, which is an hyperphysiological condition—and suddenly liberate a large quantity of energy, and then gradually re-attain high instability. The point I wish particularly to urge is, that not only do those highly unstable cells discharge by "downward" lines towards the parts of the body they especially represent, but that they also discharge laterally by "cross-lines," and overcome the resistance of healthy, comparatively stable, collateral nervous arrangements of the same general rank, each of which then discharges "downwards." Thus, partly from the primal discharge, and much more from the secondary discharges of healthy nervous arrangements, there is an enormous energy-liberation towards the periphery. In illustration, let us suppose that the Navy Board—highest navy-centres—consists of twenty-four members, each one of whom governs the whole of the Navy, through the intermediation of middle and lowest officials. We try to illustrate two things. First, destruction of a small part of the highest centres produces very little effect, whilst sudden and excessive discharges of such small part produces, although indirectly, an enormous effect. If one of the twenty-four members gives up his duties, the whole navy administration is very slightly defective throughout, there is compensation by greater activity of some of the remaining twenty-three members; this is analogous to destruction of a small part of the highest centres. It is notorious that a small part of the brain—a small part of the highest centres—may be destroyed without any striking symptoms; compensation is practically perfect. But the case analogous to the epileptic fit, is when one of the twenty-four highest navy officials becomes occasionally insane. Then, by issuing foolish orders to lower officials, "discharging downwards," he produces widespread and yet slight disturbance in the navy. But, by wrongly advising his colleagues, "discharging collaterally," he leads them to issue foolish orders to lower officials; leads them to "discharge downwards." Thus, by a multiplication of foolish orders, the whole navy is severely and universally "convulsed." The officials who, in the case of loss of one of their colleagues, work more to compensate that loss, are compelled, when one becomes insane, to cooperate in his excess. I beg particular attention to the term "Co-operation" in excess. It is, so to speak, Compensation inverted; both have to be carefully considered on any scheme of Localisation.

At length we come to the condition when the epileptic fit is over. It is commonly said, however, of epileptic mania, that it sometimes occurs in, or, rather, that it replaces, an ordinary epileptic paroxysm. Further, what I shall shortly speak of as the first depth of dissolution effected by—remaining after—an epileptic discharge would, I believe, be considered by most medical men to be, or to be part of, a paroxysm. I do not accept these hypotheses; but, if they were verified, dissolution would still be exemplified, although by a different process. I will state a counter-hypothesis, and leave it to my hearers to judge whether or not it accords with the facts.[3] The view I take is that the sudden and excessive discharge in an epileptic paroxysm produces exhaustion of nerve-tracts which have been travelled by excessive currents in that paroxysm. I will illustrate by a simple case—an epileptiform seizure. A man has convulsion of the left leg, followed by temporary paralysis of that limb. It will be agreed upon that, in such a case, there is disease in some part of the cortex in the right middle region of the brain (middle motor centres), say a tumour. And, since the event outside is excessive, it is obvious that the corresponding event inside is excessive—discharge of nerve-cells near the tumour. Further, in order that the central discharges or "explosions" inside—primary and secondary—may "get at" the muscles outside, the nerve-currents developed must travel a particular route—passing down the internal capsule into the opposite lateral column of the cord, they will next overcome and discharge certain anterior horns (some lowest centres), and ultimately, by peripheral nerves, get at the muscles; there is excessive activity from cortex discharging to muscles convulsed. The explanation suggested (Todd and Alexander Robertson), of the temporary post-epileptiform[4] paralysis, is that, after the excessive "exercise" of central nerve-fibres during the epileptiform seizure, they remain for a time exhausted. Confirmation of this hypothesis seems to be given by, in some cases, the existence of exaggerated knee-jerk and foot-clonus,[5] in the stage of post-epileptiform paralysis. Beevor has found the same after some epileptic seizures.[6] Further confirmatory evidence is experimental. Franck and Pitres, for whose highly scientific work I have a most respectful admiration, found that after epileptiform convulsions induced in dogs, the part of the cortex which had been artificially discharged, remained for a time unexcitable.[7]

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[1] "Facts seem to show that the front part of the brain serves in the motor aspect of mind, and we may fairly speculate the posterior serves in the sensory."—BRITISH MEDICAL JOURNAL, March 6th, 1869.

[2] It must be clearly understood that I am not speaking of epileptiform seizures; they depend on discharge beginning in some part of the middle centres—so-called motor region—centres of a lower degree of evolution.

The generalisation arrived at is that a sudden and excessive discharge, or sudden and excessive liberation of energy of part of the middle motor centres, produces great activity, followed by exhaustion of other parts secondarily engaged. Besides the running down of—loss of energy of—the cells of the "discharging lesion" there is a far wider negative state from running down of the parts secondarily discharged, and from the exhaustion of central nerve-fibres effected by these primary and secondary discharges.

Applying Todd and Robertson's hypothesis to the highest centres, we say that after an epileptic fit there is, according to its degree of severity, exhaustion of more or fewer "layers" in those highest centres. I believe there to be also some exhaustion of middle centres, and of fibres in the lateral columns of the cord, and sometimes of some of the lowest centres. (Here is an example of compound order.) The range of exhaustion downwards will vary according to the severity of the discharge; we must bear in mind also another factor governing range, that the lower the centre the more organised it is, and thus that it will resist more and recuperate sooner. I neglect the implication of the lower centres.

Now, manifestly, returning to the case of epileptic mania, exhaustion of the highest two layers of the highest centres being a purely negative state cannot account for the superpositive state, mania. Nothing cannot be the cause of something. I repeat, that the maniacal actions are supposed to be the outcome of the activity, on the lower level of evolution remaining—third layer—of nervous arrangements which, except for over-physiological activity, are healthy; that they are manifestations of the survival of the fittest states on the lower, but then highest, level of evolution. To show more particularly what is meant, we must speak of three degrees of exhaustion, three increasing depths of dissolution, which are effected by epileptic discharges of different degrees of severity, taking count of the corresponding three degrees of decreasing shallows of evolution. First Depth.—There is defect of consciousness significant of dissolution of the topmost layer along with the rise of a certain kind of ideation significant of increased activity of the second layer. The double condition is roughly analogous to ordinary sleep with dreaming. Second depth.—There is so-called loss of consciousness, significant of dissolution of the topmost and second layers, along with actions of more or less elaborateness (one example of which is postepileptic unconsciousness with mania) significant of increased activity of the third layer. The double condition is analogous to sleep with somnambulism. Third.—There is coma, significant of dissolution of the first, second, and third layers, with which, seemingly, there is persistence only of "vital" operations, such as respiration and circulation, significant of retention of activity of the fourth layer. The double condition is analogous to deep slumber, to so-called dreamless sleep.

It will be seen that the opinion expressed is that in each case the lower level of evolution remaining—the then highest level—is of some part of the highest centres. Manifestly it is in the first depth. As to the second, it may be asserted that the lower level of evolution is made up of the middle centres. These centres, and after them the lowest, are in activity, of course, but are, I think, put in activity by what remains of the highest. I believe that in the third depth the lower, then highest, level of evolution is in the highest centres, but do not undertake to defend this opinion. One thing to be insisted upon is that in each of these degrees there is a negative, and that there is a positive, and often a superpositive, element. We must beware of the ordinary nomenclature; (post) epileptic mania is named after the positive element only; (post) epileptic coma is named after the negative element only. Negatively, there are increasing degrees from defect, through so-called loss of consciousness, to coma, signifying three increasing depths of dissolution; positively, there are decreasing degrees from ideation through elaborate actions to mere vital operations, signifying three increasingly shallow levels of evolution remaining. Later on I shall state a serious qualification.

[The first depth was then remarked on. The ideation or "dreamy state" was usually called an intellectual aura, and was by most physicians considered to be part of the paroxysm. Particular attention was drawn to the frequent occurrence of the "dreamy state," with or after movements of chewing, or tasting, and sometimes of spitting—movements believed to imply an excitation of central gustatory elements.]

Second Depth. There has been a stronger discharge, which has effected deeper exhaustion. Now, there is no ideation, at least none is remembered on recovery; but there are actions. There are really subdegrees or subdepths of the second depth, and no doubt of the first and third depths, of dissolution; and correspondingly there are several subdegrees of diminishing levels of evolution. As to the second depth, there are, symptomatically, actions of different degrees of elaborateness, from such highly special and complex actions as that of a fisherman, unconscious after an epileptic fit, occurring at dinner, pulling out a line from a reel, untying a knot, taking out a hook from his pocket, affixing it and baiting it (doing all this pantomimically), down to such actions, if they deserve that name, as sprawling on the floor.

[Details were then given of very elaborate actions by an epileptic when unconscious after a fit; the case of the fisherman above spoken of will, however, serve for illustration.]

Here was a second depth of dissolution, in which we say, speaking loosely, that there was exhaustion of the highest two layers of the patient's highest centres, answering to his loss of consciousness—answering, in other words, to his being "lost to his surroundings" (his not knowing that he was in the dining-room, etc.). So much for the negative element. We recognise, too, the positive element, lower level of evolution remaining, third layer, from activity of which he acted *en rapport* with other surroundings—acted as if he were on the river's bank. No explanation is adequate which does not account for the two diametrically opposite elements, not only for his ceasing to do this, but also for his beginning to do that. Putting it in another way, that patient's postepileptic state differed from his previous normal state by a minus and also by a plus; after the fit, he was a different person, although in the same skin; or, as the popular phrase is, the postepileptic patient "was not himself." There was too little of him in one way, and too much of him in another way. Not only in so-called epileptic mania, but in all degrees of postepileptic states—from such elaborate actions as those of the fisherman down to sprawling on the floor—the two diametrically opposite elements have, on any adequate hypothesis, to be accounted for.

I must now make some additional general remarks on evolution and dissolution.

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[3] I have been said to accept the doctrine of replacement—to believe that "psychoses" occur instead of ordinary epileptic paroxysms. In reality, I entirely disbelieve that doctrine; I gave it up many years ago. I believe that all elaborate, suddenly occurring states in epileptics, whether they are to be called mental or physical, follow a paroxysm. The very title of a paper I published, *West Riding Asylum Reports*, vol. v, 1875, "On Temporary Mental Disorders after Epileptic Paroxysms," shows this.

[4] A very valuable paper on Paralysis, after such seizures, has been published by Dr. Dutil, *Revue de Médecine*, March, 188 .

[5] I published a case of this kind in the *Medical Times and Gazette*, February 14th, 1881, "On a Case of Temporary Left Hemiplegia, with Foot Clonus and Exaggerated Knee Phenomenon after an Epileptiform Seizure, beginning in the Left Foot."

[6] I have suggested that these increased "reflexes" are owing to loss of control, to over-activity of anterior horns (lowest centres) consequent on withdrawal of cerebral inhibitory influence. I now think it far more likely that there is exhaustion not only of fibres in the lateral columns of the cord, as I suggested in the paper mentioned, but, as Gowers has stated, of inhibitory centres in the cord itself. Westphal and Gowers have pointed out that after some epileptic paroxysms there is temporary loss of the knee-jerk. Gowers suggests that in these cases the lumbar nuclei were exhausted; that the exhaustion was deeper than in cases where the knee-jerk is excessive.

[7] "Ce phénomène de l'épuisement cortical consécutif aux accès d'épilepsie partielle est très facile à constater." MM. François-Franck et A. Pitres, *Archives de Physiologie*, 15 Août, 188 . No. 6.

The doctrine of evolution implies the passage from the most organised to the least organised, or, in other terms, from the most general to the most special. Roughly, we say that there is a gradual "adding on" of the more and more special, a continual adding on of new organisations. But this "adding on" is at the same time a "keeping down." The higher nervous arrangements evolved out of the lower keep down those lower, just as a government evolved out of a nation controls as well as directs that nation. If this be the process of evolution, then the reverse process of dissolution is not only "a taking off" of the higher, but is at the very same time a "letting go" of the lower. If the governing body of this country were destroyed suddenly, we should have two causes for lamentation: 1, The loss of services of eminent men; and 2, the anarchy of the now uncontrolled people. The loss of the governing body answers to the dissolution in our patient (the exhaustion of the two highest layers of his highest centres); the anarchy answers to the no longer controlled activity of the next lower level of evolution (third layer).

Another way of stating the general principle involved (Anstie's principle), is that the over-activity in epileptic mania and in the other cases mentioned, is not caused, but is permitted; on cutting across the pneumogastric, the heart is not caused to go faster, but is permitted to go faster. In other words, the lower level of evolution is not "goaded into activity," but is "let go." So we see that exhaustion of the highest nervous arrangements—two layers—answers to negative affection of consciousness; and this exhaustion being, at the same time, a removal of control from the next lower level of evolution—third layer—it springs into activity—is "let go."

We stay to remark on some differences in the two depths. One great difference between them is that, in the first, the ideation is remembered, or of course we should know nothing about it. From the second, as in somnambulism, nothing is remembered. But it comes to be a question of importance, and of more practical importance than, at first glance, appears, whether or not in the second depth there is some ideation, in spite of the expression "*loss* of consciousness." That there is activity of some nervous arrangements of the highest centres, we are supposing of the third layer, is, I submit, quite certain. The question is this: "Do states of consciousness attend that activity or not? There will be two views on this matter. Let me return to the case of the fisherman, who pantomimically pulled out a line from the reel, etc., when "unconscious" after an attack. Had that man, who, on recovery, remembered nothing of his doings, any states of consciousness attending the nervous activities which were producing his elaborate actions? One view would be that the fact that the patient remembered nothing was proof that there were no mental states. Another view would be that the very elaborateness of the operation implied some co-existing states of consciousness. We must carry each view to its logical conclusion. Those who take the first view—nearly all medical men, I believe—must say that the patient was a mere machine; that, having no consciousness, he was a mere automaton. I beg that it may be borne in mind that, otherwise stated, this view is that elaborate and universal movements may occur without a trace of consciousness. On the second view, it would be admitted that the man was a machine, an imperfect automaton, he having lost the highest parts of his nervous machinery; but it would be asserted that some degree of consciousness attended activities of the nervous arrangements on the lower level of evolution remaining. Each of these two views has consequences, as we shall soon see.

Third Depth.—Supposing a severest discharge; when it is over, the patient is comatose, lies motionless on his back, has seemingly no movements excepting "vital" movements, such as the respiratory and the circulatory.

Having so far very much neglected the distinction between mental and nervous states, I must now have special regard to it, the reason for which will soon appear. The current explanation of the post-epileptic comatose patient's immobility is, that he does not move, because he is unconscious. This, I submit, is a metaphysical explanation. We want, in scientific matters, realistic explanations. My belief is that the postepileptic immobility is paralysis. The objection which has been made to this statement is that, as a mere matter of fact, there is no paralysis. If anyone means that there is no hemiplegia, nor any other local paralysis, I entirely agree with him. What I contend for is, that there is some universally spread paralysis. The facts are not in dispute; it is a question of their interpretation. All are agreed that the postepileptic comatose patient does not move when unconscious; all that I dispute is, that he does not move because he is unconscious. No man was ever unconscious without there being at the same time some physical change in at least the highest arrangements of his highest centres. I contend that it is more realistic to put the patient's immobility down to the negative physical change in his nervous centres—to attribute the physical to the physical—than to the correlative negative mental state. In other words, I give a realistic explanation in place of a metaphysical one. I put this question, "If loss of consciousness were all, why should not the patient move as well as ever?" This question will not seem in the least degree strange to the majority of medical men, for, as I have pointed out, they positively assert that an epileptic maniac who manifests universal and exceedingly elaborate movements has no consciousness.

Let us look at two comparable sets of facts. If a man does not move his leg after a convulsion of that limb, everybody declares that limb to be paralysed. But if a man, after an epileptic fit, which involves the whole of his body, does not move any of his limbs, his condition is not called paralytic; the explanation is given that the patient does not move because he is unconscious. Consistently with this view, one ought to say that the man who does not move his leg after an epileptiform seizure, has lost volition over it. Everybody sees this explanation to be purely verbal; but the explanation, which is identically the same in effect, that the man does not move because he is unconscious, does not jar on anybody's mind; being a familiar expression, it has a deceptive appearance of realism, but I contend that it is not realistic at all. Let us consider a greater range of cases from another point of view; I dwell upon this matter because it seems to me to be of vast importance to establish that negative states of the highest centres produce some universal or widely distributed paralysis of the body. I admit that part of the paralytic condition may be owing to exhaustion of elements of lower centres.

After a slight attack of epilepsy (*le petit mal*), the patient declares himself to be "knocked up," unfit for anything," etc. The explanation of this condition is given in popular language, the patient is said to be weak; but if the very same patient has an exceedingly severe fit, and if after it he does not move any way (except for "vital" movements), then his immobility is explained metaphysically. In the simple case instanced of paralysis of one leg after an epileptiform seizure, the patient is declared to be paralysed. So that of the first a popular explanation is given; but, I would ask, what is "weakness" after an excessive nervous discharge but paralysis? Of the second a metaphysical explanation is given; but I contend that there is no reason why a patient should not move if loss of consciousness were all; it is not all. Of the third only is a thoroughly realistic explanation given. Are we to believe that local immobility after a local convulsion is paralysis, and that universal immobility after a universal convulsion is not paralysis, but that it demands a metaphysical explanation? Besides, supposing that the loss of consciousness does explain the immobility in post-epileptic coma, will it also explain the exaggerated knee-jerks and the foot-clonus described by Beevor? More than this, according to Beevor, there is, after some epileptic attacks, transitory lateral deviation of the two eyes. Does loss of consciousness account for this deviation? Is it not decisive evidence of at least some paralysis, especially as the eyes deviate from the side to which they were strongly turned in the prior paroxysm? Occurring in postepileptiform paralysis, such deviation would certainly be said to imply some paralysis. Occurring after an epileptic fit, it surely also means some paralysis. I shall speak of it again in my next lecture, when referring to some recent experiments by Ferrier and Gerald Yeo, on the frontal lobes, which I call the highest motor centres.

It may be said, "Your supposition that the universal immobility after a severe discharge is paralysis, is discrepant with your explanation of the second degree of postepileptic unconsciousness and mania. If you say that exhaustion of three layers is causative of some universal paralysis in post-epileptic coma, you must admit that in the post-epileptic mania exhaustion of two layers also entails some, if less, paralysis. You are bound to say that the epileptic mania has some universal paralysis, although at the very same time he is in a state of universal activity." Of course, I do not endorse the absurdity that a man is perfectly paralysed all over, and that at the same time he is in movement all over. My contention simply is, that in post-epileptic mania there is some degree of paralysis all over the body, or, more precisely, loss of some movements of all parts, and that at the very same time there is persistence and over development of some other movements of all parts. To show that this is not an extravagance, I would point out that loss of movements of the whole of a part, with persistence of some other movements of the whole of that part, is an exceedingly common thing. Take the case of imperfect paralysis of an arm in ordinary hemiplegia, or after an epileptiform seizure. To say that the arm is "weak" is misleading. The patient has lost some movements of the whole of the limb, and yet retains some other movements of the whole of the limb. Often enough there is loss of some of the most "delicate" movements, with, at the same time, the retention of many "coarser" movements. Unable to button his shirt, the patient may be able to grasp strongly, or to strike a heavy blow. In some cases there is, if possible, further demonstration. An arm is permanently partially paralysed all over, loss of some movements of the whole of the limb; and yet that other movements of the whole of the limb remain is emphasised by the occurrence of severe convulsion of it, which is nothing other than a sudden excessive development of the movements remaining. Any adequate doctrine of localisation has to account for this. In chorea we find persisting paralysis, with over movements of the same parts; what has been called loss or defect of voluntary co-ordination in this disease is indirect evidence of some paralysis; the involuntary disorder of co-ordination is owing to over activity of movements left.

I contend that there is no difficulty whatever in conceiving, whatever difficulty there may be in believing, that the exhaustion of the highest layer, first depth, which defect of consciousness implies, is causative of a slight degree of paralysis "spread out thin" all over the body (called "weakness"); that exhaustion of two layers, second depth, which loss of consciousness implies, is paralysis spread out more "thickly" all over the body, notwithstanding that, from the raised activity of the third layer, other movements of all parts of the body may be in great excess; and that the immobility in post-epileptic coma is paralysis spread more thickly still all over the body.

Since I say (1) that the highest centres are sensorimotor; (2) that negative affections of consciousness imply negative conditions of parts of the highest centres; and (3) that there is some defect of consciousness in every case of insanity, I ought to hold the opinion that, in every case of insanity, there is some degree, however slight, of universal or widely distributed paralysis—sensory, or motor, or both. So I do. That I could not demonstrate its existence in many cases, I admit. I should expect there to be the least degree of negative affection of consciousness, and correspondingly the least paralysis, in cases of insanity where the accompanying positive element was very elaborate, that is, on the physical side, when the dissolution was very shallow and the level of evolution remaining was very high. In cases of dementia, the patient's "lethargy" might be put down to his negative mental state—a metaphysical explanation. I should call dementia the chronic analogue of what acutely is post-epileptic coma, and attribute the lethargy to the negative condition of more or less of the patient's highest centres, implied by his negative mental state, and call the lethargy paralysis.

Paralysis is indirectly admitted in some cases of insanity (when its existence might be denied directly) in the assertions that there is loss of facial expression, difficulty of articulation, tremor of the limbs (indirect evidence of some paralysis), and shambling gait. Taking but one of these, surely loss of expression implies either loss of the most special or "delicate" facial movements, or continuous development of them (rigidity), or both. There is no abstraction "expression" to be lost. What we know of any healthy person's conduct is from his movements. Such symptoms as I have enumerated are just those I should expect from chronic negative lesions of parts of the highest motor centres. They exist in many cases of general paresis, which Crichton Browne has shown to be owing especially to disease extending from the front backwards in the brain, from highest motor centres towards middle.

Now for the "serious qualification" I spoke of. The following difficulty, taking the case of the fisherman, has to be met. There was so-called loss of consciousness, implying a deep dissolution, and yet his very elaborate doings implied a very high level of evolution remaining. I hold that in post-epileptic states there are local dissolutions, meaning that the post-epileptic exhaustion is in, or preponderates in, one cerebral hemisphere. Thus, whilst there is a low level of evolution in the highest centres of one half of the brain, there is a perfect or very high level in those of the opposite half. If so, the discrepancy disappears.

[The lecturer then variously illustrated the assertion that all elaborate (positive) mental states in cases of insanity of every kind were the outcome of activities of healthy nervous arrangements on the lower level of evolution remaining. He believed that the patient suffering from delirium tremens saw rats, mice, etc., by agency of nervous arrangements which the pathological process had spared; he did not believe that a patient "heard voices" (words spoken), nor that a melancholic man framed the delusion that he was going to hell, during the activity of nervous elements touched by any pathological process. He thought that in Anstie's principle lay the explanation, not only of these positive mental symptoms, but of the necessarily co-existing negative mental symptoms also].

He then spoke of the several factors in cases of insanity. (1) There are different depths of dissolution, both of uniform and local dissolutions of the highest centres. This has just been illustrated by cases of local dissolutions, and might no doubt be illustrated by a parallel series of chronic cases of insanity—by cases from those with very complex delusions, down to cases of dementia, if the duplex symptomatology of each were noted. (2) The person undergoing the dissolution, young or old, educated or uneducated, intelligent or unintelligent. (3) The rate at which dissolution was effected. He believed that the more rapidly control was removed, the greater was the activity on the lower level of evolution remaining—contrasting, in illustration, the furious delirium of the epileptic maniac, who had undergone dissolution in a minute or so, with the quiescence of the senile dement, who had undergone dissolution some thousand times more slowly. (Similarly for different cases of epilepsy.) (4) The influence of external circumstances and local bodily states. Examples of the induction of very elaborate states of the highest centres (in the lower level of evolution remaining) by simple peripheral excitations were given by all writers on dreams. The lower level of evolution, then, in hyperphysiological activity, allowed a wider irradiation to simple stimuli coming to it. "Hearing voices" might not necessarily imply any disease of part of any centres especially concerned with sounds or words. That particular mental abnormality might be determined, in a patient reduced to a lower level of evolution, uniform or local, by some morbid state in the ear or auditory nerve, or in its nucleus acting on the lower level of evolution remaining.]

THREE CASES OF PLEURAL EFFUSION WITH VERY FEW SUBJECTIVE SYMPTOMS.

By W. M. BEAUMONT, M.R.C.S., Oxford.

THE following cases, which have recently come under my notice, are of interest from the fact that in each the patient was unaware that there was anything serious the matter with the chest. In neither was there any dyspnœa, and inability to lie on the sound side was conspicuous by its absence.

J. D., aged 42, a nervous, hysterical woman, and one who, *primâ facie*, would have been expected to exaggerate every little ache and pain, complained of pains in the abdomen and epigastrium, a feeling of *malaise* and depression of spirits, although not sufficiently severe to confine her to bed. She had been continuously occupied nursing her husband through a long, and finally fatal illness. There was neither pain in the chest nor cough; she ate well, and could sleep when lying on either side.

On examining the chest, as a matter of routine, I found skodaic resonance below the left clavicle as far as the second rib; below that absolute dulness (flatness) extending to the base. There was also dulness in the axillary and infra-axillary regions. Posteriorly, there was high-pitched resonance in the left interscapular area as low as the sixth rib; dulness in the infraspinous and infrascapular regions, taking the italic *f*-shaped curve first pointed out by Dr. Ellis.[1] There was ægophony, and in one spot at the left base posteriorly there was tubular breathing. The heart's impulse was imperceptible, but apparently in the epigastrium. I had great difficulty in persuading her to submit to treatment. On aspirating at the sixth interspace in the infra-axillary region, I drew off thirty-four ounces of clear blood-coloured serum.

W. H., aged 12, an errand-boy, had not been very robust, although he had never been laid up in bed, nor prevented from working. He complained of occasional pains in the left side, which had been felt during the last twelve months. Night-sweats supervened, but there was no cough nor hæmoptysis. He had been under medical treatment for debility.

On examination, the chest was found to be flattened somewhat under the clavicles, and there was very little respiratory motion on the left side. The semicircumference of the chest at the nipple-level measured half an inch more on the left than on the right side. The breath was very fœtid. There was skodaic resonance under the left clavicle downwards to the second rib, and dulness below. The percussion-note over the manubrium was duller than normal in the upper half, and the dulness then deepened in intensity to the ensiform cartilage. Posteriorly, the dulness in the suprascapular and supraspinous areas was wooden in character, below it became stony. Vocal fremitus was entirely absent. The heart's impulse could be felt in the epigastrium. On aspirating, twenty ounces of clear straw-coloured serum were evacuated.

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[1] "Clinical Lectures on [illegible] Pleuritic Effusions," by Dr. R. Douglas Powell (*Medical [illegible]*, 1882). [illegible] that such a careful observer as Professor Frerichs [illegible] in hydatids of the liver is at a lower level [illegible] vertebral column, and [illegible] sternum than it is in the axilla, [illegible] with pleuritic effusions." (Clinical Treatise on Diseases of the Liver, by F. T. Frerichs. *Translation of the Sydenham Society*, Vol. ii, p. 245.) See also Dr. Stephen Ward *On Some Affections of the Liver*, 1872, p. [illegible].

J. W., aged 24, a labourer, had always had good health before the present attack, which began with a slight, but troublesome cough. He had not shivered. There was tenderness over the spinous processes of the second, third, and fourth dorsal vertebræ. When I first saw him the cough had subsided, but the tenderness of the spinous processes remained, otherwise he made no complaint. The tongue was clean and moist, the appetite good, and the urine normal. There was slight dulness at the left base posteriorly. In a few days rapid effusion into the left pleura occurred, manifesting itself clearly enough objectively, but without subjective symptoms. There was neither pain, nor cough, nor difficulty of breathing. Temperature 98.4°, respirations 28, pulse 76. The heart's impulse was visible in the fifth interspace, just within the nipple line. I aspirated his chest at the angle of the scapula, and drew off forty-eight ounces of yellow alkaline serum, with a specific gravity of 1020, and which did not gelatinise.

The absence of any very marked subjective symptoms in these three asthenic cases may explain why we so often find in the dead-house old pleuritic adhesions, although there is no history of the subjects having ever suffered from pleurisy; for if these three patients could go about without knowing that there was anything very wrong with their chests (whilst in each there was a considerable quantity of fluid), it can be readily understood how a slight pleurisy, with a very moderate effusion, may cause adhesions to be formed without the subject of them giving up work, or consulting a medical man.

CLINICAL MEMORANDA.

THE INCUBATION OF MEASLES.

SIX or seven months ago, J. H., aged about 20, residing in a neighbouring village, where there was not at the time (nor had been for a long time previously) a single case of measles, travelled by train to Brackley, a distance of about eight miles. On looking around the carriage, she found among her fellow-passengers a woman with some children—one an infant in arms, which had a very red face. On getting into conversation with the mother, she discovered to her horror (being of somewhat nervous temperament) that the said infant "had 'fell' with the measles" (*alias*, the rash had come out) at Bletchley Junction, *i.e.*, about half-an-hour before my patient entered the carriage—the other children having recently recovered from the same disorder. Just a fortnight afterwards J. H. returned home, feeling on that day "out of sorts," with coryza, and sent for me the following morning, when I found her with the rash well out all over her face, neck, and shoulders. The complaint ran a mild course. A fortnight exactly after this, her youngest sister (who had not seen her for some time until her return home) caught the infection; the general feeling of *malaise*, etc., occurring on one day, and the rash coming out very freely the day following. In this second case the complaint also ran a mild course, and no other case has occurred in the village up to the present date (March, 1884).

W. L'HEUREUX BLENKARNE, M.R.C.S., Buckingham.

THERAPEUTIC MEMORANDA.

A NOTE UPON A LOCAL METHOD OF TREATING PHTHISICAL COUGH.

THE merits of mullein, taken by the stomach, are now well established as a weight-increaser and general palliative in pulmonary consumption. I am anxious to call attention to a simple and apparently effectual method of using this drug for the relief of phthisical cough, which was lately suggested to me simultaneously by two sources, by a hospital patient and by a paragraph in the *Philadelphia Medical and Surgical Reporter* of February last.

Richard F., aged 30, an engine-driver in the office of the *Freeman's Journal*, was admitted into St. Vincent's Hospital on February 29th last, suffering from chonic phthisical disease of the apices of both lungs; and was treated in the usual way, and with the usual results, with the milk-decoction of mullein (see BRITISH MEDICAL JOURNAL, January 27th, 1883). His principal trouble had been a constant racking cough, which, however, he informed me, he had now in complete control by smoking the dried leaves of the mullein-plant in an ordinary tobacco-pipe. Whenever he was attacked by this cough, he used to fill his pipe with these dried leaves, broken up into a kind of coarse snuff, and, by the time he had finished, the cough would be relieved. After he had been a few days in hospital, he told me that he suffered severely from the cough at about 3 A.M. every morning; but that he was afraid to smoke, as it would be a violation of hospital rule. I told him that this only applied to tobacco-smoking, and that he was free to smoke his mullein, provided he was careful not to set his bed on fire. His cough was at once relieved, and he is now up and talking of going back to work. A remarkable feature in his case is that he does not use tobacco in any form.

I have since seen a very favourable notice in the American journal already mentioned, of this method of using mullein. The extreme simplicity of the procedure renders it worth a trial; and the flavour of the leaf, when smoked, is not disagreeable. It can be used either in an ordinary pipe, or in paper cigarettes, and might be found useful in asthma and spasmodic coughs in general.

F. J. B. QUINLAN, M.D., F.K.Q.C.P.

Dublin, March 25th, 1884.

OBSTETRIC MEMORANDA.

UNUSUAL WEIGHT OF FŒTUS AT FULL TERM.

ON March 16th, a lady, aged 35, primipara, tall, healthy, and well built, gave birth to a well formed female child, weighing eighteen pounds and measuring twenty-six inches in length. Delivery was effected by forceps, and presented no unusual difficulty till after the head was born, when the shoulders wedged between the coccyx and the pubic arch; by bringing out each arm they were released. The pelvis now lodged in the same place as the shoulders, and was only liberated after a severe struggle by compressing the iliac bones of the fœtus. The passage, even of the thorax and abdomen, was effected only by great effort. There was just a twitching of the nose and lips of the child after birth. The placenta was expelled in ten minutes afterwards. A binder was applied and one drachm of ergot administered. The pulse was 80. The patient seemed exhausted, but fully conscious. Artificial respiration, warm bath, brandy, etc., failed to resuscitate the child, although persevered in for half an hour. Unfortunately, the patient, on asking if the child were dead, was answered in the affirmative by an attendant, and at once threw up her hand, exclaiming, "Then I shall die too." She died two hours and a half after the extraction of the fœtus. The immediate cause of death seemed to be syncope from shock by the news of the death of the child after such a severe and laborious extraction.

Perhaps the extraordinary size of the child may be, in some measure, accounted for by the inordinate appetite of the mother. She herself informed me, during the labour, that she had often eaten a pound of raw meat at a time, took little or no exercise during the last six weeks, often lying in bed till eleven o'clock, and again lying down at three in the afternoon till six. I am informed by a relative that, on one occasion, she ate three pounds of pork at one meal during the latter part of her pregnancy. The lady had made a note of the date since the last menses were seen, which made the fœtus exactly nine months on March 16th.

P.S.—The weight and length were given me by the father, an intelligent business-man.

EDWARD GORDON, M.R.C.S., L.S.A., Stockport.

PATHOLOGICAL MEMORANDA.

A CASE OF CONGENITAL EPULIS.

THE following case, being exceedingly rare, if not unique, is, I think, worth recording. Mrs. M. J. McC., aged 30, primipara, wife of a trooper, 5th Lancers, was admitted into the hospital for soldiers' wives and children, Dublin, on March 5th, at 7 A.M., and confined at 3.15 P.M. There was a considerable flooding from a placenta partially attached to the fundus uteri and a rent in the cervix. Having removed the placenta and checked the immediate hæmorrhage, I found, on examining the baby, that the mouth was filled by a bluish-red tumour, which projected between the lips, and was firmly adherent to the lower gum immediately to the right of the mesial line. It had a very peculiar appearance, and precluded all attempts at sucking, but not of swallowing, when a little milk and water were introduced on the left side by means of a spoon. On March 8th, I passed a double carbolised silk ligature, from within outwards, through the middle of the tumour, tying it tightly at either side. It came away in two days. A second smaller growth, to the right of the first, was treated in a similar manner on March 17th. When this last came away, there was a good deal of bleeding from the gum, which was only arrested by the application of a point of solid silver-nitrate. The infant did very well, and the gum is now (March 24th) quite healed.

ALBERT A. GORE, M.D., F.R.C.S.I.,
Surgeon-Major Army Medical Department, Dublin.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

CASES OF OSTEOTOMY, WITH REMARKS.[1]

By HOWARD MARSH, F.R.C.S., Assistant-Surgeon to St. Bartholomew's Hospital, Senior Surgeon to the Hospital for Sick Children.

ALTHOUGH the evidence to establish it is complete, there are many who are deterred from accepting a new position, because they have never quite dismissed their surprise at finding that what they had not suspected is yet true. Osteotomy is a case in point. Experience has shown that this operation is safe beyond all previous expectation. Yet many surgeons never use it, although the necessity for osteotomy, in some cases, is as clear as the necessity of tenotomy in others. But, with some surgeons, the surprise they have felt at the safety of this new proceeding has had another, and contrary effect, and has led them to practise it with too little discrimination. It is, no doubt, generally safe to divide the tibia for rickety deformity, but there are few cases in which such an operation is necessary, at least, in children under three or four years of age; for, with subsequent growth, the deformity, if the child be kept off his feet, and fed with meat and milk, and be ordered cod-liver oil, will gradually disappear. Nor is osteotomy required, except for the more severe forms of knock-knee. Discussion, and further experience, will lead to the adoption of the proper media between these extremes in respect to this method of treatment. The following cases are briefly reported as examples of the application of the operation to conditions which could not have otherwise been remedied. They also present some further points of interest.

CASE I.—Mary P., aged 17, had had hip-disease in childhood, and her femur had become ankylosed at a right angle with the trunk. The great trochanter lay an inch above Nelaton's line; but a short neck could be distinctly felt. As no movement, during examination under ether, could be felt between the femur and the pelvis, an incision was made, about three quarters of an inch long, just above the trochanter, and the finger was introduced to ascertain the dimensions and axis of the neck. A chisel was then used to divide the bone to about half its thickness; the remainder gave way with the exercise of very moderate force. Lister's dressings were used. The patient was confined to her back, by means of a Liston's long splint applied to the sound side. The limb, with the knee straight, was supported, in its deformed position, on a rest; and a weight acting in the long axis of the femur, and running over a raised pulley, was attached to the foot. There was no rise of temperature after the operation, and no suppuration. The wound healed in about a fortnight. Under the action of the weight the limb gradually passed into a position of complete extension, so as to be in a line with the trunk; the pulley being gradually lowered so that the weight always acted in the long axis of the femur. At the end of two months the patient was discharged, wearing a Thomas's splint. There was movement, through three or four degrees, between the femur and the pelvis. I should have preferred bony ankylosis. With bony ankylosis, no return of deformity can occur; but with ligamentous union there is a tendency for the limb to become again flexed upon the trunk. The method by which the limb is brought down in cases in which the femur has been divided for deformity of the hip is important. If the limb be forcibly extended at the time, there is considerable danger that the femur will slip upwards and backwards on the dorsum ilii, a movement of the bone which not only shortens the limb, but, by altering the line of gravity of the trunk in relation to the femur, produces lordosis. But, by using weight-extension, acting always in the long axis of the thigh, the limb may be fully extended without any risk of tilting up the femur. This method, besides, is much more comfortable to the patient, as the limb is kept throughout in an unconstrained position. It was striking to see how easily the muscles and ligaments in front of the joint yielded to continuous extension. They gave way here, as they do when the weight is used in the ordinary treatment of hip-disease, as if they certainly had undergone no structural shortening.

CASE II.—J. D., aged 42, had pyæmia after a poisoned wound. In the course of this attack his ankle suppurated, and was left firmly ankylosed, apparently by bone, in a position of marked talipes equinus. He came to the hospital, nine months afterwards, complaining that he could not get his heel to the ground, nor walk on the limb, any attempt to bear weight on the ball of the foot causing him severe pain. When he was under ether I found the ankle-joint fixed, though the tendo Achillis was not tight. It was evident, therefore, that no change in the position of the foot could be produced by tenotomy. Under these circumstances I introduced a narrow chisel, through an incision over the front of the ankle, just outside the common extensor tendons, and so far divided the union between the tibia and astragalus that these bones could be moved on each other. There was no difficulty in finding the interval between them. As the tendo Achillis became tight when the foot was flexed on the leg, it was divided; and the foot was fixed on a splint well within a right angle with the tibia. The wound healed favourably; and the temperature never rose above 100° Fahr. For some nights the patient was in considerable pain, and hypodermic injections of morphia were given. In six weeks, he could stand on the limb. He was discharged nine weeks after his admission. I saw him again three months later. He then said he could walk freely, and without pain, on his heel, and he illustrated this by hopping upon the foot. Mr. Willett and Mr. Baker had previously had cases similar to this one, and the same method of treatment had yielded good results in their hands.

Ankylosis of the ankle-joint is but seldom met with; but when it does occur it will be found that if, as is very likely to be the case, the foot is in any degree of talipes equinus, the patient will walk in a very awkward manner. He may tread on the ball of the foot with the knee bent to accommodate the limb to the amount of the deformity, but his gait will be so unsteady that he will probably prefer to walk on his heel. This, however, he can only do by keeping the limb in advance of its fellow; a method of progression that is both slow and laboured. Patients walk much more easily and quickly on the limb after a Syme's amputation than, so far as I have seen, those do whose ankle-joint is fixed, unless it be placed well within a right angle. This point should be borne in mind during treatment.

CASE III.—R. C., a sailor, aged 30, was admitted with his right arm crippled by an unreduced dislocation of the head of the radius backwards and outwards. Pronation and supination were entirely lost; flexion and extension were very limited and painful. On endeavouring to increase movement by forcible manipulation under ether, I found that nothing could be gained by this means, as the radius was firmly locked against the humerus. I therefore removed the head of the radius. In doing this, care was required to avoid injury of the posterior interosseous nerve, as it ran behind the bone beneath the supinator brevis. On dividing the neck of the radius, I found it had been fractured, and that the callus thrown out around the fragments had acted so as firmly to lock the joint. The case made favourable progress; and when the patient left the hospital, at the end of five weeks, he had regained free flexion and extension, and, to a considerable degree, pronation and supination; and movement at the joint was free from pain. This case deserves to be recorded as an instance in which so rare an accident as fracture of the neck of the radius was proved to have occurred.

CASE IV.—In July, I performed Macewen's operation for the relief of knock-knee in R. T., aged 7, in whom, when the condyles of the femora were in contact, the malleoli were separated by a distance of eleven inches. This case is related in order that the complication of hæmorrhage from the anastomotica magna may be alluded to. As to the right limb, nothing need be said. On the left side, the incision was made in the usual situation, that is, half way between the tendon of the adductor magnus, and a line drawn inward from the inner border of the patella, and an inch and a half above the upper margin of this bone. Somewhat free hæmorrhage occurred at the moment, but it soon ceased. The bone was very soft, and gave way after a very limited use of the chisel. The same evening such severe bleeding occurred that Mr. Brinton, the house-surgeon, and others who saw the case with him, were afraid the popliteal artery was wounded. The tibials, however, were pulsating naturally. Bleeding was easily stopped by a compress and bandage. All went on well for the next seven days, when another hæmorrhage, quite as copious as the first, took place; but this also was readily controlled. I now reopened the wound. On enlarging it, I came at once on the anastomotica magna, in the side of which an oval opening was plainly seen, from which blood freely escaped. On completely dividing the vessel, and tying its two ends, bleeding ceased, and never returned. The child made a good though slow recovery. The fact that two large hæmorrhages, separated by an interval of a week, occurred from a vessel of the size of the anastomotica magna, is important. It conveys a caution against tying any principal artery, the closure of which may be disastrous to parts beyond, until every safe means has been taken to ascertain the exact source from which bleeding is derived.

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[1] Read before the West London Medico-Chirurgical Society.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 28TH, 1884.

Sir ANDREW CLARK, Bart., M.D., LL.D., F.R.C.P., President, in the Chair.

Cases of Enteric Fever Associated with Rheumatism.—Dr. FINLAY read notes of five cases, the first of which may be taken as a type of the whole. The patient was a man, aged 24, a porter by occupation, admitted under his care into the Middlesex Hospital for acute rheumatism on October 1st, 1883. There was a strong family history of rheumatism, and the man himself had had one severe and several slight previous attacks. For a week before admission he had complained of pain, redness and swelling in the ankles, knees, and hips, the ankles being still affected on admission. His pulse was then 88, temperature 101.4°, tongue slightly coated, and there was a systolic murmur audible over the præcordia. The evening temperature on the day of admission was 103.4°. Treatment consisted of salicylate of soda in fifteen grain doses, with cotton-wool to the painful joints, under which he rapidly improved. His temperature became normal on October 5th, when he was also free from pain, and he appeared quite convalescent, and was allowed to get up on the 13th. He continued to improve till the 19th, when he complained of stiffness in the back, and headache, and his evening temperature was found to be 102.6°. Next evening it was 104.2°, and from this time onwards the case presented the usual features of one of enteric fever. Rose-coloured spots were observed on the 25th and following days; diarrhœa set in on the 28th, and on the 29th perforation took place, and he died on the 31st. At the *post mortem* examination there was found general peritonitis, the result of a perforation through the lower part of the ileum. Two principal ulcers were found in the small intestine, the one that had perforated, free from slough and with undermined edges; the other, with clean granulating base, to which the edges were adherent, clearly of more remote formation than the former. In order to establish the diagnosis of rheumatism, attention was drawn to the redness, swelling, and pain in the joints, the sour sweating, the endocardial murmur, and the history of previous attacks. As to the enteric fever, it appeared probable that it and the rheumatic attacks were coexistent on the man's admission to the hospital, the former being so slight as to be completely overshadowed by the rheumatic manifestations. The fatal attack was, therefore, a relapse; and this was attested by the different ages of the ulcers in the ileum, and by the course of the temperature. Of the four other cases, one, which was fatal, presented very similar features, the fatal result here being also due to perforation of the bowel, which occurred during a relapse. The remaining three cases presented no special features except the fact of enteric fever following upon an attack of rheumatism. Notwithstanding the fact that no mention was made, even in recent writings, of the occasional association of these two diseases, such association did not seem to be very infrequent. In connection with this view, it was a point of some interest that, of seven patients in whom enteric fever became developed in the wards of the Middlesex Hospital over a series of years, five were admitted for rheumatism. Such cases as those recorded suggested the inquiry whether there existed a more than casual connection between rheumatism and enteric fever—an attack of one predisposing to an attack of the other. As regarded the fatal cases, the question arose whether the allowance of solid food after the rheumatic attack passed off was in any degree responsible for the death by perforation. Two practical points seemed to be deducible from such cases: first, that as solid food might increase the danger of perforation in enteric fever, cases of rheumatism occurring in the course of an epidemic of enteric fever deserved a more than usually narrow scrutiny, lest they should turn out to be something more than rheumatism merely; and, second, that if any close connection between the two diseases, such as that hinted at, should be found to exist, rheumatic cases should not be placed in close proximity to cases of enteric fever. Although the facts were insufficient to prove a predisposition, they at least suggested a case for further inquiry.—The PRESIDENT asked whether Dr. Finlay's contention was that the diseases coincided, or whether they followed each other. He also asked Dr. Finlay whether he had considered the possibility that the rheumatic symptoms were only manifestations of the enteric fever.—Dr. FINLAY said that, in his first case, the two diseases were certainly coincident; he did not think the second suggestion of the President's could be accepted.—Dr. DOUGLAS POWELL would have put the same question about the diseases being coincident. He had seen three cases which bore on the subject. The first was that of a lady, aged 40, who had previously suffered from rheumatism, and whom he saw on the fifteenth day of her illness, which had begun with rheumatic symptoms, on account of a supposed heart-complication. The patient had many symptoms of typhoid fever, and on the twenty-first day some spots were seen. After a fall, for a few days, the temperature rose again, and the stools became typhoid-like. On the forty-second day, there was hæmorrhage, and on the fifty-fourth day, a relapse of the rheumatic symptoms. The second case was that of a lady who, twelve days after being exposed to sewer-gas, was seized with headache and *malaise;* five days later, there was joint-affection, and the next day pericarditis; five days after this, she had pneumonia, and slight albuminuria. Two days later, the abdomen was swollen, the motions were loose, and tinged with blood, and the symptoms were those of typhoid. Death occurred in six days, the diagnosis having been confirmed by Sir W. Jenner two days previously. The third patient was a woman, admitted into the Middlesex Hospital on the fourteenth day of her illness, which had been considered in the first instance to be rheumatism; but spots appeared, and the motions were loose; and she was convalescent on the twenty-seventh day. In his cases, the rheumatic and typhoid symptoms were blended, and there was no break between them, as was the case in Dr. Finlay's patients. In his first patient, the rheumatic symptoms had developed during the prodromal stage of typhoid. He did not think that such cases could have been overlooked if they had formerly existed.—Dr. DE HAVILLAND HALL had seen a similar case, where there was no interval between the symptoms of rheumatism and those of typhoid. A girl, 12 years old, had a sharp attack of rheumatism, with endocarditis, followed by a typical attack of typhoid fever. The rheumatism in these cases differed from that seen with scarlatina, in that it preceded, instead of following, the other malady.—Dr. POWELL alluded to a case where the rheumatism occurred at the end of a typhoid fever.—Dr. O'CONNOR thought the association of these two diseases was by no means rare.—Dr. SEYMOUR thought that the question was, whether the typhoid fever was a coincidence, or whether it attacked people who had had rheumatism previously.—The PRESIDENT said that such cases were not unknown to practitioners of large experience, and they were of much interest. The first question that suggested itself was, what was the character and duration of the prodromal period of typhoid? In his own experience it often lasted as long as six weeks, and there might be diphtheritic, rheumatic, etc., symptoms during it. Secondly, did rheumatism predispose to typhoid? Thirdly, were they diseases of close kinship? And lastly, did the rheumatic symptoms sometimes precede and sometimes follow the typhoid? As to the point hinted at by Dr. Powell, he had no doubt that there were new diseases, as well as complications of old ones.—Dr. FINLAY, in reply, said that in his cases there had been a complete break between the two diseases, some being absolutely convalescent in the interval. In all but one of them the enteric fever followed the rheumatism.

Case of Dislocation backwards of the First Lumbar Vertebra, which was successfully Reduced under Ether.—Mr. N. DAVIES-COLLEY read notes of this case. A shipwright, aged 55, was stooping at his work, when a mass of iron, weighing 7 cwt., fell upon the small of his back. He was at once admitted into Guy's Hospital. He was collapsed, but quite sensible. The spine of the first lumbar was three-quarters of an inch to an inch behind that of the last dorsal vertebra. The adjacent spines were even, and formed a continuous series, those above at a level considerably anterior to those below. There was no motility nor crepitus to be detected upon gentle manipulation. He could move his legs, but the right somewhat less than the left. There was impairment of sensation on the outer side of the right leg, and complete loss upon the dorsum of the right foot. Soon after admission, extension was applied under ether. Mr. Davies-Colley kept his hand upon the prominence while three assistants made traction upon the legs. The projection was thus gradually reduced without any jerk; at the same time, some crepitus and motility could be felt in the last dorsal spine. A plaster-of-Paris jacket, similar to the laminated form recommended by Mr. Furneaux Jordan, was applied in the horizontal position, while traction was still being made upon the man's legs. When he recovered consciousness, he was quite comfortable. A more careful examination, two days later, showed that the right musculo-cutaneous nerve was completely paralysed, and there was some loss of sensation between the first and second toes, where they are supplied by the anterior tibial nerve. For ten days, he was unable to micturate, and some small bed-sores formed over the sacrum, although, within two days of the accident, he could turn over in bed and lie upon his side. On the thirty-fourth day after the accident, the splint was removed. The line of the spine was then quite even. There was no deformity, and little, if any tenderness. In less than two months after the accident, he was able to walk; but he was still unable to evert his right foot. With the help of faradisation, he gradually recovered power and sensation; and when he was last seen, in October, no difference could be detected between the movements of the two legs, and the only abnormality in sensation was a slight numbness in the middle third of the outer side of the right leg.—Mr. **BRYANT**, after remarking on the great interest of the case just related, said that the practice therein recommended was hardly sufficiently recognised. He had seen three cases of supposed fracture of the spine in the practice of his colleagues benefited by extension, and had had two cases under his own care where the treatment had been adopted successfully. One of these was that of a man, aged 74, who brought to the hospital an hour after a heavy sack had fallen on to the nape of his neck. There was paralysis from the nipple-level downwards, no loss of sensation, slight priapism, and great pain in the right half of his body. There was projection of the third dorsal vertebra, with swelling around, and some separation of the spinous processes; there was also fracture of the sternum. Extension was applied, a sudden jerk was distinctly felt, and was audible to the bystanders; the deformity was completely relieved, and so was the pain, which had been extreme. The next day some movement of the toes and of one foot was possible, but on the following day the anæsthesia had increased, and was complete the day after, and he died from respiratory troubles on the seventh day. The examination confirmed the diagnosis of dislocation of the third dorsal veterbra, which was found to have been completely reduced, there was some extravasation of blood into the spinal cord, but not enough to have produced permanent disorganisation, and had the patient been younger he might have made a complete recovery. He wished to advocate very strongly the treatment of such cases by extension.—Mr. **HOWARD MARSH** referred to a case of Mr. Willett's at St. Bartholomew's Hospital, wherein there was dislocation of one of the lower dorsal vertebræ; extension had brought about replacement, and after death the dislocation was proved to have been completely reduced, but he could give no details.—Mr. **DURHAM** had seen Mr. Colley's case throughout, and congratulated him on the result. He did not now regard these cases as so hopeless as he was taught to consider them in former days. He thought that there was some danger in the use of plaster-of-Paris jackets in these cases, except in the late stages, on account of the risk of producing sores, which would be unrecognised and inaccessible.—Mr. **DAVIES-COLLEY** agreed that the jacket would be objectionable, if with a fracture of a dorsal vertebra there was loss of sensation below the umbilicus.

Case of so-called Frontal or Supra-orbital Neuralgia following Injury, successfully treated by Trephining after Failure of other Methods of Treatment.—Mr. **ARTHUR E. DURHAM** described this case. The patient, a man, aged 33, was admitted into Guy's Hospital in October 1882. A year previously, he had been knocked down and kicked on the forehead by a horse. An external wound was produced, extending from about an inch and a quarter to two inches or rather more above the left external angular process. The wound soon healed. Two or three months afterwards, he was thrown out of a cart, and fell upon his head. He walked home, a distance of four miles. Soon after getting into bed, he began to suffer from intense pain, extending from about the seat of the cicatrix of the old wound towards the top of his head. This pain remained more or less persistent, distracting exacerbations occurring from time to time. His condition became most pitiable; he was altogether incapacitated from attending to his business, and his general health began to suffer. He tried in succession an immense number of medicines and external applications, but without benefit. On October 23rd, Mr. Durham excised about half-an-inch of the external branch of the supra-orbital nerve, and forcibly pulled both the proximal and distal portions. It seemed that the pain occupied the area supplied by this nerve. No relief followed this operation. On November 17th, Mr. Durham again operated, and dissected out and excised portions of other branches of the supra-orbital nerve, and some plexiform filaments of communication between these nerves and the auriculo-temporal. The pain remained as severe as ever, though the area over which it spread was more limited. The patient was now sure that the pain started from a spot in the bone very nearly beneath the cicatrix of the original wound. He was ready and anxious to submit to any operation, even at the risk of his life, to be relieved from his agony. Under these circumstances, Mr. Durham trephined the frontal bone at the spot indicated. The portion of bone removed was about an inch in diameter. From the time of this operation to the present, the man had been entirely free from his old pain. The portion of bone removed was apparently healthy in every respect. It was not obviously thickened, nor indurated. It showed no signs of fracture, nor were there indications of suppuration, old or recent, beneath it. On subsequent examination, a small depression was found on the internal surface, close to the margin, but this was believed to be only one of those little pits or depressions commonly met with on the internal surface of the adult skull. It was possible, however, that there might have been some small papillary or other outgrowth from the dura mater, involving some highly sensitive nerve-filaments, and hence the pain. But there was no evidence of this to be obtained. There was a little bleeding from the dura mater, which was easily arrested, and the dura mater then presented a normal healthy appearance. The wound was dressed, and subsequently treated in the ordinary way. No bad symptoms of any kind supervened. The wound filled up by granulation, and the patient steadily recovered. He left the hospital on February 28th, speedily regained health and strength, and was soon able to resume his ordinary avocations. He was last heard of two days ago (some fifteen months after the operation), and reported himself as quite well and entirely free from all pain. Though the result of the treatment was so successful, Mr. Durham considered it would have been more satisfactory if the cause of the pain could have been discovered, and definitely ascertained. He thought the case was allied to those well recognised cases classed together under the designation osteitis neuralgica. Although in almost all of such cases it was one or other of the long bones affected, and, as a rule, there was marked thickening and induration of the bone, Mr. Durham further thought that his case might be taken as illustrative of the comparative immunity with which the skull might be trephined in cases in which there was a prospect of benefit resulting from such operation—an operation the dangers of which he believed to be very much overestimated. He had brought the case forward, not with the idea of advocating for one moment the adoption of any such severe measures in ordinary cases of supraorbital neuralgia, but rather to illustrate the good that might be effected by well directed surgical interference in certain cases in which medicines internally and applications externally proved altogether useless.—Mr. **WALSHAM** mentioned a case of Mr. Langton's, where a young woman, aged 22, had constant pain for two years after a compound fracture of the skull; she was trephined; some diseased bone being found, and made a complete recovery. In a paper in the *St. Bartholomew's Hospital Reports* he had collected 700 cases of trephining, of which thirty were for neuralgia, half of them attributed to a blow, the others having no causes assigned. In two-thirds there had been no return of pain after the operation; in only five had death occurred, and was not in them due to the trephining. In the majority the cause was disease of the bone, in ten no cause was found, in two a small granulation was removed. In these cases we had to ask if the pain should be attributed to the injury; and if so, where should the trephine be applied. He quoted two cases; one was that of a young woman who had had a fall, and had a small swelling on the frontal bone, near the suture. Was the pain hysterical, or was it due to a possible exostosis on the inner plate? The other patient was an engine-driver, who had an accident to the back of his head, and suffered from constant pain in the occiput. It was difficult to say where the trephine ought to be applied.

Living Specimens.—The following living specimens were exhibited.

By Dr. **WILLCOCKS**: A case of Paralysis of the Fourth and Fifth (Motor and Sensory Branches) Cranial Nerves, with a history of Syphilis.

By Dr. **SEYMOUR TAYLOR**: A Man with Dilated Superficial Veins over the Front of his Thorax, probably due to Intrathoracic Aneurysm.

By Mr. **BERNARD ROTH**: A Girl, aged 16, with Lateral Curvature, illustrating the bad influence of Dress on this condition.

Mr. **EDMUND OWEN** also exhibited Artificial Teeth swallowed, and passed *per anum* on the sixth day.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 1st, 1884.

J. WHITAKER HULKE, F.R.S., President, in the Chair.

Juvenile Osteomalacia.—Mr. **DAVIES-COLLEY** showed specimens from a case of general bone-disease of somewhat obscure nature. The patient, a girl, was always a pale, thin, delicate child. A waddling gait was early noticed, and at an early period the ankles "grew out wards and the knees inwards;" somewhat later, the humerus was broken, and she first came under treatment at Guy's Hospital, when ten years old, on account of a fracture of the femur. It was then noticed that the long bones, especially the tibiæ, were very tender; it was also observed that the long bones were flexible and could be dinted in as the skull can be dinted in cranio-tabes. While under observation, the lower jaw became swollen in front of the angles; this swelling was at first soft, but subsequently became firm. The urine contained a sediment, which consisted chiefly of triple phosphates; a few pus-corpuscles were seen towards the end of life. A quantitative examination showed that the phosphoric acid of the urine was deficient, amounting to about a third of the normal quantity, but the calcium was in excess. About eight months before death, she began to pass phosphatic calculi, and the determining cause of death was suppurative pyelitis set up by phosphatic calculi; the right ureter and pelvis of the kidney were full of these calculi. The head was enlarged, the forehead was deformed, and the upper extremities were twisted and distorted. The chest was not ricketty, but enlarged and barrel-shaped. The abdomen was distended. She died at the age of thirteen. After death, some of the bones were seen to be hypertrophied and dense, while others were thin and light. The skull was thickened, dense, and without diploe; in places it was soft. The lower jaw was dense and thick; the vertebræ were softened, there was slight lateral curvature, and at about the ninth dorsal vertebra the curve was very sharp. For some time before her death, she had suffered from paraplegic symptoms. The right ala of the pelvis was thickened and soft, with a thin layer of bone on each surface; the ala on the other side was very thin. The pelvic outlet was small and deformed, having a trefoil-outline. On the fourth and fifth ribs was a rounded swelling, apparently a sort of callus formed on a fracture of the fourth rib. The radius and ulna were twisted, so that the axis of the arm was at right angles to that of the hand. The femur was also abnormally curved, and deformed; the epiphysial line resembled that seen in rickets; the shafts of the long bones were thin and rough. Mr. Davies-Colley had found some difficulty in relegating this case to any category; it had certain points of resemblance to rickets and to osteomalacia, and he was led to think that this case lent support to the view that there was a close affinity between these two diseases; in this case, the resemblance to osteomalacia was more pronounced than to rickets. The ordinary remedies for rickets, as well as iodides, iron, and perchloride of mercury, failed to produce any improvement.—Mr. C. J. Symonds had made a microscopical examination of various bones in this case. The main point to be remarked in the long bones was the absence of compact tissue; there was a complete absence of Haversian systems, the porous bone being filled with fibrous tissue. This wasting of the bone seemed to have led to the fractures. The swellings on the bones were of a different character, and appeared to have arisen from a perverted rapid development of bone in fibrous membrane. The skull was porous, containing large spaces filled with fibrous medulla. The microscopical appearances were not, he thought, those of osteomalacia, but they agreed with the description of late-rickets given by Cornil and Ranvier, who had described great wasting of bone, with excess of fibrous tissue.—The President had listened to the case with great interest, as in several cases of osteomalacia in women he had witnessed the occurrence of this calculous condition.—Mr. W. Arbuthnot Lane thought the case gave support to views he had put forward with regard to osteomalacia. He contended that that disease consisted primarily of a decalcification, which was followed by a mucoid change, and, lastly, by the appearance of fluid in the spaces. As decalcification advanced, there was, as it were, an effort to form new bone, which failed owing to the absence of calcification. Further, the case supported his contention that the fractures were really due to local increase of decalcification. He was able to exhibit the larynx from a case of mollities ossium, which he had previously reported to the Society. The cartilages were very flaccid, and the hyoid bone presented two articulations at the junction of the greater cornua and the body; these false joints were also due to rapid local decalcification at points of greatest strain, and not to any local injury.

Bone-Disease in Animals.—Mr. J. B. Sutton said that, with reference to specimens of rickets in animals which he had previously shown, the question as to the influence of age had arisen, and at the time he had not been able fully to meet the objection, as monkeys did not frequently breed in this country. He had, however, been able to ascertain that rickets was exceeding common among carnivorous animals; especially among the small species. From the examination of some thirty cases, he had come to the conclusion that the rickets of infancy in the carnivorous animals attacked chiefly the appendicular skeleton, the thorax, and occasionally the skull. A second form occurred at the period of puberty, and most commonly attacked the axial skeleton. The disease was equivalent to late rickets in the human subject, and its chief features were that the axial skeleton was most commonly attacked, but the spine and thorax only might be affected, or the vault of the cranium alone. Infractions of the ribs were common. This form had been observed, and the *post mortem* appearances carefully noted, in a lion. A third form, which might be termed the adult rickets of animals, was very rare. The skeleton presented considerable deformity, but the bones were brittle, the compact tissue within the medullary and cancellous spaces was large, and contained diffluent medulla. The teeth fell out, owing to extensive absorption of the alveolus, and paraplegia was a prominent symptom. More rarely another manifestation of the disease was observed in young animals, the bones became soft, the epiphyses large and ricketty, but the diaphysis developed bulgings, and the medullary cavities became filled with a diffluent oily material. He referred at length to the views of M. Lataste, who, from his observations on the rodents, had come to the conclusion that when in captivity a bone-disease developed which varied with the period at which captivity commenced. To one variety the term rickets might be applied. The small rodent upon which his observations were made reached maturity at about the fourth month, and in those which were affected with the disease on the thirty-fifth day it would be noticed that the animal grew feeble, and that the bones of the extremities and the vertebral column were deformed by the action of the muscles and the weight of the body; the bones presented all the appearances characteristic of rickets. But in the adult the course of the disease was different; it would become, after some considerable period of captivity, weak; then paraplegic; then the bones of the arms and legs would fracture, and the animal would die. Examination showed that the cranium was so softened as to resemble gelatine, calcareous matter being completely absent. In this form the female succumbed first, the reason obviously being that it had to furnish calcareous material to build up the skeleton of several progenies. Mr. Sutton coincided with M. Lataste's conclusion, that this was, in fact, one disease appearing under two distinct aspects, rickets in the young and osteomalacia in the old, and that the disease consisted essentially in an alteration of the osseous system, either by absence of the assimilation, or by re-absorption of the calcareous salts. Without wishing to fall into the error of drawing conclusions upon insufficient data, Mr. Sutton thought we were now in possession of the main features of this curious disease in three classes of animals, quadrumana, carnivora, and rodentia. One common group of causes, captivity and bad hygiene, gave rise to rickets of infancy and puberty, and to a disease resembling osteomalacia in the adult animals. The differences in the manifestations of the disease were due to the altered physiological condition of the skeleton incident to the three phases of life, infancy, puberty, and maturity.—Professor Humphry believed that it was incorrect to speak of enlargement of the bones in rickets; there was always, on the contrary, an imperfection of growth or formation of bone, a deficiency of size; neither was there any increased proliferation of cartilage at the epiphysial line, but rather decreased calcification; true ricketty enlargement of the epiphyses was rare. But there were additions to rickets; of these additions some were of an inflammatory kind, leading to thinning of the bones which might run on to mollities; also there was an addition of porous bone, which was to be noticed more especially in the skull.

Ulceration (probably Syphilitic) of the Small Intestine.—Dr. Norman Moore exhibited a skull-cap and a portion of small intestine, showing syphilitic lesions, from the body of a woman aged 46, who died, under the care of Dr. Gee, in St. Bartholomew's Hospital. The skull-cap was very adherent to the cranial fasciæ, and showed a node on its external surface. On the inner side of the right parietal bone was a partly degenerated gumma. The intestines were distended with fæces, though there was no single obstructed point. In the small intestines were numerous thickened patches—some ulcerated, some showing scar-tissue and contraction, and some consisting of fresh connective tissue. The mesenteric glands were not enlarged. The liver was small, and showed many scars and one recent gumma. The kidneys were small and granular, but without scars. There was double pyo-salpinx. There had clearly been long-continued obstruction at several points in the small intestine; for between the ulcerated places, there was a slight general thickening of the intestinal wall. There was no amyloid disease. Visceral syphilis, a rare cause of obstruction in the upper part of the large intestine, was of still more rare occurrence in the small intestine.

Acne Keloid.—Mr. Roger Williams showed the photograph of a stout, healthy-looking woman, aged 53, with a keloid tumour, six inches by two inches, extending transversely across the back of the neck, at the junction of the skin and hairy scalp. It presented a smooth, shiny, reddish appearance; and its surface was sparsely marked by follicular depressions, out of which projected tufts of bristly hairs, giving the disease its characteristic physiognomy. On pressure, it was firm and tender, and a material of caseous appearance exuded from the follicles. It began, without any injury or other known cause, as a small pimple, five years previously. It was painted with a solution of iodine and collodion, and, after some time, became smaller and less tender. A piece was excised for microscopical examination; the sections showed a new growth of dense fibrous tissue in the deep part of the corium. Connecting this were numerous large vascular channels, filled with leucocytes; but there was no small-celled infiltration of the surrounding fibrous tissue. The epidermis and the papillary layer of the corium were normal, except from the complete absence of the cutaneous glandular structures, other at least than those represented by the few hypertrophied hair and sebaceous follicles, which probably escaped owing to their deeper implantation. In conclusion, Mr. Williams considered the disease to be merely a variety of the keloid of Alibert, and to differ essentially from the disease described by Kaposi, under the name of *Dermatitis papillomatosa capillitii*, which consisted of a chronic inflammation of the corium.

Cystic Disease of the Liver.—Dr. HALE WHITE brought forward a case of true cystic degeneration of the liver in association with yellow fever, for which specimen he was indebted to Inspector-General Lawson. In making the *post mortem* examination on a soldier who, in 1860, died in Jamaica from a severe attack of yellow fever, it was noticed that the liver was full of holes in some parts of its substance. Microscopical examination showed the condition to be exactly the same as in the previous cases which he had brought before the Society; namely, the process consisted in the occurrence of small vacuoles simultaneously in several hepatic cells; soon, the vacuoles of adjacent cells running one into the other, large cavities were formed, visible to the naked eye; these contained the remnants of the broken down hepatic cells. It was pointed out that this condition could easily be distinguished from fatty change in the liver by not staining with osmic acid, and also from *post mortem* decomposition, which produced a spongy condition of the organ, by not containing air-bubbles. The points of distinction between cysts due to vacuolation and those due to dilatation of the bile-ducts were that, in the latter case, a cause for the constriction of the ducts would exist, and if the cysts were numerous, they would contain bile-pigment, those that did not being usually congenital, large, and single. A liver full of cysts, as a result of cirrhosis, was shown to the Society. Under the microscope, the differences were very marked. Out of the four cases of cystic liver recorded by Drs. Savage and Hale White, two were in lunatics, in which every organ of the body was cystic; one was in a case of pelvic abscess; and one in a case of yellow fever. This showed that there was as yet no evidence to show that the condition was associated with any particular morbid phenomena, nor did it throw much light on the debated question whether, when this condition was present in the kidney, the association was more than accidental. The microscopical appearances clearly showed that the vacuolation could not be looked upon as congenital. Specimens were shown of the very rare condition in which tubercular deposit in the liver broke down, so that small cavities were formed; these were never larger than a pea, were quite exceptional, and occurred only in children.—Dr. NORMAN MOORE asked how long after death the *post mortem* examination in this case was made, as he was not satisfied that the vacuolation was not due to decomposition.—Mr. SUTTON coincided with the last speaker, as he had seen a vacuolation produced in the liver of animals within an hour after death.—Dr. MAHOMED supported Dr. Hale White's contention, and distinguished it from *post mortem* vacuolation due to putrefaction.—Dr. HALE WHITE said that the necropsy was made from four to six hours after death.

Living Specimens.—Dr. FREDERICK TAYLOR: Chondro-epitrochlearis muscle in the male.—Mr. CLEMENT LUCAS had seen a similar case. Mr. JOHN WOOD had never seen so well marked a case; the peculiarity was not quite symmetrical in this case. He briefly referred to the comparative anatomy bearing on the subject. Professor HUMPHRY referred to the mode of development of the muscles of the upper limb, and its relation to comparative anatomy; remnants resulting from an imperfect morphological development.

Card Specimens.—Dr. CHARLEWOOD TURNER: (1) Mitral stenosis and necrosis of the valve; (2) Extensive obstruction of one coronary artery; (3 Free coagula in the pulmonary vein.

Dr. GOODHART, for Dr. Pye-Smith: Primary cancer in a cirrhotic liver.

Mr. CLEMENT LUCAS: Kidney removed by nephrectomy.

Mr. W. A. LANE: Spine from a case of spastic contraction of the sterno-mastoid. The fourth, fifth, and sixth cervical, and most of the dorsal vertebræ were ankylosed on the concave side of the curve; the intervertebral substances above and below the cervical vertebræ were almost completely replaced by synovial cavities, and the movement which allowed the face to look directly forward, took place at these joints.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 20TH, 1884.

GEORGE P. FIELD, M.R.C.S., President, in the Chair.

Spasm of the Muscles of the Face and Cataract due to Dental Irritation.—Mr. HENRY SEWILL'S paper dealt with the case of a middle aged lady, the subject of inveterate neuralgia, who, during late years, had suffered from alveolar abscesses, and, in 1881, had complained of recurring pains in the right eye, complicated since January 1882 with persistent spasm of the right side of the face. In July 1882 partial loss of sight of the right eye from cataract, and partial closure of the same eye from spasm of the orbicularis were superadded. In July 1883 she consulted Dr. Ferrier, who advised extraction of offending teeth. Mr. Sewill found in the upper jaw the stumps of some molars, and artificial bicuspids, incisors, and canines attached to a vulcanite plate which had not been removed for years. The right canine was completely broken down, and pus exuded from several fistulous openings in the gums. The lower teeth were hidden beneath an enormous mass of tartar. The treatment consisted in extraction of all the upper teeth in two sittings, and in gradual removal of the tartar from the lower teeth. Within two days of the extraction, the facial spasm entirely disappeared, but no change took place in the damaged lens. Mr. H. Power had lately stated, in a paper read before the Odontological Society, that dental lesions were very frequently the cause of certain diseases of the eye, to which should now be added cataract. The case recorded was probably an instance of trophic disturbance.—The PRESIDENT called attention to the frequency with which the ear was affected from the same cause.—Mr. F. TREVES referred to similar cases which had occurred in the practice of Mr. Hilton and of Dr. George Johnson. The case might lend support to the view that a nervous communication existed between the second division of the fifth nerve and the lenticular ganglion.—Mr. JULER, from observations upon a large number of cases in which eye-affections were associated with diseases of the teeth, was of opinion that the latter were even more commonly the cause of ocular and intra-ocular lesions than Mr. Sewill appeared to consider. Mr. Juler considered that the recent paper upon this subject by his colleague, Mr. Power, had been instrumental in calling the attention of the profession to a field of observation in which it had previously been almost asleep.

On certain Forms of Intestinal Obstruction that may follow after Hernia.—A paper on this subject was read by Mr. F. TREVES. Although, after complete reduction of a strangulated hernia, and after recovery from the operation, as a rule, no further intestinal troubles might be expected, apart from such as depend upon fresh accidents to the rupture, certain forms of intestinal obstruction might follow after such reduction. 1. There might be stricture of the intestine, due to cicatrisation after ulceration or sloughing of the mucous membrane, or to a form of contracting peritonitis. From the collected cases, it would appear that neither the seat of the hernia, nor the duration of the strangulation, nor the nature of the operation, have certain or definite concern in the production of these strictures. 2. Obstruction might be due to adhesions. The herniated loop might become adherent to the parietal peritoneum, and cause occlusion by "kinking;" or the adhesions might lead to "bands." Omental bands were also common after certain herniæ. 3. Obstruction might be produced by the formation in the bowel of a rigid loop. Several examples of this form of obstruction were given, together with examples of a fistula bimucosa consequent upon injuries received by the strangulated bowel.—Mr. GANT said, with regard to the origin of stricture of the intestine and looped constriction as forms of intestinal obstruction resulting from hernia, that they were not subsequent conditions, but commenced from the time of operation, owing to the indentation often left upon the bowel at the seat of stricture, when the strangulated portion had been inadvertently returned into the abdomen in that condition. Hence the great importance of gently drawing down the gut, and of effacing the indentation by gentle manipulation before returning the part into the abdomen. If this constriction could not be thus removed, the previous division of the stricture would only half complete the operation, and the prognosis would be proportionately unfavourable. After the reduction of enterocele without operation, it was more than probable that similar forms of intestinal obstruction originated in like manner; and this pathological explanation would indicate the propriety of resorting to operation to discover and release any such constriction, even when reduction could be effected by taxis, provided that the duration of the strangulation rendered it probable that plastic constriction might have supervened. If the bowel were then returned, the symptoms of strangulation would probably continue, or intestinal obstruction eventually result. Had the latter condition occurred in Mr. Treves's experience more frequently after femoral than after inguinal hernia?—Mr. Cowell thought that some of the forms of obstruction, and especially those produced by bands of adhesion, were much more likely to be found in old herniæ. In many patients, several different portions of intestine in succession found their way into the hernial sac, and were liable to be pressed upon, each of them in turn becoming the seat of some inflammatory change and exudation.—Dr. Symes Thompson asked the opinion of the author of the paper as to the desirability of adopting special rates in life-insurance for cases of hernia. Fibrous bands similar to those described in the peritoneum as a result of former adhesions, were frequently seen in the pleura from the same cause.—Mr. Pepper gave the history of three cases of acute obstruction dependent upon the pressure or traction of inflammatory exudations.—Mr. Treves having replied to the various speakers, the meeting was adjourned.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, March 5th, 1884.

H. Gervis, M.D., President, in the Chair.

Specimens.—Dr. Horrocks showed a wooden ring-pessary coated with a deposit of lead from the use of lead lotions. It had been worn for five years.—Mr. Thornton showed a fibro-cystic myoma of the uterus with both ovaries attached, removed from a single woman, aged 40. The patient recovered. Also a large fibroid uterus with separated subperitoneal fibroids, small multiple cysts of the left ovary, and a large multilocular tumour of the right ovary, with broad ligament cyst attached. The patient, aged 40, single, died of peritonitis on the fourth day.—Dr. Galabin showed, for Mr. Fielden, of the Chichester Infirmary, a cyst removed from the vulva, believed to be a hydrocele of a peritoneal pouch.—Dr. Heywood Smith showed a dermoid cyst of the right ovary, containing skin, teeth, bone and hair; also a large fibroid removed, together with the upper third of the uterus, from a woman aged 39.—Dr. Boxall showed a morbidly adherent placenta from a syphilitic patient, detached with great difficulty by the fingers. There were several accessory cotyledons joined to the main placenta by a membranous or velamentous interspace of chorion; also a placenta containing a large blood-cyst nearly as large as an orange; the greater part of the fœtal surface being also occupied by old blood-clot.—Dr. Barnes showed an ovarian tumour removed at short notice on account of symptoms of twisted pedicle, viz., sudden access of severe pain, vomiting, and depression of pulse, together with rapid increase in the size of the tumour. The case showed that ovarian tumours should be removed as soon as diagnosed, in order to avoid the numerous accidents to which their owners were liable.

Corroding Ulcer of the Os Uteri.—Dr. John Williams read a paper on this subject. He referred to the rarity of the disease, to the almost entire absence of descriptions of it in systematic treatises, and to the fact that its existence had been denied by some observers. It had been mistaken for cancer, and *vice versâ.* The histories of these cases, which had been under the author's observation for varying periods of time—one for two years and two for about ten years—were narrated, and the *post mortem* appearances, together with the microscopical characters of the ulcer in one instance, were described. The differences between corroding ulcer—both clinical and anatomical—were pointed out, and the views of Sir Charles Clarke, that the disease was distinct from cancer, upheld. The disease began at the os uteri and extended along the vagina, involving its walls in a symmetrical manner. Its progress was slow, and two of the author's patients died of other diseases, while the third, which had been under observation for ten years, was still living. It was not necessarily associated with loss of flesh, and the pain and discharges were different from those usually met with in cancer of the uterus, and the edges of the ulcer were not hard and thickened. The mode of progress of the ulcer was in one case by means of reddish raised tubercles which became ulcerated, in another by slow ulceration without any preceding changes in the tissue about to be invaded, except some redness. The mucous surface to the edge of the ulcer appeared perfectly healthy. Microscopic examination showed this last observation to have been accurate, for the ulcer, its base and borders, presented no appearance except that of granulation-tissue. The case in which the disease presented the characters of lupus is still living. In the second case which died, and which presented the microscopic appearances mentioned, the ulcer appeared to be the result of a slow gangrene arising from calcification of the internal iliac arteries and their branches.—The President regretted that no necropsy had been allowed in the second case; but, from the results of the necropsy in the third case, the symptoms observed by the writer through a series of years in each case, and the observations of other authors, referred to by Dr. Williams, he thought that the disease must now be definitely withdrawn from the list of cancerous or cancroid affections. Dr. Williams's graphic description might have the effect of bringing cases, hitherto classed under the head of ulcerating epithelioma, under that of corroding ulcer.—Dr. Priestley said that the rarity of the affection was proved by the fact that some gynæcologists in large practice were doubtful if they had ever seen a case, and that its pathology was much disputed. Thus, Kiwisch and Scanzoni regarded it as a variety of encephaloid cancer; Courty and West regarded it as a form of epithelioma. He thought he had seen the characteristic form of the disease more than once. Sir Charles Clarke described the pain as burning, and not gnawing like that in cancer.—Dr. Matthews Duncan said the disease had been the object of special study for many years to him, and he believed it to be of the nature of lupus. He was not sure that he had ever seen a case identical with those of Dr. Williams as to situation, but he had seen many in the lower vagina and external organs. Lupus of the external organs seemed to produce hypertrophies greater than any produced higher up in the passages. He had also seen the disease in the uterus.—Mr. William Duncan thought Dr. Williams's cases were lupus, which had taken on an epitheliomatous nature.—Dr. Chalmers thought that the disease was not so rare as had been thought. He had seen two such cases in the last two years; in one case the patient died within a period specified in the prognosis given.—Dr. Galabin asked Dr. Williams whether he regarded the disease as having any analogy with rodent ulcer of the skin, which was now regarded as a form of rodent cancer. He had examined the uterus in Dr. Duncan's case, and found the deposit thickening the walls to consist of leucocytes, some of them having the suspicious character of being united by tailed processes.—Dr. Griffith had seen a case which he thought similar. There was little pain, no glandular enlargement; it proved fatal in two or three years by repeated and uncontrollable hæmorrhage. No necropsy was allowed, but the left side of the uterus was felt much thickened.—Dr. Routh had seen two cases of the disease. There was no induration of surrounding parts, nor fixation of the cervix. The absence of induration made him dissent from the view that it was lupus. Moreover, the ulcer never healed, as it does sometimes for a time in lupus. He suspected a scrofulous or syphilitic taint acting on ill-fed and weakly persons. Similar ulcers had been described by Samuel Cooper.—Dr. Aveling said that Dr. Rigby believed that the burning pain accompanying this form of ulceration was different from the darting pain of cancer.—Dr. Williams replied that rodent ulcer was epithelioma starting from hair-follicles and sweat-glands, and corroding ulcer of the cervix could not be such. In one of his cases it appeared to be lupus. This patient was still living, therefore no microscopic examination had been made. The third case was, in his opinion, senile gangrene, depending on calcification of the internal iliac arteries and their branches on both sides. He had used the word "malignant" loosely as equivalent to incurable. He had seen one case of ulceration of the inner surface of the body of the uterus. The patient was over 60 years of age, had suffered long with offensive discharge, and was very fat. She died from other causes. At the necropsy the uterus was large, the walls thickened, the cavity large, secreting a quantity of broken-down dark material. Section of the walls showed nothing except the muscular fibres of the uterus running to the surface, and in them many round cells, but nothing to indicate malignancy. No local treatment had been pursued.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

Monday, March 3rd.

J. S. Turner, M.R.C.S., L.D.S., President, in the Chair.

Defective Dentition.—Mr. W. Hern showed models of three cases of defective dentition. The first, a boy aged 7, had only four teeth (molars) in the lower jaw, the alveolar ridge in front of these being narrow, and giving no evidence of the presence of any tooth-germs. In the upper jaw, he had six teeth, four molars, and two conical teeth in the incisor region. Both the parents had their full complement of teeth, and so had a younger brother. In the other two cases, the canines were present, as well as the molars, but the lateral incisors were absent, and the centrals small and ill developed. Here, again, the parents had good teeth, and a younger brother had the proper number. Mr. Hern referred to some similar cases brought before the Society by Mr. Moon a few years ago, in which it was noticed that the elder children had defective dentition, whilst that of the younger children in the same families was normal.

Replantation. Mr. CUNNINGHAM, of Cambridge, showed a patient for whom he had performed replantation. The tooth, an upper central, had been knocked out during a game of football, but the patient did not present himself until four hours after the accident. The alveolus was much lacerated, and the tooth very dirty. It was carefully cleansed, the pulp removed, and the nerve-canal filled. It was then replaced, and secured with silk-ligatures. At the end of three weeks, it had become quite firm, and was not to be distinguished from its neighbours. Mr. ACKERY mentioned the case of a girl who applied to him on account of persistent hæmorrhage following the extraction of a molar tooth sixty-two hours before. She brought the tooth with her; and Mr. Ackery, thinking it would make a good plug, replaced it in its socket without removing the pulp or treating the canals. The bleeding was at once arrested, and, when the patient came again a week later, the tooth was found to be quite firm. She stated that there had been a little tenderness for a day or two, but this soon subsided, and the tooth had given her no pain since; it was therefore allowed to remain.—A discussion ensued as to how long a replanted tooth might be expected to last, supposing the immediate result of the operation to be satisfactory, the general opinion being that the average duration was from five to seven years, though instances of longer duration were occasionally to be met with; and that, as the operation was not usually attended with much pain or inconvenience, the prospect of retaining an useful tooth for six years was quite sufficient to justify the experiment.

Hammond's Splint after Surgical Division of the Lower Jaw.—Mr. NEWLAND PEDLEY read notes of a case operated upon at Guy's Hospital by Mr. Clement Lucas, for the removal of a sublingual epithelioma, in which the above mentioned apparatus gave very satisfactory results. He pointed out that such cases were more difficult to treat than ordinary fractures, owing to the complete division of all the soft parts, and the smooth ends of the divided bone.

Dental Jurisprudence.—A communication was read from Mr. F. R. LLOYD, of Mussoorie, North-West Provinces of India, relating a case which had been submitted for his decision. A gentleman's servant came to Lahore, saying that his master had been killed by savages while travelling in Kashgur, and that a head which he brought with him was that of his master. But Mr. Lloyd was able to decide, after careful examination of the teeth, that the head must have belonged to a much older man than the gentleman said to have been murdered, and, further, that it was the head of a native, and not of an European.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 31ST, 1884.

ARTHUR E. DURHAM, F.R.C.S., President, in the Chair.

Beri-beri Fever. Dr. NORMAN CHEVERS read a paper on Beri-beri, a disease which has occupied an anomalous position in the nomenclature of the College of Physicians at the end of the list of general diseases, next to general dropsy, a condition which was one of its most characteristic features. He considered that a review of the epidemic of beri-beri which visited Bengal and Mauritius in 1877 and 1878 would lead physicians to regard it as a specific fever *sui generis,* and to place it next to scarlatina, with which fever it had certain marked features in common. He therefore proposed to give it the designation of "Febris Exanthematosa Orientalis," otherwise beri-beri fever. According to their opportunities of observing it, and to the type of the disease with which each authority had been most familiar, authors had assigned various causes to this malady. Thus Ranking held that it was renal anasarca; Malcolmson viewed it mainly in its paraplegic and scorbutic aspects; Moreshead considered it to be an expression of scorbutic cachexia; others had regarded it as an outcome of paludal cachexia. Dr. Chevers, however, thought that an analysis of the characters of the Calcutta and Mauritius epidemics proved that acute beri-beri was an exanthematous fever, hitherto best known by its sequelæ, acute general anasarca, and frequently, but not invariably, morbus Brightii and paraplegia. In both the Calcutta and the Mauritius outbreaks, most especially in the latter, the characteristic features of an exanthematous fever were distinctly pronounced. Viewing the malady from this standpoint, the occurrence of renal anasarca as its complication appeared natural enough; but the malady was by no means invariably shown to be followed by renal affection. Mr. Ranking described the renal complication about 1852, but it had not been recognised in any subsequent outbreak of beri-beri until the occurrence of this disease in the criminal gaol at Singapore in 1875-80, when it was found that "the urine was scanty, high-coloured, and albuminous." It was shown that, in many cases, loss of power in the lower extremities was due to hard œdema of the limbs; one of the leading sequelæ of beri-beri being anasarcous and dropsical effusion into the areolar tissue and serous cavities, the occurrence of spinal paralysis in various degrees, as one of its complications, was clearly accounted for. Referring to Sir J. Fayrer's suggestion, that filarious disease may be in some way concerned in inducing beri-beri, the author mentioned that a form of spinal paralysis in the horse, "kumree," which prevailed within the Madras area of beri-beri and in Eastern Bengal, had been ascribed by Twining and others to the presence of entozoa in the cord. He inquired, "Do spinal lesions in beri-beri cases arise from a like cause?" Scorbutus should be looked for in all cases of beri-beri, and be treated, when present, as a grave complication. He argued that beri-beri was not a malarial fever, but that the victims of malarious cachexia were especially liable to suffer from its attacks. Few constitutional states could be regarded as more perilous than that of the multitudes of unfortunates who, being the subjects of the combined cachexia of marsh-poison and scorbutus, were attacked with beri-beri. With regard to treatment, the first object should be, as in scarlatina, to endeavour to see each case *ab initio,* to promote cutaneous action, to subdue fever, and to prevent the occurrence of renal and other visceral mischief, anasarca, and dropsical effusion into the serous cavities. When relief was not sought until general anasarca had become established, the same principles of treatment ought to guide us. He deprecated attempts to remove the serous effusions by drastics and direct diuretics. If the other complications of beri-beri could be relieved the anasarca would undoubtedly disappear as constitutional power became re-established. No purgative or diuretic would, except by promoting exhaustion, touch a pericardial, arachnoid, or pleural effusion which threatened life. The author believed that, fifty years hence, the futile and destructive practice of endeavouring to remove dropsical effusions by the use of drastics and direct diuretics would be viewed as one of the most disastrous therapeutic errors of the present century.—Sir JOSEPH FAYRER had always regarded beri-beri not as a specific disease, but as a condition of profound cachexia, but would defer his own opinion to that at which Dr. Norman Chevers had arrived. The Persian word for sheep was "bheri," and the resemblance of the gait of a person affected with this disease to that of a sheep was supposed by some to have suggested the name. Further, in Arabia, the word "bahr" implied weakness; and the term "Sum beri," used by natives of Bengal, implied a mixture of weakness and numbness; a similar word existed in Cingalese. All the terms implied weakness, and this was the central point in the disease. The outbreak of the disease which occurred at Singapore was clearly traced to local unsanitary conditions; but the disease was more or less spread throughout the Malay peninsula. The outbreak in Singapore occurred in the prison, where the water and food were good, but the building was erected on made-ground on the border of a lagoon. Dr GORDON referred to the occurrence of beri-beri in Japan, where it was known under the name "kakké." It had anciently prevailed in China, but had now disappeared, and in other localities it had ceased to appear; but it had extended into other countries not previously affected. The disease was very local in its manifestations in the Cocos archipelago, off the [illegible] of Japan; the disease existed in all the islands, except the [illegible] Keeling, and patients taken to that island, suffering from the disease, recovered. The only method of treatment which could be relied upon was removal from the neighbourhood in which the disease originated. The Japanese used hydragogue cathartics, and a secret [illegible] "Treak Farouk," which was known to the English [illegible] Venice treacle, and appeared to be identical with the Theriaca Andromachi of the old *London Pharmacopœia* of 1716.—Mr. PAUL [illegible] experience of the disease in its chronic form in Japan, he [illegible] conclusion that kakké and beri-beri were not identical. [illegible] was slight, and confined to the fronts of the tibiæ. He [illegible] to regard it as a functional disease of the spinal cord; anæsthesia and paresis were often early symptoms. He believed [illegible] which showed that the disease was not a new importation into Japan, but had been in existence for at least a hundred years.—Sir [illegible] HUNTER had never seen beri-beri in an epidemic [illegible] had attributed the few cases he had observed to [illegible] scurvy combined; and believed the determining [illegible] cold or some meteorological change. He had [illegible] and in these the œdema was well marked, and the [illegible] attributed, in great part at least, to the œdema of the limbs. The connective tissue of every part of the body, and all the [illegible] cavities, were loaded with fluid.—Dr. NORMAN CHEVERS said that, after a full review of the whole subject, he must still maintain the view advanced in the paper.

Vote of Condolence.—The PRESIDENT proposed a vote of sincere condolence with Her Majesty the Queen, and with Her Royal Highness the Duchess of Albany, in their late sad bereavement. This was seconded by Sir JOSEPH FAYRER, and carried amid a profound silence.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

MONDAY, MARCH 3RD, 1884.

W. N. PRICE, M.R.C.S., President, in the Chair.

Bacillus Tuberculosis.—Dr. BARRS read a paper on this subject, and invited discussion on the communicability of phthisis. After passing in review the observations of Villemin, Wilson Fox, Marcet, Koch, Spina, Tappeiner, Schottelin, Weichselbaum, and many others, he stated his belief that the constant presence of the bacillus tuberculosis in all tubercular lesions in man and in animals, including the ordinary form of pulmonary phthisis, had been sufficiently affirmed to warrant the definition of tubercle by the presence of the organism. In dealing with the evidence of contagion from the clinical side, Dr. Barrs criticised freely the cases recorded by Villemin, Dr. Hermann Weber, and also those published by the Collective Investigation Committee, and stated his strong opinion that, as published, the cases could not in any sense be taken as evidence of direct infection from man to man. Although the experimental evidence clearly demonstrated the possibility of infection under certain conditions, Dr. Barrs was strongly of opinion that such conditions were not at present established amongst us, and were not in any way likely to be so. (Dr. Barr's paper will be published *in extenso.*)—Dr. MYRTLE did not believe in the communicability of phthisis. In Edinburgh, he had attended hundreds of cases of phthisis, chiefly among the stone-hewers, and he could not recollect a single case where the disease could be proved to have been communicated from the sick to the healthy. He had watched very prostrated cases, where wives had lived under the most unfavourable surroundings, with husbands suffering from this disease, without contracting it.—Dr. TIBBITS had not met with any cases where there was the slightest suspicion of the communicability of phthisis. He believed that most of the so-called specific bacilli would be in a short time nothing but medical curiosities, altogether laid aside, but not forgotten.—Dr. HUTCHINSON said, in only one case out of sixty-seven treated by himself could anything be found at all confirmatory of the contagiousness of phthisis. In this case, a man and his brother, both of healthy stock, married consumptive wives. In each case, after a few years of married life, the wife died of consumption. One brother died of the same complaint a year after his wife; and the present patient, a few months after the death of his wife, is in the second stage of the complaint with softening of both apices.—Dr. SOLOMON C. SMITH remarked that the proof of the communicability of phthisis came from experimental pathology, and till those experiments were refuted, we must accept the theory that the bacilli, which by their growth irritate the tissues to the formation of tubercles, get into the body from without, *i.e.*, by an infection. The aim of clinical inquiry should be, discovery of those conditions of heredity, surroundings, and mode of life which make man's body a fit soil for the growth of these bacilli, which he felt assured must be as harmless to a perfectly healthy man as are the bacteria of decomposition and fermentation which he constantly inhales along with them.—Dr. JACOB maintained that it was easy to distinguish the tubercle from other bacilli. He referred to the history of the investigation of the anthrax disease as an instance of the complete establishment of the bacterial pathology of disease, and to the recent discovery of a micrococcus in acute pneumonia as an instance of the direction in which pathological discovery was tending.—Dr. CHURTON had been disinclined to accept the view that phthisis was a communicable disease on account of the paucity of evidence in its favour; but he related the following case. A clerk, aged 43, had had phthisis for eight years. Bacilli had been found in the sputa. He had been married ten years. A year ago his wife began to suffer from cough. She had now consolidation of left upper lobe, and there were bacilli in the sputa. Her family history was not phthisical in any branch. Her father, mother, three brothers and two sisters, are alive and quite well, but six of her brothers died in infancy, one with "water in the head." She had been subject to depressing influences, damp house, bad drains, husband's illness, etc. Two theories of causation were therefore in this case possible. This case seemed to show that if phthisis be infectious, it must at least be very hard for a person without distinct predisposition to become infected. With reference to the example mentioned in which four successive wives of one phthisical man had died of phthisis, Dr. Churton pointed out that in an arithmetical series so long and so large as that of phthisis-mortality, it was not at all surprising that one such combination should occur, quite independently of direct personal infection. —Mr. A. W. MAYO ROBSON thought that, although it was difficult to trace out many cases of communicated phthisis, yet some very suspicious examples had been related by several observers, as in the cases reported to the Collective Investigation Committee by himself, where two healthy sisters apparently contracted consumption by nursing a diseased brother, who had obtained the infection away from home. He suggested that as in the case of unfitness of soil preventing the growth of certain plants, *e.g.*, wheat, so in the case of the bacillus tuberculosis a want of predisposition might mean an absence of something needful to the growth of the organism; and that this might perhaps explain why some persons were affected whilst others escaped. —Dr. BRITTON and Mr. ARTHUR ROBERTS also joined in the discussion.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, MARCH 5TH, 1884.

D. J. LEECH, M.D., President, in the Chair.

Ovarian Cysts.—Dr. LLOYD ROBERTS showed a young girl from whom he had removed an ovarian cyst by abdominal section. The parietal peritoneum was thickened, and adherent to the tumour. There were also firm adhesions to the omentum, small intestines, and liver; they were all divided or broken through, except those connected with the liver. The cyst ruptured, allowing the escape of a quantity of thick creamy-looking fluid. A large portion of the cyst was cut away by means of scissors; the remainder was united to the edges of the wound. The operation was conducted under antiseptic abdominal precautions. A glass drainage-tube was placed in the cyst, and another one passed below it into the pouch of Douglas. The patient was extremely ill for several days after the operation. On the sixth day, the cyst-fluid began to be offensive, and continued so for nearly three weeks, notwithstanding the use of strong Condy's fluid, until contraction commenced in the cavity of the cyst. A month after operation, the wound had closed, and only one or two sinuses remained, the drainage-tube having been removed from the cyst on the twenty-third day. The age of the patient was 12 years. Dr. Lloyd Roberts also showed an ovarian cyst weighing 4 lbs. 7 oz., which he had removed that day from a patient aged 51.

The Electro-magnet in Ocular Surgery.—Dr. GLASCOTT made some remarks on the use of the electro-magnet in the removal of foreign bodies from the interior of the eye, and gave details of the eight cases which he had exhibited at the last meeting.

Discussion on Operation for Herniotomy.—Mr. JONES, in opening a discussion on herniotomy, suggested the following questions. 1. Is it advisable or necessary in all cases to open the hernial sac? 2. How should we deal with a superabundance of omentum? 3. What treatment is to be adopted when the coils of intestine have adhered to each other or to the sac? 4. What is to be done with the sac after the gut and omentum have been reduced? In favour of the practice of opening the sac there were three powerful reasons. There might be hidden mischief within the sac, which would cause the patient's death if not speedily removed, and which it was impossible to discover until the sac was laid open. Again, the seat of obstruction might be in the hernial sac itself; and, thirdly, the length of time strangulation had existed might make it desirable to obtain a view of the hernial contents. In recent examples of femoral hernia, incision of the sac might be dispensed with, and the extraperitoneal operation performed. Should any doubt remain in the operator's mind as to the complete reduction of the contents, then it was far better to run the increased risk produced by opening the peritoneum than that the symptoms should be left unrelieved. The presence of omentum in the sac was often a source of great difficulty, especially when, by its long exclusion from the abdomen, it had become much altered in structure and appearance. The older surgeons designated omentum so changed as expatriated. The reduction of such a mass would require a free division of the stricture, and its presence in the abdomen would, in all probability, excite inflammation in the surrounding parts. Hence the altered omentum should be removed. The treatment of adherent coils of intestine would vary with the age of the adhesions. If of recent date, they might be safely detached, and the rupture returned. When old and firm, they had better be left untouched, and the hernia considered as irreducible. The surgeon must, however, divide the stricture, and return any bowel recently descended, and upon the presence of which the symptoms would probably depend. Closure of the sac in recent cases of hernia, and particularly in the congenital form, was strongly recommended. The practice could be carried out in those cases where strangulation had existed for a considerable time, and in which the state of the gut made it probable that perforation might subsequently take place. In this event, it was better to permit extravasation of intestinal contents into the sac than into the general peritoneal cavity. —An animated discussion then ensued, in which Messrs. Lund, Hardie, Whitehead, Southam, Fox, Young, and Wright, took part.

REVIEWS AND NOTICES.

INTERNATIONAL REVIEW OF MEDICAL AND SURGICAL TECHNICS (Official organ of the American Association of the Red Cross). Edited by JOSEPH WARREN, M.D., CHARLES EVERETT WARREN, M.D., and WILLARD EVERETT SMITH, M.D. Vol. i., No. 1. Boston, U.S. Published by the International Medical Exchange.

THE editors of this review, the first number of which was published at the beginning of the year, announce that it is to be devoted to the description of new instruments and methods of operation. The need of a journal of this kind, in the English language; has long been felt, and in these days of extended surgical activity and of cottage hospitals and ambulance-lectures, such a venture, if well organised, could not fail to be successful. This initiatory number seems to be a decided success, since not only have the editors made a judicious selection of their material, but all engaged in the publication have evidently done their best to present this material in a creditable form. The review begins with an interesting chapter on "Shifts and Expedients," which teaches how to improvise, from common and readily available objects, splints, and also instruments for arresting bleeding, removing foreign bodies, and drawing off urine. We hope, in future numbers of the *Review*, to meet with other articles of this kind, for such a series would occupy a position in the literature of general surgery analogous to that in military surgery held by Esmarch's well known *Handbüch der Kriegschirurgischen Technik*. The greater portion of the number is taken up by judiciously selected and well illustrated notices of new instruments and appliances. In an appendix is given a full report of the American Association of the Red Cross, of which philanthropic institution this review is to be recognised as an official publication. Among the many items of useful information in this number, we notice some hints to medical men on literary work.

ON THE TREATMENT OF WOUNDS AND FRACTURES. By SAMPSON GAMGEE, F.R.S.E., Consulting Surgeon to the Queen's Hospital, Birmingham. Second Edition, pp. 364. London: J. and A. Churchill. 1883.

THIS volume of clinical lectures is a consolidated second edition of two well known works by Mr. GAMGEE: one published in 1871, on the *Treatment of Fractures;* the other in 1878, on the *Treatment of Wounds*. These works, it is stated, have now been recast, with earlier and later writings on the same subjects, and with hitherto unpublished clinical records, into what is practically a new work. Of this book but very little can be written now in the way of criticism. The author has expressed his views frequently, and always very fully; and the practice he so warmly advocates in the treatment both of wounds and fractures is now extensively applied. By his work on the *Treatment of Fractures*, he has done good service by insisting on and demonstrating the advantages of the methods practised long ago by Mayer of Lausanne, and by Mr. Erichsen. The system of dry dressings has certainly had most beneficial results in the practice of the large majority of surgeons who, through failure of time and opportunities, or through lack of faith in the germ-theory, have not taken up the Listerian method in all its details. The grounds on which Mr. Gamgee bases his methods of treatment are stated in this volume with much lucidity and force; and his views are illustrated both by the results of extensive personal observation and by frequent references to the classical literature of surgery. This work is a thoroughly practical one, and any possible objection as to the number of its pages may be removed by pointing out that its bulk and importance are due in great measure to the insertion of a series of interesting clinical records.

NOTES ON BOOKS.

The Truth about Alcohol: A Lecture. By NORMAN KERR, M.D., F.L.S. London: H. K. Lewis. 1884.—This lecture was delivered by the author, in December last, at Exeter Hall, to the Metropolitan Open-air Temperance Mission and Advocates' League. It is, of course, the work of a staunch total abstainer; nevertheless, Dr. Kerr begins it by exposing some of the popular physiological errors commonly held by non-scientific advocates of teetotal principles, such as that the brain is hardened by the imbibition of alcohol; that the red corpuscles of the blood are altered by alcoholic drink; that in all circumstances all doses of alcohol are injurious; that all drinks containing alcohol in all proportions (even the smallest) are evil; that "fermenting" is synonymous with "intoxicating;" and that alcohol does not exist in nature or under natural conditions. These curious specimens of the intemperate advocacy of temperance scarcely require refuting in the eyes of sensible men; but it may possibly be worth while to show their fallacy to those who use them in argument, that, if they should still remain open to conviction upon the matter, they may cease to regard them as props for their often random statements, and may use common-sense reasons for the cause which they would advance. It is pleasant to know that Dr. Kerr does not regard ginger-beer as an intoxicant, in spite of its being a fermented liquor and a "beer," but he does consider "any drink containing more than 1.5 per cent. of alcohol, equivalent, say, to 3 per cent. of proof spirit, intoxicating, and therefore destructive and dangerous. Cyder, perry, pale ale, beer, stout, and claret, are intoxicating drinks;" and he advocates total abstinence from "all liquors which have the power to make men drunk and to steal away the senses." The author then states what he regards as the testimony of physiology in respect of the action of such intoxicating drinks on the body, refuting the opinion that they arrest waste and take the place of food; he shows what is the testimony of pathology as to their action on the different organs of the body, and he computes that over 40,000 persons die in the United Kingdom every year from personal intemperance, and nearly double that number indirectly from the same cause. He dwells on the miseries of dipsomania, and tells how heredity implants the liking for strong drinks in the children of drunkards. He speaks of protection for the reformed, in which he takes great interest; and has found alcohol occasionally, though very rarely, useful in disease. Altogether, the lecture is simple, and fulfils its purport sufficiently for non-scientific hearers and readers.

Random Notes and Observations of a Trip through the Great North-West; including a few words about the Yellowstone National Park. By Dr. EDMUND C. WENDT, New York. New York: Trow's Printing and Bookbinding Company. 1883.—These notes, reprinted from the *New York Medical Record*, are now published in pamphlet form. They originally formed a series of letters addressed to the editor of the *Record* by the author, who participated last autumn in the opening excursion of the North Pacific Railroad, and who therein recorded the impressions, more particularly from a medical point of view, which were made upon him by the wide West. He spent one week in Chicago, and thought the status of the profession in that city of phenomenal growth much lower than it ought to be. The remedy for this state of things, he thought, lay in the fact that the doctors charges were too low. He found a lake-side sanitarium for the treatment of diarrhœal diseases amongst infants, who were brought to the institution in the morning, and remained there all day, receiving medical treatment and proper food. Much success had naturally attended this excellent method of treatment amongst the babes removed from the contaminated atmosphere of crowded city-tenements to the purer breezes of the lake-side. Minnesota, St. Paul, Minneapolis, Dakota, Montano, the Rocky Mountains, Portland, and the Yellowstone National Park, were visited in order, and received attention. Almost universally in the far West, Dr. Wendt found existing a feeling of harmony within the profession, which "sounded to Gotham ears like the strains of sweet music long forgotten, though dearly loved." The incomes made by physicians in these western districts the author did not discover to be excessive; but they lived "content and happy in the absence of patient-stealing dispensaries." Of the huge geysers in the Yellowstone Park he remarked that, "It makes an ipecac-prescribing man feel almost small by comparison to witness such powerful results! Nature is, after all, a great physician—a model instructor. Only to think of the immense *vis emeticatrix naturæ*, here so plainly visible!" The notes are pleasantly written, but are somewhat meagre, and thoroughly justify the prefix "random" attached to them by the author.

Contributions to Operative and Clinical Surgery. By JORDAN LLOYD, F.R.C.S. Birmingham: Cornish Brothers. [illegible]. This little volume is made up, in most part, of several contributions that have already appeared in this and other medical journals. In each of these Mr. Lloyd deals with some subject of interest and importance in modern surgery, and the collection may be well recommended to the notice of those engaged in active surgical practice. The contributions are all devoted to subjects of practical import, and those on [illegible] fracture and on the treatment of [illegible] [illegible] fractures of the patella, are really valuable additions to the literature of these debatable subjects.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

SESSION 1884.

Thursday, March 27th.

DR. ACLAND, President, took the chair at two o'clock.

Results of Examinations.—On the motion of Sir HENRY PITMAN, seconded by Dr. STORRAR, a table showing Results of Professional Examinations, held in 1883, for qualifications granted under the Dentists' Act, was received and ordered to be entered on the minutes.

The late Dr. Allen Thomson.—On the proposal of the PRESIDENT, it was unanimously agreed that three members of the Council, Mr. Marshall, Dr. Struthers, and Dr. Aquilla Smith (being one from England, one from Scotland, and one from Ireland), should attend the reception of the remains of Dr. Allen Thomson, at the Euston Square Station, in the name and on the behalf of the Council.

The Conjoint Scheme in England.—Sir HENRY PITMAN moved, and Mr. MARSHALL seconded, the reception and entry on the minutes of communications received from the Royal College of Physicians of London and the Royal College of Surgeons of England, giving notice of withdrawal from the scheme for an examining board for England, dated May 1st, 1877, which scheme had been approved and sanctioned by the General Medical Council, but never came into operation.

Dr. PYLE considered that in the prospect of medical legislation it would be as well to let this matter of the conjoint scheme remain in its present position.

Dr. QUAIN said the subject of the conjoint scheme had occupied the attention of the Council for many years. On June 7th, 1871, a resolution was passed to request the universities and medical corporations in each division of the United Kingdom to concert such a scheme, and submit it to the General Council. It therefore was due to the Council that they should be informed why the English scheme had not been carried out, although it had been approved of by the Council. If it had been carried out, the profession would now be in a position to say that they did not want any legislation in the direction of divisional boards.

Dr. AQUILLA SMITH thought it was quite irregular for the Council to entertain Dr. Quain's suggestion. The two colleges had acted quite within their right in giving twelve months' notice. The Council ought not now to reopen the whole question, and ask those bodies why they did what they had a perfect right to do.

The Rev. Dr. HAUGHTON agreed with Dr. Quain that the Council ought to have some reasons given them why the machine would not work, and he should object to having the letters placed on the minutes without some such explanation.

Sir HENRY PITMAN said they were formal letters written by two corporations out of courtesy to the Council. They had power to withdraw, and they had given notice to do so.

Mr. MACNAMARA thought the representative of the College of Physicians had made some mistake in stating that it was out of courtesy to the Council. The conjoint scheme had received the sanction of the Council, and therefore the corporations could not withdraw without sending a notification to the Council. At the same time, he was perfectly sure that neither of the Colleges would be guilty of any act of discourtesy towards the Council. The question put by Dr. Quain was most germane to the matter. Entering the letters on the minutes would be tantamount to eating their own words, and would be practically endorsing the action of those bodies. The members of the Council were entitled to ask the reasons for the withdrawal. No doubt they were very satisfactory and cogent reasons; but, twelve months ago, there was on the Agenda something about another scheme for England; and suddenly, as if by the wand of a magician, it disappeared. One day it was in the programme; and when, the day after, he came prepared to discuss it, it was gone, and he was subjected to the chance of dying of suppressed eloquence. Clearly, therefore, before entering the letters on the minutes, and thereby giving its approbation to them, the Council had a right to have an explanation.

The Rev. Dr. HAUGHTON said he was prepared to move that the subject be postponed until to-morrow, and he would give notice of a motion on it.

Dr. PYLE said he would second such a proposal.

The Rev. Dr. HAUGHTON wished to asked the President what would be the right course for him to take in order to do so. If the Council had been treated courteously, perhaps the universities had not, and all the parties to the bargain ought to have their say in the matter.

Dr. FERGUS regarded the whole discussion as irregular. The two bodies had simply given the twelve months' notice, which they had a perfect right to give.

Mr. SIMON said there could not be any doubt that these bodies had a perfect right to withdraw, but the motion being to put the letters on the minutes, any member of the Council had a right to move an addition to the motion, or a rider. For instance, he might propose to add, "and that the colleges be requested to inform the Council what has led to no action having been taken on the scheme," or "the course that these bodies propose to take in the future."

Dr. QUAIN hoped that the Council would clearly understand the distinction he made. The bodies had a right to withdraw, but in the letter from the College of Surgeons it was stated that the scheme had "never come into operation," and he wanted to know why such was the case. He believed there were about one hundred meetings held before the scheme was completed, and great trouble was taken in preparing it.

The PRESIDENT said Dr. Quain had no right to ask his question without notice, and certainly a discussion ought not to be raised upon it. No doubt, Dr. Haughton might give notice of a motion on any subject whatever, and the Chairman of Business would decide whether or not it was one that ought to go on the programme.

The Rev. Dr. HAUGHTON did not think the question whether or not the letters should be entered on the minutes was a fair one to put. It would be discourteous for him to say "No" to that question, but he could not say "Yes."

Sir HENRY PITMAN said he should object to any rider being added to his motion.

The Rev. Dr. HAUGHTON moved as an amendment

"That the question of entering on the minutes the letters from the Royal College of Physicians of London and the Royal College of Surgeons of England be postponed until to-morrow."

A division was taken, and the amendment was carried by 13 votes to 8.

The amendment was then put as a substantive motion, and carried.

Unqualified Assistants.—Sir HENRY PITMAN moved that the following letters be received and entered on the minutes:

(*a*) Privy Council Office, Whitehall, May 16th, 1883.

Sir,—I am directed by the Lord President of the Council to acknowledge the receipt of your letter of the 14th instant, on the subject of the employment of unqualified assistants by registered medical practitioners, and I am to inform you that the matter shall receive the consideration of his lordship. I am, sir, your obedient servant, C. L. PEEL.

H. W. Acland, Esq., F.R.S., M.D.

(*b*) General Register Office, Somerset House, London, W.C., March 19, 1884.

Sir,—I am directed by the Registrar-General to inform you, with further reference to your letter of May 14th, 1883, that he has carefully read the resolution referred to therein, together with the report of the committee appointed to consider the evasion of the provisions of the Registration Act by unqualified assistants of medical practitioners, and he is quite alive to the serious results of such practices.

The Registrar-General has endeavoured, to the utmost extent of his powers under the Registration Acts, to prosecute the offenders, and he sees much force in the contention by the Medical Council that further legislation is required in order to put a stop to the practice complained of; at present, however, he can see no immediate prospect of his being able to get passed into law any amendment of the Registration Acts.

If the General Medical Council are of opinion that they could procure the insertion into the Medical Acts Amendment Bill of a clause which would prevent unqualified assistants from giving misleading certificates of causes of death, and will draw up and submit to the Registrar-General such a clause, it shall have his immediate and favourable consideration.—I am, sir, your obedient servant,

WILLIAM CLODE, Secretary.

H. W. Acland, Esq., M.D., Regius Professor of Medicine, etc.

Dr. HUMPHRY seconded the motion.

Dr. CHAMBERS asked whether the Executive Committee had taken any further steps to obtain legislation on the subject of unqualified assistants.

The PRESIDENT said the first letter, from the Privy Council Office informed the Executive Committee that the matter should receive the consideration of his lordship. He thought it right to communicate with the Office in order to ascertain whether or not the subject had been further considered, and the reply was that, as the present Bill was going into the House of Lords in a very little altered shape, there would be no clause introduced in the House of Lords upon that subject. Therefore, there was no such clause in the Bill. He had also communicated with the Registrar-General's Office, and asked whether there was anything further that it would be to the interest of the Council to know, and the letter of March 19th was written in reply. He wished to draw the special attention of the Council to the very important last clause in that letter, by which they were informed that if they had a very distinct and clear view as to what should be done, the Registrar-General would give his best attention to any clause which they might suggest. This was a very important matter, and the Council would remember that he gave special attention to it in his address.

The motion was then agreed to.

Medical Congresses at Copenhagen and the Hague.—The following communication was ordered to be entered on the minutes, on the motion of Sir HENRY PITMAN, seconded by Dr. HUMPHRY.

Science and Art Department, London, S.W., January 18th, 1884.

SIR, I am [illegible] of a letter and its enclosures, received from the [illegible] relative to two Congresses on [illegible] and sanitary questions proposed to be held in May next at Copenhagen and the Hague respectively; and I am to state that, should the General Council of Medical Education wish to nominate a delegate, the Secretary of State for Foreign Affairs has expressed his readiness to furnish him with letters to Her Majesty's representatives at Copenhagen and the Hague, and to announce his nomination to the Governments in question. It must be understood, however, that Her Majesty's Government are unable to contribute towards the expenses of the delegates at either of these Congresses. I am to add that the Department would be glad to receive the names of any genuine sanitary authorities whom you may think it desirable should be represented on the occasion, in order that they also may be invited to send delegates. I am, sir, your obedient servant,

W. D. DONNELLY.

The President of the General Council of Medical Education.

Mr. MACNAMARA asked if the Council intended to appoint a delegate.

Mr. SIMON said it was out of their province.

The PRESIDENT said there was no motion on that subject.

Report of the Finance Committee.—The report of the Finance Committee was presented. It was to the following effect. The income of the General and Branch Councils for the year ending December 31st, 1883, had been £7,945 7s. 6d., an amount which exceeded by £780 19s. 7d. the income for 1882. The expenditure during the year 1883 had been £4,451 6s. 6d., which was less than the expenditure of 1882 by £369 3s. 7d. The excess of income over expenditure for the year 1883 amounted to £3,494 1s. The excess of income over expenditure for the previous year, 1882, was £2,343 17s. 10d. A table annexed to this report indicated the increase and decrease in the several items of expenditure during the years 1881, 1882, 1883. As regards expenditure, there had been an increase, which amounted to £40 19s. 4d., during the year 1883, in law-expenses. In salaries and wages, there had been an increase of £86 1s. 8d., owing mainly to an increase in the business of the office, requiring the employment, during the greater part of the year, of a junior assistant in the general work. The principal item of diminished expenditure for the year 1883, as compared with 1882, was in the visitation of examinations. This amounted to £467 10s. 9d., the expenditure during 1883 on this account having been *nil*. There was a decrease also in the item of fees to members of the General Council, amounting to £343 4s. 10d.—a result due to a short session of the Council. From another table, which showed the average income and expenditure of the General and Branch Councils during the last seven years, it would be seen that the average yearly income during that period exceeded the average yearly expenditure by £1,332. Another table showed the receipt and expenditure of the Dental Registration Fund for the year ending December 31st, 1883. In the receipts, £668 4s. 4d., there was a decrease of £50 3s. 1d. over those of 1882; while the expenditure, £744 18s. 2d., had been less by £483 0s. 8d. The deficiency of income for the year was thus £76 13s. 10d., as compared with a deficiency of £506 2s. 1d. in 1882. During the year, a sum of £600 had been invested by the Scottish Branch Council, making a total investment of £3,800. Thus the total amount now invested by the three Branch Councils was £36,169 17s.

Dr. QUAIN moved that the report be received and entered on the minutes. There had been no extravagance and no waste; and if the present year closed the life of the Council, they would have the satisfaction in dying rich and leaving a good legacy to their successors. If there were not a meeting of the Council in the summer or autumn, it was more than probable that it would be necessary for the Pharmacopœia Committee to meet in London, and he considered that, in that case, they ought to receive the same fees and expenses as the Executive Committee.

Sir HENRY PITMAN seconded the motion, which was agreed to.

Report of the Pharmacopœia Committee.—The following report was read.

The Pharmacopœia Committee reports that, since the last meeting of the Council, in April, 1883, the arrangements for the preparation of the next edition of the *Pharmacopœia* have been continuous. The subcommittee has met on four occasions, and has been in communication with the editors personally, and by written reports. A memorandum, of which a copy is annexed, has been forwarded by the Registrar to the several medical authorities mentioned in the Medical Act, to various pharmaceutical bodies, and to several gentlemen holding prominent positions as practical pharmacists and manufacturing chemists. Answers in reply to this communication have been received from the Royal College of Physicians of London (provisional), the Royal College of Surgeons of England, the Apothecaries' Society of London, the Royal College of Physicians of Edinburgh (provisional), the Royal College of Surgeons of Edinburgh, the King and Queen's College of Physicians in Ireland, and the Apothecaries' Hall of Ireland. These communications from the several medical authorities contain many valuable suggestions, for which the thanks of the Council are due. Communications have also been received from the following pharmacists and manufacturing chemists, and to these gentlemen the Council are much indebted for the valuable information afforded to the Committee: Messrs. J. B. Barnes, London; W. Inglis Clarke, D.Sc., for Duncan, Flockhart, and Co., Edinburgh; S. Gale, for John Bell and Co., London; D. Howard, for Howard and Sons, Stratford; F. J. McFarlane and Co., Edinburgh; B. S. Proctor, Newcastle; J. C. Tresh, D.Sc., Buxton; Thomas Farries, for Burgoyne, Burbidges, Cyriax, and Farries, London; John Moss, for Stagg, Harker, and Moss, London; F. W. Fletcher, Edinburgh; T. and H. Smith and Co., Edinburgh. Some members of the profession, notably Mr. Marshall, President of the Royal College of Surgeons, and Mr. Hussey of Oxford, have forwarded some very practical suggestions. All the documents and reports have been placed in the hands of the editors. It will be found that many of the suggestions made to the Committee had been anticipated, but all will receive the fullest consideration. In conclusion, the Committee feel satisfied that the information now in the hands of the skilled editors, will be sufficient to render the next edition of the *British Pharmacopœia* worthy of the approval of the Council and of the profession.

Dr. QUAIN moved that this report be received and entered on the minutes.

Mr. SIMON seconded the motion.

The resolution was agreed to.

Dr. STORRAR asked to how much the fees and expenses to which Dr. Quain had alluded would amount.

Dr. QUAIN said about £70 or £80.

A resolution was thereupon agreed to:

"That, if any special meeting of the present Pharmacopœia Committee be necessary at such times as the General Council is not sitting, the treasurers be authorised to pay the fees and expenses of such meeting on the same scale as for a meeting of the Executive Committee."

The Report of the Preliminary Examination Committee was read. It was as follows.

The Committee were appointed by the Executive Committee to consider the following letter referred to them by that Committee, and to report thereon to the General Council.

St. Thomas's Hospital Medical School, Albert Embankment, S.E.,
M[illegible] 1884

Dear Sir, The subject of Elementary Mechanics [illegible] Preliminary [illegible] General Medical [illegible]

Can you inform me [illegible]

W. J. C. Miller, Esq., B.A.

They beg leave to report as follows. They find, on inquiry, there is no evidence that, up to the present time, any of the students have included Elementary Mechanics in their Preliminary Examination; or that any of them have subsequently passed an examination on this subject. Indeed, it does not appear that in England there are any opportunities for their doing so subsequently to registration. The Committee feel that, in this and other respects, the subject of Preliminary Examination repuires the consideration of the Council, but the present period appears to the Committee to be most inappropriate for entering upon this consideration. Should the Bill now before Parliament become law during the present session, the consideration of this subject will devolve upon another body. Should it not do so, it would be the duty of the Medical Council to lose no time in entering fully upon it.

Sir HENRY PITMAN, in moving that the report [illegible] on the minutes, said that the question raised was of somewhat an extraordinary kind. The Council required that every student should pass a preliminary examination in [illegible] fluids, comprising the elements of statics, dynamics, and hydrostatics, but that examination might be passed [illegible] of the preliminary examination, before the [illegible] first professional examination. The candidates seemed to have taken advantage of the indulgence, and it was found upon inquiry that they all obtained registration without passing that examination, and never afterwards took up [illegible] awkward provision to give them, and it was impossible for them to make good the examination afterwards, because there was no preliminary examining body in England that would examine on that subject alone. That was the difficulty the Committee had to deal with, and they had therefore placed the facts before the Council in order to ask for advice. An answer must be sent to the letter.

The Rev. Dr. HAUGHTON said that when these subjects were introduced into the preliminary examination, he anticipated the difficulties that had arisen. It was quite true that there were no bodies in the country willing to examine in one particular subject, such as mechanics and hydrostatics, and they would not alter their regulations merely for the benefit of medical students. In many respects, the preliminary arts examination required alteration, and he intended, at some future time, to bring the question of Latin before the Council; but, under present circumstances, he thought the letter might be entered on the minutes, and there left.

Mr. MACNAMARA said that when a student came up for his professional examination at the Royal College of Surgeons in Ireland, if he had not previously passed in these subjects, an examiner was specially told off to examine him then and there. This was a little expense and trouble to the College, but in this, as in every other respect, they had loyally carried out the wishes of the Council.

Mr. SIMON said, when the Council was asked if students who had not passed in these subjects must pass, the answer was that they must before being admitted to the second professional examination, in accordance with the regulations of the Council.

The Rev. Dr. HAUGHTON said it was a physical impossibility for the students to comply with the regulation.

Mr. SIMON said that, if the necessity for it was shown within a month, the College of Preceptors would have a separate examination in the subjects, so that men accidentally in default could go to that body.

Dr. HALDANE said that both in the corporations and in the universities in Scotland candidates might go up for the whole number of subjects or for a part of them, and take credit for those in which they passed. It very seldom happened that a man passed the whole at once, but he might obtain a special examination in physics at any period during his studentship.

Dr. MATTHEWS DUNCAN said it was evident that the recommendation of the Council had been carried out in Scotland and Ireland, but not in England. It was extremely desirable that some such plan as Mr. Simon had recommended should be adopted at once, so that students in England might not get off easily. He also deprecated the idea that the Council was in a moribund condition. It would be wrong to act upon the supposition that they would be dead in a few months, and they should not give up performing their duties until they died.

Sir HENRY PITMAN suggested that the answer to the letter should be that, so long as the regulations of the Council required that mechanics should be one of the subjects of examination, the students would be expected to pass in it. It was not for the Council to find the machinery.

The PRESIDENT said that more than once he had felt it his duty to say, in his addresses, that until the Council was at an end the work assigned to it must be steadily performed. The difficulty in England had arisen partly from the progress of education, and the elaborate subdivision of subjects that students were called upon to take up for examination. Lately, in Oxford, a special statute had to be passed to enable men who had taken honours in other subjects to have a special examination in these subjects. All that the Council could now do was to insist on the regulations being observed. Local difficulties could be easily got over.

Dr. MATTHEWS DUNCAN considered that physics was the most important subject in the preliminary examination; in fact, it was more important than all the others put together.

Dr. STORRAR thought that the Council ought at once to say that no person should hereafter be registered as a medical student whose preliminary examination in arts had not included these subjects.

Dr. PETTIGREW approved of Dr. Storrar's suggestion.

Dr. HALDANE agreed with other members of the Council as to the importance of mechanics and physics, but, in his opinion, the preliminary examination was at present pitched too high, and included too many subjects. It would be very much better to insist upon a tolerably full knowledge of two or three subjects.

The PRESIDENT asked the registrar to state what difficulties arose in the details of the working of the office with regard to this subject.

The REGISTRAR said that, in preparing the *Students' Register* for the present year, he put in a note to this effect, that, in cases where a special mark was prefixed to a name, and in those cases alone, the student had, so far as could be ascertained, passed in elementary mechanics, etc.; but he found, on inquiry, that there was no evidence that any one had passed, nor at the present time had he had any advice from the registrars in Ireland and in Scotland that any had passed there. The Council recognised certain examinations *en bloc*, and the certificate did not state whether the student had passed in any particular subject.

Mr. MACNAMARA said that, as far as the Irish Registrar was concerned, it had never been understood that the Council required the fact of passing in elementary mechanics to be specifically mentioned.

Mr. SIMON was of opinion that an elementary knowledge of physics ought to precede the commencement of medical studies. Considering what were the duties of the mass of the profession, a knowledge of that subject should certainly be expected. The letter from St. Thomas's Hospital meant in substance, "Does the Council mean its recommendation to be obeyed?" Only one answer could be given to that, and he would therefore suggest that Mr. Rendle should be informed that the regulation was one to which the Council attached much importance, and that it intended it should be strictly observed.

Dr. DUNCAN said he would second such a motion.

Further discussion on this subject was then adjourned.

The late Dr. Allen Thomson.—The deputation to Euston Station having returned,

Mr. MARSHALL announced that Dr. Struthers, Dr. Aquilla Smith, and himself, arrived in time to witness the solemn and respectful way in which the remains of Professor Allen Thomson were received for transmission to the north. They found at the station a large assembly of representative men, including the President of the Royal Society, and representatives of biology and other sciences. The Council would have deeply regretted it if they had not been represented on the occasion. The relatives of Dr. Thomson informed the deputation that, in due course, a formal recognition of their graceful act would be sent to the Council.

The Case of Dr. O'Hara.—The Council again deliberated in private on the case of Dr. O'Hara; and, on strangers being readmitted, the President announced that it was once more adjourned.

Application for Restoration of a Name to the Register.—Matthew Bass Smith, whose name was erased from the *Register* on March 31st, 1873, and who had presented a petition for restoration, appeared with his solicitor, Mr. T. A. Nelham. A petition on his behalf was also presented, with the signatures of 36 medical practitioners, 3 clergymen, 4 schoolmasters, 1 coroner, 1 solicitor, and 60 other persons.

Mr. NELHAM, in reply to the President's inquiry whether he had any additional facts to lay before the Council, said that Mr. C. F. Knight, who had known Dr. Smith for twenty-four years, was present, and was prepared to confirm the statements in the petition.

In answer to a question put by the President, Dr. SMITH said he was Doctor of Medicine of St. Andrew's University, Member of the Royal College of Surgeons, Licentiate of the Apothecaries' Company, and Licentiate in Medicine. He had not been removed from the *Register* of the different bodies.

The Rev. Dr. HAUGHTON said that universities could not take away degrees which they had once conferred.

Strangers were directed to withdraw, and, on their readmission,

Mr. KNIGHT, of Highgate Hill, said he had known Dr. Smith for many years, both before and after the charge was brought against him, and knew that the facts stated in the petition were true.

The Council again deliberated in private, and had not concluded at six o'clock, when an adjournment took place.

Friday, March 28th.

DR. ACLAND, President, took the chair at 2 P.M.

Restoration of a Name to the Register.—The Council continued their private deliberation on Dr. Matthew Bass Smith's petition for restoration to the *Register*. On strangers being admitted

The PRESIDENT announced that the Council had decided to restore Dr. Smith's name to the *Register*.

The English Conjoint Scheme.—The Council resumed the consideration of the communications from the Royal College of Physicians of London and the Royal College of Surgeons of England.

Sir HENRY PITMAN said the proposal he had made was the ordinary one, that letters addressed to the Council from corporate bodies, and read in the ordinary course of business, should be entered on the minutes. He had not supposed that any discussion would arise, but some of the members of the Council took that opportunity to raise questions which were quite irrelevant. A proposal had been made to add a rider to the motion, but he could not entertain that. If the letters were to be entered on the minutes, it must be on the general merits of the case. He could not find anything in the letters which should excite the disapproval of the Council. They contained no expression in any way discourteous to the Council; they merely announced the fact that two corporate bodies, in the exercise of their right under a clause of the scheme, withdrew from it, and notified to the medical authorities that they had so withdrawn. Not as a matter of right, but as a matter of courtesy, the College of Physicians thought it proper to make the Council acquainted with what the College had done. The wording of the letters could not be altered; they could not be sent back, for they had been received and read. Entering them on the minutes was the course generally adopted. He could not say that the Colleges had been treated courteously by the Council. He would not say that it was done designedly, but it certainly was done in a way which was not likely to create a very good feeling. He, however, trusted that the Colleges would continue in the same harmony with the Council as existed previously, and he trusted that the voting would show that they were disposed to show the same courtesy to the Colleges as the Colleges had always shown to the Council.

Mr. MARSHALL said that he had been silent on the previous day because he had no power to explain why the Royal College of Surgeons withdrew. If the Council wanted to know, they should inquire of the Colleges. The next question was, why the scheme did not come into operation. On this point, too, he would say, if the Council wanted information, let the bodies be requested to give answers to any questions submitted to them.

The motion for entering the letters on the minutes was agreed to.

The Rev. Dr. HAUGHTON proposed

"That this Council, having been informed, by the letter from the Secretary of the Royal College of Surgeons, that the scheme approved and sanctioned by the General Medical Council has never come into operation, desires to know if this statement be correct, and, if so, why such scheme has not come into operation."

He said his object was to obtain information on a subject in which the Irish bodies took a deep interest. When the English conjoint scheme was prepared, after an enormous expenditure of brain-work and time by the various bodies concerned, it was approved by the Council. In the debates upon it, the Irish bodies were urged to follow the example of the English bodies. They proceeded to do so, and at last succeeded in preparing a scheme which, with one trifling exception, was adopted by the Council. The Scotch bodies followed suit, and had now a conjoint scheme to be brought out. It was important, in considering the Scotch scheme, that the Council should know what mysterious operations had prevented the English scheme from working. He did not know whether it would be worth while to follow up Mr. Marshall's suggestion, and respectfully ask the Colleges to give the reasons. It it would not be objected to, he would propose a resolution to that effect, but he would not if the representatives of the two Colleges did not approve.

Dr. QUAIN, in seconding the motion, said nobody was more anxious than he that the letters should be recorded on the minutes. This was the first official intimation received by the Council that the English scheme was not in operation. Two bodies had withdrawn, but if the rest of the bodies adhered to the scheme, the others would be wise in returning. The withdrawal of the two bodies did not destroy the scheme. The University of London had not withdrawn. The Convocation of that University willingly gave up their special Act of Parliament in order to join the scheme in the interests of the public. It ought to be distinctly known why that scheme failed.

Mr. SIMON did not regard the scheme as still continuing; it inevitably terminated by the withdrawal of the two great corporations.

Dr. STRUTHERS had voted for the postponement of Sir Henry Pitman's motion, but not at all out of discourtesy to the Colleges. Their withdrawal from the scheme had given him the most lively satisfaction. His reason for supporting the postponement was that it should be known in some way that the withdrawal was not a collapse of conjoint schemes in England. Most members of the Council knew what the reason of the withdrawal was, but he was anxious that the outside world should not suppose that a voluntary conjoint scheme by the corporations had become impossible, and that, therefore, the strong arm of the law had to interfere. The representatives from Scotland generally disapproved of the conjoint scheme, and criticised it, and now they had the satisfaction of seeing that their English friends had gradually discovered that it was possible for the Scotch to be right and the English wrong. There was no saying what was *in utero*, and he could only express the hope that before very long a conjoint scheme, such as Scotland had always advocated, between the corporations as distinct from the universities, would be the outcome of the wisdom and experience of the great corporations of London.

The discussion was adjourned.

The case of Michael Healy.—The case of Michael Healy, who had been summoned to appear before the Council, charged with infamous conduct in a professional respect in associating himself with a notorious foreign quack, was considered.

Mr. Healy did not appear.

Mr. BURRELL (solicitor) stated that the summons was served by his agents at Liverpool. Their clerk went to the house, 56, Derby Street, and the servant informed him that Mr. Healy was in and disengaged. He was then shown into a consulting-room, in which was a gentleman who said he was Dr. Healy. Thereupon the summons was served. The person seemed more like a foreigner than an Irishman. The action in this matter was at the instigation of the Liverpool Defence Association, who promised to supply the necessary materials for bringing the facts before the Council. The Association was written to several days ago, and finally urgency was pressed on them by a telegram. A letter from them had been received that morning, stating that Healy died at Christmas, and that the quack had now with him two other practitioners.

The Council having deliberated with closed doors for a short time, it was announced that the matter was adjourned till to-morrow.

The English Conjoint Scheme.—The debate on the Rev. Dr. HAUGHTON's motion was resumed.

Mr. MACNAMARA said it was highly desirable that the Council should know the facts which had induced the two English Colleges to withdraw from the conjoint scheme; otherwise it would be open to suspicion that the object in breaking up the English conjoint scheme was to favour the passing of the Medical Bill. He had been exceedingly surprised at the attitude assumed by the two great corporations, inasmuch as they had not been active in opposition to the Bill; but the only active competitor with them at present, the Apothecaries' Company, was, *ipso facto*, sponged out of existence by the Bill. He thought the representatives of the two Colleges should state candidly why they had withdrawn from the scheme. He did not speak in any hostile spirit towards them, for he did not believe there was a single member of the Council who held the College of Surgeons and the College of Physicians in higher honour than he did. He regarded them as most honourable, high-minded corporations; and it was in consequence of the interest he took in them that he thought it was due to them to state the suspicions to which they would expose themselves if they did not inform the Council of the entire facts of the case.

Dr. HUMPHRY had intended to be silent on this subject; but, after the speech of Dr. Struthers, and the remarks that had fallen from Mr. Macnamara, he could not longer hold his peace. Perhaps he had more to do with the conjoint scheme than anyone else. He was present at a greater number of meetings than any other person, and knew the whole history of it thoroughly. Many years ago, the Council passed a resolution that it was desirable that there should be in each division of the kingdom a conjoint examination through which all who obtained licences should pass. The English universities and corporations very soon proceeded to act upon that recommendation. They went on with their work loyally and carefully, and with the utmost pains. Not only did they agree to a plan, and present it to the Council, but they also drew up a system of education and examination, and were perfectly ready and willing at once to carry it out. The question was, Why did not they carry it out? Dr. Struthers had said that the result showed that England was wrong, and Scotland was right. If England were at fault, the fault lay at Scotland's door. The English bodies were perfectly willing to carry out the scheme, and intended to do so, but they hesitated because they felt it was questionable whether it was wise to carry it out in one division of the kingdom unless there were a good prospect that it would be carried out in each of the other divisions. As time went on, they found that the prospect of its being carried out in Scotland became less and less, and an apprehension arose that, if the examination were instituted [illegible] students would pass more and more across the Tweed, [illegible] licences in Scotland. For his own part, he thought [illegible] have gone on. If it were a right thing, it should [illegible] but every one did not feel that. There were many difficulties in the way of framing the scheme, but these were completely overcome. The English bodies were liable to no imputation, and Mr. Macnamara's remarks had not a shadow of foundation. The decision of the two corporations to withdraw had no reference to the [illegible] Medical Bill. The reason was that Scotland would not go on, and England was afraid to go on lest the ends which the Council had in view would be frustrated. It appeared to him, after reading over the evidence given before the Royal Commission, that the grounds for proposing the Bill were mainly that English students, finding the examinations in the Scotch bodies easier, went to them to obtain their licences

Mr. MARSHALL said that the College of Surgeons had not advertised that its examination would be under the conjoint scheme, but it had prepared the necessary documents, and all preliminary steps had been taken. That did not invalidate Dr. Humphry's main position, which was that the English did not go on with the conjoint scheme because there was no conjoint scheme in Scotland. The scheme dated from 1877, and in April 1878 difficulties were seen in consequence of the want of combination in other divisions of the kingdom, and a resolution was passed by the College of Surgeons, which said "that the promoters of the English conjoint board would have to recognise that their board could have no reasonable chance of success while certain authorities in other divisions of the kingdom might compete against them." That included Ireland as well as Scotland. The ground for delay had not been removed, and, therefore, the machine had not been put in action. There was a weak point in the scheme—that it had a clause permitting dissolution. The English bodies did not care what motives were imputed to them. He denied the right of any person to ask for motives. The College of Surgeons had dealt with the question openly. When they found that the conjoint scheme could not be brought into play because there was no similar action in Scotland and Ireland; they were bound, in the interests of medical education and progress, to see whether they could not join with some other corporation in order to give the students of England facilities for coming up to one uniform and complete examination, irrespectively of what was done in Scotland or Ireland. It might be imputed that they had done this in order to thwart medical legislation, but such an idea had never entered into their consideration. They had delayed bringing forward any proposition until the Medical Bill was issued; but if the Government were unable to deal with this vexed question so as to settle it at once for all, then the Colleges had a legitimate right to see what they could do amongst themselves. The College of Surgeons and the College of Physicians had passed resolutions approving of the principle of the Bill, but reserving a right with regard to its details. They said distinctly that they had a right to form a combination in England.

Dr. QUAIN, being well content with the discussion that his question had originted, asked that the motion might be withdrawn.

The Rev. Dr. HAUGHTON said it was not part of his intention to force the hands of the College of Physicians and the College of Surgeons; and the explanations made by Mr. Marshall and Dr. Humphry would satisfy any reasonable person. He was, therefore, willing to withdraw the motion.

Mr. TEALE regarded the discussion as valuable. If the Bill passed, the matter would be taken out of the hands of the Council; but if it did not pass, the discussion would strengthen the tendency in different parts of the kingdom to form conjoint boards. He regretted the failure of the English scheme.

Dr. SCOTT ORR remarked that, when a resolution was passed that there should be one conjoint board in each division of the kingdom, Scotland endeavoured to form such a board.

The PRESIDENT said that it was he who proposed to the College of Physicians that there should be a conjoint board of the College of Physicians and the College of Surgeons of England. He did not wonder that some of those who had trusted him were puzzled and perplexed; but only one had the candour to say to him that, after all, it was clear he wished to upset the conjoint scheme in England. The Council had for many years seen that it was a great evil to have so many different bodies in this country. Under their Act, it was in their power to remedy it; and the Council felt that, either voluntarily or by by-law, there must be a reduction of the examining boards. England manfully and resolutely determined to sacrifice personal interests and combine for the purpose. Why, then, was an endeavour now made to break it up? Because there was something more important than the opinion that politicians might form about them, and that was the education of the future young men of the profession. When it was manifest that the conjoint scheme in England, after so many years, did not come into operation, he implored the College of Physicians, of which he had been a Fellow for many years, to unite with the College of Surgeons, and no longer wait for politicians. He was not afraid of Scotland or Ireland. The language he always used was, "Let us do our duty here, and leave our colleagues elsewhere to use their judgment." It was asked why the two colleges proposed to do this, when legislation was about to take place. The answer was, that it was uncertain whether or not there would be legislation last year. He believed that there would be, but there was none; and looking to the state of the political atmosphere at this moment, who could say that there would be this year? He did not suppose that the Medical Bill was the best possible; but the Government said it was the best they could do. It was better that they should do that, than that the poor students should be forced to do so much work, some of which he believed to be quite unnecessary, and tending to distract them from their clinical and other studies. It was a hard thing for an university man to cut away the ground from under his own feet, and break away his university from the College of Physicians; but there was a higher duty than thinking of the university or the colleges, viz., to think of the future of the students and of the medical profession in the country. If there could not be a conjoint board throughout England, he should think it would be better that the universities should do the best they could, and the corporations do the best they could, and thus, at any rate, minimise the evils of the others. He was glad that the question had been ventilated, so that it might be understood by the public that the Council was now, as it always had been, animated by the desire, in the face of various difficulties, political and professional, to do the best it could for the education of the students, and therefore for the benefit of the public.

The motion was withdrawn.

The Death of the Duke of Albany.—The PRESIDENT: I am sorry to disturb the proceedings, but, as it has been communicated to me, I think you will forgive my communicating it to you. I have just received the news that the Duke of Albany is dead; and those who knew him well may perhaps forgive me, who knew him from a boy, however slightly, for being much moved on the receipt of the intelligence. He seems to have died at Cannes suddenly. I telegraphed to Windsor half an hour ago, to ask whether it was true; and, though I have not received a reply, Dr. Matthews Duncan has heard it in a way which, he thinks, precludes all doubt.

It was ultimately decided to leave to the President the drawing up of a letter expressing the sincere and respectful sympathy of the Council with Her Majesty in her bereavement.

Report of the Preliminary Examinations Committee.—The motion to enter on the minutes the report of the Preliminary Examinations Committee was agreed to.

Mr. SIMON moved the following resolution:

"That, in answer to Mr. Rendle's letter, the Registrar inform Mr. Rendle that the regulation to which he refers (that students who have not in their preliminary examination passed an examination in the elementary mechanics of solids and fluids shall pass this examination before or at their first professional examination) is a regulation to which the Council attaches much importance, and which it intends to be strictly observed."

The Rev. Dr. HAUGHTON seconded the motion. The Council could not have a law and not enforce it; but the truth was, the preliminary arts examination was being overloaded. Physics was not really included in it, for the examination was an exceedingly elementary one in mechanics and hydrostatics, not a single particle of evidence being obtained of knowledge of heat, electricity, and magnetism. Having charge of the educational department at Trinity College, Dublin, it had been his duty to call the attention of the professors to the miserably imperfect examinations in those subjects, and every student, whether medical or not, was now compelled to pass three examinations in them, extending over a year. He must first pass in pure statics, then in pure dynamics, then in hydrostatics, in addition to which he must pass three examinations in electricity and magnetism. He hoped that on a future occasion the Council would go thoroughly into the question of the preliminary arts examination.

Mr. TEALE considered the preliminary arts examination very much an illusion. The answers in the professional examinations frequently showed that the preliminary examination did not secure anything like a good preliminary training.

The resolution was agreed to.

Oxford and Cambridge Schools Examinations.—A communication from the Oxford and Cambridge Schools Examination Board was ordered to be entered on the minutes. It stated that the masters of schools had drawn attention to the difference in the conditions under which the General Medical Council allowed exemption from their preliminary examination to the holders of lower certificates granted by the Board, and of the junior certificates given by the Cambridge Local Examination's Syndicate. It appeared that the Medical Council required the holders of their lower certificate to have passed in English history and in geography, beyond the subjects in which they required a candidate holding a junior certificate from the Local Examination's Syndicate to have passed. The Board suggested that for the future the Schools Examination Board be allowed to omit the words "English history and geography."

Dr. HUMPHRY said he was informed by examiners that the Oxford and Cambridge School Board examination was a higher one than the junior local, and was actually on a level with the local senior. As a matter of wisdom and discretion, it would be better for the Council to assent to the request, and he proposed a motion to that effect.

Mr. **Teale** seconded the motion.

Sir **Henry Pitman** called attention to the fact that the Council had just decided in the case of mechanics that their requirements must be complied with.

The Rev. Dr. **Haughton** was also of opinion that the requirements should be insisted on. Geography must be retained.

Mr. **Simon** recommended the Council not to encourage nibbling at the requirements. If alterations were to be made they should reconsider the whole scheme.

Dr. **Banks** considered that if this application were granted, other bodies would ask that other subjects might be omitted from the preliminary examination.

Dr. **Storrar** regarded it as absurd to say that a lad was educated when he knew nothing of history or geography.

Mr. **Macnamara** supported the view that geography should be retained.

Dr. **Pettigrew** considered that the answer of the Council should be, that the order must be complied with.

Dr. **Humphry** withdrew his motion.

Supply of Anatomical Subjects.—On the proposal of Sir **Henry Pitman**, seconded by Mr. **Simon**, the following report by the Committee on the deficiency of anatomical subjects was ordered to be entered on the minutes. It was signed by Dr. Lyons, as chairman.

"Your Committee have to report that, in pursuance of the direction of the Council, it sat last year, and, by permission of the Council, again this year, and has carefully considered the matter referred to them. In the interval information has been sought for and obtained from the different divisions of the kingdom; and as the result, your Committee is unanimously of opinion that it is most unadvisable to recommend the Council to seek for further legislation on the subject."

Saturday, March 29th.

Dr. **Acland**, President, took the chair at 1 P.M.

The Death of the Duke of Albany.—The **President**: In obedience to the instructions which I received from the Council, I have endeavoured to draft a letter, which I will read to the Council for their consideration; and in case the Council see fit to adopt this or any other letter, I should suggest, considering the small number of persons of whom the Council consists, and considering the very varied interests and institutions over the whole country which they represent, that all their names and the places which they represent respectively, should be appended to the letter instead of the single signature of their President.

> May it please your Majesty,—We the General Medical Council of Education and Registration for the United Kingdom, have learnt with extreme sorrow this day, during our ordinary sitting, the blow which it has pleased God to inflict upon your Majesty, upon your Majesty's house, and upon the nation.
>
> In common with the rest of your Majesty's subjects, we admired the great attainments, the high character, and the noble aims of the Prince who has been taken from your Majesty and from the country so suddenly, so grievously. We felt that the Duke of Albany was walking in the footsteps of his revered father; we had hailed with delight his apparently established health; and we hoped for a long continuance of those powers which every year seemed to be more and more developed in his Royal Highness.
>
> We believe that a judicious and true friend has been taken from literature, from science, and from the arts of the United Kingdom of Great Britain and Ireland, and from the Empire, at a time when his calm judgment was not less valuable than his gentle and fostering care.
>
> Into the more sacred feelings of your Majesty's private life, and of the Duke of Albany's home, we dare not intrude, but we humbly tender the heartfelt sympathy of loyal subjects to your Majesty and to all your Majesty's family. We heartily pray that your Majesty may find all the consolation which a knowledge of the deep sorrow of your Majesty's subjects can impart. Your Majesty's loyal and dutiful subjects, Henry Wentworth Acland, M.D., C.B., President.
>
> General Medical Council, March 28th, 1884.

[Then follow the names of all the members of the Council.]

The Case of D. M. O'Hara. The Council resumed the adjourned consideration of the case of Daniel Murray O'Hara.

The **Solicitor** to the Council stated that notice of the last adjournment having been sent down to Prescot, a letter had been received from "Daniel Murray O'Hara, M.D.," asking that the case might be still further adjourned in order that he might be able to lay his case before the Council, and to supplement it by witnesses and documents which could not be disputed. He desired most emphatically an adjournment in order to enable him to bring home from America the veritable Owen Patrick O'Hare, who would appear in person with him on the occasion.

The **President** stated that the case of O'Hara was adjourned in order that the solicitor should collect any facts which it was in his power to ascertain, and he would now proceed to bring before the Council such facts as he thought necessary. Mr. Muir Mackenzie attended as assessor to the Council.

Daniel Murray O'Hara was then called, but did not appear.

Mr. **Wynne** stated that Owen Patrick O'Hare came to him from Mr. Needes as an assistant, that he produced testimonials in that name, and was known under the same name till a difficulty arose in regard to the signing of a certificate—owing to this name being absent from the *Medical Register*—and also as to some goods supplied. This person remained with Mr. Wynne from November, 1882, to June, 1883, and two months after he left, he was found to be practising as *locum tenens* at Prescot, in Lancashire. His general appearance corresponded with what had been previously stated thereon by Mr. Needes. Mr. Wynne added that the person he engaged was now at the Prescot workhouse. Ample evidence was, the witness believed, forthcoming to identify this Owen Patrick O'Hare with the so-called Daniel Murray O'Hara who was subsequently in practice at Prescot, and from the witness's own knowledge these dual-named persons were one and the same person. O'Hare left the witness's employment after having robbed him of £160.

Mr. **L. E. Kreitmayer**, clerk to Mr. Needes, had for four years known Owen Patrick O'Hare, who was repeatedly at the witness's office down to October, 1882. O'Hare limped, walked with a stick, had a beard partly black and partly grey, and was altogether of easily and definitely recognisable physiognomy. The man known as Owen Patrick O'Hare was the same person who had lately given himself out to be Daniel Murray O'Hara.

Mr. **John Quinn**, jun., a solicitor, from Liverpool, had known Owen Patrick O'Hare, who came to him (with an introduction from a Mr. Mahoney) to learn whether, having been erased from the *Register*, he could practise, or, if not, how he could be restored to the *Register*. His physical appearance, as known to witness, agreed with previous descriptions. Witness saw him last at Prescot, on the 15th inst., when he appeared to be quite well.

Strangers having withdrawn, Mr. **Muir Mackenzie**, acting as Assessor to the Council, stated the legal aspects and bearings of the case. There was, in his opinion, abundant evidence that Owen Patrick O'Hare and Daniel Murray O'Hara were one and the same person, but of this the Council were to be the judges. The evidence was summed up for the Council's decision on the case. The Council would be amply justified in regarding this as a gross case of personation, and ordering the erasure of the offender's name from the *Medical Register*, under Section 39 of the Medical Act (1858).

On motion put from the chair, it was resolved:

"That the name of Daniel Murray O'Hara, having been fraudulently restored to the *Register* on January 13th, 1883, at the instance of a person who has been proved to the satisfaction of the Council to be in fact one Owen Patrick O'Hare, be erased from the *Register*, and that the Council gives orders to the Registrar to erase the name accordingly."

Petition for Restoration to the Register. The Council considered a petition for the restoration to the *Medical Register* from William Story, whose name was erased from the *Register* by order of the General Medical Council of July 5th, 1882. William Story's petition stated that in 1881 he was convicted, on circumstantial evidence alone, of the crime of arson. He suffered two years' imprisonment, and then on petition signed by most influential persons, the whole circumstances of the case being thoroughly inquired into by the Home Secretary, the conviction was rescinded, and he was set at liberty. He was seventy years of age, and had no other means of gaining his living than by his profession, and it was for that purpose that he asked that his name might be reinstated. The petition was accompanied by a memorial signed by a considerable number of medical men, and also by testimonials from several clergymen and others relative to his character, and also a certificate from Dr. Forbes Winslow in regard to the state of his mind. The matter having come before the Executive Committee on March 11th, 1884, it was resolved:

"That the Executive Committee suggest to the General Council that they should inform each of the bodies that have withdrawn their licences from Mr. Story, that the Council sees no objection to their restoring these licences, should they think fit, with a view to his consequent registration."

After a full consideration of the subject, the Council resolved:

"That the Council, having heard a statement from the representative of the Royal College of Surgeons of England, giving an account of facts not within the cognisance of the Executive Committee, feels it undesirable to adopt the suggestion of that Committee."

The Scotch Conjoint Examination Scheme. It was resolved, on the motion of Dr. **Haldane**, seconded by Dr. **Struthers**, that the scheme of conjoint examination to be conducted by the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, be received and entered on the minutes.

The following are the chief features of the proposed scheme.

I. Each of the three medical corporations of Scotland, namely, the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, while reserving to itself liberty to confer its higher qualification or qualifications as it may deem proper, resolves, That on and after the 1st day of October, 1884, it shall abstain from the exercise of its power of granting its licence separately and independently, except only in the cases herein provided for; that is to say, the Royal College of Physicians of Edinburgh may, notwithstanding this agreement, grant its licence to candidates already possessed of one or other of the surgical qualifications mentioned in Schedule (A) of the Medical Act, 1858; and the Royal College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow, may each grant its licence to candidates already registered licentiates of one of the colleges of physicians of the United Kingdom, or graduates in medicine of a British or Irish university mentioned in Schedule (A) of the Medical Act.

II. The three medical authorities above-mentioned shall co-operate to form an Examining Board to conduct their examinations in combination; and that from the date to be fixed for the commencement of this scheme, the agreement or convention at present subsisting between the Royal College of Physicians of Edinburgh, and the Royal College of Surgeons of Edinburgh, by which, under Section XIX of the Medical Act, 1858, these two colleges conduct examinations in combination; and the similar agreement or convention at present subsisting between the Royal College of Physicians of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow, by which these two bodies conduct examinations in combination, shall cease and terminate, and the provisions of this present agreement, in respect to combined examinations, shall alone be valid.

III. Each of the co-operating medical authorities shall elect two members of a committee, herein called the Committee of Management. Of this committee of six members, three members shall retire annually, that is to say, one elected by each of the authorities; but they shall be eligible for re-election, but shall not at same time hold office as examiners. To the members of this Committee reasonable remuneration shall be paid for attendance at the meetings.

IV. The duties of the Committee of Management shall be:—*a.* To elect annually a chairman, who shall also be convener, and have both a deliberative and casting vote. *b.* To fix the periods and places of examination under the provisions of this scheme. *c.* To convene the examiners, and to apportion their work at the different periods and places of examination, in accordance with the provisions of this scheme. *d.* To appoint a general treasurer and any other executive officers they may consider necessary. *e.* To determine the fees to be paid to the examiners and other officers. *f.* To arrange for the visitation of examinations. *g.* To act generally as a Committee of Superintendence and Reference under the provisions of this scheme, and also in all matters concerning the examinations, which are not specially provided for in this scheme.

V. Each of the co-operating medical authorities shall elect its own examiners to examine on special or allied subjects, each of these authorities determining the number to be elected on each subject, and the period for which they shall hold office; and notification of the names of the examiners, with the subjects for which they are appointed, shall be duly made to the Committee of Management.

VI. The examination on the principles and practice of medicine (including clinical medicine) and in therapeutics, and, except only so far as is provided otherwise in the note appended to this article, shall be conducted wholly by the examiners on these subjects appointed by the Royal College of Physicians of Edinburgh; that the examination on the principles and practice of surgery (including clinical surgery) and on surgical anatomy, shall be conducted wholly by the examiners on these subjects appointed by the Royal College of Surgeons of Edinburgh, and by the Faculty of Physicians and Surgeons of Glasgow; and that, in all the other subjects the examination shall, subject to the provisions of Article VII, be conducted by the examiners of the three co-operating authorities. NOTE.—At the examinations to be held in Glasgow, the examination in clinical medicine shall be conducted by examiners of the Faculty of Physicians and Surgeons of Glasgow, being hospital physicians, and by the examiners of the Royal College of Physicians of Edinburgh.

VII. In arranging for the examinations at the different periods and places, the Committee of Management shall apportion the examiners in the different subjects of the three co-operating authorities, on the plan provided for in the schedule appended to this agreement, which plan may from time to time be modified, with the consent of the three co-operating authorities.

VIII. The examinations shall be held in Edinburgh and in Glasgow, it being arranged that at every third period they shall be held in Glasgow, and at the other periods in Edinburgh.

IX. There shall be three professional examinations, named herein the first, the second, and the third examinations. To the first examination candidates shall be admissible at the end of the first year (embracing a Summer and Winter Session) of study, on producing certificates of attendance on the prescribed courses of subjects embraced in the examination. To the second examination candidates shall be admissible at the end of the second year of study, on producing certificates of attendance on the prescribed courses of subjects embraced in the examination. To the third examination, candidates shall be admissible at the end of the full period of study, on producing certificates of having completed the entire curriculum.

X. The subjects of the first examination shall be Chemistry, Practical Chemistry, Elementary Anatomy, and Histology. The subjects of the second examination shall be Anatomy, Physiology, Materia Medica, and Pharmacy. The subjects of the third examination shall be: Principles and Practice of Medicine, including Therapeutics, Medical Anatomy, and Pathology; Clinical Medicine; Principles and Practice of Surgery, including Surgical Anatomy, Operative Surgery, and Pathology. Clinical Surgery; Midwifery and Diseases of Women; Medical Jurisprudence and Hygiene.

XI. A candidate, on passing the third examination, shall be admitted and receive the diplomas as Licentiate of the Royal College of Physicians of Edinburgh; Licentiate of the Royal College of Surgeons of Edinburgh; Licentiate of the Faculty of Physicians and Surgeons of Glasgow.

XII. The total fees payable by candidates in respect of the examinations and qualifications shall be twenty-five guineas. (Provisions are made for the apportionment of fees at the examinations, and the disposal of the moneys.)

XIII. This agreement shall come into operation on the said 1st day of October, 1884, and remain in full force and effect for the period of five years from and after that date; but declaring that the same shall come to an end and shall cease and determine on the 1st day of October, 1889, provided one or other of the said parties shall have given to the said first, second, or third parties, one year's previous notice in writing of their intention that the said agreement shall be so terminated; and, failing such notice, the same shall continue in full force and effect from and after the said 1st day of October, 1889, until the expiration of one year after such notice shall have been given as aforesaid.

A schedule to scheme shows the plan for an apportionment of exminers of co-operating authorities at examinations in Edinburgh and Glasgow.

Dr. HALDANE moved "That the proposed co-operation between the Colleges of Physicians and Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow be approved of." He said that, by the Medical Act, permission was given to the different bodies to combine for purposes of examination, and the Medical Council had, on more than one occasion, strongly advised that such a course should be pursued. A scheme was proposed many years ago, and received the sanction of the Council; but, from reasons which had been fully explained, the scheme never came into operation, and Dr. Humphry in particular mentioned that it was owing to the fear of competition on the part of the Scotch and Irish bodies that the English were afraid to bring forward this scheme. As far as a number of the bodies in Scotland were concerned, they were quite willing to enter into a similar scheme, and the corporations would have been quite prepared to join with the universities so as to establish a general scheme for Scotland. Efforts were made in that direction some years ago, shortly after the English scheme had been authorised, but those negociations entirely fell through. The corporations were perfectly willing to go forward, but the difficulty arose on the part of the universities. He was not at all blaming the present universities for the course which they thought it right to take, but matters in Scotland with regard to medical education and licences were in a very different position from what they were in England. In England the universities were neither great teaching medical bodies, nor great licensing medical bodies. In Scotland, the greatest amount of medical education was conferred by the universities. The corporations thought it would be better to have a scheme which would embrace themselves, the College of Physicians, the College of Surgeons, and the Faculty of Physicians and Surgeons of Glasgow; and, after a good deal of negotiation, a scheme had been drawn up, which he hoped the Medical Council would approve. The objects of corporations were, in the first place, to take away the power of anybody giving a single qualification, and to prevent anyone from being admitted to the *Medical Register* without being truly qualified. In accordance with this view the scheme made provision that each body, except under certain circumstances, should cease to give its simple qualification; that the College of Physicians would not refuse to admit men registered as surgeons for an examination in medicine, and in the same way the other two bodies would admit registered physicians to examinations for their qualifications. This could not last for any great length of time, because when the scheme became general in England, they would very soon have no candidates at all. The advantages of the scheme were obvious. It would give a much greater equality to examinations than they would otherwise have possessed. At every examination a certain number of examiners from each of the divisions would be present, and, in addition, provision was made that those examinations should be regularly inspected. With regard to the scheme itself, he did not think the Council could object. It had been founded, as far as possible, on the recommendations of the Council. The only objection which he could see was, that the present was a very inappropriate time for bringing forward any new scheme. No doubt, in a certain sense, it was, if it were certain that the Medical Bill would pass that session; but looking at the state of uncertainty with regard to the passage of the Bill, he thought it was far better for the Council to go forward, and that the corporations should at once, with the consent of the Council, enter into this co-operative scheme.

Dr. STRUTHERS seconded the motion.

Mr. SIMON said they were now in the twenty-sixth year of the sitting of the Council, and there had been ample opportunity during all that time for a proposal of this nature, and yet no such proposal had been made. He thought that the present was an inopportune moment. The Medical Bill was before Parliament, and they were not entitled to judge officially as to what were the probabilities of its becoming law. If that proposal became law, there would be a combination of two of the authorities in each division of the United Kingdom; and he should say they ought to congratulate themselves on even that partial combination. No doubt, it did not realise what had been for years past the recommendation of the Council, that all the authorities should combine. He did not see any difficulties at all. It was a partial scheme; but, if there were no better scheme proposed on authority, he would gladly accept it. He thought, therefore, for the Council at the present moment to proceed to discuss a fragmentary system was inopportune. The Bill was a Government Bill, and it was brought forward because the Council had asked the Government to bring forward proposals substantially of this kind. It was a Medical Council Bill in the root, not as to every detail, but still the principle of the combination of all the authorities, the creation of a central examining authority for each division of the United Kingdom, was the principle which the Council had adopted. He would suggest that the consideration of the scheme should be deferred until after the close of the present session of Parliament. If the Bill passed, there would be an end to the conjoint scheme. If it did not pass, then it would become possible for the Council to work on a scheme of the kind, and, perhaps, to express the regret that it did not embrace the universities as well as the great corporations.

Mr. MACNAMARA thought they should not consider the question of any Bill in Parliament. A certain duty had been imposed upon the Council by an Act of Parliament, and they should discharge that duty. They were not in the condition of a moribund body. All their legal powers were as full and endued with as much vitality as they were in 1858. A duty had been imposed upon them, by an Act of Parliament, to look after medical education and medical registration. He could thoroughly understand that the proposed plan might be rejected upon its merits; but to reject it on the ground put forward by Mr. Simon would, he thought, be unworthy of the Council. He believed the scheme had been brought forward with *bona fides*, and he hoped the Council would not reject it on the ground of impending medical legislation. It must not be said that they were weak-hearted and faint-hearted enough to refuse to consider a conjoint scheme because the Government had introduced a Medical Bill. He was most anxious that the Bill, with certain amendments not affecting its principles, should pass. He was heartily sick of the eternal sword of Damocles being held over their heads. Let them get rid of the Medical Bill if they could, and let them have some peace. At present, the Medical Bill had not the remotest chance of passing the House of Commons. Opposition must be expected in the House of Commons; and, in the present condition of public affairs, it did not require any very wise man to tell them what was the chance of passing the Bill. Let the Council, whilst they were in existence, discharge their duty. If the Scotch scheme was faulty, why, then, reject it on those grounds, but not on a side-issue that it might interfere with Government passing a Bill, or any such general considerations.

The Rev. Dr. HAUGHTON moved the adjournment of the debate, and the Council adjourned.

Monday, March 31st.

DR. ACLAND, President, took the chair at 2 P.M.

The Case of D. M. O'Hara. The Council resumed in private the consideration of the case of Daniel Murray O'Hara, and came to the following resolution:

"That the Council give instructions to its solicitor to take such measures as counsel may advise in regard to the case of Daniel Murray O'Hara or Owen Patrick O'Hare."

Proposed Conjoint Scheme for Scotland.—The discussion on the proposed co-operation between the Colleges of Physicians and Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow was continued.

The Rev. Dr. HAUGHTON said that, though there were fifteen provisions in the Scotch scheme, only three of them involved principles, the others dealing entirely with questions of detail. He regarded the scheme as a *bonâ fide* move in the direction that the Council had always recommended. The three Scotch corporations were prepared to give up their power of granting single diplomas, and he congratulated them upon it. The clause permitting the agreement to be terminated at the end of five years was the weak spot in the scheme. He had been told that there were legal grounds for the insertion of such a clause; and if that were so, he would recommend the addition of words to the effect that, when any body proposed to dissolve the partnership, they should submit the case to the General Medical Council.

Dr. QUAIN said that the bringing forward of the Scotch scheme at this time suggested that they did not believe there was any possibility of the Government Bill being passed. In the first place, the scheme was entirely opposed to anything that the Council had previously adopted. Their records contained a resolution of the most positive and distinct kind that any union of bodies should not be confined to the corporations. The English corporations and universities acted up to the letter of the resolution which was passed thirteen years ago; but now the Council were asked to sanction a partial scheme for Scotland. So far as the partial scheme of the Scotch corporations was concerned, it was probably unobjectionable, and he thought it more clear and definite than the English scheme; but the whole subject ought to be postponed.

Sir HENRY PITMAN thought that this was a question with regard to which the Council should be very careful what steps it took. No sooner had the Medical Act passed by which power was given to the corporate bodies to combine for examining purposes under the sanction and direction of the Medical Council, than the College of Physicians approached the College of Surgeons with that object; and, from that time to the present day, the College of Physicians in London had been earnest in its endeavours to obtain a combination. All the corporate bodies confessed, fourteen years ago, that the time had arrived for such combination. Since then, attempts had been made to carry out the wish of the Council, but without success. Some years ago, a Bill was introduced into the House which it was expected would pass, because it was a Bill which the Council and the corporate bodies were all willing to accept. The Bill was defeated, not because of any opposition on the part of the Council or of the corporate bodies, but on account of the opposition of the profession. Last year, a Bill was introduced framed upon the report of the Royal Commission, and the present Bill was almost identical with it. That showed the desire of the Government to put an end to the condition of things which had lasted so long. For five-and-twenty years, the corporate bodies had tried scheme after scheme, but they had failed, and the Council had failed, and therefore the Government had taken the matter in hand. Considering that there was now a Bill before Parliament with a scheme of its own, he asked the Council whether, in giving its sanction to the Scotch corporation scheme, it would not be taking up an attitude of opposition to the Government scheme. It would be more than indiscreet for the Council to place itself in that position. The proposed scheme might have been brought forward twenty-six years ago; and why were the Council asked to sanction it now? Was it to show the Government how very anxious they were to retrace their steps? The English scheme was drawn up before the Bill was introduced into the House of Lords last year. He hoped Dr. Haldane would withdraw his motion.

Dr. HUMPHRY seconded the amendment. He did not wish to express any opinion whatever as to the merits of the Bill, as to the merits of the Scotch scheme, or as to the effects which the approval of the Council might have on the passage of the Bill; but the scheme would be entirely invalid if the Bill should pass. The Council could enter upon the consideration of the scheme only on the presupposition that the Bill would not pass; and that would be acting in a discourteous and antagonistic manner towards the Government. The resolution asked the Council to approve of the scheme; but it was scarcely possible to do so without further consideration of the details. Dr. Haughton had indicated one point in which he considered alteration ought to be made; and he (Dr. Humphry) could point out others, and that was another reason why the motion should be withdrawn. He was very glad to see that proposals for combination were coming forward. If the Bill passed, there was an end of all such schemes; if it did not pass, then it would at once be the duty of the Council to take into consideration the schemes brought before them, and wait no longer for Bills in Parliament.

Dr. MATTHEWS DUNCAN said it was extremely unfortunate that the discussion had turned entirely on the fate of a Bill which was now before Parliament. He urgently hoped, and fully expected, that the Bill would not pass; and, in fact, there was no chance of its passing, for no Medical Bill ever passed if it was opposed unanimously by the Scotch and Irish bodies. It had been said that the profession was in favour of the Bill, that the Council had expressed itself in favour of the Bill, and that it was a principle of the Council that there should be one Examining Board in each division of the United Kingdom. Those three propositions were inaccurate. The profession had not expressed its approval of the Bill. He had a large connection with eminent professional men, and he found that they had no interest in the Bill. He had faithfully attended the meetings of the Council since the Bill was brought in, and he had not heard a word said in its favour. With regard to the one portal system, he considered it the worst that could be invented for any country whatever. He intended to support Dr. Haldane's motion, and he thought it a very curious comment on the speeches of the gentlemen who opposed it that on the programme there was a similar proposal from the College of Physicians and the College of Surgeons of England. It was quite a delusion to suppose that Lord Carlingford's Bill would produce peace. To fancy that, after the Bill was passed, difficulties would be at an end, was to live in a fool's paradise. The one portal system was advocated for the sake of uniformity and equality, but he considered that the opposite of uniformity and equality was desirable. Who would like to amalgamate Oxford and Cambridge Universities for the sake of uniformity? It was extremely desirable that the present diversity should continue. During the period of so-called dispeace, medical science and education had advanced more than ever before; and it was during the last thirty years that the principal medical journals had been established and improvements in education introduced. He earnestly hoped that the same state of things would continue. He saw no likelihood that a dead stillness of uniformity would encourage advancement. It was said that there ought to be equality, but inequality had tended to the raising of medical education. If the requirements of the various boards were above Lord Carlingford's future level, the more they were unequal the better, because then they would stimulate medical students to attain higher degrees. He himself had sat on six or seven different examining boards, and none of them were below the proper level, while many of them were above it. It was said that a man should take a degree from the university after he had passed the minimum examination; but that would be injustice to a poor man, while it was an insult to the universities to say that a man who was dubbed M.D. should not practise. The one-portal system was a most injurious and unholy alliance between the corporations and the universities; for the corporations were, in their history and policy, different from the universities, and the two could never co-operate cordially. It was in this direction that he felt the difficulties of working the new Medical Bill would begin. Universities were established for the purpose of promoting religion, morals, and learning, and if they departed from that purpose in order to combine with bodies established merely to promote medical science, they would try to bring about a combination which could never work. He therefore strongly objected to Lord Carlingford's Bill; for, if that Bill passed, no university or corporation would have the power to give a degree entitling a man to practise. All who had spoken on Dr. Haldane's motion agreed that the scheme he proposed was a good thing, and not a voice had been raised against it; and he objected to the Council saying that because some Bill was *in nubibus*, the progress of medicine should be stopped.

Mr. SIMON maintained the accuracy of what he had said, and in support of it referred to the resolution of February 26th, 1870, which was carried by a majority of 17, the minority consisting of Sir Dominic Corrigan.

Mr. MACNAMARA said the reasons advanced by the proposer and seconder of the amendment were founded on what might be termed the approval of the Bill; but directions had been given to the Council to consider all such schemes, and, if they approved of them, permit them to be carried out under the sanction of the Council. He had not heard one word against the Scotch scheme, except what had reference to the Government Bill. It seemed to be thought that the Council were to cease from doing their duty, and not to obey the instructions of the Act of 1858, because of the Bill; that was the only argument that had as yet been brought forward. Reading between the lines of the amendment, it was evident that it meant an implied sanction of the Bill. The Scotch bodies were acting strictly within their rights, and they now called upon the Council to do their duty. He trusted that Sir Henry Pitman's amendment would be negatived by a very fair majority, and that the Council would, without any further delay, proceed to see whether they could sanction the scheme or not.

Dr. STRUTHERS considered that the amendment was intended to stop discussion. Whether the Council ultimately approved of the scheme or not, it was most important that a thorough discussion should take place. The scheme was one to put a stop to all the evils complained of with regard to medical licences; and could it be fair to the gentlemen who had drawn it up that the outside world should not know that a discussion had taken place upon it? Even if the Council refused to discuss it, the scheme still existed. Mr. Simon had condemned the proposal as partial and inopportune; and he thought it necessary that the Council should have the opportunity of hearing a reply to those statements. He (Dr. Struthers) would willingly point out how the scheme would correct all the evils that had been complained of, if a discussion on its merits were allowed. It would be easy to show that, in every respect, Scotland had removed all occasion for legislation. Scotland came before the world as a leader of the conjoint schemes. He entirely agreed with the view that it was the business of the Council to do its duty irrespectively of any Bill; and he maintained that the Scotch scheme was so good, that if it had only the stamp of the approval of the Council upon it, there would be no occasion for medical legislation as far as Scotland was concerned. The situation was entirely changed by these schemes; and the objection that it might impede legislation amounted to an admission that, if it were sanctioned, legislation would not be needed. It had been said that the Bill, if passed, would supersede the scheme; but he was not aware of one word in the Bill incompatible with the scheme. What better examining authority could there be in Scotland than the three great Scotch corporations united into one board? It was an entire mistake to imagine that the scheme interfered in the least with the Bill. He, therefore, hoped that the Council would proceed to discuss the scheme thoroughly.

Mr. TEALE said, if the Council considered the Scotch scheme in detail, they ought also to consider the English scheme; and he would prefer to have a special meeting of the Council, in order to go into those matters. Dr. Struthers had pointed out that the sanction of the Scotch scheme did not really conflict with the passing of the Bill in Parliament; and that, under the Act, voluntary combination would be just as important as if the Act were not carried. From his experience in visitations, he considered there were certain points of weakness in Edinburgh with regard to the method of appointing examiners. They were not appointed there for special subjects, except in rare instances; but in Glasgow the examiners were carefully told off for special subjects.

Dr. HERON WATSON said it appeared to him to be the duty of the Council to consider any scheme brought before them for the purpose of amalgamating any bodies in any division of the kingdom. In 1858, such schemes were brought forward from Scotland—one for combining the College of Physicians with the College of Surgeons of Edinburgh, and the other on the part of the College of Physicians of Edinburgh in conjunction with the Glasgow Faculty of Physicians and Surgeons; and, when the latter scheme was brought forward, Dr. Alexander Wood proposed, and Mr. Lawrence seconded, that the co-operation be approved of. Dr. Haldane's motion used exactly the same words. The last clause of the scheme would allow any college to make similar arrangements with their licensing bodies, if deemed expedient, and if sanctioned by the Medical Council. It was not, therefore, a final scheme; and he was astonished to hear Mr. Simon complain that twenty-six years had passed away before this scheme was brought forward. The Scotch bodies were now simply proposing to amend what had been in operation for a period of twenty-five years, and had been found to work admirably. It had, to a certain extent, done away with the objections that were taken against so many portals; and the present scheme was to abolish what was considered a blot in the former one of 1858. The object of it was to establish one portal instead of the five corporation-portals in Scotland, and that would secure that everyone passing through it was competent to practise his profession in medicine, surgery, and midwifery. The Scotch bodies were, therefore, abundantly justified in coming forward with such a scheme. They had burnt their ships; for they had determined absolutely that, if the scheme were passed, they could not go back to giving a single qualification. With regard to the proposal to postpone the discussion of the scheme until the termination of the present session of Parliament, that would be putting it off, perhaps, until the early days of August, when it would be too late to bring it into operation this year; but, if it were passed now, it would come into operation in October next.

Dr. BANKS supported Dr. Haldane's motion. It was a step in the right direction, and he only regretted that Ireland had not brought forward a similar scheme. It had been under consideration, but an agreement had not been arrived at. He believed if the three divisions of the kingdom had recommended such schemes, the Medical Bill would not now be before Parliament. If the Council affirmed this principle, he thought he could answer for it that Ireland would follow the example.

Dr. SCOTT ORR said that Scotland had found it quite impossible to join the universities with the corporations. He sincerely trusted that the scheme would do away with what had been called a scandal. Sir Henry Pitman had stated that the corporations had hitherto failed in establishing anything like a conjoint board; but Dr. Watson had shown that in Scotland there had been conjoint schemes ever since the Medical Act came into operation.

Sir HENRY PITMAN, in reply, said that nothing he had heard had altered his views that the present was not a proper time for considering this question of a conjoint scheme, whatever bodies brought it forward. It might be very interesting to the public to know that Scotland and England were prepared with a conjoint scheme if circumstances rendered it necessary, but this was not the time for considering the subject. He was very much surprised to hear Dr. Struthers say that it would make no difference whatever to the proposed scheme whether the Government Bill passed or not. By the scheme there were to be three examinations, while, under the Government Bill, there would be but one. He considered that the most prudent course would be to postpone the consideration of the scheme. The Council must have another meeting this year, and then would be the proper time to receive the schemes, and give them full consideration.

The amendment was then put and lost, eight voting in its favour and eleven against. Three members of the Council did not vote, and two were absent.

On the original motion being put,

Dr. **Heron Watson** said that the clause enabling either of the corporations to terminate the agreement at the end of five years was inserted merely as a legal form, which was necessary in all acts of copartnery in Scotland. Without such a clause, any member of the copartnery might appeal to a judge to have the whole thing thrown into court and broken up. With it, however, the scheme would work for five years, and, at the end of that time, there was not the least prospect of its not continuing.

Dr. **Storrar** asked whether any plan was in operation for conducting in a systematic manner the preliminary examination in arts. In England, very great importance was attached to that examination [illegible] and it had been the subject of many discussions in the Council. It was felt that it should be conducted by some public body wholly outside the medical corporations, and in England their efforts in that direction had succeeded. The effect of this would be to raise the standard of education in the medical profession; but if in Scotland the examinations were still conducted by the medical bodies, and the candidates were allowed to take a portion of the examination at one time, and another portion at another; so that, in fact, a system of remanets existed, the so-called preliminary examination was a very poor business indeed.

Dr. **Heron Watson** said the intention was loyally to carry out the instructions of the Medical Council with reference to the whole question of preliminary examination, and that all students who intended to become candidates for the diplomas of the three bodies should pass an examination in general education.

Dr. **Storrar** asked whether the examining bodies would or would not be medical bodies.

Dr. **Haldane** said they might or might not be.

Mr. **Simon** said he considered that, in the interests of higher education, it would be most deplorable if the universities did not take part with the corporations in providing a single qualification. He did not mean that they must be on exactly the same footing, but he thoroughly approved of the principle laid down by the Council in 1870, reaffirmed in 1871, and again affirmed on two occasions in 1878.

The motion was then put, and carried by a considerable majority, in the following form:

"That, subject to the future directions of the General Medical Council, the proposed co-operation between the Colleges of Physicians and Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow be approved of."

Tuesday, April 1st.

Dr. **Acland** (President) took the chair at 2 P.M.

The Medical Act Amendment Bill. Mr. **Macnamara** moved:

"That this Council do resolve itself into a Committee of the whole Council for the consideration of the provisions (other than those directed to the reconstruction of the General Medical Council) contained in the Medical Acts Amendment Bill, as amended in Committee of the House of Lords in this present session of Parliament."

Last year, he moved a resolution to the effect, that the Council resolved itself into a Committee of the whole Council for the consideration of the Medical Acts Amendment Bill. The motion was negatived; and, on the present occasion, he had brought forward a proposal in the same direction, but with a material modification. He could understand that several members of the Council, from motives of self-dignity, objected to the resolution last year, inasmuch as it might have involved a discussion as to the constitution of the General Medical Council. He had, therefore, in his present motion, introduced the words "other than those directed to the reconstruction of the General Medical Council." He felt that it would be unworthy, on their part, to discuss a question which would involve their existence or non-existence. It was not his intention in the slightest degree to attack the principles underlying the present Bill, or to try to persuade members of the Council to put themselves in a position of antagonism to the Government; on the contrary, he wished them to consider the propriety of assisting the Government in passing the Bill, subject to certain modifications, which did not in the slightest degree strike at its principle. It had been said that the Council was a [illegible] body, that it had done nothing for the advancement or improvement of the profession, and that it depended entirely upon what was conveniently described a moral suasion; but the journals in making these statements had apparently entirely ignored what was the result of the moral suasion. Shortly after he became a member of the Council, he stated what at the time was the fact, that, in consequence of the great disparity between the severity of examinations in the three kingdoms, students were charged by teachers or grinders twenty guineas to be prepared for the Irish qualification, fifteen guineas for the English qualification, and ten guineas for the Scotch qualification; but, at the present time, grinders charged precisely the same sum for preparing for a Scotch qualification as for an Irish one. That was due to the improvements that had been effected in the examinations on the other side of the Tweed, not by a levelling down of the Irish examination. He asserted that the agitation in favour of the Government Bill was a journalistic agitation. A distinguished member of the Council, who had a right to speak with authority, told him yesterday that, though he enjoyed a large consultation-business, he heard nothing whatever of this agitation among the profession; and though it was said that, in Ireland, professional men were panting for a reconstruction of the Medical Council, he denied the truth of the statement. A remarkable fact was worth a thousand theories. A country Fellow in Ireland got up an agitation for the purpose of discussing the provisions of the Bill, and 60 or 70 Fellows of the College of Surgeons held a meeting. The question of direct representation was brought under their consideration, but only seven voted for it. He himself was often brought into contact with other members of the profession, and he positively asserted that the only agitation that he ever heard of for direct representation was a journalistic agitation; and when he heard men who had passed through the toil and labour, and active professional duties, and at least achieved such a position that their names would be handed down with honour and respect to posterity, record their opinion that direct representation would be an absolute injury to the Council, and when he saw gentlemen sitting around that table who had spent the greater part of their lives in educating and examining the youth of the profession, he could not conceive that a general practitioner from Essex or any other county would improve the character of the Council, and enable it better to discharge the duties which devolved upon it. The Royal Commissioners, in their annual report, said it was clearly proved that the General Medical Council had rendered valuable service to the profession and to the public, and that it was to that Council that the universal adoption of a preliminary examination for intending medical students was mainly due. The agitation had been got up by certain parties; but, finding that it was hopeless for them to think of keeping within the secret portals of the Council in any other way, sought to do so by direct representation, because they looked upon the Council as the *ultima Thule* of their aspirations, the paradise at the gate of which the Peris had been so long knocking. Not only was the agitation a journalistic one, but he went further, and said that the Bills that had been framed and brought in never had the sanction of any great statesman; they were the product of journeyman-legislators. It had been said that the opposition to some of the details of the Bill sprang from sordid motives on the part of the corporations. Corporations and jobbery were associated together in the public mind; but, when he remembered that the most stringent by-law in the Royal College of Surgeons in Ireland absolutely prevented the giving of one farthing, directly or indirectly, to the Fellows of the College, he was prepared to hurl back the insulting accusation, so far as the body which he represented was concerned. The interests and motives of the Royal College of Surgeons in Ireland were to establish, sustain, and support a library that was second to no medical library in Great Britain, and to form an anatomical and pathological museum limited in extent, but of remarkable value. Neither could anyone say that the Royal College of Surgeons of England had not done noble work on behalf of surgery and anatomy; and, in the formation of libraries and museums, the colleges were doing incalculable service to the public. The Bill proposed to reform the Medical Council, and to take away from the bodies the power of giving licences. Among the powers given to the conjoint examining board was the power to charge certain fees; and these fees were to be appropriated to defraying the expenses of examinations, the reasonable expenses incurred by the members of the board, the expenses of officers and rooms, etc.; and the surplus, if any, might be appropriated to maintaining medical museums and libraries belonging to the authorities authorised to return members to the medical board. The Bill only provided for the expense of museums and libraries out of the surplus funds of the divisional boards, and not one word was said about the payment of the departmental expenses of the colleges. In the College of Surgeons in Ireland, the departmental expenses, exclusive of the museum and the library, amounted to [illegible] a year; but the funds at their disposal would only be £300 a year, and [illegible] the College of Surgeons in Ireland would [illegible] if it had to depend solely on the surplus which could only be appropriated to museums and libraries. According to the published reports, the departmental expenses of the College of Surgeons of England amounted to £[illegible]. Where was that amount to come from? It certainly could not come out of the surplus of the divisional board. Another provision in the

Bill was to take away all the funds from the branch councils in each division and to centre them in the Medical Council, and the funds of the Medical Council were to be devoted to the reasonable expenses incurred by the members in attending the meetings of the Council or the committees, the expenses of committee-rooms, etc. Some years ago, a committee was appointed to consider this question of the medical funds, and he was appointed chairman. The recommendation of the committee was that the invested funds of the several branch colleges should be consolidated into one capital fund, and vested in trustees; but it was considered that such an union or fusion of funds would be unjust towards England. It was perfectly true that the branch council of England had a very large sum at its command; and, for the year ending January 1st, 1883, the registered fees in England were £3,198, in Scotland £1,776, and in Ireland £1,156. The expenditure was about £3,500, leaving about £3,000 a year profit. His suggestion was that, after all the expenses were defrayed, the surplus should be allotted *pro ratâ* among the three divisions of the kingdom; but, when he brought that forward, he was met by the statement that the amount belonging to the English branch council was very large. He had made an examination of the *Medical Register*, and he had found that at that time there were on the *Register* 3,222 names, which had been placed there in virtue of qualifications obtained exclusively either from Scotland or Ireland. He therefore thought he had made a very good case in favour of the surplus money being put into one joint stock purse. It was said that it would be unprecedented to introduce such a thing into the Medical Bill; but, in the Medical Act of 1858, the principle of a *pro ratâ* division was acknowledged. The College which he represented ran a great risk by the Bill of being completely disestablished and disendowed, but there was an easy way out of the difficulty if the Council would only consider the question, and he would suggest an amendment which he believed the Government would have no objection to. In the House of Lords last night, in spite of representations made in all directions, it was decided that the direct representative of the General Council should not be permitted to take a share in the labours of the divisional board. That decision would still keep open a sore subject of agitation, and the agitators who succeeded in getting a direct representative on the General Council would never remain satisfied unless they also had one on the divisional board; so that it was indulging in a fool's paradise to imagine that an end would be put to medical agitation by the Bill. Affiliation, as suggested by the Irish colleges, was distinctly different from the affiliation that was under the consideration of the Royal Commission, and he was authorised by Dr. McDonnell to say that had that kind of affiliation been brought under the consideration of the Commission, it would have received a very different reception from that which had been extended towards the other. In the first proposal of affiliation a man who had passed the final examination of the divisional board was not to be allowed to get upon the *Register* until he was affiliated to one of the medical authorities. But why should a man who had passed the divisional final examination be called upon to pay twenty guineas to the College of Physicians or any other college? He could quite understand why the members of the Royal Commission objected to this kind of affiliation, but what the Irish bodies recommended was that the affiliation should be at the commencement of the medical studies, and not after the man had passed the final examination. He would then be under the surveillance of the particular body to which he was affiliated from the commencement of his education, and the body would without any further charge confer upon him the licence which they were entitled to grant. That plan of affiliation was not discussed before the Royal Commission. It was sometimes said that the students after passing the divisional board examinations would go in for higher qualifications, but 85 per cent. of those who had the lowest qualification of the Royal College of Surgeons of England, and 90 per cent. of those who had the lowest qualifications of the College of Surgeons in Ireland, never went any higher, being content with the bread-winning qualification. It might be said that the College of Surgeons would be able to recoup itself by the primary examinations, but those examinations throughout the country would be pretty much on a par, and he implored the Council to remember that so far as the College of Surgeons in Ireland was concerned the primary examinations were conducted at the charge of one guinea each by the Royal University. Where, then, was the surplus to come from? The Royal University had public funds to deal with, but what would become of the College of Surgeons in Ireland under such conditions?

Mr. COLLINS seconded the motion. The present Bill was intended for the general medical practitioner, to enable him to practise medicine, surgery, midwifery, and pharmacy, and yet the Society of Apothecaries of London and the Apothecaries' Hall of Ireland were altogether excluded from the Divisional Boards. He considered that a most serious objection to the Bill. Not long since, a branch council in Ireland held a meeting at which it was unanimously agreed that a scheme of examination for a general medical practitioner would be highly imperfect unless the two apothecaries' halls were represented upon the conjoint boards. It might be said that there was no apothecary on the board for Scotland, but the College of Surgeons of Edinburgh had a double function upon it in its original charter, and it had to take charge of surgery and pharmacy. The present Bill ignored the status of all the bodies, and would interfere very considerably with their income, and, in addition to that, it was an imperfect Bill, leaving out as it did the Apothecaries' Society of London and the Apothecaries' Hall of Dublin.

Dr. STRUTHERS said he had no sympathy whatever with those who came forward to oppose the Medical Act Amendment Bill, because he considered that there were some things that required alteration. There was, however, one point in the Bill which the Council might with perfect propriety take into consideration, and possibly the Government would feel obliged to them if they gave an opinion upon it. It was continually said that the Bill was largely founded on the lines of the Report of the Royal Commissioners, but that commission was not unanimous in their report; there was a minority report as well as a majority report, and he wished to ask the Council whether the minority report would not be most satisfactory to the medical profession. That report suggested coadjutor examiners to each of the examining authorities. He could not reconcile himself to any scheme for sweeping away every diploma and degree at present existing. The principle of the Bill was that there should be a complete threefold examination in medicine, surgery, and midwifery; but that would entirely destroy all *esprit de corps*, and therefore he thought that the minority report was preferable to that of the majority. Of course the Government could not adopt the minority report, but if the Council expressed approval of it, the Government might be able to say that they would delay the Bill for another year, and then adopt the system of coadjutor examiners. He did not think that the Government had been well advised in this matter. They were giving offence all round, both to the universities and to the corporations, the former of whom were placed in an extremely awkward position by the Bill. He did not believe that corporations and universities could ever work together in one board. In the English conjoint scheme there were to be no university examiners, but in Scotland the universities must not only be a real power, but the chief power in any examining board. The students there must not be subjected to an additional examination, and there was not a particle of justification for such a scheme being forced upon Scotland. The Scottish universities would consent to a divisional board in which they had the chief authority; they would accept outside examiners appointed by the divisional board, and that was further than the conjoint scheme of England went. There was no want of efficiency in the examinations for the universities, but they were quite ready to go the length of accepting outside examiners appointed by the divisional board. They would not, however, consent to any scheme which required a duplicate examination. If the system in England required such a duplicate examination, that was no reason why their neighbour's house should be set on fire simply that the English eggs might be roasted. He did not believe that any Bill would pass in Parliament which thrusted a duplicate examination on the Scotch universities. Englishmen, as a rule, did not realise what the education in the Scotch universities really was. In Scotland the university was not merely an examining board or a teaching place, but it was both. It was a place where young men could receive a complete higher education, from men who devoted their time and their lives to the cultivation of sciences. The Scotch universities were not mere grinding-shops for a minimum examination. The three great universities in Scotland gave thorough education, and medical education in London could only be improved by copying the Scotch system. The coadjutor examiner system would solve all the difficulties. No one would for a moment say that the united corporations of either division of the kingdom were not able to conduct a proper examination. A solution of the question would be this—conjoint examiners by the corporations now, a year or two rest, and then medical legislation could be carried out in the direction that was considered necessary. It had been said that the Bill was a Medical Council Bill, but he did not believe that the Council had ever recommended a system to supersede existing qualifications. All the schemes which had been brought forward were due to the results of competitive examination for admission into the army a number of years ago, but he had no faith whatever in those results. He proposed "That the Council take into consideration the question whether the object of the Medical Act Amendment Bill, now before Parliament, in so far as completeness and efficiency of examination and admission to the *Medical Register* are concerned, can be obtained with less disturbance of existing arrangements than will be occasioned by the method proposed in the Bill."

Dr. PETTIGREW seconded the amendment.

Dr. QUAIN said that Dr. Struthers had not said one word about the essential question before the Council. Conjoint schemes originated because there existed nineteen bodies in the country giving between fifty and sixty qualifications. The English universities and corporations made an honest effort to form an examining board which should be an example to other divisions of the kingdom, and nobody pressed more earnestly than he did, on the College of Physicians, the necessity for some such action in order to preserve their licensing powers. No one had a greater regard for the interests of the corporations than he had, for he considered that the College of Physicians of London was the noblest medical institution in the world. Dr. Struthers had said that the universities had nothing to do with the examinations under the English conjoint scheme, but the fact was that they had their full share in selecting the examiners through the board of reference. No jealousy or unkindly feeling prevailed in England between the corporations and the universities, but they acted together for the public good. The only reason why the scheme did not come into operation was, that Scotland did not follow the example. The object of the present Bill was to enable persons requiring medical aid to know who were qualified practitioners. He had advocated the conjoint scheme for the very purpose of preventing Government control. The chairman of the Royal Commission expressed the opinion to him that the present condition of things was a gross scandal, and partial schemes and amalgamations of corporations would never put an end to it. No doubt some of the examinations in England and Scotland were worthy of all praise, but there were others that were not so perfect. There were 16,000 practitioners in England, and only about half that number in the two other divisions of the kingdom, and he would very much like to know what became of those who registered in Scotland, where there were only about 2,000 in practice, while 4,045 were registered. Scotland and Ireland were the source whence the difficulties proceeded, and if Lord Ripon's Bill had passed the question would not be in its present condition.

The Rev. Dr. HAUGHTON objected to Dr. Struthers' amendment because it was a year too late. Twelve months ago, the University of Dublin petitioned in favour of Professor Huxley's proposal for coadjutor examiners, but it was too late now to accept the principle of the Government Bill. Both the Irish universities were prepared to offer to the Government in passing the Bill their loyal and sincere support; they believed that, on the whole, the Bill was a good one. But if the representatives of the Irish corporations wished to discuss the money-clauses, he would support them. How could the Government be got to alter their Bill, even if a majority of the Council wished it? The Government had yielded in several points. The question of the distribution of the surplus fees was not fatal to the Bill, but Professor Struthers' amendment asked the Council to strike a death-blow at it.

Mr. MACNAMARA said that Professor Huxley's proposal was urgently pressed on Lord Carlingford by a deputation from the Royal College of Surgeons in Ireland, but they were told that it would be a death-blow to the Bill, and that the Government might as well withdraw it as consent to the suggested appointment. The Royal College of Surgeons in Ireland, therefore, at once withdrew their proposal. Nothing was further from the intention of the body which he represented than to do anything which would tend to wreck the Bill. They were most anxious to assist the Government to pass it, subject to a few amendments. They did not in the slightest degree wish to interfere with the principles of the Bill, but on the question of the surplus it was material to their very existence as an examining board. He would regard those who opposed the recommendations of the College of Surgeons in Ireland as the enemies of the Bill.

Dr. HUMPHRY said that he was not at all sure that the adoption of the coadjutor examiners scheme would reconcile all the bodies, for he did not imagine that the universities would look with favour upon coadjutor examiners assisting in their examinations. The universities did not look at their degrees as being merely licences to practise, but they regarded them from a much higher point of view, and were especially anxious that the whole arrangements for the examinations for their degrees should be in their own hands. He therefore did not think that Professor Struthers' suggestion would meet with universal acceptance. The Scotch universities might regard their examinations as licensing examinations, but that was not the English view. The English universities would certainly not accept the examination of the divisional board in lieu of their own examination; but to what extent they might modify their examinations for candidates who had received a qualifying certificate was another point; he could not therefore vote for the amendment.

Dr. HERON WATSON considered that the Government had treated the Medical Council with scant courtesy in not sending the Bill to them for discussion. The various Bills that had been brought forward did not emanate from Scotland or from Ireland, and he did not believe in the existence of gross scandals in connection with the education and examination of the medical profession. He regarded it as exceedingly unfortunate that no attempt had been made to show the Government that the course now being pursued was a reckless one. If he were asked to say what was the source of the Bills which had of late years been introduced into Parliament, he would say the London medical journals. He quite agreed with Dr. Duncan and Mr. Macnamara that the profession did not care for the Bill; and, in point of fact, between two and three hundred petitions were last week presented in the House of Commons against it. Under these circumstances, he thought the Council should discuss the merits of the Bill.

Dr. PETTIGREW said that, so far as he was aware, the Scottish universities had nothing to be ashamed of, and were quite prepared to adapt themselves to the times.

Dr. STRUTHERS withdrew his amendment, and the original motion was put and carried; 11 voting in its favour, and 9 against it. The Council accordingly went into Committee on the Bill.

Mr. MACNAMARA said that in the earlier years of the Medical Council some of the money that was paid into the English Branch Council, had to be refunded to the Irish Branch Council, so that it was no new thing for the Irish Branch Council to complain of the unfair and unjust way in which the money was paid. Out of 615 persons registered in 1882 by the English Branch Council, 215 presented only Scotch and Irish qualifications. He therefore asked that the moneys of the Branch Councils should be capitalised and handed over to the Medical Council as contemplated in the Bill, and then divided *pro ratâ*. It was quite true that the English Branch Council had a large balance, but that was because moneys were paid to it which should have been paid in Ireland or Scotland.

Mr. SIMON had not voted against the proposal to go into Committee on this subject, because he considered it due to Mr. Macnamara that he should have an opportunity of stating what his views were; but he hoped that the Council would soon resume. Mr. Macnamara's proposal appeared to be perfectly reasonable, and he would suggest that a Committee be appointed to consider it.

Dr. QUAIN said Mr. Macnamara had estimated the proportions of moneys according to the number of persons registered with English, Scotch, or Irish qualifications; but the proper way would be to consider the number of practitioners practising in either country.

The Council then resumed; and a Committee was appointed, consisting of Mr. Macnamara, the Rev. Dr. Haughton, Dr. Haldane, Dr. Watson, Mr. Marshall, and Dr. Humphry.

Wednesday, April 2nd.

A report was presented by the Committee appointed on the previous day, with regard to the disposal of the surplus funds of the divisional boards, recommending that such funds should be at the disposal of the boards rather than of the General Medical Council. After discussion, it was decided that the report should be approved, and that the corporations should be recommended to move jointly in the matter.

A proposal that the Council should go into committee on the subject of the Medical Act Amendment Bill was rejected.

The following motion, proposed by Dr. HALDANE, and seconded by Dr. MATTHEWS DUNCAN, was adopted:—"That a committee be appointed with a view to considering whether the experience of the office of the General Medical Council during the last twenty-five years suggests any improvements which might be introduced with advantage into a Medical Acts Amendment Bill."

On the proposal of Dr. QUAIN, it was resolved that it should be referred to the Executive Committee to consider and report on the means, if any, which should be taken to improve the structural arrangements of the Council Room.

On the proposal of Sir HENRY PITMAN, it was decided that "as Dr. Acland's term of office as President will expire on the 18th of July next, the Council request Dr. Acland that, if the Council shall not be sitting at the time when his term of office expires, he will favour the Council by remaining in office as President till the Council shall next afterwards assemble."

The usual votes of thanks ended the session.

A complete report of the proceedings of the Council on Wednesday will be given next week.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

Subscriptions to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161a, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 5th, 1884.

THE HÆMORRHAGIC DIATHESIS.

The recent bereavement in the Royal Family will naturally turn the attention of the medical public towards the constitutional affection to which the illustrious deceased was subject. There is no distinct mention of hæmophilia in any classical or mediæval writer. It has been suggested that Charles IX of France died of hæmophilia; but, in the account of his examination after death given by Bonetus, there is nothing to suggest such an idea, but rather that the cause of his death was phthisis. Bateman speaks, in his work on diseases of the skin, of a boy, whose case has been frequently quoted, whose skin was constantly covered with petechiæ, and exhibited purple blotches whenever he received the slightest blow; he died during a sudden attack of profuse pulmonary hæmorrhage. Hæmophilia, as a rule, attacks the males of a family, and leaves the females exempt; but genealogical records show the strong tendency which this disease possesses of dissemination into other families by intermarriage; sisters of "bleeders" marrying have been repeatedly found to become the mothers of boys who were "bleeders" like their uncles, and of girls who were not "bleeders," but who bore male "bleeders" after marriage, and female children who perpetuated by marriage the disease from which they were personally free. A similar kind of perpetuation of a disease common in males through female members of affected families has been observed with regard to Duchenne's pseudo-hypertrophic paralysis, diabetes insipidus, and colour-blindness.

The pathology of hæmophilia, or the hæmorrhagic diathesis, is still obscure. Dr. Percy Kidd, in one case, detected a peculiar appearance in the muscular coat of the arteries of a child aged six, who died in the Ormond Street Hospital, in 1877, of hæmorrhage from the mouth after having been a "bleeder" for four years. It is very significant, with regard to a case of more immediate interest, that this child once struck his head against a wall, and the bruised place swelled to the size of an egg and became purple, and at the same time he had considerable epistaxis, which was difficult to check. In such a case, intracranial hæmorrhage might readily have been produced by a direct blow on the head, or even by indirect violence. Dr. Kidd detected a very distinct degeneration of the muscular fibres of the middle coats of the arteries in this case, also some less distinct changes in the buccal epithelium. The epithelioid cells lining the small arteries, capillaries, and veins of the mouth had undergone great proliferation, some of the small veins being blocked by this process, which had also affected the vasa vasorum of the aorta and vena cava. These morbid appearances are, however, not constant.

The most interesting complication of hæmophilia is the joint-swelling, first described as intra-articular by Poncet in 1871. The knee-joints of a young bleeder were examined, and blood was found freely effused within them; there were also changes in the cartilages, already described by Redfern and Charcot. In all the other joints of the lower extremities similar appearances were found, though not so marked in degree. Sir William Jenner also found free blood in the knee-joints of a bleeder, and Legg and Macready detected marked changes in the right knee-joint of a boy, aged 9, who died of hæmorrhage from a wound of the lip, in one of Mr. Thomas Smith's wards at St. Bartholomew's Hospital, a few years since. Much blood was extravasated in the right popliteal space, even the substance of the muscles being invaded. The knee was slightly flexed; the patella was fixed to the front of the femur by an adhesion that was broken without difficulty. A gap was then detected in the cartilage on the femur where the patella had been fixed to it. The cartilage on the patella had been absorbed, and fibrous tissue occupied its place. The synovial membrane was stained of a yellow-brown colour; the ends of the bones were also stained, and staining was detected in the left ankle-joint and the right ankle.

The substance of the above observations will be found in Dr. Wickham Legg's interesting *Report on Hæmophilia* in the seventeenth volume of *St. Bartholomew's Hospital Reports,* and in Dr. Percy Kidd's *Contribution to the Pathology of Hæmophilia* in the sixty-first volume of the *Medico-Chirurgical Transactions.*

At the end of January 1868, the Duke of Albany, then Prince Leopold, suffered for a week from very severe accidental hæmorrhage, which rapidly reduced him to a state of extreme and dangerous exhaustion by the loss of blood; but within a fortnight he was convalescent. At that date, we had occasion to state that his condition would undoubtedly, and throughout life, require him to abstain from violent exertion of any kind, or from indulging in the more active departments of professional activity selected by the Duke of Edinburgh and the Duke of Connaught (Journal, February 15th, 1868). We observed that the special cultivation of the arts and literature affording probably an adequate recompense, we might look forward to Prince Leopold as the special friend and patron of social, artistic, and literary progress; and, if he fulfilled that promise, his career would be honourable and of great usefulness to the nation. That promise he did his best to fufil, so far as his short term of life would allow. But since 1868 he has never been in robust health, and has suffered from several attacks of swelling in one knee-joint, having some of the characters of subacute rheumatism. It is, however, highly probable that the articular disease was that which frequently complicates hæmophilia. The weakness of the knee appears to have caused the fall, but the nature of the intracranial complication is obscure.

THE GENERAL MEDICAL COUNCIL.

The Medical Council completed on Wednesday last a session which, having commenced on Tuesday, March 25th, lasted eight days. All the members were present. The only change in the constitution of the Council which has taken place is the substitution of Professor Struthers of Aberdeen, as representative of the Universities of Edinburgh and Aberdeen, in the room of Professor Turner of Edinburgh.

In his opening address, the President, Dr. Acland, alluded in terms of regret to the delay which had taken place in the settlement, at least for some time, of the long debated question of medical reform. He expressed the opinion that the Council ought to endeavour individually, if not collectively, to aid in settling medical legislation during the present session of Parliament. The present Bill was, he thought, "the only way now known of quieting the disturbed state of education in the medical schools, and of getting into a reasonable and more uniform shape the increasing mass of knowledge which students were required to produce at the examining boards."

A tabular statement of passes and rejections in the year 1883, based on the returns made by the examining boards, was received and ordered to be entered on the minutes, after some remarks had been made by Dr. Aquilla Smith on the large proportion of rejections by some of the boards. A table showing the number of cases in which departure had been made from the recommendations of the Council, and one giving the results of examinations for diplomas in dental surgery, were also received and entered on the minutes.

Several petitions to the Council for restoration to the *Medical Register*, from persons whose names had been struck off by direction of the

Council, were considered. The first case was that of Mr. A. A. Sadgrove, who was at the session of 1883 removed from the *Register* on account of having pretended to have qualifications which he did not possess. The petition had been investigated by the Executive Committee, who reported that they saw no reason for restoring the name to the *Register*. Another petition, supported by a considerable number of medical practitioners, was from Mr. William Story, whose name was erased in 1881 on account of his being convicted of arson. He had suffered two years' imprisonment, but had been released, after investigation of the circumstances of the case, by order of Sir William Harcourt, the Home Secretary. The Executive Committee had passed a resolution suggesting that the Council should inform the bodies, whose licences Mr. Story had held, that they had no objection to the restoration of the licences with a view to his restoration. The Council, however, decided not to adopt this suggestion, on the ground that a statement had been made by the representative of the Royal College of Surgeons of England, stating facts in reference to the case which had not been within the cognisance of the Executive Committee. More fortunate than Mr. Sadgrove and Mr. Story was Dr. Matthew Bass Smith, whose name was erased from the *Register* in 1873 on account of infamous conduct in a professional respect. His petition was accompanied by one signed by a large number of medical practitioners and other persons, stating that he had since 1873 "conducted himself as a gentleman of good moral character should do." The Council, after deliberation, decided on restoring his name; an act of clemency which was subsequently acknowledged by Dr. Smith through his solicitor.

A rather complicated case of personation for the purpose of being entered on the *Medical Register* was brought before the Council. It seems that a person named Owen Patrick O'Hare, whose name had been removed from the *Register* in 1878, on account of felony, caused himself in 1882 to be registered as Daniel Murray O'Hara, assuming the name of a practitioner who had been on the *Register*, but whose name had been erased in consequence of not having answered a letter from the Registrar. The identity of O'Hare with the pretended O'Hara having been shown, the name of D. M. O'Hara was ordered to be erased. Subsequently, the Council instructed their solicitor to take such measures as might be advised by counsel, with regard to the prosecution of O'Hare, in case this proceeding should be thought desirable.

The case of Michael Healy, which had been brought to the notice of the Council by the Liverpool Medical Defence Association, on account of his connection with a notorious irregular practitioner named Ethens Tomanzie, came before the Council. Mr. Healy did not appear in answer to the summons that had been sent to him; and it was stated that he died at Christmas. No decision appears to have been arrived at.

The names of James P. Murray and Arthur A. Sadgrove, which had been erased from the *Medical Register* in consequence of their having been judged to have been guilty of infamous conduct in a professional respect, were also erased from the *Dentists' Register* on the same ground.

A report was presented from the Executive Committee in regard to the means to be taken to prevent personation at the preliminary examinations recognised by the licensing bodies. Inquiries had been made of, and replies received from, twenty-one examining bodies, whose answers were summarised. The Committee made certain recommendations for better insuring the prevention of personation; and, after some discussion, the report, together with the special recommendations, was approved. It was afterwards decided that the various licensing bodies should be requested to intimate to the General Council all cases of impersonation at the examinations, with the view of the names of the offenders being communicated to all the examining bodies recognised by the Medical Act.

Two reports were received from the College of Preceptors, on the results of the examinations held by that body for persons desirous of becoming medical students. The first report showed that, at an examination held in September 1883, there were 264 candidates, of whom 82, or rather less than one-third, passed. The second report stated that, at an examination held in March, only 55 candidates out of 230, or less than one-fourth, obtained certificates qualifying for registration as medical students.

On the suggestion of the President, a deputation of three members of the Council attended on March 27th the reception of the remains of the late Dr. Allen Thomson at Euston Square, on their way to Edinburgh.

Letters were received from the Royal College of Physicians of London and the Royal College of Surgeons of England, giving notice of their withdrawal from the scheme for a conjoint examining board for England, which, though approved and sanctioned by the Medical Council in 1877, had never come into operation. After a good deal of discussion, the letters were ordered to be entered on the minutes. A proposal on the part of the Rev. Dr. Haughton, that an inquiry should be made as to the reason why the scheme had not come into operation, was, after debate, withdrawn.

A scheme of conjoint examination, to be conducted by the Royal College of Physicians of London and the Royal College of Surgeons of England, was ordered to be received and entered on the minutes. The scheme was drawn up in 1883, and the outline of it was given in the BRITISH MEDICAL JOURNAL for March 17th of that year. No steps were taken towards the consideration of the scheme in detail and its approval by the Council.

A new conjoint scheme was presented by the Royal Colleges of Physicians and Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow. A motion for its approval was made by Dr. Haldane (representative of the Royal College of Physicians of Edinburgh), and seconded by Dr. Struthers. An amendment, that the scheme should not be considered in the present session of the Council, was proposed by Sir Henry Pitman and Dr. Humphry, but was lost, and the original motion in favour of approval of the scheme was carried; it being provided that the approval should be subject to the future directions of the General Medical Council. In the discussion, much stress was laid on the uncertainty of medical legislation during the year. The proposal in favour of the scheme received the support of the six Scottish members, one English member (Dr. Chambers), and all the Irish members but two (Dr. Aquilla Smith, who voted against the amendment, and Dr. Lyons, absent). The minority, who desired that the consideration of the subject should be delayed, consisted of seven English members, with Dr. A. Smith.

A communication from the Registrar-General, respecting the means to be taken to prevent unqualified assistants from giving misleading certificates of death, was read. It stated that, if the Council thought that they could procure the insertion in the Medical Acts Amendment Bill of a clause dealing with the subject, and would submit such a clause to the Registrar-General, it would receive his attention. Subsequently, it was decided to entrust the Executive Committee with the duty of taking steps with a view to insertion in the Bill of clauses intended to prevent the delegation of professional duties to unqualified persons and the signing of certificates of death by such persons.

On the receipt on Friday of the news of the death of the Duke of Albany, the President at once brought the subject under the consideration of the Council, and was authorised to draw up a letter expressing the condolence of the Council with Her Majesty the Queen. In accordance with this instruction, he next day presented a letter, which was unanimously approved by the Council, and signed by all the members.

The question of discussing the Medical Act Amendment Bill was brought before the Council by Mr. Macnamara, who moved that the Council, sitting as a committee, should consider the provisions of the Bill, with the exception of those relating to the reconstruction of the Medical Council. This was carried, eleven voting for and [illegible] against it. The Council having gone into Committee, a discussion took place, mainly with reference to the money questions of the Bill, but no decision was arrived at until the Council resumed, when it was decided to appoint a Committee of six members, two for England, two for Scotland, and two for Ireland) to consider the money clauses of the Bill. The next day the Committee presented a report, recommending that the surplus funds, after payment of current expenses, should be at the disposal of the divisional boards rather than of the Medical Council, as proposed in the Bill. The adoption of this recommendation was opposed by several members; and, ultimately, it was agreed that the Council should approve of the report, and recommend the corporations to jointly address Her Majesty on the subject. Immediately afterwards a motion to go into committee on the Bill was rejected.

On the proposal of Dr. Quain, it was referred to the Executive Committee to consider what, if any, steps should be taken to improve the structural arrangements of the Council-room.

A proposal by Dr. Chambers, to the effect that candidates at the final oral examination should not be rejected without having been examined orally at least half an hour, gave rise to a great deal of discussion, in which attention was directed to the recommendations already made by the Council. The motion was, in the end, withdrawn by Dr. Chambers, who said that a good deal of information had been gained by the discussion.

It was decided that Dr. Acland, whose term of office as President will expire on July 18th, should be asked to remain in office until the next subsequent meeting of the Council. This was agreed to by Dr. Acland, who said that the fate of the Medical Bill now before Parliament was quite uncertain. If it should not pass, it would be for the Council to meet in the autumn, and, under a new President, consider what course should be adopted. If it should pass, it would be for him to consult with his colleagues on the course to be pursued in carrying out the provisions of the new Act.

THE ABROGATION OF THE LICENCE OF MIDWIFERY OF THE COLLEGE OF SURGEONS.

ONE measure adopted by the late meeting of Fellows and Members of the College of Surgeons deserves a passing notice, because it marks a recognition by the Council of an error which they were saved from carrying into practical effect by the public spirit of Dr. Robert Barnes. The Council recommended to the meeting "that Section 17 of the charter of the 15th Victoria be abrogated, it being inexpedient to continue the examinations for the licence in midwifery of the College." The President explained "that the object of this was that they might no longer be able to put a person upon the *Medical Register* by virtue of his passing the Licentiateship of the College in Midwifery. It must not, he said, be understood that they were to abandon examinations in midwifery; but under their charter they had power to examine persons for a licence in midwifery, and the licence admitted them to be placed on the *Register*. It was thought desirable that this should be abrogated, because it was just possible that pertinacious persons might get a mandamus to compel the Council to grant this examination."

In 1852, a Board of Examiners in Midwifery was instituted, whose function was to examine in midwifery men who possessed the diploma of Member of the College, or some other registered qualification. This supplementary qualification had become necessary mainly through the neglect of the College to make midwifery an integral part of the examination for the membership. The consequence of this neglect was that a large number of men had been admitted to the *Register*, with authority to practise in every department of medicine, without having given any guarantee of possessing an adequate knowledge of midwifery. Professional and public opinion reacted upon the men practising upon this imperfect qualification, and these men, in their turn, reacted upon the Council. The Board of Examiners in Midwifery was therefore instituted to correct this omission. From 1852 to 1875 this board worked usefully and honourably, enabling many men to complete their qualification. In 1875, however, a new idea seems to have taken possession of the Council. They obtained power to institute a special licence in midwifery, the holders of which might claim to be put upon the *Register*, and thus might practise not midwifery alone, but anything. Hitherto the College would put a man on the *Register* on the strength of an examination in surgery and medicine. Now they sought to put upon the *Register* men and women on the strength of an examination in midwifery only. It did not occur to them that the proper course was to make the examination for the membership a complete qualification, by making midwifery an integral part of it. Somehow or other surgery was not to be defiled by direct association with midwifery. They resolved to work this special licence. They invited the Board of Examiners, at that time consisting of Drs. Arthur Farre, Robert Barnes, and Priestley, to undertake the duty. Dr. Barnes, without hesitation, declined to be an agent in what he held to be a degradation of obstetric science, and an injury to the public; he resigned. Dr. Farre and Dr. Priestley adopted the same course; and as no men could be found willing to fill their places, the scheme failed. The section empowering the Council to grant this special licence has been in abeyance. Examiners in midwifery have been appointed to cooperate with the examiners in surgery and medicine, thus carrying into execution the principle for which Dr. Barnes contended of making midwifery an integral part of the qualification.

Still the charter remains in force, and the Council, so far from being anxious to give it effect, now look upon it as a reproach and a source of dread, and propose its abrogation.

It is no more than justice to Dr. Barnes, through whose courage and foresight this illogical and mischievous scheme was frustrated, that this history should be recorded. It is no less fitting that the present Council of the College should have due credit for giving the scheme its final blow, with the assistance of the Fellows and Members assembled in open congress.

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THE Naples Commission for the International Hygienic Exhibition in London has held its first sitting, presided over by the Pro-Syndic of Naples.

THE twenty-second festival dinner in aid of the funds of the Royal Medical Benevolent College at Epsom, is announced to take place at the Langham Hotel, Portland Place, on Wednesday, May 7th, when Sir Joseph Lister, Bart., has consented to take the chair.

THE presentation of a testimonial to Mr. Francis Hird, F.R.C.S., is announced by the Committee of the "Hird Testimonial Fund," to take place at the Charing Cross Hospital Medical School on Tuesday next, at 4.30, when Professor Huxley, Pres.R.S., will take the chair.

A MIXED commission, composed of Turkish and foreign naval officers and delegates of the Sanitary Board, is about to start for the Archipelago, for the purpose of selecting, among the smaller islands, a suitable site for a central quarantine establishment, which the Porte is desirous of securing in view of possible future outbreaks of cholera or plague in Egypt or Arabia. Admiral Faio Pacha has been appointed on the part of the Ottoman Admiralty. The Imperial yacht *Ismail* has been placed at the disposal of the commission, and will probably sail on Thursday next.

CREMATION.

DR. SEDGWICK SAUNDERS, and Mr. Tickle, a prominent member of the City Commission of Sewers, have made a very important step to further the practice of cremation. The erection of a crematorium in the Ilford cemetery, on the motion of Mr. Tickle, has been referred to the Sanitary Committee of the City of London; and, as Dr. Saunders is Medical Officer to the City, we may hope for a full and able report, and trust that the City will set a good example to other corporate bodies in a great and much needed sanitary reform.

DISCUSSION ON DIPHTHERIA.

THE West Middlesex District of the Metropolitan Counties Branch have arranged to hold a discussion on the "Causation, Recognition and Treatment of Diphtheria," on Thursday, April 10th, at 8.30 P.M. The discussion will be opened by Dr. Mahomed, and several gentlemen have promised to take part in it. It is a subject of the deepest interest and importance, and we have no doubt that many of the speakers will be able to contribute much information from their own experience, which may throw light upon some of the problems which present themselves for solution in connection with this disease.

ST. JOHN AMBULANCE ASSOCIATION.

A MEETING of the Central Executive Committee was held on Thursday, March 27th, at St. John's Gate, Clerkenwell, Sir Edmund Lechmere, Bart., M.P., presiding. It was reported that inaugural and other meetings had taken place during the month at Tilbury, Chard, Wirksworth, Backhouse, and Welwyn, and that many distributions of certificates had been held. At one meeting, in Florence, the Duchess of Teck presided, and another, attended by over 1,000 persons, was held at Dublin, in the Senate Hall of the Royal University. As an instance of the extension of the work, it was stated that twenty applications for examiners were received in one day alone last week, and that nearly five hundred pupils are about to be examined at one centre, Dundee. Prince Edward of Saxe-Weimar presented certificates to the classes at the Portsmouth centre on Friday, March 28th.

THE ILLNESS OF THE PRIME MINISTER.

MR. GLADSTONE is steadily, but somewhat slowly, recovering from the attack of bronchial and laryngeal catarrh under which he has recently laboured. The general depression of the system which these maladies can produce, especially in old people, is well known; and when it is remembered that Mr. Gladstone is seventy-five, it is not surprising to learn that the depression in his case has been very considerable, and has been accompanied by a good deal of neuralgia; the symptoms, indeed, seem to have pointed to the probability that Mr. Gladstone has been suffering from an attack of genuine influenza—an opinion which finds material confirmation in the large number of other similar cases of illness which have been recently noted. It will be necessary for the Premier to exercise unwonted caution and moderation in labour for some time to come, and to submit to an orderly regulation of each day's work and manner of life. If this necessary concession be made, there is every reason to hope that he will presently be restored to his accustomed vigour.

OVERCROWDING IN TENEMENT-HOUSES.

THE agitation as regards the housing of the poor, which has culminated in the appointment of a Royal Commission to inquire into the subject, has already led to the display of unusual activity on the part of several metropolitan vestries. Mr. Wynter Blyth, health-officer of St. Marylebone, has been busy of late in investigating from house to house the tenement streets of his district. The sanitary circumstances of East Street afford an excellent example of the evils arising from the present overcrowding of the poor. It contains 105 houses, with 940 rooms let to 483 families. In three instances one family occupies the entire house, but the rule is that the whole is let out in rooms. The population of the street is at present 1,642, giving for every ten rooms 17 people, or 1.7 to a room. The avocations of the inhabitants are extremely various, ranging from tradesmen in a fairly good position, down to the poorest class of male labourers, or charwomen. As a whole, the population is a very respectable one, quiet, orderly, and clean; only five houses were discovered to be thoroughly dirty. Each house is provided with a six-inch pipe drain, but in 44 instances there was no trap in the sewer, and in one house a cesspool was discovered; the other defects were of a minor character. Considered as a whole, the street is a fair sample of tenement property, and any excess in the death-rate may be fairly attributed to the crowding of six or eight families in a house built for one. During the seven years 1877-1883, the total number of deaths amounted to 274, or 39 annually, representing a death-rate of 23.9 per 1,000. As many as 104 occurred in infants under one year (37.9 per cent.), and 146 in children under five (53.2 per cent.). Mr. Blyth is of opinion that, making every allowance for the natural feebleness of infant life, the death-rate of East Street is not satisfactory, and adds another fact to the evidence already in existence as to the tendency of ordinary conditions of tenement life.

HEALTH-DUTIES OF SCHOOL BOARDS.

AT a time when the question of school-hygiene is receiving so much attention, a suggestion made by Dr. Corner, in a recent report to the Vestry of Mile End Old Town, that the London School Board should organise a hygienic and sanitary department, is worthy of consideration. In Mile End alone there are twelve schools, with an aggregate of upwards of 13,000 children on the rolls, affording a fertile source and means for the diffusion of infection. Having regard to the aggregate number of children in the whole of the metropolitan schools, penetrating as they must do into every street, court, and almost every house, Dr. Corner is surprised that infectious diseases are not even more prevalent and devastating than they have been hitherto. In any case, the indisputable fact remains, that these public schools are considerable propagators of infectious disease, and therefore care and supervision should be stringently exercised by those who are, or should be, responsible for the sanitary condition of the schools and health of the children. Dr. Corner expresses his wonder that the department he has indicated has not before been initiated by the London School Board in connection with their great educational work, since its cost would be speedily recouped, and would be the truest economy to the ratepayers, as well as a saving of human life. Dr. Corner's suggestion is one that might profitably receive consideration at the conference on school-hygiene, promoted by the National Health Society, to which we drew attention in a recent issue (see page 572).

FOOTBALL: THE KILLED AND WOUNDED.

VERY recently, under this title, we commented on two deaths in the football-field; but, in this short interval, two more deaths have occurred, both from injury to the spinal cord. In one case, death was rapid, almost sudden; in the other, the unfortunate young man, a student at the Royal Engineering College, Cooper's Hill, lingered for four months in a hopeless state of paraplegia produced by hæmorrhage into the cord. One useful piece of evidence was given by another student at Cooper's Hill, who swore that the game was not more dangerous when played according to the Rugby rules than according to the Association rules. The brutality of the game under the Rugby rules is admitted by so many lovers of football, that the Association may now, we hope, be stirred up to clear itself from this imputation. If no remedy be found by that body, then it will clearly become the duty of the authorities of all colleges to follow the lead of the Principal of Harvard, and forbid their students to play the game.

EGYPTIAN PRISONS.

THANKS to the energy of Mr. Harry Crookshank, F.R.C.S., Director-General of Prisons of Egypt, an efficient Prisons Department is now approaching completion. Since January 1st, when he came into office, the prisons of Alexandria, Cairo, Tantah, Zagazig, Damanhour, Benha, Mansourah, Gizeh, Damietta, Port Said, and Suez have been metamorphosed from dens of filth and injustice into prisons conducted as nearly as possible on the same lines as English prisons. The hard labour convicts, who are at present in charge of the Marine Department at the arsenal of Alexandria, will, we understand, shortly be transferred to an old military hospital at Tourah, part of which is now being fitted up for their reception, and their labour will then be utilised to convert the whole building into a convict prison capable of housing a thousand men. They will subsequently be employed on the quarries in the neighbourhood. The greatest credit is due to Dr. Crookshank for the energy with which he has thrown himself into a task of great labour and difficulty; and it must be a source of great gratification to all Englishmen to know that the occupation of Eg is resulting in the abolition of a prison system which has been for centuries a reproach to civilisation.

MILK-POISONING.

MR. G. W. WIGNER, President of the Society of Public Analysts, asks and answers the question "How long is the public health to be jeopardised by bad milk?" It will be so, he declares, until our Adulteration Acts are amended, so that the penalties are heavier, and a more efficient mode of reference is provided for disputed cases. As the law at present stands, an average adulterating dairyman makes more profit out of a day's good watering than he would have to pay as an ordinary fine when an inspector procures a sample from him; and his facilities for disposing of doubtful milk are cheaply purchased by an occasional fine of ten shillings or twenty shillings. Should he be unfortunate enough to be caught tripping, every quibble of law is invoked to procure his acquittal; and these failing, the decomposed sample is sent to be re-analysed, and an opinion is formed on results obtained when the milk is in such a state that analysts are all but agreed that no reliable opinion can be formed. Mr. Wigner has shown before that the milk-bill of London is increased by some hundreds of thousands *per annum* through customary watering and skimming, with a very few brilliant exceptions. The only remedy is new legislation. When shall we have it?

THE DEATH OF THE DUKE OF ALBANY.

WE have received from a trustworthy source the following account of the death of the Duke of Albany. His Royal Highness had been feeling remarkably well, but on Thursday, as described in the papers, he slipped in the Cercle Nautique at Cannes. He seemed very little the worse for this, and watched the *bataille de fleurs* from the balcony of the club. He dined as usual in the evening with Captain Perceval, and went to bed at his usual time, apparently in excellent general health. Mr. Royle was sleeping in an adjoining room to his Royal Highness, with the door open between the two apartments. He was awakened about one o'clock, by hearing the Duke breathing very stertorously; and, on getting up to see what was the matter, found him in a convulsion, with his face drawn to one side and his hands clenched. From this fit he never recovered, dying about 4 p.m. The constitutional malady from which he suffered is the subject of a leader in the present number of the JOURNAL.

DEATH UNDER CHLOROFORM.

A DEATH under chloroform is reported to have occurred at the Royal Portsmouth, Portsea, and Gosport Hospital. The deceased, Walter Humby, aged 44 years, had, it appeared from the medical evidence, been suffering from papilloma of the tongue, and entered the hospital in order that a surgical operation might be performed. It was thought necessary to excise a portion of the tongue, and with this object chloroform was administered by means of flannel and a Skinner's inhaler. The resident medical officer stated that the frame was kept over the mouth about six minutes, the flannel being replenished three times. A few seconds after the inhaler had been taken off for the third time Dr. Cousins noticed a change in the face of the patient, who was at once placed flat on his back, with a bolster under his shoulder, while the house-surgeon commenced artificial respiration, but unfortunately without avail. A galvanic battery was also applied over the region of the heart, and the windows of the room were opened. Before the administration witness made an examination of the state of the heart of the deceased, and found that all sounds were perfectly normal. From the appearance of the external organs he was of opinion that syncope was the primary cause of death, brought on by the administration of chloroform. During the administration, Mr. Henry Rundle held the pulse of the right hand, and about five or six minutes after the inhaler had been applied he found the pulse change. Before the stoppage of the pulse occurred, the death-like pallor of the patient attracted his attention and that of the other medical gentlemen present; artificial respiration was immediately commenced and carried on for quite twenty minutes, and every remedy to restore the deceased was tried. A verdict in accordance with the medical testimony was returned by the jury, who were of opinion that the doctors were justified in the steps they had taken before and during the administration of the chloroform.

ATTACKED BY A CONVICT.

LIVING among convicts, one may be said to resemble a soldier on perpetual active service. The warder who marches his men out in the morning to work, does so with his life in his hand. In one way, he is worse off than the soldier, who deals with an open enemy, and has equal chances of being able to fire the first shot; whereas the prison officer has to deal with a cowardly ruffian who strikes a blow from behind, and, like the savage, has no respect for the non-combatant. On Sunday morning last, a most savage assault was made by a convict at Portsmouth prison on the senior medical officer, Mr. Power, who was at the time inspecting a number of convicts, who had been drawn up in line before him. The assailant, who was well known as a desperate character, with a piece of iron, which he had sharpened for the purpose, aimed a blow at the forehead of Dr. Power, who, drawing back, received the sharp edge of the iron on the left eyebrow externally. It glanced down, inflicting a cut on the nose, and he thus only narrowly escaped a blow which might have been attended with serious results.

OUR INTEREST IN LOCAL TAXATION.

THE House of Commons had a business-like and interesting debate last Friday on the incidence of local taxation. It is singular that while every citizen makes more or less of a personal grievance of each penny of Imperial taxation, his local burdens are commonly regarded by him as an affair beyond his purview or control. Yet the latter touch his most tender spot—his pocket—much more acutely and pressingly than the former, and their amount is infinitely more susceptible of modification by his own action than the taxes which he pays to Her Majesty. Friday's debate will probably be contemplated by the vast majority of the people with a languid interest, as a somewhat intricate jumble of figures in which millions appear rather more often than is pleasant. It is true that Mr. Pell did not bring forward any definite plan of his own. What he desired was, that the Government should act upon the principle which has often been declared in the House by substantial majorities, that some readjustment of local taxation is necessary and urgent. In favour of this proposition it was hardly to be expected that any arguments of special novelty should be adduced. Most people who have studied the subject, recognise that the present incidence of local taxation is highly unsatisfactory, not to say unjust. The question of subventions from the State is, after all, a secondary matter. It means little more than emptying one pocket to fill another. What is necessary is, that the present system of local government should be remodelled. The Cabinet are, it appears, prepared to do this if they are only allowed; though one would have thought that in the present state of public business it would have been wiser to restrict rather than enlarge their field of operations. Sir Charles Dilke's description of the Bill which he has ready in his dispatch-box is very tantalising reading. Not only elective county councils, but elective district councils are to be created by it, urban being distinguished from rural communities. The poor-rate will be divided between owner and occupier. There will be a simplification of areas by adjustments and consolidations, and power will be given to the county councils to alter boundaries. Sir Charles might well call this measure large and comprehensive; but what reasonable person can expect that with the programme to which the Government now stand committed, any sort of progress can be made with it this Session? There is always danger in putting off the redress of a grievance until the whole class of grievances to which it belongs can be swept away. On the other hand, to patch up a fabric already rotten is proverbially unsatisfactory. As the House of Commons has passed Mr. Pell's resolution, the Government will probably be expected to do something to carry it into effect; though it is not easy to say what is to be done except to grant additional subsidies from the Imperial exchequer. Further subsidies could, however, only be regarded as a temporary staving off of a question admittedly urgent; and it is much to be wished that, if it were at all possible, a reform in the direction of Sir Charles Dilke's Bill could be carried into effect.

FIRE AT A HOSPITAL IN SALFORD.

A FIRE of a most disastrous character occurred at Hope Hospital, the hospital of the Salford Union, on Saturday last, resulting in the destruction of the whole of the upper half of one of these blocks. There were three female wards, and when the fire broke out there were in the block more than seventy patients, some of them seriously ill, and all more or less helpless, and the flames spread with such rapidity that it was with the greatest difficulty that the patients were rescued, the roof falling in a few minutes afterwards. As it was, we are glad to learn no mishap occurred to anyone, and this, no doubt, was in a great degree due to the order maintained and the steps taken to prevent as far as possible anything of the nature of a panic. The fire, which is supposed to have had its origin in a flue, was observed by Dr. Conry, the medical superintendent of the hospital. It was three hours after the arrival of the fire-brigade and engines before the fire was extinguished. Mr. Kelly, master of the workhouse, Mr. G. W. Gadd, chairman of the Infirmary Committee of the Guardians, and Mr. W. L. Marshall, chief constable of Salford, rendered efficient aid. So far as could be ascertained, none of the patients suffered through the sudden removal. Sufficient accommodation is available for them in the other wards, the number of patients at present in the hospital being about 200 short of its capacity.

CERTIFICATE OF DEATH SIGNED BY A DRUGGIST.

AT an inquest held last week at Leeds on the body of a girl, aged 4, it was deposed that the child had been ill about a week before death, with symptoms which the mother considered to be due to measles. As the gravity of the symptoms increased, a druggist named Kemplay was called in. He visited the child on four succeeding days, and prescribed medicine. Shortly after his last visit the child died. The druggist signed a death-certificate, stating that he attended the child, and that the cause of death was rubeola and gangrenous stomatitis, and he protested against the right of the registrar to refuse the certificate. The jury found that the child died from natural causes, and appended to their verdict a rider that they would have been much better satisfied if a properly qualified practitioner had attended the child. The coroner acted wisely in holding an inquest under the above circumstances, but the inquiry would have been more satisfactory if a *post mortem* examination had been conducted, and evidence of the cause of death tendered by a registered practitioner.

OBSTETRICAL SOCIETY OF LONDON.

ON Wednesday evening last, there was an unusually interesting meeting of the Obstetrical Society. Dr. Francis Neugebauer, of Warsaw, in an address delivered in French, demonstrated his theory on the cause of spondylolisthesis, exhibiting numerous specimens of lumbar vertebræ from cases where this pelvic deformity existed. Dr. Neugebauer is of opinion that the sliding forward of the lumbar vertebræ is always produced after birth, without the intervention of any constitutional or osseous disease, by the passive weight of the trunk, favoured by obesity, repeated pregnancies, and other causes; and he believes that this deformity is not limited to the articulation between the fifth lumbar vertebra and the sacrum. After a paper by Mr. Doran, on cases of prolapse of the vagina in women, many of whose relatives were subject to hernia, an interesting contribution was read on the benefits derived from the induced current during parturition, the contributor being Dr. Kilner, Electrician to St. Thomas's Hospital. There were good discussions on both papers, and Dr. Neugebauer's demonstration proved highly interesting to the Society. It was unanimously agreed that the Society should present an address of condolence to the Queen and the Duchess of Albany on their recent bereavement.

SCOTLAND.

UNIVERSITY OF ABERDEEN.

THE medical classes in this University were closed at the end of last week. The professional examinations for degrees in medicine were commenced on Monday, and there was a large number of candidates for each examination.

ROYAL HOSPITAL FOR SICK CHILDREN, EDINBURGH.

THE monthly report of the Royal Hospital for Sick Children states that, during March, 91 patients were treated in the hospital. Of these, 32 were admitted during the month, and 59 were in the hospital at the end of February. Twenty-seven patients were discharged cured, and 15 were relieved. The average daily sick in the hospital was 50. At the dispensary 850 patients were treated and 17 vaccinated, making a total of 867. There were received during the month 454 new cases; of these, 349 were from the city, 78 from Leith, and 27 from the country. Thus, the total number of patients treated in the hospital during the month was 958.

IRELAND.

KERRY COUNTY INFIRMARY.

DR. FITZMAURICE has been elected surgeon to the County Kerry Infirmary in the place of Dr. Neligan, whose right to hold the office was recently contested in the Court of Queen's Bench, and referred to in these columns.

QUEEN'S COLLEGE, CORK.

WE recently referred to the agitation which exists among a section of the students against the authorities of this College; and it is now stated that the secretary of the Philosophical Debating Society, which is connected with the College, has had an interview with the president in relation to the office-bearers of the society. He has been informed, it is said, that if any of the students who were recently punished for infringing the rules of the College were elected as office-bearers, the society would be at once dissolved by the authorities.

THE COUNTY DOWN CORONERSHIP.

AT a meeting of the Newtownards Board of Guardians, held last Saturday, a communication was read from the Local Government Board in reference to Dr. Parke holding the dual appointment of coroner for County Down and medical officer of the Newtownards Workhouse. They stated that as the guardians were of opinion that the position of coroner was not inconsistent with the efficient discharge of his duties as medical officer of the workhouse, the Board would not object to the arrangement receiving a trial, on the definite understanding that if any case arises in which Dr. Parke's attendance of the workhouse is neglected, or in which a patient in that institution suffers from his absence, the Board will feel it necessary to require him to resign his appointment as medical officer. We congratulate Dr. Parke upon the sympathy and support which he has received from the guardians of Newtownards Union, and which render it unnecessary for him to vacate the post of coroner as suggested by the Local Government Board.

MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

A MEETING of the Provisional Executive Committee was held at 38, Wimpole Street, on Thursday, March 27th. There were present Mr. E. Noble Smith in the chair, Mr. Sibley, Mr. J. Brindley James, Dr. Clibborn, Mr. Major Greenwood, jun., Mr. Fred. Wallace, and Mr. Radley, Secretary.

The Secretary presented his report, showing a total of 333 members, and receipts of preliminary entrance fees, etc., to the amount of £228 2s. 6d.

A letter was read from Dr. J. D. Plunket, President of the Tennessee State Board of Health, Nashville, U.S., asking for copies of the rules, tables, etc., of the Society, as a model for the formation of a similar society, in connection with the Tennessee State Medical Association. The Secretary was requested to forward copies of the documents.

A communication was read from Mr. Gilbert Walker, the editor of the *British Journal of Dental Science*, raising the question whether dental surgeons or dentists, either qualified or unqualified or both, would be eligible as members of the Society. The question, which was thought to be an important one, was discussed at some length, and the following resolution, proposed by Mr. Sibley, was unanimously passed:—"That any qualified registered dentist holding the diploma of L.D.S. of the Royal College of Surgeons of England, Scotland, or Ireland, be eligible as members of the Society." The Secretary was desired to forward a copy of the resolution to Mr. Walker, with a request that he would bring it before the notice of the dental profession through the columns of the *British Journal of Dental Science*.

Letters were also read from Mr. J. Bain Sincock, Bridgwater, and Mr. H. E. Trestrail, Aldershot, containing suggestions, the consideration of which it was decided to postpone until the general meeting, when full opportunity will be afforded for the discussion of any question, the adoption of which would necessitate an amendment of the rules.

The Secretary read the draft copy of a circular (drawn up in accordance with a resolution passed at the last meeting), in which the history, objects, and benefits of the Society are clearly laid down. It was approved and ordered to be circulated as arranged.

A consideration of the proposal forms brought forward for the decision of the Committee concluded the proceedings.

THE ROGERS' TESTIMONIAL.

THE following additional subscriptions to the fund for a testimonial to Dr. Joseph Rogers have been received. It should be understood that the subscription to this fund is not confined to Poor-law medical officers. The Treasurer is Mr. J. Wickham Barnes, 3, Bolt Court, Fleet Street, E.C.; and subscriptions are received by the Editor of the BRITISH MEDICAL JOURNAL.

Fourteenth List.—Mrs. Hawksley, £1 1s.; Dr. Danford Thomas, £1 1s.; G. Terry, Esq., Mells, £1 1s.; Dr. G. Barnes, Ewell, 10s. 6d.; Thos. Davies, Esq., Colwyn Bay, 5s.; A Pauper, 2s.

Mr. J. Wickham Barnes requests all subscribers who have not yet sent him their promised donations, to kindly do so, at their earliest convenience.

MEDICAL ACTS AMENDMENT BILL.

THE following circular has been issued, and a copy forwarded to us for publication.

23, St. John Street, Manchester, March 28th, 1884.

SIR,—At a meeting of the Lancashire and Cheshire Branch of the British Medical Association, held in Manchester, on March 18th, 1884, it was unanimously resolved that the President and Secretary of the Branch be requested to sign the petition submitted to the Council in favour of the Medical Act, 1884, introduced into the House of Lords by the Right Honourable the Lord Privy Seal, and to send a copy of the petition and resolution to every member of both Houses of the Legislature residing in, or connected with, the district.

The Lancashire and Cheshire Branch of the British Medical Association numbers nearly 900 members of the medical profession, and in its district are situated the Victoria University, and University College, Liverpool, each with its large and flourishing medical school.

The feeling in this district in favour of the proposed Medical Act is very strong, and the Council of this Branch ventures to hope that you will be able to give it your support.—I am, your most obedient servant,

CHARLES E. GLASCOTT, Honorary Secretary of the Branch.

Unto the Right Honourable the Lords Spiritual and Temporal of the United Kingdom of Great Britain and Ireland in Parliament assembled.

The humble petition of the Council of the Lancashire and Cheshire Branch of the British Medical Association, showeth:

That a Bill has been brought into your honourable House, intituled, "An Act for the Consolidation and Amendment of the Law relating to Medical Practitioners," by the Right Honourable the Lord Privy Seal, and that provision is therein made for improvement in the examination of candidates for the medical profession, and for the introduction of representatives elected by the registered medical practitioners residing in the United Kingdom of Great Britain and Ireland into the Medical Council.

Your petitioners pray that the said Act may become law.

And your petitioners will ever pray, etc.

D. LLOYD ROBERTS, M.D., President.
CHARLES E. GLASCOTT, M.D., Secretary.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, April 9th, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council-Room of Exeter Hall on Wednesday, the 9th day of April next, at 2 o'clock in the afternoon.

Subcommittees will meet as follows. At 161A, Strand, W.C.—Tuesday, April 8th, 1884: Subcommittee on Branch Organisation, 5 P.M. Scientific Grants Committee, 6 P.M. Subcommittee on Cost of Literary Part of Journal, 7.30 P.M. Wednesday April 9th, 1884: Journal and Finance Subcommittee, 11 A.M.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, London, April 2nd, 1884.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee: they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
IV*a*. Diphtheria, sanitary.
V. Syphilis, acquired.
V*a*. ,, inherited.
VI. Acute Gout.

URGENT.—*The Committee needs 150 more cases of Pneumonia, and hopes that they will be sent in as soon as possible.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
September, 1883. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH.—Meetings are held on the first Friday in every month, at half past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

LANCASHIRE AND CHESHIRE BRANCH. The first intermediate meeting of this Branch for 1884 will be held at the Mining School, Wigan, on Tuesday, April 8th, at 2 P.M. Dr. Frederick Roberts (London) has kindly consented to read a paper on Local Treatment in connection with the Respiratory Organs. The following communications have also been promised. Mr. Wm. Berry: A Paper on Surgical Dressings. Dr. Davidson: A Case of Hystero-epilepsy in a Boy, in which Metallotherapy and Magneto-therapy were employed. Dr. Leech: On Paraldehyde. Dr. Lloyd Roberts: A Patient from whom he removed a portion of an Ovarian Cyst. Dr. Walter: A Case of Suppurating Dermoid Cyst of the Ovary. Mr. Brown (Bacup): A Paper on the Proposed New Medical Bill, and the duty of general practitioners, and of the British Medical Association in particular, thereto, and will move a resolution thereon. Mr. Walter Whitehead will demonstrate the application of the Electric and the Oxy-hydrogen Light in Surgical Practice; and will also make some remarks on the Surgical Treatment of Haemorrhoids. There will be an exhibition of the newer forms of medical and surgical instruments, by Messrs. Wood, of Manchester. Messrs. Armstrong Bros. will show a selection of microscopes, optical instruments, and models. Messrs. Woolley and Co. will exhibit specimens of new drugs and special preparations. Messrs. Mottershead will furnish a series of peptonised foods and digestive preparations, and show some of the later forms of medical batteries. At five o'clock, the members will dine together at the Victoria Hotel. Dinner tickets 7s., exclusive of wine. Members who intend to be present at the dinner are specially requested to inform the Secretary as early as possible on the day of the meeting. CHARLES E. GLASCOTT, M.D., Honorary Secretary, 23, St. John Street, Manchester.

Metropolitan Counties Branch: West Middlesex District. The next meeting will be held on Thursday, April 10th, at the Horbury Schoolroom, Notting Hill, at 8.30 P.M. A paper will be read by Dr. Mahomed on the Causation, Recognition, and Treatment of Diphtheria, with a view to discussion, in which Dr. Goodhart, Dr. Stephen Mackenzie, Dr. Barlow, and others, have promised to take part. —Ed. Hart Vinen, M.D., Honorary Secretary, 17, Chepstow Villas, Bayswater. —April 1st, 1884.

North of Ireland Branch. —A general meeting of this Branch will be held in the Belfast Royal Hospital on Thursday, April 24th, at 12 o'clock. Members desirous of reading papers are requested to communicate as early as possible with the Honorary Secretary. Alex. Dempsey, M.D., 26, Clifton Street, Belfast.—April 2nd, 1884.

SPECIAL CORRESPONDENCE.

LETTERS FROM ITALY.—VI.

NAPLES.

Its Natural Beauties of Site and Scenery.—Posilipo, Baiæ, and Sorrento.—Its Sanitary and Social Condition.—Characteristics of the Streets.—Habitations and Habits of the People.—Sewers, Drains, and Water-Supply.—Mortality.—Climate.—Prospects and Drawbacks.—The Food-Supply.—Wines.—Hotels.—Means of Travel.

Mr. Ernest Hart writes, in his final letter from Italy:

So long as unrivalled beauties of scenery, masterpieces of art, the chief works of a bygone and buried civilisation, which lives again in its resuscitated treasures at Pompeii and in the Bourbon Museums; so long as purple mountain, azure sea, sweeping undulations of coast-outline, and sunny sky, a soft and equal climate, heights crowned with the umbrella-pine, the cypress, and the olive, enamelled with the golden groves of the orange and the citron, and festooned with vines; so long as the restored cities of the past, and the immortal works of classic masters have an invincible attraction to mankind so long, at least, will Naples remain the goal of a great pilgrimage; the city of the hopes and longings of thousands whose imagination has been fired by the story and the pictures of her galleries, her monuments, her cities of the dead; her bronzes and sculptures, her neighbouring temples, her volcanoes, her bay, and the tributary beauties of her neighbouring coast. So manifold and varied are her beauties and treasures of classic and mediæval art, so marvellous the titanic manifestations of elemental force, so singular and unrivalled her natural beauties, that it is probable that no one ever left Naples disappointed, unsatisfied, or without undying recollections of a city which combines in a strange and unequalled degree nearly everything which charms and attracts with much that repels and disgusts.

Naples, to make her charm most felt, should be looked at, rather than inquired into. Seen from any of the points of vantage in the bay, from Posilipo on the one side, to Torre del Greco on the other; or as she shows mistily in the tender quivering morning light, or in the orange and crimson tints of sunset, as she is approached by sea, no fairer sight can meet the eye. I can recal vividly the magical view of the Golden Horn seen when the slanting rays of the sun sparkle on the minarets of Pera; the dancing turquoise wavelets of the Egean, over which rise proudly the heights of the Acropolis, surmounted by the matchless symmetry of the Parthenon, golden with the ruddy hue with which centuries have adorned its marble shafts; the approach to Corfu, through the islands of the Greek Archipelago; these have charms which dwell for ever in the memory, and which are not easily rivalled; but the Bay of Naples bears easily the palm for proud beauties of unceasing and everchanging attraction. Spreading along shores gracefully curved, climbing the heights guarded by the stern fortress of St. Elmo, stretching far beneath the base of the lava-scorched, but still fertile flanks of Vesuvius laughing into garlanded vineyards and flowering gardens, sprinkled with terraced villas towards Baiæ, Naples queens it over the fairest stretch of land, and the loveliest bay of the sea, and the rarest combination of mountain, rock, and valley, that the eye can hope to rest upon. Baiæ, Pozzuoli, Posilipo, Pompeii, Sorrento, Ischia, Capri, all are comprised within the Bay of Naples; and are not *filiæ matre pulchriores*, only because of her beauty they are tributary parts. From them she is best seen, in them she is best enjoyed; and then quiet and refreshing loveliness, their balmy air, their fragrant hills and shaded groves, their cool sea-breezes, their sunny slopes and flowering gardens, the spreading parasols of their pines, the gleaming fruit of their orchards, their wholesome sweetness, their picturesque contented simplicity, tell us all that Naples may have been, much of what she might be, and is not. To see Naples, then, and live healthily and cleanly, without the disgust bred of loathsome stenches, and the sickness of heart and body which squalor, filth, neglect, and putrefaction bring, she is best seen from her suburbs at an admiring distance. Within her precincts crowd about six hundred thousand human beings, under circumstances which favour the easiest, happiest, cleanliest life, in a climate such as no other great city in the world can boast. Athens for a large part of the year is parched and smothered in white dust; Constantinople, even in the late spring, is pierced through and through with icy blasts from the Black Sea; and Rome is cursed with the Campagna, and suffers from the alternations due to the snow-cooled winds from the Alban hills that temper too sharply the hot rays of the sun; the streets of New York alternate between the heaped-up snow of winter and a summer furnace-heat which slays its hundreds of adults by sunstroke and its thousands of infants by the slower diseases of excessive insolation; London lives, for a large part of the year, beneath a pall of smoke and in a shroud of fog; Paris is only a few degrees better; but Naples hardly knows snow; her skies are clear at least ten months in the year; the temperature, except in a month or two of the hottest part of the summer, is always temperate; she is protected from the fury and inclemency of the winds; a moist sea-breeze cools her streets and fans her gardens; she is situated on the sides of sloping hills, and with a frontage extending for miles along the sea. The nearest port to the continents of the East; with a teeming population content to live simply, to work hard, and for a low wage, and of gentle and easy temper; with sturdy labourers, and a race of good fishermen, and half-amphibious from their birth; here might be collected, it would be thought, all the material for prosperous, cleanly, and healthy life. But it is otherwise. There is hardly anywhere to be seen a population more ragged, more poverty-stricken, more miserably housed, more filthy in their habits. There is a fine water-supply to be had at no great distance, but it is not utilised; the atmosphere of a great part of the town is an infection; the defilement of the streets is unspeakable; the mortality of the city is excessive; but it is only surprising, and indeed hardly credible, that it is not greater. The poorest Arab quarters of Cairo are not defaced by scenes so foul and habits so unseemly; Irish cabins in the wilds of Connemara and of Donegal are better fitted for human habitations than many of the huts which lie at the back of Naples; and no slums of any other city of Europe show a population so openly barbarous in their disregard of the decent modesties of the physical functions, as those who occupy the ground floors of the palazzi which line the principal thoroughfares of Naples. Along the Chiaja, facing the quays of Santa Lucia, on the great paved road which leads out to the suburb of Portici, the broad street-way is bordered with palaces, villas, great houses, and hotels. Mostly they face the sea; at the back of many of them are spacious and lovely gardens; in the apartments of the first and second floors live the wealthy, the noble, the prosperous, and the enterprising part of the population. Of a large number of them the ground-floor is constituted by cavernous arches, opening to the street by huge folding-doors or fitted up otherwise as shops, magazines, factories, wine-counters, *trattorie*, barbers' shops, or are inhabited by artisans. These have neither light nor air, except what they get from the front. They teem with a swarming population of various grades of prosperity, poverty, industry, idleness, and squalor. The front part is parted off by boarding or by a curtain, and constitutes the shop, or factory, or living-room: and in the back part is the sleeping-accommodation. There is no provision of closets, or for the disposal of refuse. An upper room is frequently carved out, but only occasionally. The larger part of the life of this motley population goes on in public, at the door or on the pavement. In one of these cavernous abodes, you may see a stable with a horse or mule, a shop, a bedroom with all its appurtenances; and in the front a baker's shop or a general provision-store. On the pavement are groups of women knitting, washing, gossiping, rocking with the foot a baby in a rough cradle, seated on chairs ranged in a circle. Hair-combing appears to be a solemn operation, conducted only at intervals, performed most often in public, and accompanied by a sporting hunt for small deer. The huge elongated cesspools miscalled drains, without water to flush them, and choked with every kind of putrefying filth and street-rubbish, exhale, by gaping apertures, foul stenches, with which the whole air is thick. Past corners, in which garbage is heaped up, you rush with handkerchief to nose, only to notice that that spot is unconcernedly selected for spreading the family-table in the open air for an evening meal, or that there is performed the family toilet. In this way the precincts of many of the most palatial houses are inhabited and defiled. No spot is sacred, no corner clean; no open space can be trodden without scrupulous vigilance. The rich and prosperous have tolerated this dirt and indecency so long, that they pass everything with indifference, and seem to be unaware of the degrading caricature of civilisation which the street-life of Naples shows. Needless to say that this indifference breeds and accompanies other anomalies which would not elsewhere be tolerated. The tram-companies are allowed to render broad and spacious avenues impassable for months; and, when they lay down fresh lines alongside the worn-out rails of the old tram-course, they leave the roadway still in ruts, which tear off cart- and carriage-wheels impartially. The state of the great thoroughfare leading from Naples to Torre del Greco can only be paralleled in Constantinople. The people live hard, are badly fed, ill-clothed, ill-paid; they are shameless and persistent beggars, and, as to the greater number of them, cannot be trusted to name a fair price for any service which they render or any wares which they sell. This is a serious indictment to draw; and yet I am sure it is not framed with ill-will, or with any conscious exaggeration.

For, spite of all, notwithstanding that Naples is the dirtiest, raggedest, most obscene and squalid city of Europe, although the disorder of her streets and the infection of the atmosphere raise moral and physical disgust, although her population is so poor that only 50,000 out of her population of 500,000 pay, I was informed, any taxes; although her trade is falling off and her greatness tottering, still Naples remains a city, not only with a great past, and having such present attractions as no rival can boast, but also, I believe, a great future. And since we must all die, everyone who can should, at least, try to see Naples once before dying. Her trade may yet take a fresh impulse, when the Italian Government are wise enough to free her maritime port from the excessive imposts which now prevent her from becoming the *entrepôt* of the east and west. Her streets may yet be clean when the great scheme is carried out which the municipality have long had in hand, and of which I have seen the plan, for bringing in a fresh water-supply, and laying down a scientific system of drains. Fifty millions of francs, we are told, are to be spent on this shortly, a wise outlay if intelligently made. A more direct and rapid *route* to Rome would greatly augment the number of visitors; an underground railway would facilitate the movement of population and quicken industrial intercourse, now toilsome and slow; adequate schools and secular education will awaken the people to quicker life and more decent habits. All these are promised in the near future. Meantime, Naples is what I have said; and to those who would visit her with impunity, I advise a shortened stay in the town, and preferably a residence at Posilipo, or some other of her charming suburbs. During the last fortnight of March we found the thermometer never over 90° in the sun, or below 60° degrees in the shade; the evenings temperate and mild; no sharp alternations of temperature; skies of gentle radiance and no monotonous hue; a flourishing and early vegetation. During all the spring, the traveller may find in the neighbourhood of Naples, on the north side of the bay, a delightful weather, reminding him of a fine English May or early June. In the winter, he is protected from wind, and basks in mild sunshine; in summer and autumn, he may cross to Sorrento, and either there or at Posilipo, he will always find cool sea-breezes and a grateful freshness; so, at least, my English friends tell me; and looking to my two experiences in spring, and to the natural characters of the site, I can well believe their report to be not exaggerated.

The hotels are good in Naples; those on the Corso Vittorio Emanuele, and others, such as the Hotel des Etrangers on the Chiaja, are well fitted, and every way satisfactory. The Villa Postiglione at Posilipo is a model of English comfort and cleanliness, with a site of unrivalled beauty, standing among its own gardens and vineyards, which slope down to the sea, and commanding views of Naples, Vesuvius, Torre del Greco, Capri, Ischia, and, the other side, Cape Miseno, which are not to be matched anywhere in the world, so far as my rather widely travelled experience recalls.

There is nothing in the food of the population which is special, except the maccaroni, which is fast losing its predominance, as it deserves to do. Tough, tasteless and unartificial, it represents one of the rudest forms of cereal food. To see it hand-made, in dirty hovels, hanging to dry in the sun suspended on rods, in the streets of Portici, in a foul atmosphere, and collecting the fragmentary dust of streets reeking with dried and pulverised filth, is enough to take away any charm of novelty, or of that local colour with which old stories of the picturesque maccaroni-eating lazzaroni of Naples may have invested it. Polenta is a good food when well cooked. Bread is bad, dear, ill-made, tough, and cavernous. Ill-baked loaves are sold at fivepence the kilo of two pounds. Meat is scarce and dear, veal and beef notably so; of course, at good hotels, meat and poultry of good quality are provided. Wine is abundant and cheap, and ought to be sold at still cheaper rates. In the vine-culture of the district lies its present chief source of wealth and hope for the immediate future. I took some pains to examine this subject, and visited the vineyards and cellars of one of the most active and intelligent wine-producers, Luigi Scala. They have learned during the last few years the advisability of making arrangements to supply for foreign markets an uniform type of Italian wine of the class of claret, of which this district is capable of producing, with due care in the vintage and wine-making, an enormous supply, capable of considerable increase as the demand progresses. I found here the signs of the commencement of a great and growing industry. The vines of the Herculaneum district, and of the slopes of Vesuvius, produce a claret which is supplied in quantities of thousands of hogsheads annually to France, England, and America. This Italian claret, a pure, sound, wholesome, red wine, is put free on board, at £4 5s. the hogshead of 25 dozen, which, after paying all costs of transport, duty, and bottling, would enable it to be bottled at a cost of less than 10s. a dozen. It has an alcoholic strength of 12 per cent., and thus bears transport well to this country, and ripens in the cellar. Of the clarets of higher quality, the Falerno would cost only about three shillings a dozen more; and, if a demand on a large scale arose, this, also, could be cultivated, and supplied in great quantities. Hitherto, the objection to Italian wines has been that, the vineyards being in the hands of small and poor proprietors, they hastily gathered and utilised the grapes of whatever quality, and very often in rainy years gathered them while still immature; so that successive vintages differed greatly, and could not be depended upon. In the hands of larger capitalists, supported by the banks, this is now being remedied. There is, however, no stock of old wines, and nearly all were wines which require to be kept a year or two in the cellar, before they will be ripe enough to suit our English tastes. There are many vintages, such as Capri, Lacryma Christi, Ravello Bianco, which already have their special reputation, and which are much and badly imitated. The Ravello Bianco, of F. Palumbo, at Sorrento, is a wine of a character equal to a high class Sauterne. Possibly it also varies; the wine which I chanced to meet with of this brand—Episcopio Moscato—at 25s. the dozen, was worth 60s. But I doubt whether the produce is large or the wine uniform. Excellent Marsala is, of course, to be had at 16s. to 18s. the dozen; seeing how much more generous and sound a wine is good Marsala than cheap sherry, it is surprising that it has gone out of fashion in this country; probably because Marsala is always cheap, and sherry may be dear; and, therefore, sham gentility prefers a wine which is not car-marked or of low price. To meet English tastes, the great Marsala growers would do well to produce a drier wine. The Barslo of Piedmont, the Chiante of Tuscany, and the richer wines of Syracuse and Sicily, have a great future before them.

I must close my letter, however, for it is written on the last day of our stay at Posilipo. In an hour or two, I must take ship, and regretfully leave the loveliest shores on which a holiday-maker in search of health and resort can ramble. I had hoped to enjoy a journey home by the Orient line, of which the steamers make the trip direct to London in eight days; for I am greatly addicted to "holidays at sea," and would never willingly rumble along in a train when a steamer can be obtained, and on it the refreshment of a sea-journey. But the dates of sailing are inopportune, and the time occupied beyond my available remnant, so that our sea-journey will end at Marseilles by the Fraissinet line. This mode of reaching Naples involves little, if any, loss of time; it is infinitely less wearisome than the long and fatiguing railway-journey; and I mention it, because it appears to me to be too little known and used by English travellers.

PARIS.

[FROM OUR SPECIAL CORRESPONDENT.]

Sulphate of Copper in Obstetric Practice.—Structural Elements of Vaccine-lymph.—The Influence of Chloroform and Ether on Yeast and Vegetable-cells.—Whooping-cough of Parasitic Origin treated by Resorcin.—A New Cannula.—A New Instrument for Transfusing Blood.—Brouardel on Cremation.—Living Germs in Sea-depths.—A Statue to the Memory of M. Broca.—The Minister of Commerce and the Sanitation of Factories.—A Legacy to the Académie des Sciences.—Chevaliers of the Legion d'Honneur.—Legrand du Saulle on Madness.—"La Comité Consultatif d'Hygiène" and Coloured Toys.

M. **CHARPENTIER** recommends sulphate of copper as an antiseptic in obstetrical practice. He has tested it, and arrives at the following conclusions: solution of sulphate of copper at 100° acts both as an antiseptic and disinfectant; its use is agreeable to the patients. It can be used for vaginal and uterine injections without the slightest danger or pain, even when there is erosion of the epithelium. It is a more energetic hæmostatic than iron-perchloride. It may be used during the first eight or ten days, and applied several times, if necessary, in the space of twenty-four hours. A lowering of the temperature, and the pulse becoming slow, are the only results. M. Charpentier used a solution of sulphate of copper in treating an abscess of the urethrovaginal septum. The following day, the fœtid odour had disappeared, also the general symptoms characteristic of septicæmia. Carbolic acid solution had proved useless. In a case of vulvular thrombus, the patient was completely cured by the use of sulphate of copper, and reparation of the tissues of the affected area was effected without the presence of a drop of pus. M. Charpentier recommends that the solution of sulphate of copper at 100 should be heated to 36° or 38° Cent. (96.8° or 100.4° Fahr.).

M. Ferré, Chief of the Municipal Laboratory of Bordeaux, in a note on the microscopic examination of vaccine-lymph, read by M. Brouardel at the Académie de Médecine, states that vaccine-lymph contains different structural elements, such as lymphatic cells, blood-corpuscles, more or less misshapen molecular granular carbonate of ammonia, and a micro-organism which he believes to closely resemble that described by Jolyet. It is held in suspension in the fluid, or is observed on the surface of the corpuscles. It is surrounded by a bright ring, which allows it to be distinguished from granules. It is easily mistaken among structural elements which have undergone degeneration, as their degree of refraction is similar; the structural elements remain fixed, but the micro-organisms are endowed with movement; they measure from one to two or three-thousandth of a millimètre. Examined with a low power, they appear round or crescent-shaped; with a higher power, they present a superior convex surface, and an inferior more or less concave. Two prolongations are situated at the same diameter on the inferior surface. This micro-organism is generally agminated; it was observed in the blood of different animals after vaccination.

M. Gomez has made a series of researches on the influence of chloroform on yeast, which show that it is analogous to that of ether. A chloroform-solution lessens the respiration of the yeast-cells. A current of water and chloroform almost completely arrests this function. M. Rabuteau asserts that ether and chloroform lessen respiration in vegetable-cells; and, if the experiment be prolonged definitively, arrest it. But the action of ether on seed before and after germination is not the same; before germination, it is inert.

M. Moncorvo of Rio Janeiro, in a pamphlet presented to the Société de Médecine de Paris, states that he believes whooping-cough to be of parasitic origin. He, therefore, applies to the laryngeal mucous membrane an aqueous solution of resorcin. The applications are made every two hours during the daytime. This treatment was successful in thirty cases.

Dr. Roudet, assistant in the physiological laboratory of the Faculty of Medicine, has invented a cannula for experimental biliary fistulæ, which is free from the defects presented by cannulæ hitherto used. This was practically demonstrated by Dr. Laborde presenting to the Biological Society a dog comfortably wearing one of the cannulæ in question.

M. J. Roussel has invented an instrument for transfusing blood. It consists of an India-rubber tube and a bifurcated lancet, which imprisons the vein and incises its lateral walls. The India-rubber tube should be immersed in hot water before it is used. It is free from clots after transfusion.

At a recent meeting of the Conseil d'Hygiene, M. Brouardel read the report on the cremation of bodies used in dissecting-rooms. The report stated that public health would not be endangered by cremating subjects used for dissection, provided the process was effected in stoves from which no odour escaped. Cremating these human remains was of no importance with reference to medical jurisprudence.

M. Alphonse Milne-Edwardes presented to the Académie des Sciences a memoir by M. Certes on the experiments made by him on the water and sediment collected at different depths, from three thousand to four thousand mètres, during the voyage of the *Talisman*. M. Certes's experiments authorise the belief that the water and sediment contained living germs.

The Conseil Municipal have decided to erect a statue to the memory of M. Broca. It will be placed at the angle formed by the Boulevard St. Germain and the Rue de l'Ecole de Médecine.

The Minister of Commerce has applied to the Comité Consultatif d'Hygiène Publique for advice concerning the sanitation of factories.

The Comte du Moncel, well known as an electrician, has bequeathed to the Académie des Sciences 15,000 francs (£600) to be used as the society may determine.

M. Regnard, professor of physiology at the Institut National Agronomique, is named Chevalier of the Legion d'Honneur.

A few days ago, M. Legrand du Saulle, before a crowded audience at the Salpêtrière, delivered a lecture on "Madness during the Siege," in which he refuted the belief that political crises, such as revolutions, etc, originated madness. A healthy, well balanced mind would not, according to M. Legrand du Saulle, be affected by any form of insanity during periods of danger. The number of the mad patients at Bicêtre did not vary between 1847 and 1854, notwithstanding the revolution of 1848 and the subsequent *Coups d'Etat*. These events gave a special character to insanity already manifested, and hastened the appearance of symptoms of insanity in others which, later on, would certainly have been manifested. The most frequent causes of insanity during recent years, M. Legrand du Saulle described as the thirst of enjoyment, the desire to become rapidly rich, loss of fortune, Stock Exchange losses, and, above all, alcoholism. From 1870 to 1884, 25 per cent. of the total number of insane patients was traceable to alcoholism. A curious coincidence happened in 1870. As soon as war was declared, statistics indicated that madness was on the decrease. This condition was transitory. After Sedan the country people crushed into Paris almost frantic. A curious form of insanity declared itself: melancholia characterised by anxiety and stupor, but the sufferers completely recovered from it. During the siege many were a prey to a mania termed "*delire des inventions*," a form never observed during quiet times. A number of these unhappy people invented methods for annihilating the Prussians, and, after an audience with General Trochu, were conducted to M. Legrand du Saulle's consulting-room. The children conceived during the siege presented, in many instances, arrested development and different forms of morbid degeneration. Some of these unhappy examples were shown to the audience. M. Legrand du Saulle terminated his lecture by saying, among the misfortunes that the war has bequeathed, there is one little known; before 1870, in Paris, the women were sober, but since the war they indulged in drink.

M. C. Hérisson, Minister of Commerce, has communicated to the Comité Consultatif d'Hygiene Publique several letters from toy-manufacturers protesting against the prohibition of certain colouring substances used in ornamentation. The Committee has decided that this prohibition, which was issued in 1878, is too stringent, and the *préfects* would be called upon to revise the regulations. Lead-chromates, carbonate of lead or cernuli, mercuric sulphide, generally known as vermilion, may be used for small tin and iron toys, also for India-rubber toys and balloons, if a coat of varnish is superimposed on the colouring substance.

Dr. Doumie, formerly medical inspector of the Mediterranean steamers, and medical officer to the prison of Poissy, has received the decoration of Chevalier of the Legion of Honour.

The female superintendent of the dispensary of Laënnec Hospital, and her assistant, who were accused of manslaughter, in the circumstances mentioned in the JOURNAL of March 29th, have been acquitted. The jury strongly condemned the system prevalent at this dispensary, and asked why a qualified dispenser was not appointed.

CORRESPONDENCE.

THE MEDICAL REFORM BILL.

SIR,—The Associates will do well to carefully consider their duty to the general public and to themselves before filling up the form sent out with the JOURNAL. If the Apothecaries' Act of 1815 be abrogated, and not an equivalent substituted, it will be a great mistake. Let each Branch have a meeting, and discuss this particular point; otherwise we shall have unlicensed practice rife all over the country, with no power to check it. As it is, the above Act is a salutary deterrent.—Yours, etc., JOHN BROWN, L.R.C.P.Lond.

Bacup, March 16th, 1884.

*** This point was placed before the Association last year. The opinion of the Government and of the solicitor to the Association is, that the repeal of the Apothecaries' Act will not have the effect suggested.

A CAUTION.

SIR,—Under the above-named heading you published, on the 1st of March, a letter addressed to you by Mr. Horatio Nelson Hardy cautioning the members of the British Medical Association against—well, what? Why, himself, I say.

Mr. Hardy states that I have used his name without his authority, which is incorrect. Mr. Hardy says, also, that he knows nothing of the committee mentioned in my circular letter. That again is incorrect. Mr. Hardy has taken upon himself the exalted and thankless position of adviser to the members of the Association, etc.; he also advises that they should send no subscriptions to the committee, although he tells them that he knows nothing of the committee.

Probably your readers will feel surprised to learn that no appeal has been made to the profession for donations, but only to a few gentlemen with whom I am more or less acquainted, and to three or four others I know of only by name. The letter was printed just to save me time and trouble in writing about thirty copies of it; and the result of this very limited appeal is that we have formed an excellent committee of general practitioners who are all members of the British Medical Association, and who know well what the interests and wants of the general practioners are, both as regards medical legislation and the treatment they ought to receive from our Journal and Finance Committee.

I hope it will prove to be a balm to Mr. Hardy's troubled mind when I tell him that our funds are equal to our present wants; but it is not that which has so sorely tried his patience, but this—it was decided not to have his name on our committee, as it was considered best to rely upon his loyal (?), outside, independent help; and that this course was wise is amply shown by his letter—I am, Sir, your obedient servant,

R. H. S. CARPENTER.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, April 3rd.

MEDICAL ACT AMENDMENT BILL.

LORD CARLINGFORD presented a petition from the British Medical Association, which, he said, was a body of very great importance, containing ten thousand registered members of the medical profession, and comprising a large proportion of physicians and surgeons in the hospitals, and physicians and lecturers attached to the various schools throughout the United Kingdom, praying that this Bill might be passed into law during the present session. The noble lord formally moved the third reading of the Bill.—The Earl of CAMPERDOWN took occasion to remark that this Bill was a compromise between the opinions of those who held that all medical authorities ought to preserve complete liberty in giving their licences and the opinions of those who considered that the licences should be given after the examinations. He did not suppose that the Lord President had been so sanguine as to suppose that in these circumstances the Bill of the Government would meet with the assent of all persons of authority interested in the question. At the same time, he had no doubt that the measure would meet with a very considerable amount of approbation, and that it would be very much the desire and to the interests of the profession and the medical authorities themselves that the measure should be passed into law during the present session. There were one or two points to which he should like to refer; one in reference to the Scotch universities who had made their statement through Lord Balfour of Burleigh. They had protested; not, however, with the intention of opposing the Bill in another place. He hoped they would realise what would be the effect of their opposition, if it were successful. It went to the root of the whole bill. If the Scotch universities were to be allowed to retain the power of giving a licence, the English and Irish universities would demand the same privilege. It was only the other day that the Scottish representatives were arguing in another place, with reference to another medical question, that it was essential to treat the three countries in the same manner; and, if that argument was to hold good, he hoped it would be remembered when dealing with the question of medical licences. He was certain that the contentions of the Scottish universities, if acceded to, would lead to the overthrow of the Bill, and believed that those universities were not well advised in making the objection. The corporations, he believed, would suffer more than any other body from the system of licensing. One reason why the medical students had preferred to go to the Scottish corporations, in preference to other bodies, for their licence, had been on account of the excellence of the examinations there; and now that there were to be approximate examinations elsewhere, it was only to be supposed that many students would take the opportunity of going where they could get the best education. For this reason, if not for any other, he believed the Scottish universities were not well advised in raising their objection. He thought the Lord President, in dealing with the claims of the various bodies, had gone to the furthest extent of conciliation. He had given the corporations more representation in proportion to the universities than he had proposed to do in the Bill of last year. He (the noble earl) had raised an objection last year because he knew very well that in a Bill of this kind it was desirable that the Privy Council should do everything they could to conciliate all the important interests. They had, for the future, a guarantee, in the examinations which were to be conducted by an authority for the whole kingdom, which they had not had hitherto, that the examinations of the Scottish corporations would be good for the future; and even supposing that that were not to be the case, there was a power of revision in the Bill which would enable the Privy Council and the Medical Council together to make changes hereafter in the representation of the various authorities upon the medical boards. Under all these circumstances, he was quite ready to accede to the change which it was proposed to make in the Bill, and he thought the Scottish medical corporations would be very ill advised indeed, if they proposed to force the changes further in the House of Commons. The evidence taken before the Royal Commission showed very distinctly—and the testimony was of the most incontrovertible character, namely, that of the crammers—that hitherto the examinations of some of the Scottish medical corporations had been very inferior to those held at other medical centres in other portions of the United Kingdom. In dealing with the corporations as the Lord President had done, he had taken a very favourable view of the case. There was only one other matter to which he wished to allude. A proposal had been put forward by the Irish Medical Corporations, in the form of an amendment, which was ultimately not pressed, to the effect that all students shall be compelled, directly or indirectly, either before the time of obtaining their licence or afterwards, to be affiliated to some medical corporation or university. Any claim of that sort, should it be hereafter revived, would, he hoped, not be listened to for a moment. This question of compulsory affiliation had been put forward again and again, and had been considered by the Royal Commission and in their lordships' House, but on no occasion had it been successful, and he wished to remind those who supported this contention of the fact, which very likely had not occurred to them, that an objection was raised to the Bill from exactly an opposite point of view. There was a powerful party who were displeased with the Bill because, although it instituted a board of examination, it did not create any title for those who passed the examinations, and he dared say an attempt will be made to create a new title. Now that point, also, was considered by the Royal Commission, and he was bound to say that he himself cordially concurred in the decision arrived at that it was inexpedient to make any addition to the already existing titles. This decision, indirectly no doubt, supported and enhanced the value of the titles, and if these medical authorities proposed to push this matter still further, and to insist that every medical student should belong to some one or other of their bodies, they were proposing to inflict on medical students a very considerable additional cost, and they would be placing a very strong argument in the hands of their opponents, which, no doubt, would be made use of. This Bill, as he had said, was a compromise. It took away from all the universities and medical corporations the privilege of giving licences, a privilege which they were naturally all very reluctant to give up; but at the same time they had nearly all been so good as to accede to the proposal of the Royal Commission, which was contained in the Bill. There was every reason to believe that the Bill in its present form had the approbation of a very large majority, both of the universities and of the medical corporations. He endorsed the statement of the Duke of Richmond and Gordon, and he hoped the Government would press the Bill forward as much as they possibly could in the House of Commons. He did not himself believe that the opposition would be of a very strenuous character; but at all events the proposals could be discussed in a very short space of time. Of this, however, he was quite certain that the delay which had taken place as to this question of medical legislation had been very damaging to those institutions which were connected with medical education, and the medical profession generally; and he hoped the Government would do all in their power to push on a Bill which he thought, if passed, would be found to be of great advantage to the public and the profession.—Lord CARLINGFORD: I am very glad the noble earl should have given his blessing to this Bill before it leaves your lordship's House to encounter the dangers of another place; and I am very glad that he should have given the weight of his authority and that of the Royal Commission against certain changes which have been much talked of and desired in certain quarters, and which are liable to be debated in that "other place." One of these proposed changes—that which I was sorry to hear threatened the other day by Lord Balfour of Burleigh, who I hope is not, as the noble earl said, instructed by the Scottish universities—differs from most other amendments that have been proposed or talked of in this respect, that it does go to the very essence of the Bill; and I am not surprised that the noble lord should have said what he has, because, in the report of the Royal Commission, it appears they most carefully considered the statements and views of the Scottish universities, and they gave the most cogent reasons why it was absolutely impossible that the Scottish universities could be treated on an exceptional footing, and be put in possession of a totally exceptional privilege as compared with the other universities of England

and Ireland. As to the Bill itself, I am convinced that it runs no danger whatever so far as public opinion or professional opinion is concerned. The petition which I have presented is a good specimen of the proof of the prevailing opinion of the medical profession, and I am convinced that, as these are the opinions that ought to be decisive, no danger will arise. Dr. H. W. Acland, President of the General Medical Council, has expressed the strongest opinion, in his address to the Council, that the time has come when they ought to bring their influence to bear in aiding the settlement of the question. Whatever danger there may be will not come from the profession. It will come solely, I believe, from the unfortunate jealousies and fancied interests of a certain number of licensing bodies. The professional and the public interests will, I hope, prevail over such attempts, and I trust the Bill will be treated in the same public spirit in the House of Commons in which it has been treated here.

The Bill was then read a third time.

Before the question, "That the Bill do pass," was put, Lord CARLINGFORD moved an amendment to Clause 9, to give the Royal Irish University four, instead of three, representatives on the Irish Medical Board.—The Earl of MILLTOWN declared that the Irish Medical Corporations were by no means satisfied with this amendment.—After a few words from Earl CAIRNS in support of the amendment, Lord CARLINGFORD defended his proposal. He said there had been a strong feeling on the part of the Irish College of Physicians that they should be put on the same footing as the Irish College of Surgeons; and he was satisfied that it would be better to do that. It was always assumed, and it had his full concurrence, that the Irish Universities should be maintained in their majority on the Board. He had attempted to deal with the matter by giving a member to the two universities, either to be elected conjointly or to be elected alternately, but that plan was thoroughly distasteful to both the universities; and it had only remained for him to settle the matter by proposing to give a member to each. It came to this, that the majority that was to be maintained on the side of the Universities was to be a majority of two instead of one.—The amendment was agreed to, and the Bill then passed.

INDIA AND THE COLONIES.

THE EPIDEMIC PREVALENCE OF SMALL-POX IN INDIA.

THE epidemic of small-pox is still raging in Madras, and the death-rate from all causes has risen to 85 per 1,000. The correspondent of the *Times* telegraphs that "The present year seems characterised by an exceptional development of small-pox throughout India. The disease is epidemic, and is causing great mortality in Rangoon, and also in several cities of Upper India. It is described as above the average in Calcutta, and appears to prevail to a greater or less extent in almost every large city in the country."

MILITARY AND NAVAL MEDICAL SERVICES.

ARMY MEDICAL SCHOOL, NETLEY.

THE forty-eighth session of the Army Medical School was opened on the 2nd instant, when twenty-one gentlemen joined for the home service, and five for the Indian. The introductory address was delivered by Professor Maclean, who began with a graceful and touching allusion to the death of the Duke of Albany. He welcomed the new surgeons on probation, and explained the objects of their sojourn at Netley, pointing out the advantages of a military career, but warning them, at the same time, of the obstacles their best efforts may have to encounter, from the indiscriminating blame sometimes heaped upon the department for shortcomings for which it ought not to be held responsible. He illustrated this by the experience of Robert Jackson, in former days, and by the unmerited obloquy thrown upon the medical officers in the Egyptian campaign of 1882.

Dr. Maclean wound up a most eloquent address with an expression of hope that the stay of the surgeons on probation at Netley might be both profitable and pleasant.

Surgeon-General Murray and the medical and professional staff were present, as well as Mr. Dayman, President of the Southampton Medical Society.

The occasion was rendered further interesting by the fact that it is the first time that the school had been opened at Netley since the post of governor and commandant of the Royal Victoria Hospital has ceased to exist. From this time forth, the surgeon-general is sole responsible and administrative head of the establishment, and a galling and vexatious grievance has been at length removed. The excellent results which have followed a similar change in the hospitals of the Royal Navy are not likely to be wanting at the head-quarters of the sister service.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.—During the week ending the 29th ult., 6,086 births and 3,495 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons. The annual rate of mortality per 1,000 persons living in these towns, which in the two preceding weeks had been 22.6 and 22.1, further declined to 20.8 in the week ending the 29th ult. During the thirteen weeks of the quarter ending last Saturday, the rate of mortality in these towns did not exceed 21.1 per 1,000, a lower rate than has been recorded in the first quarter of any preceding year, the nearest approach to so low a rate being 23.8 in 1883. From the exceptionally low rate recorded in these large towns during last quarter, it may be safely assumed that the general death-rate of the country for the same period will be found to be unprecedentedly low. The rates in the several towns last week, ranged in order from the lowest, were as follow:—Derby, 12.5; Brighton, 13.9; Bristol, 14.0; Bradford, 15.9; Huddersfield, 17.6; Birkenhead, 17.8; Plymouth, 18.7; Leicester, 18.9; Sunderland, 19.1; Bolton, 19.6; Sheffield, 19.8; Wolverhampton, 20.0; Nottingham, 20.3; London, 20.4; Birmingham, 20.8; Salford, 21.4; Leeds, 21.5; Cardiff, 21.8; Hull, 21.9; Liverpool, 22.2; Portsmouth, 22.7; Norwich, 23.7; Newcastle-upon-Tyne, 24.1; Blackburn, 25.0; Manchester, 27.1; Oldham, 27.6; Preston, 27.8; and the highest rate 30.7 in Halifax. The average death-rate last week in the twenty-seven provincial towns was 21.1, and therefore exceeded by 0.7 per 1,000 the rate recorded in London. The 3,495 deaths registered last week in the twenty-eight towns included 471 which were referred to the principal zymotic diseases, against 502 and 486 in the two preceding weeks; of these, 154 resulted from whooping-cough, 135 from measles, 73 from scarlet fever, 41 from "fever" (principally enteric), 31 from diarrhœa, 20 from diphtheria, and 17 from small-pox. These 471 deaths were equal to 13.5 per cent. of the total deaths, and to an annual rate of 2.8 per 1,000. This zymotic rate was equal to 3.1 in London, whereas it did not exceed 2.6 in the twenty-seven provincial towns, among which it ranged from 0.0 in Derby, 0.5 in Bristol, and 0.6 in Huddersfield, to 5.9 in Portsmouth, and 7.2 in Oldham. The fatal cases of whooping-cough, which had been 160 and 143 in the two preceding weeks, rose again to 154, and caused the highest rates of mortality in London, Salford, and Bolton. The deaths referred to measles, which in the two previous weeks had been 146 and 141, further declined last week to 135, and showed the largest proportional fatality in Birmingham, Oldham, and Portsmouth. The 73 fatal cases of scarlet fever were 13 fewer than the number in the preceding week, but this disease showed excessive prevalence in Leeds and Sheffield. The deaths referred to different forms of fever, which had declined in the three previous weeks from 44 to 33, rose again last week to 41, and showed the largest proportional fatality in Liverpool and Birkenhead. The 31 deaths from diarrhœa showed a marked decline from recent weekly numbers. The fatal cases of diphtheria in the twenty-eight towns, which had been 20 and 28 in the two preceding weeks, declined again to 20; 12 occurred in London, and 2 in Salford. The 17 deaths from small-pox in these towns exceeded by 4 the number in the preceding week, and included 11 in London, 2 in Liverpool, 2 in Sunderland, 1 in Birmingham, and 1 in Newcastle-upon-Tyne. The death-rate from diseases of the respiratory organs, judged by the metropolitan returns, was again considerably below the average; the deaths referred to these diseases in London, which had been 370 and 37[illegible] in the two previous weeks, declined to 359 last week; they were as many as 182 below the corrected weekly average, and were equal to an annual rate of 4.7 per 1,000. The causes of 97, or 2.8 per cent., of the 3,495 deaths registered last week in the twenty-eight towns were not certified, either by medical practitioners or by coroners. In London the proportion of uncertified deaths did not exceed 1.3 per cent., while in the provincial towns it averaged 4.0 per cent., and showed the largest excess in Oldham, Hull, Leicester, and Wolverhampton.

HEALTH OF SCOTCH TOWNS.—In eight of the principal Scotch towns, having an estimated aggregate population of 1,2[illegible] persons, 797 births and 571 deaths were registered during the week ending the 29th ultimo. The annual rate of mortality, which in the two preceding weeks had been 20.9 and 21.3 per 1,000, further rose to 23.7, and exceeded by 2.9 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the death-rate was equal to 14.8 in Leith, 16.8 in Perth, 18.0 in Dundee, 21.5 in Edinburgh, 22.9 in Greenock, 24.3 in Aberdeen, 27.3 in Glasgow, and 28.5 in Paisley. The 571 deaths registered last week in these towns included 35 which resulted from whooping-cough, 18 from diphtheria, 14 from measles, 12 from diarrhœal diseases, 4 from "fever," 4 from scarlet fever, and 1 from small-pox; in all, 88 deaths were referred to these principal zymotic diseases, equal to 15.4 per cent. of the total deaths, and to a rate of 3.6 per 1,000, which exceeded by 0.8 the average zymotic death-rate recorded last week in the twenty-eight English towns. In the Scotch towns, the lowest zymotic death-rates were 0.0 in Perth, and 1.4 in Greenock, whereas the rate was equal to 4.7 in Leith, and 7.1 in Paisley. The fatal cases of whooping-cough, which had been 22 and 23 in the two preceding weeks, rose to 35, and exceeded the number returned in any previous week of this year; 18 occurred in Glasgow, 9 in Edinburgh, 4 in Dundee, and 3 in Aberdeen. The 18 deaths referred to diphtheria exceeded by 7 those recorded in the preceding week; 6 were returned in Glasgow, 4 in Edinburgh, and 4 in Dundee. Of the 14 fatal cases of measles, 6 more were recorded in Paisley, and 4 in Edinburgh. Since the commencement of this year, 40 deaths have resulted from measles in Paisley, equal to a rate of 2.8 per 1,000. The 4 fatal cases of "fever" were fewer than in any recent week, and included 2 in Glasgow. The deaths from scarlet fever, which had been 7 and 9 in the two previous weeks, declined to 4, of which 3 occurred in Glasgow. The mortality from diseases of the respiratory organs in these Scotch towns was again considerably below the average, and was equal to an annual rate of 4.5 per 1,000, which was slightly below the rate last week from the same diseases in London. As many as 89, or nearly 16 per cent., of the 571 deaths registered last week in these towns were uncertified.

HEALTH OF IRISH TOWNS.—During the week ending March 22nd, the number of deaths registered in the sixteen principal towns in Ireland was 442. The average annual death-rate thus represented was 26.8 per 1,000 of the population, the respective rates for the several districts being as follow, ranging in order from the lowest to the highest: Dundalk, 13.1; Lurgan, 15.4; Kilkenny, 16.9; Sligo, 19.2; Armagh, 20.7; Londonderry, 23.2; Newry, 24.6; Wexford, 25.7; Dublin, 26.7; Limerick, 27.0; Belfast, 27.1; Cork, 27.3; Waterford, 34.7; Galway, 37.0; Drogheda, 38.1; Lisburn, 38.7. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.5 per 1000, the rates varying from 0.0 in Galway, Newry, Kilkenny, Wexford, Dundalk, Sligo, and Lurgan, to 11.6 in Waterford; the 15 deaths from all causes registered in the last named district comprising 2 from scarlatina, 2 from whooping-cough, and 1 from diarrhœa. Among the 113 deaths from all causes registered in Belfast, were 1 from whooping-cough, 2 from enteric fever, and 2 from diarrhœa. Among the 20 deaths from all causes in Limerick were 2 from scarlatina and 1 from diarrhœa; and among the 13 deaths in Londonderry were 1 from scarlatina, 1 from typhus, and 2 from whooping-cough. In the Dublin Registration District, the deaths registered during the week amounted to 185—93 males and 92 females. Twenty-two deaths from zymotic diseases were registered, being 7 over the number for the preceding week, but 11 under the average for the twelfth week of the last ten years; they comprise 6 from scarlet fever (scarlatina), 2 from typhus, 3 from whooping-cough, 1 from diphtheria, 2 from simple continued and ill-defined fever, 4 from enteric fever, 2 from diarrhœa, etc. Twenty-eight deaths from diseases of the respiratory system were registered, being 27 under the average for the corresponding week of the last ten years, and 1 under the number for the week ended March 15th; they comprised 15 from bronchitis, and 5 from pneumonia. The deaths of 7 children under 5 years of age (including 5 infants under 1 year old) were ascribed to convulsions. Four deaths were caused by apoplexy, 8 by other diseases of the brain and nervous system (exclusive of convulsions), and 17 by diseases of the circulatory system. Phthisis caused 31 deaths, mesenteric disease, 11, tubercular meningitis 10, and cancer 3. Three accidental deaths were registered. In one instance the cause of death was "uncertified," and in 25 other cases there was "no medical attendant."

HEALTH OF FOREIGN CITIES.—It appears from statistics published in the Registrar-General's return for the week ending the 29th ult. that the annual death-rate was recently equal to 26.7 in Bombay and 55.6 in Madras. Small-pox caused 110 deaths in Madras and 5 in Bombay; and cholera 29 in Madras and 10 in Bombay. According to the most recently received weekly returns, the death-rate in twenty-one of the principal European cities averaged 29.8 per 1,000, and was no less than 8.5 above the mean rate last week in the twenty-eight large English towns dealt with in the Registrar-General's weekly return. In St. Petersburg the death-rate was equal to 44.4, showing a further increase upon the rate in recent weeks; the 789 deaths included 44 from measles, 39 from "fever," 21 from scarlet fever, and 15 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 23.1, and ranged from 22.3 in Copenhagen, to 26.3 in Stockholm; 3 of the 47 deaths in Christiania resulted from scarlet fever, and diphtheria and croup caused 4 deaths in Copenhagen and 5 in Stockholm. In Paris the death-rate was 26.5, showing a slight decline from the rate in the previous week; it was, however, 6.1 in excess of the rate that prevailed in London; the 1,139 deaths included 66 from diphtheria and croup, 40 from measles, and 31 from typhoid fever. The 195 deaths in Brussels, including 9 from small-pox and 7 from whooping-cough, were equal to a rate of 26.6. The rate in Geneva was so high as 45.7, 21 of the 62 deaths resulting from "fever," against 10 in the previous week. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the rate averaged 23.8, the highest rate being 25.3 in Amsterdam, where 12 more deaths were referred to diphtheria and croup; 3 fatal cases of scarlet fever occurred in Rotterdam. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 28.2, and ranged from 22.6 and 23.8 in Berlin and Dresden, to 33.4 in Breslau, and 39.5 in Prague. Small-pox caused 28 deaths in Prague (against 46 and 43 in the two previous weeks) and 5 in Vienna; diphtheria showed the largest proportional fatality in Dresden and Berlin. The death-rate was equal to 43.6 in Turin and 28 6 in Venice; the 212 deaths in Turin included 18 from measles and 4 from small-pox. The 135 deaths in Lisbon, of which 5 resulted from small-pox, were equal to a rate of 34.1. The mean recorded death-rate in four of the principal American cities did not exceed 22.0, the several rates ranging from 16.1 in Brooklyn to 24.6 in New York. Diphtheria and scarlet fever showed more or less fatal prevalence in each of these American cities; typhoid fever caused 9 deaths in Philadelphia and 4 in Baltimore.

EPIDEMIC OF SMALL-POX IN LONDON.

AT the usual meeting of the Metropolitan Asylums Board, on Saturday, serious reports of the increase of small-pox were made. It was shown that during the wave of cold weather which has lately prevailed, the eastern part of London had been visited with an attack of this disease, and that the number of patients which had come upon the hands of the officials had necessitated the taking of energetic measures to meet the demands for beds. Sir E. H. Currie stated that the attention of the officers having been directed to the great increase of small-pox during the fortnight, a meeting of the General Purposes Committee was summoned. They found that in the hospital-ship *Atlas* there were 161 cases (now increased to 174), in the eastern asylum 52 cases, in the south-western asylum 12 (now increased to 22), and in the south-eastern asylum 23 (now increased to 25). In all there were 248 cases, and now 265, an increase of 112 in the fortnight. The committee at once gave orders to the steward at Darenth to prepare the camp, and to take the first steps to provide the necessary appliances to meet the needs of 300 patients. On behalf of the committee Sir Edmund asked the managers to sanction the steps the committee had taken, to appoint Dr. F. Bernard, of the south-west asylum, the medical superintendent of the camp at the present time, and that the applications should be made to the Local Government Board for the necessary orders to carry out the drainage, and to fit up the camp. Dr. Bridges, of the Local Government Board, pressed that the steps taken should include every measure for the prevention of contagion around the camp. Sir Edmund Currie stated that in the laundry and sewage arrangements, points specially referred to by Dr. Bridges, every care would be taken to safeguard the inhabitants, and also in regard to visitors of patients, no means would be omitted to prevent the association of persons from the asylum with the public. The necessary resolutions were carried to give effect to the recommendations of the committee. It was decided that no one should be allowed on board the ships, on visits, except those who came from the managers' wharf, and on board the managers' launch. Such a limitation would save the railway-companies from fear, and the managers would be saved from the troubles which always arose when the fears and prejudices of the public were aroused. On the motion of the Rev. H. G. Henderson, it was agreed that a circular should be issued to the several unions and parishes, urging that the officials should institute a house-to-house visitation, with a view of ensuring that the laws relating to efficient vaccination were strictly enforced. Sir E. H. Currie stated that the *Castalia* would be ready for use as an additional hospital-ship in about three weeks' time, and would be berthed in Long Reach, with the *Atlas* and *Endymion*.

OUTBREAK OF SMALL-POX IN HACKNEY.

THE medical officer of health for Hackney reported, at a meeting of his board held on March 27th, an extensive outbreak of small-pox almost all over the district, which had commenced on the 20th, and was then declining. The outbreak was so sudden and extensive, that he did not attribute it to direct infection from person to person, but to infection combined with some peculiarity of the atmosphere which existed for some days, from about the 6th of the month. During the fourteen days immediately preceding the outbreak, there had been a few dropping cases, which did not occur in any particular locality, or seem to be the precursor of an outbreak. During the week ending March 12th, there had been 4 cases reported to him, and, for the week ending the 19th, 4 cases also; but, on the 20th, there were 7 cases; on the 21st, 16 cases; on the 22nd and 23rd, as many as 27; on the 24th, 12; on the 25th, 10; on the 26th, 5; and the 27th, only 3; making a total of 80 cases. The earliest cases, *i.e.*, on the 20th, occurred chiefly, viz., 4 out of 7, in the vicinity of the hospital, to the east of the hospital, the wind blowing on the 4th from the S.E.; and on the 5th, 6th, and 7th, from the S.W.; and on the 8th, and subsequently, more or less from the east, the hospital being on the east of the houses in which the first cases occurred. But there were only 28 cases in the hospital at that time, and the wind had been in that direction in part of February, when there were more cases in hospital, with a total absence of ozone and diminished rate of wind, being the same meteorological conditions as occurred about the time when the disease must have been contracted, without, however, any outbreak occurring then near the hospital or elsewhere. On the 21st, out of the 16 cases, only one occurred within a quarter of a mile of the hospital; on the 22nd, 23rd, and 24th, by far the largest number occurred away from the hospital; but there were four cases on the 20th which happened in different streets, and were in no way connected, which took place in a line from the hospital corresponding with the direction the wind was blowing on the 8th and 9th. There were 12 cases removed in a fortnight to the Asylum Board's hospitals from Bethnal Green, 67 from Hackney, 10 from Islington, and 14 from Shoreditch, making a total of 103 cases from these four adjoining parishes, out of 114 from the whole of the parishes on the north side of the Thames. These figures show that the infected locality was of considerable size, and render the cause of the outbreak very difficult of determination, especially as in Hackney there did not appear to be, so far as could be ascertained by inquiry amongst the friends of the patients, any reason to believe that the cause was personal infection of the sick.

OBITUARY.

ALLEN THOMSON, M.D., D.C.L., LL D., F.R.SS.L. and E.

THE news of the death of Dr. Allen Thomson, formerly for many years Professor of Anatomy in the University of Glasgow, will have been received with regret by all who knew him, whether personally or through his scientific labours. He died on Friday, March 21st, in the seventy-fifth year of his age. He had been for some time suffering from a disease of the eyes; and, a fortnight before his death, symptoms of disease of the brain appeared.

Dr. Allen Thomson was the son of Dr. John Thomson, who held in succession the chairs of Military Surgery and of Pathology in the University of Edinburgh. He was educated at the High School of that city, and subsequently at the University, where he took the degree of M.D. in 1830; the subject of his thesis being the Development of the Heart and Blood-vessels in Vertebrate Animals. In the following year, he was admitted a Fellow of the Royal College of Surgeons of Edinburgh, and began to lecture on Anatomy in the Extra-academical School, having as his colleague the late Dr. Sharpey. With Sharpey, he maintained for many years an intimate friendship; and, on the death of his old friend and colleague in 1880, was the author of an interesting and kindly memoir of his life and works.

In 1839, Dr. Allen Thomson was appointed Professor of Anatomy in Marischal College, one of the two colleges into which the University of Aberdeen was then divided. In 1842, he became Professor of Institutes of Medicine, or Physiology, in the University of Edinburgh; and, in 1848, was appointed Professor of Anatomy in the University of Glasgow. He thus held, in succession, a chair in each of the three great universities of Scotland. He retained the professorship in Glasgow until 1877, when he retired, and removed to London. In 1878, his portrait, painted by Sir Daniel Macnee, was publicly presented to the University in which he had long been a distinguished teacher, and where he had gained the character of a man of highly cultivated intellect and scientific attainments, as well as of one wise in counsel, a genial, kindly, and tried and trusted friend.

As a professor of anatomy, he was an excellent teacher, and won the affection and respect of his pupils and colleagues. He especially devoted his attention to the study of embryology, in which subject he made researches which have caused him to be regarded as one of the highest authorities in that department of science. He first published the results of his labours many years ago in Todd's *Cyclopædia of Anatomy*, to which he contributed several articles on "Generation" and "Ovum," as well as on "Circulation." He was the principal editor of the descriptive portions in the last three editions of *Quain's Anatomy*, to which he made important additions. To the eighth edition he added an elaborate an instructive chapter on his favourite subject of Embryology. His other contributions to literature are to be found in the *Transactions* of the Royal Societies of London and Edinburgh, and in medical journals.

Dr. Thomson became a Fellow of the Royal Society of Edinburgh in 1838, and of the Royal Society of London in 1848. After his removal to London in 1877, he became a member of the Council of the latter Society, and ultimately a vice-president. In 1871, he received from the University of Edinburgh the degree of LL.D., which degree was also conferred on him by the University of Glasgow in 1877; and, in 1882, the University of Oxford conferred on him the degree of D.C.L.

In 1859, on the death of Dr. J. A. Lawrie, he was appointed representative of the Universities of Glasgow and St. Andrew's in the Medical Council, and held the office up to the time of his retirement from his professorship in 1877. As a member of Council, he took an active part in the proceedings, and there, as elsewhere, gained the sincere esteem of his colleagues by his honesty of purpose, his soundness of judgment, and his genial friendliness.

In 1871, he was President of the Biological Section of the British Association for the Advancement of Science, at its meeting in Edinburgh; and, when the Association met in Plymouth in 1877, he filled the Presidential chair. The subject of his address on the occasion was one to which he long devoted attention, the "Development of the Forms of Animal Life;" and in it he gave an able exposition of his views in relation to the Darwinian theory.

Beyond his scientific career, Dr. Allen Thomson was well known for many years as one of the most active and influential men in Glasgow. He was always ready to aid in any good cause, and he took a prominent part in various great public undertakings. In particular, he acted as chairman of the Removal and Buildings Committee of the University of Glasgow from 1863 to 1874, which led to the erection of the University Buildings on Gilmorehill; and the carrying out of this great scheme was largely due to his energy and tact, and to the confidence reposed in him. Dr. Thomson also took an active part in the erection of the Glasgow Western Infirmary; and, during its earlier years, as a member of the board of directors, did much towards its prosperity.

When the Glasgow and West of Scotland Branch of the British Medical Association was formed in 1875, Dr. Thomson was chosen as the first president; and, at the annual meeting of the Branch in 1876, he delivered a very interesting address on "The History, Constitution, and Objects of the British Medical Association, and on Medical Organisation in Glasgow." In the course of that address, he made allusion to an event which, though it has not yet taken place, is, it is to be hoped, not far distant.

"I think we must look forward to obtain, at no very distant date, a general meeting of the British Medical Association in Glasgow. As a proof of the advantages of such a meeting, I need only refer to the brilliant success which attended that held in Edinburgh in the past year; and I feel assured that, when the matter is viewed in its proper light, it will soon be felt that Glasgow and the West of Scotland must not lag behind in the endeavour to bring about such an union of the active intelligence of the profession, as may stimulate and invigorate the exertion of its members for their own improvement and for the increased utility of the profession to the public."

When the Association meets in Glasgow—an event which is probably not far distant—among the pleasures of the gathering there will with many be one regret: that the eminent man who uttered the words which we have quoted will not be there. But though he is no longer seen, his voice no longer heard, the memory of him will survive in the hearts of many.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at meetings of the Board of Examiners on the 1st and 2nd instant, and, when eligible, will be admitted to the pass examination.

Messrs. H. E. Hackett, A. B. Crowther, H. Harrop, G. Okell, J. M. Johnson, N. C. Haring, and W. K. Walls, of the Manchester School of Medicine; H. Skelding, E. C. Andrews, W. Clarke, C. Brook, E. P. Manby, B. de B. Carey, and F. M. Ogilvie, of the University of Cambridge; F. W. Halliday, C. W. Turner, C. F. M. Althorp, F. W. Thornton, H. A. Smith, and H. Hebblethwaite, of the Leeds School; F. W. Bloomer, A. H. Nott, G. L. Hill, and J. H. Blakeney, of the Birmingham School; G. A. Syme, of the Melbourne School; W. F. Brook, and E. Solly, of St. Thomas's Hospital; D. P. Gaussen, and W. G. Bigger, of the Belfast School; O. P. Beater, of the Dublin School; J. Girling, of the London Hospital; B. B. Grayfoot, D. Hepburn, and J. M. Caw, of the Edinburgh School; J. W. Dalgleish, of the Newcastle School; J. H. Abram, J. Cunningham, and A. A. Kanthack, of the Liverpool School; W. L. Dickinson, of St. George's Hospital; W. C. Swayne, and R. F. W. Tucker, of the Bristol School.

Seven candidates were referred for three months.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 27th, 1884.

Aspinall, John, Ash Cottage, Hindley.
Averill, Charles, Stafford.
Caleb, Clement Cornelius, Allahabad, India.
Cropley, Henry, Swaton, Lincolnshire.
Davis, Edward Sandom Stone, Fowey, Cornwall.
Forster, Thomas Frederick, Brampton, Cumberland.
Freeland, Freeland John, Antigua, West Indies.
Hopkins, John Walter, the Infirmary, Ryde.
Leech, Priestley, Linden Road, Halifax.
Moore, Edward Head, Falmouth.
Paul, Edmund William, Wearne Wyche, Langport.
Stericker, George Frederick, Pickering.
Woolmer, Shirley Lawrence, the Poplars, Kingswood, Bristol.

MEDICAL VACANCIES.

The following vacancies are announced.

BETHLEM HOSPITAL.—Two Resident Medical Students. Applications to A. M. Jeaffreson, Esq., Bridewell Hospital, Blackfriars, E.C., by April 5th.

BIRMINGHAM AND MIDLAND COUNTIES ORTHOPÆDIC AND SPINAL HOSPITAL.—Honorary Assistant-Surgeon.—Applications by April 7th.

DENTAL HOSPITAL OF LONDON AND SCHOOL OF DENTAL SURGERY.—Medical Tutor. Salary, 40*l*. per annum. Applications by April 21st.

DUNFANAGHY UNION.—Medical Officer. Gweedore portion of the Crossroads Dispensary. Salary, 110*l*. per annum and fees. Applications to John Beattie, Honorary Secretary, up to 17th instant.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Salary, 100*l*. per annum. Applications to the Honorary Secretary, 10, South Bailey, Durham, by April 15th.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, 100*l*. per annum. Applications to the Secretary, Board Room, Bagillt Street, Holywell, by April 15th.

JERSEY GENERAL DISPENSARY.—Medical Officer. Salary, 120*l*. per annum. Applications by May 1st.

MORPETH DISPENSARY.—Resident Medical Officer. Salary, 100*l*. per annum. Applications by May 5th.

OLRIG AND DUNNET PAROCHIAL BOARDS.—Medical Officer. Salary, 60*l*. per annum. Applications, marked "Medical Officer," to James Brims, Esq., Chairman, by April 8th.

PADDINGTON GREEN CHILDREN'S HOSPITAL.—Surgeon. Applications by April 9th.

ST. BARTHOLOMEW'S HOSPITAL, Chatham.—Assistant House-Surgeon. Salary, 100*l*. per annum. Applications addressed to the Clerk to the Trustees, endorsed, "Application for Assistant House-Surgeon," by May 1st.

THE GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Junior Resident Medical Officer. Applications by April 15th.

MEDICAL APPOINTMENTS.

ABBOTT, C. E., M.R.C.S., L.K.Q.C.P.I., reappointed Medical Officer of Health for the Braintree Rural Sanitary District for one year.

BROOKS, W. Tyrrel, M.B., appointed Honorary Physician to the Radcliffe Infirmary, Oxford, *vice* E. B. Gray, M.D., resigned.

BROWN, J. H., M.B., C.M.Edin., M.R.C.S., appointed fourth House-Surgeon to the Manchester Royal Infirmary.

BUTLER, W. G., M.R.C.S.Ireland, appointed Resident Medical Officer for the Workhouse, Limerick Union, *vice* T. O'D. Russell, M.K.Q.C.P.I., resigned.

BUXTON, Dudley W., B.S.Lond., M.R.C.P., appointed Administrator of Anæsthetics to the Hospital for Women, Soho Square, *vice* Tom Bird, M.R.C.S.

CHARTRAS, H. William, appointed Medical Officer to the Maguiresbridge Dispensary of the Lisnasken Union, *vice* Robert Warnock, L.K.Q.C.P.I., deceased.

CLARK, J., M.D., F.R.C.S.Ed., appointed Medical Officer of Health to the Rural Sanitary Authority of Lichfield, *vice* D. H. Monckton, M.D., F.R.C.S., resigned.

COLLINS, John S., M.D.Queen's University, Ireland, appointed second House-Physician to the Manchester Royal Infirmary.

DEAS, P. Maury, M.B., M.S.Lond., Medical Superintendent of the Parkside County Asylum, Macclesfield, appointed Medical Superintendent of the Wonford House Hospital for the Insane, Exeter.

EVANS, William Arnold, M.R.C.S.Eng., L.S.A., appointed District Surgeon to the Salford and Pendleton Royal Hospital, *vice* G. J. Haslam, M.D., resigned.

FARMER, Septimus, M.R.C.P., L.R.C.P., A.K.C., appointed House-Surgeon and Apothecary to the Chorley Dispensary, *vice* Dr. Nichol, deceased.

FREER, E. S., M.R.C.S., appointed Honorary Surgeon to the Birmingham and Midland Counties Orthopædic and Spinal Hospital.

FREER, W. C., M.R.C.S., appointed Consulting Surgeon to the Birmingham and Midland Counties Orthopædic and Spinal Hospital.

GRIFFITH, Walter S. A., F.R.C.S., M.R.C.P., appointed Physician to the Samaritan Free Hospital for Women and Children, *vice* Skene Keith, M.B., M.C., resigned.

GRIFFITHS, Thomas Richardson, L.K.Q.C.P.E., appointed Medical Officer to the Richill Dispensary of the Armagh Union, *vice* W. O. Deacon, L.K.Q.C.P.E., deceased.

HARDWICK, E. H., appointed Medical Officer to the Infection Hospital, Solihull.

HARRIES, Arthur J., M.D., M.R.C.S., L.R.C.P.Ed., appointed Assistant-Surgeon to St. John's Hospital for Diseases of the Skin.

HARRIS, Spencer, appointed Surgeon in Ordinary to the City of Ely Dispensary, *vice* G. M. Sinclair, L.R.C.P.Ed., deceased.

HUMBLE, G. A., M.D., M.R.C.P., appointed Physician to the Governorship of Patagonia, Argentine Republic, South America, *vice* Dr. Piñero, resigned.

LEARER, Charles B., M.R.C.S., L.R.C.P.Lond., appointed Assistant Medical Officer to the Nottingham Borough Asylum.

McGACHEN, F. W. D., L.F.P.S.Glas., L.M., L.S.A.Lond., appointed Medical Officer and Public Vaccinator to the No. 5 District, Newport Pagnel Union, *vice* F. Deynes, M.D., resigned.

MACPHERSON, R. C., M.D., appointed Physician to the Anderson's College Dispensary, *vice* William Stewart, M.D., resigned.

NOLAN, J. R., R.C.S.Ireland, appointed Resident Medical Officer for Workhouse, Limerick Union, *vice* T. W. O'Connor, F.R.C.S.I., resigned.

PALMER, J. Foster, L.R.C.P., M.R.C.S., appointed Assistant-Surgeon to St. John's Hospital for Diseases of the Skin.

PHILLIPS, E. A., M.R.C.S., L.S.A., appointed second Assistant-Surgeon, Derby Amalgamated Friendly Societies' Medical Association, *vice* T. B. Shaw, resigned.

SMITH, Pynsent C., M.R.C.S., L.R.C.P., appointed Resident Surgeon, Bedford General Infirmary and Fever Hospital, *vice* E. A. O. Laurent, M.B., resigned.

SPICER, R. H. S., M.B.Lond., appointed Resident Medical Superintendent, Fulham Union.

STATHERS, G. Nicholson, M.R.C.S.Eng., L.R.C.P.Ed., appointed Medical Officer and Public Vaccinator to the tenth and eleventh districts of the Wycombe Union, *vice* Henry Hayman, F.R.C.S.Eng., resigned.

STEWART, C. W., M.D., appointed Physician to the Anderson's College Dispensary, *vice* William Stewart, M.D., resigned.

WALLACE, William, M.B., C.M.Glasgow, appointed Medical Officer for Bolsover District, Chesterfield Union, *vice* J. E. Slaughter, resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

ALEXANDER.—At Paignton, April 2nd, the wife of James Alexander, M.D.T.C.D., of a daughter.

HITCHCOCK.—April 2nd, at the Lunatic Hospital, Bootham, York, the wife of C. K. Hitchcock, M.D., M.A., of a daughter.

LEES.—At Elton, Bury, Lancashire, on the 27th ultimo, the wife of J. E. F. Lees, M.B., of a son.

MARRIAGE.

HOUGHTON—LEVEAUX.—On March 27th, at the Parish Church, Hornsey, by the Rev. J. M. Brown, uncle of the bride, Lambert Houghton, L.R.C.P., etc., only son of the late George G. Houghton, of Funchal, Madeira, to Adele, second daughter of the late Edward Henry Leveaux, of Hampton Wick. No cards.

DEATHS.

GAIRDNER.—Died, at 9, the College, Glasgow, on March 31st, [illegible] Anna Mary, aged 12, daughter of Professor W. T. Gairdner, M.D. Friends will please accept this intimation.

TAYLOR.—On March 18th, after a long and painful illness, William Taylor, J.P., M.R.C.S.Eng., of Scarborough and Cloughton, aged 66, deeply regretted.

AT the last annual commencement of the Bellevue Hospital Medical College, New York, no fewer than one hundred and forty-nine students received a diploma to practise. Even before this accession to the ranks, we believe that there were more doctors in proportion to the population in the United States than in any other country in the world; the number being one doctor to every 625 inhabitants.

A VETERAN IN HARNESS.—M. Chevreul, the veteran chemist and Director of the Gobelins Manufactory, though he has reached the age of 98, has so strongly objected being placed on the retired list, that the order has been rescinded. M. Chevreul is a tremendous worker; he does not care about wine, and never takes it; he is spare in his diet, takes but two meals a-day, and devotes a quarter of an hour to each. "I am very old," it is reported that he said ten years ago, "and must not waste time in eating."

OPERATION DAYS AT THE HOSPITALS.

MONDAY........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY ......St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Joseph Coats (Glasgow): On Compensatory Hypertrophy of Various Organs. Dr. Clement Godson: On Retroversion of the Gravid Uterus.—Odontological Society of Great Britain, 8 P.M. Casual communications by Messrs. Storer Bennett, J. H. Mummery, F. N. Pedley, and E. Lloyd Williams. Mr. A. S. Underwood: On the Influence of Micro-organisms in the Production of Caries.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. John Harley: The Pathology of Myxœdema, as illustrated in a typical case. One of Dr. Harley's patients with myxœdema will be present for examination. Mr. F. B. Jessett: An Inquiry into the Causes of the Increase of Cancer in England and Wales.

WEDNESDAY.—Epidemiological Society of London, 8 P.M. Mr. Bolton G. Corney: On the Behaviour of Certain Epidemic Diseases in Natives of Polynesia, with especial reference to the Fiji Islands.—Hunterian Society, 7.30 P.M. Council. 8 P.M. Dr. Stowers: Sequel to a Case of Paget's Disease of the Nipple. Mr. Rivington: 1. Case of Recent Fracture of the Patella treated by Wire Suture; 2. Case of Wound of Knee-joint. Dr. Herman: On Prolapse of the Pelvic Floor without relative Displacement of the Uterus.—Royal Microscopical Society, 8 P.M. Dr. W. B. Carpenter: On Binocular Vision with the Microscope.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT. We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE WHEATLEY MEMORIAL FUND.

SIR,—I enclose you a list of the subscribers to the fund so far as their subscriptions have been received. I shall be much obliged if you will give space to its insertion in your columns. The amount received is at present far below the sum required to make the needful provision for those dependent on the late librarian of the Royal Medical and Chirurgical Society.—I am, sir, yours faithfully,

BERKELEY HILL,
Honorary Secretary, Wheatley Memorial Fund Committee.
53, Berners Street, Oxford Street, W.

	£	s.	d.		£	s.	d.
Thomas Boone, Esq.	50	0	0	T. Pickering Pick, Esq.	2	2	0
The Clinical Society	25	0	0	George Pollock, Esq.	2	2	0
Dr. William Wood	25	0	0	Dr. Sieveking	2	2	0
Sir Andrew Clark, Bart.,				John Simon, Esq.	2	2	0
M.D.	10	10	0	Dr. Symes Thompson	2	2	0
T. B. Curling, Esq.	10	10	0	Dr. Charlewood Turner	2	2	0
J. Cooper Forster, Esq.	10	10	0	J. E. Adlard, Esq.	1	1	0
Sir Prescott Hewett, Bart.	10	10	0	Dr. Appleton	1	1	0
Berkeley Hill, Esq.	10	10	0	John Birkett, Esq.	1	1	0
Sydney Williams, Esq.	10	10	0	Dr. Champneys	1	1	0
Morrant Baker, Esq.	5	5	0	Dr. Fairlie Clarke	1	1	0
J. E. Erichsen, Esq.	5	5	0	F. Le Gros Clark, Esq.	1	1	0
Dr. Wilson Fox	5	5	0	R. H. Clay, Esq.	1	1	0
Dr. Gervis	5	5	0	Dr. Cleveland	1	1	0
Cæsar H. Hawkins, Esq.	5	5	0	H. Clutton, Esq.	1	1	0
Christopher Heath, Esq.	5	5	0	H. Curling, Esq.	1	1	0
J. W. Hulke, Esq.	5	5	0	Dr. Horace Dobell	1	1	0
Dr. Hughlings Jackson	5	5	0	Dr. Langdon Down	1	1	0
Sir William Jenner, Bart.	5	5	0	Dr. Ewart	1	1	0
Dr. George Johnson	5	5	0	Sir Joseph Fayrer	1	1	0
John Kingdon, Esq.	5	5	0	Dr. Gowers	1	1	0
John Langton, Esq.	5	5	0	Reginald Harrison, Esq.	1	1	0
John Marshall, Esq.	5	5	0	Dr. Herman	1	1	0
Sir James Paget, Bart.	5	5	0	Dr. Graily Hewitt	1	1	0
Dr. Priestley	5	5	0	George Knapton, Esq.	1	1	0
W. S. Savory, Esq.	5	5	0	A. W. Leachman, Esq.	1	1	0
Thomas Smith, Esq.	5	5	0	Dr. MacFarlane	1	1	0
Sir Henry Thompson	5	5	0	F. Mason, Esq.	1	1	0
Dr. Wegg	5	5	0	Dr. Gueneau de Mussy	1	1	0
Sir Erasmus Wilson	5	5	0	Surgeon-Major Myers	1	1	0
Sir William Bowman, Bart.	5	0	0	Dr. T. A. Nelson	1	1	0
Dr. Matthews Duncan	5	0	0	T. L. Read, Esq.	1	1	0
Dr. Douglas Powell	5	0	0	Dr. F. T. Roberts	1	1	0
Dr. Dyce Duckworth	3	3	0	Sir Edwin Saunders	1	1	0
Dr. Routh	3	3	0	Dr. Sedgwick	1	1	0
Alexander Shaw, Esq.	3	3	0	Dr. Felix Semon	1	1	0
John Wood, Esq.	3	3	0	Dr. Sharkey	1	1	0
Dr. Robert Barnes	2	2	0	Dr. [illegible]	1	1	0
Dr. Cayley	2	2	0	Dr. Pye-Smith	1	1	0
Dr. Duffin	2	2	0	Dr. Sutherland	1	1	0
Dr. Finlay	2	2	0	Dr. Trend (Southampton)	1	1	0
William H. Flower, Esq.	2	2	0	W. W. Wagstaffe, Esq.	1	1	0
J. G. Forbes, Esq.	2	2	0	C. Stewart Watkins, Esq.	1	1	0
Jonathan Hutchinson, Esq.	2	2	0	[illegible] Watson, Esq.	1	1	0
Dr. Stephen Mackenzie	2	2	0	Spencer Watson, Esq.	1	1	0
J. H. Morgan, Esq.	2	2	0	Dr. Charles West	1	1	0
E. Nettleship, Esq.	2	2	0	Dr. Dawson Williams	1	1	0
Dr. W. Ogle	2	2	0	W. [illegible]	1	1	0
Dr. O'Neill, Lincoln	2	2	0				

CONTAGIOUS DISEASES ACTS: A CORRECTION.

Two errors, one of omission and the other of commission, have crept into one paragraph of our article on the Contagious Diseases Acts, published on March 8th, page [illegible]. The paragraph in which the comparison between the fourteen formerly protected stations, and fourteen other unprotected stations, is made for the year 1883, ought to read as follows. We will take first the year of suspension, 1883. In this year we find that the average strength of the fourteen hitherto protected stations was [illegible], and that the ratio per 1,000 admitted was [illegible]. Next taking the fourteen unprotected stations formerly selected for comparison, with a force of [illegible], the ratio of admissions was [illegible]. Finally, taking the unprotected stations [illegible] with a strength of 11,801, the ratio per 1,000 admitted was [illegible].

MICROSCOPICAL EXAMINATION OF SPUTUM.

SIR,—Thanks to Dr. Heneage Gibbes, the staining of the bacilli of tubercle is simplicity itself. Obtain from Messrs. Beck, Cornhill, a bottle of his double staining fluid (2s.). The steps in the process are these (I generally make the investigation when arranging my visiting-list for the next day, and so every moment can be occupied). Press between two thin cover-glasses the sputum to be examined, taking care that only the thinnest film is left, which may be accomplished by slipping one glass off the other. Two specimens are thus obtained, which are to be exposed to the air or held some distance over a spirit-lamp to dry. Pour enough of the staining fluid into a watch-glass; warm this over a spirit-lamp until vapour rises; remove it, and float, with the sputum downwards, the glass on it for five minutes; take the slide out, and wash it in methylated spirits until all pink stain is removed. When dry, mount in Canada balsam or Farrant's medium in the usual way. One-eighth or one-tenth object-glass is wanted to demonstrate the bacilli satisfactorily. The staining-fluid must be kept in the dark, as all aniline dyes fade. Faithfully yours,

D. H. G.

THE MEDWAY UNION AND MR. BUCHANAN'S REPORT.

DR. WHITTLE.—Mr. Buchanan's report was noticed in the JOURNAL on March 15th, page 525.

IGNORAMUS.—It is impossible to judge of your case, unless the limb be actually examined. You must place yourself entirely in the hands of a surgical colleague, especially with regard to the question of leaving your bed and wearing a plaster-of-Paris bandage.

ABOLITION OF DISSECTION.

SIR,—In the recently published *Memorials of John Flint South* (p. 154), I find the following passage: "Mr. South played a prominent part....in the presenting of a memorial from the anatomical teachers to the Privy Council, for the total abolition of dissection." What does this mean? Your obedient servant,

D.

⁂ On inquiry, we find that the copyist substituted "abolition" for "suspension," Mr. South's handwriting being difficult to read. This memorial from the teachers preceded the letter which the Council of the Royal College of Surgeons addressed to Lord Melbourne in 1831, expressing hopes that some plan might be devised by the legislature calculated to remove the serious evil then existing, by which bodies used for dissection in anatomical schools were frequently procured by illegal means. The Council insisted, in their letter, that the study of anatomy by dissection was the most important part of surgical education. It was the evil to which the Council referred that made the teachers of anatomy desire the suspension of dissection till the law was made more definite and satisfactory. Chiefly in consequence of this agitation, the Anatomy Act of 1832 was passed.

AN OIL-STOVE.

SIR,—In reply to the inquiry in the JOURNAL concerning stoves, I beg to recommend Gillingham's Radiator. I have used one to warm my consulting-room for some months past with satisfaction. The apparatus consists of a duplex lamp burning colza, the heat from which is collected and radiated from a horizontal iron pipe suspended over it. The lamp consumes a gallon of oil a week, when kept burning twelve hours a day. Properly managed, there should be no smell whatever. The cost is about £2, and I think the only drawback is that they are somewhat unsightly.—Yours faithfully, G. S. MAHOMED.

Bournemouth.

SIZE OF DRAIN-PIPES.

H. D. desires to know what diameter the glazed pipes ought to be to secure good drainage from a house, and if there is any rule laid down on the subject.

⁂ In an ordinary sized house, the rule is that pipes of not less than four inches and not more than six inches diameter should be used; 6-inch pipes are most commonly laid. It is scarcely necessary to add that the correct size of pipes alone will not "secure good drainage."

PROVIDENT DISPENSARIES.

SIR,—Though one swallow makes not a summer, I agree with Mr. R. Lee, writing in the BRITISH MEDICAL JOURNAL, March 22nd, 1884, in hoping that "we shall soon see the question of hospital difficulties sensibly settled." I have my doubts, however, whether the matter will be settled in the way he suggests, curiously enough, for the very considerations he most strenuously urges, viz., those stated at the end of his letter with respect to public confidence. The fact is, public confidence is always in a more or less shaky state when things are not in proper order already.—I am, etc., J. HUSSEY WILLIAMS.

169, Stanley Road, Bootle, March 31st, 1884.

AN OLD ARMY SURGEON.—No doubt the stricter enforcement of the preliminary testing examinations will tend every year more and more to exclude illiterate and unworthy candidates from entering the medical profession. The instances which our correspondent quotes are striking enough, but are of course by no means singular, and are even, unfortunately, not unusual. We can only look to the progress of medical reform, and to the passage of a satisfactory parliamentary measure for the purpose, for the early and speedy remedy.

VIOLENT ITCHING IN AN ELDERLY GENTLEMAN.

If M.D., whose question appeared on March 15th, will make inquiry, he will probably find a gouty tendency, either inherited or acquired, and his patient may find relief from a daily morning dose, fasting, of sulphate of soda, sulphate of potash, and sulphate of manganese.

SPASMODIC CONTRACTION OF UTERUS ON PLACENTA: ITS CAUSES AND TREATMENT.

SIR,—Mr. Alexander Stirling, in his communication (March 22nd), seems to argue that in the case I recorded on March 1st in the BRITISH MEDICAL JOURNAL, the cause of the spasmodic contraction was traction of the cord. He deprecates (and rightly so) a "vis a fronte," but in this case there was no "vis" at all. My words were, "slight traction of the cord." I merely did what I opine every practitioner must do, unless he means to let the placenta come away "of its own sweet will"—just pulled slightly on the cord; but, directly I felt that the placenta was a fixed point, and that I could not reach the insertion of the umbilical cord into it, I desisted, and adopted the most rational treatment in such cases—had chloroform administered to the patient, and so released the spasm.—Yours faithfully, W. L'HEUREUX BLENKARNE, M.R.C.S.E.

Buckingham, March 24th, 1884.

VALIDITY OF AGREEMENTS NOT TO PRACTISE.

IN reply to "W. E. T." (Pontypridd), who inquires whether an agreement between a registered medical practitioner and an unqualified assistant, by which the assistant (still unqualified) is prevented from acting as an assistant to any practitioner within a given distance, is legal, we may say that an agreement not to practise a trade or profession within a given district is not illegal. We cannot see that the fact of one of the parties being unqualified makes any difference. If there are any special circumstances which he thinks alter the case, he had better state them.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

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Aids to Practical Physiology. By J. Brindley James, M.R.C.S. London: Baillière, Tindall, and Cox. 1884.

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THE CROONIAN LECTURES

ON

EVOLUTION AND DISSOLUTION OF THE NERVOUS SYSTEM.

Delivered at the Royal College of Physicians, March, 1884.

By J. HUGHLINGS JACKSON, M.D., F.R.S., F.R.C.P.,
Physician to the London Hospital.

LECTURE III.

So far I have, for the most part, ignored the distinction between mental states and nervous states. I now pay particular regard to it. Here it is well to remark that, as Spencer says, "the doctrine of evolution, under its purely scientific form, does not involve materialism, though its opponents persistently represent it as doing so." He speaks of the materialistic hypothesis as being "utterly futile." To describe Spencer, Huxley, and Tyndall as materialists, is as absurd as speaking of Sir Joseph Lister as an opponent of antiseptic surgery would be. Spencer frequently insists on the absolute difference between states of consciousness and nervous states. Here is a most explicit declaration. After a consideration of increasing complication of mental states and nervous states, he writes *(Psychology*, vol. i, p. 403): "Of course, I do not mean that material actions thus become mental actions. As was said in Sections 41-51, 62, 63: 'No effort enables us to assimilate' mind and motion, I am merely showing a *parallelism*" (Italic in original) "between a certain physical evolution and the correlative psychical evolution." If any one wish to be thoroughly materialistic as to what is material, the nervous system, let him not be materialistic at all as to mind, which is not material at all. A man has both a mind and a body. On the principle of doing one thing at a time, I shall, in this lecture, first, speak of the body only. A man, physically regarded, is a sensori-motor mechanism. I particularly wish to insist that the highest centres—physical basis of mind or consciousness—have this kind of constitution, that they represent innumerable different impressions and movements of all parts of the body, although very indirectly, as certainly as that the lumbar enlargement represents comparatively few of a limited region of the body directly. It may be rejoined that the highest centres are "for mind." Admitting this, in the sense that they form the physical basis of mind, I assert that they are "for body," too. If the doctrine of evolution be true, all nervous centres must be of sensori-motor constitution. *A priori*, it seems reasonable to suppose that, if the highest centres have the same composition as the lower, being, like the lower, made up of cells and fibres, they have also the same constitution. It would be marvellous if, at a certain level, whether we call it one of evolution or not, there were a sudden change into centres of a different *kind* of constitution. Is it not enough difference that the highest centres of one nervous system are greatly more complicated than the lower? Some years ago, I asked the question: "Of what 'substance' can the organ of mind be composed, unless of processes representing movements and impressions? And how can the convolutions differ from the inferior centres, except as parts representing more intricate co-ordinations of impressions and movements in time and space than they do? Are we to believe that the hemisphere is built on a plan fundamentally different from that of the motor [and sensory] tract?" (*St. Andrew's Med. Grad. Reports*, 1870.) It is accepted, since the researches of Hitzig and Ferrier, that convolutions in the mid-region of the brain (which I call middle motor centres) do represent movements. It may, not without reason, be asked: Why should not also the more anterior parts of the brain, frontal lobes (which I call highest motor centres) represent movements? Recently, indeed, Ferrier and Gerald Yeo *(Pro. Royal Soc.*, January 24th, 1884) have concluded, from experiments on monkeys, that the frontal lobes represent some movements, and significantly these are lateral movements of the eyes and head—the most representative (in another sense of the word represent) of all movements. This is all the more significant, since many epileptic paroxysms (the discharge beginning in some part of the highest centres) begin by turning of the eyes and head to one side; and the more significant still when we bear in mind Beevor's observationst hat, in many cases of postepileptic coma, there is very transitory lateral deviation of the eyes from the side to which they turned in the prior paroxysm. Whilst, however, Ferrier agrees with me in thinking that the whole anterior part of the brain is motor, and that, to use his words, "mental operations, in the last analysis, must be merely the subjective side of sensory and motor substrata" *(Functions of the Brain)*, as I have long earnestly contended, he does not agree with me in thinking there to be a division into middle and highest cerebral motor centres; and he thinks that what I call the highest motor centres represent only movements of the eyes and head, and not movements of all parts of the body, as I do.

In further exposition, I shall speak, for the most part, of movements only; for I believe that no one has ever denied that convolutions represent impressions (or, as is sometimes inaccurately said, sensations, or ideas made up of combinations of sensations). If the highest centres do not represent movements, it seems to me that the phenomena of an ordinary epileptic fit are unintelligible. Moreover, I think that the highest centres represent impressions and movements of *all* parts of the body. Neglecting impressions, this position seems to me to be supported by very different kinds of evidence.

1. I postulate that in an epileptic seizure, since consciousness is lost at or soon after its onset, the discharge begins in some part of the highest centres, the physical basis of consciousness. I do not say that in all epileptic seizures it begins in some part of the highest motor centres; these may no doubt be put in secondary activity by discharges beginning in parts of the highest sensory centres. I think it quite certain that epileptic attacks are not, and that epileptiform seizures are, owing to discharges beginning in parts of the mid-cortical region (middle motor centres). A consideration of the facts of epileptic paroxysms leads, I submit, to the conclusion that the highest centres represent, through the intermediation of the middle and lowest centres—that is re-re-represent—all parts of the organism in most intricate combinations. *a.* We see in a severe epileptic fit that all the skeletal muscles are put in vigorous activity—simultaneous development of innumerable different movements of all parts of the body. *b.* If we take a slighter case, one of *le petit mal*, we see that the effects of the central discharge are very widely, if not universally, distributed over the body; there are, in such cases, effects so various as spasm of ocular and hand muscles, pallor of the face, flow of saliva, perspiration, changes in the circulation (sometimes stopping of the heart's action, as Moxon has insisted), and arrest of respiration; there is often in, or just after, these slight fits, a discharge of fæces and urine. The existence, in some cases of *le petit mal*, of the voluminous mental states, so-called intellectual aura, spoken of in the last lecture (first depth of dissolution effected by an epileptic discharge), guarantees, so to speak, that the cruder effects just spoken of are owing to abnormal activity of the highest centres. The elaborate mental states mentioned, which, I suppose, no one will hesitate to ascribe to activity of "the organ of mind" (highest centres), never, so far as I have observed, occur in or after epileptiform seizures (discharges of middle motor centres). *c.* Then, if we take only the "warnings" of epilepsy, or rather of many different epilepsies, which "warnings" occur from, or attend, the beginning of the central discharge, we find them exceedingly various; there is giddiness, implying spasm of ocular muscles, or of some of those of the head; there are "crude sensations" of smell, sight, hearing, and taste. Besides these we find palpitation, a peculiar sensation referred to the epigastrium, and widely referred sensations of tingling, shuddering, and shivering. *d.* Another kind of evidence from cases of epilepsy is that, when a severe fit is over, there is some universal paralysis; at least, I contended so in my last lecture. Surely the several kinds of evidence point to the conclusion that the highest centres—the physical basis of consciousness—represent the whole organism.

2. There is a totally different kind of evidence which points to the same conclusion. Some medical writers speak of centres of volition, of ideational centres, of centres for reasoning (!), and of emotional centres; all four, of course, being cerebral centres. Whilst not believing in the least that there is a separate centre for each of these four "faculties," I will speak, for simplicity of exposition, as if there were. I now proceed to analyse, very briefly, not the mental states themselves, but their physical bases—nervous arrangements, which are in each, I submit, sensori-motor, triply indirectly representative of impressions and movements of parts of the body. I need, however, say nothing of the sensory element, for I suppose it will not be denied. *a.* The physical basis of volition consists of nervous arrangements, representing movements; the particular volition of the movement is, on the physical side, the survival of the fittest movement of the whole organism during activities of the centre for volition. The "centre of volition" is a centre representative of movements, particularly of movements of the arms, legs, face and eyes. *b. Ideational centres, or centres of memory.* Limiting myself to the simple cases of tactual and visual ideas, or images, the assertion is that the ideational centre

of necessity represents movements of the hands and eyes. That it represents manual and retinal impressions is, of course, certain; but that it also represents movements needs insisting on. No one ever touched anything (had a vivid tactual image) without moving his fingers; and no one ever saw anything (had a vivid visual image) without moving his eyes; therefore, in the anatomical substrata of what are called "ideas of objects," or better, "faint images," there will be represented movements of the hands and of the eyes. *c.* I confess that I never heard any one speak of a centre for reasoning; but, if there were warrant for believing in the existence of separate centres for the other faculties, I should think there to be greater warrant for believing in a centre for reasoning. Words serve us during reasoning; they are necessarily required in all abstract thought; this being so, the centre for words or for reasoning would consist especially of nervous arrangements representing highly complex and special articulatory movements.[1] *d. The emotional centre.* In strong emotional manifestations nearly all parts of the body are involved—not only the limbs, the facial, vocal, and respiratory muscles, but also many internal organs. The emotional centre will then represent an exceedingly wide range of movements. During fright there are pallor, palpitation, and hurried respiration; occasionally, there is a passage of fæces; there is dry mouth; there is increased sweat with coldness of skin.[2] The popular explanation would be that there is an emotional centre which is not representative of the parts concerned in the manifestations, but that its activity produces the manifestations by acting on lower centres, which alone represent those parts. The more realistic view, I submit, is that an emotional centre itself represents, although very indirectly, the parts of the body concerned in different emotional manifestations, and that the emotion arises during the central activities which, through subagency of the middle and lowest centres, produce the manifestations.

Now, not believing in the existence of the four separate faculties, but holding that will, memory, reason, and emotion are simply artificially distinguished aspects of one thing, a state of consciousness, I say that, instead of four centres, there are highest centres; and that, during activity of these centres, will, memory, reason, and emotion are simultaneously displayed; or, in strictly equivalent words, that there arises a state of consciousness. If so, then, putting together the "four centres," and their motor representations, we have, altogether, obtained highest centres representing (1) movements, especially of the arms, legs, and face; (2) movements of the hands and eyes; (3) articulatory movements; and (4) movements of many parts of the body, animal and organic. The conclusion from this evidence, very imperfectly and incompletely stated I admit, is that the highest centres represent, at any rate, very many, and certainly most different, parts of the body. The two utterly different kinds of evidence converge to the same conclusion. Taking them together, we see that there is no incongruity in asserting that both epilepsy and insanity are diseases of the highest centres. In health, will, memory, reason, and emotion, or, in other words, a state of consciousness, arise during slight sequent activities of sensori-motor nervous arrangements of the highest centres, representing all parts of the body. An epileptic seizure is owing to a sudden and excessive discharge of very many of these sensori-motor nervous arrangements nearly simultaneously. During such discharges, consciousness ceases, and from them, taking into account secondary downward discharges of middle and tertiary discharges of lowest centres—there results that contention of innumerable movements of all parts of the body, which we call universal convulsion. Taking a case of insanity which, like epilepsy, is a disease of the highest centres, the averment is that the negative element, defect of consciousness, implies loss of, or loss of function of, for illustration, the topmost layer of the highest centres. This, on the hypothesis that the highest centres are sensori-motor, is causative of some trifling widely distributed paralysis. The positive element (illusions, etc.) is mentation or consciousness going on during activity of the lower level remaining, second layer. This, the highest mentation then possible, occurs during activities, stronger than normal, of sensori-motor nervous arrangements, but activities incomparably less strong than those productive of convulsion. Were, in the case of insanity, the second layer, or part of it, to discharge suddenly and excessively, as occurs in an epileptic fit, even insane mentation would cease during the discharge, and convulsion would result from it. This is an old conclusion, as the following quotation shows. At that time I did not, not having the advantages of the researches of Hitzig and Ferrier, divide the brain into middle and highest centres. As the words now intercalated show, I did not then distinguish clearly the mental from the physical.

"Surely the conclusion is irresistible, that mental symptoms from disease of the hemisphere, are [on the physical side] fundamentally like hemiplegia, chorea, and convulsions, however specially different. They must all be due to lack of, or to disorderly development of, sensori-motor processes." (*St. And. Med. Grad. Trans.*, 1870.)

It may be objected that, during most mentation, there are no movements. It will be borne in mind that I said that the nervous arrangements of the four centres, together the highest centres, represent parts of the body triply indirectly. The middle and lowest centres are not only "reservoirs of energy," but also "resisting positions." All that is contended for is, to take the case of visual ideation, and neglecting the sensory element, that there are slight excitations of nervous arrangements triply indirectly representing movements of the ocular muscles, but excitations not strong enough to overcome the resistance of the middle centres. When ideation rises into perception, there is, physically, a stronger discharge of the same nervous arrangements of the higher centres, so that the middle and then the lowest centres are overcome. I speak of this subject again, after considering reflex actions in which the highest centres are engaged.

I now speak again of degrees of organisation, especially as to the highest centres, which are the least organised. I have pointed out that there is no difficulty in supposing that these centres may be the most complex, and, at the same time, the least organised. If the highest centres were already organised, there could be no new organisations, no new acquirements. I will now illustrate the process of dissolution with regard to degrees of organisation. It may be contended that alcohol, in a small quantity, "excites," although it is granted that, in a large quantity, it produces coma. It may be said that the boisterous conduct of a drunken man occurs because alcohol has goaded certain nervous arrangements of his highest centres into activity, and that it is not, as Anstie supposed, the result of permitted increased activity of a lower and more organised level of evolution consequent on exhaustion of the higher, the less organised. Let us take a case free from ambiguity—a case of simple fatigue. A very good example of what would be popularly called "increased activity" of the brain "from debility," is given in *Greater Britain.* "This evening, after five sleepless nights, I felt most terribly the peculiar form of fatigue that we had experienced after six days and nights upon the plains." Observe, the writer calls his condition fatigue. "Again the brain seemed divided into two parts, thinking independently, and one side putting questions while the other answered them; but this time there was also a sort of half insanity, a not altogether disagreeable wandering of the brain, a replacing of an actual by an imagined ideal scene." Popularly, we say that the condition was caused by fatigue—five sleepless nights; but I submit that the more reasonable explanation is that fatigue caused only the negative physical state, answering to the negative part of the mental condition, the loss of the "actual scenes," and that the "ideal scenes" which "replaced" them occurred during activity of lower, more organised, nervous arrangements, uncontrolled by the exhausted highest. It seems to me that Anstie's principle applies clearly here. I may instance a more extreme case. Delirium sets in during starvation; surely it cannot be contended that from total withdrawal of food certain nervous arrangements attain greater activity? If they do, we have still to account for the negative part of the starved man's delirious condition. Does innutrition "cause" two diametrically opposite and yet co-existing states of the nervous system? Anstie's principle accounts for both.

The next pair of terms I consider are voluntary and automatic. The expression "most voluntary" is very objectionable. It is a compound of a psychological and of a physiological term. Instead of it, I suggest the expression "least automatic," which is rigidly equivalent to what is called "most voluntary." This is stated in effect by Herbert Spencer in the remark that the "cessation of automatic action and the dawn of volition are one and the same thing" (*Psych.*, vol. i, p. 497). Volition arises during activity of the least automatic nervous arrangements; or, rather, "a kind of mental action arises which is one of memory, reason, feeling, or will, according to the side of it we look at" (Spencer, vol. i, p. 495). So now we say that the progress in evolution is from the most to the least automatic, and thus that the highest centres are the least automatic. It is not a mere question of words. The substituted expression does not imply an abrupt division into the voluntary and the automatic, but implies degrees from most to least automatic, and that a man, physically regarded, is an automaton, the highest parts of his nervous system (highest centres) being least automatic; the substituted term does not bring the will, a psychical state, into a purely physical sphere.

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[1] It is not meant that a word, which is a psychical thing, is an activity of any nervous arrangements for highly special and complex articulatory movements, but that such nervous arrangements (or, rather, audito-articulatory nervous arrangements) are the physical bases or anatomical substrata of words. I believe that these articulatory movements are represented largely in Broca's region, but yet over again in the highest motor centres.

[2] I believe that the positive effects are owing indirectly to exhaustion of nerve-fibres effected by a prior sudden discharge, holding that there is a negative and a positive element in the physical condition for fright; for example, the palpitation may be owing indirectly to exhaustion of the inhibitory fibres of the vagus, the passage of fæces indirectly to exhaustion of the splanchnics; the two positive symptoms are owing to permitted over-activity of lower centres, consequent on removal of control.

A perfect automaton is a thing that goes on by itself. There are degrees from those nervous arrangements, which almost go on by themselves to those which come into activity by the aid of other, lower, more organised, nervous arrangements. To say that nervous arrangements go on by themselves, means that they are well organised; and to say that nervous arrangements go on with difficulty, if at all, by themselves, is to say that they are little organised. Hence degrees from most to least automatic are, on another aspect, degrees of organisation from the most to the least. Repeating what has been already said in effect, if the highest centres were perfectly automatic, there would be no such thing as a "voluntary" operation: all being organised, there would be no possibility for correct adjustments in new circumstances; we should be ready adapted to particular external conditions, but no new adaptations to new conditions could occur.[3] The becoming more perfectly organised, and the becoming more automatic, are only different sides of one thing; a commonplace illustration is learning to write. There are degrees of automaticity from those operations inherited comparatively perfect, through, so to speak, the secondary automatic (writing, for an example) up to the activities of those least automatic nervous arrangements which are concerned during one's present thinkings and doings. We may say that there are degrees from most organised and most automatic nervous arrangements, up to nervous arrangements just begun—nerve-stuff being, for the first time, travelled by nerve-currents.

To illustrate dissolution, from this point of view, would be essentially a repetition of former illustrations, given after speaking of degrees of organisation. I would observe here that, in using such an expression as "*the* automatic" we must bear in mind that what is very automatic to one man is not automatic to another. This is either a truth or a truism, as we apply it. When a patient is delirious, say during acute non-cerebral disease, and goes through, in pantomime, the manipulations of his trade, although these operations are exceedingly elaborate in themselves, they are not elaborate to him. They have become deeply automatic, and go on very much by themselves in health; in consequence, in spite of their elaborateness, the persistence of only such actions implies a deeper dissolution than the persistence in another patient of actions equally elaborate, which had not in him become automatic.

I pass over the two antithetical terms, "general" and "special," and also another pair, "complex" and "simple." We now come to the doctrine of reflex action. The term corresponding to "most organised" and "most automatic" is "most perfectly reflex;" that corresponding to "least organised" and "least automatic" is "least perfectly reflex."

Degrees of automatic action answer to degrees of independency of nervous arrangements, from those almost going on by themselves, and nearly independently of all others, to those put in action by others, most dependent on all others. Degrees of reflex action are degrees of nervous arrangements going on according to degrees of stimuli coming to them. No doubt the distinction is to a very great extent artificial, but it is a convenient one. In further remarks, I limit myself entirely to reflex actions in which the highest cerebral centres are necessarily engaged. Here we make a division of these: 1, complete and strong, those in which the highest centres are strongly engaged along with all lower centres; 2, incomplete and weak, those in which the highest centres are alone engaged, and are in but slight activity. Beginning with an artificially simplified case of complete and strong reflex action, I suppose that I am seeing a brick: this is sometimes called "a perception." I prefer the expression, that I have a vivid image. So far we have spoken of a mental event; now for the correlative purely physical event, which is a reflex action, occurring during, or rather effecting, a correspondence of the organism with the environment; the process is really double. What first happens is that there is a peripheral impression upon the retina, impulses then pass through the lowest, through the middle, and up to the highest sensory centres. It should be particularly observed that there is passage from the most organised to the least organised centres, from the least modifiable to the most modifiable; there is a multiplication of energy-liberations upwards, and consequently strong excitation and wide irradiation in the highest sensory centres. So far we have only stated one half of the reflex action, have only reached the physical condition in the highest sensory centres correlative with the colour of the brick. It and all other objects have shape, and this as much requires to be accounted for as the colour. The shape of an object is the relation of its several positions one to another; our knowledge of this relation is by movements, in this case ocular movements (symbolising some movements of the hands).[4] By currents passing from the highest sensory centres, so to speak, "across" to the highest motor centres, and from these downwards, through middle and lowest motor centres to muscular periphery, there is development of movements of the eye-balls; the process in this stage is from the least to the most organised, from the most modifiable to the least modifiable; there is a limitation of energy-liberations downwards, and thus from wide excitations in the highest centres there result movements limited to a part of the periphery. Here we have complete and strong reflex action, complete because all orders of centres, sensory and motor, are engaged; and strong, because the highest centres are in great activity, consequent on the multiplication of energy-liberations upwards.

This is a purely physical process. The vivid image, the mental state we have, arises during (not from) the physical condition in the two divisions of the highest centres, and is strongly and definitely "projected," because the lower centres are engaged; it *seems* part of the outer world. Next day, we can think of the brick in its absence, have "an idea of it," or, as I prefer to say, have a faint image, where, yesterday, we had a vivid image. In this case, the reflex action is incomplete and weak; the lowest and the middle sensory centres and the middle and lowest motor are not engaged. The highest sensory and motor centres are alone engaged; there is still reflex action, but only the central links of the sensori-motor chain are engaged: the central part only of the whole process which occurred in perception is done over again, and, the excitations being slight, the image arising is faint, and, the lower centres not being engaged, it is feebly and indefinitely projected, *seems* more part of ourselves.

Let us see how the doctrine of reflex action applies in the elucidation of the phenomena of an epileptic fit, and thus illustrate again, on a small scale, the dictum that an epileptic fit is owing to an excessive discharge beginning in some part of the anatomical substrata of consciousness. Let us imagine, which for my own part I do not believe, that there is a centre for visual ideation and nothing else—a centre made up of the anatomical bases of visual images only. We "store up" images of innumerable different objects, each of which has some colour and some shape; this means, on the physical side, that the centre we are imagining contains innumerable nervous arrangements, each of which represents a different retinal impression, and a different ocular movement; these are, anatomically, sensori-motor, (retino-ocular) nervous arrangements; physiologically, they are reflex actions. During slight activities of this centre, unprovoked from the periphery, (incomplete and weak reflex actions) we have faint visual ideas; during strong activities provoked by peripheral agencies leading to reactions on the periphery (complete and strong reflex actions), we have vivid visual ideas (the parts of the highest centres concerned during perception and during ideation are the same). So far for two degrees of healthy activity. Now, suppose that some of the cells of the nervous arrangements of these centres, by any pathological process, become highly unstable, to a degree such as occurs in epilepsy. The consequence will be that many nervous arrangements occasionally discharge suddenly, excessively, and simultaneously. During such a discharge, there would not arise images of many objects differently coloured and shaped; but, on the contrary, there would be crude masses of vivid colour before the eyes, and there would also be a strong development of many ocular movements at once—that is to say, [illegible] of the muscles of the eyeballs. Some epileptic seizures begin by the patient having vivid colour before his eyes; spasmodic [illegible] to one side is not an uncommon onset.

There is another matter of vast importance. The [illegible] which I have spoken, and some others which I have passed over, are, I think, parallel in meaning, but may not seem so at [illegible]. We have to mention that evolution is not a necessary [illegible] on conditions. Evolution, so to speak, is not [illegible] increasing complexity, etc., from bottom to top. We [illegible] as we must, that is, according to what we are [illegible] we can, that is, according to internal conditions. There is something more than this [illegible] what I would call internal [illegible] would goes on most actively in the highest centres. On account of its great preponderance in the highest centres of man, he differs so greatly from lower animals. We acquire numerous different ideas: that is to say, there is, on the physical side, an organisation of many different nervous arrangements of our highest centres, during actual converse with the environment. When, as in sleep and in "reflection," this actual converse ceases, the quasi-spontaneous slight activity of the highest sensory centres is uninterfered with by the environment, they being protected from it by the lowest and middle sensory centres; and, consequently, there are no reactions on the environment, the highest motor-centre being resisted by the middle and lowest centres; in such case (sleep, reverie, reflection, etc.), the very highest nervous arrangements of the highest centres, those in which entirely new organisations can be made, will be in least activity, and the next lower of those centres in greater activity. The nervous arrangements of the highest centres, or some elements of them, are "left to fight it out among themselves;" new combinations arise, the survival of the fittest. Manifestly new, although evanescent combinations, are made during dreaming; but I contend that permanent rearrangements (internal evolutions) are made during so-called dreamless sleep (I believe that the late Dr. Symonds, of Bristol, stated this in effect). Internal evolution is supposed to go on in all centres; perhaps, as to some centres, such as those for micturition and defæcation, we may say that it has been almost completed; they are nearly autonomous at birth, and are but slightly, I imagine, represented over again in the higher centres, but are much under their inhibition. The doctrine of internal evolution, I submit, accounts for what, at first glance, seems the inadequate number of fibres from lowest centres towards highest. In the highest centres will be a great number of sensori-motor combinations, which do not answer to any actually experienced correspondencies with the environment, and which on their normal excitations do not lead to actual movements; and, in the case of many lowest centres, there will be sensori-motor nervous arrangements for purely "local affairs," which will, I imagine, require little re-representation in the higher centres. Since most mentation, ordinarily so called, is carried on in visual and tactual ideas, or in words, internal evolution in the highest centres leads to a great multiplication of nervous arrangements representing ocular, manual, and articulatory muscles; this is repeating in another way the statement that small muscles are very largely represented in the highest centres.[5] Mentation involves emotion; as the highest emotions are (Spencer) compounded out of the lower, there will be, on the physical side, in man a large re-representation in his highest centres of the organic parts concerned during emotional manifestations. These statements as to very large representations of small muscles and of organic parts in the highest centres accord with the facts that in slight epileptic fits —comparatively slight discharges, beginning in parts of the highest centres—the skeletal muscles chiefly convulsed are the small muscles spoken of; and that there is a very extensive involvement of the organic parts. We have, I think, in the doctrine of internal evolution, an explanation of the disproportionate involvement of organic parts in slight epileptic attacks.[6] In those parts of the middle motor centres especially representing small muscles, there are (Bevan Lewis) most small cells (I suppose these will be paths of least resistance). Whether the like obtains or not in the highest motor centres, I do not know.

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[3] The becoming more automatic is not descriptive, as [illegible] be, but is, on the contrary, [illegible] are the most [illegible] other words, the highest centres [illegible] most actively going on, whilst [illegible] tion is probably nearly completed.

[4] [illegible]

So far, I have, as much as possible, considered a man as a mere machine. I have often, it is true, in preceding remarks, used psychological terms; but I have really been dealing only with the nervous system—have been speaking of the physical conditions underlying mental states. Now, I speak of the relation of consciousness to nervous states. The doctrine I hold is: first, that states of consciousness (or, synonymously, states of mind) are utterly different from nervous states; second, that the two things occur together—that for every mental state there is a correlative nervous state; third, that, although the two things occur in parallelism, there is no interference of one with the other. This may be called the doctrine of Concomitance. Thus, in the case of visual perception, there is an unbroken physical circuit, complete reflex action, from sensory periphery through highest centres back to muscular periphery. The visual image, a purely mental state, occurs in parallelism with—*arises during* (not *from*)—the activities of the two highest links of this purely physical chain; so to speak, it "stands outside" these links.

It seems to me that the doctrine of concomitance is, at any rate, convenient in the study of nervous diseases. It, or an essentially similar doctrine, is held by Hamilton, J. S. Mill, Clifford, Spencer, Max Müller, Bain, Huxley, Du Bois Raymond, Laycock, Tyndall, Herman, and David Ferrier. Those who accept the doctrine of concomitance do not believe that volitions, ideas, and emotions produce movements or any other physical states. They would not say that an hysterical woman did not do this or that because she lacked will; that an aphasic did not speak because he had lost the memory of words; and that a comatose patient did not move because he had lost consciousness. On the contrary, they would give, or try to find, materialistic explanations of physical inabilities. I do not try to show what is the nature of the relation between mental and nervous states.

The next question is as to range of concomitance. How "far down" in the nervous system does consciousness extend? Lewes thought that some degree of consciousness or "sensibility" attended activities of even the lowest centres. The current view is, that it only attends activities of the highest parts of the nervous system, although no lower limit is agreed upon. Some, indeed, speak of "unconscious states of mind," as if, below consciousness, there were some faint mental states. I am not sure that I state this view with verbal correctness, as I do not understand it. That activities of the highest, least organised, nervous arrangements, during which consciousness, or most vivid consciousness arises, are determined by activities of lower, more organised, nervous arrangements, I firmly believe. As I have said, in effect, states of consciousness attend survival of the fittest states of centres representing all parts of the organism as one whole. Roughly speaking, the highest nervous states are determined from below, and not by autocratic faculties acting upon the highest parts of the highest centre. But whether the activities of the lower nervous arrangements have attendant states of mind, however faint or not, is disputable. Less consciousness attends activities of nervous arrangements the more organised and automatic they are or have become, which means that the highest, least organised, least automatic, most imperfectly reflex centres, are the physical bases of consciousness or of most vivid consciousness.

[The lecturer then spoke of those disorders of co-ordinations which occurred only when movements were attempted—started by volition, or, speaking realistically, by discharges beginning in parts of the highest centres. (He did not believe that there was a difference in kind between inferior centres representing impressions and movements, and superior centres co-ordinating them; the so-called superior co-ordinating centre was one where impressions and movements represented in the inferior centre were re-represented in more complex and special combinations.) All the disorders of co-ordination spoken of, he thought, were essentially cases of paralysis; that is, in the sense of there being loss of some movements; there was also an over-development of other movements, consequent on greater energising of healthy nervous arrangements; the two elements, negative and positive, constituted the disorder of co-ordination. Here again was seen, but in another way, the importance of taking note not only of the dissolution, but of the levels of evolution (lower, or higher, or collateral) remaining. He illustrated his hypothesis as to the disorders of co-ordination mentioned by the case of paralysis of the right external rectus muscle, pointing out that, as an indirect consequence of this purely negative state, there was an over-positive effect on the internal rectus of the left eye (secondary deviation); an ordinary discharge starting in the highest centres failed to turn out the right eye; there being a stronger discharge, there was still no effect on the right eye, but the left turned in too much. Here the direct effect of the negative lesion and its indirect over-positive effect, were seen nakedly separate; but he believed that in cases of disorder of co-ordination, where the same muscles were involved, the principle held; there may be loss of some movements of a set of muscles, and retention of other movements of them. He supposed that in writers' cramp there was some paralysis, in the sense of loss of but a few of the most special movements of writing, represented in some lowest centres, from atrophy of their cells consequent on over-use—that is, abuse. As a result, there was greater energising of the highest centres coming down to compel the atrophic elements of the lowest centres to act. No effect being produced on these elements, the most special of the movements of writing were not developed, but there was an over-development of the more general movements of the same and other muscles, represented in the same and other lowest centres. He thought that the essential condition of things in the reel in destruction of part of the middle lobe of the cerebellum was loss of some movements of the spine, was some paralysis; the erratic movements of the legs were, he thought, consequent on discharges of healthy nervous elements.

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[5] It is well-known that, after amputation of a limb, the patient retains a phantom limb, or part of one. According to Weir Mitchell, the parts most often remaining spectrally are the terminal parts—the parts having most small muscles. The part of the limb above up to the stump often does not remain spectrally. Here is some further evidence of the especially great representation of parts having small muscles in the highest centres.

[6] What I have described as internal evolution is, I think, essentially the process of which Spencer speaks in chapter 6, Physical Synthesis, *Psych.*, vol. i. I particularly refer to section 246.

The lecturer then stated his opinions as to Localisation, limiting consideration to movements. For illustration, he imagined a centre for the arm and the leg. The "Universaliser" would say that every part of the centre represented both the arm and the leg in the same way; the "Localiser" would say that one part of it represented the arm only, and another part the leg only—would, indeed, make two centres. This is the current hypothesis. The lecturer did not take either of these views; he restated the opinion which he had held as to localisation, both before and since the recent experiments of Hitzig, Ferrier, and others on the mid-cerebral cortex.

"It may be said that one convolution will represent only the movements of the arm, another only those of speech, another only those of the leg, and so on. The facts above stated show that this is not the plan of structure of the nervous system. Thus, to take an illustration, the external parts, x, y, and z, are each represented by units of the corpus striatum. But the plan of representation is not that some units contain x largely only, as x_3, others y largely only, as y_3, but that each unit contains x, y, and z—some, let us say, as x_3, y_2, z; others as x_2, y_3, z, etc. When we come to the still higher evolution of the cerebrum,[7] we can easily understand that, if the same plan be carried out, a square inch of convolution may be wanting, without palsy of the face, arm, and leg, as x, y, and z are represented in other convolutions; and we can also easily understand that discharge of a square inch of convolution must put in excessive movement the whole region; for it contains processes representing x, y, and z, with grey matter in exact proportion to the degree of complexity." (*St. Andrew's Medical Grad. Trans.*, 1870.) This is only another way of stating the doctrine of compensation and its "inversion," co-operation in excess (see second lecture). This double doctrine, he thinks, applies to representation of movements in the mid-cerebral region of dogs. Destruction of a part of the dog's mid-cortex entails no permanent paralysis, but discharge of any part of it produces convulsion. Ferrier, Charcot, and others have shown, since the part quoted was written, that destructive mid-cortical lesions in monkeys and men entail some permanent local paralysis; in these animals, it would seem that there is less compensation than in dogs. The important question is—Is there some recovery, and thus some compensation, in the case of man? The lecturer did not now suppose compensation for any destructive lesion to be ever absolute. His hypothesis was that the so-called centre for the arm represents that part very specially, but that it also represents the leg and face more generally, and the parts on the other side of the body still more generally; similarly, *mutatis mutandis* for the other centres. According to this view, destruction of the arm-centre should entail some decided paralysis of that limb, and very little, if any, of the leg and face, which two parts would have also a large representation in, so to speak, their own more particular centres. On the other hand, excessive discharge limited to the arm-centre should produce convulsion, beginning in that limb, and yet spreading beyond it to the leg, face, etc. The currents developed would, however, not be limited to one centre; they would, no doubt, spread to collateral centres, and discharge them; thus a convulsion beginning in the arm and becoming universal, was no evidence that a single centre—the arm-centre—represents all four limbs.[8] Yet certain experiments by Franck and Pitres on dogs tended, the lecturer thought, to show that his view of localisation—that every centre represented all parts, but that each centre represented some one very specially—held in the case of those animals. They conclude from these experiments: "Elles démontrent, en effet, que l'épilepsie peut se généraliser bien que l'excitation provocatrice ait été limitée à un seul centre cortical [they isolated the arm-centre, and by stimulation of it produced convulsion of all four limbs] et que la destruction préalable d'un centre cortical [they cut out the arm-centre in another experiment] n'empêche pas l'extension des convulsions aux muscles correspondant au centre préalablement détruit."

It must be said that these distinguished physicians believe, as stated in the first lecture, that, "Le cerveau commence l'attaque, la protubérance, le bulbe et la moelle la généralisent." Ablation of the cortical centre, "primitivement excite" does not (Albertoni, Franck, and Pitres) stop the convulsions. Franck and Pitres' argument is very able and powerful; their contention deserves most respectful consideration. No doubt centres in the pons, medulla, and spinal cord (lowest centres), are discharged by the prior cortical discharge. At any rate, the experiments mentioned go towards showing that *all* the lowest centres are under the command of—if they are not all, as the lecturer thinks, re-represented in—*each* part of the mid-cortex. The order of the discharge of all the lowest centres is determined by the particular part of the mid-cortex primarily discharged.

Admitting difficulties in the way of acceptance of his hypothesis of localisation, the lecturer thought the current hypothesis did not account for all the facts. Any adequate hypothesis had to account for the following: (1) that from a destructive lesion of motor centres the paralysis was especially of the more voluntary, etc.; (2) that from a discharging lesion, the development of movements (convulsion) was the same: an epileptiform seizure starting in the arm began, first of all, in the hand; one starting in the leg began in the foot; one starting in the face, in the side of the mouth; (3) that the progress in each (1 and 2) was in compound order; (4) that a part might be permanently imperfectly paralysed, and yet the whole of it might be occasionally convulsed; (5) that recovery, or some recovery, follows on permanent destructive lesions producing paralysis; there is often at least some compensation; (6) that a small destructive lesion of a motor centre may entail little or no obvious paralysis, whilst a sudden and excessive discharge beginning in such part produces (indirectly) very great convulsion; (7) that from discharges beginning in different parts of the mid-cortex, we have fits affecting the same regions, but their parts in different order ("isomeric seizures"); (8) that a patient, who has no paralysis before a convulsion, has much (temporary) paralysis after it. (Cases of monoplegia [the paralysis only existing after a convulsion] must not be adduced as evidence to show that any lesion found *post mortem*, say a tumour, had produced paralysis by its direct, its destructive, action.)]

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[7] At that time, I regarded centres morphologically, and did not then make a division into lowest and middle motor centres. I used to speak of convolutions being the corpus striatum "raised to a higher power." As stated in the second lecture, I now speak of them on an anatomico-physiological basis.

[8] Of course, the term "centre" is an arbitrary expression; but using the term "centre for the arm," there would be in it, one must suppose (judging from the mode of spreading of convulsion from that limb from discharge beginning in part of the centre), its subcentres.

THE LUMLEIAN LECTURES

ON

THE ÆTIOLOGY OF PHTHISIS.

Delivered at the Royal College of Physicians.

By J. ANDREW, M.D., F.R.C.P.,
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LECTURE II.

THE causes of phthisis which come next under consideration are those connected with modes of life and industrial occupations. A mere enumeration will be almost sufficient in the case of the majority of the members of this group. It is all but impossible to separate the influences of the day-workshops and of the occupations from that of the houses, and especially of the sleeping-rooms, of the operatives, so that whatever arguments on either side might be drawn by a confident statistician could be of little value. The conclusions could scarcely be of greater weight than the premisses. Still, as the influence of the home-life is probably about the same as all occupations which are paid at the same rate, except, of course, those which must, from their nature, be carried on in specially unhealthy localities, it would be reasonable to attribute, in part at least, to the occupation any great variation from the phthisis-mortality in either direction; although it might be impossible to determine the exact proportion in which the conditions of labour and of home-life contribute to it. Still more justifiable would it be to do so in cases where general rules, such, for example, as that phthisis in country districts is more frequent among women, are interfered with. With these limitations, I would divide this group into two subgroups, viz.:

1. Those occupations and modes of life in which there is the possibility, the likelihood if you will, that direct contagion may come into play;

2. Those in which there is no greater danger of such contagion than all of us are exposed to in the ordinary intercourse of life.

1. All modes of life, all occupations which are carried on indoors, contrast unfavourably with outdoor pursuits. The naked savage, whatever ills he may have to bear, rarely finds phthisis among them; but with every addition to his clothing, and to the comfort of his tree or cave, his proneness to it increases. In this respect, in an advanced civilisation, the effeminacy or luxury of the rich and the necessities of the poor bring about the same result. Sometimes, perhaps, even members of our own profession are forgetful, in the advice they give, of the advantages of an open-air life. I remember more than one medical student with incipient phthisis, compelled by circumstances to undertake country practice in a bleak district, who, instead of being

injured by the constant exposure to all sorts of weather, has regained seemingly perfect health. In the case of trades, it is impossible to ascertain the true proportion of cases of tubercular phthisis included in the totals of deaths from pulmonary diseases; but the facts, such as they are, contained in Dr. Greenhow's "Local Inquiries into Excessive Mortality from Lung-diseases," printed in the Reports of the Medical Officer of the Privy Council for the year 1860-61, make it probable that here too, as in general statistics, when the death-rate from diseases of the lungs is large, that of phthisis is also excessive. Wherever imperfect ventilation of workshops, with or without overcrowding, exists, the possibility of direct contagion must be admitted, whatever may be the nature of the occupation. It would be superfluous to enumerate the well-known industries and localities in which this is the case. A very long, if not complete list, will be found in the paper just referred to; but, at the same time, it must be remembered that, apart from any special infection, exposure to an atmosphere vitiated in this way is invariably recognised as a most potent cause of ill-health, and as a predisposing cause of many other forms of disease besides phthisis.

2. Certain occupations, however, in which there is no overcrowding or want of ventilation, give an abnormally high death-rate from pulmonary diseases, and these constitute my second subgroup. Instead of enumerating the occupations themselves, it will be sufficient to mention the chief causes of their unhealthiness, and these appear to be the following:

a. The presence in the air of fine dust of any kind, of carbonic or of other noxious gases.

b. Exposure to great vicissitudes of temperature.

c. Inhaling hot air, either very dry or very moist.

d. The workman being obliged to carry on his labours in some cramped posture, interfering with the freedom of the respiratory movements.

It is clear that the excess of phthisis which Dr. Greenhow's facts prove to exist under these conditions cannot be due to direct contagion. But the complexity of the factors to be dealt with in considering the influence of occupation is so great, that its discussion would require a length and mode of treatment impossible in these lectures. I trust, however, that the majority of my hearers will agree in the probability of the conclusion just stated, viz., that the excess of phthisis in some trades cannot be altogether accounted for by direct contagion only. The causes of phthisis, so far briefly reviewed, have all been external to man's organism. Some of them are physical conditions more or less beyond his control; others artificial, due to his own mismanagement, and blots upon his so-called civilisation, yet one and all acting upon him from without. I pass now to a different order of facts, those connected with some special, though unknown modification of bodily constitution; which renders those in whom it exists more or less liable to be attacked by phthisis. Sometimes it is found in large numbers of men, either of one common stock, or, if unrelated, yet living under similar physical and social conditions, sometimes it may occur only in a few isolated individuals. It may be either inherited or congenital or acquired. It may be labelled, according to fancy, temperament, or diathesis, or idiosyncracy, or constitution, or habit. But it is met with in so many different forms, and under such widely differing circumstances, that I find it difficult to believe that its nature is always the same, although its result, viz., susceptibility to phthisis, is so. It must be one of the more remote causes, not the proximate cause of the disease, and its production is one of the modes in which external agents exercise their injurious influence. It falls naturally under the heads of race, inheritance, congenital origin, and acquired diathesis.

It would be an unwarrantable trespass on your patience to treat any of these in detail, as if they still required proof; but it is necessary for my argument to give one or two illustrations in connection with their bearing upon the question of direct contagion.

In Peru, according to Dr. Alphonse Guilbert, in his well-known paper on pulmonary phthisis in Peru and Bolivia, the influence of race comes out in the clearest manner. He states (*op. cit.*, p. 29) that the different races now found in the country suffer from phthisis in the following order of severity:

1. Negroes;
2. The descendants of the Spaniards who took part in the conquest;
3. The half-breeds, in the various crosses between Spanish, Negro, and Indian strains of blood;
4. Persons born in Europe, and in their case the disease is not only less frequent, but its average duration is longer;
5. Indians of pure descent, among whom it is all but unknown.

There are one or two points worth noticing here.

The well known proclivity of the negro race asserts itself—a proclivity which makes it difficult to believe that the interior of Africa could have escaped if phthisis were spread by direct contagion, and which also brings out into stronger relief the anomalous immunity of Senegambia and of the Gold Coast.

Again, it is interesting to note that, in little more than three hundred years, there has been developed among the Spaniards born in Peru a liability to phthisis far in excess of that prevailing among immigrants from the mother country.

The social condition of the half-breeds is much lower than that of the Spaniards. Their habits and modes of life are much more favourable to the spread of infectious diseases, and yet they suffer less from phthisis. Again, the native Indian race has not yet been attacked by this imported contagion, any more than the North American tribes had been in the time of Dr. Rush. Making every allowance for the influence of race and modes of life, etc., in the causation of phthisis, this presents a strange contrast to the history of the introduction of small-pox, measles, whooping-cough, and other infectious diseases, among savage peoples. Thus, several millions of Indians are said to have died from small-pox on the Pacific coast of North America within three or four years of the first appearance of that disease among them.

Directly, infectious diseases are ordinarily more destructive on their first introduction into a new country; but in Peru, in the South Sea Islands, and in Australia, according to Dr. Thompson, this does not hold good in the case of phthisis; its virulence increases as time goes on.

Again, a race may escape phthisis in one country, and yet suffer from it in another. Thus, the West Indian negro, not specially prone to it in his native island, becomes so when transferred to the Gold Coast; and this too, although his near relatives there escape almost entirely, and do not even suffer from the contagion which he may have brought with him. This long known liability of new-comers to suffer more than natives from certain diseases is a matter of great importance in reference to the properties of the contagion of those diseases. In the common case of a stranger visiting a country infected by a disease—*e. g.*, yellow fever—unknown in his own home, and at once falling a victim to it, there is certainly nothing unreasonable in the supposition that the native escapes in consequence of having been exposed to minute doses of the poison, and thus, as by an artificial inoculation, obtaining protection against its fatal effects. But it must be remembered that sometimes the native suffers, whilst the stranger escapes, although exposed for the first time to a virulent contagion. Thus, some regiments raised in the Soudan, and employed in Mexico in behalf of the cause of the unfortunate Emperor Maximilian, were proof against an outbreak of yellow fever which decimated the Mexicans themselves. Here the inoculation-theory fails utterly, and we are driven to believe that some peculiar racial constitution must be, in part, at least, the cause of the immunity.

There is, however, a third combination, of which the case of the West Indian soldiers on the Gold Coast is an instance; and in this neither of these explanations is admissible. Here we have two very closely allied races, or rather, we might say, members of the same race, living together, and yet the new-comers suffer excessively from a disease to which they are at least as much exposed in their own country as the natives of the Gold Coast, who comparatively escape it, are in theirs. Under these circumstances, the theory of race and that of inoculation seem to me alike insufficient. A better explanation is to be found in the supposition that, although we speak of phthisis in the West Indies and on the Gold Coast as one and the same disease, there is some difference in its exciting cause in the two regions; that on the Gold Coast it has some property unknown to it in the West Indies, which gives it increased power over the West Indian negro, but does not render it dangerous to the native of the Coast. Granted, for argument's sake, that the exciting cause is some micro-organism, then in the West Indies and on the Gold Coast we have, if not different species, at any rate varieties, of that micro-organism. Allow me to remind you that this supposition is supported by the existence of numerous parallel instances; *e. g.*, by the greater or less activity of many medicinal plants, according to the soil and climate in which they are grown; by the fact that the same species of fungus is wholesome food in one country and poisonous in another; and, above all, by the greater or less activity of some of the septicæmic bacilli, according to the manner in which they are cultivated. I shall again refer to this, in attempting to determine the nature of the contagion of phthisis.

The influence of inheritance is the same in kind as that of race, in the production of which it is indeed a principal factor. It is less widely distributed, but within its area of distribution is more intense.

It is necessary to reassert the fact that a predisposition to disease, like any other personal peculiarity, such as the colour of the hair, may be congenital and extremely powerful, although there is no record of its previous occurrence in the family; and further, that the congenital predisposition is frequently shown by several, or even by all the children of the same parents. Thus, when several cases of the same disease occur among brothers and sisters, it is undoubtedly quite right to note the fact, whether it is or is not inherited, but not to do so in such a way as to imply that, in the absence of inheritance, there can be no common constitutional predisposition.

Acquired Diathesis.—Its reality is attested by the frequently observed relation between the development of phthisis and attacks of other forms of disease, such as syphilis, the continued fevers, or inflammatory affections of the lungs, and also by the increased liability which follows upon deterioration of general health by exposure to hardships, privations, or insanitary modes of life.

Sex.—The difference in mortality seems to depend rather upon the difference in the occupations of the two sexes, and on their relative sobriety, and morality, than on any physiological factor. In towns, especially in London, the male death-rate is the higher; in the more purely agricultural districts, the female; but, for the whole of England, in the year 1880, the Registrar-General's returns give a large excess on the male side, viz., males, 1,946, females, 1,807, per 1,000,000 living. It is, however, noteworthy that many writers, *e.g.*, Dr. Walsh and Dr. Jas. Pollock, state that inherited phthisis is more common in women than in men.

Annual Report of Registrar-General for 1880, pp. 170-1.

	Total under 1 year.	1	2	3	4	Total under 5 years.
Males	521	[illegible]	191	[illegible]	[illegible]	[illegible]
Females ...	[illegible]	[illegible]	[illegible]	111	[illegible]	[illegible]

	5	10	15	20	25	35	45	55	65	75	85	95	All Ages.
Males ...	[illegible]	[illegible]	[illegible]	2726	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Females	624	1137	[illegible]	[illegible]	5204	[illegible]	2517	[illegible]	423	57	1	[illegible]	[illegible]

Age.—Most fatal in adult life; *i.e.*, from the age of 15 to 45. In the above table, the actual number of deaths, not the percentage on those living at the second ages, is given; so that the true mortality at the more advanced ages is much higher than is shown by these figures.

The causes so far enumerated by no means exhaust the detail of the ætiology of phthisis, but they readily fall into three main classes, which may be roughly termed climatic, social, and personal; and to one or other of these, if phthisis be a diathetic or developmental disease, every one of its possible causes may be referred. If, on the contrary, it depends upon some external exciting cause, of the nature of a morbid poison or parasite, then they would stand to this in the relation of predisposing causes. I say of a morbid poison or parasite, for the time has not yet come in which it is possible, in all cases, to draw a distinct line between the two. And yet, even now, diseases in which the existence of a micro-organism as their exciting cause has been established, ought to be no longer classified as depending upon morbid poisons. For, surely, a bacillus or a bacterion in the blood or tissues is neither more nor less a parasite than a filaria or [illegible] in the blood, than sarcina in the stomach, than a tapeworm in the intestines, than trichina spiralis in the muscles, or a fluke in the liver. The chief difference among these unwelcome guests being that some are certainly animal, whilst others are probably vegetable parasites; but the nature of their relation to their "host" is the same in all. However much they may vary in the region or tissue they infest, or in the effects produced by their vital activities, they [illegible] in this, that they live, for the time, at the expense of the [illegible] organism, and, in so doing, bring upon it more or less damage or discomfort.

Is it possible, then, from the examination of these three groups of causes, to draw any practical conclusion as to the nature of phthisis? I believe it to be so, and that it is a necessary step on the road to any certain knowledge of a most important subject. For such an examination will make it plain that these causes, singly or in combination, are insufficient to account for the phenomena of phthisis. That it, in fact, cannot be developmental or diathetic, but must be ranked among the specific febrile diseases, and that, therefore, some micro-organism [illegible] condition and not a mere accident of its presence.

Unless we can find among these causes some one which is never absent, the very number and well attested rights of the claimants are fatal to the claims of any one of them to be regarded as the sufficient cause. Were they each and all always present, and in definite proportions, then indeed there would be nothing paradoxical in the uniformity of the morbid changes following their action. But that causes so diverse, so distinct, as dampness of soil, exposure to a hot dry atmosphere, imperfect ventilation, an attack of pneumonia, or the being descended from a phthisical ancestor, or any other causes of the same sort, should give rise singly, or in combination, in all climates, under all known forms of barbarism or civilisation, to similar pathological changes, associated with a similar train of clinical symptoms, and this in spite of manifold differences in the personal factor, this cannot be accepted without the production of the most cogent proof, and in default of any simpler explanation. Indeed, the longer, the more complete the list is made under these heads, the more [illegible] does its insufficiency become. Each addition to the roll increases instead of diminishing our difficulty. Many of these conditions are the exciting causes of ordinary forms of disease; *e.g.*, an ordinary bronchial catarrh is frequently induced by exposure to vicissitudes of temperature, or by breathing an irritating atmosphere, whether it be artificial, or supplied liberally by nature herself in the form of the spring east winds. That such causes should do this appears natural enough (unless, indeed, we try to realise the mode in which the effect is produced), but that they should also, from time to time, give rise, instead, to a disease with such special constitutional and local characters as phthisis, is hard to understand, except by giving what seems to me to be undue weight to the influence of constitutional predisposition. In point of fact, the only general developmental disease with which phthisis can be fairly compared in respect of its wide geographical distribution, and its practical uniformity under an infinite variety of conditions, is old age.

Except for the sake of maintaining a paradox, we must look for some one dominant factor, always and everywhere present, which can be shown, at any rate by analogy, to be sufficient to explain not only the general type of the disease, but also the anomalies in its distribution, and the variations presented by individual cases; and such a factor can only be found in some such a micro-organism as the bacillus of Koch. It cannot be found in any of the three groups of causes hitherto considered.

Not many discoveries of equal importance have received such speedy and strong confirmation as that of the tubercle bacillus. I shall not reproduce here, much less attempt a variation upon, the report by Mr. W. Watson Cheyne to the Association for the Advancement of Medicine by Research, on the relation of micro-organisms to tuberculosis. Until it be disproved, I am well content to accept the bacillus of Koch as the essential cause of phthisis, and that, too, in the extreme form in which the doctrine has been stated to me by my colleague Dr. Klein; viz., "no tubercle without bacillus, no bacillus without tubercle." Even should it be proved that this particular bacillus does not hold this intimate relation to phthisis (although this becomes every day more unlikely), I shall still maintain the same view of the essential nature of phthisis, and look forward confidently to the eventual discovery of its true micro-organism.

Let us see how the hypothesis of a specific organism [illegible] present in all cases of phthisis as its proximate exciting cause [illegible] up and reconciles the obscurities and contradictions [illegible] in every branch of the subject.

I have already mentioned the great difficulty which, on the developmental or diathetic theory, is presented by the practical uniformity [illegible] in different individuals [illegible] different [illegible]. And be it remembered that we are not dealing with a rare disease, of which so few instances have been observed that doubts might reasonably be entertained as to the existence of certain definite pathological changes, and their relation to clinical symptoms, but with one of the most common and most fatal of diseases, and one which has been known from the earliest times. [illegible] the attempt [illegible] the specific nature of [illegible] phthisis by restricting the term "tubercle" to [illegible] of cases of the disease, there was no [illegible] the lungs, were [illegible] of the morbid agent or process [illegible] was made [illegible] of processes [illegible] with such well marked [illegible]. The attempt failed to produce universal conviction, and its partial success was in great part due to concentrating attention upon the results of what would now, perhaps, be regarded as very inadequate microscopic examinations, to the exclusion of the more general and less easily misunderstood anatomical and clinical phenomena. But surely these last are not the least important factors in determining the nature and relations of any new growth or morbid change. Until such time as our modes and instruments of research are so far improved that all discrepancy between the two ceases to exist; a difference in properties, however slight, must be held to prove a difference more or less complete in kind, in spite of apparent histological identity under the microscope. And, on the other hand, similarity in properties must be held to prove more or less close relationship, if not identity, in spite of histological diversities. All through the dispute, it was virtually admitted, by almost every one engaged in it, that there is something special in the lung of phthisis. The appearances which one man proved to his own entire satisfaction not to be "tubercle," he yet never doubted would be held to be such by some other observer. It must have seemed a little odd, now and then, that the results of so many different processes should be so readily mistaken for one and the same new growth. Those who, like myself, believed throughout in the similar and specific nature of the vast majority of cases of phthisis, and in the essential identity of the various forms of new growth found in their lungs, welcomed the discovery of the bacillus as a demonstration of the truth of that opinion. I have neither wish nor intention to undervalue the results or to depreciate the labours of the great histologists who endeavoured to solve the question of the nature of tubercle by what, with our imperfect resources, was an impossible method. We owe to them all that is exact in our knowledge of the external characters of the various forms of new growth produced by the same internal agent in different individuals and in different organs and tissues; forms which vary, of course, with variations in the personal factor in each case. But it is well to recognise the impossibility of success in any attempt to determine the nature of a pathological process or product by its histological characters alone.

For argument's sake, I have admitted the possibility of this being, at some future time, accomplished; but the prospect must be a very remote one, if the present views of physicists as to the constitution of matter are even approximately true. Thus Sir John Lubbock, in his address to the British Association at York, in 1881, stated that it has been calculated that the smallest sphere of organic matter which could be distinctly defined, when associated with others, by our most powerful microscopes, is about $\frac{1}{50000}$ inch in diameter; that a particle of this size would contain many million molecules of albumen and water, and that, consequently, there may be an almost infinite number of structural characters in organic tissues, which we can at present foresee no mode of examining.

Compare the doubt and uncertainty of a few years ago with the certainty of to-day. Many of us must remember the dismay with which, if not himself the parent of some pathological bantling, he heard from the lips of an inquiring student the simple common question, "Pray, sir, what is tubercle?" For my own part, when placed in this predicament, having given in reply the latest, or what seemed to me the best, theory, I was generally careful to add that my answer was only provisional; that tubercle, next year, would probably be something quite different; but that phthisis remained the same, and that its macroscopical appearances would not materially change. Now, we feel no hesitation in answering this question. The presence of the bacillus is the essential condition, the others vary within certain limits.

Again, there is now no difficulty in our accepting the close relationship which the clinical observations of our predecessors undoubtedly established between the strumous diseases of childhood, especially those affecting the lymphatic glands, pulmonary phthisis and acute tuberculosis. The true statement that caseous matter may sometimes generate tubercle can no longer be made ridiculous by denying to that matter the possession of specific properties. For in all these instances the presence of the same material agent has been demonstrated. And thus it is no longer necessary to consign classical writings, like those of Sir Thomas Watson on the connection between scrofula and tubercle, to the limbo of medical mythology. Again, the anomalies in the geographical and local distribution of phthisis, and in its incidence upon different races, families, and individuals, the undoubted existence not only of general laws governing its manifestations in both these directions, but also of startling exceptions to those laws, admit of no rational explanation on the developmental theory, or, let me add by anticipation, on that of direct contagion. Given the bacillus, or some other micro-organism, and both sets of difficulties, the geographical and the anthropological, wide apart as they appear to be, receive the self-same easy solution. The bacillus, whether inside or outside the body of man or of any other of its "hosts," cannot thrive except certain conditions be present. The analogy of other micro-organisms (*e. g.*, that of the woolsorters' disease), and also of the higher classes of plants, proves how very slight are the changes which suffice to prevent or to favour the existence of vegetables, and probably also of the lowest members of the animal kingdom; thus the distribution even of many phanerogamous plants is extremely capricious. The exemption, then, of certain localities and of certain races from phthisis may be, is, due to the fact that the bacillus has been unable to contend with some adverse circumstance or other with which it has met, in the first case during the independent, in the second during the parasitical, phases of its life. Further illustration of these points will necessarily have to be given in discussing the question of direct contagion, and of the analogy between phthisis and ague. Notwithstanding, however, the great force of the arguments just stated in support of the theory that there exists some definite exciting cause of phthisis, and this cause is a "contagium vivum;" notwithstanding the presumption in the same direction, arising from the rapidly increasing number of instances in which changes taking place in organised and even in unorganised matter are being proved to be, if not entirely dependent, at any rate greatly promoted by, the presence of micro-organisms—*e.g.*, the formation of nitric and nitrous acid from ammonia and the organic matters contained in the soil (Robert Warrington, *Journal of Chemical Society*, January 1878, July 1879); notwithstanding this, it might still be fairly objected that the alleged proof was inconclusive in this particular case, that the bacillus, or any similar thing, must be regarded as an attendant, and not a cause, of the morbid changes with which it is found associated, if it could be shown that the clinical characters of phthisis are inconsistent with this view of its origin. Now, with our present very imperfect knowledge of the limits within which the presence and activity of so-called "germs" are restricted, it would be rash to deny the possibility of any germ-disease being due to such a cause merely because its symptoms happen to differ widely from others whose dependence upon it has been established. But, in point of fact, the same theory which furnishes a ready explanation of one set of difficulties will be found not less effectual in accounting for the symptoms of tubercular phthisis in its regular and in its irregular forms.

For my present purpose, phthisis may be conveniently divided into two main classes, viz.:

1. Those in which the onset is insidious or gradual; and
2. Those in which it begins abruptly.

These latter fall naturally into two subgroups, viz.:

a. Cases in which the symptoms of illness from the very first are those of phthisis, *e.g.*, in so-called hæmorrhagic phthisis;

b. Cases in which the disease follows sharply upon, or is even continuous with, some acute attack, it may be a pleurisy or a pneumonia, or some general fever, or syphilis.

The true typical features of the malady are exhibited most distinctively by the first or insidious form. Here, as in the case of other infectious diseases, certain symptoms precede its full development, and these it is useless to pretend to divide into two well marked groups, as belonging, the one to the period of incubation, the other to that of "primary fever." For, the line which theoretically separates them cannot be drawn with any certainty even in all the continued fevers; and in phthisis we have not yet obtained the data necessary for attempting to do so. Whatever view we adopt of the nature of its exciting cause and of its contagiousness, the period of incubation is absolutely unknown. There are, at least within my knowledge, no recorded instances of the disease following upon a single exposure, or even one of a few days only, to some source of infection; but, judging by the results of inoculation-experiments, the interval between the actual reception of the poison into the system and the production of its first effects, is probably a short one, and to be measured, if not by days, at any rate by weeks, rather than, as some seem disposed to assume, by months. Before there is any evidence to be gathered, either from physical signs or from symptoms of the existence of the pulmonary lesion, sometimes even for months previously, the patients are conscious of a general failure of strength and vigour, for which no adequate reason can be detected. Anæmia and slight loss of weight are the prominent features of this, the earliest, stage, and to these is not unfrequently added some special functional derangement which is naturally regarded as the cause of the *malaise*. Some form of indigestion is very commonly present, which may, however, amount to little more than loss of appetite, from inability to assimilate the usual quantity of food. Of course, phthisis by no means necessarily follows upon every slight indigestion, neither does pneumonia upon frontal headache, or some serious illness upon a rigor. But, in presence of phthisical antecedents, a state of debility, persistent yet seemingly causeless, or manifestly out of proportion to some trivial functional derangement, *e.g.*, gastric or uterine, ought always to be regarded with suspicious alarm.

Further, I have met with several cases in which, during this period, the urine was albuminous; the albumen sometimes disappearing before the development of the chest-symptoms, but without any corresponding impairment in health. Sometimes the albuminuria has persisted throughout the whole course of the disease. A close parallel to this is furnished by the relations of albuminuria to some forms of specific febrile diseases, *i.e.*, scarlatina and typhus. I should have added rheumatic fever and pneumonia, but that their place in our nosologies is not yet determined.

These earlier symptoms are very often neglected, for the spes phthisica begins and ends only with the disease; and, by the time the lungs have been seriously involved and medical aid is sought, their very existence may have been forgotten. But careful inquiry almost always leads to the acknowledgment by the patient or his friends that for some time before the date at which he fixes the beginning of his illness, it may be by the occurrence of slight hæmoptysis, or by the access of cough, he was not quite so well as usual. Again, the night-sweats, or rather sleep-sweats, of phthisis are very often most profuse in the earlier parts of its course, when new growth in, rather than destruction of, lung is taking place, and gradually diminish or even cease, although the rapidity of tissue-disintegration and the quantity of muco-purulent expectoration is increasing. In fact, these sweats belong to the acute general stage of the disease, and are not merely part of the heat due to suppuration. This sequence of events is closely analogous to that of some of the common symptoms of the continued fevers, *e.g.*, the headache and the gastric catarrh, so common during the first five or six days, and which then frequently come to an end. Add to these phenomena the rise of temperature which takes place at an early date, and the resemblance between gradually fully-developed forms of phthisis and the specific febrile diseases, especially those attended by some local lesion, become very complete, and supplies an additional reason for removing it from the class of developmental or diathetic diseases.

That phthisis should begin with greater violence and abruptness, after exposure to infection, in cases where the general health has been impaired or the lung itself injured by some previous disease, is only what might be expected, even from our short survey of its predisposing causes. Whilst the sudden explosion of acute tuberculosis during the course of ordinary pulmonary phthisis finds a ready explanation in the sudden entry of large numbers of bacilli into the blood, *e.g.*, in consequence of the bursting of some softening tubercular mass into a vein. With regard to hæmorrhagic phthisis, the cases in which hæmorrhage, not due to already existing pulmonary disease, leads to consumption are probably exceedingly rare.

Thus, the clinical characters of phthisis, no less than the facts connected with its geographical distribution, and with its predisposing causes, harmonise so well with the hypothesis that some micro-organism or other is its exciting cause, and not a mere accidental attendant, that it seems to me all but impossible to come to any other conclusion, even apart from the results of inoculation-experiments. I have dwelt on this at what seems to be unnecessary length, because no one who denies it, or who fails to recognise the complete change in the manner in which the problem must now be stated, has any right to claim a hearing on the question of contagion. He would be no better fitted for such a task than the blind to discern a painting, or the deaf to hear music. But having stated my unreserved adhesion to the belief that phthisis is a member of the group of specific febrile diseases, and that therefore, like its congeners, it is dependent upon some morbific germ introduced from without, am I then obliged to admit that it is propagated by direct contagion from the sick to the healthy; or even that its transmission, through indirect channels, as in the case of typhoid fever or of cholera, is a matter of frequent occurrence? Most certainly not. The grounds of my disbelief in what is, once again, becoming the popular theory, I shall lay before you in the concluding lecture. Some of them have been already incidentally mentioned; but their full force only comes out when it is seen how some of the very facts which establish conclusively the specific nature of phthisis, place it also unmistakably among the non-contagious members of the group to which it belongs.

Lord Belper has been appointed President of the Nottingham General Hospital for the ensuing year.

Dr. Henry Colebrooke, of Southborough, has been presented with an illuminated address, and a purse containing £500, by the subscription of 586 friends and patients.

A CLINICAL NOTE ON KAIRIN.[1]

By ROBERT S. ARCHER, B.A., M.B., M.Ch.Dubl.,
Physician to the Netherfield Fever Hospital, Liverpool.

Kairin (or kairine) being a comparatively new drug, the action of which has not yet been thoroughly investigated in this country, and there being but few observations published on it in British medical literature, it is hoped that the clinical record of a case illustrating its antipyretic properties may prove of some interest to members of this Institution. Our experience of the medicine is limited to the case to be quoted below and another one; therefore, it is not intended to formulate any opinion as to the general use of the drug, whether with reference to its dose, or as to the class of cases it should be employed in. We simply lay before you a record which it will be yours to criticise, and to come to any conclusion each individual may see best.

Kairin is described in chemical language as oxy-chinolin-methyl-hydrate, the formula for it being $C_{10}H_{13}NO$, and is an artificial alkaloid, prepared from chinolin (C_9H_7O). It was discovered by Fischer and König, and its therapeutical action investigated first by Filehne and other German physicians. It is a yellowish white crystalline powder, with a rather acrid disagreeable bitter taste. It is soluble in water; but, on account of its taste, is recommended to be prescribed in gelatine capsules. (We used it in mucilage and water.) It has no perceptible odour.

I have here to express my sense of indebtedness to Dr. Oldham resident medical officer at Netherfield Fever Hospital, for the care and precision with which he conducted the majority of the following observations.

Case.—Wm. H., aged 19, was admitted to hospital on Wednesday November 14th, 1883, at 11.30 A.M., suffering from enteric fever. We could not procure a history of the case, and were therefore unable to judge accurately of the day of the fever.

November 14th. On admission, his pulse was 124; temperature 104.6°; and respiration 36. The tongue was dry in the centre and moist at the edges. There were rose-coloured spots scattered over the abdomen. He was very heavy and stupid looking, aspect rather livid; no abdominal distension nor apparent tenderness; sordes on teeth; almost comatose, and quite helpless.

November 15th. He had passed a restless night; in other respects, he was much the same as yesterday, with the addition of a good deal of congestion of the left conjunctiva and some bleeding from the gums At my visit at 11 A.M., the pulse being 128 and dicrotous, respiration 42, and temperature having risen to 104.6°, it was determined to try kairin in 7½ grain doses. The first dose was not given till 2.30 P.M., when the pulse was 124, respiration 40, and temperature 103.3°. One hour after the kairin was given, the pulse was found to have fallen ten (10) beats, the respiration was unaltered, and the temperature was less by more than a degree and a half (1.5°). The patient was dozing, and the skin moist.—4.30 P.M. The pulse was 108, dicrotism gone; respiration 32; temperature 100.5°. The patient was sleeping, his skin perspiring freely. Another dose of kairin was given. 5.30 P.M. Pulse 108; respiration 30; a further fall of temperature to 99.9°; sleeping; skin soft, but not perspiring. He had half an ounce of brandy at 5 P.M. No kairin was given. 7 P.M. Rigors. Half an ounce of brandy hot. 7.15 P.M. Temperature had run up to 105.6°; pulse could not be counted at the wrist, but at the heart 130 beats were registered in the minute; respiration 40; skin dry; extremities livid; 7½ grains of kairin were given. It will be noticed that, on the omission of kairin for an hour and three-quarters, the temperature had run up 5.7°, the pulse had become imperceptible at the wrist, and, on the whole, the patient may be said to have been almost moribund. At 7.30 P.M., that is, a quarter of an hour after the kairin was given, the temperature had fallen close on a degree; the pulse was 126, could be counted at the wrist, but was slightly intermittent; respiration continued the same (40); skin soft, lividity had passed away; patient apparently dozing. 8 P.M. There was a further fall of temperature of nearly a degree; pulse 126, regular, not intermittent nor dicrotic; respiration 36; perspiring freely; dozing; slight cough; a few bronchial *râles*. 8.30 P.M. A slight rise in temperature, the medicine having been omitted for an hour and a quarter; therefore, a dose was given, with the effect that at 9.45 P.M. the temperature had fallen a little over a degree; pulse remaining the same, and respiration having risen slightly; skin moist; patient sleeping. Half a dose (3¾ grains) was given, hoping that it might keep the temperature under control. 11 P.M. There was a slight rise of temperature to 103.1°; pulse 119; respiration 32. Half a dose was given. 12 midnight. The temperature having risen half a degree, there also being a slight increase in the pulse and respiration rates, it became evident that the half doses, although probably exerting some control, were not sufficient, therefore a full dose was given.

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[1] Read at a meeting of the Liverpool Medical Institution.

November 16th, 1 A.M.; pulse 120, respiration 34, temperature 102.4°. Perspiring freely, quiet, but not sleeping. Kairin, 7½ grains. 2 A.M. Pulse 108, respiration 38; temperature 100.7°; 7½ grains of kairin. 3 A.M. Temperature 98.7°. 3.45 A.M. Patient was reported to have begun to shiver, became flushed and then livid, accompanied by an increase of the tremors. 4 A.M. Temperature 100.2°. 4.20 A.M. Dr. Oldham was called up, and found the patient "shaking all over like a man in the cold stage of ague, respiration over 60, loud and snoring, pulse at wrist scarcely perceptible, and could not be counted." He was given half an ounce of brandy hot, after which the patient spoke rationally. 4.40 A.M. Brandy one ounce, hot. 4.45 A.M. Respiration 44, and fuller. Still moaning. Somewhat livid about face and extremities. 5 A.M. Respiration 44, temperature 105.7°; kairin, seven and a half grains. 5.30. A.M. Pulse 160, more perceptible; respiration 44, but not snoring as before; temperature 105.4°; rigor almost subsided. 6 A.M. Pulse 130, full, respiration 34, temperature 105.2°, perspiring: kairin, seven and a half grains. 7 A.M. 101.2°, showing a fall of four degrees in an hour; 3¾ grains of kairin. 8 A.M. Temperature 99.5°; 3¾ grains of kairin. 9 A.M. Temperature 97.6°; 1⅞ grains of kairin. 10 A.M. Temperature 100.4.°. 10.30 A.M. Temperature 102.3°. Shortly after this another rigor supervened, the face and extremities becoming somewhat livid. 11 A.M. Pulse 140; to be felt with difficulty; respiration 44, noisy; temperature 105.5°, that is showing a continuous rise of nearly seven degrees since the last dose of medicine two hours before; 7½ grains of kairin, ½ ounce of brandy every hour.. 12.30. P.M. Pulse, 150, respiration 44, temperature 103.5°. Tongue cleaner, expression clearer; conscious, and answered direct questions; passes his urine in bed; it stained the sheets of a greenish colour; 7½ grains of kairin. 1.30 P.M. Temperature 102°. 2.30 P.M. Pulse 126, respiration 44, temperature 103.9°, showing the tendency to rise; 3¾ grains of kairin. 4 P.M. Pulse 136, small and feeble; respiration 52, shallow; temperature 101°; quite conscious to all going on around him. 6 P.M. Pulse 144, counted at heart, could not be felt at wrist; respiration 60, temperature 103.6°. Rigors again commencing with rigidity; two motions from bowels during afternoon; 7½ grains of kairin, shortly after which the pulse could be felt beating feebly at the wrist. 7 P.M. Pulse 148, respiration 54, temperature 103.8°. 7.45 P.M. 7½ grains of kairin. 8.30 P.M. Pulse 170 at heart, respiration 60, temperature 102.6°. 9.30 P.M., temperature 101.7°. 10.30 P.M. Temperature 100.8°. 11.30 P.M. Temperature 104.6°; 7½ grains of kairin.

November 17th, 12.30 A.M.—Temperature 103°. 1.30 A.M. Pulse 170 at heart, respiration 60; cold sweat all over the body; extremities cold; moribund. 2.30 A.M. Temperature 105°; death.

From the time that kairin was commenced at 2.30 P.M. on November 15th till his death, about 36 hours, 9.625 grammes, or 144.375 grains, were administered.

At the time the patient was admitted to hospital, his case was manifestly a desperate one, and on two or three occasions, when he was to all appearance about to die, kairin apparently seemed to have a great influence in assisting to resuscitate the flagging vital powers, and we had some slight hope of rescuing him, bearing in mind an aphorism of Graves to the effect that "as long as life lasts, no matter how fatal the symptoms may appear to be, you should never despair of recovery in fever."

Dr. Filehne (*Berliner Klinisch Wochenschrift*, No. 16) lays down some definite rules for the administration of kairin, which it may be as well to give herein their entirety for the guidance of those who may be inclined to make a trial of the drug. He writes to this effect.

"It is advisable to commence with doses of 8 grains per hour on the first day, and to give these say four times successively, but to cease as soon as the temperature has attained 100°F. The temperature should be observed every two hours, or, if possible, every hour, during the first day. As soon as the temperature has been lowered by the above doses to about 100° F., only four grains should be given per hour until the temperature is again perceptibly rising, when the former dose of 8 grains should once more be administered. This dose of 8 grains has to be administered at once should the patient feel the least chilliness. The patient has to be particularly instructed to immediately report such chilliness, or rather meet it by a dose of 8 grains. Should it occur that 8 grains per hour have not had the desired antipyretic effect after four administrations, doses of 16 grains should be given twice, three, or four times at intervals of one hour; when, on the other hand, the action of 8 grains per hour is perceptible after four hours without proving sufficient, 12 grains are given about four times at intervals of an hour. The doses of 16 or 12 grains per hour should be discontinued when a temperature of about 100° Fahr. is attained, keeping a reserve dose of 16 or 12 grains respectively in readiness, to be taken at once in case the patient feels the least chilliness. When the temperature has again risen within two to six hours, the administration of kairin is to be resumed. As the human organism neither gets accustomed to this remedy nor shows a cumulative effect from kairin, a single day's careful experimenting, as indicated above, will be sufficient to regulate the dose afterwards. When the weight of the body or the condition of nourishment is excessively low, and in cases of hectic fever, smaller doses should be tried at first. The urine which is passed during the administration of kairin possesses a blackish green colour."

Dr. Paul Guttmann (*Berliner Klinische Wochenschrift*, No. 31) has used kairin 72 times in 42 patients, including cases of pneumonia, measles, phthisis, typhoid fever, scarlatina, pleurisy, peritonitis, erysipelas, ague, and septicæmia. The drug was given at periods when, in the normal course of the fever, the temperature would not be expected to remit. In most of these cases, the temperature ranged from 103° Fahr. to 105° Fahr. at the time of observation. A gradual fall of temperature was noticed after a dose of eight or sixteen grains every hour, so that in three or four hours a marked depression occurred, in several cases reaching the normal line. Sweating and a fall in the pulse-rate were also observed (as in our case) to follow its administration. No unpleasant symptoms were noticeable. It was observed that repetition of the dose did not lessen the antipyretic action, and, also, that discoloration of the urine commenced about twelve hours after the first dose, and continued for about twenty-four hours.

An interesting case is reported (*Berliner Klinische Wochenschrift*, September 10th, 1883) by Dr. Knipping. A woman, aged 20 years, suffered from puerperal pyrexia. Fourteen days after labour, symptoms of parametritis manifested themselves, which were followed by periphlebitis of one leg, and then of the other, the temperature running up to 105° Fahr., and the pulse varying between 120 and 130. On the thirty-fourth day, with a temperature of 106.4°, and the heart evidently failing, kairin was commenced in eight-grain doses, in gelatine-capsules, every hour. The temperature descended more than four degrees, accompanied by profuse sweating after the first dose; and, at the end of the fifth hour, there was a further depression of two degrees. The medicine being now reduced to four grains, a rise of over five degrees occurred, the bad symptoms also returning; thereupon, the dose was doubled, with the effect that, at the end of four hours, the temperature had fallen from 105.4° to 101.2°. The four-grain doses being now again resumed, the temperature ran up to 102.2° and 103°, which, however, the larger dose reduced to 100°. Two hundred and twenty doses were given in a week, without the exhibition of toxic symptoms, with the exception of slight pricking about the nose and forehead after the first dose.

Dr. Gottlieb Meckel has published (*Deutsches Archiv für Klinische Medicin*) some observations on kairin, and comes to the following conclusions, which, however, we may not all be able to adopt until further researches have been made known, viz.

(*a*) Kairin is a very powerful, if not the most powerful, antipyretic. (*b*) It reduces the febrile temperature, the reduction depending, however, less on the size of the dose than on the constitution of the patient, and the cause of the febrile symptoms. (*c*) The reduction of the temperature takes place without collapse or any other disagreeable after-effects, and the doses are well borne by the patient. (*d*) The first large dose ought to be followed by several smaller, with close observation of the temperature. (*e*) Kairin will be of greatest benefit in diseases of continued fever, in which the heart and lungs are not affected.

In the BRITISH MEDICAL JOURNAL, of December 8th, 1883, there is published, by Dr. Ashby, of Manchester, an interesting note on a case of enteric fever in a child aged 10 years, in which two-grain doses always reduced the temperature two degrees at least. The drug appears to have been given only every four hours.

In the number of the *Liverpool Medico-Chirurgical Journal* for January 1884, in "Notes on some Important Therapeutic Agents," Dr. Carter gives a short and interesting sketch of his experience of kairin, and refers to a case of acute rheumatism with hyperpyrexia, in which the drug was administered with apparently very satisfactory results. These last two are the only observations by English physicians that I have been able to find.[1] During the last few months there have been, from time to time, editorial articles in the English journals on kairin, but these were in reference to German investigations.

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[1] Since this was written, Dr. Shingleton Smith has published a note on the subject in the BRITISH MEDICAL JOURNAL, February 16th, 1884.

ATMOSPHERIC DISINFECTION, AND ITS APPLICATION IN THE TREATMENT OF DISEASE.[1]

By ROBERT LEE, M.A., M.D.

For a long time, I have been expecting that some important researches would be made into the subject of the conditions in which organic germs exist in the atmosphere, as a step towards an explanation of the mode by which infectious diseases spread themselves in the subtle way they do, through the medium of the air. We know how the process of putrefaction is prevented from taking place, for example, in the familiar experiment of boiling a piece of meat in water in a test-tube, and closing it with cotton-wool. We feel as certain as we can of any phenomenon that the air is full of minute forms of life, which rapidly develop in the presence of dead organic substance; and we know that the wool prevents putrefaction by the exclusion of these. We further know that, if we put a piece of meat in a solution of carbolic acid, of two per cent. strength, putrefaction will not occur, because, as we can prove easily by experiment and microscopic observation, a solution of this kind destroys those minute organic beings which appear in the putrefying process, and which I need not specify more fully.

We have reasons for believing that the monads exist in the air only under certain conditions; for they are not present at high mountain altitudes, nor when the air is overheated. We have, it is true, a certain amount of general knowledge on these points, and we are inclined to believe that what is true of the germs which develop in ordinary putrefaction is also true of other germs; such as those of malaria, of cholera, or of typhoid fever.

The question, however, which I am anxious to discuss is this. Seeing that we can destroy the ordinary putrefactive organisms when they exist in solution, by means of carbolic acid and other substances of similar nature, may we not reasonably hope to destroy the germs when existing in the air, and so protect ourselves from their influence?

I mean that, while the surgeon is applying the principles of the antiseptic system to surgical practice, may not physicians go further, and study the extension of the system in the direction indicated? Most of us must have indulged in some such ideas, but we have no very exact knowledge at present to guide us. It is easy to explain the reason of this. We want a certain number of experiments made, of a somewhat original and laborious nature. These experiments belong not to the province of the physiologist or of the chemist, and a man would be obliged to educate himself if he undertook them.

Let me explain by an example. In one of the volumes of the Reports of the Medical Department of the Privy Council, there is an account of experiments somewhat of the kind to which I refer. The object of these was to determine whether the vapour of carbolic acid would have any effect on vaccine virus. By another series of experiments, it was shown that, if we add carbolic acid in a certain comparatively small percentage to vaccine-lymph, and inoculate the arm on one side with it, and compare it with inoculation on the other arm with plain lymph, the effect of the carbolic acid is to destroy the power of the vaccine-virus; for the inoculations with carbolised lymph produced no effect. The question next to determine was whether the vapour of carbolic acid would act in the same way; for, if it were so, we might look forward to nullifying the virus of small-pox; at least, some useful facts would be likely to come out of the above experiments. Well, the method employed was very simple. Some points charged with vaccine-lymph were fixed in the top of a bottle, and so arranged that, when the top was put on, the points came to within half an inch of a strong solution of carbolic acid. There they remained for some time, and were used to vaccinate with. The result was that the vaccination succeeded, and the conclusion drawn was that the vapour of carbolic acid has no effect on vaccine-virus. Quite a fair conclusion, you would imagine. A similar experiment was performed with sulphurous acid. There the result was more satisfactory, and it was clearly shown that the vapour of sulphurous acid has an effect. Now, I do not mention this example with the intention of reflecting on the experimenter. I do it simply to show that here was an experiment of a simple kind, which required special knowledge for its performance.

The error was, in assuming that the vapour of carbolic acid is given off by a solution under the circumstances. No more effect practically would be produced on points charged with vaccine-virus held above a solution of carbolic acid, as described, than if they were held over the top of this table. There is no evaporation of the acid, and consequently no effect could result.

You see upon what a small matter an important conclusion may depend. Sulphurous acid is volatile, and would act; and thus, when the addition of carbolic acid to the lymph produced one effect and the supposed vapour another, there was an inconsistency difficult to explain, and not encouraging in direction of further experiments. I could give you many examples of experiments similar to this. You know how frequently we hear of rooms being disinfected, as it is called, by sprinkling them with carbolic acid, or by hanging the room with sheets saturated with the acid, as is commonly done in cases of typhoid fever or whooping-cough. It is imagined that the air of the room is purified in this way. But such is not the case, for the reason already given, that carbolic acid does not evaporate at the ordinary temperature of the air. There is another fallacy which ought to be pointed out; and that is, that we can disinfect the air by burning certain substances, such as the resinous woods. It is stated in ancient history that a celebrated physician, Acron of Agrigentum, caused the plague to cease by burning large and numerous fires in different parts of the city. Now, it is not difficult to burn carbolic acid. It can be done in an ordinary spirit-lamp. But, if we consider what takes place, we can see that our object in disinfecting in this way is not to burn, and thus destroy the agent, but to volatilise it, or convert it into the form of vapour without destruction. We can burn eau-de-Cologne, but this does not vaporise the odorous substances it contains. In the case of Agrigentum, it was the smoke of the fires which acted as the disinfectant, exactly in the same manner that it acts in a chimney when meat or fish are exposed to its antiseptic action, and are thus prevented from decomposition. Forgive me, if I seem to be dealing with very simple and familiar phenomena. My excuse is, that there is a great deal which must be undone before we can begin to make any advance towards what is true.

There is one fact to which I wish to direct your attention, as it is one of great practical value. Supposing that we make a mixture of carbolic acid and water in the proportion of one of acid to fifty of water, and boil it. What do you imagine will be the effect? Will the carbolic acid evaporate quickly as the water boils, and leave the water, as is the case with benzoic acid, acetic acid, and some others? or will the water boil away, leaving the acid, as would be the case with sugar or non-volatile substances? This question can only be answered by experiment, and is one which is neither chemical nor physiological; at least, neither the chemist nor the physiologist could answer it from previous knowledge. It is a curious and singular fact that, as the water boils away, the carbolic acid evaporates almost, if not exactly, at the same rate; so that, if we evaporate twenty-five drachms out of fifty to which one drachm of carbolic acid had been added, we should find that the twenty-five drachms remaining would contain half a drachm of acid. At least, this is true for all practical purposes. If we are making experiments with antiseptic agents in the form of vapour, as was attempted in the case of the vaccine-points which I have mentioned, it is clear that we must first ascertain the physical laws which regulate the change from the fluid or solid state of the substance to the state of vapour. That is clearly the first step, and it is one, as I have said, which is rather laborious.

Supposing, now, we boil some water containing meat in a vapour of carbolic acid obtained in the way indicated, and keep it in that vapour at a temperature of 75° for a given period, at the end of which time we compare it with the contents of another test-tube which had been boiled in air, and kept in air under similar conditions of temperature: what difference shall we find? In the latter case, at the end of two days, putrefaction has made active progress; in the former case, the signs of putrefaction are absent. The method of examining the fluids is simply that of taking a drop on a slide, and placing it under a quarter-inch objective. The experiment is so simple, that anyone can repeat it.

Let me explain all that I think is required to test the antiseptic value of vapours. A tin vessel holding about a pint is arranged so that it can be heated, and kept at the same temperature, by means of a jet of gas, for any length of time. (See Fig.)

Above this, a tin tube, five or six inches in diameter and two feet long, is fixed, so that the vapour of fluid heated in the vessel must rise into it. A pint of water containing carbolic acid in any proportion will evaporate in about twenty-four hours, and thus the chamber is filled with a constant stream of carbolised vapour; and we can keep six or more test-tubes suspended in it for any number of days, the solution being replaced as required. Thus day by day we can remove a tube, and compare the state of its contents with a standard tube exposed to the air. By this simple arrangement, I have been able to make observations extending over several weeks, without any important variation in the conditions.

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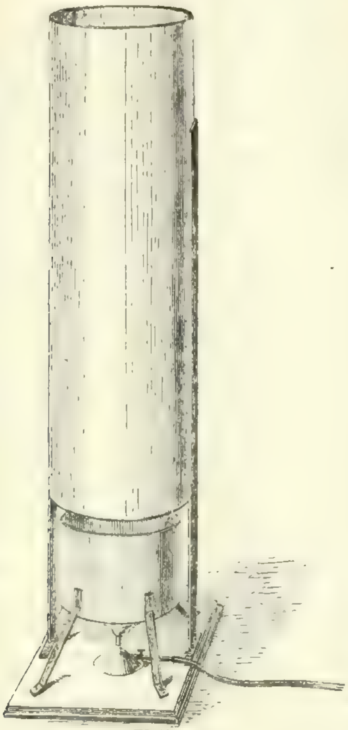
[1] Read at a meeting of the East Sussex District of the South-Eastern Branch.

You may reasonably ask what is the practical use of this kind of work. I will tell you in a few words. We are in a position to test clinically the value of the antiseptic system in the treatment of a class of diseases which hitherto have been treated on general principles, as they are termed, and by constitutional remedies.



Amongst these diseases are, notably, whooping-cough, diphtheria, and phthisis. Of the treatment of the first, viz., whooping-cough, there is a summary in a recent number of the *Archiv für Kinderheilkunde*, by Jacob Cassel, which illustrates in a singular way the ignorance which prevails respecting the method of treatment by inhalation, a method which really depends upon an accurate knowledge of the conditions which must be observed when any particular substance is converted into vapour. These most important details do not seem to have presented themselves as deserving of consideration; and when the results of observations by one author are contrasted with those of another, the actual method employed is not inquired into or questioned. That care which the surgeon bestows upon details when following out the principles of the antiseptic system must be observed with even more attention when we are using the vapour of an antiseptic agent, than when we are employing the same substance in the fluid condition.

THE PYREXIA AND COLD BATH TREATMENT OF ENTERIC FEVER.

By FRANCIS H. WELCH, F.R.C.S.
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THE recent discussion on the above at the Medical Society of London, and the article in the BRITISH MEDICAL JOURNAL of March 1st, lead me to offer the subjoined remarks on the pyrexia of enteric fever and cold applications to the skin derived mainly from observations on Europeans in hot climates.

1. On the assumption that the important and characteristic feature of enteric fever is the glandular lesion (solitary and agminated) of the small intestine, I think it must be conceded that the pyrexia is not an accurate exponent of its extent or degree; or, in other words, we cannot gauge the severity of the attack by the thermometer alone. The instances of so-termed "walking disease," in which the individual keeps about with the lesion in progress in his intestine until some complication reveals the hitherto hidden disease-action, must have had no marked febrile disturbance. Cases occur in which the fever and early systemic disturbance run very high, and the symptoms point to marked severity of the attack; yet about the fourteenth day (or even before) the abdominal symptoms have gone, and it is clear that the usual destructive phases in the glands in severe cases have not been passed through. Again, cases occur in which the thermometer-chart is never high throughout (at no time over 104°, and generally nearer 102°), but the attack proves fatal, about the middle of the disease, from general exhaustion, and the *post mortem* examination reveals very extensive lesions in the gut; and such cases appear to be far from uncommon in India. We may have enteric fever fatal, with only a moderate pyrexia from first to last, in the tropics, the charts reading considerably under the European range; and we may have the temperature declining from day to day to death. Comparatively speaking, the pyrexia does not often kill, though it may assist other conditions thereto. The pyrexia would appear to be an exponent less of the extent and degree of the gland-lesion than of the impressionability and sympathy of the system to the progressing changes; and, upon the whole, it seems that the younger the individual, the more pronounced will be the pyrexia and general symptoms, and the less the possibility of gauging the gland-lesion by the temperature records.

2. Tropical enteric fever shows considerable deviations in temperature from the type-chart of the European disease, as in the following summary of many records. The gradual ascent from health is reached between the third and seventh day of pyrexia; the intermediate period is irregular from first to last, with considerable diurnal fluctuations; the sudden fall from this period is not uncommonly absent; the later undulations during the day are occasionally supplanted by a gradual decline, with no great range from day to day, extending to the termination of the case; and even when the fall is sudden and well marked, a gradual merging into the normal body-heat may be observed in the place of the diurnal undulations. In fact, the divergences from Wunderlich's chart are numerous, the approximations few; and an arbitrary decision of a special fever-range in this disease, and of the diagnostic certainty of the thermometer, would exclude many tropical cases with the characteristic intestinal lesion. But the variations in the temperature are not merely between one day and another, but no less observed in the range during the day. The evening reading of the thermometer is not always an exponent of the highest fever-point in the twenty-four hours; the evening temperature is, as a rule, higher than the morning, though exceptions are far from uncommon. From observations at 6 A.M., noon, 4 P.M., and 8 P.M., the temperature has been found to be undulatory; and about noon the highest fever-point is generally found. One day is no exponent of another. One day may show a regular ascent from early morning to evening, followed by a remission to the next morning, though this decline is not necessarily present; another day may show the highest point at morn, gradually declining to evening; on a third, the temperature, commencing with the morning remission, may advance 2° to 3° Fahr. towards noon, and then recede in the evening to a point higher than the morning or under it; on a fourth, it may, commencing with the morning remission, continue to decline to about 10 A.M., rise at midday and remain so until evening, or decline; or declining from midday may again ascend in the evening, thus remitting twice in the day, or even three times in the twenty-four hours, should the nocturnal decline follow. The fever acme may be reached before noon, at noon, in the afternoon, or late in the evening; though when it will occur and how (whether by gradual ascent or through immediate depressions) it seems impossible to say. The fact of these undulations probably explains the want of accord between tropical enteric charts and European charts, based on morning and evening records only. If the daily remission took place early in the day in the European disease, instead of late in the evening as it is supposed to do, the result would be, with the present method, divergencies from the type-chart and an approximation to the chart of the tropical disease; or if the highest temperature reached during the day were recorded, instead of the evening reading, in the tropical disease, there would occur a closer approximation to the European chart, the explanation lying in the variation of the daily *fastigium* as to hour. These undulations are very curious, and have been already recorded in the *Indian Medical Journal*.

3. Pyrexia, however, is invariably accompanied by waste of tissue and vital force, and with, when marked, minute textural changes in the body generally; and to keep it within 101° Fahr. in the morning, or 104° Fahr. in the twenty-four hours, is unquestionably important, especially in such a disease as enteric fever with disintegration going on, closely allied to septicæmia and marked accumulation of effete products in the blood. Yet it must, I think, be allowed that it is only, as a rule, in

the severe cases that the body-heat becomes an element of danger to be met by means specially applied for its reduction. Mild and moderate cases may fairly be left to themselves; and if statistics are to be of any value in determining the influence of treatment, it is not easy to see what advantage can result from comparing one epidemic or time with another; rather we want several series of cases in the same epidemic or time, of equal ages and conditions and degrees of severity, and the result of dissimilar treatment as applied to these. Cooling applications are always grateful to the patients, and beneficial; but immersion in a bath is a process (even when we have all the requisite appliances at hand) which requires a skilled and trained official and attendants to regulate its effects and ward off possible bad results. And, carry it out as carefully as we may, a certain amount of discomfort, physical and mental disturbance, cannot be avoided. It is difficult to prevent the patient from attempting to exert himself or herself; and the younger the patient the more the probable disturbance. What has seemed to me the best course to pursue in the application of cold to the skin generally is, in mild and moderate cases, to frequently sponge the body with water feeling "chilly," say every half hour, not wiping it off, and merely covering the surface with a light sheet, or not even that; in the severe cases, to make the applications continuous by a small sheet wrung out in cold water (and made more so, if necessary, by experience) and packed close to the naked body, with a light outer covering, and repeated according to results.

Such a packing is within the scope of an ordinary attendant, can be carried out without inconvenience or movement to the patient, the materials can always be got, and a waterproof covering under the lower sheet will keep the bed dry. Moreover, I believe that it will meet all the requirements of the great majority of cases. Instances, however, will occur in which the body-temperature cannot be reduced by it, and resort may then be had to the bath to meet the pressing danger. Yet even the influence of the bath is limited; and I suppose most have met examples in which repeated immersions have failed to stop the production, or prevent the accumulation, of excessive heat in the frame, the patient succumbing to its effects in spite of all our efforts.

It is hardly necessary to add that movements of air over the body will assist the influence of the cool applications, nor would it be difficult in most rooms to rig up a "punkah" to carry this out more effectually.

OBSTETRIC MEMORANDA.

EXTRA-UTERINE GESTATION.

On January 24th, 1882, J. C. came under observation, suffering from ulceration of the os uteri, and hypertrophied cervix uteri, with debility, caused by a long continued leucorrhœal discharge. Eight days later, caustic potash (solid) was applied freely to the os, followed by vaginal injection of dilute acetic acid. Two days subsequently, having been out of bed and been exposed to cold, she suffered from sudden and severe pain in the hypogastrium, which culminated in an acute attack of metritis. The temperature rose to 104°, and the uterus, enlarged and tender; extended upwards to the umbilicus. The acute symptoms subsided in about five days, and, at the end of three weeks, the uterus had regained its normal size. Soon afterwards, she thought herself pregnant, the last menstrual period having been in January. She continued in that belief until August 31st, when I had an opportunity of seeing her in bed, from sickness and vomiting. Examination of the mammæ and abdomen then revealed signs of an ordinary pregnancy, apparently near the end of the seventh month. Two months later, I again saw her, she having called at my house. I made no examination, but she seemed in most perfect health, and to all appearance a woman near her confinement. I lost sight of her for about five months, until March 21st, 1883, when I was called, as she had slight bronchitis and nervous debility. She gave the following account of her case, in the interval, from the end of October 1882, to March 21st, 1883.

Towards what she thought the end of the ninth month of pregnancy, she had frequently recurring pains, as if those of labour, extending over two to three weeks. There were no fœtal movements after the eighth, or first week of the ninth, month. In the tenth (and perhaps the eleventh) month, she enjoyed fair health. She entered the Edinburgh Infirmary under Dr. Simpson, about January 1st, 1883, and remained under his care for six weeks; having been told that she suffered from a tumour in the abdomen for which nothing, under present circumstances at least, could be done, she returned home, and took to bed. She stated that she had menstruated at least twice since she left home until now, and, about the time she left the infirmary, she perceived a slight diminution in the size of the abdominal swelling, and it had continued to diminish until now. Latterly, there had been constant diarrhœa, with paroxysmal and recurring pains in the right side of the abdomen.

I discovered a large movable tumour lying on the right side of the abdomen, extending from the umbilicus into the pelvis, where it could be felt high up through the roof of the vagina, posterior to the uterus, and pressing towards the rectum. The tumour, which was elongated and indurated, was somewhat uniform and smooth on the surface, and painful to pressure in the right iliac region. There had been no bladder-symptoms, nor did vaginal examination reveal any uterine displacement, or apparent enlargement. The mass pressing more towards the rectum set up tenesmus, and apparently kept up a catarrh of the bowel. During the next two months, from March 21st to May 17th, I saw her on two or three occasions; and at each visit the pain in the abdomen, hectic, tenesmus, and diarrhœa, were more marked, while the tumour was sinking more into the pelvis. On May 17th, I was called to her. She said there had been constant pain in the rectum for some days, with incessant desire to go to stool, and that the pain that day had been excessive, and was still increasing. Examination showed the rectum to be blocked with a fœtal skeleton, lubricated with an oily fœtid substance, and enveloped in a collapsed, thick, tough, fibrous bag, ruptured at the lower end. After more than an hour's work, the patient being under chloroform, nearly the whole of the skeleton of almost a full grown fœtus was removed from the rectum. A large quantity of fœtid pus escaped during extraction from the interior of the enveloping sac. One frontal and one parietal bone, having been grasped and fixed in the wall of the rectum high up, were removed subsequently. The anterior ends of the ribs being free, as also the ends of the long bones of the limbs, great difficulty was experienced in their removal from their ends being inserted into the rectal walls. The patient was weak and collapsed for a few days, but the temperature did not rise above 99°. There was slight diarrhœa, with fœtid motions, for a few days, and in two weeks she was out of bed. The patient has continued well, and is now in better health than she has been for years. She had one child at full time, and natural labour, eight years ago. The patient is now about 29 years of age. On my communicating with Professor Simpson about the end of May, his assistant, Dr. Smart, wrote "that the case was diagnosed 'subperitoneal fibroid,' and that any preconceived idea of its being an extra-uterine gestation was expelled on finding the uterus of normal dimensions, and that menstruation had recurred."

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PUERPERAL ECLAMPSIA AFTER DELIVERY, TREATED BY CHLORAL-HYDRATE: RECOVERY.

At 4 A.M. on March 12th, I was called to see Mrs. C., distant about two miles. She had had two labours previously, without any difficulty. On arrival at the house, I found the membranes had been ruptured about an hour before. The funis was prolapsed and pulseless; the head high up in the cavity. I tried gently to replace the funis; but, as there was no pulsation between the pains, I did not persist, but told the husband and attendants that the child was dead. At birth, the pulseless cord protruded to a considerable extent. Labour was completed easily at 6 A.M. The placenta came away in a quarter of an hour. A small dose of liquor ergotæ ammoniatus in spirit and water was given, and the woman was left. I was hurriedly summoned four hours later, and found that she had a convulsion. Pulse 100. On trying to place a thermometer in the axilla, another fit commenced, partly, I think, excited by the cold of my hand. This fit was very severe; the face was perfectly livid; the tongue was caught between the teeth and severely bitten; the spasm was both tonic and clonic. The total duration of the fit was about seven minutes, and stupor followed for about half an hour. After about an hour, observing no further appearance, I administered a dose of chloral-hydrate and bromide of potassium, fifteen grains of each, and left, desiring the husband to bring me some of her urine, on her passing any. A small quantity of milk and lime-water was ordered to be given every two hours, and a castor-oil purgative. For some weeks before labour, she had suffered from œdema of the feet and legs, pain in the head, and giddiness. At between 3 and 4 P.M. on the same day, I got some urine, and found albumen about one-third; lithates abundant; specific gravity 1015. She had another convulsion at 1 P.M.; also one at 3 P.M. I ordered fifteen grains of chloral-hydrate every two hours, to be continued until I saw the woman. At 9 P.M., there had been no further attack; she had passed urine freely, and was sweating. There was a sweetish smell in the breath. Pain, of which she had complained in the stomach, was completely gone, but was present in the loins. I ordered a poultice to be applied; the mixture to be continued. She passed a good night. The specific gravity of the urine increased; no albumen could be detected with heat and nitric acid, but a trace with picric acid. She was perspiring freely. Arterial tension, which was plainly increased at first, was diminished. The medicine was continued at longer intervals, and purgatives and improved diet were ordered. She had no return of convulsions, and soon recovered.

I am inclined to attribute to chloral-hydrate a valuable place in diminishing the amount of albumen in urine. I have tried it frequently in Bright's disease, and invariably with good effect. In the above, its good effect was indisputable. Judging by my own experience in a pretty large midwifery-practice, these cases do not occur very frequently. I hope those who have tried chloral-hydrate in them will give their experience. N. F. H. FITZMAURICE, L.R.C.P.&S.Ed.,

Dunning, Perthshire, N.B.

PUERPERAL FEVER: RECOVERY.

ON August 6th, 1883, I was called to Mrs. B., aged 34, the mother of one child. She complained of a feeling of sickness, and great prostration, and had a suspicion that she was pregnant. In the course of another week, the sickness continued and increased to great severity; the stomach would not now retain even a little water. Bismuth, hydrocyanic acid, oxalate of cerium, morphia-injections, blistering the stomach, and dressing the raw surface with morphia, failed to produce even temporary relief. It was evident that she was pregnant; and, in consultation with another medical man, it was decided that the procuring of abortion would be the only means of saving her life, as she had for six days been living on nutritive injections. On September 1st, with the aid of a speculum and polypus forceps, we introduced a sea-tangle tent into the os and left it there. On the following day two more were inserted; and, on the third, the os was reduced to the size of a shilling. From this time the sickness began to abate; she could now retain on the stomach a little beef-tea, soda-water, and milk. She was apparently better, and we then decided to wait and see what the effect would be. The sickness seemed only to return occasionally, and pass off again without any interference.

Thirty-one days short of the two hundred and eighty, March 5th, 1884, she was seized with violent labour-pains, and in four hours was delivered of a badly nourished male child. Sixteen hours after delivery I found her doing very well; but, thirty-one hours after delivery, she was suffering great pain, and had been becoming worse for the past two or three hours. I was sent for; and, on arrival, I found her lying on her back, with her legs drawn up, and groaning in agony; the tongue was covered with a thick brownish fur; pulse 120; temperature 106° Fahr.; respiration 28; the secretion of milk was arrested; the lochia were almost stopped, and the little that came away was fœtid. I ordered flannels wrung out of boiling-water and turpentine to be applied to the abdomen, changing them every twenty minutes; moist hot flannels were laid on the vulva, and warm injections of lime-water were thrown into the vagina. I gave her a mixture containing ten minims each of sulphuric ether, aromatic spirit of ammonia, and tincture of opium, with twenty minims of compound tincture of lavender, to be taken every three hours.

Next day, at 3 A.M., she appeared to be much worse. She was delirious, and the skin was bathed in a cold clammy sweat; pulse 120, temperature 108°, respiration 30. The abdomen was very much distended and tympanitic; the pain was of a most excruciating character. I introduced into the womb a gum-elastic male catheter, and, with a syringe, I washed out its interior with about ten ounces of lime-water. As the bowels had not been relieved, I gave two ounces of castor-oil, some of which she vomited again, and I ordered that the medicine was to be repeated every two hours.

Next morning there was no improvement. I washed out the womb again as before, and at noon she appeared a little better. Pulse 118, temperature 106°, respiration 26. The skin was covered with a more healthy secretion, the bowels were copiously relieved of a dark fœtid substance resembling coffee-grounds. At 3 P.M. she was better, and slightly conscious: pulse 118, temperature 104°, respiration 26. The lochia had reappeared, and the abdomen was covered with little vesicles. Over the stomach and chest, as high up as the fourth rib, there were numerous bright red spots, of a roundish shape, and raised above the surface. At midnight she felt very prostrate; her bowels were opened again; pulse 102, temperature 103°, respiration 24. She took about two ounces of beef-tea, and a little soda-water and milk.

At eight o'clock on the next morning, she had had three hours' quiet sleep. Her tongue appeared moist and smooth, the stomach less distended, the lochia were very scanty, the odour was not so unpleasant, the pain was considerably diminished. In the evening, the pain had quite gone; pulse 80; temperature 99°, respiration 21. The breasts were tender and hard. On drawing the nipples, milk came away.

Next day, March 10th, she had taken beef-tea, egg, and milk, with a good appetite; the pulse and temperature were quite normal, but the abdomen was still distended. Only a trace of uterine discharge remained, and that was of a sanious character. On March 15th, she was able to sit out of bed for two hours, and felt quite well.

This is the third somewhat similar case in which I used injections of lime-water, and in all cases this proved beneficial. This case appears peculiar, as in her first pregnancy the patient never suffered from serious sickness, and her confinement in all ways proved most satisfactory.

Again, I wondered whether the attempts at dilating the os predisposed to the fever.—T. A. MITCHELL, L.R.C.S.Ireland,

Rushey Green House, Catford, S.E.

HOUR-GLASS CONTRACTION OF THE UTERUS.

THE subject of hour-glass contraction has recently been discussed in the JOURNAL; and one correspondent suggested that "almost every case that occurred" to him "had been due to the same cause." He does not actually state that cause; and, though the inference is that he means the faulty application of the binder, he contents himself with saying that "*I believe* this condition *can* be produced by the binder being improperly applied." (The italics are mine.) I think that most men who have seen much midwifery-practice would go the length of saying, that they are assured that this condition is sometimes induced by that means. In the case of Mrs. K., recorded by Dr. Gorham, there was no contraction of the uterus to deal with, but simply a constriction by a binder. Mr. James's case itself, and his procedure for removing the placenta, resembled precisely those of most observers. Now, in these cases, we have to deal with the use of ergot and the application of the binder prior to the removal of the placenta. The real question is: How are we to explain the occurrence of hour-glass contraction in those cases in which neither ergot nor binder has been resorted to until the completion of the third stage?

Some years ago, when practising midwifery, I used to take notes of my own cases—they were reckoned by the hundred. The entire number included but four cases of "hour-glass." It was quite the exception for me to think of applying a binder before the completion of the third stage. It so happens that in not one of the four cases mentioned was ergot or the binder used until after the discovery of the contraction. I had been called by nurses to a few other such cases; and I had reason for feeling sure, from the rope-like appearance of the binder, that the cause of the contraction was not far to seek. I may add, that I never saw a real "hour-glass" in a primipara, though I have several times known a constriction of the os in primiparæ and multiparæ, and irregular contractions of the uterine fibres in multiparæ, to be mistaken for hour-glass contractions. My own idea is that these last are very rare. In each of the four cases above-mentioned, of which I had the entire management, the second stage was very rapid, and the placenta appeared to be attached somewhere near the left cornu. I am inclined to think that the so-called hour-glass contraction does not exist transversely, but rather obliquely—thus forming a space, having the situation of a Fallopian tube as its most distant point.

A few words, in conclusion, concerning the binder. I always found that the most successful cases were those in which the firm, but gentle, pressure of a steady hand had been maintained over the fundus, from the moment of the birth of the head until the removal of the afterbirth; in which no traction whatever had been made on the funis; and, lastly, in which the nurse never handled a binder. What used best to please me was double flannel, sufficiently wide to extend from the level (all round) of a point two inches below the trochanters, up to the level (all round) of the ensiform cartilage. By this means were secured, not only equable support to the abdomen and uterus, but also the firm bracing-up of the pelvic articulations. Moreover, the binder could not possibly slip upwards. The successful obstetrician performs every detail himself.

BERNARD O'CONNOR, A.B., M.D., M.R.C.P. Lond.

CLINICAL MEMORANDA.

CONVENIENT METHOD OF APPLYING ANTIPYRETIC TREATMENT.

READING the article by Dr. S. Coupland on the treatment of enteric fever, and the value of antipyretic treatment, especially by means of the application of cold, recalls to my mind two cases bearing on the subject, in which I had recourse to a method which obviated the difficulty of the easy application of a cold bath.

A married woman was suffering from general pyrexia complicated with erysipelas. The temperature rose to over 106° Fahr., and seemed to threaten a fatal issue; and I had strongly urged a cold water bath, but this was opposed. In the same family two patients had previously suffered from typhoid fever; and a Hooper's bed, which had been used for one of them, happening still to be in the house, I had it filled with water, and substituted for the bed on which she lay, placing only a single blanket between the patient and the bed. The result was that in six hours the temperature had fallen two degrees; next day it was 103° Fahr., and the patient ultimately made a good recovery. It has since occurred to me that a water-bed might often be made serviceable, when an actual water-bath could not be employed.

The second case was that of a child aged about 4, who had been suffering from diarrhœa. I saw it at my surgery twice; and a week after the last occasion I was sent for hurriedly, and found that the child, although it had been out and seemed very well that day, had been suddenly seized with rigidity of all extremities. The intellect was quite clear, and the child was smiling and seemed happy. Next morning it was seized with strong convulsions, the temperature having risen to 107°. I immediately placed the child in a cold bath, bringing the temperature down about 1.5°. I could not, however, prolong the bath as I wished, although it evidently gave relief. I was unable to have the bath again used, and the child succumbed the same evening. When the child had been brought to me, there was nothing to indicate any severe illness. I made a *post mortem* examination, and found extensive ulceration of the bowels (typical), especially in Peyer's patches. I then regretted the bath had not been given a more effectual chance, as it was evident that a reduction in temperature was what was indicated.

GEORGE MUNDIE, M.D., Kingston, Surrey.

A RAPID CASE OF ACUTE CEREBRO-SPINAL MENINGITIS.

THE following sad case is very interesting on account of the extreme rapidity with which it passed through the three stages of cerebral fever (Trousseau) or cerebro-spinal meningitis. Each stage lasted twenty-four hours.

I was sent for at the commencement of the second stage. The patient, Mr. A., aged nearly 18, was in good health on the 21st February, 1884. On February 22nd, he complained of headache at the forehead and posteriorly, loss of appetite, pain in the stomach and constipation. At night, he vomited green fluid, and was restless. This was the first stage. On February 23rd, at 5 A.M., the parents were awoke by moaning, and found him tossing about in bed and unable to speak. I saw him at 6 A.M. The patient was semiconscious, very pale, throwing his arms and legs about, and rubbing his stomach; his eyes were half open, and very watchful of all my movements. The conjunctivæ were sensitive; the pupils dilated. He always pushed my hand away when I touched him, and if offered food, would knock the spoon or cup away. The skin was cool. Pulse 72; the tracing was normal. He was too restless for the thermometer to be used. I ordered twenty grains of bromide of ammonium and ten grains of chloral every two hours till he was quieter. There was nothing to account for the illness except overstudy. At 11 A.M., his condition was the same. There was no rigidity of muscles nor epileptic state. Food and medicine had to be forced, the patient resisting his utmost, even trying not to swallow. He moaned constantly, and was worse when his relations approached, and strongly disliked my presence. His watchfulness was very marked, but he could not speak. The last time he spoke was about 1 A.M. At 4 P.M., he passed motions and urine in the bed. He fell out of bed twice. In both cases, he was found in a sitting posture, the head and shoulders resting against the bed. He did not at any time hurt himself or strike against anything hard. At 10 P.M., he had had four doses of bromide of ammonium and chloral, and also two thirty-grain doses of bromide of ammonium, but without any soothing effect. Pulse 72; skin cool. The restlessness and moaning had increased. The patient did not sleep during the night. This ended the second or "apyretic" (Trousseau) stage. The respiration was not irregular, which is unusual.

On February 24th, 11 A.M., the third stage commenced. Muscular excitement was diminishing. The thumb was tightly opposed, and the fingers flexed over it. The head and neck were forcibly retracted. The limbs were flexed. The stomach was retracted. There was no purposive resistance, although he had great difficulty in swallowing, and was very restless. Pulse 100; skin hot and dry. The conjunctivæ were injected; the pupils contracted. He was comatose, moaning constantly. Large quantities of urine were passed involuntarily. At 4 P.M., he was seen in consultation with Dr. Hughlings Jackson. There was much less muscular resistance, and he swallowed quietly. Opisthotonos was increased. Pulse 120. Temperature (axilla) 103.6°. The optic discs were normal. The tendon-reflex was normal. The bromide was continued in thirty-grain doses, with the addition of ten grains of iodide of ammonium. At 10 P.M., coma was deeper. The head was more retracted. He was almost unable to swallow, but since 4 P.M. had had two doses of his medicine. Temperature 104°; pulse 120. He died at 8 A.M. on February 25th.

ALBERT WILSON, M.D., Leytonstone.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. MARY'S HOSPITAL.

INTERSTITIAL CEREBRITIS.

By MONTAGU HANDFIELD JONES, M.B.Lond., M.R.C.P.,
Assistant-Physician to the Chelsea Hospital for Women.

THE following cases may be of interest, as throwing some light on the causation of delirium, and affording, by the recognition of a certain pathological condition, a suggestion for rational treatment. They seem also to indicate a defect which is noticeable in our present system of *post mortem* examination—namely, the worthlessness, in many instances, of mere naked-eye inspection, and the need of more accurate methods of investigation.

CASE I. *Constipation: Vomiting: Latent Phthisis: Delirium: Death: Necropsy.*—R. H., aged 26, a brass-worker, was admitted on November 8th, 1883, suffering with vomiting and constipation. His father and two brothers had died from phthisis; his mother and five sisters were alive and well. He had had a similar attack about a year earlier, and was then laid up for five weeks. He was discharged cured from Hanwell Asylum about four weeks before admission, after a residence there of two years. There was no family-history of insanity. He had vomited everything since November 3rd, and had been sick twice on the morning he was admitted; the vomit was dark, acid, and offensive. The abdomen was not distended; it moved freely in respiration, and pain was complained of in the lower part. There was marked dulness in the left side of the abdomen, extending forwards from the flank to within two inches and a half of the median line, upwards to the edge of the ribs, and downwards to Poupart's ligament. The tongue was coated, but moist. The heart- and lung-sounds were normal.

November 9th. He was delirious in the evening, and was ordered bromide of potassium and chloral. The bowels acted once at night, and twice on the following morning.

November 10th. He felt easier; the pain in the abdomen was less. The pulse was 68, regular, quiet, and full; the temperature was 98.8° Fahr. He was delirious all night, and had to be kept in bed by force. The chloral and bromide mixture was given every six hours; morphia (a quarter of a grain) was given subcutaneously, and calomel (five grains) internally.

November 15th. Evening delirium had been less since the last report; but the patient was restless, sleeping badly, and was very prostrate. The pulse was 120; the temperature 99.8°. The face was flushed, and the tongue dry. He had pain across the chest, and the surface of the chest and abdomen was hyperæsthetic. Brandy six ounces was ordered. The temperature at 10 P.M. was 102.6°.

November 16th. The pulse was 132, large and soft. The urine and stools were passed in bed. The respirations were 48 per minute.

On November 17th, he was almost pulseless. The temperature at 2 A.M. was 105°; the respirations were 48 per minute, short and [illegible]. He died on the morning of November 18th.

The *post mortem* examination was made on November 19th. Small cavities were found in the apices, numerous miliary tubercles in the lower parts of both lungs, and pneumonic consolidation at the base of the left lung. The heart, liver, kidneys, and spleen were healthy. The brain and its membranes appeared perfectly healthy. No tubercles were seen anywhere. Microscopic examination of sections of the grey and white cortical substance showed that the small vessels were extensively coated with patches of granular exudation, which extended for a considerable distance along the course of the vessels. The exudation-patches were composed of finely granular matter, intermixed with which were largish granular nucleiform corpuscles. Many reddish-yellow masses, about the size of a liver-cell, were scattered throughout the cerebral substance; these were clearly made up of escaped red blood-corpuscles. In one section was a small extravasation of blood, apparently recent, the red blood-corpuscles not having undergone much change.

CASE II. *Typhoid Fever: Marked Delirium: Death: Necropsy.*—C. G., aged 25, commercial traveller, was admitted on November 16th, 1883, suffering from typhoid fever. His family history was good. He had had typhoid fever before. The present attack began fourteen days earlier, with diarrhœa and malaise. On admission, the abdomen was distended, but there was no pain on pressure. The heart-sounds were fairly good, and the lungs appeared healthy. The pulse was 80, and very irregular. The tongue was dry and brown. The urine was acid, of specific gravity 1028, and contained one-sixth of its volume of albumen. The temperature was 102.4° Fahr. in the morning; at night it had been 104.2° Fahr. Brandy (three ounces) and milk and beef-jelly were ordered. On the evening of November 17th, he was very delirious, and was ordered bromide of potassium and brandy (six ounces).

November 19th. He passed everything under him; the pulse was 100, small and weak. He was very delirious and prostrate. The tongue was dry and brown; the respirations 36 per minute. Subsultus tendinum was marked. He was very violent during the night.

November 20th. He was very restless and delirious all night; breathing was difficult. The temperature at 8 A.M. was 105.8° Fahr. He died at 1 P.M.

The *post mortem* examination was made on November 21st. The intestine showed the characteristic lesions of typhoid fever. There were some vegetations on the aortic valves. The kidneys were healthy. The brain and its membranes appeared "perfectly healthy." Microscopic examination of sections of the white and grey matter of the cortex of the brain showed the minute vessels extensively coated with granular exudation-matter; many were full of red blood-corpuscles, while here and there a mass of small oil-drops was seen near a vessel. Numerous pellucid vesicles were present, coated at one part of their surface with opaque granular matter; in parts, the vessels were but slightly coated, and the above mentioned vesicles were free from granular matter. Thin sections taken immediately below the arachnoid surface showed numerous clumps of escaped red blood-corpuscles strewn about in the cerebral substance, close under the serous membrane, also small glistening particles of a reddish-yellow colour, quite like those which coated the arterioles. In deeper sections, numerous minute oil-particles and much granular exudation-matter were visible. A portion of pia mater showed very numerous exudation-coated arterioles and capillaries, and larger vessels full of blood, also spots of extravasation here and there, whereat were seen granules and glistening red-yellow droplets or particles like those on the arachnoid surface.

CASE III. *Sudden Onset of Choreic Movements: Persistent Delirium; Death: Necropsy.*—M. P., aged 58, a laundress, was admitted on December 8th, 1883, suffering from involuntary movements of the right arm and leg.

Five days before admission, while washing, she suddenly fell down, and her right arm and leg began to move involuntarily; she had no power to correct these movements; she did not become insensible, the fall being due to inability to stand on the right leg. Since then, she had remained in bed. and had suffered a good deal of pain in the right half of the body, the pain "nearly driving her mad." She had always been quite healthy until this time; she had never been a heavy drinker.

The patient, a healthy looking, well nourished woman, had forcible choreic movements of the right upper and lower extremity, not continuous, but recurring at short intervals, and in a less degree even while she was asleep. She complained of a "scratching sort of pain" all over the right half of the body, but not over the face, and she had rather severe frontal and occipital headache, which she said had existed since the attack, but was not present before. The plantar reflex was normal, and ankle-clonus was absent. There was no loss of sensation or muscular power. The pupils were equal. The temperature was 98.6° Fahr. The bowels were confined. The urine was smoky, acid, of specific gravity 1025, and contained a trace of albumen, and some granular casts, but no blood.

December 10th. Involuntary movements were less, but she could not touch a finger-tip. She could use her right hand to carry a cup of liquid to her mouth without spilling it, but was only about half rational. Cardiac dulness began half an inch outside the vertical nipple-line, and reached to the median line; the sounds were fairly normal.

December 15th. She was very delirious from noon on December 14th to midnight, but slept after two morphia-injections. From this date up to December 29th, she remained in the same delirious state, very restless, and quite out of her mind; she was especially noisy and violent at night, and had to be confined by straps; she was sometimes more violent on waking from sleep. She passed all her evacuations under her; she answered questions, but not in a rational way. The temperature was subnormal; the pulse varied from 80 to 100. The tongue was foul. No treatment availed anything, except large doses of chloral. Twenty grains of chloral-hydrate, every two hours, quieted the delirium and excitement, but produced an alarming depression of the pulse. No notable change took place; she gradually sank, and died on January 21st, 1884.

The *post mortem* examination was made on January 22nd. The lungs were in a somewhat advanced state of hypostatic pneumonia. The kidneys were rather granular on the surface; the capsules were adherent. The brain and membranes appeared to the naked eye, on most careful inspection, "perfectly healthy." Microscopic examination of sections of the cerebral cortex revealed appearances very similar to those found in the preceding cases; the vessels were found coated with granular exudation-matter in both hemispheres, but especially in the right. Numerous masses of granular *débris*, composed apparently of exuded matter and broken down blood-corpuscles were found throughout the cortical cerebral substance, while numerous oil molecules and droplets were plainly seen. The whole tissue was unduly clouded and opaque. At places, the small vessels were full of masses of coloured corpuscles, and white and red blood-discs were seen in clumps in the tissues as in the preceding cases.

REMARKS.—In each of the cases detailed above, disorder of the cerebral function—as shown by delirium, restlessness, and signs of failing nerve-power, formed a prominent feature in the clinical history; and yet at each *post mortem* examination the brain and its membranes, as far as could be decided by the most thorough inspection with the naked eye, were pronounced "perfectly healthy." In all probability, had not death enabled a microscopic examination of the brain-substance to be made in each subject, the occurrence of delirium and other nervous symptoms would have been attributed to an abnormal condition of the blood, to a failure of nerve-power, or to some abnormal condition of cell-chemistry; and yet, on each occasion, well-marked organic changes were shown by the microscope to have originated during life. That these changes were of the nature of an active interstitial inflammation can hardly be doubted; the masses of lymph-exudation coating the walls of the small vessels (in some places for a considerable distance), the presence of fatty and granular *débris* in the cerebral tissue, the presence of numerous oil-droplets pointing to the breaking up of nerve-cells and fibres, the generally cloudy and opaque condition of the tissue, and the small clumps of extravasated red blood-corpuscles, all attested the existence of inflammation. It is worthy of note, that the above pathological changes were well marked in the deeper layers of the cortical substance, and not only immediately beneath the pia mater. In the light of treatment, the recognition of the possibility of interstitial cerebritis being the cause of delirium or nervous disorder of varied kind, must necessarily be of moment. In cases of enteric fever, delirium is usually looked upon as indicating a need for a stimulating line of treatment; but bearing in mind the possibility of inflammation, the advisability of applying leeches, blister, and other antiphlogistic remedies, combined, it may be, with moderate stimulation, may well be thought of. It is necessarily a most important matter, though at the same time one of considerable difficulty, to decide in what cases cerebritis may be regarded as the cause of delirium and other nervous phenomena; but studying the cases recorded, it is probable that, when delirium is without apparent cause violent and prolonged, when stupor becomes profound and deep, while the pulse at the same time is not very weak or failing, and when loss of power is recognisable in one or more limbs, then the presence of inflammation may fairly be surmised. In regarding these cases as set forth, it is scarcely possible not to be struck with the necessity for minute and exact research in making *post mortem* examinations. That lesions, the existence of which no one in the present day doubts, were at one time, owing to want of greater care, and the absence of more delicate methods of manipulation, altogether denied, is well known; and it is probably equally certain that much which has hitherto remained dubious or obscure may, in the light of keener and more accurate examination, be placed in the catalogue of established fact.

GLYCERINE APPLICATIONS FOR THE SKIN.—M. Vigier recommends four or five parts of corrosive sublimate dissolved in 100 parts of glycerine, in place of mercurial ointment, for parasites of the skin. It has been known for a long time that glycerine is not absorbed by the skin, and that, also, it prevents the absorption of medicines, and, to a great extent, that of corrosive sublimate.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

Monday, April 7th, 1884.

Arthur E. Durham, F.R.C.S., President, in the Chair.

Compensatory Hypertrophy.—Dr. Joseph Coats (Glasgow) read a paper dealing systematically with hypertrophy of the various organs. In some preliminary remarks, he observed that it was necessary to bear in mind the difference between hypertrophy and hyperplasia, though it was not possible to carry the distinction into practice. Practically it would be sufficiently accurate if under the term, hypertrophy, we included all forms of increase in the quantity of functionally active tissue of an organ, whether this was due to numerical increase of the elements of the tissue or to an increase in the bulk of the individual elements. Compensatory hypertrophy occurred most readily during the period of growth; the causes by which it was produced were of two classes: excessive performance of normal functions, and destruction of portions of tissue resulting in overgrowth of the remaining portions. After referring to hypertrophy of the heart, bladder, and various portions of the alimentary canal, he discussed at length the occurrence of hypertrophy of one kidney after the removal of the other, he quoted the experiments and conclusions of Rosenstein, Grawitz and Israel, and Gooden, and related some observations of his own. The general results of these researches seemed to establish that the glomeruli were not increased in number and not greatly in size (the increase being in the proportion of 41 to 30, or 8 to 5, according to various observers), but the enlargement was chiefly due to an increase in the thickness and bulk of the epithelium, but chiefly to increased length, and therefore increased convolution, of the tubules. This, he thought, went to support the theory that the convoluted tubules discharged the most important functions of the kidney. In dealing with the subject of hypertrophy of the lungs, he quoted the researches of Dr. Theodore Williams, and detailed a case of vicarious hypertrophy of one lung from defective development of the other. After a full discussion of this subject, in which he observed that compensatory hypertrophy rarely occurred in phthisis, probably owing to the general depression of nutrition, he shortly referred to the occurrence of hypertrophy of the liver secondary to destructive disease, and observed that it was due to enlargement of the lobules from multiplication of the cells. Dr. Douglas Powell ventured to believe that hypertrophy, both as to size and function, did occur in chronic phthisis.—Dr. Fancourt Barnes inquired whether Dr. Coats had observed *post mortem* instances of hypertrophy of the heart during pregnancy. Since, after pregnancy, the heart returned to its natural size, he thought that this was a good example of true hypertrophy.—Dr. J. Kingston Fowler had met with several instances of hypertrophy and dilatation of the descending colon associated with ulceration, but without obstruction, in young women.—Dr. Joseph Coats, in reply, said that he thought that the *post mortem* evidence of compensatory hypertrophy of the lung in phthisis was meagre, though he did not deny that it did occur.

Retroversion of the Gravid Uterus.—Dr. Clement Godson read a paper, in which he reviewed the early literature on the subject of retroversion of the gravid uterus, pointing out that it had been referred to by Ætius Adimenus, in 1535, and by various writers in the 18th century, and dwelling especially on the classical paper of Dr. William Hunter read before the Medical Society in 1770. Dr. Godson stated that the primary cause of the condition was the occurrence of pregnancy in a uterus prolapsed and retroverted in a capacious pelvis with a narrow brim. He dwelt on the signs and symptoms which were of special diagnostic importance. He related a case of extra-uterine fœtation, which had been mistaken for retroversion of the gravid uterus. The various methods of treatment which had been suggested were mentioned, and Dr. Godson strongly recommended that the uterus should not be left to rectify itself, but that immediate reposition should be attempted. The means to be used to carry out this treatment were given in detail. Polyuria following the original distension of the bladder was illustrated by the notes of a case, and two specimens of mucous membrane of the bladder which had been exfoliated, were shown. Dr. Godson concluded by pointing out that where death occurred it was almost invariably due to exhaustion, associated with blood-poisoning, or from uræmia, and not from peritonitis. Rupture of the bladder from over-distension did not occur, but extravasation of the urine into the peritoneal cavity might be brought about by gangrene of the vesico-vaginal septum, the consequence of the severe cystitis.—Mr. Griffith thought that alteration of the conjugate diameter could only influence the occurrence of retroversion of the gravid uterus, by altering the period of its occurrence.—Dr. C. H. F. Routh thought that there must be some alteration in the conjugate diameter in all cases of retroversion of the gravid uterus. In the treatment the vectis had been of great use in his hands.—Dr. Clement Godson, in reply, coincided with the view that alterations in the conjugate diameter were always present in these cases.

GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

Tuesday, March 11th, 1884.

T. McCall Anderson, M.D., President, in the Chair.

Discussion on the Pathology and Clinical Significance of Albuminuria.

Dr. Middleton (Glasgow) recorded his experience of the occurrence of albuminuria in the continued fevers, as observed while resident in a fever-hospital some years ago. The conclusions at which he arrived were, that albuminuria occurred in over 85 per cent. of cases of enteric and typhus; that it occurred early in both fevers, from about the end of the first week onwards, lasting generally till convalescence was thoroughly established; that abundance of albumen indicated a severe case, but severe cases were not necessarily associated with abundance of albumen; that tube-casts, hyaline, epithelial, granular, and bloody, were frequently present, and, when abundant, indicated a severe case, especially in enteric fever; and that albuminuria was probably more common in the febrile stage of typhus and enteric than in the febrile stage of scarlet fever. He believed that, while the scantiness of the urine could be explained by the state of the circulation in the kidney, the presence of albumen was to be attributed partly to the venous congestion, and partly to interference with the nutrition and function of the renal epithelium; that being true whether the view were held that albumen normally transuded through the glomeruli to be reabsorbed by the tubular epithelium, or whether it were accepted that the glomerular vessels and their epithelial covering exerted a selective action in preventing the escape of albumen from the blood. With regard to these theories, he submitted that the theory propounded by Dr. Newman at the commencement of the discussion had been apparently misunderstood by some of the subsequent speakers, who had failed to recognise the important parts played in regard to it by the lymphatics of the kidney, and the vital function attributed to the epithelium of the tubules in absorbing albumen. He then met some objections that had been raised to this theory in the cases of acute and chronic Bright's disease, diabetes, hysterical polyuria, etc. It seemed to him more probable that the fluid transuding through the glomeruli contained some albumen, which was afterwards reabsorbed by the thick epithelium of the tubules, than that the thin membrane covering the glomeruli, the existence of which was even denied by some, should have the power of restraining the escape of albumen. He referred, in conclusion, to the occurrence of albuminuria in those apparently in health, quoting from a report of Dr. Munn to the Directors of the United States Insurance Society, to the effect that eleven per cent. of those who presented themselves to him for insurance presented albuminuria, though in apparently perfect health. From keeping these cases under observation, however, Dr. Munn concluded that their health gradually deteriorated, and that albuminuria must be regarded as of grave significance, though further research might show some cases to be of slight importance.

Dr. J. Lindsay Steven (Glasgow) considered such cases of "physiological" albuminuria very important, as throwing light upon the cause of the condition. In such cases, increase of blood-pressure could play no part; and this fact, along with others still to be mentioned, led him to the opinion that albumen appeared in the urine as the result of alteration in the function or structure of the kidney; this alteration being some deterioration in the vitality of the renal vessels, persistent or temporary. Apart from the kidney altogether, it was well known that diminished vitality of the vessel-wall allowed not only albuminous fluid in excessive quantity, but even the blood-corpuscles themselves, to leave the capillaries. In proof of this, he referred to the fact that arterial hyperæmia, unless complicated by the action of an irritant, was not accompanied by œdema; and he also [illegible] Cohnheim's experiments on the ear of the rabbit. He pointed out that in venous hyperæmia, œdema only occurred after the vessel-wall had been deteriorated by prolonged contact with venous blood, even although at first the increase of blood-pressure might be considerable. He also referred to the [illegible] of the [illegible] in [illegible] ments to the kidney itself [illegible] was not [illegible] blood-pressure [illegible] [illegible] and [illegible] on the [illegible] to raise the blood-pressure in the kidneys by ligature of the abdominal aorta.

he urged that, in diabetes mellitus, he had a strong argument in favour of the view he adopted. In this disease, there must be an enormous quantity of blood, probably under circumstances of increased pressure, passing through the renal vessels; and yet, how comparatively seldom was albuminuria seen in connection with it, when uncomplicated. In the course of fifty-eight examinations of diabetic urine, obtained from eleven patients, and scattered over a period of two years, he had only found a trace of albumen in eight, or about 15 per cent. of the specimens. In the urine of only one patient (examined four times) was the albumen a constant feature, while in the others it was exceedingly occasional. Albuminuria was generally regarded as a complication of diabetes mellitus, and, when present, he could only account for it on the supposition, not that the blood-pressure was increased (for it probably was so more or less all along), but that the vitality of the renal vessels had been impaired. In support of the same opinions, he referred to diabetes insipidus, and the albuminuria of the specific fevers; and he agreed with the remarks of Dr. Finlayson on the toxic origin of many cases of albuminuria. He suggested that the influence of the nervous system in causing albuminuria might be a trophic one, and might have nothing to do with elevation of blood-pressure. He then referred briefly to the conditions met with in organic diseases of the kidneys, and supported the theory that the vessels of the Malpighian tuft might be regarded as possessing certain selective powers. He summed up his remarks by the following statements. 1. In a typically healthy kidney albumen never passes through the walls of the glomerular vessels. 2. When albumen is found in the urine, the fact of its presence is to be explained by some deterioration of the vitality, or degeneration of the structure, of the glomerular vessels; and that the nature of this change may be various—*e.g.*, inflammatory, acute, or chronic—amyloid—the result of poisons—simple diminution of tone, etc. 3. Increase of blood-pressure, whether arterial or venous, of itself seldom, if ever, causes albuminuria, unless associated with the degenerative changes mentioned above.

Dr. PERRY (Glasgow) doubted whether there could be such a condition as a healthy or physiological albuminuria; but he agreed with Dr. Finlayson that "albuminuria seemed to be oftenest due to the influence of poisons operating on the system," although he was not quite sure that it was ever due "to the presence of grave constitutional disturbance," because in such cases he thought that the poisons had produced grave organic mischief. He regarded the albuminuria produced by specific organisms or poisons in the blood as a perfectly curable disease. He was of opinion that too little importance had been assigned in this discussion to the products of digestion as a fertile cause of albuminuria; and too little attention was apt to be bestowed by hospital-physicians on the earlier stages of the interstitial and amyloid forms of renal disease. He was inclined to divide chronic cases of albuminuria into two classes, according to their probable cause and the antecedent history of the individual affected. The first class included amyloid disease; and, in his experience, since the introduction of the antiseptic methods in surgery, this form was becoming rarer. In amyloid disease following upon phthisis, cancer, etc., the conditions observed were of a mixed nature, fatty change being often present. The second class included chronic renal diseases brought on by the mode of living of the individuals, and especially by the abuse of various alcoholic stimulants, and by other irregularities of living. He agreed with Dr. Johnson in saying that "renal degeneration is a consequence of the long continued elimination of products of faulty digestion through the kidneys." He had rarely met with a patient who was a total abstainer all his life, suffering from interstitial nephritis, although total abstainers were as liable as others to albuminuria from other causes. In conclusion, he stated that were more respect paid to that much abused organ, the stomach, fewer cases of chronic albuminuria would occur.

Dr. CLELAND thought it to be plain that in the secretion of urine there were two processes, one purely mechanical, and the other fundamentally vital. There was no evidence that simple squamous epithelium ever took on itself a secreting function, and therefore the anatomical evidence was in favour of the action of the Malpighian corpuscles being an action of pure filtration. In support of this, he referred to the solid urine of birds, reptiles, and fishes. He agreed with Dr. Greenfield in saying that the afferent arteries were highly muscular, and the efferent "mainly elastic," but he did not understand how it could be doubted that the afferent vessel was longer than the efferent. He thought, however, Dr. Greenfield himself doubted his anatomical position in objecting to the idea that the circulation in the glomerulus was normally under increased pressure. The energy, existing as pressure in the glomerulus, became converted into velocity in the narrow efferent vessel. He did not know that we were in a position to decide whether ordinary serum albumen usually passed through the glomerulus, and he did not regard the boiling experiments on the kidney as of much value. He was inclined rather to support Dr. Newman's theory that the scanty urine of acute parenchymatous nephritis was due to paralysis of the epithelial corpuscles. Returning to normal function, it was not easy to see what the meaning of the loops of Henle was, if there were no function of reabsorption in the previous part of the tubules.

Dr. NEWMAN, in replying, said that, in opening the discussion, it was not his object to give an extensive or general summary of what was known on the subject of albuminuria, but rather to limit himself to a few points round which the discussion might centre. He proceeded to criticise some of the remarks made by Dr. Coats and Professor Greenfield, and drew attention to the fact that both of these gentlemen had, to some extent, misapprehended the theory proposed by him as an explanation of polyuria and albuminuria in Bright's disease. But, as Dr. Middleton had already indicated the error into which these gentlemen had fallen, it was not necessary for him to refer to the subject. Dr. Newman then discussed the experiments performed by Bidder and Senator, and quoted by Dr. Coats, and expressed as his opinion that, though these experiments were extremely interesting, they seemed to him to prove very little, because they were all capable of a double interpretation. He regretted that Dr. Coats had occupied so much of his speech in the quotation of experiments, and would have greatly preferred Dr. Coats's own views based upon his own experience, because there were few pathologists in this country able to call up such extensive and various experiences as Dr. Coats. Dr. Newman entirely differed with him regarding the amount of albumen found in the urine in amyloid disease, and stated that his experience had been entirely different from what Dr. Coats indicated as the experience of Leube, and said that he had tested the urine in a considerable number of cases of amyloid disease, and estimated the amount of albumen; and, except where there had been either interstitial or parenchymatous nephritis to explain its presence, he had rarely found a large quantity of albumen, although the amount was usually greater than that found in chronic interstitial nephritis. He then said that his explanation of polyuria and albuminuria in amyloid disease was practically the same as the explanation of these symptoms in chronic interstitial nephritis. In both these diseases, there was increased resistance in the true capillary system of the kidney, by reason of which the tension of the blood in the glomeruli was increased; and if we took into consideration the amyloid changes in the Malpighian tufts, it would probably be admitted that a larger quantity of albumen passed through the glomeruli than under normal conditions. From the fact that the epithelium was not involved in the early stages in amyloid disease, it was presumed that it still performed its functions by reabsorbing a portion of the albumen which escaped from the glomeruli, and so the quantity of albumen in the urine in the early stages of amyloid disease was small. The polyuria was to be explained in the following way, that increased glomerular tension probably led to the escape of a large quantity of water from the blood; and as in cases of chronic interstitial nephritis, so, also, in cases of amyloid disease a new material was thrown out, which obstructed the lymphatics and separated the blood-vessels from the uriniferous tubules. In the former disease, the material was of inflammatory origin, while in the latter it was an infiltration of amyloid matter. In both diseases, the endosmosis from the uriniferous tubules to the lymphatic capillaries was interfered with, and polyuria was the result. Dr. Newman then criticised some points raised by Dr. Greenfield, particularly as to the relative size of the afferent and efferent vessels of the glomeruli, and the importance of their anatomical structure in relation to their function. Dr. Newman agreed with the views expressed by Dr. Cleland on this point, and, after a few remarks on so-called physiological albuminuria, he said that he had many other points to which he would like to refer, but feared that it would take up too much time to consider them now. He said that he thought the members of the Society might congratulate themselves that the discussion, so far as it had been successful in bringing forward a number of very interesting points, and certainly it would act as a great stimulus to future thought and work.

The PRESIDENT, in summing up the discussion on the nature of albuminuria, gave expression to the feeling of the members that it had been of a most interesting and instructive nature. He directed attention, however, to the extreme diversity in the opinions advanced by the various speakers, and illustrated this by a reference to the discussion on the pathological side of the question. He then referred to the influence of high fever in the production of albuminuria, in which condition the kidneys partook in the general congestion of the system, and gave it as his opinion that in some, at least, of the cases of albuminuria occurring in connection with poisons in the blood, the cause was to be found in the fever produced by the poison, rather than in its irritating effect upon the kidney itself. He next spoke of albuminuria as a neurotic affection, and of its being probably the cause of the albuminuria met with sometimes in young adults; and he agreed with Dr. Gairdner and others, in having grave doubts of the existence of physiological albuminuria. In speaking of exophthalmic goitre, he pointed out that albuminuria and dropsy were not uncommon symptoms, that they were probably dependent upon the same vaso-motor nerve-disturbance which produced the other symptoms of that disease, and that while sometimes the albuminuria and dropsy coexisted, either might occur alone. He expressed his admiration for the ingenuity of Professor Hamilton's theory of the cause of high tension, although he could not accept it as a correct interpretation of the phenomena of that condition, for the following amongst other reasons:—(1) (as mentioned by Dr. Mahomed) because lowering of the specific gravity of the blood-serum was a slow process, whereas the development of high tension might take place very rapidly, even within a few hours; (2) because in hydræmia the specific gravity of the serum of the blood was lowered, in which condition high tension is certainly not observed; and (3) because the specific gravity of the blood corpuscles must vary with that of the fluid with which they circulate. Finally, he alluded to the tests for albumen in the urine, and to the very different estimates formed by several of the speakers of the value of the more recent tests. He gave it as his own opinion that there was no more beautiful or delicate test than that with a saturated solution of picric acid, and that it was thoroughly reliable if means were taken to eliminate deposits consequent upon the presence of mucin peptones, and the vegetable alkaloids (especially quinine). After stating how these sources of fallacy were to be met, he concluded by suggesting that it might be a good thing at some future time to have a discussion upon the treatment of albuminuria.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

Ordinary Meeting, March 28th, 1884.

D. C. Lloyd Owen, F.R.C.S.I., in the Chair.

Sequestrum of the Entire Shaft of the Radius.—Mr. Bartleet showed a sequestrum of the entire shaft of the radius, removed by him from the arm of a patient under his care. The disease had been in existence three months; but no new bone was formed from the periosteum, which had everywhere separated from the sequestrum. He contrasted the rapidity with which separation was effected, in this case, with the extreme tediousness of cases of necrosis affecting the flat bones of the skull. Mr. Bennett May and Mr. Jordan Lloyd cited similar cases, the latter suggesting that, in some instances at least, the disease was rather the result of osteo-myelitis than of periostitis.

The Classification of Cirrhosis of the Liver.—Dr. Saundby showed a microscopic specimen from a case of hypertrophic cirrhosis of the liver, in which numerous newly formed biliary canaliculi could be seen naturally injected by inspissated bile. In this case, which had been under observation from its commencement, there had never been any jaundice; ascites was present in moderate amount; and the liver, which at one time nearly filled the abdomen, was much enlarged at the time of death. The surface of the organ was smooth, and, on section, the liver-tissue was stained yellow, and surrounded by tracts of grey fibrous tissue. The arrangement of the fibrous new growth was multilobular and interlobular; but the liver-cells were proliferating and fatty, and there were numerous biliary canaliculi round the margins of the acini. This case illustrated the inexactness of the views of the French school, which attempted to divide cirrhosis into two types—common and biliary cirrhosis—in which the latter form was characterised, clinically, by enlargement of the liver, early jaundice, and absence of ascites; and, histologically, by the new growth being monolobular and intralobular, the liver-cells proliferating, and, most of all, by the numerous newly formed biliary canaliculi. This case conformed in all respects to the type of common cirrhosis, with the exception that the liver was enlarged, that the liver-cells were proliferating, and the biliary canaliculi were numerous. It therefore shared the characters of both the so-called types, which were creations of the imagination, not pathological realities.

Cases of Albuminuria in Surgery.—Mr. Gilbert Barling read notes of several cases which had come under his notice in the surgical wards, in which albuminuria had been present. He drew especial attention to the following points: 1, the necessity for careful examination of the urine previous to performing operations in surgery; 2, the beneficial effects of operative proceedings in certain cases when the albuminuria was apparently dependent upon degeneration (amyloid ?) changes.

Molluscum Contagiosum.—Dr. Saundby showed a microscopical section of an excised tumour, from a case of molluscum contagiosum, and drew attention to the character of the contents, which differed from ordinary sebaceous matter, and appeared to consist of a vitreous hyaline degeneration of the secreting cells.

Sarcoma of Tibia.—Mr. Jordan Lloyd showed (for Mr. Wilders) a giant-celled sarcoma of the upper end of the tibia.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

March 6th, 1884.

H. F. Banham, M.D., President, in the Chair.

Trifid Trachea.—Dr. Sinclair White exhibited a trifid trachea from a male, aged 45. The third bronchus corresponded to the upper lobe of the right lung.

Adeno-sarcoma of Breast.—Dr. S. White also showed an adeno sarcoma removed from the left breast of a patient of Dr. Keeling. She was aged 20, and the growth was of two years' duration. The microscopical sections showed much fibrous tissue interspersed between the contracted gland-ducts.

Chancre of Eyebrow.—Mr. G. K. Thorpe introduced a patient with an indurated sore at the outer side of the left eyebrow. The chancre had nearly healed. There were secondary symptoms.

Lumbricoid Worms.—Dr. Cleaver showed upwards of one hundred lumbricoid worms, which had been passed by a child 3 years of age within seven days, by the help of santonin and calomel.

Uric Acid Calculi.—Dr. Cleaver also showed two uric acid calculi extracted at different times from the bladder of a boy. The first time lithotomy was performed upon him, he was 2 years and 5 months old; and nine months afterwards he was again operated upon, and the second stone extracted. There were no appearances of facets on either of the calculi. Both operations were done in the Children's Hospital.

Membranous Casts of the Bowel.—Mr. Edward Barber gave particulars of a case of chronic inflammation of the bowels, attended with the passage, *per anum*, of large quantities of false membrane, which were, in fact, casts of the bowel. He exhibited the quantity that had been voided in the preceding twenty-four hours. The membrane was of a soft gelatinous consistency, and of a greenish-brown colour. The patient was a woman, aged 37, who had been married fourteen years, and had had no children. She suffered a good deal from neuralgia, was of a dull and desponding nature, and was beginning to exhibit symptoms of pronounced hypochondria.—Dr. Law and Dr. Banham referred to similar cases that had occurred in their own practice.—Dr. Keeling pointed out that there was an essential difference between the membranes exhibited and those given off from the uterus in cases of membranous dysmenorrhœa.

Bright's Disease; Uræmic Amaurosis.—Dr. Hargreaves exhibited the kidneys from, and related particulars of, this case. The patient, a fairly temperate man, aged 27, was seized with great pain and heaviness in the forehead, and, next day, complete blindness ensued, which lasted for forty-eight hours, and then passed off. There was no albumen in the urine at this time; but it appeared in great quantities a week later, and continued so, with casts. With improved health, he indulged more freely in eating, and he was seized with uræmic convulsions, followed by two other attacks, at intervals of ten and five days. Shortly afterwards, he was seized with catarrhal symptoms; he had copious dark sputum; there was no blood in the urine, nor purpura of the skin. Cheyne-Stokes respiration was a marked symptom. He died fourteen weeks after the occurrence of amaurosis.

Syphilitic Paraplegia.—Dr. Porter read a paper on syphilitic paraplegia, with notes of a case. The patient had been under his care in the Sheffield Public Hospital and Dispensary, with symptoms which pointed to implication of the anterior portion of the spinal cord, about the level of the second lumbar nerve, and pressure upon the posterior roots of that nerve. Although the patient's appearance and history, and the evidence remaining of former affections, were sufficiently characteristic of syphilis, the source of the poison was not satisfactorily accounted for. The patient, however, made a rapid recovery under large doses of iodide of potassium; and, in less than a month from his admission into the hospital, was walking about, with very little trace left of the paralysis from which he had suffered. In speaking generally of syphilitic lesion of the spinal cord, Dr. Porter quoted cases, mentioned by Lancereaux and Buzzard, in which post mortem examinations had been made. The former author divided intraspinal syphilitic growths into two kinds: the diffused, which bore the character of sclerosis, and had been seen to involve large tracts, or even the entire length, of the spinal cord; and the circumscribed variety, which resembled the ordinary gumma. These syphilitic growths appeared to have a preference for the anterior or motor portion of the cord ; and, as Lancereaux had said, they generally left intact, in part at least, the sensibility, and, above all, the reflex movements of the extremities. This persistence of reflex movements with complete paraplegia, Lancereaux regarded as a characteristic distinction between tumours of the meninges and growths involving primarily the substance of the cord ; and Dr. Porter considered that these remarks in every respect corroborated the view he had taken of the nature and situation of the growth in the case he had read.—Remarks were made by the President, Dr. Keeling, and Dr. Law.

MARCH 20TH.

H. F. BANHAM, M.D., President, in the Chair.

Tumour of Brain.—Dr. BANHAM introduced to the Society a patient whom he considered to be suffering from a tumour in the middle fossa of the skull.

Glioma of Pons Varolii.—Sections were shown from a case of glioma of the pons Varolii, which was under the care of Dr. BANHAM, at the Sheffield General Infirmary, the clinical features of which were brought under the notice of the Society at an earlier meeting, during the life of the patient.

Fracture of both Patellæ. Dr. S. WHITE introduced a patient of Dr. Keeling's, with fracture of both patellæ. The patient, a man aged 46, sustained a transverse fracture of the left patella, by muscular violence, in October last. The fragments were widely separated. A back-splint, with foot-piece, was applied, and the foot raised eighteen inches. A piece of strapping, broad enough to encircle half the limb, was put on the front of the thigh, and from its inferior angles two pieces of calico-bandage, stitched to it, passed down over the foot-piece, and were drawn firmly downwards, so as to counteract the action of the extensor muscles of the thigh. Ligamentous union resulted with one-eighth of an inch of separation. Ten years previously the opposite patella had been fractured ; scarcely any treatment seemed to have been then adopted. The fragments were now three inches apart, but the movements were good, and the power of the limb was unimpaired.

Hysterectomy.—Dr. KEELING related the particulars of a case of hysterectomy in which a large uterine tumour was removed, along with the body of the uterus and its appendages, by abdominal section. The broad ligaments, containing large vessels running up into the mass above were tied in two portions with catgut ligature, and the stump of the tumour was secured by means of Kœberlé's serre-nœud in the lower angle of the wound. A smart hæmorrhage, which occurred twenty-seven hours after the operation, was stayed by tightening the wire ligature. With this exception, the patient made an excellent recovery, and at the end of seven weeks was able to leave the hospital.—Mr. FAVELL and Mr. JACKSON made remarks on the case, and Dr. Keeling was requested to bring it forward again for further discussion.

Double Ovariotomy.—Mr. W. BANHAM read notes of a case of double ovariotomy which had been performed successfully by Mr. G. Shaw, of Attercliffe, on a woman, aged 44. The first operation was performed on September 12th, 1883, and the second on January 7th, 1884 ; a period of less than four months having elapsed between the two operations. The right (first removed) cyst was found to be a multilocular one, which had undergone sarcomatous changes. At the time of operation the left ovary was examined, and found apparently healthy. When the latter was removed later, there was ascertained to be a cystic sarcoma ; the cyst-wall had ruptured before the operation, its contents escaping into the peritoneum. A smart attack of acute peritonitis followed, although the temperature was persistently below 98.4° ; the patient was, however, able to leave her bed in less than a month. The disease had since recurred in the uterus.

A Quarter of a Century's Surgery.—Mr. ARTHUR JACKSON read a paper entitled "A Quarter of a Century's Surgery ; its Lessons, its Failures, its Disappointments, its Prophecies." After alluding to the great and important changes that had taken place in surgery, and especially in operative procedure, since 1860, he proceeded to inquire into the influence that anæsthetics and antiseptics had had in producing those changes. He dwelt upon the great advantages of anæsthetics, not only for operative, but for diagnostic purposes ; but he also thought they were responsible for many evils, the result of careless administration, and for the production of slow operations, as well as inducing improper and fatal exploratory operations. To them was due the neglect of clear and accurate diagnosis which distinguished surgeons years ago. While agreeing with Lawson Tait in his views on Listerism, he felt that to antiseptic surgery was due increased cleanliness in every way, and the knowledge that operations never dreamt of before might be done safely. They had led he thought, on the other hand, to many improper and unnecessary operations, especially in the case of abdominal explorations and osteotomies. He illustrated the failures and disappointments of the last twenty-five years by hip-joint disease, by disease of the metatarsal and tarsal bones, and by herniotomy, and urged in the future amputation wide of diseased bones, and a more careful and thorough tabulation of cases of strangulated hernia. The harassing of and commotion in the various departments of surgery were strongly deprecated, and the adherence to good old rules strongly insisted upon. In operations on the kidney and bladder, great progress had been made. The importance of not changing treatment till something better was provided, was earnestly urged.—The discussion was postponed to the next meeting.

WOOLWICH MILITARY MEDICAL SOCIETY.

MONDAY, MARCH 17TH, 1884.

Sir JAMES HANBURY, K.C.B., President, in the Chair.

Compressed and Portable Medicines, and their Use on Service.—Surgeon-Major JAZDOWSKI read a paper on this subject. After alluding to the importance of a good supply of medicines on service, three-fourths of the cases treated being purely medical, he pointed out that the actual weight of the drugs required was never very great, and that it was chiefly the bulk and weight of the bottles required to contain them that rendered their transport difficult ; but that recent improvements in the manufacture of compressed and portable drugs enable bottles to be dispensed with, except in the case of a few liquid and volatile drugs which were absolutely necessary. He then exhibited specimens of the latest experiments in compressed drugs by Messrs. Savory and Moore (who supply the medicines for the army), which appeared to him to be exactly what was required, as they could be readily carried in small tins, or even pasteboard-boxes, packed in hampers or baskets ; these included tablets of quinine, ipecacuanha-powder, compound jalap-powder, etc., containing from fifteen to thirty grains each. He also handed round specimens of Messrs. Savory and Moore's gelatine-lamels and hypodermic and ophthalmic discs, which seemed to him to be extremely useful, as they were portable and easily administered, and kept well, their only disadvantage being the slightly greater cost. He stated that the authorities at Whitehall Yard were alive to the importance of this subject, and that changes in the arrangement and contents of the field-companion and panniers were being carried out. The supply of medicines in these, however, was soon exhausted on service; and he asked if it would not be better to have field and base hospitals supplied with the necessary compressed medicines, and also pills, etc., prepared according to known and tried formulæ, which could be rapidly issued for replenishing field-companions and panniers, and also used in the hospitals themselves, instead of having, as hitherto, crude drugs to be compounded according to individual taste or theory. He pointed out that no special arrangements were made for cavalry, although these were often many miles away from bearer-companies and field-hospitals for days together, and advocated for this purpose the use of panniers similar to those issued to the Austrian bearer-companies in the campaign of Bosnia and Herzegovina, and exhibited at the late Hygienic Exhibition at Berlin, which could be carried on a spare horse on the most rapid march ; besides this, the gelatine-lamels would be found extremely useful, as medical officers with cavalry regiments could personally carry enough for several days' use without trouble. In conclusion, he handed round a modification of the regulation medical officer's pouch, which he had had made for his own use, and which contained, besides the regulation dressing-case, a compartment for a supply of gelatine-lamels, and a two-ounce phial of solution of morphia for hypodermic injection. He had been induced to have this made because he found the gelatine-lamels extremely useful during the campaign in Egypt ; and he considered that, when carried in this way, they were not likely to be spoilt, and were ready at hand when required.—Captain SYLVESTER (Army Hospital Corps) said that, from his experience in South Africa, he was of opinion that the adoption of these compressed and portable drugs would effect an actual saving, as, besides the enormous breakage of bottles, he had known of packing-cases, bottles, and even medicines, being abandoned from want of carriage over rough country.—Surgeon-Major BARROW said that, on the Malabar coast, he had found that the gelatine-discs soon became mouldy and useless, and that, in many cases, the gelatine-preparations returned into store were unserviceable.—Surgeon LANGRIDGE objected to anything being carried in the regulation-pouch on service, as weight carriedi n that way was extremely irksome ; and, in the Afghan war, he had been obliged to discard it altogether. He advocated instead an extra pouch attached to the "Sam Brown" belt, as this was now universally worn on service, and, in our late campaigns medical officers had to carry sword and revolver for their own protection. Sir JAMES HANBURY said that the adoption of compressed and portable medicines would be a great improvement; and that, in a case like this, the question of cost could not be allowed to prevent improvement. He was glad that the question of medical supplies for cavalry had been brought forward, as undoubtedly some change was required; but he did not consider the plan of panniers on led horses practicable, and thought that, with proper selection of portable medicines and dressings, the orderlies could carry a sufficient supply in their saddle-bags.

REVIEWS AND NOTICES.

VORLESUNGEN UBER PHARMAKOLOGIE FUR AERZTE UND STUDIRENDE. Von Professor Dr. C. BINZ. Bonn.

IN these lectures, which are to be completed in three parts, the able professor of pharmacology in Bonn gives us in great part a summary of his collegiate prelections. While pharmacology is one of the oldest branches of medicine, yet it must still be regarded, as Dr. BINZ clearly shows, to be the youngest from a scientific point of view.

The present instalment deals entirely with neurotics of different kinds, and we have first a very able review of several of the anæsthetics. The action of ether in moderate doses is carefully described, and its usefulness in cases of chlorosis when combined with iron referred to. The chapter on chloroform is particularly interesting, and the mode of action of this body is there discussed fully and instructively; the importance also of using pure chloroform for inhalation purposes is insisted upon, as Dr. Binz is of opinion that, in some of the cases in which death has occurred under its influence, the fatal result has been due to impurity of the chloroform.

Next follows an able review of the varied action and uses of opium and its alkaloids, in which reference is made to the very much greater sensitiveness to morphia of the protoplasm of the nerve-cells of the human brain, as compared with other animals—a fact that should teach us to be cautious in accepting, or at least in directly acting upon, the results obtained in comparative experiments. The action of the drug on the nervous system of the Asiatic appears even to differ somewhat from that produced in the European, a much longer stage of excitement preceding the stage of sleep in the former—many Malays often exhibiting a temporary condition of madness, and "running a muck," as it is called, under its influence. The whole question of the subcutaneous injection of morphia, and the precautions to be observed, as also the condition termed morphinismus, are treated clearly and in detail; and two categories are laid down in which the injections are justifiable: (1) when there is acute mischief, as in severe wounds, acute neuralgias, sleeplessness in acute diseases; and (2) in carcinomata, tuberculosis, incurable neuralgias, and the like.

As a frequent substitute for opium, Indian hemp may be employed, particularly when a soporific is required for a lengthened period.

Under the head of chloral, a case is related of a strong man suffering from delirium tremens who died twenty minutes after taking 180 grains of the hydrate. This drug is generally best administered in a state of solution, and its unpleasant taste best disguised by giving it with some milk; or, if it be difficult or impossible to get it swallowed, as in convulsive attacks in children, it may be given hypodermically, or in an enema, although in the former case suppuration is liable to follow the consequent irritation. Chloral is particularly useful in producing anæsthesia of the head, this occurring before the rest of the body is affected, and it may even be present without sleep being induced; chloral, accordingly, is to be recommended in neuralgias of the head, and a good prescription is: butylchlorali hydrati 80 grains; glycerine half an ounce; distilled water four and a half ounces. To be well shaken, and a tablespoonful to be taken every four hours if necessary. In poisoning by chloral, good results have been obtained from the use of strychnine and atropin.

Of the salts acting as sedatives to the nervous system, none is superior to potassic bromide. Although discovered only in 1826, it was soon after very generally employed in medicine, particularly in epilepsy. The bromine appears to be the active constituent. A general cachexia follows the excessive use of bromine salts, and Aresu and Schiff have produced a parenchymatous myelitis, especially in the inner segment of the lateral column of the spinal cord, by the long continued administration of metallic bromides to animals.

Dr. Bertelsmann thus lays down the best mode for the administration of potassic bromide in epilepsy. A 10 per cent. solution in water is employed. Of this, in the first week, three tablespoonfuls are taken daily, morning, noon, and evening, about half an hour before meals; in the second week, four tablespoonfuls a day, at regular intervals, but never immediately before or after food; in the third week, five tablespoonfuls daily, and so on, the daily dose being increased by a spoonful each subsequent week, until eight tablespoonfuls a day are arrived at. But if at this, or any time during the administration, the patient shows much somnolence or stupor, the dose should be at once reduced. When the desired effect has been brought about, the amount is likewise reduced, and the drug given in daily doses of three tablespoonfuls for two or three months, and of two tablespoonfuls for a subsequent period of three months. In children between 10 and 16, begin with three tablespoonfuls daily, and increase to six; while with children under 10, begin with two and end with four to five tablespoonfuls a day.

Iodoform, bromine salts, chloroform, and nitrous oxide, all possess, as Dr. Binz explains, a common depressing action on the central nervous system; and it is possible that they split up after they enter the organism, their halogen element being thus set free. The halogens of themselves possess a decided narcotic action, and, so far as the living active protoplasm is concerned, they further appear to diminish its activity.

Atropine, as we know, tends to paralyse the peripheral nerves. In small doses it has often been found most effectual in relieving habitual and obstinate constipation, and in neuralgia and cramps of different parts of the intestinal tract; in epilepsy it has also been found very useful, according to some authorities, the potassic bromide alone being superior to it in this respect. It has likewise been beneficially employed in poisoning by digitalis, and in fever cases with failing pulse. As Luchsinger states, "in whatever way the action of the heart has been brought to a standstill, whether by chloroform, potash salts, salts of the biliary acids, or of oxalic acid, or by apomorphia, quinine, or salts of copper, zinc, or antimony, in the early stage atropin always tends to restore the pulse." Between quinine and atropin, therefore, there is an antagonistic action; and a similar antagonism is likewise manifested between atropin and muscarin, the active principle of certain fungi. In cases of poisoning by fungi, atropin is therefore deserving of a trial. Further, between atropin and morphine a therapeutic antagonism exists, and, accordingly, in cases of belladonna-poisoning, injections of morphia have been used successfully. Chloral has also been employed with benefit in such cases.

MEDICAL FASHIONS IN THE NINETEENTH CENTURY. By EDWARD T. TIBBITS, M.D.Lond. London: H. K. Lewis. 1884.

WHILST making no pretensions to rank as a scientific treatise, there is, nevertheless, internal evidence to show that the writer is acquainted with the later researches which have been made with the view of advancing our knowledge of the causation and cure of disease. As regards some of these his criticism is forcible, and it is expressed in crisp language.

Of the seventy odd pages of which the book consists, nearly one-half is devoted to a review of the evidence which has been adduced in favour of this, that, and the other disease being caused by a bacterium or a bacillus. The author regards this as very inconclusive, and is particularly severe on the bacillus tuberculosis. "This tubercle-bacillus theory," he writes, "infectious as it is, in more ways than one, can scarcely make headway against the personal evidence of hundreds and thousands of individuals whose very existence is opposed to such an extravagant notion."

The pamphlet is an honest attempt to subject the current doctrines of our time as to the etiology of disease to careful scrutiny. The author writes from a macroscopic rather than from a microscopic point of view, but there has been no dearth of investigations of the latter kind during recent years.

VOICE, SONG, AND SPEECH: A PRACTICAL GUIDE FOR SINGERS AND SPEAKERS; FROM THE COMBINED VIEW OF THE VOCAL SURGEON AND VOICE-TRAINER. By LENNOX BROWNE, F.R.C.S.Ed., and EMIL BEHNKE. Pp. 322. London: Sampson Low and Co. 1883.

THIS handsome volume is intended as a practical guide in vocal hygiene, and in the details of voice-culture and management, for general use by singers and speakers. It is written by two well known authors, "from the combined view of the vocal surgeon and voice-trainer," who have both previously made substantial contributions to the literature of vocal physiology and disorders of the throat. The book contains a good popular account of the anatomy and physiology of the larynx, and of the history and teachings of the laryngoscope; and it gives many excellent directions and elaborate details concerning voice-cultivation, the daily life of the voice-user, and the special vocal disorders to which he is liable. The illustrations are numerous and excellent: amongst these are some copies of interesting photographs of the larynx and soft palate, in the production of which much care has been spent, and which show the movements concerned in the production of various vocal notes and tones. The book well deserves perusal by all who especially use the voice, and it contains much that will interest medical readers.

Medicinische Bibliographie und Anzeiger zum Centralblatt für die Gesammte Medicin: Klinische Medicin, Chirurgie, Gynakologie. Bearbeitet von Dr. Arthur Wurzburg. 1 Jahrgang. Leipzig. Druck und Verlag von Breitkopf und Härtel.

In this very useful periodical, indications are given of the most important productions in medical literature over a wide range of subjects. Not only are all the principal medical publications notified, but the principal articles and subjects treated in the more important medical papers, reviews, and transactions, are all mentioned by name. It is merely a catalogue of names, and no attempt is made to analyse the articles of which the titles are given, but, as a catalogue *raisonné* of titles of subjects, its use to authors is obvious, especially in relation to German literature.

NOTES ON BOOKS.

The Disease of Inebriety and its Social Science Relations. By T. D. Crothers, M.D.—The author regards inebriety as a true disease, and denounces the prevalent belief that drunkenness is a vice and a moral defect, curable by conversion, by the pledge, and by rousing up the will-power. The true cause of intemperance is a diseased and defective organism. Inebriety is closely allied with the rush of civilisation, and is an expression of the inability of the brain-force to keep pace with the revolutions of thought and the changes of occupation and surroundings. Inebriety, like insanity, is a mark of failure. Both are penalties we pay for ignorance and neglect. Inebriety was recognised as a disease long before insanity was deemed to be other than spiritual madness. Inebriety may be called suicidal insanity, and is an affection of the central nervous system. Certain physical conditions are switch-points, turning off the train of health from the main line. Such points are alcoholic heredity, injuries to brain, strain and drain. Inebriety exists under fixed laws which are as yet unknown.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

LEBON'S CLINICAL FIGURES.

Messrs. Lebon and Co., engravers, 23, Southampton Buildings, London, are showing an excellent series of outline-figures in diagram, for the purpose of enabling members of the medical profession to illustrate in this way, with rapidity and ease, the clinical records of their cases. The present issue consists of books, containing twenty-five copies each, of outline-figures, illustrating respectively the external surfaces and sections of the brain; outline-figures of the thorax and abdomen; outlines of the body for skin-diseases and nerve-lesions, and of the head for the same purpose; outlines for diseases of the eye and for diseases of the larynx. These outlines are very correct and simple, being prepared in perforated sheets with adhesive backs—a system which has now attained considerable popularity. They will prove of much use to clinical physicians and surgeons. Acting on an ingenious suggestion of Dr. Ferrier, they have also prepared electro-blocks of the figures of the brain for book-illustrations. These can be used in the following manner. If the physician intends to publish the records of any of his cases, and wishes to have a block to illustrate the disease, he should shade in the lesion upon the figure required, and send it to Messrs. Lebon and Co., who will immediately prepare a block in accordance with the altered diagram at an uniform charge of 2s. 6d. for each block of Brain, Series I; and of 1s. 6d. for each block of Brain, Series II. The lesion will be shown by white patches upon the dark groundwork.

The Fylde Guardians have increased the salary of Mr. John Augustine Orr, medical officer for the Fleetwood district, from £26 18s. to £40 per annum.

GENERAL COUNCIL

OF

MEDICAL EDUCATION AND REGISTRATION.

SESSION 1884.

Wednesday, April 2nd.

Dr. Acland, President, took the chair at 2 P.M.

The Medical Act Amendment Bill.—A report was received from the Committee appointed on Monday, recommending the following arrangement with regard to the surplus funds of the Divisional Board: "That any surplus appearing on such accounts to be remaining, after leaving a sufficient balance for the payment of current expenses, shall be disposed of by the Medical Board for the maintenance of the above mentioned medical authorities, as the Board may think fit."

Mr. Macnamara proposed the adoption of the report.

The Rev. Dr. Haughton, in seconding the motion, said it was not equitable that the surplus funds should go to the Medical Council, as proposed by the Government Bill, or that any arrangement should be made by which the income of the colleges would be diminished. He believed the Government would accept the proposal as an equitable suggestion. The universities made no claim to the surplus funds.

Dr. Struthers asked who were "the above mentioned bodies" referred to in the report.

The Rev. Dr. Haughton said they were bodies that supported libraries and museums out of their examination-fees.

Dr. Struthers opposed the adoption of the report. There was, he said, no reason why the surplus funds should be restricted to the corporations, and why the universities should be ignored.

Mr. Macnamara said the question was a very complicated one. The universities under the Bill were entitled to have their pupils examined on the payment of fees. They would have contributed no money to the fund, and would therefore have no claim on it. But it was proposed to leave the matter to the Divisional Board, and the Scotch universities ought to be satisfied with that arrangement, considering the majority that they had on the Board.

Dr. Quain thought that the matter might be well left to the Divisional Board, subject to the control of the Council. He hoped that the Council would cease to talk of pecuniary matters, and proceed to more important business.

Dr. Storrar could not see what the Council had to do with the question. It had not been consulted about the Bill, and he saw no reason for picking out one particular section of it for consideration.

Mr. Simon said it was not necessary that the Council should communicate its views to the Government, but there could be no objection to its expressing its opinion on the subject of the Bill.

Dr. Storrar said it might be assumed, if the resolution were passed, that the Council agreed with the remaining portions of the Bill, and he was not prepared to sanction such a conclusion.

Dr. Struthers thought the proposal of the Committee would be very unjust to Scotland. He proposed, as an amendment, that for the word "Council," in line 17, page 21 of the new Bill, the word "Board" be substituted.

Dr. Pettigrew seconded the amendment.

Dr. Humphry said the question was one which concerned not the Scotch universities only, but all the universities in the kingdom. The universities did not contribute to the fund, and therefore had no claim upon it. There had been no misunderstanding in the matter, and he hoped that the recommendation of the Committee would be adopted by the Council.

Dr. Lyons suggested that the subject be referred back to the Committee, and that the Committee be requested to present their final report at the next meeting of the Council. The Council would be placed in an awkward position by adopting the report, because it would lead to the supposition that the rest of the Bill had their support and approval. There were many important subjects connected with education involved in the Bill, and it was not dignified on the part of the Council to take into consideration only the comparatively unimportant question of the application of surplus funds. No harm could come of deferring the final consideration of the subject to a future meeting of the Council.

Dr. Struthers' amendment was put, and negatived.

Dr. Lyons moved as an amendment that the question as to the adoption of the report be taken into consideration that day six months.

Dr. Storrar seconded the amendment.

The Rev. Dr. Haughton protested against the postponement of the question. He did not agree with Dr. Lyons that the money-question was so unimportant. It was the money-question that would settle the fate of the Bill in the House of Commons. There had been evidently a mistake in the drafting of the Bill, and he was shocked to think that any claim should be made by any of the universities to participate in a fund to which they did not contribute. He called upon the Council to express its decided opinion in favour of an equitable arrangement.

Mr. MACNAMARA said the proposal of Dr. Lyons's amendment was, that the stable-door should be locked after the horse was stolen.

Dr. CHAMBERS supported the amendment.

Mr. SIMON suggested that the Council should express its approval of the report, and recommend the corporations jointly to address Her Majesty on the subject.

The amendment of Dr. Lyons was put and negatived.

Mr. MACNAMARA accepted Mr. Simon's proposal instead of the original motion.

This was accordingly put and agreed to.

Mr. MACNAMARA moved that the Council go into committee again on the subject of the Government Bill.

Dr. HERON WATSON seconded the motion, which was rejected.

Dr. HALDANE moved:

"That it be remitted to the Executive Committee to consider whether the experience of the office of the General Medical Council during the last twenty-five years suggests any details which might be introduced with advantage into the Medical Acts Amendment Bill; and that they be authorised to communicate with the Council-office on any such suggestions."

Dr. MATTHEWS DUNCAN seconded the motion, which was carried.

Arrangement of Funds of Council.—**Dr. STORRAR** moved:

"That, in Clause 9 of Chapter IX of the General Council's Standing Orders, the following changes be made: Instead of 'The General Council shall pay one-half, the English Branch Council shall pay one-fourth, the Dental Fund shall pay one-fourth;' the following be substituted: 'The General Council shall pay three-sixths, the English Branch Council shall pay two-sixths, the Dental Fund shall pay one-sixth."

He said that the English Branch Fund was becoming very large while the Dental Fund was becoming very small. He had been looking at the proportion of dentists to the medical practitioners upon the *Register*, with a view of seeing whether they were not paying more than they should be reasonably expected to pay. The old by-law prescribed that the General Council should pay half the rates and taxes and general expenses of the office, the English Branch one-fourth, and the dental fund one-fourth. The proportion of dentists to registered medical practitioners was about one-sixth, and he did not think it was fair that the dentists should be put into such a position that the capital was declining, and possibly approaching a vanishing point. He thought it would be more equitable that the dental fund should pay one-sixth instead of one-fourth. He was not opposed to the Branch Council having money in hand, but it was not fair that the dentists should be allowed to run the risk of getting into liquidation.

Dr. A. SMITH seconded the motion.

Dr. QUAIN in supporting the motion, said that when the arrangement was originally made, there was a less difference between the number of dentists and medical men than there was at the present time. The number of registered practitioners had increased, but that of the dentists had not increased in the same proportion. The number of registered medical men was 24,500, and of dentists 5,300, or one-fifth. It would therefore be treating the dentists with great liberality to arrange that they should pay one-sixth. He could assure the Council that the dentists were treated with very great consideration, and during the past week no fees were charged by the Dental Committee for investigating certain cases, because they happened to be meeting at the same time for other matters.

The motion was agreed to.

The Structural Arrangements of the Council-Room.—**Dr. QUAIN** moved:

"That the Executive Committee be empowered to take such steps as they may be advised to adopt with a view to improve the structural arrangements of the Council-room."

He said that great complaints had been made of the ventilation of the Council-chamber, and no one could sit in it for any length of time without a headache. The room was practically in a well, and he suggested that the floor should be considerably raised.

Mr. TEALE seconded the motion. No doubt the raising of the floor would diminish the cubic space of the room, but that would be more than compensated for by the improved ventilation which would then be rendered possible. At present there was no method of changing the atmosphere.

Mr. MACNAMARA thought the room would be too low if the floor were raised as proposed.

The Rev. Dr. **HAUGHTON** protested against the diminution of the cubic contents of the room. If the members did not get headaches, they would catch colds from the draughts, and suffer great discomfort.

Dr. QUAIN said he would not press the motion if the members of the Council did not desire a change, but he though there was a great desire for some improvement.

Mr. SIMON thought that the Executive Committee should consider and report on the subject at a future meeting of the Council. If an alteration could not be made without any great expense, it would, he thought, be better to go elsewhere.

Dr. FERGUS thought the room could not be made a wholesome one without raising the roof at the same time as raising the floor.

Dr. PETTIGREW suggested that improved ventilation might be obtained by means of a fan.

Dr. QUAIN said that that method was at present employed.

The **PRESIDENT** said he was always averse to entering upon the present building, believing that better premises could have been had in the neighbourhood of the embankment. It would not be wise to make any considerable expenditure, especially as the arrangement might be for another body.

Dr. QUAIN said he accepted the suggestion that the matter should be referred to the Executive Committee to consider and report on the means, if any, which should be taken to improve the structural arrangements of the Council-room.

This was accordingly put and adopted.

Rejections at Examinations.—**Dr. CHAMBERS** moved:

"That it is inexpedient that any candidate at his final oral examination for a diploma entitling him to registration should be rejected unless he shall have been examined orally for at least half an hour by the examiner, or by each of the examiners, on whose authority he has been deemed deficient in requisite knowledge or skill."

There was, he said, a general complaint on the part of the public of the insufficient number of medical men, and that many candidates were rejected who ought not to be rejected. The schools had made great complaints that students who had been considered industrious and intelligent ran a great risk of being plucked at the examinations, and there was a strong suspicion that the examiners rejected too many of the candidates. Dr. Chambers referred to several cases from a single London school, in which candidates who had occupied the post of house-surgeon, and were known by their teachers to be well qualified, had been rejected at the pass-examination. In the face of such facts, he could not be surprised that the public should think that there was something wrong in connection with the examinations. At the examination for the double licence of the Royal Colleges of Physicians and Surgeons of Edinburgh, the percentage of rejections was 41 per cent., and at the College of Surgeons of England, 37 per cent., the percentage decreasing with other bodies down to 22. It would be found that those bodies in which the examiners were most limited in point of time were those in which the largest number of rejections took place. An examiner ought not to be bound down to a particular time. He should be able to pass a candidate as soon as liked when he had satisfied himself as to his efficiency, but should not be allowed to reject him until he had subjected him to a very full and complete examination. That would remove every difficulty. The present very rapid mode of examination was very hard upon certain nervous candidates, who ought not to be subjected to such an ordeal, and who were often undeservedly plucked. It should be remembered that the examinations of the present day were different from those of former times, only in regard to the quantity, but in regard to the quality, of the knowledge required. It had more to do with things than with words, with universals than with particulars. At the College of Surgeons of England, 5 per cent. of the candidates were rejected at the written examination, and 33.7 per cent. at the oral examination. The former was leisurely, and the latter rapid. A change was required in the conduct of the examinations. They should be more leisurely, and more adapted to the individual candidates.

Mr. TEALE seconded the motion.

Dr. MATTHEWS DUNCAN opposed the motion, and said he had very little sympathy with the remarks of Dr. Chambers in moving it. A plea had been put in for nervous men; but he could assure Dr. Chambers that it was not generally the nervous men who were rejected, but rather the [illegible], who often [illegible] remonstrated at their rejection. The nervous man was always dealt with as a nervous man, and, indeed, obtained such consideration that candidates sometimes assumed a nervousness that they did not really feel. It was not the [illegible] who [illegible], but the middle class student. He had long been an [illegible], and had been connected with six boards, and he could testify that the examiners had never felt themselves tied to time when they were in any difficulty. Then he had another objection to the motion. If every rejected man were to occupy half an hour, the expense to the other candidates would be enormously increased. Moreover, the length of the examinations would be enormously increased, and the supply of examiners would fail. No examiner would care to talk to a set of blockheads for half an hour each when five or six minutes would suffice. If he were required to do such a thing, he would resign his office at once. The proposal of Dr. Chambers was an injudicious interference with the liberty of the boards. The universities and corporations were the best judges, and might say to the Council, "Mind your own business; we will reject whom we like, and decline to carry out your recommendations if we do not see any force in them."

Mr. TEALE, while not agreeing with all that Dr. Chambers had said, thought that the present was an opportune moment for raising the question of rejections. The heavy lists of rejections showed that the various bodies throughout the kingdom were doing their duty in not competing downwards against one another; but there was another side of the question: Was that large number of rejections absolutely necessary? And did it indicate a great amount of unpreparedness on the part of the student? The examinations had a twofold effect: they spurred the student to work, but they also interfered with the work of the best students. He had spoken to many teachers in the medical schools, who agreed that there were many students rejected whom they regarded as their best pupils; and surely the opinion of the teachers, who had ample opportunities of judging, was entitled to weight against the opinion of an examiner who had examined for ten minutes. Mr. Teale then referred to the recent report of the visitors of examinations, and their recommendations to the Council, and also to the resolution passed by the Council to the effect that in oral examinations, notwithstanding any general rule limiting the examination to ten minutes or a quarter of an hour, there should be a margin of additional time for satisfying the examiners in doubtful cases.

Dr. SCOTT ORR said he quite agreed with what Dr. Matthews Duncan had said, and in thinking that it was not the good man or the very bad man that required the time, but the middle class man. They could soon find out whether a man was good or bad, but the middle-class man might require more than the half hour. His own idea was that there should be no limitation of time for the examination of candidates, and there was no such limitation in Glasgow.

The Rev. Dr. HAUGHTON warned the Council against the impolicy of pressing a general rule with an insufficient knowledge of the persons to whom that rule was applied. The proposed rule would come over to the University of Dublin as a great puzzle and surprise. It applied to a method of examination that was unheard of amongst them, and that they considered very bad. The examination of candidates for a degree in Dublin took at least four days; the oral part of the examination was conducted in public, and the students, when rejected, were perfectly satisfied that they deserved to be so. The verdict of their fellow students was brought to bear upon them, and everybody was satisfied with the result. If the resolution were passed and sent to the University of Dublin, they would certainly return it with a polite answer that they had not the slightest idea of entertaining such a proposal. He thought the Council ought not to pass such an unpractical resolution.

Mr. SIMON said the system against which the resolution was directed was one of strict limitation to a ten-minute examination by each examiner, a system liable to fail not only in the direction named, but also in the other direction—not only in the particular sense of occasionally unjustly plucking a man who might fairly be allowed to pass, but also in the sense of undue leniency in doubtful cases. It seemed to him that the Council could hardly improve on the course it took two years ago in the matter, when the resolution referred to by Mr. Teale was accepted by the Council, and communicated to the examining boards for their opinion. He thought that the resolution proposed by Dr. Chambers would be really very objectionable. He had been a teacher for many years, and thought that ten minutes was not necessary in all cases to satisfy an examiner absolutely that a man was unable to pass. That conclusion might often be arrived at in five minutes. Of course it was the doubtful cases which required time, and that time might sometimes go up to half an hour, and at other times to an hour; but a hard and fast rule that at least half an hour must be given would be just as faulty in one direction as was the hard and fast rule of the College of Surgeons that the examination was to be one of ten minutes.

Mr. MARSHALL said the Royal College of Surgeons of England was really chiefly implicated in the remarks made by Dr. Chambers and Mr. Teale. Mr. Simon had very properly drawn attention to a resolution passed by the Council, and to which there could not be the smallest possible objection. The Royal College of Surgeons contended that the decisions of their examiners did not contain an element of doubt. It might be said, no doubt, that their examinations should be longer; but he was quite sure that the examiners did not decide hastily where the case was a doubtful one. They had no difficulty in deciding the number that they should assign to the particular part of the examination; they were utterly blind to the result. Each examiner did not know the result of the examination of the other tables; the evidence of each was taken for what it was worth, and the verdict was given according to the judgment arrived at. He thought perhaps some kind of provision might be made for cases which might be termed doubtful. There were parts of the examination, especially the clinical, in which it was perhaps difficult to bring out a man's knowledge at once on certain cases presented to him, and there, perhaps, a little more time might be allowed. His oral examination on surgical pathology and treatment lasted twenty minutes already, but he had to pass through the hands of two examiners, and with regard to that part of the examination no alteration whatever was needed. Ten minutes was ample for an examination in the use of instruments or surgical anatomy; for, if a man could not describe the course of a large vessel or muscle in that time, it was perfectly certain that if they were to give him half an hour, it would be of no use. It was, however, possible that in the clinical part of the examination, a little more time might be given. He was sure that if everybody had half an hour the rejections would come to be about the same, and then there would be a demand for three-quarters of an hour or an hour. It was really a truth that a good, honest, conscientious examiner could determine in ten minutes whether a man had acquired a knowledge of his profession or not. He therefore hoped that the Council would not pass the resolution, but would be content with relying upon what was really a good resolution passed two years ago, and which would have its effect upon examining boards in time. The examining boards were just now in a state of threatened decomposition or re-composition, and they were unwilling to harrass themselves with any questions of detail, seeing that the results of their final examination might pass out of their hands. The Council must rely upon the honesty of the examiners; they had a very difficult task, and they must have the credit of desiring to do their duty and to take sufficient care to find out whether a man were fit to practise his profession or not.

Dr. LYONS suggested that, as Dr. Chambers had accomplished a great deal that was useful, and almost all that could be expected, by having the subject debated at considerable length, and as there might be a question as to the expediency of passing this resolution, the wisest course would be to withdraw the motion. There was a great deal open to consideration in regard to certain individuals who came forward for examination, and who were not gifted with a readiness of answering or displaying that knowledge, little or much, which they had acquired. Again, the fact of nervousness or the want of sympathy on the part of an examiner might cause a man to break down who was really fit to pass. These were all questions to be considered; and as he should not like to see the motion negatived, he hoped it would be withdrawn.

Mr. MACNAMARA spoke of the advantages resulting from following out the recommendations of the Council, that there should be a conference of the examiners, especially in doubtful cases. He thought the Council was, in this discussion, effecting a complete change of front. Formerly their efforts were directed to securing the rejection of incompetent candidates, but now they seemed to be going in an opposite direction.

Dr. HERON WATSON wished to point out one error into which Dr. Chambers had fallen. The final examinations of the Scotch bodies were not each for ten minutes as had been stated, but in the subjects of surgery and surgical anatomy they were forty minutes, in medicine forty minutes, in midwifery twenty minutes, in medical jurisprudence twenty minutes, while in clinical surgery and clinical medicine the periods were unlimited; and, furthermore, whenever there had been the slightest feeling of doubt on the part of a board of examiners as to the treatment which a candidate should receive at their hands, he had been sent back and re-examined by other examiners, who came fresh to the subject, and might be supposed to deal with a case without any undue partiality.

Dr. CHAMBERS said he did not think anything would be gained by putting the motion to the vote, but a good deal had been gained by the discussion upon it. He was, therefore, willing to withdraw the motion.

The motion was then, by leave of the Council, withdrawn.

Prosecutions of Illegal Practitioners.—On the motion of Sir HENRY

PITMAN, a communication from the Liverpool Medical Defence Association was received and entered on the minutes. It was forwarded last year to Mr. Mundella, who promised to give the matter serious consideration.

"The Liverpool Medical Defence Association desire to express their opinion that Clause 27, Sections 1, 2, 3, 4 should have inserted, after the words 'liable to a penalty not exceeding £20,' the following words, 'and to pay the costs of the prosecution.' They ground their opinion upon the fact that they have had to prosecute persons under the penal clauses of the Births and Deaths Registration Acts and Medical Acts, and though in one instance the individual was fined £5 and costs, and sent to the sessions, and from thence remitted to gaol for two months, the expense devolving upon the Association exceeded £90. Upon the Recorder being asked to allow the costs of the prosecution, he expressed himself as perfectly willing and glad to do so if he had the power, but it was found that no such power was given.

"A second case also occurred of a person being sent to the sessions for trial for breach of the Births and Deaths Registration Acts. He pleaded guilty, and was fined £5, and here again no costs could be obtained, although this case cost the Association between £30 and £40. The Association, whilst readily agreeing to the clauses in question, nevertheless feel that, as the prosecutions chiefly fall upon themselves and similar bodies, power should be given to the magistrates to order also the costs of the prosecutions, their experience leading them to the view that many notorious quacks and empirics would gladly forfeit such a sum as £20, even three or four times a year; but when the costs of a prosecution are added, it becomes a serious matter for their pockets, and it is only through this medium that they can be successfully reached. They would also suggest that in cases where either three or four convictions have been recorded, a term of imprisonment should be inflicted, basing their view upon the fact that it is already in the power of the court to sentence a person who shall have falsely pretended to be or practised as a solicitor to a term of imprisonment for a period not exceeding one year, and that, morally, it is a far greater offence to tamper with the life of a person than with their estate or effects. There is another point which the Association are desirous of bringing prominently forward. It is indisputable that a large number of qualified practitioners are in the habit of employing unqualified men, and placing them in charge of 'dispensaries,' or so-called 'branch practices.' They fulfil all the duties of the qualified practitioner, who, in cases of urgent illness, makes a visit, and is thereby enabled to sign a death-certificate if required, and thereby escapes the legal consequences of a breach of the Births and Deaths Registration Acts, though morally as guilty as the assistant. The Association would therefore suggest that a clause should be inserted, making it illegal (with a severe penalty attached), for 'an unqualified or unregistered person to take charge of, or conduct any branch practice, or dispensary, which is carried on apart from the residence of the practitioner.' This would completely put a stop to a practice which is both injurious to the patient and discreditable to the doctor; but it would not infringe the undoubted right of a medical practitioner to have an unqualified assistant, resident in the house, and acting under his own immediate supervision, experience having proved that the practical knowledge of the profession is best acquired by residence with a practitioner."

Unqualified Assistants. On the motion of Dr. CHAMBERS, seconded by Dr. PYLE, it was resolved:

"That the Executive Committee be requested to communicate afresh with the Lord President of the Privy Council and the Registrar-General, with a view to the enacting of such provisions as were suggested by the Council in its last session to prevent the delegation by registered practitioners to unqualified persons of duties strictly professional, and to prevent also the signing of misleading certificates of causes of death by unqualified assistants."

The Presidency of the Council.—Sir HENRY PITMAN moved the following resolution:

"With reference to the fact, adverted to from the chair at the opening of the present session of the Council, that Dr. Acland's term of office as President will expire on the 18th of July next, the Council request Dr. Acland that, if the Council shall not be sitting at the time when his term of office expires, he will favour the Council by remaining in office as President till the Council shall next afterwards assemble."

The Rev. Dr. HAUGHTON seconded the resolution, which was unanimously agreed to.

The PRESIDENT said that, having seen the motion upon the programme, he felt that there was but one course possible for him to pursue, namely, during the remainder of the work of the Council, as long as it saw fit, that he should continue to serve it; always understanding that, after the happy but responsible work which he had shared with the members of the Council for so many years, he should be glad at any moment to welcome his successor in the honourable office. The motion appeared, upon the whole, the most practicable course the Council could pursue. Nobody could tell what would happen with the Bill, and he was sure no one was in a position to say that it would pass. If it did not pass, then upon the Council, with its new president, in the autumn would devolve the serious duty of deciding what was to be done after five Bills had been passed through one branch of the legislature and withdrawn in the other. If, on the other hand, the Bill passed, he would then confer with his colleagues on the Executive Committee as to what course should be pursued in carrying out the provisions of the new Act. Once more, therefore, earnestly and gratefully thanking the Council for imposing upon him a responsibility which implied their general sanction of what he had endeavoured to do, he would resume the duties of president. [*Applause.*]

Examination of the College of Preceptors.—On the motion of Sir HENRY PITMAN, a second communication from the College of Preceptors was placed on the minutes. It gave the results of the recent preliminary examination for medical students and others, held by the College on March 11th, 12th, and 13th. The number of candidates examined was 230. Of the total number examined, 55 obtained certificates qualifying for registration as medical students. Of the 175 who failed to obtain qualifying certificates, 37 failed in one obligatory subject, 33 failed in two obligatory subjects, 30 failed in three obligatory subjects, 60 failed in four obligatory and more subjects, while 15, who passed in all the obligatory subjects, failed to obtain the minimum total of marks required for a place in the second division of the second class. The letter concluded as follows: "It will be seen from the above statement that the results of the examination are, on this occasion, very unsatisfactory, only about a fourth of the candidates who presented themselves having satisfied the requirements of the Medical Council for the registration of medical students. The number who failed in four or more subjects shows that a large proportion of the candidates were wholly unprepared for the test of any serious examination."

The usual formal business resolutions were then passed, and votes of thanks having been accorded to the various officers of the Council, the session was brought to a close.

IRISH GRADUATES' ASSOCIATION.—The annual metropolitan dinner took place at the Holborn Restaurant on St. Patrick's Day. The President (Professor G. F. Yeo) was in the chair. Forty-four guests and members were present. After dinner, Professor Yeo proposed "The Queen and the other members of the Royal Family," which was duly honoured. The next toast was "Our Guests," coupled with the name of Sir Joseph Lister. Professor W. Stokes (the President-elect) next proposed "Our Elders," coupling with it the names of Dr. Johnson, President of the Royal Medical and Chirurgical Society, and Dr. Hare, President of the Metropolitan Counties Branch of the British Medical Association—both of whom responded. Dr. Macnaughton Jones gave "Our Next Meeting," coupling with the toast the names of Dr. James Thompson, the honorary treasurer, and Dr. R. Daniell, the honorary secretary, to whose unceasing care, he said, the Association was specially indebted. The Treasurer responded, stating that the next meeting would be at Belfast, and that he hoped to be able to give a good account of his stewardship. Dr. Daniell also responded. The usual Council meeting was held before the dinner. Several new members were admitted, and the usual business transacted.

THE PARKES MUSEUM.—Among the members elected at the last meeting of the Council of the Parkes Museum, were: Sir William Bowman, Bart., F.R.S.; the Honourable Sir John Rose, Bart., G.C.M.G.; Sir Henry B. Loch, K.C.B.; Sir Frederic Abel, C.B.; Mr. J. Bonham Carter; Surgeon-General James Mouat, V.C., C.B.; Professor H. E. Armstrong, F.R.S.; Major H. B. Hamilton; Dr. S. O. Habershon; Mr. W. Emerson, F.R.I.B.A.; Mr. J. Cooper Forster, F.R.C.S.; Stephen Salter, F.R.I.B.A.; Dr. John Williams; Mr. Morrant Baker, F.R.C.S.; and Mr. Thomas Bryant, F.R.C.S.

THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.—An influential meeting, presided over by the Lord Mayor, was held on March 21st at the Mansion House, in aid of the rebuilding fund of £16,000 still required for this institution. Among the speakers were Mr. Marshall, President of the Royal College of Surgeons, Sir Risdon Bennett, M.D., Mr. S. Morley, M.P., Sir Hardinge Giffard, and Cardinal Manning, who had been convinced that there was very large room for special hospitals. This special hospital had a strong and irresistible claim upon the support of the public. The secretary announced subscriptions amounting to £1,500.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 12th, 1884.

MEDICAL LEGISLATION.

THE passage of the Medical Bill through the House of Lords was delayed by the difficulties which arose in settling the proportionate representation of the different universities and corporations on the divisional boards, which the medical authorities are to elect in each of the three divisions of the kingdom. The duties of the medical boards will include the regulation, subject to the control of the Medical Council, of the final examinations in medicine, surgery, and midwifery, for the admission of candidates to registration as medical practitioners; and also the choice of persons to serve on the Medical Council. Four such persons will be chosen by the Medical Board of England, two by the Medical Board of Scotland, and two by the Medical Board of Ireland; while six members of the Medical Council will be nominated by the Crown, and four, being half the number allotted to the universities and corporations, will be elected by the registered members of the profession.

In this manner, the universities and corporations will no longer be separately represented in the Medical Council. It might naturally be supposed that the educated and distinguished gentlemen who will as a matter of course be elected to serve as representatives of the universities and corporations on the divisional boards, would sink all individual jealousies, and devote themselves with one accord to the improvement of the education and examination of the candidates for the medical profession. To this great common object their energies should certainly be exclusively directed. It is, therefore, matter of surprise to outsiders to observe the struggles for supremacy on the divisional boards; no one university or corporation reposing confidence in the disinterestedness of another, especially in Scotland and Ireland.

The Lord President, in his attempts at conciliation, has been compelled to alter the proportionate representation. Let us trust that his efforts will in the end prove successful.

On the motion to go into Committee on the Bill, the Duke of Richmond made a direct appeal to the Lord President, and urged most strongly upon him that the Government should press the Bill through this session. His Grace, who has himself been the promoter of a Medical Bill, and who has therefore had personal experience of the difficulties attendant on medical legislation, declared that "it was a most important measure, and if the Government were really in earnest, they would have no difficulty in passing it." Lord Carlingford, in reply, said that "the noble duke knew how difficult was the navigation of a Bill like that, and that it had to be steered through a labyrinth of shoals and quicksands lying in all directions, among which were the jealousies and the vested interests, or fancied vested interests, of a large number of rival bodies. They had to deal with the jealousy of the universities among themselves, then with the jealousy of the different corporations, and then with the jealousy of the whole body of univerities in the country collectively, as against the medical corporations collectively....With respect to the Bill itself, he was glad to hear what the noble duke had said, and his appeal to the Government, because he felt strongly that it was their duty to take every means in their power to obtain the passing of that Bill into law before the end of this session; and he should be deeply disappointed if that were not accomplished."

The Duke of Richmond and Lord Carlingford are fully aware of the difficulties incidental to medical legislation, owing to the power wielded in the legislature by the universities and corporations; and the support of the profession is of great importance to the Government. There can be no question that if the profession, after soliciting the Government to undertake legislation, be not loyal in their support, the corporations will triumph, and the wretched competition amongst examining boards will continue for an indefinite period. No such opportunity for attaining the objects for which the profession has so long and arduously struggled has hitherto presented itself; no such opportunity, in all probability, will ever occur again.

The petition issued with the JOURNAL of March 15th, emanated from the chief officers of the British Medical Association, who have given close attention to the various points involved in medical reform for many years. It therefore commands the confidence of all members of the Association, who should lose no time in returning it, duly signed, to the General Secretary.

Quot homines, tot sententiæ, is an adage that must ever retain all its force; and of course all cannot be expected to concur in the policy advocated by the vast majority of the profession. Some, doubtless, entertain such a horror of "lady doctors," that they will not support the Government Bill because it provides for their examination and admission to the *Medical Register:* a majority of the profession disapprove of ladies qualifying as medical practitioners, but they are powerless to prevent it. The University of London confers degrees on women, the King and Queen's College of Physicians in Ireland grants diplomas to them, and the profession is powerless to exclude them from the profession. The Bill of the Government simply recognises the existing state of things. Several persons are of opinion that the repeal of the Apothecaries' Act will open the way to the practice of the profession by unqualified persons; but this is not the object of the Government, who desire to maintain all existing restrictions against illegal practice, and to strengthen the penal clauses against the illegal assumption of professional titles.

The Government and the leading members of the Opposition desire to pass the Medical Bill. Dr. Acland, the President of the General Medical Council, in his opening address on March 25th, stated: "It seems to me that the time is come when we ought strenuously to endeavour, individually, if not collectively, to bring every influence to bear which may aid in settling medical legislation, for some years to come, during the present session of Parliament. The reasons for this course are simple and convincing. The present Government naturally desires to carry out the recommendations of the Royal Commission appointed by themselves. Though the report of that Commission was only a 'majority-report,' yet this very fact proved both the difficulty of the task and the impossibility of absolute unanimity."

Let the knowledge of the impossibility of absolute unanimity govern us all; and, above all, let us not mar the prospect of obtaining what is undoubtedly good and important—conjoint boards of examination and an improved Medical Council—by aiming at what Parliament will never grant; in fact, by aiming at the unattainable.

EDUCATIONAL OVER-PRESSURE IN ELEMENTARY SCHOOLS.

FOR some time the subject of educational over-pressure has agitated the public mind, and already it seems evident that there are two more or less opposed parties in the agitation. The Education Department, the majority on most school-boards, and what may be called the official portion of the organisation for carrying on the elementary educational work of the country, are of opinion either that no educational over-pressure exists in elementary schools, or that the cases in which it occurs are very exceptional, and such as must be expected to happen in any organised system of education that could possibly be devised. The other side is represented by parents, who see, or think they see, their children suffering from the overwork of schools, and by the minority (often consisting of only one or two members) on some school-boards. But it is quite possible that the voices of these persons would have been silenced by the louder noise of the official voice, had not a stream of medical opinion, made up of tributaries from widely separated parts of the country, united to swell the volume of the complaints they were making on the subject. There can be no doubt, for instance, now, that one or two children have actually committed suicide owing to their felt inability to grapple with their school-difficulties, and there can be equally little doubt that a few children have died of diseases brought on, in the opinion of the medical men, by overwork at school. A question arises, of course, as to the number of such cases and their proportion to the whole number of children attending elementary schools. The proportion has never been said to be large. The educational system of the country, indeed, could not stand for any length of time if it were so. But for our own part, we fail to see the necessity of sacrificing any children in the effort to educate them, and we think it must be taken as *primâ facie* evidence against a system if it can be shown that even a few children have been done to death by efforts to train them. The official defence is that the mortality among children to-day is not only not greater, but is actually less than it was before there was any system of compulsory elementary education in the country. Two periods are compared together, 1838 to 1854, and 1876 to 1880. In the latter period, among children of from 5 to 10 years of age, it is said there has been a diminished mortality of nearly 35 per cent., of which only 6 per cent. is due to improved hygiene. We must say that, considering the heavy incidence of the zymotic diseases at these ages, and considering the immense diminution that has been effected among them, 6 per cent. seems to us a very small proportion of reduction to be attributed to improved hygiene. But as the figures appear to be stated on the high authority of Sir Lyon Playfair, and as we have not been able to check them, we accept them for the sake of argument. It is further stated on the same authority that all diseases among children show a diminished mortality in the latter period, all that is, but one. But the one is rather an important exception; for brain-disease among children has not diminished as have the other diseases of childhood since 1854. The natural inference from this fact is that some cause or causes are acting to prevent the reduction of child-mortality from brain-disease, coincidently with the diminution from other causes of fatality. This is in fact the very inference made by parents of scholars at elementary schools, by a minority of members of school-boards, and by the medical men whose powerful influence has prevented the voice of these from being silenced or drowned. And when we come to examine the question more closely, the compulsion to draw the inference that some disturbing causes are at work to send up the mortality from brain-disease, or, at least, to diminish the nervous vitality of our children the compulsion to draw this inference is increased rather than otherwise. On a recent occasion, a deputation of medical men waited upon the Bradford School-Board to urge on them the advisability of relieving children under 10 years of age from the necessity of doing home lessons. That deputation urged various considerations in support of their prayer, and, among them, stated that the mortality from hydrocephalus at the ages of 5 to 25 years, that is, at school and post-school ages, is relatively greater now than it was ten years ago. In 1870, it was said, there were registered 7,423 deaths in all from hydrocephalus. Of these, 6,138 occurred among children under 5 years of age, and 1,230 among children and young persons from 5 to 25 years of age; that is, the deaths under 5 years of age were to the deaths from 5 to 25 years of age as 5 to 1. But, in 1880, after the Education Act had been some years in operation, the total deaths from hydrocephalus were 8,514, and, of these, 6,748 occurred among infants under 5 years of age, while 1,613 took place at 5 to 25 years of age; that is, the proportion of deaths from this disease at school-ages and post-education ages had risen to about a quarter, or, in other words, showed an increase of nearly 20 per cent. in 10 years. If the figures had been given for 1868, the result would have been still more strikingly against the later year; but, although Dr. Crichton Browne quotes statistics beginning from that year, we do not do so, because, for some reasons which are not apparent, and which we have not mastered, the mortality from hydrocephalus under 5 years of age was much higher than the average, and leads to erroneous results on comparing it with that from 5 to 25 years from the same cause, and on comparing 1868 with other years.

The figures quoted to the Bradford School-Board naturally attracted some attention; questions were asked about them in both Houses of Parliament. In reply to one of these, Mr. Mundella stated that the figures were not corroborated by the Registrar-General. We understand that a correspondence is now proceeding on this question, and that Mr. Mundella's statement has been challenged. We do not know what may have been in his mind when he gave his answer in the House of Commons, but suppose he was thinking of Sir Lyon Playfair's figures.

Before Mr. Mundella's reply has been received, it would of course be premature to say much on the point; but this much we may say, that he will not be able to make good his denial by pointing to an error in the figures, since we have satisfied ourselves that they are correct to a numeral. Of course, the inferences to be drawn from them are another matter, and so is the question whether they tally with the results of further inquiry into child-mortality from other forms of brain-disease. But, indeed, this consideration is not the most important part of the case, for even if it can be shown that no decided increase in child-mortality has taken place from educational over-pressure, this will not prove the non-existence of educational over-pressure. By far the most subtle and dangerous effects of brain-forcing are just those that do not appear in the mortality-statistics of school-ages, but show themselves in the deteriorated lives and chronic invalidism of adults, with, perhaps, an increased mortality in after-life from nervous affections. The medical deputation to the Bradford School-Board did well to point to the large increase in the mortality from nervous affections, and to pray the Board not to be the unwitting cause of a still further increase of this mortality in the next generation, by adding brain-forcing to the causes already in existence, which seem almost in the nature of things to increase the hurry, and excitement, and worry of life. In the meantime, however, it cannot be denied that a very important agitation is going on, not against compulsory education, of the necessity of which almost all parties are convinced, but against the mode in which compulsory education is being at present conducted in elementary and higher grade schools, and that the agitation shows a *primâ facie* case for further inquiry.

According to some of the most important writers on the subject, the system of payment by results is one of the chief causes of the over-pressure which is weighing down, it is said, teachers and taught alike. It is plain that the all-important necessity of earning grant—the necessity, that is, of earning a livelihood—must press heavily on teachers and school-managers under this system, and may lead teachers to over-press scholars, as it may compel managers to over-press teachers. On the other hand, it is plain that it ought not to be too easy to obtain grants of public money; and we know very well what unworthy means of obtaining grant might be resorted to, if strict supervision were not maintained. We think the spending of public money can hardly be too carefully watched, but would, on the other hand, point out that more depends on the character of teachers than on any possible means that can be suggested [illegible]. If teachers of high character are chosen, much may be left to their judgment and sense of honour. If the teachers [illegible] supervision will prevent their imposing on managers on the one hand, or on scholars, and through them on parents, on the other. It should also be remembered that lawyers and doctors and clergymen are all paid for their work irrespective of results, it being assumed that their interest in their work will be a sufficient stimulus to induce them to do it conscientiously. Indirectly, of course, all men are paid by results—all men, that is, who are not protected by a monopoly—since the public naturally employ those who are most successful; and this is the cause of the better success of one teacher than another in private schools. This being so, teachers may, it seems to us, fairly grumble that a harder test is applied to them than is used to other professional men; and the grievance is so strong, that it does not appear to be tolerable, unless no other method of remunerating them can be safely devised. This has certainly not yet been proved; and, therefore, up to the present, the advantage of the argument seems plainly on the side of the teachers. In the words of a speaker at a recent public meeting on this question, the indications, therefore, seem to be that we should take great care in our selection of teachers; and, when we have chosen them, we ought to allow them a reasonable discretion as to how they choose to do their work. For the rest, whatever may be the result of the inquiry which is now proceeding as to the effects of education on child-health, we feel that the public are justified in demanding that the schools be made suitable for the children, and not the children adapted to the schools.

THE RELATIONSHIP BETWEEN SCARLATINA AND DIPHTHERIA.

It has frequently been held that the relationship between diphtheria and scarlet fever, in origin and pathology, is of a very intimate character, and evidence which goes far to support this view is rapidly accumulating. When enquiring last year into an outbreak of diphtheria at Sutton-in-Ashfield, Dr. Parsons, of the Local Government Board, found that this disorder and scarlatina had existed side by side, and that in some cases one disease appeared to have been contracted from the other. Whether this was due to mutual or common causation, or merely to the difficulty of correctly diagnosing between them, Dr. Parsons hesitates to say. That both diseases did not exist is beyond question, since some cases were marked by red rash, and followed by desquamation of the skin and renal dropsy, while other cases had no rash, but were followed by paralysis. About November, two cases of what appeared to be scarlet fever occurred in an isolated group of cottages. When they were recovering (the exact date could not be ascertained), a neighbour came to the house to help them with the washing. Shortly afterwards three of the children of this neighbour were taken ill, one on December 23rd, two others at the end of the month; of these latter both died, the cause of death in one case being certified as "scarlatina maligna," in the other as "diphtheria." In April of last year the continued prevalence of these two disorders was again the subject of investigation by Dr. Parsons, who discovered additional instances of one disease being apparently contracted from the other. In some cases the first patient in a family was taken ill with vomiting, sudden accession of fever, red rash, and other symptoms of scarlet fever; but other members of the family, taken ill a few days or a week or two later, suffered from what was pronounced to be diphtheria, having no red rash, but white patches on the throat, and in one or two instances subsequent paralysis of the muscles of the pharynx. In other instances the children of neighbours, who had associated together, had had at the same time, some what was called diphtheria, others what was called scarlet fever. One boy, taken ill apparently with diphtheria, having white patches on the throat, after three or four days developed the rash of scarlet fever, which was followed by anasarca, of which he died. On the other hand, in one family in which four members had suffered from scarlet fever in November, two children had diphtheria in January, viz., one who had had scarlet fever in November and one who had escaped; the cases both of scarlet fever and of diphtheria being typical ones.

Further evidence of the concurrence of the two diseases is afforded by Mr. W. H. Power, who has recently been enquiring into the circumstances attending outbreaks of diphtheria at Whitstable and Dunmow. At the first place the disease commenced in October, and rapidly extended during the following three months, when scarlatina began to appear. For a time the two diseases were concurrent, and even, in particular instances, attacked at one time different members of the same family. But soon the diphtheria began to disappear, while the scarlatina became more prevalent. From the beginning of February 1881 to the end of April, but seven cases of distinct diphtheria were heard of, against some forty in the previous three months and a half, and seemingly by May, diphtheria had wholly disappeared from the town, not to be heard of again. Meanwhile, scarlatina became increasingly fatal; in the quarter ending March it caused nine, and in the June quarter no fewer than fifteen deaths. In the next quarter, that ending September 30th, the scarlatina-epidemic declined, fatal cases numbering three only, and diphtheria began again to appear, two cases of that disease proving fatal. By the end of the year both diseases had well nigh disappeared from the town. After this, nothing more was seen of scarlatina, but with the beginning of 1882, diphtheria began again to increase, and remained more or less prevalent thoughout the year. Mr. Power observes that during this outbreak more than one medical man had difficulty in diagnosing between the one and the other disease. Setting aside nondescript minor sore-throat, the etiological relations of which might only be guessed at, there occurred cases of smart throat-illness, associated with distinct skin-rash, and altogether free from faucial false membrane, that at no period of their illness or convalescence betrayed any sort of tendency to peeling of the skin such as usually follows. Upon questions hence arising, Mr. Power refrains from commenting, beyond remarking that there can be no doubt of the main facts as to concurrence of diphtheria and scarlatina, the subsequent dissociation of the diseases, and the difficulties of diagnosis.

At Dunmow, there was a curious group of cases presenting a similar concurrence of the two disorders. The group occurred at an isolated farm-house which had been turned into two labourers' dwellings. To one of these dwellings, the eldest daughter, who had been away in service, and had there caught scarlet fever, came home convalescent on April 14th. All care appeared to have been taken to disinfect her clothes and person before sending her home. Eight days after her arrival, one of her sisters, aged 14, was taken ill on April 22nd, and died on the 24th of "malignant sore-throat." Next day three more of the family, aged 12, 9, and 3 years, were seized with the same complaint. One died on the 25th and another on the 26th. The youngest lived a week longer, and appeared to be recovering, but relapsed and died on May 4th. In this case in the relapse there was an appearance of petechial blotches on the skin. This death was registered from "diphtheria," and the medical attendant considered that the earlier deaths were from the same disease. A child in the adjoining dwelling, under the same roof, was taken ill with sore-throat on April 24th, and developed the rash of scarlet fever about the 30th, followed by desquamation on the chest, legs, and arms. Four other children in the same family escaped. A woman, residing a quarter of a mile away, who came to help in nursing the sick children and laying out the dead bodies, was attacked with diphtheria on April 29th, and died while sitting in her chair on May 2nd. It is difficult, Mr. Power observes, to disconnect this string of events from the recent arrival of the convalescent scarlatina-patient. Dr. Bond, who, as health-officer of an immense area, has ample facilities for observation, is convinced of the relationship between the two diseases, of which he gives a remarkable illustration. At the close of 1882, forty children were suddenly smitten by an attack, the precise nature of which it was by no means easy to identify. The only invariable symptom was a more or less congested condition of the throat and tonsils, accompanied in several cases with localised ulcerations, and very rarely with anything like true diphtheritic exudation, but with occasional croupy tone of voice. In the absence, in the majority of the cases, of the characteristic symptoms of specific diphtheria, the presence in the district, at no great distance from these cases, of unquestionable scarlatina, the want of any conditions to explain an outbreak of specific diphtheria, and the existence about the same time of similar ambiguous cases of the same kind in other parts of the district, led Dr. Bond to believe that he had to deal with an aberrant and ill-developed form of scarlatina, modified to some extent probably by some obscure local or personal influences. Dr. Bond adds that every year tends to confirm in his mind the belief that though scarlatina generally originates from direct personal infection, and though typical diphtheria often has a purely local origin, especially from sewer-emanations finding their way into houses, these diseases are due to an infection which in all cases attacks the throat, propagates itself mainly from the throat, and which may in passing from one person to another undergo such modifications as will give rise in one case to a characteristic outbreak of scarlatina, in another to an equally characteristic attack of diphtheria, and in a third to a mongrel type of affection which it is difficult to refer dogmatically to either of these diseases, or identify by any other name than bad sore-throat, and which is, in fact, a connecting link between them.

LIGHTING AND SEEING.

Within the last few years, the monopoly long enjoyed by the gas-companies has received a serious shock from the introduction of the electric light, and the fear of competition has induced the gas-engineers to devise material improvements in their methods of illumination; while, on the other hand, the spirit of commercial rivalry between the various systems of electric lighting, which it must be admitted is still in its infancy, has led to every kind of unhealthy, if not actually fraudulent, manipulation of the share-market, in order to reap a harvest of profit before another and better system shall have superseded each of those at present in existence.

It is well, then, to pause for a moment, and turning from the battles of patentees and shareholders to inquire, as the guardians of the public health, into the physiological action, especially on the eye itself, of the several modes of artificial lighting as regards the intensity, proximity, and colour of the actual light, the heat given off by it, and the influence on health of the products of combustion. Not till these questions have been decided, are we in a position to pronounce a judgment as to the superiority of one system over another, or justified in considering the relative cost. Even then, we may find that what is ill adapted for the illumination of houses may be advantageously adopted in our streets, for differing circumstances call for different expedients.

As regards intensity, the experiments of Czerny and Deutschmann have shown that direct exposure to the rays of the sun causes coagulation of the albumen in the fluids of the eye, and acute inflammation of the retina, followed by atrophy and degeneration, which neither the darkest grey or blue glasses, nor the interposition of a tube of water 20 centimètres long, which would effectually intercept the non-luminous calorific rays, can prevent.

The phenomena of snow-blindness caused by the perfect reflection of the sun's rays from non-absorbent surface of the snow have been well described by Reich, as observed by him among the Russian soldiers employed on the mountain-roads in the Caucasus, as consisting in acute inflammation, intolerance of light, spasms of the lids, and contracted pupils. The strongest men were often attacked, while others felt no inconvenience whatever. All recovered after a few days' careful treatment. Very similar symptoms have been recorded in four or five instances as following long and direct exposure to the electric light while adjusting the carbons by hand; but the men employed, not only in electric light works, but in other factories where electric has superseded gas-light have been, when asked, unanimously in its favour. Czerny and Deutschmann entirely failed to induce inflammatory changes by gas-light.

The practical conclusion seems to be that, though direct exposure of the eye to electric light, even perhaps at some distance, is not desirable, no diffused light can by any possibility be too strong, the strongest of all—viz., daylight—being the most agreeable, just because its source is the furthest removed. Removal of an intense light, such as the electric, from view, *i.e.*, placing it in such a position that its rays shall not fall directly on the eye, is preferable to the use of globes of milk-white or ground glass, since these diminish its intensity by from 30 to 60 per cent. Such a removal is easy enough out-of-doors, by raising the height of the lamp-posts, while its practicability indoors, subject to certain architectural arrangements, is shown by the lighting of the Imperial Parliament House in Berlin.

The ill effects of working with deficient illumination are evident. Distinctness of vision, as measured by the smallest visual angle at which an object—*e. g.*, the E on Snellen's cards—can be clearly seen, varies with normal eyes in arithmetical progression as the intensity of the light varies in geometrical; but the clearness of vision in short-sighted persons, and in those past forty years, diminishes far more rapidly with deficient illumination. The approximation of the object to the eye which a want of light necessitates puts a severe strain on the muscles of accommodation, increases the internal pressure, and stretches the vascular and other coats of the eyeball, gradually elongating its axis, and, aggravating shortsightedness where it already exists, induces it in those previously normal. This has been shown beyond the possibility of doubt by the statistics of the various classes in eight of the German gymnasia, the uniformity of the educational system giving a precision to such investigation; among 9,400 pupils, the percentage of short sighted in the several classes, from the lowest to the highest, having been found to be 22, 27, 36, 46, 55, and 58. The position of the lights in schools, as regards the pupils, and the protection of their eyes from the glare and heat, are matters for consideration; but, as Javal says, "Il n'y a jamais trop, il n'y a jamais assez, de lumière artificielle;" and Soyka gives it as his opinion that the test of sufficient illumination is the power of reading diamond print comfortably at half a yard's distance.

Of scarcely less importance is the amount of heat given off by a light; the dryness of the conjunctiva caused by the rapid evaporation of its moisture is familiar to all, especially those who read and write much by night. Cohn, Grätz, Fischer, and others, have shown that, given the same amount of light, candles cause a thermometer exposed to their rays to rise twice as high above the temperature of the room as an ordinary gas-flame, which in its turn gives out at least twice the heat of an incandescent electric light. Cohn, in the course of some inquiries fifteen years ago, was surprised to find that while fifty per cent. of compositors were short-sighted, only nine per cent. of watchmakers were so, notwithstanding their habit of working with the light only 18 to 25 centimètres (7 to 10 inches) from their eyes; but, on questioning them further, he learned that seventy-five per cent. of them preferred petroleum, on account of its not drying their eyes as much as gas.

The question of colour has not yet been worked out; the battle of blue and yellow spectacles is being lustily fought among the French oculists, though elsewhere the preference is still given to the blue. It has, however, been asserted that the electric light is inferior to oil-lamps in its power of penetrating a thick and foggy air, and that, consequently, its employment in lighthouses presents no great advantages. If this be the case, it is probably due to the fact that, with equal intensities, the oil-light contains an excess of yellow rays, which are, undoubtedly, more penetrating than the blue; but, as this affects outdoor lighting only, it has no medical or sanitary interest.

Lastly, a flickering light is trying in the extreme; and this defect precludes the use of the arc-light indoors, though its freedom from heat would be, at first sight, a strong recommendation. In this respect again, the "regenerative" gas burner has an immense advantage over other forms, to say nothing of its sanitary features.

The deterioration of the air of rooms by the products of combustion has been so often insisted on, that we need not further allude to it here. It is extraordinary that the old-fashioned naked gas-jets hold their ground almost everywhere against the numerous effective contrivances for carrying off the noxious gases and effecting ventilation.

We may, however, call attention to a few of the more striking contrasts shown by the well known engineer, Herr Hobrecht, between systems of lighting or apparatus in other respects allied. For instance, the superiority except as regards its flickering of the arc over the incandescent light is seen by the fact that, while neither yields any products of combustion, the former evolves, for every 100 German candles, from 57 to 158 units of heat per hour, and the latter 290 to 536 at a greater expenditure of horse-power and pecuniary cost. Again, comparing three forms of gas-lamps, Siemens' regenerative burner, the argand, and the common batswing, the cost of these is respectively 8, 14, and 36 pfennings (100pf. = 1s.); the carbonic acid given off 0, 0.46, and 1.14 cubic mètres; and the heat 1,500, 4,800, and 12,150 units. Petroleum lamps with round wicks give off 0.44 cubic mètres of carbonic acid, and 3,600 thermal units, while flat wicks give over twice as much, viz., 0.95 cubic mètres of carbonic acid, and 7,200 units of heat for the same light; while candles of all kinds, wax, stearin, and tallow, are twice as injurious and incomparably more expensive, a tallow-candle costing thirty, and a wax-candle sixty times as much as a petroleum round wick, a Siemens' gas-burner, or an electric light.

The Library of the Royal Medical and Chirurgical Society will be closed from Good Friday to Easter Monday, both days inclusive.

Dr. Arthur W. Edis has been unanimously elected obstetric physician to the Middlesex Hospital.

We regret to learn that a student of St. Thomas's Hospital, acting as "*post mortem* clerk," has recently died of pyaemia, contracted in the execution of his duties.

Messrs. D. H. Menzies, of Glasgow, have published a lithographic portrait of Sir Spencer Wells. It is a speaking likeness, and excellent as a work of art.

The great fire at Messrs. Pardon and Sons, Paternoster Row, destroyed the entire edition of the second volume of Dr. Morell Mackenzie's book on *Diseases of the Throat and Nose*. It will, however, be possible to reprint the work from proof-sheets in the possession of the author, but the publication will necessarily be delayed for some months.

Mrs. Weldon has appealed from the recent decision of Mr. Baron Huddleston non-suiting her in her action against Dr. Forbes Winslow, and has moved for a new trial. Her arguments have been mainly directed to show that, whilst he had the power to "receive" lunatics brought to his asylum, he had no power to fetch them. In the Queen's Bench Division, on Tuesday, Mr. Justice Manisty and Mr. Justice Williams gave judgment on the motion. After stating that the case was one of great importance, Mr. Justice Manisty said the question of legal malice should have been left to the jury; and Mr. Justice Williams concurring, the rule for a new trial was made absolute.

Mr. Baron Huddleston this week gave judgment in a case in which the widow of a stevedore, named Heckmore, brought an action against the guardians of St. George's-in-the-East for compensation for loss of her husband, who committed suicide whilst in the infirmary. He decided that the guardians had been guilty of negligence, and awarded the woman and her children £350 compensation. This verdict materially adds to the responsibilities of hospital-managers generally. At the same time, we are inclined to think that some increased vigilance in respect to the night-watching of turbulent and dangerous patients would be amply repaid, not only in the better safeguarding of such patients, but in the greater quietude and better care generally at night of ward-patients.

By inaugurating a system of physical training in our board-schools, the authorities have taken another step in the right direction. We learn from the *Charity Organisation Reporter* that an officer of the Swedish Royal Guards arrived in England a fortnight since to organise the Ling system of calisthenics in vogue in that country, and at once commenced to put squads of teachers and children through a course of instruction. No dumb-bells or weights of any sort are used, and thus the weakest are not debarred from these exercises. Their effect on the health and physique of town children should be invaluable. The manual drill commonly taught in this country is marked by such an utter absence of life and intelligence, that it is of little or no educational value; but the lively rhythmic movements elsewhere in use are good for the brains as well as for the muscles of those children especially who need to be taught how to play.

VOTE OF CONDOLENCE FROM THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

At the meeting of the Royal Medical and Chirurgical Society on Tuesday evening, April 8th, the President, Dr. George Johnson, announced before the proceedings opened, that the Council had unanimously agreed to forward to Her Majesty the Queen and the Duchess of Albany an address embodying their most heartfelt condolence in the bereavement from which they had suffered by the death of his Royal Highness the Duke of Albany.

THE JURISPRUDENCE OF CREMATION.

In a recent lecture, Dr. Comyns Leach, having dealt with the religious and sentimental reasons urged against it, referred to the objection that it would be used to destroy evidence of crime. To prevent this, he proposed that a person who desired cremation should sign a request to that effect during lifetime, that a certificate that death was natural should be given by the medical man who attended the deceased, and that, in default of this, a *post mortem* examination should be made. He believed, despite the opinion expressed by Sir W. Harcourt, that had the Liverpool poisoners known that the burial of their victims would be subject to such conditions, the crimes would not have been committed.

TENEMENT-HOUSES.

The refusal, last week, of the Vestry of St. Pancras, amidst "cheers and laughter," to adopt the regulations suggested by the Local Government Board for houses let in lodgings, appears to be due less to any objection to the regulations themselves than to an unwillingness to control by such means the sanitary condition of this class of property. Although objection was taken especially to two or three sections, the proposal to refer the subject back to the Sanitary Committee for the purpose of having the objectionable sections expunged, met with no support, and had finally to be withdrawn; and thus the regulations came to be rejected by a vote of 45 to 9. Whether the Sanitary Committee will make any further effort to deal more seriously than heretofore with the sanitary condition of the dwellings of the poor, remains to be seen; probably, however, other regulations would not have a more happy fate than those already rejected. The vestry has certainly not acted wisely in choosing the present moment for thus refusing to regulate tenemented houses; with the question of the present government of London before the House of Commons, it was surely supplying too much material for Sir William Harcourt's argument.

HOW TO PREVENT AN EPIDEMIC OF SMALL-POX.

The metropolis is again threatened with an epidemic of small-pox. The disease, which broke out some weeks ago in the north-eastern district, is now prevalent in Hackney and one or two adjoining parishes, and the number of cases under treatment in the Asylum Board Hospitals has risen from 150 in the middle of March, to 273 on April 7th. The frequent occurrence of outbreaks of small-pox in London, and the great expense entailed by treating and isolating the cases in hospitals, make us ask the question, Can an epidemic of small-pox be prevented? It is a well known fact that a very large proportion (75 per cent. being the average) of those nowadays attacked with small-pox have been vaccinated in infancy, but that, after a time, the protection against small-pox afforded by vaccination seems to die out. We have before us statistics of 17,756 cases of vaccinated small-pox cases of all ages, treated in the London hospitals from 1871 to 1881. Of these, 15,903, or 90 per cent., were over ten years of age, while only 10 per cent. were under ten years. This shows in a sufficiently definite manner that, of the vaccinated population, children under ten are very little liable to small-pox, and that the incidence of small-pox is in those who have passed the age of childhood, and are entering on, or have reached, adult life. To afford protection against small-pox to adults in the same measure as we now do to children by vaccination in infancy, is clearly the only effective means (apart from isolation in hospital or at home) of preventing epidemics of small-pox; and, to effect this, a second vaccination should be performed soon before or at the age of puberty. We have frequently instanced the experience of small-pox hospitals, where the staff there employed are revaccinated, to show the complete immunity from small-pox enjoyed after revaccination by those engaged in nursing the sick. If the public would protect itself against small-pox in the same way that officials of small-pox hospitals do, this loathsome and dangerous disease would never assume the proportions we have been accustomed to see during the past fifteen years. To prevent an epidemic of small-pox, we unhesitatingly say that the only effective measure is revaccination.

SPONDYLOLISTHESIS.

As we announced last week, a very erudite paper was read upon this subject before the Obstetrical Society at its last meeting, by Dr. Franz Neugebauer of Warsaw. The sliding forward of the lower lumbar vertebræ upon the sacrum, which is the form in which this affection has generally been observed, never occurs in consequence of caries, as has been stated, but may be the result of one or other of two conditions: the one (which is the least frequent) is fracture of the articular processes, a condition which favours the production of this deformity. The other cause is non-union of the ossific centres of the laminæ with those of the body of a vertebra. The author had found eighty examples of this want of union, but in only seventeen of these had there been spondylolisthesis. The deformity only takes place when much weight is brought to bear upon the undeveloped vertebræ, such as occurs in child-bearing or in obesity, and the displacement takes place by elongation of the cartilaginous or fibrous union between the bodies and laminæ of the vertebræ. The subject excited considerable interest, and a committee was formed to examine and report upon the interesting specimens and photographs of specimens which Dr. Neugebauer had brought with him. This committee was formed of two Fellows of the Society, Dr. Robert Barnes and Mr. Alban Doran, with the addition of Mr. William Adams and Mr. Noble Smith.

SMALL-POX IN SUNDERLAND.

Small-pox is evidently spreading rapidly in Sunderland; during the last quarter of 1883 more than 250 cases of this disease were reported; during the first quarter of the present year, more than twice that number of cases, and over 50 deaths were registered. Sunderland is, therefore, threatened with a serious epidemic of small-pox, and the hospital accommodation is altogether inadequate. The need for further provision has already been much pressed upon the Town Corporation, and is likely to be more so as the result of a recent occurrence in the town. A man who was suffering from compound fracture of the leg, in the infirmary, developed small-pox, and in default of accommodation in the infirmary itself, or of a spare bed in the Corporation House of Recovery, was removed to the workhouse hospital, where he appears to have recovered, at any rate to some extent, from the injury to his leg, and from his attack of small-pox. He was then removed to the house of the tailor to the workhouse, the Governors of the infirmary preferring to pay for his maintenance there rather than allow him to be readmitted into their institution, where it was feared he might expose the patients to risk from small-pox. But his removal to the tailor's house was followed by his death, and it is alleged as a result of his removal from place to place. The coroner has, however, refused to hold an inquest, and no further light may be expected to be thrown on the case; but, however this may be, there is no doubt that Sunderland requires, and that speedily, further hospital accommodation for infectious diseases. Sanitary authorities are slow to learn that the chief use of such an institution is the removal of the earlier cases to hospital, and that a single person suffering from an infectious disease, and left in his own home, may do an immensity of harm. It would be interesting to learn how far the rapid growth of small-pox in Sunderland may be due to such a cause.

MICRO-ORGANISMS IN DISEASE.

A very distinguished audience assembled at the Parkes Museum, on March 27th, to witness Mr. Watson Cheyne's demonstration of pathogenic micro-organisms. Mr. Cheyne stated that the great group, commonly called bacteria, might most conveniently be subdivided into four classes: 1, micrococci (round bodies); 2, bacteria (small oval or rod-shaped bodies); 3, bacilli (large rod-shaped bodies); and 4, spirochætæ and spirilla (rods spirally twisted). He then demonstrated numerous micro-photographs taken by Dr. Robert Koch, as well as some drawings, by means of a lime-light apparatus. He observed that the bacteria varied widely in their behaviour towards the human body. The true pathogenic organisms were able to attack the living body and multiply in it; they included the organisms which found entrance through some wound giving rise to the traumatic infective diseases, and others which could obtain entrance without observable wound. Further certain organisms, such as the bacillus anthracis, were capable of growing outside the body in dead organic substances, while others, such as the bacillus tuberculosis, though they long retained their vitality in the dry state, were apparently only capable of developing in the living organism or under artificial conditions, which reproduced to some degree those existing in the tissues of warm-blooded animals. To establish the proposition that a given morbid state was due to micro-organisms, it was necessary that an organism of a definite form and with definite characteristics should always be found in the blood or in the affected part; that the blood or the affected part, when inoculated into another animal of the same species, produced the same disease; that when the blood or the affected part was inoculated on a suitable soil outside the body, the micro-organisms grew, and could be indefinitely propagated on similar soil; and that, when in this manner the organisms had been separated from the remains of the materials in which they were imbedded, their inoculation in an animal produced again the same disease, the same organisms being found in the diseased parts. The conditions had now been fulfilled with regard to anthrax, septicæmia of the mouse, erysipelas, tuberculosis, glanders, and acute pneumonia. With regard to typhoid fever, relapsing fever, cholera, and ague, the evidence was very strong but not conclusive. Mr. Watson Cheyne concluded by dwelling on the importance of surrounding circumstances, chiefly those summed up in the phrase un-hygienic conditions, as concomitant causes of disease by preparing the body for the attacks of these micro-organisms. The [illegible] Sir [illegible] [illegible] that the [illegible] were only able to develop under very special conditions, instancing the [illegible] [illegible] [illegible] [illegible] favourable to the development of the bacteria, was one of very great interest: as it was possible to conceive that, by the administration of some medicine, sufficient alteration might be produced in the blood of the human system to kill off or to prevent the development of any special bacteria on the first appearance of the symptoms of the disease in the patient.

OVARIOTOMY IN INFANCY.

DR. ROEMER, Assistant-Surgeon to the Augusta Hospital, Berlin, has recently published, in the *Deutsche Medicinische Wochenschrift*, a case of ovariotomy performed by him on a child aged one year and eight months. At the birth of the child, the midwife observed that its abdomen was much distended. There was little difficulty in diagnosis, and the pelvis was readily explored though the rectum. The tumour was removed last August, under corrosive sublimate spray; it was "of the size of a child's head," and there was slight adhesion of the omentum. The pedicle was long and thin, and was secured by a double catgut ligature. The right ovary was the seat of disease, the left was perfectly healthy. The tumour was dermoid, containing hair, bone, and cartilage. After the operation, the child was tied gently but effectually on to its cot, and opiates were given when required. It was fed on cold milk and wine. The highest temperature was 101.6°; this point was reached on the evening of the second day. On the fifth, the child's bowels were freely opened by five minims of castor-oil administered twice; on the twelfth, the abdominal sutures were removed. The child recovered perfectly. Dr. Roemer gives the following statistics of ovariotomy performed on children. One of the youngest cases next to his own was under the care of Dr. Neville of Dublin: the patient was two years and eleven months old, but only survived the operation for two hours. Busch operated on an infant aged two, Alcott on a child aged three; both cases died. Schwartz operated successfully on a child aged four; Barker on two, and Knowsley Thornton on one aged seven; and Spencer Wells, Cupples, and Chenoweth, each on one child eight years of age.

THE BIRMINGHAM MEDICAL INSTITUTE.

A BIRMINGHAM correspondent writes:—The annual meeting of the members of the Birmingham Medical Institute was held on March 27th, under the chairmanship of Dr. Wade, the retiring president. The report shows that the building is free from debt, and that the number of members is steadily increasing. The library now contains 10,803 volumes, while 45 British and foreign periodicals are supplied to the reading-room. The annual deficiency of income as compared with expenditure is being reduced. This year, the deficit amounted to £49, and this sum was generously made up by Mr. Crompton, one of the oldest and most liberal supporters of the institute. Dr. T. Underhill, of West Bromwich, has been chosen president for the ensuing year; while Dr. Agar, of Henley-in-Arden, and Mr. Priestley Smith, of Birmingham, have been elected vice-presidents. All the local medical societies now hold their meetings in the institute.

COFFEE AND CHICORY.

THE twenty-seventh Report of the Customs' Commissioners, issued this week, gives some interesting information concerning the recent legislation on chicory and other vegetable substitutes for coffee, euphemistically so called. It states that, in 1872, the duty upon chicory, or any other vegetable matter applicable to the uses of chicory or coffee, was reduced, at the same time as the duty upon coffee was reduced, to 2d. per lb. At this rate of duty, any vegetable matter which might include a mixture of genuine coffee could be imported and brought into competition in the market with chicory and coffee. During the years 1880, 1881, and 1882, the revenue on coffee showed a decided tendency to decline, and it was considered that the presence in the market of some of the spurious mixtures which resembled coffee might have, to some extent, been the cause of it. At the same time, as these mixtures had paid Customs duty, they could hardly be dealt with under the Food Adulteration Act of 1875 (38 and 39 Vic., c. 63). It was therefore decided to repeal the Customs duty of 2d. per lb. on "vegetable matter other than chicory," but to impose an Excise duty at the same rate on any article offered for sale prepared in imitation of, or resembling, or intended as a substitute for, coffee or chicory, and a similar duty on any mixture of coffee or chicory with any such vegetable matter. The importation of such vegetable matter is, therefore, now free; but as no sale of any mixture resembling coffee or chicory, whether manufactured at home or abroad, can now legally take place without an Excise label descriptive of its being a mixture (with the proper name of the several articles or substances of which such mixture is composed), a check has been placed on the previous unrestrained use of these spurious mixtures. The Act 45 and 46 Vic., cap. 41, secs. 5 and 6, carried out this object. It became law on August 10th, 1882, and on the 15th of that month the requisite directions were issued to the officers of this department. The coffee-duty in 1882-83 shows a considerable advance, and produced a revenue nearly equal to that of 1880, but, as the Act was only in operation for a portion of the year, it is premature to say whether or not this recovery of the revenue is to be ascribed to its action.

THE MICROCOCCUS OF PNEUMONIA.

PROFESSOR PURJESZ of Klausenburg, in a communication to the Medical Society of Buda-Pesth on the etiology of pneumonia, objects to Friedländer's theory that pneumonia is due to the pressure of micrococci, and is infectious. In a great number of cases of croupous pneumonia, the diplococci described by Friedländer were absent from the sputa; while in some individuals entirely free from pneumonia, he observed them. Dr. Purjesz does not consider that Friedländer has thrown any light on the etiology of pneumonia. Jurgensen's theory also places pneumonia among infectious diseases; but its author has not refuted Herr Litten's objections that croupous pneumonia can be produced artificially by mechanical injury. Dr. Purjesz also rejects the theory of pneumonia *a frigore*. He has examined the statistics of pneumonia for ten years in most of the European capitals. It was found that the frequency of pneumonia does not coincide with that of other illnesses arising from cold, nor with low atmospheric temperature. In certain towns, such as Klausenburg, Munich, Greifswald, etc., pneumonia is at its maximum during March; in Vienna, Paris, Kiel, etc., during May, and in London during December. Dr. Purjesz believes that when pneumonia assumes an epidemic form, certain telluric and atmospheric phenomena are the cause. The researches made by him at Klausenburg during ten years convince him that there is a close connection between the level of the subterraneous matter and the presence of pneumonia, which explains why this affection is at its maximum at different periods at different localities, and is independent of all infectious agents, diplococci or the influence of cold.

PNEUMONIA TREATED BY COLD BATHS.

M. GIGNOUX of Lyons has lately published a paper consisting of details of five cases of pneumonia. In four of these cases, he had resorted to baths, and in one to cold applied by means of compresses of ice-cold water renewed at intervals of five minutes, a bath not being at hand. All were severe cases; four recovered, and one died. The fatal case appeared to derive benefit from the bath, although the pulse was sufficiently feeble from the first to warrant a foreboding of death. The treatment was carried out with much resolution; one patient had thirty-two baths in seven days; another fourteen in three; and in the case which proved fatal they were given regularly every three hours for three or four days. The temperature of the baths ranged from 68° to 75° Fahr. M. Gignoux, from his experience, thinks very highly of the baths; and these cases, although few in number, are carefully reported, and will make a valuable addition to the now accumulating experience of this plan of treatment in pneumonia. The pamphlet is entitled *Observations de Pneumonies traitées par les Bains Froids.*

TYPHOID FEVER AND DEFECTIVE SEWERS.

A SOMEWHAT remarkable outbreak of typhoid fever, illustrating the dangers of a combination of defective sewers and a heavy rainfall, is recorded by Mr. P. Q. Karkeek in his last report on Torquay. The first case, which was reported in March 1883, was probably imported into the district; but the cause of the second was readily found in the unsanitary condition of the patient's dwelling. No fresh cases came under notice until after July 30th, when a tremendous rainfall took place, as much as one and a half inches falling in about two hours. Sudden and heavy falls of rain have always been a severe test to Torquay, and this occasion was no exception to the rule. From August 10th to 15th, as many as eight persons were notified as suffering from typhoid. The first of these occurred in a house free from defects in any way; but in the next instance—that of a mother and two children—enough was discovered to account for any amount of disease, in addition to a shocking state of overcrowding. In another house, a most unsatisfactory state of things was at once perceptible; but, on attempting to alter these, a still worse condition was brought to light. The same may be said of the dwelling occupied by the last three cases, who were all servants. This group may seem to illustrate a common fallacy, inasmuch as the previous occupant, family, and servants, had lived in the same house for many years, and no one had ever been ill from zymotic disease. But a new tenant takes possession, with a fresh set of servants, and the first heavy rain suffices to strike down all the female servants using one particular water-closet, which was defective in every sense of the word. It would, as Mr. Karkeek observes, seem as if some of the inhabitants become fever-proof; for there have been many heavy rainfalls in Torquay, and yet the inmates of this house escaped attack. When, however, a new set of servants are subjected to precisely the same influences as their predecessors must have lived in, they succumb at once. Mr. Karkeek has had occasion to notice the peculiarity of this fact in several instances; and he urges that, on every change of occupants, the sanitary condition of each house should be thoroughly tested and examined. One case was that of a servant who had gone to the infirmary, and, owing to want of space, was placed in the ward in which were the mother and two children referred to above, suffering from typhoid. She had been cured of her ailment and sent home, but, a few days later, was taken ill with what ended in typhoid. The fact that but three houses were attacked after so tremendous a rainfall as one and a half inches in two hours is undoubtedly a satisfactory result. Mr. Karkeek does not say that these are the only three vulnerable houses in the town; but he concludes that the work done during the past few years shows good results, and that the number of safety-valves attached to houses seem to be in reality what they are called.

THE JACKSONIAN PRIZE.

AT a meeting of the Council of the Royal College of Surgeons on the 9th inst., the above prize was awarded to Mr. Frederick Treves (F.R.C.S, 1878). Assistant Surgeon to the London Hospital, Examiner in Anatomy at the University of Aberdeen, for his Essay on "The Pathology, Diagnosis, and Treatment of Obstruction of the intestines in its various forms in the Abdominal Cavity."

NATIONAL SCHOOLS AND INFECTIOUS DISEASES.

WE have had our attention drawn to a memorial addressed to the Commissioners of National Education in Ireland, signed by sixteen medical officers of health, and by two physicians in practice in Sligo, Leitrim, and Roscommon counties, setting forth the spread of infectious diseases by children coming from infected houses to schools, and thereby making "the school a centre of contagion." The memorialists also state that health-officers might derive great assistance from masters of schools in the early information they might give of the presence of disease in their localities; but that, owing to "the present system of payment by results," school-teachers can hardly be expected to give that assistance, as "they suffer pecuniary loss when the average daily attendance of pupils is diminished;" and therefore they ask the Commissioners to take into their consideration any loss masters of schools may suffer owing to the closure of schools for the prevention of the spread of disease. We cannot but sympathise warmly with the principle which our medical brethren in the north-west of Ireland seek to recommend. Possibly these matters may not be similarly arranged in Ireland as they are in England and Wales; if not, the sooner the rule applied in the latter is introduced into the former kingdom, the better. In England and Wales, under the code of 1883, the "attendances" are only counted for the twenty-two weeks immediately preceding the day of examination. If the school shall have been closed by the managers, upon the recommendation of the health-officer, for any number of days during that special period, then the attendances for a like number of days during the weeks immediately preceding that period are to be counted instead. It would hence appear that, so far as the number of attendances goes, there is no injustice done to the master, as he may substitute the attendances during a past period for the period of enforced closure of the schools. Our sympathies go more strongly with the health-officers, whose wise efforts are directed to the prevention of disease. We would especially commend to their notice the recent declaration of the Vice-President of the Privy Council, that he proposed introducing an amendment to the code of 1883, by which children under seven (that is, the Infant School Department) would not be examined "separately," but only as a whole. It is inferred from this declaration that the question of "attendances," as far as infants are concerned, will not be insisted on, but reference will be more especially given to the general tone of the instruction given. Hence, while it will not be of the same pecuniary importance to the master to insist upon the presence of infants at schools, they may be the more readily induced to assist health-officers in their efforts to prevent the spread of febrile contagious diseases; and their concurrence will be the more readily given when they learn that the early closure of the infant department of a school surely and quickly puts an end to the spread of those maladies. Of this truth numerous reliable evidences have been published in this JOURNAL and in the *Sanitary Record*. Briefly, then, we would urge our brethren in Sligo, Leitrim, and Roscommon, and those who interest themselves in this most important work of preventive medicine, that, whenever febrile maladies find access to their localities, they should advise the early closure of the infants' department of schools for one month—never less (when scarlet fever is the malady, six weeks should be the least period); to require that no child from an infected house shall be received in the other departments; and, lastly, that they should assist the masters of schools in procuring that amendment in the code of 1883 which Mr. Mundella has promised to introduce.

VITAL STEPS IN SANITARY PROGRESS.

UNDER this head, Dr. B. W. Richardson read, on the 26th ultimo, a paper before the Society of Arts, in which he indicated what in his opinion are the lines which, in the future, that Society should follow for promoting the progress of sanitation. He spoke on four vital steps for the improvement of the national health, such steps having relation to the reduction of mortality; they were, 1, the physical purification of the people; 2, the suppression of infectious diseases; 3, the provision of proper food; and 4, the organisation of sanitary administration. As regarded physical purification, he divided it into two branches, underground and overhead purification. In respect of the former, the complete removal from communities, day by day, of all their organic excreta, he considered it still an unsolved difficulty. He advocated the separate system of drainage, and would send the storm-water to the river or sea, and the organic excreta to the land, which is calling for them and which dies if its demands be not naturally supplied. As regarded overhead purification, Dr. Richardson advocated the construction of another London overhead. He would have houses all run up to the same level, their roofs flat, and a terrace as wide as the houses running along the top, with railing on each side, and perfectly level floor surface of wood, with, at intervals, light bridges spanning from one terrace to another. Each house would open on to these upper terraces, and at convenient spaces terraces would be accessible from the street beneath. Of course, all smoke would have to be done away with, and the terraces would then be the healthiest parts of London; charged with flowers and trailing evergreens, they would be the empyrean gardens of the great city, Even travellers in light, noiseless vehicles like tricycles, might use them. These terraces also might convey the electric lines and water-pipes for the suppression of fires. From this Utopian topic, Dr. Richardson next passed to the much more practicable step of the isolation of the infectious sick, which he, of course, advocated with all his skill. He would place the infected in small, peculiarly constructed iron hospitals situated in different parts of each parish. In the absence of isolation he considered that there can be no certain check to the devastations of the great zymotic family of disease. With respect to the supplies of food and water, Dr. Richardson would have inspection of all foods, animal and vegetable, exposed for sale in markets. He mentioned vegetarianism with approval, and looked forward to the time when the keeping of thousands of cows to produce milk for human consumption would be unnecessary, in consequence of the chemist having made milk, or the exact equivalent of it, from vegetables, in his laboratory, by a process of faultless purity. He evidently anticipated a time when milk will "be brewed daily in our great cities at less trouble than the beer from the breweries." We cannot say that we have such robust faith in the chemistry of the future as has the learned lecturer. In respect of sanitary administration, the advisability of allowing women to become eligible for seats on local sanitary boards was urged, their knowledge of domestic life and the home being so much greater than that of the men. It was suggested, too, that, in the largest places, there ought to be one local representative of health to three thousand of the population, as a minimum of representation. The Medical Officer of Health should hold to the sanitary department just the same position as the Recorder does to the legal. He ought to be the chief and chairman of the sanitary department, and to have such powers as to enable him to put down disease, of which he is the medical judge, as freely, as unsparingly, as fearlessly, as the legal judge or magistrate puts down crime. Again, those who all their lives have laboured for sanitation should be crowned with the same honours as are rendered to the representatives of the ruder and more savage arts. Lastly, a Board or Ministry of Health should be established, to which might be referred all matters relating to the health of the people —the registration of disease, mortality, vitality, marriage, birth, etc. This department would bring all work relating to health into a focus. In the discussion which followed, the suggestions of the lecturer met with much criticism from engineers, architects, and others. The chairman (Sir R. Rawlinson) thought the question of unwholesome food was of the utmost importance, the amount of it consumed all over the country was something appalling. The wonder was that so little disease was occasioned by it. Captain Douglas Galton quite agreed that the separate system of sewage should be adopted wherever it could; but in such large towns as London there would be immense difficulties in the way. Mr. E. C. Robins could not approve of roadways on the tops of houses, though, as they could not be carried out without getting rid of the smoke, for the sake of doing that he would put up with them. Mr. Westgarth, on the contrary, approved of the roof-terraces. Mr. W. Lascelles Scott thought the proposals neither so impracticable nor Utopian in character as some gentlemen seemed to consider them; and thought, if they were approached in a proper spirit, that by degrees immense good might be accomplished. Mr. H. Doulton did not like the idea of the flat roofs, nor that of abolishing cows; and thought the lecturer should have alluded to the supreme importance of preserving open spaces in and around London, and also of converting dis-used grave-yards into gardens and playgrounds. Mr. Wolstencroft, Mr. Liggins, and Mr. H. Maudslay also addressed the meeting, and Dr. Richardson replied; after which the meeting adjourned.

IS IT AN ILLEGAL ACT ON THE PART OF BAKERS TO PUT ALUM INTO THEIR BREAD?

THIS point was decided at the Boston Quarter Sessions this week, on a baker being indicted for selling a loaf of bread adulterated with thirty-five grains of alum. The Court held that an offence had been committed, and sentenced the defendant to a month's imprisonment. It is to be hoped this case will serve as a general warning, for there is reason to believe that alum is sometimes freely used in the making of bread, and by some bakers the practice is thought justifiable. It constitutes an offence under the Food and Drugs Act, and that fact cannot be too widely emphasised.

MR. PETER SQUIRE.

THE death of Mr. Peter Squire, the well-known pharmaceutical chemist of Oxford Street, at the age of 85, removes from the scene one of the most able, accomplished, and useful men of his class and generation. Mr. Squire was a veteran in the pharmaceutical world when many of those whose names are now most prominent, were as yet in the nursery. The record of his life, when it comes to be written, will sum up the history of the organisation of the pharmaceutical profession as it now stands. Squire, Bell, and Hanbury, were the three most notable figures in all that was done to raise pharmacy to the status of an organised profession, and to advance its science and practice. Mr. Squire's published works have long been the recognised standards in practical pharmacy. His contribution to the work of the Pharmacopœia Committee of the General Medical Council was important and reliable. He enjoyed a quite exceptional position in medical society, as a man of great scientific knowledge and considerable personal accomplishments. As a chemist, botanist, and naturalist, he was distinguished; as a tradesman he was successful in a high degree, in virtue of his sound and trustworthy qualities, and of the entire dependence which could be placed in all his products. He has long retired from active business occupations, but he retained his energy of mind and body to a very late period. All who knew him cherish his memory as that of a most accomplished, able, and estimable man; while to his trade and profession he leaves a memory which they will do well to honour and to perpetuate.

INTERNATIONAL EXHIBITION OF HEALTH AND EDUCATION, LONDON, 1884.

WE are informed that the following handbooks are being written for this Exhibition.—Healthy Villages, illustrated (H. W. Acland, C.B., M.D., F.R.S.); Healthy Bed-Rooms and Nurseries, including the Lying-in-Room (Mrs. Gladstone); Healthy and Unhealthy Houses in Town and Country, illustrated (Mr. W. Eassie, C.E., with an Appendix by Mr. Rogers Field, C.E.); Healthy Furniture and Decoration, illustrated (Mr. R. W. Edis, F.S.A.); Healthy Schools (Mr. Charles Paget, M.R.C.S.); Health in Workshops (Mr. J. B. Lakeman); Manual of Heating, Lighting, and Ventilation, illustrated (Captain Douglas Galton, C.B., F.R.S.); Food (Mr. A. W. Blyth, M.R.C.S.); Principles of Cookery (Mr. Septimus Berdmore); Food and Cookery for Infants and Invalids (Miss Wood; with a Preface by W. B. Cheadle, M.D., F.R.C.P.); Drinks, Alcoholic (John L. W. Thudichum, M.D., F.R.C.P.); Drinks, Non-Alcoholic and Aërated (John Attfield, Ph.D., F.R.S.); Fruits of all Countries, illustrated (Mr. W. T. Thiselton Dyer, M.A., C.M.G.); Condiments, including Salt (Rev. J. J. Manley, M.A.); Legal Obligations in respect to Dwellings of the Poor (Mr. Harry Duff, M.A., Barrister-at-Law; with a preface by Mr. Arthur Cohen, Q.C., M.P.); Moral Obligations of the Householder, including the Sanitary Care of his House (G. V. Poore, M.D., F.R.C.P.); Laboratory Guide to Public Health Investigation, illustrated (Mr. W. W. Cheyne, F.R.C.S.; and W. H. Corfield, M.D., (F.R.C.P., M.A.); Physiology of Digestion and the Digestive Organs Professor Arthur Gamgee, F.R.S.); Fermentation (Dr. Duclaux; with a Preface by M. Louis Pasteur, Membre de l'Institut); Spread of Infection (Mr. Shirley F. Murphy); Fires and Fire-Brigades, illustrated (Captain Eyre M. Shaw, C.B.); Scavengering and other such Work in Large Cities (Mr. Booth Scott); Athletics, Part I, illustrated (Rev. E. Warre, M.A.); Athletics, Part II (Hon. E. Lyttleton, M.A., and Mr. Gerard F. Cobb, M.A.); Dress in relation to Health and Climate, illustrated (Mr. E. W. Godwin, F.S.A.); The Ambulance, illustrated (Surgeon-Major Evatt, M.D., A.M.D.); The Influence of Schools of Art on Manufacturing Industry (John Sparkes); The Homes of the Poor (Author not yet settled).

THE PRESIDENT OF THE ROYAL COLLEGE OF PHYSICIANS.

THE assent of Sir William Jenner to serve a further term of office as President of the Royal College of Physicians has solved satisfactorily some of those difficult questions of succession which are always raised on such occasions, and which, as may have been noticed in some of the rather ill-informed speculations which have appeared on the subject, would have in this case been somewhat unusually complicated. The kind of order of seniority, which at the Royal College of Surgeons is rarely disturbed, affords an easy settlement of such issues, and one which has its advantages. The principle of selection which prevails at Pall Mall, and the longer term, make the office of President one of greater preponderating influence and more definite personal responsibility, as well as larger influence. The selection becomes proportionately more difficult; and, to people who take a deep interest in "college-electioneering," it has sometimes a palpitating interest. We are inclined to think that, had Sir William Jenner declined definitely to continue in office—and it was known that he was at one time unwilling to do so—his mantle would very probably have fallen on Sir William Gull or Dr. Owen Rees. Sir William Jenner unites all suffrages, and the vigour with which he has filled the office has left nothing to be desired. When the acknowledged head of the medical profession in England is willing to carry on the duties of the President of the London College of Physicians, there is an obvious and dignified fitness in the appointment which fulfils all requirements. As a member of the Royal Commission on the Medical Acts Amendment Bill, Sir William Jenner is peculiarly capable of aiding at the present moment, in his presidential office, in bringing about a satisfactory settlement of the measure of medical reform now before Parliament.

MEDICAL INSPECTION *v.* QUARANTINE.

THE councils of common sense, scientific sense, and experience are prevailing at last over antiquated prejudices and sentimental ignorance in this matter in Egyptian administration. The Board of Trade have received through the Secretary of State for Foreign Affairs a despatch from Her Majesty's Consul at Brindisi, from which the following is an extract, viz.: "The quarantine upon arrivals from Egyptian ports has been removed, and all vessels with a clean bill of health and passage free from incident will be admitted to free *pratique* after rigorous medical inspection. But others from non-Egyptian ports beyond the Suez Canal will not receive *pratique* unless they have purged their quarantine at an intermediate port. The prohibition, however, to the introduction of soiled clothes and rags continues in force." Rigid medical inspection is rational and effective when properly carried out, and so obviously just that it is not evaded. Quarantine on the oriental and continental plan is useless, cruel, and most ineffective.

"CHLORIDE OF METHYLENE."

MM. REGNAULD and Villejean have published the results of two investigations into the nature and action of chloride of methylene, from which they have drawn several interesting conclusions. They set themselves, in the first place, to determine the relative constitution of the substance known as chloride of methylene in England, as compared with a standard specimen of chloride of methylene (CH_2Cl_2) prepared by themselves. The density of the former at 15° C. (59° F.) was found to be 1.363, and of the latter 1.334, which pointed to the probability that the English product was not exclusively composed of chloride of methylene. Further, the standard chloride of methylene boiled at a temperature of 40.4° C. (104.7° F.), while the other did not show any signs of ebullition until 53° C. (127.4° F.) was reached. At that temperature, most of the English substance passed over into the condenser, leaving a residuum which proved to be methyl alcohol. That part which passed over was found to be chloroform. The substance, therefore, known in this country as chloride of methylene is a mixture of methyl alcohol and chloroform, the proportions of each component being one part of the former to five of the latter. The second part of the research was devoted to a study of the physiological effects of chloroform ($CHCl_3$) and of chloride of methylene (CH_2Cl_2). It is unnecessary to make any remarks upon the action of the former substance, but the results of the inquiry regarding the latter are novel and interesting. From fifteen experiments upon dogs, the following picture is drawn as giving the typical sequence of phenomena. After half a minute of inhalation, agitation began with whining. After one minute and a half, there was dilatation of the pupils and nystagmus. After two minutes, the eye-reflexes were abolished, and general insensibility set in. In three minutes, clonic movements of all the extremities and the tail set in. At four minutes, inhalation was stopped and the dog set free. The clonic movements ceased. In six minutes, the eye-reflexes returned; there was persistent contracture of the jaws. At seven minutes, there was an epileptiform attack. At eleven minutes, the phenomena diminished in intensity; the animal tried to get up, but the paws seemed to be in the same condition as in strychnia-poisoning. At twenty-two minutes, the jaws could not be opened; there was convergent strabismus. Up to about half an hour, the symptoms of intoxication gradually passed off, but, although the jaw could be opened, the animal could not raise its head, and paid no attention to its keeper's summons. These results prove that the substance known in this country as chloride of methylene has nothing in common with true chloride of methylene except the name; that the action of the English product is solely due to its contained chloroform; that the effects of true chloride of methylene are entirely different from those of chloroform; and, finally, that the action of the former is so disturbing that it never can be used in surgical practice.

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SCOTLAND.

WE understand that the Government have resolved to establish a station for the scientific investigation of fishery questions at St. Andrew's, and are to place it under the care of the Professor of Natural History in the University of St. Andrew's.

IT is now authoritatively announced that the protest lodged against the election of Mr. Fawcett to the rectorship of the University of Glasgow on the ground that he is a professor in another university, and so ineligible for office, has been finally withdrawn.

ANDERSON'S COLLEGE DISPENSARY.

OF the different Glasgow charities, each has its own distinctive aim; but the above institution has, from its commencement, kept itself to work which has specially marked it out from the others, in that it undertakes to visit, when necessary, the sick poor at their own homes. At the sixth annual meeting, held on March 26th, the report presented and adopted shows that this privilege is very largely taken advantage of by the patients, the number of visits during the year being 4,218, of which 1,062 were new cases. The visitation of these home-cases is undertaken by the senior students of the dispensary, under the supervision of the dispensary staff; and so far the plan followed has been found to work admirably, and to supply a decided want in the curriculum of the student, in familiarising him with cases of disease not usually seen in hospitals, and which will form a large proportion of his future practice. From the report, we observe that all the different departments of the dispensary are largely attended, the total consultations for the year being 11,213, comprising 9,243 new cases. The financial condition of the charity seems satisfactory, the ordinary annual income having been sufficient to meet the ordinary expenditure and to leave a balance in hand.

THE WEATHER DURING MARCH IN SCOTLAND.

FROM an examination of the meteorological returns of the weather during the past month, one very remarkable feature is brought out, and that is the exceptionally high temperatures of March 15th, 16th, and 17th. From a careful comparison of the highest temperatures registered during March at the Royal Observatory as far back as 1841, the fact is established that no such high temperatures have been recorded during a period of forty-four years so early in the year as in March 1884. The effect of so much warm weather, coming as it has after such a mild winter, is clearly observed in the forward condition of the trees, plants, and crops all over the country.

AN EXTRAORDINARY OCCURRENCE.

ABOUT four weeks ago, an old woman died rather suddenly at Tigharry, in North Uist. Several days after the woman was buried, it was considered necessary by the Procurator Fiscal to order a *post mortem* examination to be made. While attempting to open the lid, however, the coffin burst with a loud noise, one of the boards striking police-inspector Mackenzie, and knocking him down. Dr. M'Donald, medical officer in attendance, fainted, and remained in an unconscious state for some time; and such was the effect of the shock upon his system, that, although able to carry out the examination later on, he died last week. The doctor was about thirty years of age. Dr. Black, who was also present, is lying seriously ill.

GLASGOW UNIVERSITY MEDICAL EXAMINATIONS.

THE University of Glasgow proposes to make certain changes in the qualifying examinations for its medical degrees, the chief of which are the removal of pathology from the third to the fourth division of the examinations for graduation in medicine, and the abolition of therapeutics as a separately named department. It is also intended to permit candidates who commence their medical studies in the winter session to present themselves for examination in the second division of examinations after two winter and two summer sessions. The Edinburgh senatus decided to offer no objections to these alterations; but we observe that at its last meeting, the Edinburgh University Court expressed the opinion "that certain of these changes, and especially the transference of pathology from the third to the final division of subjects of examination, are not desirable in the interests of medical education."

FIRE AT THE GLASGOW ROYAL INFIRMARY.

A FIRE of rather an alarming nature occurred at the Glasgow Royal Infirmary shortly before four o'clock on the morning of the 3rd instant. It commenced in a building which is used as a store, and which is situated immediately behind the medical wards forming the southern portion of the hospital. In these wards there were a large number of patients located at the time the alarm was given, and some anxiety was felt by the officials as to the fire spreading into this portion of the hospital, and endangering the lives of the inmates, so that, after the outbreak of the fire was made known at the fire-brigade office, Dr. Thomas, the superintendent, the house-surgeons, the nurses, and others connected with the institution, exerted themselves in the interval in removing the patients from danger. Amongst them the greatest alarm prevailed, and, although no actual panic took place, in the excitement three made their escape on to the roof of an adjoining building, and were with difficulty dissuaded from throwing themselves into the street which passes in front. Ultimately, all were safely removed into other wards at a safe distance from the fire. By the exertions of the fire brigade, the flames were confined to the store, and were prevented spreading to the main building; but the number of cracked and broken windows in the wards and staircases showed the danger that for some time threatened the hospital. We are glad to observe that the damage is covered by insurance, and it is a matter of congratulation that the efforts made were so successful in checking the conflagration and saving such a valuable institution from destruction.

AMBULANCE WORK IN SCOTLAND.

FROM time to time we have been pleased to note the progress of ambulance work in Scotland, and we are glad to observe, from the recent report of the St. Andrew's Ambulance Association, that there has been of late considerable extension of the work in different directions. The St. Andrew's Association has its headquarters in Glasgow, and, as far as that city is concerned, it has very successfully solved the difficulty experienced in many large towns of having a suitable ambulance transport in civil life, for the report shows that no less than 350 cases of accident and sickness, in and around Glasgow, were removed during the past year by the wagons of the association. Of these, 295 were taken to the infirmaries, and 55 to their own homes or to the railway-stations. At the recent annual meeting of the association, the chairman of the Royal Infirmary directors bore testimony to the good and valuable work it was doing, and said that the experience of the hospital officials was that the patients brought in by the ambulance-wagons arrived much less exhausted than when removed there in cabs or other vehicles. In the other branch of the association's work, which undertakes to give instruction in the proper aid to be first rendered to the sick or injured, very gratifying results have been obtained, several classes having been carried on in different parts of Glasgow, all of which were largely attended. We observe that the St. Andrew's Association has also been instrumental in establishing centres for ambulance-work in other towns, Edinburgh, Paisley, Coatbridge, and Dumfries being among those who have so affiliated themselves, and we have no doubt that, with time, others will follow when they come to realise the advantages of the work.

QUARTERLY MEDICAL RETURNS, EDINBURGH.

ON Tuesday, the quarterly return of the Medical Officer of Health of Edinburgh was submitted to the Public Health Committee of the Town Council. The statement showed that during the past three months the total number of deaths recorded in the city was 1,191, giving a death-rate of 19.31 per 1,000 of the estimated population. These statistics compare favourably with those of the same months during 1883, by showing a decrease of 17. The number of deaths in the New Town was 377; in the Old Town, 659; and in the Southern Suburbs, 155. Diseases of the chest caused 416 deaths; debility and old age, 117; and zymotic diseases, 168; the detail of zymotic diseases being as follows:—typhus, 4; typhoid, 16; diphtheria, 11; scarlatina, 34; measles, 53; whooping-cough, 45; erysipelas, 5. At the same meeting, the monthly return of infectious diseases for March was also recorded by the Medical Officer. The return showed that during the month 579 cases of infectious disease had been reported, which consisted of measles, 363; scarlatina, 153; typhoid, 36; diphtheria, 22; typhus, 5. Of the cases of measles, 135 occurred in the New Town, and 109 in the Old Town, and 119 in the Southern Suburbs. In the three months ending March 31st, there had been 2,375 cases of infectious disease—1,037 in January; 759 in February; and 579 in March. No fewer than 1,709 cases of measles were reported; the New Town having contributed 706; the Old Town, 563; and the Southern Suburbs, 440. Of 88 cases of typhoid, of these 25 were in the New Town; 54 in the Old Town; and 9 in the Southern Suburbs. At present there are being treated in the various hospitals in the city 81 cases of infectious disease, as contrasted with 114 a fortnight ago; their distribution being, in the City Hospital, 23 cases; in the Old Infirmary, 45; and in the Sick Children's Hospital, 13. The cases of scarlatina out-number all the others put together. The inspection of milk-shops, unsanitary houses, and lodging-houses was also considered at the meeting; and in the case of unsanitary houses, numbers of complaints were considered, and in each case defects were ordered to be remedied, and in one case the tenement was ordered to be disused.

THE PREVALENCE OF RICKETS IN GLASGOW.

FOR the second time within the last two or three years, attention has been drawn to the prevalence of rickets in Glasgow and its neighbourhood. On the present occasion, the matter was brought up at the last meeting of the Glasgow Philosophical Society, in the shape of a paper by Mr. James Thomson, the president of the Biological Section of the Society, and a well known geologist. The subject was treated under the two heads of, first, the frequency of the disease; and, secondly, its relation to the food and water used. On the former point, abundant evidence was adduced as to the great prevalence of the disease, as shown by the number of deformed children seen in the streets, the results obtained being the fruit of several years of observation in the various localities of the city. When dealing with the second question, namely, the relation of the disease to the food and water used, Mr. Thomson brought out some curious but interesting statistics. He does not altogether blame Loch Katrine water, with its small amount of lime, as the cause of the mischief, though he evidently regards it as a source of weakness to the growing members of the community, but he looks for an explanation of the present state of matters in the wrong system of feeding which is so much in vogue among the working classes, in which there is an excessive use of tea and sugar, to the almost total neglect of oatmeal. In fact, it was apparently brought out by the figures quoted that the prevalence of rickets in different localities bore some relation to the amount of oatmeal used. Another point on which Mr. Thomson also dwelt was the evil resulting from the supercession of oatmeal by fine flour, this last being so much less nutritious. He says, "both the miller and the baker not only foster, but pander, to the popular and delusive desire for white bread," which is "a mass of deception in the form of flour." In the course of the discussion which followed the reading of Mr. Thomson's paper, Professor McKendrick gave the weight of his opinion in favour of the view that the number of rickety children in large towns, such as Glasgow, is principally owing to the kind of food employed, and not so much to the water-supply. There can be no doubt that the foolish style of infant feeding so prevalent amongst our working classes has much to answer for in the frequency of rickets in our city populations; and if the public attention thus drawn to the matter leads to an increase in the use of oatmeal as an article of diet, and to the discontinuance of many of those "modern innovations which have supplanted the simpler and more natural arrangements of living," we would find rickets as a disease less prevalent in our midst, provided due attention is also paid to those conditions, such as impure air, bad drainage, and careless nursing, which are so favourable to its development, apart from the question of food-supply.

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IRELAND.

THE Rathdown Board of Guardians recently granted an addition to the salary of Dr. Maine of £100 a year; but the Local Government Board last week suggested that £50 would be sufficient, which was agreed to.

DURING the past month, the mortality in Belfast from affections of the respiratory organs amounted to 11.7, or nearly one half of the entire number of deaths within the district. This result was due to the variable weather experienced.

SMALL-POX IN BELFAST.

A COUPLE of weeks since, a case of small pox was admitted to the Belfast Workhouse, and which was removed from a vessel lately arrived in the port. All precautionary measures have been adopted to prevent the spread of a disease which has caused so many deaths in Belfast.

KING AND QUEEN'S COLLEGE OF PHYSICIANS OF IRELAND.

AT the last meeting of this college Dr. Acland, C.B., F.R.S., Regius Professor of Physic in the University of Oxford, and President of the General Medical Council, and Dr. Crawford, Director-General of the Army Medical Department, were unanimously elected Honorary Fellows of the College. At the same meeting, Dr. W. J. Smyly, Gynæcologist to the City of Dublin Hospital, was elected a Fellow. The College has forwarded addresses of condolence to Her Majesty the Queen, and to Her Royal Highness the Duchess of Albany, on the occasion of the death of H.R.H. the Duke of Albany.

DR. CREMEN AND THE CORK GUARDIANS.

AT a meeting of the Guardians, recently held, an application for additional medical aid was received from Dr. Cremen, who, for more than thirteen years, has been one of the medical officers to the Cork Union. These gentlemen have about 1,200 patients under their charge in the Union Hospital, amongst whom is a much larger proportion of acute cases than are generally treated in unions, in consequence of the want of hospital accommodation in Cork. Dr. Cremen has lately had much additional duty imposed on him, having 150 more patients than his predecessor. When he made known to the Board the want of increased medical aid, he was politely told to resign, although apparently no shadow of a complaint had been made against him during his thirteen years of service. The time spent at the Union daily by Dr. Cremen is over two hours, for which he receives less than six shillings, his salary being £100 a year. Not caring to submit to such very cavalier treatment, Dr. Cremen resigned his post, but has withdrawn his resignation. Such ingratitude and discourtesy as Dr. Cremen has experienced are rare, even in the annals of Poor-law medical history; and show such very peculiar qualities in this particular Board as will, it may be expected, deprive them of the services of men of the reputation and experience who might otherwise aspire to succeed to Dr. Cremen's office.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A QUARTERLY meeting of the Council of the Royal College of Surgeons was held on Wednesday, the 9th instant. The minutes of the previous meeting were read and confirmed.

A vote of condolence to the Queen, in reference to the death of the Duke of Albany, was unanimously resolved upon.

It was agreed to send a letter of congratulation to the University of Edinburgh, on the occasion of the celebration of its tercentenary.

A letter was read from the Home Secretary (Sir W. Harcourt), in answer to the communication addressed to him by the Council regarding the public prosecution of medical men for offences connected with their profession, in which he promised that, in those cases, the advice of the most competent medical men will be taken before proceedings are begun.

The report of the Museum Committee was received and adopted, in which they recommend no alteration in the conditions of appointment of Conservator of the Museum, but that he receive the salary of £600 *per annum*, with residence in the neighbourhood of the Museum. Applications for the appointment must be sent in, addressed to the Secretary, by the 3rd of May.

It was resolved to present to Mr. Edward Trimmer the sum of £500, in consideration of his having completed twenty-five years of active service as Secretary to the College, and of his great services to the College in connection with medical legislation.

A communication was read from Sir James Paget regarding the presentation, by Dr. Arthur Farre, to the Museum of a large and valuable collection of water-colour drawings, illustrating pathological subjects, which were made by his father, Dr. J. R. Farre.

A letter was read from Mr. Tweedy, recommending to the consideration of the Council the advisability of an alteration of the Charter, to the effect that, should any member of the Council cease, during his term of office, to be engaged in the active practice of his profession, he should *ipso facto* cease to be a member of Council.

ROYAL COLLEGE OF PHYSICIANS.

An extraordinary meeting of the Fellows was held on Monday, April 7th. There was a very large attendance.

Before the commencement of the special business of the meeting, the President, Sir William Jenner, made a feeling and eloquent allusion to the loss sustained by the College, the medical profession, and the whole nation, in the death of Prince Leopold, Duke of Albany. An address of sincere and respectful condolence, to be presented to Her Majesty the Queen, and a similar address to Her Royal Highness the Duchess of Albany, were unanimously voted by the Fellows, and the College seal was ordered to be affixed thereto.

The amended report of the Pharmacopœia Committee, embodying suggestions for the consideration of the committee of the Medical Council engaged in the revision of the *Pharmacopœia*, was received and adopted.

The Examiners in Hygiene reported that Mr. C. W. Lowe had passed the First Examination in that subject.

A report was received from the Medical Bill Committee, which was reserved for discussion at the next meeting.

Dr. Acland brought forward a motion for the appointment of two Vice-Presidents, in order to afford relief to the President, the duties of whose office have of late become increasingly onerous. A discussion followed, in which all the speakers agreed that it was necessary to take some step of the kind, and the matter was finally left for consideration by a committee.

Sir W. Jenner then read his annual address, in which he sketched the history of the College during the past year, and concluded with a brief summary of the life and works of the Fellows who have passed away within the last twelve months. The list included the names of Dr. Bond, formerly Regius Professor of Physic in the University of Cambridge; Dr. Boyd, of Southall; Dr. Hilton Fagge; Dr. A. P. Stewart; and others, whose death was a loss, not only to the College, but to the whole profession.

The Fellows then proceeded to the election of a President for the ensuing year, and Sir W. Jenner was almost unanimously re-elected.

THE GERMAN CHOLERA COMMISSION.

The Seventh Report of the German Cholera Commission, dated Calcutta, March 4th, recently published in Berlin, is a document of no small importance, as it supplies evidence on the question of the mode of origin of epidemics, and the method of propagation.

The evidence distinctly supports the theory that cholera is spread by a water-borne contagion. The report deals chiefly with the occurrence of small local epidemics of cholera in the neighbourhood of "Tanks." These "tanks," which are scattered over the whole country in vast numbers, are in reality small ponds, often in marshy ground, surrounded by a few huts. The inhabitants use the water of the tank for every purpose, washing, bathing, and drinking, and latrines of a very primitive design are frequently erected on the banks and drain into the "tank." The water of these tanks is, of course, under these circumstances, highly charged with foul organic matter, and it is said to be within the experience of all who have seen much of cholera that local epidemics occur with considerable frequency in the neighbourhood of these tanks. The Sanitary Commissioner with the Government, having been applied to by Dr. Koch, was able in the end of February to direct his attention to Saheb Bagau, a suburb of Calcutta, where such a local epidemic was in progress; it was entirely limited to the inhabitants, about one hundred in number, of huts built around the pond. Seventeen deaths from cholera occurred among these hundred persons, though during the same period in the other parts of the police-district in which the tank is situated, no cases of cholera were reported. It was ascertained that the water of the "tank" had served the inhabitants for purposes of bathing, washing, and drinking, and that the linen of the first fatal case of cholera, smirched with the dejections, was washed in this "tank." Samples of water were taken from different parts of the pond and examined by the method of cultivation on gelatine. It was found that the first samples were rather rich in the cholera-bacillus, whereas of those obtained at a later period, and near the termination of the epidemic, the characteristic bacillus was only found, in very small numbers, in one sample taken from a very dirty part of the pond. This was the only instance which could be examined, but Dr. Koch contends that it affords strong evidence of one of the ways by which the poison of cholera finds its way into the human body.

The examination of cholera-dejections and of the bodies of persons who had died of cholera, had been continued by the Commission; and the results obtained had confirmed, without extending or otherwise modifying, those previously published.

Experiments have been made by the Commission to ascertain the influence of disinfectants, such as corrosive sublimate and carbolic acid, on the growth of the bacillus in culture-fluids, and also the results of cultivation in an atmosphere of carbonic acid gas, and in a closed chamber.

No definite results have as yet been obtained with regard to the question of the conditions under which the bacillus can retain its vitality. It does not seem to be able to preserve its vitality when dried, but if kept moist it can be preserved for a long time. In liquids it can maintain its vitality for several weeks, and Dr. Koch think that all the evidence tends to show that the infection can only be introduced into the human body in a moist state.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

Meetings of the Council will be held on Wednesday, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

Cards for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
IV*a*. Diphtheria, sanitary.
V. Syphilis, acquired.
V*a*. " inherited.
VI. Acute Gout.

Urgent.—*The Committee needs 150 more cases of Pneumonia, and hopes that they will be sent in as soon as possible.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
September, 1883. 161a, Strand, W.C.

Notice.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

The North-Western Provinces and Oudh Branch.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons Shirley Deakin and W. A. Morris, 8, City Road, Allahabad.

North of Ireland Branch. A general meeting of this Branch will be held in the Belfast Royal Hospital on Thursday, April 24th, at 12 o'clock. Members desirous of reading papers are requested to communicate as early as possible with the Honorary Secretary.—Alex. Dempsey, M.D., 26, Clifton Street, Belfast.—April 2nd, 1884.

Bath and Bristol Branch.—The fifth ordinary meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday evening, April 17th, at half-past seven o'clock; Edward Crossman, Esq., President. 1. It is proposed to alter Rule 10 by the substitution of "By-law 17" for "Law 26," and by the insertion after "Annual" of the words "or a special." 2. The President of the Central Council asks the opinion of the Branch on *(a)* the admission of homœopaths as members of the Association; and *(b)* the retention of those homœopaths who are already members. The following communications are expected. 1. Short Notes on Cases of Uterine Polypi removed by Operation: A. E. Aust Lawrence, M.D. 2. Sciatica and its Allies, and their Treatment by the Bath Thermal Waters: J. K. Spender, M.D. 3. A Case of Recent Fracture of the Patella, treated by the Wire Suture (the patient will be shown): J. Hinton, Esq. 4. A Case of Sarcoma of the Tibia (microscopical specimens will be shown): T. P. Lowe, Esq.—R. J. H. Scott, E. Markham Skerritt. Honorary Secretaries.—Bath, April, 1884.

North of England Branch.—The spring meeting of this Branch will be held at Newcastle-on-Tyne on Wednesday, April 30th. Members desirous of reading papers or exhibiting patients or specimens are requested to signify their intention to the Secretary at their earliest convenience. David Drummond, M.D., Honorary Secretary, Newcastle-on-Tyne.—April 8th, 1884.

Southern Branch: South Wilts District. A meeting of this District will be held on Friday, April 18th, at the Bath Arms Hotel, Warminster, at 3.30 p.m. Agenda: 1. To consider the times and places of future meetings, and to draw up regulations for the District. 2. To elect officers for the District. 3. To elect (a) a representative to the General Council of the Association; (b) a member of the Branch Council. 4. To discuss the arrangements for the annual meeting of the Branch, which is to be held this year in Salisbury. General business. Subject for discussion: Collective Investigation. Dinner will be provided after the meeting; tickets (not including wine), 5s. H. J. Manning, Honorary Secretary.

SOUTH EASTERN BRANCH: WEST KENT DISTRICT.

A meeting of the above district was held at the Army Medical Department Mess Room, Woolwich, on March 28th; Sir James Hanbury, K.C.B., A.M.D., in the chair.

Next Meeting.—It was resolved unanimously that the next meeting be held at Maidstone in May, and that A. H. B. Hallowes, Esq., late Honorary Secretary of the District, be requested to preside on the occasion.

Communications.—The following papers were read and discussed:

1. Mr. G. Pollock: The Use of Opium as an Aid to Surgery.
2. Dr. J. V. Bell: A Case of Perineal Section for Foreign Body.
3. Mr. F. B. Jessett: Two Cases of Cancer of the Lower Jaw. One of the patients was exhibited.
4. Dr. Braxton Hicks: The Influence of Bodily Movements on Septic Absorption.

Dinner.—Twenty-one members and visitors subsequently dined at the King's Arms Hotel.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

A meeting of the above District was held on Thursday, March 13th, at the Queen's Hotel, Upper Norwood; John Rand, Esq., in the chair.

Papers.—The following papers, etc., were read.

1. Dr. J. Milner Fothergill: The Uses of Ipecacuan.
2. Mr. Noble Smith: Mechanical Principles in Orthopedic Surgery (illustrated by diagrams).
3. Mr. H. G. Plimmer exhibited Bacilli of Anthrax and Tubercle.
4. Dr. Stowers described a New Method of Treating Acne Rosacea and Vascular Hypertrophy of the Nose; and reported the sequel to a Case of Paget's Disease of the Nipple.

Dinner.—After the meeting, the members and visitors dined together at the Hotel.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

The ninetieth meeting of the above District was held at the Cottage Hospital, Ashford, on Thursday, March 13th; Dr. George Wilks in the chair.

Previously to the meeting, the President conducted the members over Eastwell Park, the residence of their R. and I.H. the Duke and Duchess of Edinburgh. The church, model dairy, and farm, as well as the mansion and improved drainage system, were viewed and inspected with considerable interest by all present.

Messrs. Down Brothers of London exhibited Surgical Instruments.

Collective Investigation.—The Secretary reported that 77 cards and 2 reports had been sent up to the London Committee.

Myxœdema.—Dr. Bowles exhibited a typical case of myxœdema, and gave a clinical exposition of the disease, as well as a cursory review of the history of this malady, and the respective views entertained, up to the present time, of its causation. With respect to this last point, he insisted that much too little was known of its early beginnings to form a correct view. It appeared, at present, that opinions were formed rather upon the results of unknown processes—processes which appeared to him allied to retrogressive changes, such as obesity, chronic gout, chronic Bright's disease, arterio-capillary fibrosis, and diseases of that kind. Dr. White related a very interesting case of myxœdema that had been under his care for two years and eight months, and made some observations on the same.

Dinner.—The members afterwards dined together at the Saracen's Head, where a most excellent repast was provided.

At the next meeting (annual) at Canterbury, on May 8th, Dr. Robinson will bring forward an account of the epidemic sore throat in Dover, supposed to be connected with the milk-supply.

SHROPSHIRE AND MID-WALES BRANCH: QUARTERLY MEETING.

A quarterly meeting of the Branch was held at the Feathers Hotel, Ludlow, on Thursday, March 20th, at 3.30 p.m., o'clock. The President, Dr. Andrew, occupied the chair.

New Members.—The following gentlemen were elected members of the Branch: Henry Clarence Williams, Grinshill, Shrewsbury; and Louis E. G. De Woolston, Shrewsbury.

Collective Investigation Committee.—Dr. W. H. Packer was unanimously elected secretary to the local Committee of Collective Investigation, in the room of the late Dr. E. S. Scott. It was also suggested that a vote of condolence, on behalf of the Branch, be conveyed to the representative of the late secretary.

Payment of Representative in Council.—A motion was brought forward as to the payment of the travelling expenses of the Branch representative in the Council of the Association, and it was the unanimous opinion of the members present that the Branch should defray the travelling expenses of its representative.

Papers.—The following were read:

1. Dr. Bowen Davies read notes of a Case of Amnesia.

2. Dr. Long read the notes of four cases of Cutaneous Diphtheria, which had occurred in his practice. An animated discussion followed upon the general subject of diphtheria. One of the members present, Dr. Lane, stated that in 1873 he had 1,100 cases of diphtheria; two cases out of this number had cutaneous eruptions; the mortality in this outbreak was only nine cases. It was the general opinion of the members present that diphtheritic membrane appearing on the external surface of the body was extremely rare.

3. Dr. J. E. Brooks read a paper on Educational Over-pressure. A discussion followed, and the general opinion of those present was in keeping with the reader of the paper, and condemnatory of the system of payment of teachers by results.

Discussion.—The President brought forward for discussion the subject of Puerperal Fever. He reviewed the whole subject of septicæmia, illustrating it by cases, drawing an analogy between erysipelas and puerperal pyrexia. He asked the members who considered it a specific fever to give their views. A prolonged discussion followed, in which several interesting cases bearing on the subject were brought forward; the President giving it as his opinion that puerperal fever was not a specific fever, but a pyrexial state due to different causes occurring in the puerperal state.

METROPOLITAN COUNTIES BRANCH: HERTFORDSHIRE DISTRICT.

The third meeting of this district was held in the Council Chamber, Shire Hall, Hertford, on Monday March 31st. The chair was taken at 6 p.m. by the President of the Branch, Dr. C. J. Hare, who gave an address.

Communications.—The following communications were made.

1. Pelvic Hæmatocele and Pelvic Abscess: Dr. Hayes.
2. Some Cases of Deformity, with remarks upon treatment: Mr. Noble Smith. Illustrated by diagrams.
3. Hypodermic Injection of Chloral in Puerperal Convulsions: Mr. F. R. Webster.

Next Meeting.—It was arranged that the next meeting should be held at Watford.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.

A meeting of the members of the above district took place at Brighton on March 26th, Dr. Mackey in the chair.

Living Specimens.—The chairman showed four children suffering respectively from spina bifida, lichen, abdominal enlargement (supposed thickened mesentery), and scleroderma. The latter case seemed to be due to a shock.

Collective Investigation.—Dr. Sturges introduced the subject of the collective investigation of disease, with special reference to phthisis. Dr. Fuller, Dr. Treutler, Dr. Bagshawe and the chairman joined in the discussion.

New Remedies.—Dr. Mackey read notes on some new remedies. 1. *Paraldehyde* as nerve-sedative and hypnotic. It had been said to have the merits of chloral without its after-effects. The author tried it in four cases, in only one of which it succeeded, and then, after a fortnight's trial, it lost its effects, although the original dose was doubled. In two cases it caused severe dyspepsia. 2. *Pilocarpine.* Two cases were quoted in which relief had followed the subcutaneous injection of this drug. The first was an old-standing case of asthma, which resisted all treatment till a quarter of a grain of pilocarpine used as described, removed all symptoms, and the attacks have not recurred. The second case was septicæmia, due to disease of the internal ear. Great relief was obtained, although the case eventually proved fatal. 3. *Cascara.*—Six cases were quoted in which this drug was given for obstinate constipation; ten drops was the dose. The preparation was the liquid extract. In two cases (of anæmia and of melancholia) a good result was obtained, but, in two, severe pain and vomiting ensued. 4. *Kola Nut* (powdered).—The author had given this with benefit in cases of alcoholism. Two or three teaspoonfuls, boiled in milk and strained, relieved the nausea, anorexia, etc., of these cases.

SPECIAL CORRESPONDENCE.

PARIS.

[From our Special Correspondent.]

A Specific Treatment for Diphtheria.—Carbolic Acid in Typhoid Fever.—The Organisms of Sea Depths.—Mal Perforant.—Bovine Affections.—Drains and Enteric Fever in Paris.—Suppression of the Grade of Officier de Santé.—Statistics of Insanity.—Sanitation of Factories.—Chair of Physiology at Lyons.—The Centenary of Valentine Haüy.—Mortality amongst the Working Classes.—Child-Desertion.

At a recent meeting of the Académie de Médecine, Dr. Delthill read a memoir on "The Specific Treatment of Diphtheria," which may be summarised as follows. Fumigation with two hundred grammes of tar, and eighty-three grammes of turpentine dissolves the false membranes of diphtheria. These fumigations are disagreeable neither to the patient nor to the attendants, and may be repeated every two or three hours according to the gravity of the case. They destroy parasites and micro-organisms. At the onset of the affection, their use results in cure. When tracheotomy is the only resource, they increase the chance of recovery. Dr. Delthill has devised a burner in which the above named substances may enter into combustion without danger.

M. Albert Robin enters a protest against the use of carbolic acid in the treatment of typhoid fever. His objections are based on the transformations this substance undergoes in the organism, also its process of elimination. Carbolic acid is a normal constitutent of urine; but typhoid patients, in a space of twenty-four hours, render twice the quantity peculiar to a normal condition and ordinary diet. Carbolic acid is eliminated as a sulphocarbolate of potassium. A typhoid patient loses also more sulphur and potassium than a healthy person. Such nourishment as can be given during typhoid fever does not compensate for this loss of sulphuric acid and potassium. Thus the tissues are deprived of their mineral constituents; muscular and nervous inanition are thus provoked, which becomes general. M. Albert Robin's researches indicate that those substances which are eliminated by the same process as carbolic acid, ought not to be administered in enteric fever (creasote, thymol, naphthol, resorcin, vanillin, benzol, aniline, etc.).

M. Regnard has made a series of experiments in order to determine the conditions of life special to different sea-depths. The fauna of deep sea-depths is a different kind from that of the surface. The animals living in the depths never come to the surface of the sea, and those on the surface never penetrate lower than a zone varying from 2,500 to 3,000 mètres. In order to arrive at an explanation of these facts, M. Regnard used M. Cailletet's pump for liquefying gases, which, under water, obtains a pressure of 1,000 atmospheres; thus realising the conditions existing in sea-depths of about 12,000 mètres. Saliva submitted to a pressure of 1,000 atmospheres retained its property of converting starch into sugar. Beer-yeast, a structural ferment, was submitted to a pressure of 1,000 atmospheres during one hour, and was then placed in contact with sugared water. Fermentation took place very slowly. In another experiment, beer-yeast was submitted to a pressure of 600 atmospheres. After seven minutes, fermentation had set in. The same substance, under ordinary pressure, fermented in half an hour. When the yeast was removed from Cailletet's apparatus, it asserted its properties, which had probably assumed a latent condition, and fermentation was set up. This result is in accordance with the observations of the *Talisman* Commission, that substances in a state of putrefaction were never withdrawn from sea-depths. Infusoria collected from the surface of the water were placed under a pressure of 600 atmospheres. Their vitality was partially arrested, and their movements rendered slower, but they lived. M. Regnard next conducted experiments on a higher order of animals. He submitted crabs, carp, cray-fish, and daphniæ to a pressure of 600 atmospheres. Insensibility was instantaneous; but, a few minutes after their removal from the tube, they regained their normal condition. M. Regnard gives the following summary of the results of his researches. Among plants, and lower animals which have not red blood, excessive pressure reduces vitality to a latent condition, probably due to the presence of the water which penetrates among the tissues. Among the higher orders of aquatic animals, death is due to muscular tetanus, also to water penetrating among the muscular tissue. The tissues of the animals living in sea-depths is modified in accordance with the surrounding conditions; and, when they are brought to the surface, immediate death results, due to phenomena exactly the reverse of those studied by the author.

At the Société de Médecine de Paris, M. Polaillon read the following clinical note. At a former meeting M. Charpentier gave the history of a patient who, during an attack of small-pox, had been treated by subcutaneous injections of ether. On one occasion the sciatic nerve was injured, and the ether penetrated among its fibres; traumatic neuritis, and paralysis resulted. This same patient entered M. Polaillon's ward, suffering from perforating disease of the foot corresponding to the injured nerve. M. Polaillon considered trophic disturbance resulting from the neuritis to be the origin of the perforating ulcer. The patient was cured, the anæsthetic zones were more limited, and he could execute the movements which had been impossible during the affection.

A Commission has been appointed by the Minister of Agriculture to decide on the regulations to be established in the Villette Cattle Market, for preventing the propagation of bovine affections.

M. Strauss, a Municipal Councillor, asked, at a recent meeting, if the manner of laying down the drain-pipes at Paris could not be modified. According to M. Durand-Claye, it was the cause of the especially virulent form of enteric fever which appeared in 1882, the ground being constantly dug up. M. Alphand, the city engineer, replied he could not suggest any other method. The drain must be excavated; branch drains or trenches subsequently made, and the pipes laid down before the old ones are removed.

The Commission appointed by the Senate to report on M. Chevaudier's proposition concerning the laws of medical practice *(conditions d'exercice de la médecine)* has decided to suppress the grade of *officier de santé*. Those now in practice will be allowed to continue. At the end of six years' medical experience, they can obtain a doctor's diploma by passing two examinations and presenting a thesis.

Dr. Lunier, in a recent lecture at the Sorbonne, "On the Statistics of Insanity," made the following statements. The number of insane people placed under restraint in 1835, amounted to 16,000; this number has gradually increased. In 1876 it reached 83,000; in 1835 the number of insane people, idiots, and cretins, tended in their private homes was 54,000; in 1876, 39,000. The increase on one side and the decrease on the other, Dr. Lunier believes to be due to the fact that out of every ten patients now admitted into public institutions, seven would formerly have been refused. According to the last census there is one mad person to every 444 inhabitants; but Dr. Lunier asserts that the proportion is seven to every 300 or 350 inhabitants. The principal causes of madness and cretinism are excessive population, the condition of stagnation peculiar to valleys in mountainous districts, and the results of civilisation. It has been observed that mothers of idiots and cretins, when removed from narrow gorges, where the air is heavy and full of miasma to more healthy localities, have perfectly healthy and normal children. Dr. Lunier further stated that in countries presenting an equal degree of civilisation the proportion of insane people is identical.

The Minister of Commerce has directed the Comité Consultatif d'Hygiene Publique to examine the proposed law concerning the sanitation of factories.

The Minister of Instruction has created a new chair of physiology at the Faculty of Science at Lyons.

The Minister of the Interior has given permission to the professors of the Institution Nationale des Jeunes Aveugles to celebrate next May the centenary of Valentine Haüy, the inventor of the different methods used for teaching the blind. In 1784 he opened the first school that was established for teaching the blind.

M. Jacques Bertillon, Chief of the Statistical Bureau of the town of Paris, stated before a commission of inquiry, that there was less mortality among the working class in 1883 than in 1882. There was also an increase of births. In 1883, the population of Paris presented an increase of 50,000 inhabitants.

M. Charles Quentin, Director of the Assistance Publique, furnishes statistics of a less satisfactory nature. In 1882, 2,746 newly born infants were abandoned by their parents, in 1883 the number amounted to 5,000. The crime of abandoning children from one to six years of age is on the increase.

CORRESPONDENCE.

ON THE EDUCATION OF THE DEAF.

SIR,—You referred recently to a discussion in the *Glasgow Herald* which credits the school-boards of Leeds and Sheffield with having introduced the oral system into their classes for the deaf and dumb. Having been for years interested in this subject, I am bound to state that this is not the case. I may mention, in corroboration of this, that a correspondent to the *Glasgow Herald*, dating from Leeds on March 8th, states that the school-boards of Leeds and Sheffield have not adopted the pure oral system; for the pupils taught on the so-called "oral system" resort in each case to the finger-language. The system at work under the London School Board, and also at Greenock, technically known as the "German" or "pure oral" system, dispenses *in toto* with all signs, pantomime, gestures, and manual alphabets, or any form of communication except that common to ordinary hearing persons, viz., spoken and written language. The deaf understand the speech of others by observing the motions of the lips and tongue of the speaker. This faculty (a result, I need hardly say, of careful training and practice) is termed "lip-reading," and takes the place of hearing. It is truly astounding to watch the extraordinary degree of proficiency and the truly marvellous powers of properly taught deaf children. I know children who, a few years ago, were as mute as if they possessed no organs of speech, devoid also of all written language, and able only to express their physical wants and childish emotions by natural gestures; yet these same children are now chattering and laughing the whole day long. Children so taught use no signs, no manual alphabet; as a matter of fact, are unacquainted with either, and ever since words were given them, even natural gestures are set aside.

Now, certain institutions for the deaf and dumb in this country have adopted a method, and have called it "oral," which, if not "pure oral," must be regarded with complete disfavour, for it never succeeds in educating its totally deaf-born pupils to a free knowledge and use of spoken language, owing to the habitual practice of signs, and the manual alphabet in the daily teaching of its pupils.

The importance of this distinction is essential; the silence or speech of the deaf and dumb in this country is dependent upon it. Let me draw a parallel. For the success of "Listerism," impure outer air must be excluded from the wound, everything touching or approaching it must be rendered scrupulously antiseptic or failure will result. What would the precise followers of this school of surgery think of imitators who, while operating under the spray, took no heed whether that spray consisted of Thames water or carbolised, so long as the wound was bathed, and then dressing and redressing with ordinary bandages without further reference to antiseptics?

The oral-system advocates, however, trust nothing to chance; they ensure failure, they literally gather all the infectious germs they can, and carefully introduce them into the wound; the names of these deadly germs are signs and manual alphabet.

A tide, favourable to the better education of the too long unjustly treated deaf and dumb of this country, seems to be now swelling, which I, in common with many others, am eagerly wishing to see in full flood, and am naturally anxious that no obstacle should check its even flow, or divert it into obscure channels.

With your help our profession will realise the true bearings of this question, and then the "pure oral" system will do for the English deaf what it has already done for those of other nations.—Yours truly,
E. SYMES THOMPSON.

TYPHOID FEVER IN GENEVA.

SIR,—On my return home from the sunny shores of the Mediterranean, whither I was attracted by the charming articles which appeared in your journal, I passed through Switzerland, spending three days in Geneva, where I learned from one of the oldest inhabitants that typhoid fever existed in every part of this beautifully situated town, due I am told to bad water, and aggravated by imperfect drainage. This report was verified by travellers met at Lausanne, who stated they had recently left one of the principal hotels in Geneva in consequence of there being several cases of this terrible disease in the house they stayed in. The medical man in charge of these cases stated he had eighty cases of a similar kind under his care. Perhaps some reading this letter may say "but the death-rate of Geneva is very low;" and in reply to those I may add, that a good deal of this form of disease may exist without a high death-rate, the mortality being, as far as I can recollect, only one in twenty.—I remain, yours faithfully,
RICHARD JEFFREYS, M.R.C.S.

P.S.—I have thought it my duty to communicate the above as a word of warning to those about to visit Switzerland. I could not ascertain that the epidemic extended to other towns.

THE RECENT DISCUSSION ON PELVIC SURGERY AT THE HARVEIAN SOCIETY.

SIR,—In your report of this discussion, Mr. Knowsley Thornton is made to say that "he had just completed two years' ovariotomy at the Samaritan Hospital, seventy-three cases, without a death." At the discussion Mr. Thornton made no such statement, and I have ascertained that he altered the proof of the secretary's correct report, and inserted this misstatement. Had he made it at the Society, I should have immediately pointed out that it was a wholly irrelevant statement, and only went to prove that the mortality in his private practice must have been very heavy, as he excluded it; and as I assume that he uses Listerism in private practice, his argument is wholly fallacious.

The practice of inserting in reports of meetings statements which are afterthoughts is extremely unfair to others who take part in the discussion, and is unjust to the journals in which those reports appear.

I enclose copies of letters which have passed between Mr. Thornton and myself on this matter, and these you are at liberty to publish if you see fit.—I am, etc.,
LAWSON TAIT.

Birmingham, April 9th, 1884.

[*Copies.*]

"Birmingham, March 27th, 1884.

"Dear Sir,—It is reported in the BRITISH MEDICAL JOURNAL that, during the discussion at the Harveian Society, you stated that you had just completed two years' ovariotomy at the Samaritan Hospital, seventy-three cases, without a death. I cannot remember you making such a statement, nor can others who were present, and whom I have asked the question. Will you kindly tell me if this is a mistake of the reporter? If so, it is a statement which must be corrected, if not it must be replied to.—Yours truly, LAWSON TAIT.—J. Knowsley Thornton, Esq."

"22, Portman Street, W., March 28th, 1884.

"Sir,—The statement you refer to is quite correct. From the end of February 1882 to the end of February 1884, I performed ovariotomy seventy-three times at the Samaritan Hospital, and all the cases recovered. This is exclusive of oöphorectomies, which were also every one successful.—Faithfully yours, J. KNOWSLEY THORNTON.—Lawson Tait, Esq."

"Birmingham, March 29th, 1884.

"Dear Sir,—You misunderstand my question, though it seems to me to be put with sufficient clearness. Did you or did you not make the statement in question at the discussion of the Harveian Society? The question of its accuracy or its relevancy will be discussed by-and-by.—Yours truly, LAWSON TAIT.—J. Knowsley Thornton, Esq."

[*No Reply.*]

"Birmingham, April 4th, 1884.

"Dear Sir,—Allow me to remind you of my letter of March 29th, to which I have not yet received a reply.—Yours truly, LAWSON TAIT.—J. Knowsley Thornton, Esq."

[*No Reply.*]

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Wednesday, April 2nd.

The Educational Code.—Earl DELAWARE moved an address to the Crown, praying that the new code of regulations issued by the Committee of the Privy Council on Education might be so altered as to exempt infants, till they have attained the age of five years, from examination in reading, writing, counting, and needlework; but on Lord CARLINGFORD explaining that it was the opinion of the Education Department that the individual examination of infants had been carried beyond the necessities of the case, and that the code now gave no individual grant whatever to children in infant schools, and required no individual examination, the noble earl withdrew his motion.

HOUSE OF COMMONS.—Thursday, April 3rd.

Indian Medical Service.—Mr. GIBSON asked the Under Secretary of State for India whether the number of surgeons of the Indian Medical Service under and up to five years' service, as shown by the recently issued Bengal Army List of December, 1883, who were employed on "unemployed" pay, in Bengal alone, was 28 out of a total of 59 surgeons; and was it a fact that, when being "instructed," or doing duty, the officers of the Indian Medical Service actually received less pay than their brethren of the same standing in the Army Medical Department.—Mr. CROSS replied in the affirmative to the first part of the question; and, as to the second, observed that, for the remainder of their service, these officers received much better pay than those in the Army Medical Department.

Patent Medicines.—Mr. WARTON asked the Vice-President of the Council when the Government intended to introduce, in the House of Peers, their Bill relating to patent medicines.—Sir W. HARCOURT said the Bill would be introduced soon after Easter.

Saturday, April 5th.

The Lunacy Law.—The Earl of MILLTOWN gave notice that he would, on May 6th, call attention to the recent remarks of Mr. Baron Huddleston in the case of Weldon *v.* Winslow, and move that the existing state of the Lunacy Law is eminently unsatisfactory, and constitutes a serious danger to the liberty of the subject.

MEDICO-LEGAL AND MEDICO-ETHICAL.

MEDICAL ETIQUETTE.

SIR,—I shall be glad to hear your opinion of the following case. Two years since, A. was attending a patient, the wife of a clergyman, who had met with an accident. B., the surgeon to the County Infirmary, ten miles distant, was called in consultation. The patient recovered, but has remained in indifferent health since. A. has continued as the medical attendant since, and has been in attendance upon a member of the family as recently as a month since. Three days since, the clergyman met A., said his wife was ill, and that B. was going to attend her. A. then wrote to B., reminded him of his position of consultant, and asked him whether it would be fair to take the case under the circumstances. The letter written by A. was marked "confidential." The next day, A. received a letter from the clergyman, saying that he had heard from B., and he had declined to attend except in consultation; but, notwithstanding, the next day B. attended, and is in charge of the case. B. has never acknowledged the letter written by A. Now the questions I want answered are:

1. Was A. entitled to object to B. attending?
2. Was B. acting in a proper manner in communicating the contents of a confidential letter? and
3. Should B. have attended at all, except in consultation?—Yours obediently,

MEMBER B. M. A.

⁂ 1. A. was not, in our opinion, entitled to object to B. attending the lady, inasmuch as she was not then, and evidently had not been for some time, under A.'s professional care; the husband, moreover, had a perfect right to change her former medical attendant, if he deemed it advisable.

2. There is no evidence, so far as we can judge from our correspondent's note, that B. did communicate the contents of A.'s confidential letter, further than to decline attendance on the lady except in consultation—a decision which was in strict accord with medico-ethical rules, and in unison, we presume, with A.'s wishes.

3. Under the circumstances narrated we consider that B. was justified in attending the case. At the same time, it will, perhaps, be well to note that a courteously written communication entails, by the ordinary rules of civil and professional life, a like courteous reply.

A further and somewhat important question, however, arises, as to how far A. himself acted rightly in using the information frankly imparted to him by the clergyman, of the intention to place his wife under the care of B.; and, by confidentially communicating with the latter, try to thwart it.

MEDICAL ETIQUETTE.

SIR,—I should like to ask your opinion on a matter of professional etiquette. A man was hit on the head with a hammer in a shoemaker's shop, and turned out into the street, sustaining severe concussion of the brain and several scalp-wounds. The curate of the parish, who is a patient of A.'s, and happened to be passing, sent for A., whose surgery was not many yards away; finding A. was absent, he sent for B., who lived a quarter of a mile away, and who is in partnership with his father. B. went at once, and found that the man had been removed to A.'s surgery. B. dressed his wounds at A.'s surgery; but, owing to an accident, had his plaster and lint spoiled, so begged a small piece of each from A.'s servant. Before the man was removed from A.'s surgery, B. asked his wife who was her doctor, thinking that if A. was, he would hand the case over to him; she replied: "Your father." After three days had passed, from something said by A., B. cross-examined the man's wife, and ascertained that A. had attended her since B.'s father had. I should like to ask you, sir, whether B. was bound, by either medical etiquette or common courtesy, to turn the case over to A.—Yours, etc.,

A MEMBER.

⁂ The question, as put by "A Member," is, in the absence of material information on an obscure point, somewhat difficult to solve, and our reply must be dependent on the matter of fact as to which of the practitioners, A. or the father of B., was the usual medical attendant of the injured man, not of his wife, as mentioned in B.'s statement. If he was ordinarily attended by B.'s father, medical etiquette would justify B. in retaining the patient, and common courtesy would, at the same time, naturally suggest either a friendly call upon, or a courteous note of explanation to A. in reference thereto. On the other hand, if A. had been the usual professional attendant, it would be B.'s duty to act in accordance with the following rule (7) laid down in Dr. Styrap's *Code of Medical Ethics*, page 37.

"When a practitioner is called to an urgent case in a family usually attended by another, he should (unless his assistance in consultation be desired), when the emergency is provided for, or on the arrival of the attendant in ordinary, resign the case to the latter; but he is entitled to charge the family for his services."

MILITARY AND NAVAL MEDICAL SERVICES.

ARMY AND NAVAL MEDICAL DEPARTMENTS IN THE SOUDAN.

THE official despatch from Major-General Sir G. Graham, commanding Tokar Expeditionary Force, dated Camp, Tokar, March 2, contains the following paragraph:—"My thanks are also due to Deputy Surgeon-General M'Dowell, who has conducted the duties of the medical department to my entire satisfaction, and has shown great judgment and forethought in providing for the wants of the wounded, who have been well and promptly attended to."

Admiral Hewett concludes his despatches with these words: "I beg also to bring to their lordships' notice the admirable arrangements which were made for the reception and treatment of the sick and wounded on board Her Majesty's ships *Orontes* and *Jumna*, the credit for which is due to Staff-Surgeon Robert Grant and Fleet-Surgeon James Trimble, of those ships respectively."

Commander Rolfe, in his report of proceedings to Admiral Hewett, says: "The conduct of Mr. Thomas D. Gimlette, surgeon, calls for very special comment from me. The devotion to duty which this officer displayed has already been instanced by my brief allusion to the service which he performed when accompanying Lieutenant Royds to Trinkitat; and I must say that the same spirit which prompted him in that matter actuated him also throughout the whole time he was with the brigade, and made him conspicuous for zeal, as well as for personal coolness, during the action at Teb on February 29th, where his attention to the wounded was beyond praise."

THE MARCH OF VOLUNTEERS TO PORTSMOUTH.

THE following instructions for the volunteer medical officers in charge of columns on the march from Petersfield into Portsmouth, on April 11th and 12th, have been issued by Surgeon Cumming, Scots Guards, Principal Medical Officer marching columns.

1. Medical officers in charge of columns will keep a return of all men falling out of the line of march, on one of the forms with which they will be supplied.

2. On arriving at the end of the day's march on Good Friday, they will inform the principal medical officer, who will be found at W. Tooker, Esq., Hinton Daubeny, Horndean, of the total number falling out from all causes, and also of any serious cases *by signal*, which they will send through the nearest signalling party. They will complete their detailed form of casualties in duplicate, and will forward one as soon as possible to the officer commanding their column; the other they will have ready for the principal medical officer early on Saturday morning, and this will be collected by a mounted orderly during the march on Saturday.

3. In any case which may occur on Good Friday of sufficient severity to incapacitate a man from taking further part in the operations, he will, if well enough, be sent to his home by himself, provided this can be arranged; if not well enough to proceed alone, he will be sent by rail in charge of a certificated member of the Volunteer Ambulance Department to the Civil Hospital, Portsmouth, and particulars of the case will be furnished to the officer commanding the corps he belongs to, the officer commanding the column, and the principal medical officer.

4. Men reporting themselves sick before the commencement of the march on Saturday will, if well enough, be allowed to proceed either to Portsmouth or to their homes alone; if not well enough for this, they will be sent to the Civil Hospital, Portsmouth, by rail, in charge of a certificated member of the Volunteer Ambulance Department.

5. The number of men reporting themselves sick before the commencement of the march on Saturday will be notified to the principal medical officer, when Friday's returns are collected, for the information of the officer commanding the marching columns; also, details of any serious case.

6. Returns of men falling out on Saturday's march should be sent to the principal medical officer, at Officers' House, Grand Parade, Portsmouth, as soon as possible after the completion of the march, to enable him to make out his report of the two days' marching and manœuvres for the information of the officer commanding the columns.

7. Medical officers should take means to let it be generally known throughout the column they are attached to where they are staying on Good Friday night, in order that they may be readily found in case of accident or emergency, and they should provide themselves with the addresses of the men of their bearer-detachments, in order that they also may be at hand in case of need.

8. A certain number of tickets with supposed wounds or injuries written

thereon, will be distributed amongst the men of each column (in the proportion of about four per cent.), who will fall out at different times on Friday's march, and also during the engagement on Saturday; and, on coming up with any of these, the men of the bearer detachments will deal with them as if the supposed injuries, etc., really existed; they will then be inspected by a medical officer, who will, if necessary, point out to the bearers any defects in their treatment of the case, and will then cause all bandages, etc., to be removed, and direct the man to rejoin his corps. On the Saturday, none of these men will fall out till the commencement of the engagement. The bearers will then take the stretchers from the wagon, and will spread themselves out to look for wounded, as in actual war, keeping in rear of the men of their own column. On coming up with a supposed wounded man they will dress the injury, place him on the stretcher in the proper manner (No. 1 giving the word of command), and carry him back to the ambulance, where the dressings will be inspected by a medical officer. The man will then be directed to rejoin his corps. At this time, also, medical officers should practise their men in loading ambulance-wagons in the proper manner.

9. In their final report, medical officers will state briefly and generally how the exercises in No. 8 have been carried out by the men under their command.

10. Should any serious casualties occur on the march, or during the manœuvres on Saturday, they should be taken on to Portsmouth in the ambulances, and then be conveyed to the civil hospital there. A report of any such case should be immediately sent to the principal medical officer.

The medical officers detailed for duty with the marching column from Petersfield to Portsmouth are: Surgeon Bateman, 5th Surrey R.V.; Surgeon Lane, 18th Middlesex R.V.; Surgeon Jackson, Artists' R.V.; Acting-Surgeon Cantlie, London Scottish R.V., Surgeon Davidson, 17th Middlesex R.V.; Surgeon Casson, Derby R.V.; and Surgeon Platt, Tower Hamlets Rifle Brigade.

INDIA AND THE COLONIES.

Field-Hospital Equipments.—A Committee, composed of an officer of the Army Medical Department, an officer of the Indian Medical Service, and Apothecary T. H. Hill, is to assemble in Calcutta for the elaboration of a scheme for the packing of the various equipments of a field-hospital, the weight of the unit load being limited to 80 lbs.

Quarantine.—The Government of India have addressed the following despatch to the Secretary of State for India, protesting against the reimposition of quarantine in Egyptian ports to vessels arriving from Bombay: "In continuation of our despatch No. 12, dated June 15th, 1883, we have the honour to transmit a copy of a letter from the Government of Bombay, with its enclosures, containing a protest from the Chamber of Commerce at Bombay against the reimposition of quarantine in Egyptian ports on vessels arriving from Bombay. We concur in the views expressed by the Chamber of Commerce and by the Government of Bombay, and we are of opinion that no means should be left untried for the early removal of these quarantine restrictions, which every day interfere more and more seriously with the commerce of India, and from which there is no evidence that the smallest good has resulted."

Small-pox.—The small-pox epidemic at Delhi is abating. Small-pox is very prevalent at some of the large towns, including Calcutta and Madras. In Madras vaccination has been made compulsory. The city of Bombay is almost entirely free from the disease, but there are cases in most of the Mofussil districts of this presidency.

Communication of Cholera.—Mr. Vincent Richards, of Goalundo, has, it is said, obtained very important results from cholera-experiments. He has, it is alleged, succeeded in doing what the German medical men hitherto have failed to accomplish; he has produced the disease artificially. The subject of his experiment was a pig. After many trials, Mr. Richards has succeeded in communicating what appears to be cholera. The animal died three hours after the experiment.

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

The Thurston Prize will be awarded at the end of the present academical year. The prize, about £50 in money, or in any other form that may be thought best, is given triennially "to that member of Gonville and Caius College who has published, in the course of the preceding three years, the best original investigation in physiology, including physiological chemistry, pathology, or practical medicine." Publications or notices of publications must be sent to the Master.

The Shuttleworth Travelling Scholarship, awarded for biological science, and tenable for three years, has been obtained by Mr. C. S. Sherrington, B.A., of Gonville and Caius College, a student of St. Thomas's Hospital.

UNIVERSITY OF OXFORD.

The Radcliffe Travelling Scholarship.—This Fellowship has been awarded, after examination, to Mr. J. E. Blomfield, B.A., late Natural Science Demy of Magdalen College, and now of University College Hospital, London. This Fellowship is of the annual value of £200, and tenable for three years, provided that the Fellow travels abroad for his improvement in the study of medicine. This is the fourth time in five years in which this prize Fellowship has been won by a student of Magdalene College.

HOSPITAL AND DISPENSARY MANAGEMENT.

EDINBURGH DENTAL HOSPITAL AND SCHOOL.

The Edinburgh Dental Hospital and School continues to increase in usefulness and efficiency; the number of patients during the past year having been 2,478 males and 3,120 females, a total of 5,598. The conservative treatment of teeth continues to receive the careful attention of the staff; the number of stoppings being 561, as compared with 430 the previous year. The treasurer calls attention to the healthy interest taken in the institution by the patients voluntarily subscribing towards the defraying of the necessary expenses; the sum subscribed by them this year, amounting to £16 13s., an increase of £3 13s. over last year's amount. There has also been an increase of students, whose attention to their teaching and duties has given satisfaction to the staff. The financial report is also in a satisfactory condition.

EDINBURGH ROYAL INFIRMARY.

In January, each year, the Court of Contributors to the Edinburgh Royal Infirmary holds two meetings; at the first of these the annual report is submitted, a committee is then appointed to examine and report on the same; and at the second meeting the observations of the committee are received, the report adopted, and six managers appointed, who represent the Court of Contributors for one year on the Board of Managers of the Royal Infirmary. At the meeting held on January 7th, and presided over by the Lord Provost, the report submitted showed that on October 1st, 1882, there were 498 patients in the Infirmary; that during the year from October 1st, 1882, till October 1st, 1883, there were 6,831 patients admitted, making a total for the year of 6,829 patients treated in the wards, of whom there were 3,279 dismissed as cured; as relieved, 1,954; on other grounds, 582; and died, 501; while on October 1st, 1883, there remained in the wards 513. Of the cases completed during the year, 467 were of infectious diseases, and were treated in the Fever Home, Old Infirmary; they included 132 cases of scarlet fever. Ordinary medical cases numbered 2,669, and surgical cases 3,180. The average number of children in the hospital at any period during the year was between forty and fifty, and the greater number of these were surgical patients. The daily average of patients was 555, the maximum number having been 607, and the minimum, 502. The average period of duration of treatment was 29.6 days, while in the previous year it was 30.1 days. Edinburgh sent 3,380 patients, Leith 492, and the country 2,444; total, 6,316. The number of deaths which occurred within 48 hours after admission was 119; these were mostly hopeless cases of [illegible] injury, and they unduly raised the death-rate in the Infirmary. The percentage of deaths among ordinary medical and surgical cases was 7.1, but deducting the deaths that occurred immediately after admission, the percentage would be 5.4. In the Fever Home 12 deaths took place within 48 hours of admission, and the percentage of deaths from all infectious diseases treated in the Old Infirmary was 7.9, and deducting those which occurred within 48 hours of admission, 6.9 per cent. During the year, 758 patients were treated in the Convalescent Hospital, Corstorphine, which exceeded the preceding year by 86; the average number admitted per month was [illegible], the average daily number was 50.5, and the average period of residence [illegible]. In addition to indoor patients, there were over 22,000 cases treated as out-patients during the year, many of whom, in addition to advice, received the necessary drugs and appliances at the expense of the hospital.

Portrait of Mr. John Marshall.—An excellent portrait of the President of the Royal College of Surgeons has been painted by Miss E. M. Merrick. The artist, who has attained already considerable distinction both at the exhibitions of the Society of Lady Artists, and at the last Academy Exhibition, gained, last year, the first prize of silver medal at the Royal Academy School, for a study from the life, and was, for this reason, selected by Professor Marshall from among the students to [illegible] as the popular lecturer on anatomy.

OBITUARY.

JOHN HALL DAVIS, M.D.Lond., F.R.C.P.Lond.

Those who were intimate with the late Dr. Hall Davis could scarcely have been surprised to hear of his recent death. For the last few years, his health had been giving way; and, although he persisted in attempting to perform his hospital duties up to within the last few weeks, it was evident to all that the end must soon come. Of late he had suffered frequently from severe attacks of asthma, which proved very distressing, and on more than one occasion threatened imminent dissolution. On the evening of January 22nd, he had a slight hemiplegic attack, due apparently to some small amount of cerebral effusion. The symptoms, however, passed off within a few weeks, and hopes were entertained that his health would be improved by a change to the sea-side.

On the night of Tuesday, March 18th, he retired to rest as usual, having felt comparatively well during the day. In the early morning, he was heard to be breathing stertorously, and his friends at once sent for medical assistance; but this arrived too late to be of any avail, death apparently resulting from extensive cerebral hæmorrhage.

Dr. Hall Davis received his medical education in University College, London, where his father (Dr. D. D. Davis) was for many years Professor of Midwifery. He graduated at the University of London, taking the degree of M.B. about 1840, and that of M.D. in 1845. For some time, he assisted his father in his professorship. On the death of Dr. Davis, senior, in 1841, Dr. E. W. Murphy was appointed his successor; and in the following year Dr. Hall Davis obtained recognition by the examining boards as a private lecturer in midwifery, and opened, at his residence in Charlotte Street, Fitzroy Square, a class which was continued for several years. He was, if we remember rightly, the last of the private lecturers in London recognised by the licensing bodies. He became a Member of the Royal College of Physicians in 1851, and was made a Fellow in 1863.

Dr. Hall Davis was appointed Obstetric Physician to the Middlesex Hospital, and Lecturer on Obstetric Medicine to the Medical School, in 1863, both of which appointments he continued to hold until very recently, resigning the chair of obstetric medicine only about a twelvemonth ago, and the post of obstetric physician just a week before his death. He held, at one time, the offices of Examiner in Obstetric Medicine to the University of London, and also to the Royal College of Physicians.

Dr. Davis was, from an early period of his career, and for many years, Physician to the Royal Maternity Charity, being a colleague of Ramsbotham, Barnes, and Hicks. He was also Consulting Physician to the St. Pancras Infirmary.

An original Fellow of the Obstetrical Society of London, Dr. Davis was made President in 1867. It was during his term of office that one of the most numerously attended and stormiest meetings, respecting the expulsion of one of the Fellows, took place—Dr. Davis discharging the duties of President with much courtesy and impartiality. He contributed numerous cases of interest to the *Transactions* of the Society, on "Puerperal Convulsions," "Chorea complicating Pregnancy," "Uterine Fibroid Tumours," and other subjects. He was the author of *Parturition and its Difficulties.*

Dr. Davis was an honorary member of the Gynæcological Society of Boston, U.S., and of the Medical Society of Victoria.

At one time, he enjoyed a large midwifery practice, but of late years had given it up to a great extent. Dr. Davis was eminently respected for honesty of purpose, judgment, and good feeling. He will be long remembered by those who knew him as a kind and sympathetic friend and adviser.

WILLIAM TAYLOR, M.R.C.S.Eng., Scarborough.

Mr. William Taylor of Scarborough died on March 18th, aged 66, after a long and painful illness, from carcinoma of the rectum.

Commencing practice at Scarborough at the time when that watering-place had just become, comparatively speaking, within easy reach of the English public, Mr. Taylor lived to see the place, where the greater part of his life was passed, become, from a second-rate English sea-port and watering-place, one of the chief watering-places; and, by lending his assistance and wise counsel in the development of many and various undertakings, having for their object the benefit of the place, he has placed his fellow-townsmen under deep obligation.

Mr. Taylor was educated at St. Bees' and at Shrewsbury; and, having completed his studies at the latter place, he was apprenticed at Scarborough to Messrs. Heuland and Euston, with whom he afterwards became associated as partner. After the termination of his apprenticeship, Mr. Taylor went to University College, London, where, in due succession, he held the appointments of house-surgeon, under Liston; physician's assistant to the late Dr. John Taylor; and obstetric-assistant to the late Dr. Murphy. He afterwards visited Paris, where he worked under Nélaton; and, finally, he commenced practice in Scarborough in the year 1845. He was appointed surgeon to the Dispensary (of which he was one of the principal founders) when that useful institution was established. A short time since, on his retirement as senior surgeon, the members of the Board presented him with a testimonial, in recognition of his long and highly valued services; at the same time placing his name on the list of consulting surgeons. He was also surgeon to the Scarborough Sea-bathing Infirmary, and of the Borough Gaol; and, having been gazetted as surgeon to the Scarborough Artillery Volunteers, he became surgeon to the East Yorkshire Artillery Militia, and was surgeon-major on his retirement.

These varied appointments did not prevent Mr. Taylor from serving his fellow-townsmen in other spheres of usefulness. He was appointed Justice of the Peace for the Borough; and he was chairman of the Valley Bridge Company, and also of the Queen's Parade Tramway Company; in fact, his services were rendered not only on behalf of those institutions specially designed to be of service to his poorer neighbours, but they were freely given in favour of such as were likely, by attracting visitors to the place, to confer material benefits upon his brother-townsmen generally. It will, however, be principally by patients, and by his medical brethren, that Mr. Taylor will be best remembered; by the former, as a faithful friend and skilful practitioner; by the latter, as one always ready to advise and to help unostentatiously a brother-practitioner; in fact, to use the words which have recently been recorded by his local biographer, it may be said that he was "candid yet courteous to all; he has been respected through life by all who knew him, patients and friends, in every class of the community."

Mr. Taylor's remains were interred in the Scarborough Cemetery on March 21st, amid demonstrations of respect and affection by friends and public officers.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

SCARLET FEVER AT LEEDS.

Scarlet fever has, for some time, been unduly prevalent in the borough of Leeds. Last month it caused 80 deaths, a decrease of 21 deaths as compared with the previous four weeks of the year, and respectively 33 and 22 fewer deaths than were recorded in the months of November and December. The disease proved highly epidemic and fatal all through 1883, when 647 deaths occurred. The year opened with 36 deaths in January, and closed with 102 in December. The average monthly mortality was 54, and the highest and lowest number of deaths per month registered during the year were respectively 113 in November and 28 in July. The 80 deaths recorded for February yield a mortality-rate of 3.1 per 1,000 living within the borough. All these 80 deaths occurred among persons under 15 years of age, 18 in persons under 2 years, 29 in persons above 2 and under 5 years, 24 in persons above 5 and under 10, and only 9 among young people above 10 and under 15. Recently the borough has been completely placarded with "caution bills," and Dr. Goldie, the health-officer, is of opinion that this mode of precaution proves of great service in checking the reckless spreading of infection. Dr. Goldie regards the Public Health Act as utterly powerless to prevent the spread of infectious diseases, through exposure of ignorant persons to infection by bringing them into contact with an infected person in a private house, or to prevent a person from exposing himself in the infected clothing which he himself is wearing. His experience during the past twenty-five years has taught him to regard those two means of spreading infection as probably the most prolific.

THE EPIDEMIC OF SORE-THROAT AT DOVER.

Sir,—In the Journal for March 22nd, a leading article, commenting on Dr. Robinson's report upon the recent epidemic of sore-throat in Dover, attributes the outbreak to the use of milk from cattle affected with foot-and-mouth disease; and the writer adds, "so far as we are aware, the Dover outbreak is the first extensive epidemic of its kind that has yet been reported."

Dr. Robinson's report, as an instance of sagacity and practised skill in the investigation of sanitary delinquencies, is deserving of the highest commendation; but his inferences and conclusions seem to me to be hardly warranted by the evidence.

If it be true, as Dr. Robinson asserts, that "the outbreak of foot-and-mouth disease amongst the cows, and the subsequent epidemic amongst milk-drinkers in Dover, stand to each other in the relation of cause and effect," then there is nothing more to be said. But this is mere assumption, and one looks in vain for anything like absolute proof that in this epidemic we have had to deal with a complaint originating solely from tainted milk and from no other source.

Hasty generalisation upon insufficient data does infinite harm to the cause of sanitary science, inasmuch as it raises suspicion in the public mind of the value of sanitation in general, and of sanitary "reports" in particular.

As regards my own experience in this matter, I may say that a large proportion of cases fell to my lot in hospital and private practice, both before and after the special outbreak referred to by Dr. Robinson; and I am bound to add that in none of them did I observe symptoms which would lead one to suspect any special infection. The cases seemed to me to be cases of epidemic catarrhal tonsillitis, probably of atmospheric origin, and I still so regard them; nor, looking back, do I see any reason to doubt the accuracy of this view.

The cases presented much variety, gouty and lymphatic patients suffering most, the latter especially showing a tendency to quinsy and enlarged cervical glands. Nearly all had the exudation, more or less, which one commonly sees in follicular tonsillitis; but I saw none with "vesicular eruption of the throat or other parts of the body." Indeed, with this one exception, the special symptoms described by Dr. Robinson usually obtain in most cases of chill, catarrh, or tonsillitis, of course with varying degrees of intensity—*e.g.*, "headache and fever, pains in the limbs, thirst, parched lips." In such cases, too, herpes of the nose and mouth are not uncommon; and Dr. Robinson speaks of a vesicular eruption on the lips!"

As regards erysipelas, I had one case in a patient liable to gouty eczema of the face, who had a sore-throat for two or three days from a chill, which appears to have kindled up the facial erysipelas.

And, lastly, there is the "ropy mucus;" but who is not familiar with its constant discharge in cases of quinsy? and there were many such in this epidemic.

It was a singular coincidence, to say the least, that besides these severe cases there should be prevalent at the same time very many others too mild to be attributed to specific infection, or to anything else but simple catarrh. Moreover, during the past week several fresh cases have come under treatment, manifesting symptoms identical with those observed in the milk-scare. One case, indeed, was as bad as the worst that came under my notice during the epidemic, and culminated in double quinsy. I suppose the milk of the town at the present time is above all suspicion; but I have little doubt that this case would have been attributed to infected milk, had it occurred at the period of Dr. Robinson's report.

With every desire to be convinced, I must frankly admit that I am not convinced, that, in the recent outbreak, we have had had to deal with a specific disease originating solely from drinking infected milk. To my mind, it is clearly "not proven."

I may add, that many cases of sore-throat occurred amongst the drinkers of milk from other dairies; but these do not appear to be included in Dr. Robinson's report.—Faithfully yours,

2, St. James's Street, Dover. CHARLES PARSONS, M.D.

HEALTH OF ENGLISH TOWNS.—In the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons, 5,983 births and 3,809 deaths were registered during the week ending the 5th inst. The annual rate of mortality per 1,000 persons living in these towns, which had declined from 22.6 to 20.8 in the three preceding weeks, rose to 22.7 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow:—Brighton, 14.3; Huddersfield, 14.6; Leicester, 16.5; Bristol, 17.7; Birkenhead, 17.8; Hull, 18.1; Bradford, 18.9; Blackburn, 18.9; Norwich, 19.0; Salford, 21.2; London, 21.9; Sunderland, 22.0; Derby, 22.0; Sheffield, 22.4; Bolton, 23.0; Halifax, 23.2; Birmingham, 23.3; Portsmouth, 23.5; Liverpool, 23.6; Newcastle-upon-Tyne, 24.5; Preston, 25.2; Wolverhampton, 26.6; Nottingham, 26.9; Leeds, 28.1; Plymouth, 28.3; Manchester, 30.4; Cardiff, 31.3; and Oldham, 36.2. In the twenty-seven provincial towns the death-rate last week averaged 23.3 per 1,000, and therefore exceeded by 1.4 the rate recorded in London. The 3,809 deaths registered last week in the twenty-eight towns included 184 which resulted from whooping-cough, 143 from measles, 75 from scarlet fever, 41 from "fever" (principally enteric), 37 from diarrhœa, 28 from diphtheria, and 21 from small-pox; in all, 529 deaths were referred to these principal zymotic diseases, against numbers declining from 502 to 471 in the three preceding weeks. These 529 deaths were equal to 13.9 per cent. of the total deaths, and to an annual rate of 3.2 per 1,000. In London, the zymotic rate was equal to 3.4, and slightly exceeded the average rate in the twenty-seven provincial towns, among which it ranged from 0.5 in Brighton, and 0.7 in Bradford and in Halifax, to 5.1 in Oldham, 5.4 in Leeds, and 5.8 in Preston. The deaths referred to whooping-cough in the twenty-eight towns, which in the two preceding weeks had been 143 and 154, further rose to 184, and caused the highest death-rates in London and Bolton. The fatal cases of measles, which had declined from 146 to 135 in the three previous weeks, rose again last week to 143, and caused the highest proportional fatality in Portsmouth, Wolverhampton, and Oldham. The 75 deaths referred to scarlet fever exceeded by 2 the number in the preceding week, and caused the highest death-rates in Sheffield, Leeds, and Preston. The fatal cases of fever, which had been 33 and 41 in the two previous weeks, were again 41, and showed the highest proportional fatality in Blackburn. The deaths referred to diphtheria in the twenty-eight towns, which in the two preceding weeks had been 28 and 20, rose again last week to 28; 14 were recorded in London, 4 in Cardiff, 3 in Birmingham, and 2 in Portsmouth. The 21 fatal cases of small-pox in these twenty-eight towns showed a further increase upon the numbers returned in the two previous weeks, and included 13 in London, 3 in Birmingham, 2 in Liverpool, 2 in Sunderland, and 1 in Newcastle-upon-Tyne. The rate of mortality from diseases of the respiratory organs, judged by the metropolitan returns, was again considerably below the average; the deaths referred to these diseases in London, which had been 373 and 359 in the two preceding weeks, were last week 357; they were 148 below the corrected weekly average number, and were equal to an annual rate of 4.4 per 1,000. The causes of 90, or 2.4 per cent., of the 3,809 deaths registered last week in the twenty-eight towns were not certified, either by medical practitioners or by coroners. The proportion of uncertified deaths in London did not exceed 1.6 per cent., while it averaged 3.0 per cent. in the provincial towns, and showed the largest excess in Halifax, Hull, and Oldham.

HEALTH OF SCOTCH TOWNS.—During the week ending the 5th inst., 847 births and 583 deaths were registered in the eight principal Scotch towns, having an estimated aggregate population of 1,254,607 persons. The annual rate of mortality, which had been 20.9, 21.3, and 23.7 in the three preceding weeks, further rose last week to 24.1, which exceeded by 1.4 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the death-rate was equal to 14.8 in Leith, 16.9 in Dundee, 23.5 in Perth, 23.6 in Edinburgh, 25.8 in Greenock, 26.1 in Glasgow, 28.5 in Aberdeen, and 28.5 in Paisley. The 583 deaths registered last week included 101 which were referred to the principal zymotic diseases, against 74 and 88 in the two previous weeks; of these, 42 resulted from whooping-cough, 20 from diarrhœal diseases, 12 from diphtheria, 11 from measles, 7 from "fever," 5 from scarlet fever, and 4 from small-pox. These 101 deaths were equal to 17.3 per cent. of the total deaths, and to an annual rate of 4.2 per 1,000, which exceeded by as much as 1.0 per 1,000 the average zymotic death-rate recorded last week in the twenty-eight English towns. The lowest zymotic death-rates in the Scotch towns were 3.1 and 3.5 in Leith and Dundee, whereas the rate was equal to 5.1 in Aberdeen and 6.7 in Perth. The deaths referred to whooping-cough, which had risen from 22 to 35 in the three preceding weeks, further increased to 42, of which 21 occurred in Glasgow and 10 in Edinburgh. The 20 deaths from diarrhœal diseases considerably exceeded the average. The fatal cases of diphtheria, which had been 11 and 18 in the two previous weeks, declined last week to 12, and included 5 in Glasgow, 3 in Dundee, and 2 in Aberdeen. The 11 deaths from measles were 3 less than the number in the preceding week; 5 occurred in Edinburgh, and 3 in Paisley. The deaths referred to "fever," which had declined from 9 to 4 in the three previous weeks, rose to 7 last week, of which 3 were returned in Aberdeen, and 2 in Glasgow. Of the 5 fatal cases of scarlet fever, 2 occurred in Glasgow, and 2 in Edinburgh. The 4 deaths from small-pox were registered in Glasgow. The mortality from diseases of the respiratory organs in these towns was considerably below the average, and was equal to an annual rate of 4.7 per 1,000, which almost corresponded with the rate last week from the same diseases in London. As many as 90, or more than 15 per cent., of the 583 deaths registered last week in these towns were uncertified.

HEALTH OF IRISH TOWNS.—In the week ending March 29th, the number of deaths in the sixteen principal towns was 434. The average annual death-rate represented by the deaths registered was 26.3 per 1,000 of the population, the respective rates for the several districts being as follow, ranging in order from the lowest to the highest: Sligo, 9.6; Lurgan, 15.4; Armagh, 15.5; Limerick, 18.9; Dundalk, 21.8; Galway, 23.5; Lisburn, 24.2; Londonderry, 25; Cork, 25.3; Kilkenny, 25.4; Dublin, 25.6; Belfast, 29.5; Wexford, 29.9; Waterford, 32.4; Newry, 35.1; Drogheda, 38.1. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.1 per 1,000, the rates varying from 0.0 in Londonderry, Galway, Newry, Kilkenny, Wexford, Dundalk, Lisburn, Lurgan, and Armagh, to 6.9 in Waterford; the 14 deaths from all causes registered in the last named district comprising 1 from whooping-cough and 2 from diarrhœa. Among the 39 deaths registered in Cork were 2 from measles, 1 from typhus, 3 from whooping-cough, 1 from enteric fever, and 2 from diarrhœa. In the Dublin registration district the deaths registered during the week amounted to 183. Twenty-three deaths from zymotic diseases were registered, being 1 over the number for the preceding week, but 8 under the average for the thirteenth week of the last ten years; they comprise 1 from scarlet fever (scarlatina), 2 from typhus, 3 from whooping-cough, 4 from simple continued and ill-defined fever, 4 from enteric fever, 3 from diarrhœa, 2 from erysipelas, etc. Thirty-four deaths from diseases of the respiratory system were registered, being 6 over the number for the preceding week, but 22 under the average for the thirteenth week of the last ten years; they comprised 24 from bronchitis and 8 from pneumonia. The deaths of 19 children under 5 years of age (including 16 infants under 1 year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 8 by other diseases of the brain and nervous system (exclusive of convulsions), and 17 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 22 deaths, mesenteric disease 3, cancer 3, and gout 1. Five accidental deaths were registered. In 3 instances the cause of death was "uncertified," and in 30 other cases there was "no medical attendant."

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 4th instant, and, when eligible, will be admitted to the pass examination.

Messrs. W. H. Tomlinson, C. F. Cheetham, A. Greenhalgh, and T. J. Wheeldon, students of the Manchester School of Medicine; A. S. Wilson, E. H. Douty, T. Redmayne, and W. K. Sibley, of the University of Cambridge; S. Tor[illegible], A. S. Barling, and W. Porritt, of the Leeds School of Medicine; B. G. Sumpter, and A. F. Bradbury, of the Newcastle-upon-Tyne School of Medicine; R. J. McL. Buchanan, of the Liverpool School of Medicine; A. J. Gore, and G. E. Deacon, of St. Bartholomew's Hospital; H. Smith, of the London Hospital; H. George, and S. C. Phillips, of St. Thomas's Hospital; T. W. Fowler, of the Birmingham School of Medicine; H. P. Ziemann, of the Charing Cross Hospital; R. J. Marks, and C. E. S. Flemming, of the Bristol School of Medicine.

One candidate, having failed to acquit himself to the satisfaction of the Board of Examiners, was referred to his anatomical and physiological studies for three months.

The following gentlemen passed on the 7th instant.

Messrs. C. F. Williamson, P. A. Houghton, and W. H. B. Brook, of St. Bartholomew's Hospital; F. W. Abbott, and C. P. Oliver, of the Charing Cross Hospital; H. J. Macevoy, of St. Thomas's Hospital; A. Scott, and E. R. Davies, of Guy's Hospital; H. W. Dumergue, E. C. Perry, C. W. Daniels, and R. M. Brown, of the University of Cambridge; E. Caudwell, and J. Watson, of the Westminster Hospital; H. J. Wheeler, of St. George's Hospital; and J. E. Thompson, of the Manchester School.

Seven were referred for three months, and one for six months.

The following gentlemen passed on the 8th instant.

Messrs. W. Balgarnie, M. O. Manson, C. A. Parker, F. G. Engelbach, and O. E. P. Evans, of St. Bartholomew's Hospital; D. Owen, and W. P. Stocks, of the Manchester School of Medicine; G. A. Barton, of St. Mary's Hospital; H. Duncan, J. E. Sturt, C. Brown, and H. P. Hawkins, of St. Thomas's Hospital; A. W. F. Noyes, of Charing Cross Hospital; D. J. Mantri, of the London Hospital; H. E. Crook, and F. S. Hawkins, of Guy's Hospital.

Eight candidates were referred for three months.

The following gentlemen passed on the 9th instant.

Messrs. R. H. W. Webbe, and K. W. I. Mackenzie, of St. Bartholomew's Hospital; W. F. Clarke, of Guy's Hospital; H. Goodall, H. Lawson, of St. George's Hospital; J. C. Rossall, of St. Mary's Hospital; J. Hamel, C. P. O'Connor, H. P. Dean, F. G. S. G. Martin, of University College; R. H. Penton, E. J. A. Haynes, T. M. Thomas, of the London Hospital; G. Barlow, of the Manchester School; S. W. Wheaton, W. F. Ward, C. O. Parsons, of St. Thomas's Hospital; G. H. O'Reilly, of King's College; H. C. Bartlett, of the Middlesex Hospital; C. Scatchard, of the Leeds School.

Two candidates were referred for three months, and one for six months.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 3rd, 1884.

Cooper, Charles Bolingbroke, Oakhill Park, Stoneycroft.
Johnson, Obadiah, Hastings, Sierra Leone.
Jones, Thomas, Columbia Road, Hackney Road.
Newton, Sidney Frederick, Long Acre, W.C.
Nunn, John Robert, Repton, Burton-on-Trent.
Swindlehurst, Thomas Newton, Newington Crescent, S.E.
Tovey, Reginald Samuel, Royal York Crescent, Clifton, Bristol.

MEDICAL VACANCIES.

The following vacancies are announced.

BELMULLET UNION.—Medical Officer, Knocknalower Dispensary. Salary, 110*l.* per annum and fees. Applications to April 14th to D. O'Connell, Honorary Secretary, Kilcommon Lodge, Belmullet.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.—Dispenser. Salary, 7[illegible] per annum. Applications by April 15th.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.—Vacancy on the Honorary Acting Staff of the Out-patients. Applications to H. C. Fulford, 35, Augustus Road, Edgbaston, Birmingham, by May 10th.

BRITISH OPHTHALMIC HOSPITAL AT JERUSALEM.—Resident Surgeon. Applications to the Secretary of the British Ophthalmic Hospital at Jerusalem, St. John's Gate, Clerkenwell, E.C.

BURTON-ON-TRENT AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Medical Officer. Salary, 200*l.* per annum. Applications to Mr. N. Udall, 12, St. Paul Street West, Burton-on-Trent, by April 12th.

CARLISLE DISPENSARY.—Junior House-Surgeon. Salary, 100*l.* per annum. Applications to Mr. John Ostell, 14, Bank Street, Carlisle.

CHESHIRE COUNTY ASYLUM, Parkside, Macclesfield.—Medical Superintendent. Salary, 500*l.* per annum. Applications by May 3rd.

DENTAL HOSPITAL OF LONDON AND SCHOOL OF DENTAL SURGERY.—Medical Tutor. Salary, 40*l.* per annum. Applications by April 21st.

DEVONSHIRE HOSPITAL, Buxton.—Assistant House-Surgeon, and act as House-Apothecary. Salary, 50*l.* per annum. Applications by April 19th.

DUNFANAGHY UNION.—Medical Officer, Gweedore portion of the Crossroads Dispensary. Salary, 110*l.* per annum and fees. Applications to John Beattie, Honorary Secretary, up to 17th instant.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Salary, 100*l.* per annum. Applications to the Honorary Secretary, 10, South Bailey, Durham, by April [illegible]th.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, 100*l.* per annum. Applications to the Secretary, Board Room, [illegible] Street, Holywell, by April 15th.

GENERAL HOSPITAL, Birmingham.—Resident Surgical Officer. Salary, 130*l.* per annum. Applications by April 26th.

GENERAL HOSPITAL, Birmingham.—Resident Registrar and Pathologist. Salary, 100*l.* per annum. Applications by April 26th.

GRANTHAM FRIENDLY AND TRADE SOCIETIES' MEDICAL INSTITUTE.—Resident Medical Officer. Salary, 150*l.* per annum. Applications by April 15th.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Junior Resident Medical Officer. Applications by April 15th.

JARROW PROVIDENT DISPENSARY.—Qualified Practitioner. Applications to J. Christie, Secretary, 20, Lord Street, Jarrow.

JERSEY GENERAL DISPENSARY.—Medical Officer. Salary, 120*l.* per annum. Applications by May 1st.

LIVERPOOL INFIRMARY FOR CHILDREN, Myrtle Street.—House-Surgeon. Salary, 85*l.* per annum. Applications by April 19th.

MORPETH DISPENSARY.—Resident Medical Officer. Salary, 100*l.* per annum. Applications by May 5th.

PARISH OF BRACADALE.—Medical Officer. Salary, 108*l.* per annum. Applications to the Rev. John M'Lean, Manse of Bracadale-by-Portree.

PAROCHIAL BOARD OF KIRKCOWAN.—Medical Practitioner (qualified). Salary, 52*l.* per annum. Applications to Peter Gordon, Inspector of Poor, by May 1st.

ROYAL FREE HOSPITAL, Gray's Inn Road, W.C.—Junior Resident Medical Officer. Applications by April 16th.

ST. BARTHOLOMEW'S HOSPITAL, Chatham.—Assistant House-Surgeon. Salary, 100*l.* per annum. Applications addressed to the Clerk to the Trustees, endorsed, "Application for Assistant House-Surgeon," by May 1st.

ST. MARY'S HOSPITAL, W.—Electro-Therapeutical Assistant. Applications by April 26th.

WARNEFORD ASYLUM, Oxford.—Assistant Medical Officer. Salary, 100*l.* per annum. Applications to the Medical Superintendent by April 12th.

WEST END HOSPITAL, 73, Welbeck Street, W.—Physician. Applications by April 21st.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

MACLAREN.—On the 3rd inst., at 23, Portland Square, Carlisle, the wife of Roderick Maclaren, M.D., of a son.

MACNAUGHTON.—At Balachnain, Easdale, on the 5th instant, the wife of Allan Macnaughton, M.D., of a son.

DEATH.

HITCHMAN.—Died, March 24th, at the Laurels, Fairford, in the sixty-seventh year of her age, Mary Ann, the wife of John Hitchman, M.D., formerly Superintendent Physician of the Derby County Asylum, and ex-President of the Midland Branch of the British Medical Association.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY ..... St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY . St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., [illegible]; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

[illegible].—Harveian Society of London, 8.30 P.M. Dr. D. B. Lees: [illegible]. Dr. T. Robinson: On Acne [illegible].

[illegible].—Clinical Society of London, [illegible]. Dr. C. Haviland Hall: [illegible]. Dr. Percy Kidd: A Case of [illegible]. Mr. Hutchinson: [illegible]. Dr. Angel Money: A Remarkable Case of [illegible] Meningitis.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE POLICE AND AMBULANCE WORK.

THE Commissioner of Metropolitan Police has forwarded to the Central Executive Committee of the St. John Ambulance Association a report of a most effective case of "first aid to the injured" rendered by Police-constable Thomas Pearson, 112 B, who was awarded a certificate last year, after attending the classes at Albany Street Police-station. It appears that a man was found by the constable in the Buckingham Palace Road, suffering from hæmorrhage [illegible] of a varicose vein. Pearson immediately took the proper measures for arresting the bleeding and conveyed the man to Westminster Hospital, where it was stated that, had these precautions not been taken, the man would probably have bled to death; a letter being subsequently received from Dr. Newick, the acting house-surgeon, testifying to the opportune good service rendered by Police-constable Pearson, who will be rewarded by the Commissioner. Considering the frequency of accidents in our streets, and that the duty of conveying the unfortunate sufferers to the hospital devolves upon the police, too much praise cannot be accorded to the numerous officers of the force of all grades who attend these classes.

MARINE MEDICAL SERVICE.

THE unsatisfactory state of the sanitary administration upon Atlantic steamers, with the disabilities under which the ship-surgeon suffers, is a question which has been much discussed in these columns, and which formed the subject of a petition presented last year by the Parliamentary Bills Committee to the President of the Board of Trade. Dr. Irwin, than whom no man has [illegible] to urge on this much needed reform in this country, has been [illegible] our transatlantic friends that the American people and Government are even more interested in the reform than are the English people.

The *New York Tribune* sees in Dr. Irwin's measure a reform of special importance to Americans, for the bulk of saloon-traffic by the British transatlantic steamship lines is of American families making the tour of Europe, all of whom, during a voyage subjecting the great majority of them to various forms of sea-sickness and to possible danger from infection, are under medical care inferior to that which they employ at home. They maintain, they say, at heavy expense to the State of New York, a quarantine-service to counteract some of the perils pointed out, but it cannot guard against them all. The British Government and the English steamship companies which enjoy the profits of this great traffic, ought, they contend, to urge the passage of the [illegible] suggested.

Dr. Irwin's statements have met with [illegible] it is asserted that the medical service of the ocean steamers is [illegible] reasonable requirements. These statements are hard to reconcile with a return issued by the Board of Trade last year, which shows that of [illegible] surgeons who during the first six months of 1882 had full medical charge of ships carrying passengers to this country in transatlantic steamers, only twenty-seven [illegible] possessed any qualifications as physicians and surgeons [illegible], but were under twenty-five years, while sixty of them [illegible] through lack of [illegible]. Dr. Irwin observes, "These [illegible] and [illegible] Americans [illegible] competent for medical service [illegible] who are pronounced by English law [illegible] sufficiently qualified to treat English convicts and paupers."

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT a meeting of the Dental Board of this institution, on February [illegible], when [illegible] candidates [illegible] themselves for the diploma in Dental Surgery, the following were the questions in Anatomy and Physiology, Surgery and Pathology, Dental Anatomy and Physiology, and Dental Surgery and Pathology [illegible]. 1. Give the [illegible] attachments [illegible] the lower jaw [illegible] of expression. 2. Mention the [illegible] of the mouth, and state what you know respecting the [illegible]. 3. Enumerate the several causes which [illegible] of the lower jaw, and describe the treatment you consider appropriate to each case. 4. Describe the naked-eye and clinical differences between [illegible] and [illegible]. [illegible] the throat what complications may arise [illegible] What is the appropriate treatment [illegible]. [illegible] Wednesday [illegible].

EXTRACTION OF TEETH BY [illegible].

SIR,—[illegible] R. W. [illegible], M.D.

[illegible] Abbey, [illegible], Ireland, March [illegible].

Cremation.

Sir,—In a letter dated April 22nd, 1874, from Regent's Park Barracks, in the *Medical Times and Gazette*, I ventured to observe with regard to the happy sanitary idea of cremation, so ably suggested by Sir Henry Thompson, that it did not require very deep thought "to see in cremation the forerunner of many a Lucrezia Borgia."

As a complete safeguard against this most serious and glaring possibility, I perceive the Council of a society calling themselves "The Cremation Society of England,' state that "a certificate must be sent in by one qualified medical man at least who attended the deceased until the time of death, unhesitatingly stating that the cause of death was natural, and what that cause was." I fail to see much difference in this certificate from the usual one given by every medical man, yet cases have occurred where exhumation has proved the death unnatural.

We will suppose, for instance, that a man wished to poison his wife by slow poison, and that he managed to pick a quarrel with her usual medical attendant, discharged him, and in a week after she died, having been seen by another qualified medical man up to the hour of her death, he being under the impression that her case was misunderstood by her usual medical adviser. Again, would there not be considerable touting for names to be placed on the company's books, for those who wished to be cremated? Cremation, in my opinion, to be legal, must entail in every case a most perfect *post mortem* examination; and, until such is established, I trust the legislature will hold it illegal, and abolish all attempts at it in this country.—Yours respectfully,

Cosmo G. Logie, M.D., late Royal Horse Guards.

47, Queensborough Terrace, Kensington Gardens, March 23rd, 1884.

The Indian Medical Gazette.

Sir,—Through the medium of the British Medical Journal, I should like to bring to notice the fact that its admirable contemporary, the *Indian Medical Gazette*, is characterised by its absence in most of the medical libraries in England. I feel sure the *Indian Medical Gazette* only requires to be known, and its perusal would be appreciated by the frequenters of these libraries, many of whom are interested in the professional work carried on in and peculiar to India.—Yours obediently,

Alex. Faulkner, I.M.D.

London, March 30th, 1884.

Model Boots.

Dr. Matthews (Waterloo) forwards us samples of a model boot for children, made of the shape now fortunately no longer unfamiliar, though but little adopted by bootmakers, viz., the shape of the natural foot. These model boots are made by Messrs. Cook and Townshend of Byrom Street, Liverpool. They are sensible and humane, and there are many who will be glad to know that these model boots of natural form are kept ready-made for children at popular prices.

Incompatibility of Iodide of Potassium and Quinine.

Sir,—With reference to the observation of Dr. Rabuteau regarding the incompatibility of iodine and quinine, noted in your Journal, page 242, a reference to Section 402:2 of the *Medical Digest* will show that the late Dr. Fuller was fully aware of the fact, and communicated a suggestive paper to the *Lancet* upon the subject.—Obediently yours,

Richard Neale, M.D.Lond.

60, Boundary Road, South Hampstead, S.W.

Molluscum Fibrosum.

Sir,—Common as are the little fibrous tumours of the above disease, and frequently through their situation as they characterise the individual, they seldom present themselves for treatment. The sons of toil retain them as a birthright, and are, as a body, sceptical of the promises of surgery held out for their relief. In these days, to make a wound is often to excite an erythema, and, in the presence of pigment, the young surgeon is cautioned against well known risks in their removal; still, much may be done for them. It is when fibromata are prominently placed, as on the face or neck, and when they occur in ladies or young people of personal comeliness or fashionable tastes, that treatment is solicited. They are either spherical or oblong, and occur in large numbers when small, and, when single, are occasionally large (I have seen one of the size of a walnut hanging from the lobe of the ear). As usually met with, they vary in size from a pin's head to a bean, or even a hazel-nut, and they are, except when situated over a nerve, painless. It is to Virchow that we are mostly indebted for a description of them. Rokitansky calls the affection "Molluscum simplex," and ascribes its presence to "a heaping up of embryonic connective tissue-cells, and bulging forwards of the corium." Two cases, in which the patients were sisters, each possessing a high degree of intelligence, and "moving in good society," have lately come under my care; in neither was there a history of arrest of development. In the first the tumour was single, of the size of a pea, smooth, firm, and sessile, and situated at the root of the nose. In the second case, there were no fewer than seven of these homoplasms placed on the side of the nose, the cheek, the chin, and the angle of the mouth; and this last, where, through local activity, they are often larger, is a very common place to find them. Some were soft, but most of them firm in consistence. Two contained a varying amount of pigment, and one at least of capillaries. I removed the nodule in the first case by a transverse elliptical incision, extending somewhat beyond, and brought the edges together by a suture of very fine Japanese silk. Union took place immediately on removal of the suture. In the second case, two of the larger growths, of the size of a small grape, I similarly treated; three smaller ones, I submitted to the action of strong carbolic acid applied with a match; and two occupying an intermediate size, I treated with strong nitric acid, neutralising with carbonate of soda as soon as "blanching" had well set in. One application sufficed with nitric acid; a thick yellow, leathery slough giving place at the end of a fortnight to a circular white spot. Four applications of carbolic acid were needed, and the effect was a slightly pigmented stain. Excision left a faint linear cicatrix. After the initial treatment, the spots were covered over with discs of pink court-plaster, and flexible collodion painted on for a variable distance, so as not to restrict the patient's liberty, and to guard against ensuing "redness." The rude method of snipping off these little lumps with scissors is neither a strictly surgical proceeding, nor productive of good results. Arising from the subcutaneous layer, the growths consisted of dense greyish white fibres, and a few embryonic cells. No capsule could be traced, and the epidermic layer was detached with difficulty. One of them was soft, and contained, in addition, fat-cells, capillaries, loose fibrous tissue, and some pigment. No central duct was observed. There was an absence of sebum, and, superficially, no umbilication. The use of strong tincture of perchloride of iron, where vascularity prevails, not unfrequently gives rise to much irritation.—I am, sir, faithfully yours,

Herbert A. Smith, M.R.C.S.Eng., L.R.C.P., L.S.A.

The Value of Vaccination.

Sir,—The following case, corroborating as it does the cases given by Mr. Buchanan in the British Medical Journal of March 8th, is worth recording.

On February 23rd, I was called to see A. R., aged 24, unvaccinated, and found him suffering from small-pox. I had him removed to the Borough Hospital, where he died on March 4th. The family consisted of father, mother, two brothers, and two sisters, besides the one sent away—the children all over twenty years old, and unvaccinated. I revaccinated the father, and vaccinated the rest, excepting the mother, who had small-pox some years ago. The vaccine took well.

One brother, who had slept with deceased up to the time of his going away, was taken ill on March 5th with all the premonitory symptoms of small-pox. On the 8th, there appeared the usual eruption of pimples, which, however, did not go on to suppuration, and had quite disappeared on March 14th; showing, I think, very clearly in this case the good effects of vaccination, even if done after infection has taken place.

No other member of the family has been at all affected.—Yours truly,

J. P. Bradley, F.R.C.S.Ed.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. R. Trotter, Perth; Dr. J. Smyth, Naas; Dr. J. T. Faulkner, Stretford, Lancashire; Mr. F. A. Cox, Dublin; Dr. Moore, Dublin; Mr. G. A. Hawkins Ambler, Liverpool; Mr. S. Farmer, Chorley; Mr. W. L'Heureux Blenkarne, Buckingham; Mr. F. C. Wallis, London; Mr. Lawson Tait, Birmingham; The Secretary of the South Wales and Monmouthshire Branch; Our Glasgow Correspondent; Mr. Shirley Murphy, London; Dr. David Drummond, Newcastle-on-Tyne; Mr. E. Luckman, Bowdon; Mr. H. J. Manning, Salisbury; Our Dublin Correspondent; The Secretary of the Royal Medical and Chirurgical Society, London; Our Edinburgh Correspondent; Mr. R. J. H. Scott, Bath; Mr. G. S. Brady, Sunderland; Our Paris Correspondent; Mr. C. Spurway, Rome; Mr. J. Vesey Fitzgerald, London; Mr. J. Startin, London; Mr. D. W. Richards, Birmingham; Mr. R. D. R. Sweeting, London; Our Aberdeen Correspondent; Sir Edmund Lechmere, London; Messrs. Lebon and Co., London; Mr. J. Smith, Belfast; Mr. T. W. Wholey, London; Dr. Sheen, Cardiff; Dr. Kelly, Taunton; Dr. Davison, Southbourne-on-Sea; Mr. William Graham, Middleton; Mr. John Giles, Cuxton; Dr. Ward Cousins, Southsea; Mr. H. G. Davies, London; Our Birmingham Correspondent; Mr. Richard Jeffreys, Chesterfield; Dr. S. W. Smith, Pershore; Mr. William Jones, Wrexham; Dr. John Topham, London; Dr. A. Wahltuch, Hulme, Manchester; Dr. James McNaught, Bookfold; Dr. Collingridge, Greenwich; Dr. Robertson, Kimberley; Mr. D. H. Menzies, Glasgow; Mr. H. O. H. McDougall, Winchester; Dr. Norman Kerr, London; Dr. Styrap, Shrewsbury; Mr. N. Lambert, London; Dr. C. E. Prior, Bedford; The Secretary of the National Medical Association for Repeal of the Contagious Diseases Acts; Dr. R. Leslie, London; Mr. J. L. Clifford Smith, London; Sir T. Spencer Wells, London; Dr. J. Hughlings Jackson, London; Mr. J. E. Lane, London; Mr. W. J. Spencer, Bradford; Mr. J. Alexander, Paignton; Mr. J. L. Steven, Glasgow; Dr. W. White, Hadfield, Manchester; Mr. W. Barker, London; Dr. Joseph Rogers, London; Mr. B. Jones, Leigh, Lancashire; Mr. A. R. Adams, Madras; Mr. J. McGregor Robertson, Glasgow; Mr. J. H. Swirm, Allahabad; Dr. Gibson, Edinburgh; Mr. J. L. Jardine, Capel, Surrey; Mr. H. P. Hobson, London; Mr. J. Moloney, Colooney, co. Sligo; Our Belfast Correspondent; Messrs. Mellin, London; Dr. C. Cameron, Dublin; Mr. H. P. Leech, Bury St. Edmunds; Mr. W. Bates, Wimbledon; The Right Hon. the Lord Mayor, M.P., London; Mr. J. G. Douglas Kerr, Bath; Dr. Patrick Manson, London; Dr. D. W. Buxton, London; Our Manchester Correspondent, etc.

BOOKS, ETC., RECEIVED.

Ambulance Handbook for Volunteers and Others. By J. A. Raye, L.K.Q.C.P. London: J. and A. Churchill. 1884.

On the Treatment of Spinal Curvatures. By H. Macnaughton Jones. London: J. and A. Churchill. 1884.

Anatomy of the Inguinal and Femoral Regions. By E. L'E. Ledwich. Dublin: Fannin and Co. London: Baillière, Tindall, and Cox. 1884.

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THE LUMLEIAN LECTURES
ON
THE ÆTIOLOGY OF PHTHISIS.

Delivered at the Royal College of Physicians.

By J. ANDREW, M.D., F.R.C.P.,
Physician to St. Bartholomew's Hospital.

LECTURE III.

It was my intention to have dealt separately with the evidence as to the contagiousness of phthisis, and with its analogy in many respects to malarial fever; but the two diseases are so closely related, each throws so much light upon the other, in respect to the question of contagion, that to do so would involve much needless repetition without adding any force to my argument. From our review of the ætiology of phthisis, it is easy to recognise those points in which the two diseases strikingly resemble each other. I shall begin by stating their chief resemblances dogmatically, and without unnecessarily quoting well known facts in their support.

Both have been known from the earliest times, and in both the evidence of their having been introduced into any new country by man is very inconclusive. The facts, such as they are, are quite consistent with the view that the first discoverers and colonisers of any new country did not, in either case, import some special morbific germ, but found it already there.

Both, within historical times, have prevailed in varying degrees in the same locality. Thus, the increase of phthisis in America and in Australia is fairly comparable to that of malarial fever in Italy. In each case a change, more or less complete, in the race of the inhabitants of the country, with in the first case an advancing, and in the second with a retrograding civilisation, seems to have favoured the spread of the specific disease. Both are met with almost everywhere; but phthisis extends somewhat further towards the north than malaria. There is no need to involve human agency to account for this wide dispersal of either one or the other. The same fact obtains in the case of many of the lower forms of vegetable life, *e.g.*, the mosses and lichens. Of these latter several species, common in Britain, have been found in the Falkland Islands, Graham's Land, Kerguelen's Land, and in other antarctic islands or continents; on the Himalayas, in Chili, in Equatorial Brazil and South America, in Spitzbergen, Lapland, Iceland, Nova Zembla, and more northern Polar islands or continents. (*Popular History of British Lichens*, by Lauder Lindsay, page 97.) In the *Transactions of the Linnæan Society of London*, Botany, Vol. 1, page 391, will also be found a long list of self-fertilising British plants of world-wide distribution.

Both, judging by their effects, vary in their characters to a certain degree in different parts of the world; and thus variation, in the case of malaria certainly, in that of phthisis probably, cannot be altogether due to differences in the personal factors. Compare, *e.g.*, the greater rapidity of the course of phthisis in the tropics, with the greater violence of malarial fevers in the same regions.

Both prevail under certain well known climatic and social conditions; and yet both are, here and there, unaccountably absent from likely and present in unlikely spots.

Both decrease in severity, and finally disappear, with increasing elevation above the sea-level.

Both are closely connected with wetness of soil, and both are greatly diminished, if not extirpated, by efficient drainage.

Both are sometimes confined locally within very narrow limits; *e.g.*, in malarious countries the second floor of the houses is said to be less dangerous than the first.

The action of the micro-organism in each is greatly modified by the personal constitution of those exposed to it. Thus, white races suffer specially from malaria, and negroes from phthisis.

In both, a bacillus has been demonstrated, cultivated, and proved by inoculation-experiments to be the exciting cause of the disease.

They differ in their habitat, phthisis being most prevalent in cities which afford all but complete protection against malaria.

Clinically, they agree in that recrudescence takes place after long periods of apparent health. In the case of ague, this frequently happens without any fresh exposure to infection; and there is often, as in so-called Roman fever, a well marked approach to periodicity in its returns. The history of many cases of phthisis makes it probable that the same thing takes place in it too.

Again, in both the pyrexia is periodic. Some members of the group of specific febrile diseases—and those, too, of the most common occurrence—are so undoubtedly communicable, either by direct infection, as scarlatina, or by indirect, as typhoid fever, that the idea of contagion dominates the view we take of the entire class; and any disease which has once been placed in it, is forthwith regarded as contagious. But it is clear that, in different cases, the micro-organism, which is the exciting cause of the disease, stands in very different relations to the living creature which it attacks. Sometimes, as may be the case in typhus and in small-pox, the bacillus may be truly parasitical, *i.e.*, incapable of existing, or at any rate of multiplying, unless it meet with a certain "host." Of course, here the disease is directly contagious; and, apart from any question of the origin of species, every case of it is a proof that another case has already existed.

Sometimes, the bacillus may not be a parasite in so complete a fashion. It may be capable of enormous growth and multiplication in the soil, or in fluids of various kinds, and yet may require, if not for its very existence, yet for vigorous growth, to pass from time to time through the body of some host. This is probably the case with the micro-organism of typhoid fever. In both these cases, the resulting disease is almost certain to be highly epidemic in character, sometimes causing a vast number of deaths, sometimes almost unknown, or presenting only the mildest type for many years in succession. An instance of this in the case of a directly infectious disease, and of the cases in practice which may arise from forgetfulness of it, is given by Dr. Graves in his twenty-second lecture on the history of scarlatina in Dublin. In the last four months of 1801, and in the spring of 1802, scarlatina committed great ravages in Dublin. It ceased in the summer, but returned at intervals during 1803-4, when the disease changed its character; and, although scarlatina-epidemics recurred very frequently during the next twenty-seven years, yet they were always in the simple or mild form, so that, out of eighty boys attacked in a public institution, not one died. The epidemic of 1801-2-3-4, on the contrary, was extremely fatal, and left many parents childless. The long continuance of the mild type of scarlatina led to the belief that the fatality of the former epidemic was chiefly owing to an erroneous method of treatment, and that bleeding and antiphlogistics would have averted it. "This," he says, "was taught in the schools, and scarlet fever was every day quoted as exhibiting one of the most triumphant examples of the new doctrines. This I myself learned; this I taught; but the experience derived from the present epidemic has completely refuted this reasoning, and has proved that, in spite of our boasted improvements, we have not been more successful in 1834-35, than were our predecessors in 1801-2."

The history of typhoid fever, the disease which I have mentioned as the instance of indirect communicability, is essentially one of epidemics—epidemics varying much in type and in extent, but always explicable by some specific fouling of food or water. Sometimes the micro-organism may be entirely independent, if not of any host whatever, at any rate of man; its sojourn in his body may be unfavourable to its full development, and it may there cease to bear fruit after its kind. Of course, even here transfusion of blood, or inoculation with solid tissues or with the products of careful cultivation, might propagate the disease; but it would be absurd and mischievous to assert that this proved it to be communicable from the sick to the healthy in any practical sense of these words. This last relation between the germ and the disease which it induces probably holds good in the case of malaria; and with it, all the broad facts ascertained relating to its ætiology prior to the discovery of the bacillus, prove that phthisis is far more closely allied than with the other two classes of communicable diseases. Is there any reason why the discovery of the bacillus should make us reject the conclusion to which the other known facts, with but few exceptions, point? I can see none. That discovery has placed phthisis in the group of specific febrile diseases, a position which it ought to have occupied before the first bacillus was seen, a position which it ought to continue to hold, even though the true bacillus should never be seen at all. Of these diseases, some are communicable from the sick to the healthy directly, some indirectly, and this as a part of their natural life-history; but some are not communicable at all, except by artificial means, and then with difficulty. There is no *a priori* reason in the nature of things why phthisis should belong to one of these classes rather than to another, or why it should not occupy any conceivable intermediate position among them. It is true that its natural history as a whole indicates its affinity with the last named class; but the question, after all, is one which can be determined only by direct evidence.

What, then, are the proofs that phthisis is contagious? No doubt the belief that it is so is an old one, and it would be supported by a most respectable array of [illegible] by an equally respectable array on the other side. By the regulations of the old hospital of the Knights of St. John at Valetta, embodying the details of the system in use from the foundation of the building in 1575, if not a still older tradition, the beds used by persons suffering from consumption are directed to be burnt, with all the sheets and other things belonging, without any reservation. But the force of this is not a little diminished by the circumstance that the beds of persons suffering from other complaints were also destroyed. In fact, the knights were, no doubt, very wisely resolved to be on the safe side in dealing with possible infection.

It will be convenient to consider, first, the effect of the success of inoculating animals with the blood or sputum of tuberculous patients, or with the bacillus alone, purified as far as possible by successive cultivations. It would be waste of time to adduce proof of the trustworthiness of these experiments, still more to raise captious objections against them. There can be no doubt about the matter. They are also a necessary part of the proof that the bacillus, or some similar organism, is the *vera causa* of tubercle, and that, consequently, phthisis is a specific disease. For the sake of this last truth, I could almost, were it necessary, bring myself to admit the truth of the doctrine of contagion. I also fully believe that the inoculation would be successful in man as well as in animals; for, indeed, the thing has been done some years ago. I have not seen the original authority, but quote from the account given by Mr. George Fleming in his well known article, "On the Transmissibility of Tuberculosis," in the *British and Foreign Medico-Chirurgical Review* for October 1874, p. 473.

Experiments conducted by Demet, Paraskeva, and Zallonis in Syra, Greece, were not only successful in transmitting the disease to rabbits by inoculation with the sputa and blood from a man affected with phthisis; but they ventured upon the unprecedented experiment of inoculating a human patient whose history gave no indication of tuberculous taint, and whose lungs were perfectly healthy, so far as a physical examination could discover, but who was suffering from gangrene of the big toe of the left foot, due to obliteration of the femoral artery. Amputation of the limb was proposed by the surgeon, but would not be submitted to; and as a fatal termination was inevitable, a quantity of sputa, from a man who had abscesses in his lungs, was inoculated in the upper part of the left thigh. About three weeks afterwards, auscultation revealed very slightly increased respiratory murmur at the summit of the right lung, and somewhat prolonged expiration in the subclavicular region. In thirty-eight days after inoculation the man died from gangrene; and, on examination of the body, it was found that the upper lobe of the right lung had seventeen tubercles in the first stage of development, two of which were of the size of a lentil, the others being as large as a grain of mustard; they were of a grey colour and very hard. Two similar tubercles existed at the apex of the left lung. At the centre of the convex surface of the liver were two tubercles, one as large as a shelled pea, the other smaller, both being very hard and of a yellow colour. From this unusual experiment, it is evident that tubercle is inoculable in man himself; for it is scarcely possible that this patient, who was 55 years of age, could have had his organs infiltrated with as many as twenty tubercles in the first stage of development only; had they been naturally developed, they must have multiplied and passed through their regular evolution, especially in an individual predisposed to phthisis. Their limited number, stage, and size, offered a direct relation to the brief interval separating inoculation from the decease of the patient.

It is to be observed that this unique case lends no support to the idea that the period of incubation in phthisis is a long one, and that, consequently, the disease may be contracted by exposure to infection two or three years before its first symptoms declare themselves. In this respect, the result coincides closely with that of inoculations of animals; in which the creatures killed within five weeks after the operation presented tubercle-growths, which must have begun not less than two or three weeks before death.

There is also another point relating to inoculation of animals to which it is necessary to call attention. In the course of the numerous experiments carried out by various observers about sixteen to eighteen years ago, it was supposed to have been established, among others, by no less an authority than Dr. Burdon Sanderson, that tuberculosis could be produced in rodents by inserting substances which could not themselves have possessed any specific properties, *e.g.*, setons of unbleached cotton. This is Dr. Sanderson's account of his experiments in this direction, and of the inference to be drawn from them given in the tenth report of the Medical Officer of Privy Council for 1867, and which he again affirmed before the Pathological Society in April 1868.

"It has been found that, if animals are inoculated with pus derived from the secondary abscesses of patients affected with pyæmia, death is apt to occur during the third or fourth week after inoculation, in which case the results of dissection are as follows. Abscesses are found at the seat of inoculation, and purulent deposits in the neighbouring subcutaneous tissue; these, although obviously of the same character as those observed after inoculation of tubercle, differ from them in being larger, more numerous, and more generally distributed. The subcutaneous lymphatic glands are healthy, or at most a little enlarged. The internal organs are usually free from disease. When this is not the case, lesions of an obviously inflammatory nature are found; as, for example, pleuropneumonia, pericarditis, or subpleural or subperitoneal abscess. If, on the other hand, the animals survive the primary, *i.e.*, pyæmic, effects of which these lesions are the expression, and are examined several months after inoculation, morbid appearances are found in the lungs, liver, and spleen, in which all the anatomical characters of a tuberculous process are to be recognised.

"From these facts it is evident that these lesions can no longer be regarded as dependent on any property or action possessed by the inoculated material in virtue of its having been taken from the diseased organs of a phthisical patient. This conclusion is rendered almost certain by the result of the following experiment.

"On October 29th last, setons of unbleached cotton were inserted, by means of a needle which had not been used before, in the shoulders of two guinea-pigs, which, from their being entirely white, could be easily distinguished from any of the other animals under observation, all of which happened to have spots of colour. One of these animals was killed on December 28th, and was dissected by Mr. Simon and myself. One of the setons was surrounded by a hard mass of semi-transparent substance, obviously dried-up pus, which was surrounded by connective tissue induration. The other abscess was of considerable size; the material contained in it was of the consistence of cream-cheese, and, on microscopical examination, the corpuscles of which it consisted were found to have the characters of pus. The internal organs were perfectly healthy. The other animal died on March 15th. There were two open wounds on the left shoulder, each of which led to a sinuous cavity, containing a small quantity of pus, the greater part of the contents of the abscesses having escaped externally. Both cavities were connected with each other, and with the neighbouring scapular gland, which was enlarged and softened, by subcutaneous bands of induration, and there were numerous purulent deposits in the neighbouring muscles and areolar tissue. The lungs contained very numerous iron-grey nodules. The liver was much enlarged, and presented the characteristic appearances of interstitial adenoid deposit. In the spleen, there were numerous miliary nodules. There was enlargement of the agminate glands, both of the large and small intestines, as well as of the lymphatic glands in the gastrohepatic omentum and mesentery. In this case, therefore, a pathological process which had originated in traumatic subcutaneous suppuration, resulted in lesions which were characteristically tuberculous."

It is impossible to neglect a deliberate statement like this, or to put it on one side with the answer that there must have been some fault in the mode of performance of the operation. We have no right to assume that in this, as in all other similar experiments with the same result, tuberculous material must have been introduced into the wound; and yet it is almost certain that these same experiments repeated now, with the fuller precautions suggested by a better knowledge of the extreme difficulty of excluding bacilli or their spores, do not give rise to the same specific lesion. The comparison of the two sets of observations, former and recent, with these seemingly contradictory results, calls to mind the difficulty found by Professor Tyndall in preventing the access of certain bacteria to his solutions. These earlier experiments were in one sense failures, although, from another point of view, they are most valuable, as proving the necessity of strict antiseptic precautions, which could scarcely be required if the tubercle-bacillus were not generally diffused. It must further be remarked that, notwithstanding the readiness with which tubercle is produced in guinea-pigs by inoculation, and even the difficulty of preventing an unpoisoned wound affording an inlet to the disease, the creatures, in their natural state, are not specially liable to it. Even when kept for physiological purposes, and in the near neighbourhood of the spot where experiments are being carried on, they rarely contract it through the natural channels. Thus, in March 1869, Dr. Wilson Fox exhibited at the Pathological Society some specimens as the first instance which he had ever observed, out of nearly two hundred guinea-pigs which had passed under his hands, of spontaneous tuberculosis occurring in these animals independently of local injury; adding that, in this particular case, the disease may well have been inherited, for the parents had been inoculated, and had both died tuberculous within six months of the inoculation.

The results, then, of direct inoculation justify fully the assertion that phthisis may be communicated artificially; they fall far short of proving—what, indeed, other evidence disproves—that it is likely to spread through a community by personal intercourse, immediate or mediate, after the fashion of scarlatina or typhus; whilst the results of the older experiments with indifferent substances point to the probability that the bacillus of tubercle is widely diffused, like that of ague, which can also be successfully inoculated, and that, therefore, the risk of infection is not, perhaps, greatly increased by personal contact with the sick. The bacillus malariæ, so far from gaining increased virulence by its sojourn in the human body, must become less dangerous; and, looking to the capricious distribution of phthisis, and the absence of any sufficient proof that it has been imported into any country, the same may also be the case with the bacillus of tubercle. Anyhow, we require some further more cogent proof of its being propagated in communities by contagion.

Such evidence has been sought for in the results of feeding experiments. Granted that direct inoculation must be a very rare event in common life, the contamination of air, water, and food, by sputum or other excreta, containing, as they certainly do, bacilli, might be at least as frequent an occurrence as it is in the case of scarlatina and typhoid; might, indeed, be very difficult to prevent. Again, as in inoculation-experiments, there is no room to doubt the result of artificial feeding. An animal with whose food bacilli-containing substances are mixed becomes phthisical, if not always, yet so frequently that it would be hypercritical to deny the connection between the food and the development of the disease. Whilst, however, in an epidemic of scarlatina or typhoid fever, the distribution and the relation of the cases to each other almost always lead the investigator to the primary source of infection, at first unknown; in phthisis, with full knowledge of the foci from which the disease might spread in this way, we fail to discover anything of the kind, except in very rare instances and on the smallest scale. In this connection certain veterinary experiences, rather than experiments, are specially interesting. In the article by Mr. Fleming already referred to, there is an account by M. Grad, a veterinary surgeon in Alsace, of a most remarkable series of events. A large farmer at Leinheim, five years in succession, lost one cow by phthisis, and always in the same stall. A sixth animal, selected for its vigorous health and the absence of any taint of phthisis in its pedigree, shared the same fate. Then all the woodwork of the stall was removed; the manger and rack thoroughly disinfected, and the spot left unoccupied for some time. It was then rebuilt and reoccupied by several animals in succession, but tuberculosis made no more victims among them or in any other part of the stable. It is difficult to imagine a stronger case of a virulent contagion, or of one confined for years within such narrow limits; for the stalls were "very short stalls," preventing the animals from injuring each other with their horns, but apparently not separating them by the whole length of their bodies.

In this case, the disease must have been transmitted by some non-volatile substance in the stall itself; otherwise, and if the breath of the tainted animals had been infectious, it is difficult to believe that its neighbours on each side, for six years, could all have escaped unhurt. Indeed, their escape, so far as it proves anything, proves that people of cleanly habits run little or no risk in occupying the same room with a sufferer from consumption; for the cows probably fell victims to their habit of licking the rack and the sides of the stall. But the whole story is so exceptional that it may have been an instance of local, not of personal, infection; and on this theory the extremely narrow area within which so destructive an agent was confined for many years becomes a little less perplexing.

The largest collection of observations upon the communicability of phthisis among men, and by far the most important, inasmuch as it includes communications from men of large experience and of every shade of opinion, is that for which we are indebted to the Collective Investigation Committee of the British Medical Association. The report, based by the Committee upon the facts submitted to them, evidently leans to the contagionist side; but the premises are not so fully given, that it is easy for anyone to judge for himself how far the conclusion drawn from them is correct. There is, however, one fault in the mode in which the investigation was conducted, which must have had considerable influence on the result. In the questions circulated the Committee ask for affirmative cases only; notwithstanding this, they received several answers containing cases which appear to disprove the contagiousness of phthisis. The number of these would have doubtless been much larger had they been specially asked for; and in any future inquiry it is to be hoped that this will be done. In consequence, a great number of the returns, 673 out of 1,078, were simple negatives, of which the Committee could make no further use. The statement that the word "No" means that no case had been observed by the member making the return, without any expression of opinion, is true to the letter, but not to the intention, of some of those who made those returns. Thus a friend told me, with some slight indignation, that his "No" was a very active little word indeed, by which he meant to convey, not merely that he had seen no cases of contagion, but that he had noted its absence in cases where, if present, it must have manifested itself. I may add that he is a man who has enjoyed exceptionally large opportunities for studying phthisis. Thus, while the affirmative observers are pretty certainly present in their full proportion of 261 in 1,078, the proportion of negative observers is certainly not fully represented by 105; the majority of affirmative observers is unduly magnified; perhaps, even, if negative facts or opinions had been asked for, the majority might have passed to the other side.

The first of the groups into which the affirmative returns are classified is that of cases between husband and wife only. Here, as also in Dr. Hermann Weber's remarkable series of similar cases, the disease generally appears first in the husband. In 188 out of 192 returns under this head, in which it is stated which partner suffered first, in 119 it was the husband, in 69 only the wife. As Dr. Longstaff has pointed out, a certain unascertained number of these cases between married people would occur accidentally—*i. e.*, if there were no such thing as contagion possible; and these would affect both sexes pretty equally; so that in the remainder the difference between the death-rate of the two sexes would be even greater than it appears to be from the full figures. As it is, the disproportion is so great, that it requires some explanation. A common remark, containing some truth, is, that the woman's natural office of nurse confines her more closely to the sick-room, and exposes her to more and greater chances of infection, than would come upon her husband were she herself the sufferer; in that case, the duty of providing extra comforts for her would oblige him to work even harder than usual at his occupation, and to spend less, not more, time in her company. Even on the diathetic theory, this would be quite sufficient to explain the greater mortality among the wives. Grief, time spent in anxious tendance, and under most painful conditions, hardships and privations endured that the sick dear one may lack nothing which can be of any service or comfort to him, a life spent almost entirely within doors, and very likely in a close ill ventilated room, all this would, on the diathetic theory (which, by the way, is perfectly true so long as it is confined to the predisposing causes of phthisis)—all this would account, in the most natural simple manner, for the excessive mortality on the female side. In point of fact, the personal contagion-theory fails signally to explain the facts under this head. For it must be remembered that there is a most important difference between the contagion of phthisis, if it exist, and that of most, if not all, other diseases; and that is, its duration. It is not an affair of a few weeks at most, but of months, or even years; and, during a considerable portion of this time, there may be but little change in the domestic life. The husband is still able, if with difficulty, to follow his calling; the wife has no need to undertake the special duties of a nurse. The danger of personal contagion is fairly equal between the two for a very long period, whichever may show the first symptoms of the disease. But there is yet another powerful factor, quite distinct from any phthisical contagion properly so-called, which turns the scale heavily against the wife. This is syphilis, which undoubtedly, in most cases where it exists, is transmitted from the husband to the wife. The relation of syphilis to phthisis is by no means simple or uniform; and the number of cases which may be called more or less truly syphilitic phthisis is, I believe, very large. Sometimes, an affection of the lungs closely simulating phthisis, which may be seated at the apices, and is frequently attended by repeated and profuse hæmoptysis, is really nothing more than a visceral syphilis, and, though powerfully predisposing to, need not be followed by, tubercular phthisis. I have known cases of this kind begin within a few weeks of the appearance of the primary sore, and end in complete recovery when treated as syphilis.

In the seventeenth volume of the pathological *Transactions* is a valuable drawing from a case by Dr. Hermann Weber, showing the earliest appearances of the lung-affection and its beginning in the lymphatics. If the nature of the illness be not recognised, considerable destruction of the lung-tissue may take place, and, if the bacillus is met with, tubercular phthisis will follow; but even then the syphilis may continue to form an important factor in the complex morbid process.

A few weeks ago, a patient was admitted under my care in St. Bartholomew's Hospital for hæmoptysis. There was a history of chest-affection, with more than one attack of hæmoptysis, lasting over two years, and with marked physical signs of consolidation at both apices, especially, I think, the right. Luckily, there was also present on one leg a circular sore of very characteristic appearance. Under the use of perchloride of mercury, he rapidly regained flesh and strength, the sore healed, and the physical signs almost entirely vanished.

This is not the place to discuss individual cases; but the existence, by no means uncommon, of this form of disease, seems to me to give a more reasonable explanation of the undoubted fact that sometimes two or three wives, in rapid succession, fall victims to phthisis, than to be obliged to believe that a contagion, ordinarily so mild as even its advocates represent that of phthisis to be, should yet exhibit such portentous and fitful activity. The same explanation may perhaps hold good in some other cases of apparent direct infection, than those between husband and wife. On the whole, the excess of female mortality in the married cases seems to me to be almost inexplicable on the direct personal contagion theory, simple and natural if we attribute it in part to the presence of a certain number of syphilitic cases, in part to increased predisposition to be affected by a widely diffused exciting cause, produced by the special duties of the wife, and the indoor nature of her occupations; and to these must further be added the fact that the constitution of the wife soon becomes more or less assimilated to that of her husband, whilst but little, if any, change takes place in his. It is a little remarkable that this exceedingly doubtful class of cases should furnish no fewer than 192 out of the 261 affirmative observations. In reviewing the remaining groups, notice must be taken of the very small number of instances, especially of those observed between unrelated persons, which amounts at most to 21; and this, be it remarked, in the case of a supposed infectious disease, the contagion of which, if it exist at all, is active, in the majority of its victims, for months, or even years. If cases of typhus or of scarlet fever retained their contagious property for an equal period, no human being could escape them. And yet, upwards of one thousand observers, speaking from a collective experience of many thousand patients, can only record about a score of cases in which the disease was transmitted between persons unrelated to each other.

Contagia which act directly from person to person, and which are probably parasitical in the true sense of the word, are, for the most part, extremely powerful. They do not recognise slight differences of race or family, or climate or subsoil-water, or even of altitude above the sea-level. The only protection against them for the unseasoned is to be found in the isolation of the sick, and in the most perfect ventilation of the sick-room; but phthisis behaves after quite a different fashion. Among persons living together in the same house, or even in the same room, it picks out special strains of blood, or attacks in one family the males, in another the females only. A widow with eight children, having lost one, came up from the country and occupied a small house at New Cross. One who spent but little time there remained in good health. Of the other seven, two died of phthisis; one in 1872, the other in 1873; and two more became seriously ill with the same disease. These left the house; both gradually recovered, and are still alive. The house was a small one; the family was crowded together; conditions highly favourable for contagion certainly existed. But there were two families. The father had been twice married, leaving five living children by the first wife, and three by the second who survived him. Not one of the latter has suffered from phthisis. The only blot on the family history of the first wife was that a niece had died of consumption. The circumstances made a great impression upon me, and at first I was disposed to look upon it as an instance of contagion; but now my belief is that there was some local influence in the house, something distinct from any personal infection.

In the last group of cases observed between persons unrelated only, consisting of the very small number of eight, the following is perhaps the most remarkable.

"Miss R., aged 48, a dressmaker, living in rather a lonely cottage in Bedfordshire, had three apprentices, young girls from 17 to 19 years of age, not related, from three adjoining villages, who took it in turn to remain in the house and sleep with her, each one for a week at a time. During their apprenticeship Miss R. was taken with phthisis, of which she died. In less than two years afterwards all three apprentices died of phthisis, although in the family history of each no kind of phthisis existed, and the parents, brothers, and sisters, of two of them are alive and well at the present time."

Here again there are various little difficulties in the way of the explanation by contagium. This must have been most virulent in the case of Miss R., and yet no harm came to any of the friends of her unfortunate apprentices. Again, I find it difficult to understand how the same contagion can be now and then so destructive as this, and yet for the most part so inert, that it is impossible to trace its operation. After all, the number of these astonishing facts is not greater than might be fairly expected to occur as accidents or coincidences in the case of a disease so common as phthisis. But this is an unsatisfactory mode of regarding them when, in the light of the recognised general laws of the distribution of phthisis, and of the exceptions to those laws which point to a wide and yet capricious dispersal of its exciting cause, they can be so naturally explained as instances of special local infection. The following quotation from Dr. Bowditch's paper on consumption in Massachusetts will illustrate my meaning.

"1. Four grandparents lived to a healthy old age, and died over eighty years old. One of the grandmothers always bore on her neck scars, said to be from scrofulous ulcers in early life.

"2. Two brothers, A. and B., married two sisters, both couples being children of these grandparents. All parties were in perfect health at the time of marriage, and with no thought of consumption ever entering their families.

"3. After his marriage, A. stayed in the old homestead, situated on a southern slope, a dry and warm well drained spot, where he was born, and there all his children were born and reared to adult life. The statement of the two families may be made briefly as follows.

"Both families, as we have seen, had by one grandmother slight tendencies to scrofula, although consumption proper had never entered into the known tendencies of any ancestors. This was, in fact, a strong belief in the minds of both families.

"Of thirteen persons (parents and children) in family B., nine have died; seven (more than two thirds of them) by consumption, one of croup, and one of diabetes. Of the surviving four, father and three children, one has been for years slowly suffering from apparently pulmonary disease. The three others, viz., father and two sons, are healthy, but those two sons have not lived in the homestead for many years. On the contrary, of the eleven persons (parents and children) in family A., three have died (less than one-third), and not one of them died of consumption, though one died early with scrofula."

It remains to be added that B.'s home was situated at the foot of a hill in the midst of wet meadows, and not far from a bog which is wet all the year through. Dr. Bowditch gives several other similar histories of houses in low damp situations, whose inhabitants met with a like fate. The sporadic distribution of the bacillus furnishes the best explanation of cases such as these; and that this distribution is effected by means of direct personal contagion is extremely unlikely. Were it carried to, it would almost certainly be carried from, those foci of infection; and this by no means always happens. It did not do so in the case of Miss R.'s three apprentices, in the instance just quoted from Dr. Bowditch, or in my own case at New Cross. Indeed, in this last, the fact came out very strongly, not only that the infected persons did not serve as carriers of the disease to others, but also that they themselves showed marked and rapid signs of improvement when withdrawn for a time from the unwholesome local influence. To say nothing of Professor Tyndall's bacteria-clouds, there is no want of facts in connection with plant-life attesting the possibility of organisms flourishing most vigorously in very narrow, isolated, and widely separated spots; *e.g.*, in *Island Life*, by Mr. Alfred Wallace, at page 481, note, I find the following statement. "A correspondent in Tasmania informs me that whenever the virgin forest is cleared in that island, there invariably comes up a thick crop of a plant locally known as fireweed—a species of Senecio, probably senecio australis. It never grows except when the fire has gone over the ground, and is unknown except in such places. My correspondent adds: 'This autumn I went back about thirty-five miles through a dense forest, along a tract marked by some prospectors the year before; and in one spot where they had camped, and the fire had burned the fallen logs, etc., there was a fine crop of fireweed. All around for many miles was a forest of the largest trees and dense scrub.'

"Here we have a case in which burnt soil and ashes favour the germination of a particular plant, whose seeds are easily carried by the wind, and it is not difficult to see how this peculiarity might favour the disposal of the species for enormous distances, by enabling it temporarily to grow, and produce seeds in burnt spots."

Again I must repeat here that those cases only can be admitted as evidence of contagion in which the disease appears within a moderate interval after the last exposure to the supposed source of infection. Granting that the period of incubation is unknown, and may even be very variable, still all our present knowledge, gained from inoculation and feeding experiments, and the results of exposing animals to an atmosphere loaded with finely divided tuberculous matter, point to the probability that the period is a short one. Certainly cases in which it must have lasted for over a year ought not to be used as a double-barrelled argument to prove at once the contagiousness of phthisis and the great length of its incubation. These cases are best explained by the theory of local, as distinct from personal, infection.

It is noteworthy that scattered instances, apparently establishing the existence of contagion, occur in the history of agues as well as in that of phthisis. Thus in the article on "Intermittent Fever," in the *Cyclopædia of Practical Medicine*, edited by Drs. Forbes, Tweedie, and Conolly, I find the following passage. "Some authors have supposed ague contagious. This was the opinion of Baunarez and Cibat in Spain, Bailly and Andouard in France, and Cleghorn and Fordyce in our own country. Cases have fallen under the writer's observation which have led him to entertain at least a suspicion that such was the fact; but the most forcible case for the affirmation of the question which he has met with is one related by Bailly. 'A lady arrived in Paris with an intermitting fever, which she had contracted in the country in a marshy situation. This fever was accompanied by violent vomitings, and other serious symptoms, which displayed themselves at every paroxysm, and forced me to give bark. Scarcely was she cured, when her husband, who had never quitted Paris, but who had the imprudence not to keep himself apart from her during her illness, was struck with the same symptoms, and in a manner altogether similar.'" As I have endeavoured to show in the case of phthisis, apparent instances, such as this, of an infectious ague may have been either accidental coincidences, or cases of the recrudescence of an old contagion, or due to some unsuspected local, not personal, infection; perhaps, now and then, there may have been an error in the diagnosis of the first case, in the same way that it is by no means difficult to mistake visceral syphilis for tuberculosis.

Without denying the great difficulty of proving a negative, there is still no doubt that the non-occurrence of phthisis under certain conditions does establish a strong presumption that it is not spread by direct contagion. The facts relating to the Brompton Hospital, recorded by the late Dr. Cotton and Dr. Theodore Williams, are too well known to need repetition here. But the same immunity from phthisis has also existed among the various officers of the City of London Hospital for Diseases of the Chest, to which I was myself at one time attached. On this point, I have been favoured with the following statistics by the Secretary, Captain Storrar Smith.

"Of thirty-one physicians who have had care of patients there since 1855, with one single exception, the details of which I cannot learn, none have suffered from phthisis. Of twelve resident medical officers, whose term of office has varied from one or two to five years, one only has died of phthisis; he was attacked by hæmorrhagic phthisis, which ran a very rapid course, before he had been more than about a twelvemonth in the place. Of five chaplains, none have suffered from phthisis. Of three secretaries, one was delicate when he took office, and eventually died of some chest-disease. Of four matrons resident in the hospital, the first and the present one having been each there for more than ten years, none have had phthisis.

"Since 1867, there have been 255 nurses, sisters, and female servants employed in the hospital; of these, one, a nurse, has died in the hospital of phthisis, and thirty-three have left on account of illness. Of these latter, some, but certainly not all, were phthisical.

"Since 1865, there have been thirty-four male servants at the hospital. Of these, one, the house and out-patient porter, died of phthisis, at the age of 48 or 50, after seven or eight years' service. He had been in the army, had a fistula, and drank freely. Another out-patient, after service with the institution from its commencement, was discharged in 1882 on account of ill-health; a week or two ago, he was in the hospital with bronchitis.

"Out of seven dispensers since 1860, one died while away on sick-leave, probably from phthisis. His wife died a few years before from phthisis. He was aged about 50 when he came to the hospital, and 63 when he died.

"Of fifty-one clinical assistants, the appointment involving residence, I know certainly that two or three have become phthisical; but I have not been able to learn the history of a sufficient number to draw any conclusion. I think, however, that, in the case of very many of them, the fact of their being attacked by phthisis would have come to my knowledge."

On the whole, then, facts negative the idea of any direct contagion under the ordinary conditions of hospital residence and service.

In conclusion, let me recapitulate the conclusions which I have endeavoured to establish as to the etiology of phthisis, with special reference to its contagiousness. None can be more sensible than myself of the many imperfections in the matter and form of my argument.

1. The historico-geographical argument is insufficient to prove that the present distribution of phthisis has been brought about by the carriage along lines of human intercourse of a specific [illegible]. Indeed, many of the facts under this head are distinctly antagonistic to any such theory.

2. Before the discovery of the bacillus, one and all of the [illegible] causes of phthisis were inadequate to account for its distribution, or for the anatomical and clinical characters of the disease.

3. Those causes, even those which appeared to act as exciting causes, were all predisposing causes only.

4. From the nature of those predisposing causes, their relation to each other, and the conditions under which their influence seemed to make itself felt, it was a probable inference that phthisis belonged to the group of specific febrile diseases; and this view was held by some writers in the face of many difficulties and perplexities.

5. The facts on which this inference was based were insufficient to prove that phthisis was personally contagious, and were, indeed, rather opposed to any such notion.

6. The discovery of the bacillus proved that phthisis was a specific febrile disease; and thus the question of contagion cannot now be usefully discussed without acknowledging this fact.

7. As some specific febrile diseases are contagious, and others not so, this property existing in very different degrees and modes in different members of the group, the question as to the contagiousness of phthisis can only be satisfactorily answered by determining its affinities with other members of the group and by distinct evidence of its contagiousness.

8. Although phthisis may be undoubtedly produced in many ways experimentally in animals and also in man, there is not sufficient evidence to prove that its prevalence is materially affected by direct contagion.

9. In many most important respects it very closely resembles ague.

10. It is at least highly probable that the exciting cause of phthisis, like that of ague, the bacillus, or some other micro-organism, is in no way dependent upon man for its existence, and is widely diffused, irrespective of human agency.

From these, I may be allowed to make one short practical deduction; viz., that the prevention of phthisis, like that of ague, is to be attained by sanitary works, especially by improved ventilation and drainage, and not by isolation; and that, for its cure, as we should not send a case of ague to the Pontine marshes, so, too, it would be wise not to send a case of tubercular disease to any place where the death-rate from phthisis is high among the native population.

ON THE MARINE HOSPITAL SERVICE FOR SICK AND HURT MERCHANT SEAMEN OF THE UNITED STATES.

By Sir WILLIAM SMART, K.C.B., K.L.H.,

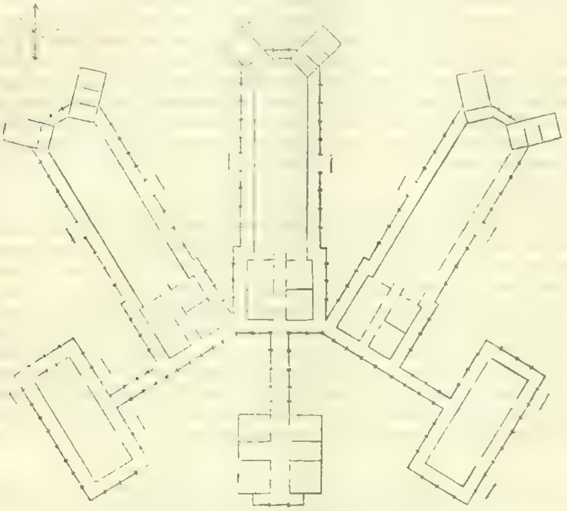
Honorary Physician to the Queen; Ex-President of the Epidemiological Society.

The Marine Hospital Service of the United States is a branch of the Treasury Department, allied to that of Revenue or Customs, having charge of quarantine and the health of the Mercantile Marine and Revenue Service, quite apart from that of the Navy; with its own hospitals at the great ports, even where naval hospitals are established. It has existed now eighty-six years; and, during the last eleven years, its annual reports have been published. The volume for the year ending June, 1883, is nearly four times as large as our own *Statistical Report of the Health of the Navy*; and yet it is concise in all its chapters, with complete statistics for each of the eight coast-districts, admirably presented in full nosological detail, followed up by reports of cases, some of which are illustrated with photographs. The last one hundred and twenty pages contain very valuable reports on two epidemics of yellow fever on the east and west shores of the Gulf of Mexico, with topographical maps; and the whole is made the more practical for reference by a copious and clear index. In every way this volume does credit to the contributors and to the Marine Hospital Service in general for its matter, style, and completeness.

This administration for the benefit of merchant seamen is analogous to our own for the treatment of the sick of the Royal Navy on our own coasts, in possessing its special hospitals at great centres, supplemented elsewhere by sick-quarters, under the management of selected medical practitioners, who may or may not be charged, in addition to treatment, with the entire provision for the wants of the sick in contract hospitals or lodgings, with allowances that vary much at different [illegible]. Thus, in contract hospitals, the authorised charges [illegible] a day, vary from 3s. to 6s. for lodging, board, nursing, with, sometimes, medicines; increased for contagious diseases from [illegible] to 20s., but without any regard to rank; and the medical treatment is by officers of the service. Where that is not the case, and private practitioners are employed, they are [illegible] with monthly wages, from £2 10s. to [illegible], according to the liabilities; or, it may be, by fees of 1s. 2d. a visit, as at the contract quarters at Edenton, in North Carolina, where the subsistence is [illegible] a day.

and the doctor's fee for attendance and medicines is the same for each visit to the hospital. Medical men so employed are styled "acting assistant-surgeons," and the staff consists of a supervising surgeon, general surgeons, assistant-surgeons, passed and acting, and purveyors at the central office. The allowance for transport to a hospital is 4s. 2d. uniformly; that for burial differs from £1 5s. to £4 17s. 6d., regulated possibly by distance of cemetery. All expenses are considerably lessened in the hospitals established, in city hospitals, or in those of the navy, and in all of these a medical officer of the service treats all the mercantile sick.

The Marine Service hospitals are administered by its own surgeons; and they are built and repaired at the national charge by votes of Congress. In them, the pavilion-plan is that approved of, and the ground-plan is given of one now proposed to be constructed (*vide* block-plan).



It may be understood roughly by extending the fingers on a plane, and imagining a square block in the palm to be divided into four square apartments, separated by two cruciform passages allotted to the reception-room and office at the entrance, and to the operating-room and dispensary towards the main blocks of buildings. Then, taking the three central fingers as wards, each has, at the entrance, a dining-room for the patients of the wards on the left, and two nurses' rooms on the right, with a central passage into the wards, all on the ground-floor, with an ambulatory on each side; and, at the further end, the angles are truncated into smaller parallelograms, of which the left half is the ward smoking-room, and on the right are the lavatory, bath-room, boiler-room, and water-closet, in connection with the wards, which diverge one from the other like the extended fingers. The two smaller fingers represent, that on the right, the quarters for the assistant-surgeons, and that on the left the hospital-kitchen and the *employés'* dining-room. The plan is very symmetrical, and well arranged for ventilation of a ground-floor and for the convenience of the sick; but neither the dimensions nor the number of beds in each ward are shown. It is suggested that there should be "also a few small rooms, so as to be easily fumigated, for infectious diseases, such as erysipelas, measles, or diphtheria; and that the hospital-buildings should be brought as compactly together as proper sun-lighting and ventilation will admit, and not be spread out over acres of ground for mere show."

A smaller hospital has been constructed on this principle at Memphis, Tennessee, and that at New Orleans is in progress in its ampler development for a first-class port. As votes have been passed by Congress for constructing three other port-hospitals on the same plan, it may be supposed that most of the old hospitals on the barrack and hut constructions will be replaced on the new plan; and thus there will be in the New World a governmental display of regard for the cure of sick merchant-seamen, not dreamt of as yet by the older maritime nations of Europe, of which the sites and the buildings will be at the cost of the nation, and not of private charity. The working expenses of the service are met by a capitation-tax on all merchant-seamen while actually employed, collected at the custom-houses amongst other dues, and paid into the national treasury; but frauds at the hands of impostors, owners, and brokers, have been not unfrequent. A central depôt for hospital furniture, stores, medicines, instruments, etc., is fixed at the seat of government, from which supplies are distributed by the purveyors on requisition, and none but perishable commodities are purchasable on the spot.

In addition to the hospitals and sick-quarters for severe cases, there are, for the treatment of milder cases as out-patients, a dispensary or two at each station, and in these, about two-thirds of the applicants receive medicines.

The receipts for the year were £88,879, and of this, £86,656 was the tax paid by employed seamen, leaving £2,234 to be met otherwise, as administrative expenses, etc. The disbursements amounted to £97,910, causing a deficiency for the past year of £9,031. The relief afforded on this expenditure was to 40,195 patients, of whom 13,356 were admitted to hospitals, and 26,839 relieved at the dispensaries as outdoor patients.

The mean of hospital-treatment was twenty-four and a half days, at a cost of nearly £2 9s. per case, including both classes of patients—in and out. There are fourteen hospitals in use, and four in construction, and in all, 150 relief-stations on the east and west coasts, the Gulf of Mexico, the Mississippi, Ohio, and the Great Lakes.

Five hundred and two deaths are recorded for the years 1882-83; and, assuming that these were of hospital-cases, exclusive of out-patients, the average mortality would be 37.5 per 1,000 with them, and, with the total sick, 12.4 per 1,000.

The Classified Ratios of Mortality were, per 1,000:

For the Year 1882.	In the United States Marine Hospital Service.[1]	In the Royal Navy.[2]
Diseases, general and constitutional	560.0	397.1
,, of nervous system	67.7	41.16
,, of circulatory system......	65.7	58.1
,, of respiratory system......	163.3	109.0
,, of digestive system	101.6	92.0
,, of urinary system	39.8	14.53
Injuries by casualty	39.8	174.33
,, in action		101.7
All other causes	23.9	12.1
Prox. per 1,000 deaths	999.8	1000.02

[1] In 502 deaths, page 124, report of 1882-83.
[2] In 41[illegible] deaths, drawn from report of 1882.

This comparison, derived from published sources, indicates how very much the grouped causes of mortality differ between the mercantile marine of the United States coasts, and the Royal Navy of England scattered over the world. These great differences of condition rest on: first, inattention to the examination of men in the United States Mercantile Service, as in our own, and its stringency in the Royal Navy, before active employment; second, the extended age for work common to all merchant-seamen, beyond that of the fighting navy in all countries; third, the benefit to health derived from naval discipline, and the fruits of service, in form of pension, that enable debilitated seamen to secede from their calling, and avoid its ultimate risks. To perfect this comparison, we require data on the final results of contracted disease that involves an annual invaliding of 45 per 1,000 from our navy, a great proportion of whom go, unfit men, on long mercantile voyages, to the increase of mortality there.

On another view, it becomes obvious that, where the mortality by diseases of every class preponderates, that by ordinary injuries is strongly marked in favour, and still more so if the "killed in action" (which, however, is an unfixed annual quantity) be taken into consideration; and further, that, in the United States Marine, there are, per 1,000 of deaths, 257 by febrile diseases, and 229 by constitutional, as rheumatic, syphilitic, and tuberculous affections, against, in our navy, 283 and 114 respectively; proving conclusively that the constitutional group, by 100 per cent., is more destructive among the United States merchant-seamen than in our navy, from which they are invalided; while the febrile group is, by 10 per cent., more so in the Royal Navy. This is corroborative of the inference as to the average stamina now existing in these two bodies of seamen, probably from the causes alluded to above.

—	In the United States' Marine Hospital Service.	In the Royal Navy.
Deaths by diseases, per 1,000......	960	723
,, ordinary casualties	40	174
Killed in action		101

With regard to the casualties of wreck of which none are recorded in either service in the year, probably such would not appear in the United States statistics; but they would form a serious item if dealing with the same question on the mortality by casualties in our own mercantile marine, if they be as stated on the authority of the Secretary of the Board of Trade.[1]

Although it is not proposed to enter on the diseases enumerated in the tables, of which many interesting cases are related, there are two that call for remark—small-pox and yellow fever. Of the first, there were 141 cases, with 60 deaths, or 42½ in the hundred, exceeding by 6½ the ten years' statistics of the London Small-pox Hospital—the most authentic we have of unprotected cases; and it may therefore be inferred that there were local or special causes for this extreme malignancy. The original infection could not have been an imported one in emigration-ships from Europe, since there was no contagious disease reported in them during the year, although 102 deaths occurred in them in crossing the Atlantic. The centres of infection were Baltimore, New Orleans, and the upper eastward tributaries of the Mississippi, by the Ohio. It appears to have been mainly by inland infection on the rivers.

The year 1882 was an epidemic period at points on the Gulf Coasts of Mexico, and of the United States from the Rio Grande to Florida, in Cuba, and Port Royal, Jamaica.

In this volume, there are full details of the epidemics at Brownsville and its neighbourhood, in Texas, and at Pensacola and its vicinity, in Florida, affording some new views of importance concerning this disease; and the annual report of the health of our navy, for 1882, contains remarks on the smaller, but circumscribed, epidemic in the shipping and dockyard at Port Royal.

By way of preface, it will assist in estimating these to examine the statistics, presented as authentic, bearing on these epidemics, together with others of wider extent. Those from Vera Cruz—an endemic centre—refer to the charity hospital for males in that city, and that of the British Navy is compiled from the official publications.

Nos.[1]	Periods.	Situations.	Attacks.	Deaths.	Per 1,000.	Page.
1	1859-78	Royal Navy	1,374	616	448.[illegible]	
2	1875-83	Vera Cruz, seamen of all nations	65	34	524.[illegible]	[illegible]
3	1883	,, total	1,756	864	496.	
4	..	Pensacola, Florida, total ..	2,[illegible]	225	[illegible]	[illegible]
5	,,	Brownsville, Texas, total .	2,070	117	57.[illegible]	[illegible]
6	,,	,, in hospital ..	76	14	184.[illegible]	[illegible]
7	,,	Port Royal, Jamaica .. .	36	14	388.8	
		Totals	7,674	1884	245.5	

With reference to this point of mortality from yellow fever, Dr. G. Wood, Physician of the Pennsylvania Hospital, states at p. 330, vol. i, of his *Treatise on the Practice of Medicine*, fifth edition, Philadelphia, 1858, "Epidemics are sometimes extremely fatal. While, in some, one half or more of the cases have proved fatal, in others, the proportion of deaths from yellow fever, prevailing epidemically, may be stated at one-third (333 per 1,000). In 1855, Norfolk and Portsmouth, naval towns in Virginia, were infected, and at the latter it has been stated, that the mortality in an epidemic was 500 per 1,000 among the whites, and 50 among the negroes, which affords the very best criterion of its malignancy there. Even with the same city, Dr. Wood remarks, the violence may vary greatly in different spots. Thus, in Philadelphia in 1820, out of 12 recorded cases in one locality, there was only a single recovery; of 70 in another, 30 recovered; and of 4 in a third, 3 recovered, showing how much of the severity of the disease will depend on the better or worse sanitary conditions prevailing in various parts of a city; and the same law holds good in hospitals, proportionate to their crowded state with fever cases, and the length of time they have been receiving them; so it is in ships, for, in the same epidemic, one ship may have received a very fatal infection, whilst others may have manifested only a mild form of fever-action, and it may be none at all, after visiting an infected harbour."

But assuming 333 per 1,000 of attacks to have been a reasonable standard of mortality in a city by epidemic yellow fever when Dr. Wood wrote, some interesting conclusions may be evolved in considering the above data; of these, the most striking is the decrease of severity of the disease since then, even in the southernmost of the cities and towns of the United states. The death-rate at Pensacola was nearly 40 per 1,000; but the difference between the highest of these and Dr. Wood's statement is 236 per 1,000. As the death-rate is the measure of the greater or less predominance of typical cases of black vomit, etc., which rarely recover, it follows that there may have been in action a less intense specific poison, or a diminution of the unsanitary local conditions that always foster the spread and severity of the disease, or both causes may have co-operated to produce the marked difference of results.

At the time when Dr. Wood wrote, this fever was considered endemic in New Orleans, Mobile, and Charleston, although it did not prevail epidemically every summer; and epidemic at distant intervals in the more northern cities of Baltimore, Philadelphia, and New York. I am not aware that any epidemic of it has appeared since then in the last three, and, in the first three, its character of endemicity has been abolished, their visitations having been rare and traceable to importations.

We all remember that, in 1865, General Butler, with paternal severity, taught the efficacy of quarantine and the influence of cleanliness, both of locality and of person.

Dr. Wood lived when the doctrine of contagiousness was not in the ascendant, and quarantine was repudiated by most medical men, while loss of blood and the use of medicines to cure were more thought of than hygienic measures to prevent and to cure yellow fever. In 1819-20 it visited most of the large cities upon the Atlantic coast from Charleston to Boston; in 1853 it was again at Philadelphia; in 1855 it was in Virginia; and during the civil war it prevailed in Louisiana, Florida, and Carolina. It was then that General Butler, as governor of New Orleans, setting aside all questions of mercantile interest, proved that, at New Orleans, prevention was easier than cure.

Now, when the disease infects towns on the Gulf Coast, the local authorities are held to blame, as in Texas and Florida in 1883. Hygiene has fully vindicated her superiority over therapeutics in meeting the many events of yellow fever epidemics; and, with that, she has proved the best way to diminish the death-rate of the once terrible and now milder disease, by reducing the chances of introduction, as well as the fostering causes of the disease.

Secondly, if it be held as proved that, in cities and towns, where improved cleanliness and ventilation of houses and of filth-receptacles, and of hospitals and other resorts of the sick, can be effected by the local authorities to the clearing out of badly infected quarters, and the destruction of all infected material, together with isolation of the attacked; and that an epidemic can be deprived of its virulence, as denoted by its general mild form, and by its minor death-rate. Then it may be comprehended how it is that when the disease does appear, whether it has arisen through introduction, or, as some assert, by spontaneous development, within the confined and overcrowded limits of a ship. The causes are obvious why so large a majority of the cases assume the very worst type, and the death-rate becomes so much inflated, that any susceptible person has but a remote chance of escape, as exemplified in the instances of ships of war, and also in the ships of mercantile marine, as well as in the crowded charity-hospital of Vera Cruz, into which none but the poverty-stricken are admitted; for under either of these circumstances, the chance of remedial measures stands at its very minimum when infection has been admitted.

From this report it is gathered that whilst the infected town of Brownsville, having received infection from Mexico, was jealous of the restraint on its commerce enforced by a rigid *cordon*, the uninfected towns on the Colorado River instituted their own *cordons* against it; and that line, being adopted, under Government authority, by the medical officers of the Marine Hospital Service [illegible] by the United States treasury, was believed to have been the means of limiting the epidemic.

At Pensacola [illegible] State [illegible] the [illegible] epidemic, although [illegible] by its death-rate [illegible] that at Brownsville, as judged by its death-rate [illegible] it was not less remarkable, notwithstanding [illegible] to limit its spread. The [illegible] contained in the report of the [illegible]

It is stated that [illegible] of yellow fever [illegible] On November 10th [illegible] the 16th all State quarantine [illegible] forwarding [illegible] was [illegible] had been

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[1] *Authorities.* For Nos 1 and 7, Health Reports of Royal Navy; for others, Report of Marine Hospital Service, United States, 1883; 2 and 3, Appendix, by Dr. Gutteras; 4 at page 80, a physician of Pensacola, Dr. J. S. H[illegible]; [illegible] pages 307, 308, Dr. R. D. Murray, principal medical officer, Marine Hospital Service, at Brownsville, Texas.

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[1] *Loss of Life at Sea.* A parliamentary paper issued February [illegible] the number of lives lost by drowning or other accident in British merchant ships registered in the United Kingdom in the [illegible] In the twelve years, the total loss of life was [illegible] of which [illegible] and 3,06[illegible] passengers. The largest numbers were in 18[illegible] and 18[illegible] mainly due to the great number of passengers drowned in those years, [illegible] former, and 572 in the latter.

enforced about three months; the maximum of daily temperature having been noted, 93.5° on August 9th, when yellow fever had begun in Brownsville; and it had fallen to 65.5° on November 14th, when it had altogether ceased at Brownsville.

At Pensacola the disease raged between September 8th and October 26th; the greatest number of attacks in any one day having been 77, and of deaths 11. The last attack occurred on November 26th, and the last death on the 29th. The general opinion held in the United States is, that no infected place can be considered safe until a frost has set in, which was not seen in those instances.

It is important to know that at Brownsville the majority of inhabitants were of Mexican, and at Pensacola, of Negro race; which accounts in a degree for the mildness of the disease.

This concludes the general information combined in the report of the supervising surgeon-general. The history of the epidemics is very instructive in a pathological sense, but that may lie beyond the immediate scope of this notice; which has been merely to show, at this moment, when a Bill is before Parliament to devise means to diminish sacrifice of life amongst our merchant-seamen, how much it is possible to effect in the direction of curing their diseases.

SUCCESSFUL REMOVAL OF TWO SOLID CIRCUM RENAL TUMOURS.

By Sir SPENCER WELLS, Bart.,
Surgeon to the Queen's Household.

Any student of abdominal surgery in general, and especially of what is now termed the "surgery of the kidney," is certain to be interested in noticing two specimens which have lately been added to the Museum of the Royal College of Surgeons. The following description of these portions of two solid tumours which I removed last November from around the right and left kidneys of a lady, with part of the left kidney attached to one of the tumours, has been prepared by Mr. Eve. One tumour weighed 16½ lb., and the other 14½ lb.

"The portion of kidney torn away comprises more than one-third of the lower end of the organ. A calyx and papilla may be seen upon the torn surface; they afford conclusive evidence that the pelvis was opened. Within the calyx is a small mass of fat. A section of the kidney has a normal appearance. Surrounding the surface of the kidney is a tolerably firm, greasy, pale yellowish white substance, evidently consisting in great part of adipose and fibrous tissues. It is in close contact with the capsule of the kidney, but is only adherent to it over a surface about half an inch in length. The capsule can be easily separated from the kidney at this point, leaving the subjacent parenchyma perfectly smooth.

"The portion of the tumour from the opposite side was slightly more fibrous in texture, but otherwise similar in its naked-eye characters.

"In minute structure, both tumours consisted chiefly of adipose tissue. The fat-cells were large, and closely approximated. There were also many large tracts and bands of fibrillar connective tissue, consisting of a close interlacement of delicate fibrils, which gave it somewhat the appearance of mucous connective tissue, but stellate cells were absent. The blood-vessels were large and numerous, and around them were masses of small round, so-called 'indifferent' cells, which could be traced through transitions, by elongation, to the formation of fibres.

"The formation of fat was evidently secondary to the growth of fibrous tissue, the advance of the fat-cells into it being apparent; while the various stages in the transformation of the fixed connective tissue-corpuscles into fat-cells were distinctly seen. Sections, cut through the point where the tumour was adherent to the kidney, showed that numerous parallel fasciculi of fibrous tissue intervened between the kidney-substance (which was healthy) and the tumour.

"The anatomical relations of the tumours to the kidneys, and the microscopic examination, support the view that the tumours originated neither in the pelvis nor capsule of the kidney, but in the circumrenal connective tissue.

"Histologically, they were fibro-lipomata, and no grounds exist for believing them to be in any part sarcomatous, since the young cell-element exhibited a distinct tendency to form mature tissues, either fibrous or fatty. A complete immunity from further disease may, therefore, be anticipated, provided that the growths were completely removed."

I removed the two tumours at Tooting on November 13th, 1883, assisted by Mr. Meredith and Dr. Ridley Hilder. Bichloride of methylene was given by Dr. Day. I had been very doubtful as to the precise character and origin of the tumours before operation, simply saying that there were two solid tumours, so movable that I did not think there could be any unusual difficulty in their removal. On making the incision usual in ovariotomy, a growth resembling an ordinary fatty tumour was seen to be covered by layers of loose serous membrane, just as in tumours covered by the broad ligaments of the uterus. This membranous capsule was divided, and the tumour easily shelled out from a large deep cavity in the left side of the pelvis and left loin. Attached to the deepest part of the tumour was a piece of dark red tissue, which I at first thought was a part of the spleen; but which afterwards proved to be about a third of the left kidney. The remaining portion of the kidney and the ureter were then seen at the bottom of the capsule. There was very little bleeding. The capsular cavity was carefully sponged, and the edges of the divided capsule were placed in apposition, but no sutures were used.

Another large tumour was then found similarly situated on the right side, and was removed in the same way; but the right kidney was neither injured nor seen. The only other difference in the proceeding on the two sides was, that the ascending colon led to no difficulty; while, on the left side, the descending colon was attached to the tumour anteriorly, and was pushed aside after dividing the serous capsule of the tumour. There was not much blood lost, only a few small vessels requiring ligature.

The patient recovered quite as well as after an ordinary ovariotomy. In quantity and appearance, the urine was quite normal. Dr. Hilder once or twice found some small clots of blood in the deposit, but, he said, "none as large as a pin's head." I saw her last month quite convalescent.

I need only add that the lady was forty-eight years of age; was married when twenty-one; had never been pregnant; had begun to suffer from abdominal trouble in 1874; and in 1878 was sufficiently large for pregnancy to be suspected. The enlargement had gradually increased. Ever since 1881, owing to prolapsus of the uterus, a ring-pessary had been worn until the day of operation, and numbness and stiffness of the right leg had been troublesome. The catamenia had been regular, and the urine was always normal when examined.

MIRYACHIT: A NEWLY DESCRIBED DISEASE OF THE NERVOUS SYSTEM AND ITS ANALOGUES.

Read before the New York Neurological Society.

By WILLIAM A. HAMMOND, M.D.,
Surgeon-General of the United States Army, Retired List; Professor of Diseases of the Mind and Nervous System in the New York Post-Graduate Medical School and Hospital.

In a very interesting account of a journey from the Pacific Ocean through Asia to the United States, by Lieutenant B. H. Buckingham and Ensigns George C. Foulk and Walter McLean,[1] United States Navy, I find an affection of the nervous system described, which, on account of its remarkable characteristics, as well as by reason of certain known analogies, I think should be brought to the special notice of the medical profession. I quote from the work referred to the following account of this disease. The party is on the Ussuri River, not far from its junction with the Amur, in Eastern Siberia.

"While we were walking on the bank here, we observed our messmate, the captain of the general staff (of the Russian army) approach the steward of the boat suddenly, and, without any apparent reason or remark, clap his hands before his face; instantly the steward clapped *his* hands in the same manner, put on an angry look, and passed on. The incident was somewhat curious, as it involved a degree of familiarity with the steward hardly to have been expected. After this we observed a number of queer performances of the steward, and finally comprehended the situation. It seemed that he was afflicted with a peculiar mental or nervous disease, which forced him to imitate everything suddenly presented to his senses. Thus, when the captain slapped the paddle-box suddenly in the presence of the steward, the latter instantly gave it a similar thump; or if any noise were made suddenly, he seemed compelled against his will to imitate it instantly, and with remarkable accuracy. To annoy him, some of the passengers imitated pigs grunting, or called out absurd names; others clapped their hands and shouted, jumped, or threw their hats on the deck suddenly, and the poor steward suddenly startled, would echo them all precisely, and sometimes several consecutively. Frequently he would expostulate, begging people not to startle him, and again would grow furiously angry, but even in the midst of his passion he would helplessly imitate some ridiculous shout or motion directed at him by his pitiless tormentors. Frequently he shut himself up in his pantry, which was without windows, and locked the door, but even there he could be heard answering the grunts, shouts or sounds on the bulkhead outside. He was a man of middle age, fine physique, rather intelligent in facial expression, and without the slightest indication in appearance of his disability. As we ascended the bank to go on board the steamer, some one gave a loud shout and threw his cap on the ground. Looking about for the steward, for the shout was evidently made for his benefit, we saw him violently throw his cap with a shout into a chicken-coop into which he was about to put the result of his foraging expedition among the houses of the stanitza.

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[1] "Observations upon the Korean Coast, Japanese, Japanese Korean Ports and Siberia, made during a journey from the Asiatic station to the United States through Siberia to Europe, June 3rd to September 8th, 1882." Published by the United States Navy Department, Washington, 1883, p. 51.

"We afterwards witnessed an incident which illustrated the extent of his disability. The captain of the steamer, running up to him, suddenly clapping his hands at the same time, accidentally slipped, and fell hard on the deck. Without having been touched by the captain, the steward instantly clapped his hands and shouted, and then, in helpless imitation, he, too, fell as hard and almost precisely in the same manner and position as the captain. In speaking of the steward's disease, the captain of the general staff stated that it was not uncommon in Siberia; that he had seen a number of cases of it, and that it was commonest about Yakutsk, where the winter cold is extreme. Both sexes were subject to it, but men much less than women. It was known to Russians by the name of Miryachit."

So far as I am aware—and I have looked carefully through several books of travel in Siberia—no account of this curious disease has been hitherto published.

The description given by the naval officers at once, however, brings to mind the remarks made by the late Dr. G. M. Beard before the meeting of the American Neurological Association in 1880, relative to the "Jumpers" or "Jumping Frenchmen" of Maine and northern New Hampshire (*Journal of Nervous and Mental Disease*, vol. vii, 1880, p. 487).

In June 1880, Dr. Beard visited Moosehead Lake, found the "Jumpers," and experimented with them. He found that whatever order was given them was at once obeyed. Thus one of the Jumpers who was sitting in a chair with a knife in his hand, was told to throw it, and he threw it quickly, so that it stuck in a house opposite; at the same time, he repeated the order to throw it with a cry of alarm, not unlike that of hysteria or epilepsy. He also threw away his pipe, which he was filling with tobacco, when he was clapped upon the shoulder. Two Jumpers standing near each other were told to strike, and they struck each other very forcibly. One Jumper, when standing by a window, was suddenly commanded by a person on the other side to jump, and he jumped up half a foot from the floor, repeating the order. When the commands are uttered in a quick, loud voice, the Jumper repeats the order. When told to strike, he strikes; when told to throw, he throws whatever he may happen to have in his hand. Dr. Beard tried this power of repetition with the first part of the first line of Virgil's *Æneid*, and the first part of the first line of Homer's *Iliad*, and out-of-the-way words of the English language with which the Jumper could not have been familiar, and he repeated or echoed the sound of the words as they came to him in a quick, sharp voice; at the same time, he jumped, or struck, or threw, or raised his shoulders, or made some other violent muscular motion. They could not help repeating the word or sound that came from the person that ordered them, any more than they could help striking, dropping, throwing, jumping, or starting; all of these phenomena were, indeed, but parts of the general condition known as Jumping. It was not necessary that the sound should come from a human being; any sudden or unexpected noise, as the explosion of a gun or pistol, the falling of a window, or the slamming of a door, provided it was unexpected and loud enough, would cause these Jumpers to exhibit some one or all of these phenomena. One of these Jumpers came very near cutting his throat while shaving on hearing a door slam. They have been known to strike their fists against a red-hot stove, to jump into the fire and into water. They could not help striking their best friend, if near them, when ordered. The noise of a steam-whistle was especially obnoxious to them. One of these Jumpers, when taking some brandy or soda in a tumbler, was told to throw it, and he dashed the tumbler on the floor. It was dangerous to startle them in any way when they had an axe or a knife in their hands. All of the Jumpers agreed that it tired them to be jumped, and they dreaded it, but they were constantly annoyed by their companions.

From this description it will at once, I think, be perceived that there are striking analogies between "Miryachit" and this disorder of the "Jumping Frenchmen" of Maine. Indeed, it appears to me that if the two affections were carefully studied, it would be found that they were identical, or that at any rate the phenomena of the one could readily be developed into those of the other. It is not stated that the subjects of "Miryachit" do what they are told to do. They require an example to reach their brains through the sense of sight or that of hearing; whereas the "Jumpers" do not apparently perform an act which is executed before them, but they require a command. It seems, however, that a "Jumper" starts whenever any sudden noise reaches his ears.

In both classes of cases a suggestion of some kind is required, and then the act takes place independently of the will.

There is another analogous condition known by the Germans as Schlaftmukenheit, and to English and American neurologists as somnolentia or sleep-drunkenness. In this state an individual, on being suddenly awakened, commits some incongruous act of violence, ofttimes a murder. Sometimes this appears to be excited by a dream, but in others no such cause could be discovered.

Thus, a sentry fell asleep during his watch, and, being suddenly aroused by the officer in command, attacked the latter with his sword, and would have killed him but for the interposition of the bystanders. The result of the medical examination was that the act was involuntary, being the result of a violent confusion of mind consequent upon the sudden awaking from a profound sleep. Other cases are cited by Wharton and Stillé in their work on *Medical Jurisprudence* by Hoffbauer, and by myself in *Sleep and Its Derangements*.

The following cases, among others, have occurred in my own experience.

A gentleman was roused one night by his wife, who heard the street-door bell ring. He got up, and without paying attention to what she said, dragged the sheets from the bed, tore them hurriedly into strips, and proceeded to tie the pieces together. She finally succeeded in bringing him to himself, when he said he had thought the house was on fire, and he was providing means for their escape. He did not recollect having had any dream of the kind, but was under the impression that the idea had occurred to him at the instant of his awaking.

Another was suddenly awakened from a sound sleep by the slamming of a window-shutter by the wind. He sprang instantly from his bed, and, seizing a chair that was near, hurled it with all his strength against the window. The noise of the breaking of glass fully awakened him. He explained that he imagined some one was trying to get into the room, and had let his pistol fall on the floor, thereby producing the noise which had startled him.

In another case a man dreamed that he heard a voice telling him to jump out of the window. He at once arose, threw open the sash, and jumped to the ground below; fortunately only a distance of about ten feet, so that he was not injured beyond having a violent shock. Such a case as this appears to me to be very similar to those described by Dr. Beard in all its essential respects.

A few years ago I had a gentleman under my charge who would attempt to execute, while he was asleep, any order given to him by a person whispering into his ear. Thus, if told in this way to shout, he shouted as loud as he could; if ordered to get up, he at once jumped from the bed; if directed to repeat certain words, he said them, and so on.

I am not able to give any certain explanation of the phenomena of "Miryachit," or of the "Jumpers," or of certain of these cases of sleep-drunkenness, which seem to be of like character. But they all appear to be due to the fact that a motor impulse is excited by perceptions without the necessary concurrence of the volition of the individual to cause the discharge. They are, therefore, analogous to reflex actions and especially to certain epileptic paroxysms due to reflex irritations. It would seem as though the nerve-cells were very much in the condition of a package of dynamite or nitro-glycerine, in which a very slight impression is competent to effect a discharge of nerve-force. They differ, however, from the epileptic paroxysms, in the fact that the discharge is consonant with the perception—which is in these cases an irritation—and is hence an apparently logical act; whereas, in epilepsy, the discharge is more violent, is illogical, and does not cease with the cessation of the irritation. Certainly the whole subject is of sufficient importance to demand the careful study of competent observers.

The death-rate of the "Royal Borough" of Windsor was last year only 13.5 per 1,000. Of the total number of 257 deaths, 15 were attributed to zymotic disease.

CASE OF PUERPERAL SCARLATINA, WITH HYPERPYREXIA: HYDROTHERAPEUTIC TREATMENT SUCCESSFULLY USED.

By W. J. CUMMINS, M.D.,
Physician to the Cork South Infirmary, and to the Cork Hospital for Women and Children.

So much interest is felt at present in metria and its varieties, that the following case, which has lately occurred in my practice, may be considered interesting.

Mrs. C., a young healthy mother of three children, was confined on December 23rd last; the labour was natural, and so quick, that I arrived only in time to complete the third stage. Convalescence proceeded naturally until the 29th, when there was slight pyrexia, and the lochia were a little offensive. The mammary secretion, however, was plentiful, and the pelvic organs and peritoneum were free from tension or tenderness.

Next day (December 30th), the temperature was 103°; pulse very feeble and rapid; and a scarlatiniform eruption had appeared on the skin; but there was no sore-throat, and the tongue was not at all characteristic of scarlatina.

On the morning of the 31st, I found my patient thickly covered with scarlatina rash, and the red papillated tongue, pathognomonic of the disease, was present. The pulse was excessively rapid and feeble; temperature 105°; the milk was declining; the lochia were scanty, and rather offensive; there were some tympanites, but no tenderness; no sore-throat. Up to this, the treatment had been careful syringing with Condy's fluid, chlorate of potash internally, and an occasional teaspoonful of brandy in milk; but now the brandy was increased, and given more regularly, as she was extremely prostrate.

On January 2nd, the temperature at my evening visit was above 105°; the pulse was more feeble; and the prostration even more intense. At 10 P.M., the temperature had risen to over 106°, and she was given five grains of quinine. I saw her again at 11.30 P.M.; the temperature was still rising; respiration was most rapid and suspirious; the pulse was scarcely to be felt, and not to be counted; and the very plentiful scarlatinal eruption had become quite dusky, and the patient, though conscious and not delirious, was lying in an apathetic, utterly prostrate condition. I therefore stripped her, and carried her to another bed. There I plentifully applied towels wrung out of the coldest water I could get, which was constantly renewed from a reservoir in the open air. The water became quite hot after each single towel was wrung into it, after only a few minutes' contact with her body. This treatment was continued without a moment's cessation by myself and the sister in charge, for from an hour and a half to two hours, when I found that the temperature had fallen below 103° in the rectum. Then I dried her, and put her into her own bed. All through this process, the patient's temperature gradually fell; the pulse returned; and she expressed the relief she experienced. When replaced in bed, she said she felt sleepy; the temperature under the axilla was 100°, and the pulse 108.

Next morning, the sister informed me that she had passed a tranquil night, had slept pretty well, and had taken her nourishment (brandy and milk) freely. The temperature had been taken every second hour, and had not risen above 100° until 8 A.M., when it rose to 101°. The bowels had acted several times during the night. The pulse was 118. The eruption was well out, commencing to desquamate in a few places, and of good colour. Towards evening, the temperature rose to 103°, and the pulse to 120. I gave five grains of quinine, and desired the sister to repeat the hydrotherapeutic treatment if the temperature rose above 104°.

On the following morning, I was informed that, as the temperature had continued to rise, last night's process had been repeated, and used till the thermometer fell to 103° in the rectum and to 100° in the axilla, after drying and being replaced in bed. She had not enjoyed the bath as much as on the previous night, and after it the stomach had been very sick, and had continued so for many hours. Temperature 102°. I prescribed three grains of quinine, with half a grain of digitalis, every fourth hour, and ordered the brandy and milk to be continued. This treatment was continued for ten days, and the patient gradually convalesced, and completely regained her health. The desquamation of the skin was excessive.

It was a curious feature in this case that the throat was never sore from first to last; and at first I was doubtful whether I had not to deal with some form of autogenetic metria instead of scarlatina. The latter disease was, it is true, prevalent in Cork at the time; but I had not myself seen a case of it until the very day after this patient was attacked by its symptoms, neither could I trace any other source of infection from without. The children of this lady had been in and out of the room the first day or two, and I watched with interest to see whether they had taken infection from the mother. The result proved that one of them had done so, so that there can be no doubt that the disease which so nearly proved fatal to the mother was true scarlatina, modified and intensified by the puerperal condition, with its excess of nitrogenous waste in the blood, on which the poison, however received, could reproduce itself to an exaggerated extent.

It may be that puerperal women are more easily infected by zymotic diseases than others, and it may be also that scarlatina-germs can produce a septicæmic condition without giving rise to true scarlatina. I believe much difference of opinion exists among experienced physicians on these points, which may be cleared up as a result of the labours of the Collective Investigation Committee. During the time I was medical officer of the Blackrock Dispensary, many years ago, there were several severe epidemics of scarlatina, and one notable and most malignant one, about twenty years ago. I attended closely and carefully to all these cases, and, at the same time, to a large midwifery-practice in the neighbourhood, without taking any of the precautions which are considered so necessary now-a-days; and yet not a single puerperal woman lost her life from scarlatina, or any form of metria, at the time. Now, I do take great precautions, and even give up midwifery for a time, when I am unfortunate enough to have scarlatina under my care. Is this necessary? We must hope that the pending investigation will enable clear rules to be laid down to guide practitioners in a matter of so much importance to themselves and their patients. One word more. Scarlatina, even in its puerperal form, is, of course, a self-limited disease as regards duration; and therefore, the treatment of this, as of other zymotic diseases, is simply to keep the patient alive for a certain time until the danger is over. In other words, we must obviate the tendency to death, whatever it may be, or whenever it may arise. It was with this view that I used the cooling treatment which proved so successful.

To the old idea, that death commences either in the head, the lungs, or the heart, we must add, in these days, a fourth—viz., death commencing in the heat-producing or heat-controlling centres; and I am satisfied that a more bold adoption of means to obviate this not uncommon tendency to death, than is generally used, would save many a life.

SURGICAL MEMORANDA.

OVARIOTOMY, MULTIPLE ADHESIONS, DRAINAGE: RECOVERY.

MRS. S., aged 36, a short, well developed woman, had married at the age of 22. Menstruation had always been regular and painless, till four years ago, when she miscarried at the fourth month of her first pregnancy. After this, the discharge at the menstrual periods became very scanty, and she began to suffer pain in the right iliac fossa. Three years ago she noticed a deep seated swelling in the same position, painless, and movable. It increased in size till September last. At this time, while lifting a weight, she was suddenly seized with violent pain low down in the left side. The pain brought on sickness, and she was obliged to go to bed. For about a month the pain continued, at intervals becoming very violent, and she increased rapidly in size. When first seen, early last January, the abdominal measurement round the umbilicus was fifty-two inches. The superficial abdominal veins were greatly distended and well marked through the skin, which was pale and waxy. On examination, the whole anterior part of the abdomen was found to be dull to percussion, and a well marked wave of fluctuation was transmitted from one hand to the other over the left side. The right side was highly elastic, without fluctuation. There was tympanitic resonance in both flanks. The legs were œdematous. The urine was scanty and loaded with urates, the tongue foul, and the bowels constipated. On vaginal examination, the os was found to be drawn up almost out of reach; the uterine sound gave five and a half inches of measurement. Seven weeks later, the general health having been attended to and somewhat improved, the tumour was tapped below and to the right of the umbilicus, and seven quarts of typical ovarian fluid drawn off; the left side did not collapse, so a long trocar and cannula was passed into it, when about a pint and a half of a very dark syrupy fluid came away. When this was exhausted, and the trocar was being removed, about two inches having been withdrawn, there was a sudden flow of a clear straw-coloured fluid, showing that the trocar had been passed through one cyst and entered another. In all, nine fluid quarts were drawn off. The left side of the abdomen was still occupied by a large highly elastic tumour. From this time the patient's general health made rapid improvement. The œdema of the legs disappeared. The urine became normal, and the bowels acted more regularly. At the end of seven weeks, however, she had nearly regained her former size; it was therefore decided to operate.

The operation was conducted under the strictest antiseptic precautions. The following points I consider worthy of note. 1. There was a great number of adhesions, many of which required ligature; the majority were soft and easily broken on passing the hand round the tumour. 2. The contents were so thick, or rather semi-solid, that hardly any could be got away by a Spencer Wells's trocar and cannula, but had to be scraped out with the hand. Owing to this, a larger amount than was desirable entered the peritoneal cavity, and required much patient sponging for its removal. The tumour was found to be divided into nine compartments, mostly filled with gelatinous contents. A glass tube, about seven inches long and half an inch in diameter, was passed down into the cavity of the pelvis, and secured in the lowest part of the wound, about one inch being left outside. The external end was plugged with absorbent cotton-wool.

On the second day after the operation, on paying an early morning visit, I found the patient restless, flushed, and complaining of pain in the lower part of the abdomen. I found that the glass tube was full of a dark fluid. Eighteen ounces and a half of bloody fluid were drawn off by means of elastic tubing attached to a glass syringe. In two hours the temperature had fallen to 99.7°, and the pulse to 128. For several days following, from two to four ounces of a similar fluid were drawn off night and morning; the temperature rising gradually between times, but rapidly falling after its removal. The quantity gradually became less, and the colour less dark; and on the seventh day after the operation no fluid could be withdrawn from the drainage-tube, so it was removed, and the wound closed by means of a harelip-needle. No further discharge took place, and the wound healed by first intention.

The patient had no sickness throughout, and took nothing but teaspoonfuls of very hot water for the first three days, during which period she did not complain of hunger or faintness. The bowels acted naturally on the twelfth day, and have since been regular. The patient is now sitting up six or eight hours daily, and has made a perfect recovery. The tumour weighed eighteen pounds and a half, and the contents forty-one pounds, thus bringing the total weight removed up to fifty-nine pounds and a half.

J. G. DOUGLAS KERR, M.B., C.M.,
Late House-Surgeon, Glasgow Western Infirmary.

CLINICAL MEMORANDA.

CASE OF BLACK TONGUE.

THE following case of black tongue may be interesting, presenting, as it does, many points of resemblance to that recorded in the JOURNAL of March 29th. The patient is a man aged 60, a painter and glazier by trade, but, on account of ill-health, has not done any work for seven years. Shortly after he commenced his apprenticeship, he was attacked with lead-colic, and the blue line characteristic of lead-poisoning appeared on his gums, and remained for about twelve months. He has never enjoyed robust health, and at present suffers from ulcers on his legs, which have existed for the last thirty years.

On examination of the tongue, the blackness is seen to be in the form of a circular patch, about an inch in diameter, situated at the posterior third of the dorsum. The greater part of it is of a deep black colour, while at the margin it is lighter, being brownish; and surrounding this for about half an inch there is a whitish tinge. Behind the coloration are a number of light-coloured nodules in the position of the circumvallate papillæ. The other parts of the tongue, except being slightly fissured, are normal. Upon stroking the patch with the finger from before backwards, it feels soft and smooth; while, on reversing the motion, it feels roughish, this being caused by the finger passing over what looks like a mass of black hairs. The discoloration is entirely composed of these black filaments, some of them of considerable length, with shorter ones intermixed. They can be detached easily with dressing-forceps, bringing along with them a portion of the subjacent tissue, which is light in colour. The blackness commenced about two years ago, the patient feeling, as he describes it, as if his tongue were too large for his mouth; and, on examining it, he found a small discoloured spot, which has gone on extending ever since. He has no pain in the tongue, nor any diminution in his sense of taste.

On microscopical examination of one of the filaments, it is seen to be composed of epithelial cells of a brown colour, closely packed, and overlapping one another. In some cases, the centre of the filament is very dark, with a lighter margin; and in other cases it is the reverse. When the latter condition occurs, there appears to be a tendency for it to split down the centre. On examination from the apex of the thread downwards, the colour gradually becomes less, till, at the point where it springs from the tongue, no staining of the cells can be detected. These filaments appear to be, as stated in the article by Mr. Stoker, the fringes of the papillæ greatly hypertrophied, and their cells stained of a brown colour.

G. T. BROATCH, M.B., C.M.Edin., Aylesbury.

A WELL marked case of this abnormality occurred in my practice some time ago; but, as I was not aware of its extreme rarity, it was not recorded. As in Mr. Stoker's case, the patient was an old man, a retired brewer; and, as he suffered from a bad stricture of the urethra, there were abundant opportunities for observation. When I first saw him, he was seventy-three years of age, and lived seven years after that, finally dying of apoplexy. He was generally healthy, took his food well, and did not smoke. When first seen, at least one half of the dorsum of the tongue was as black as jet, and the colour was not affected by rubbing or scraping. The papillæ were elongated, and gritty to the touch; but this condition caused no uneasiness, and he was uncertain how long it had continued. The area of the discoloration was broadest in the middle, and was situated in the centre of the tongue. It varied considerably in size, but never occupied less than a third of the whole surface. The last time I saw him before his death, nearly the whole dorsum was involved. There was no medicine nor anything else that I could think of to account for it; and of course feigning was out of the question. JAMES BRYDON, M.D., Hawick.

THERAPEUTIC MEMORANDA.

NÆVUS TREATED SUCCESSFULLY BY LOCAL APPLICATION OF LIQUOR ARSENICALIS.

UNDER the above heading, Mr. W. J. Beatty, of Stockton-on-Tees, in the JOURNAL for November 24th, 1883, brought before the profession a (to me) new method of treating nævus; and I am very glad, having given this mode of treatment a fair trial, to be able to say a word in its favour.

At the time his article appeared, I had been considering what would be the best mode of treatment for a large nævus on the scalp, situated over the anterior fontanelle; and, the mother objecting to vaccination, etc., I determined to try the liquor arsenicalis, with the result that my patient was completely cured in seven weeks, and that without appearing to suffer any pain, except for a short time when the nævus was ulcerating.

I had to stop the application on two different occasions, owing to severe gastric disturbance, which I attributed to the absorption of arsenious acid, and which ceased after a rest of two or three days.

JOHN BLAIR, M.D., Shotts, Lanarkshire.

GLYCERINE AND CODEIA JELLY.

I BEG to draw the attention of the profession to a preparation consisting of codeia with citric acid, tolu, and glycerine, made at my suggestion, which will, I think, be found a pleasant and serviceable agent in the treatment of chronic laryngitis, phthisical cough, etc.

I had lately to treat a lady suffering from laryngeal catarrh. During the defervescence of her attack she was much troubled by thirst, dryness of the fauces, and consequent cough and sleeplessness. It appeared to me that if I could get the mucous membrane back to its normal state, instead of the dry, hyperæmic, concentrated-viscid-mucus-secreting condition into which it had fallen, that the cough would vanish. We have often to deal with a similar condition in phthisis.

Of all agents, glycerine, both from its mechanical and hygroscopic properties, would be the most suitable to such a purpose; and the comfort obtained from oranges or lemon-juice, under such circumstances, is well known. I thought [illegible] would be the best nervous sedative, and that something in jelly-form would remain longer in contact with the parts. The jelly is [illegible] with [illegible] and very pleasant to take; and I think many will agree with me in thinking that it is often preferable to order such a preparation, particularly in long and intractable cases, to writing [illegible] prescriptions. Patients take them more readily than ordinary medicines, and, if unrelieved, are less prone to be discouraged.

G. S. [illegible], Bournemouth.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

TWO CASES OF HYDROPHOBIA.

[For the notes of these cases we are indebted to Mr. F. C. WALLIS.]

CASE I. *Hydrophobia after the Bite of a Cat.* W. W., a man aged 21, was admitted on March 30th, 1884, at midnight. He had been bitten in two fingers of the left hand by a rabid cat six weeks before. The cat bit no one else, and died after a few days, "foaming at the mouth." The patient's wounds were treated with nitrate of silver; but as he was bitten through the nail of one finger, the caustic probably did not have much effect. Three weeks before admission, he was knocked down and maltreated by some men.

On March 29th, he felt sick and could not eat; on the next day, he could not drink, and became convulsed when offered anything.

On admission, the wounds caused by the bites were healed; he was thirsty, but became convulsed on anything being put to his mouth. He was not apprehensive or alarmed. The temperature was 99.8°; the pulse was 80, and bounding. The tongue was moist. The respirations were irregular, about 12 a minute, and spasms occurred every few minutes.

On March 31st, at 3 A.M., three minims of the hypodermic injection of morphia were injected, and he seemed inclined to sleep. During the day he had several enemata, which were generally retained for about an hour; no spasm was caused by them. He was anxious to smoke, but could not do so, neither could he suck some acid-drops which he asked for. He grew worse as the day wore on, and began to ramble. At 1 P.M., 3 minims of the injection of morphia were injected hypodermically; and at 5 P.M. 6 minims were injected. At 10 P.M., a grain of pilocarpin in twelve minims of water was given as an hypodermic injection. Soon after this, he complained of great pain in his head and became strongly convulsed; the convulsions lasted until he was anæsthetised with chloroform; whilst under the anæsthetic, another hypodermic injection of morphia (6 minims) was given; a tube was passed into the stomach, and some beef-essence with one ounce of brandy introduced; a rectal enema of beef-essence and brandy was also given. The breathing was very spasmodic, calling for artificial aid occasionally; it became so bad that tracheotomy was performed, and he was temporarily relieved, but gradually sank and died at about 1.15 A.M. on April 1st. There was a large flow of saliva all the time the patient was under chloroform. No necropsy was allowed.

CASE II. *Hydrophobia after the Bite of a Dog.*—C. B., a boy aged 15, was bitten by a dog in the right forefinger on June 11th, 1882; the wounds were cauterised the same evening.

On July 13th, he felt great pain in the right arm, shoulder, and hand; this pain continued up to his admission into the hospital on July 15th; on that day, he drank freely at breakfast, but, at about 1 P.M., attempting to swallow, he had a spasm.

He was admitted at 5 P.M.; and from then till 8 P.M. he had attacks of bad breathing every few minutes; at about this time, he drank some milk with a great effort. A catheter was passed through the nose, and fifteen grains of bromide of potassium, with ten grains of chloral, were given. He also had a vapour-bath, which made him sweat profusely. At 10 P.M., he passed the catheter on himself after great persuasion, and then had some more chloral and bromide, with brandy and milk and pancreatin; one-tenth of a grain of pilocarpin was also administered. He had, after this, several violent fits, recurring at short intervals, and he hawked and spat violently.

At 11 A.M. the following day, he again passed the tube for himself, and, while passing, the spasms were more violent than they had been before. Chloral-hydrate and bromide were again administered, together with milk, brandy, and pancreatin, and nitrate of pilocarpin one-twentieth of a grain. He soon perspired freely, and the paroxysms were less frequent and less severe. He became very restless about midday; at 4 P.M., the fits recurred still more frequently, and he could no longer pass the catheter. He was anæsthetised, and fed with a similar mixture to that mentioned above, the pilocarpin being increased to one-third of a grain. At 10 P.M., he swallowed bread and butter and coffee easily. At 12 P.M., he was again anæsthetised, and fed as before, and one-third of a grain of pilocarpin was given. At 5.30 A.M., he had a bad spasm, and at 5.45 A.M. another bad spasm. He sat up in bed and took something, fell back, vomited, and died in five minutes, utterly exhausted.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 8TH, 1884.

GEORGE JOHNSON, M.D., F.R.S., President, in the Chair.

The late Duke of Albany.—The PRESIDENT announced that the Council had unanimously approved the proposal that an address of condolence be forwarded to Her Majesty the Queen and the Duchess of Albany, on the occasion of the death of His Royal Highness the Duke of Albany. The announcement was unanimously confirmed.

The Pathology of Myxœdema as Illustrated in a Typical Case.—By JOHN HARLEY, M.D., F.R.C.P. The author gave the history of a typical case which was under his care at St. Thomas's Hospital for nearly seven years. The *post mortem* examination revealed extensive adhesions and thickening of the pleuræ, with fibrous degeneration of one lung, and also traces of general peritoneal inflammation, the result of a severe illness after the birth of the patient's last child, ten years before her death. The thoracic ganglia were deeply implicated in the adherent and degenerated pleuræ, and on the left side the ganglia could not be satisfactorily distinguished. Apart from these morbid changes, two main facts were obvious. 1. The quantity of blood was small, although the heart was contracted and empty, and one lung degenerated and much less vascular than the normal organ, there was no noticeable fulness either of the superficial veins during life, or of the great internal veins after death. 2. All the tissues were abnormally firm and tough; there was a general increase of connective tissue throughout the body. The amount of mucin contained in the more important tissues and organs was determined. The author was not aware that the proportions of mucin and the other constituents of healthy tissues of various ages had been ascertained, and he therefore determined this question in respect of another patient, a woman, aged 24, who died of mitral disease. On comparing the analyses in the two cases, it appeared that the quantity of mucin was nearly doubled in the myxœdemic case. The author, however, hesitated to conclude from such scanty evidence that the mucin was in excess of the normal amount. But he thought that the question of an increase of mucin sank into insignificance in face of the unmistakably great increase of connective or fibrous tissue, to which the increase of mucin, if this should be hereafter demonstrated, might be regarded as secondary. The cerebro-spinal nervous system was evidently very slightly affected, but the sympathetic was in many cases more deeply involved. He referred to a case of so-called "simple atrophic sclerema," but really one of fibrous degeneration of the lungs and thoracic sympathetic, published in volume lx of the *Transactions of the Royal Medical and Chirurgical Society* as illustrating this view. The myxœdemic and scleremic conditions in these patients were merely the consequence of severe internal inflammation, experienced years before, and affecting, *inter alia*, the pleuræ and peritoneum, and the sympathetic ganglia adjacent to these membranes. In the two cases referred to, fibrous degeneration of the lung was a notable factor in the disease, but it was of course conceivable that myxœdema, scleroderma, and its allies, might have their origin in inflammatory or other changes exclusively confined to the sympathetic ganglia. If this view of the pathology of the disease were correct, myxœdema would not be regarded as a specific disease, but merely as a variety of what the author had termed "a chronic cold debility," dependent on depression of the vital functions, and frequently associated with fibroid degeneration of the lungs; a condition, usually, if not always traceable to some severe antecedent illness attended by internal inflammation. In illustration, Dr. Harley showed an advanced case in a male, in whom nearly all the well recognised points of myxœdema were obvious; also two microscopical preparations of the subcutaneous structures, and photographs of the case he had more minutely described.—Dr. ORD said that the case described by Dr. Harley had been for some time under his own care. He was glad to find Dr. Harley inclined to fully recognise myxœdema as a separate clinical condition. As a rule, there was more mental effect of the disease, resulting in loss of memory and of temper, and even in lunacy; some of the late cases were found in lunatic asylums, and some had an excess of connective tissue in the brain and spinal cord. Dr. Harley, if he had understood him right, argued that the original lesion was pulmonary or pleural, and from that arose atrophy of the sympathetic, and thence myxœdema. In such a view, he left out of sight entirely the atrophy of the thyroid body, which was very rarely found in such cases of fibrous degeneration of the lungs as Dr. Harley had described, which were themselves frequent enough. That the atrophy of the thyroid body was in some way connected with the essential character of the disease, he thought to be almost certain. Dr. Harley, speaking of the state of "chronic cold debility" (of which he was afraid he must ask him for a somewhat clearer description), and atrophy of the sympathetic, had given some new points to consider in a myxœdematous case. In emphasising the latter, he had at least one supporter in Dr. Hadden. In the earlier attempts at classifying the disease, some had pressed its alliance with chronic renal disease, and some with cretinism; and as something had been learnt from the former proposals, so something would be learned from the present one.—Dr. **Ralfe** observed that two chief points were insisted upon by Dr. Harley; namely, that the quantity of the blood was small, and that the tissues were all abnormally firm and tough. With regard to the first, it probably accounted for the clinical fact observed during life of the remarkable decrease in the amount of urea excreted. This remarkable diminution was first pointed out by Sir Andrew Clark; and it had not hitherto received the attention it deserved. The urine, as well as the urea, was diminished; in a case under his own care, it had been eighteen ounces daily, with sixteen grammes of urea, rising under treatment to twenty-six ounces with eighteen grammes. The urea occasionally fell to ten grammes, which was considerably less than half the normal amount. This showed diminished metamorphosis, and was quite opposed to the theory that there was increased arterial tension in myxœdema, for that was accompanied by increased urinary secretion. As to the general increase of connective tissue, there might easily be an increase of the ground-substance only, without increase of the fibrous element; and this ground-substance had, by the most recent researches, been shown to have all the characters of mucin. Its increase would account for the total mucin being, in Dr. Harley's cases, twice as much, and in Dr. Ord's, fifty times as much, as in non-myxœdemic subjects. The researches of Morochowitz tended to show that all the tissues of the connective type had a common chemical origin in the embryo from collagen (which yielded gelatin on boiling) mixed with mucin. In myxœdema there was probably a retrograde metamorphosis, in which the connective tissue elements reverted to their original embryonic conditions; and probably the same assumption might be made in a somewhat kindred disease, osteomalacia, in which microid degeneration had been definitely proved.—Dr. **Dyce Duckworth** was much interested in finding other observers besides himself entering into discussion of this disease, and appropriating it, more or less, into the group of studies in which they were most interested. For his own part, he had appropriated it from a nervous point of view. That the clinical aspect should be so clearly appreciated as it was now, seemed to him a great advance; but he must protest against forming pathological theories while there was far too little evidence on which to base them.—Dr. **Hadden** maintained that the condition of the thyroid body was part and parcel of the disease, and at the same time held that the sympathetic was affected. He handed to the President a pamphlet he had just received from Professor Henrot of Rheims, in which there was a description of a case very clearly, from the description, myxœdematous, although myxœdema was quite unknown to the author, and in which were several remarkable drawings of dissections, showing great enlargement of the sympathetic system, and of the pineal gland and pituitary body.—Dr. **John Harley** thanked his critics for the kind way in which they had received his suggestions. Dr. Ord had remarked on the great mental degeneration which was usual; in the case he had brought forward, however, such was not observable, nor in the advanced case of the man brought as a living specimen that evening, whose memory was most excellent. His view was that myxœdema was due to a degeneration of some part of the sympathetic system, and the part in which degeneration could be most easily produced was the thoracic sympathetic. In the case he had brought forward, he thought this had been done by violent pleuro-pneumonia, and had brought with it the chronic cold debility long after all fever had passed away.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, APRIL 3RD, 1884.

GEORGE P. FIELD, M.R.C.S., President, in the Chair.

Discussion on Scarlet Fever.—In his opening remarks, Mr **Cripps Lawrence** gave out the following heads for discussion: 1. Etiology of scarlet fever. 2. Surgical scarlet fever. 3. Puerperal scarlet fever. 4. Differential diagnosis. 1. *Etiology.*—The virus of scarlet fever is undoubtedly specific, but, while most believe it to be an organised body, as yet its existence has not been demonstrated. The specific action of the virus is manifested in the uniformity which scarlatinous blood exhibits microscopically, by the reproduction of the disease when such blood is injected into healthy animals or inoculated into the human subject, and by the power of propagation possessed by the inoculated variety. While holding the view that desquamating cuticle is one of the chief means by which scarlet fever is transmitted, Mr. Lawrence noted that this belief was not universal in the profession, and that a German authority had denied that the epidermal scabs were infectious. The possibility that eczema, urticaria, pityriasis, measles, and rötheln may be associated with desquamation and possibly sore-throat, render it imperative to avoid precipitancy in diagnosis as well as dogmatic assertions which may injure a professional brother. The chief characteristics of the scarlatinal poison were briefly referred to, such as its volatility, its durability, and its transmissibility by unaffected persons. The speaker also dealt with suppressed scarlet fever and with recurrent scarlet fever. 2. *Surgical Scarlet Fever* was not a new disease. M. Germain Sée noticed, in 1858, following upon tracheotomy, an eruption closely allied to scarlet fever. From theses by M. Trélat and Mr. E. C. Stirling, the following propositions could be gathered: (*a*) scarlet fever may be an immediate sequel of operations; (*b*) it exhibits certain variations; (*c*) it more or less retards cicatrisation of the wound; (*d*) a wound is a necessary condition for its production; (*e*) various eruptions, other than scarlet fever, may follow operations, wounds, and injuries—the views of Sir James Paget, of Mr. Howse, and of Dr. Goodhart were quoted. Some doubt was expressed as to the possibility of a latent scarlet fever, and of an indefinite incubation. 3. *Puerperal Scarlet Fever* was a variety having an incubation-period of from twenty-four to forty-eight hours. Mr. Lawrence referred to five labours associated with puerperal scarlet fever; one mother escaped, although malignant scarlet fever deprived her of four children during the week of her labour; four mothers recovered after severe scarlet fever; one infant died, two infants escaped, and two recovered. The address by Dr. Priestley at the Obstetrical Society in 1876, gave the results of a discussion on this topic. Mr. Lawrence noted the marked frequency of pulse which followed the third stage of labour, as an initial symptom, in the cases of puerperal scarlet fever observed by him; and he inquired whether rupture of the perinæum was a constant factor in such cases. 4. *The Differential Diagnosis* was considered with reference to measles, roseola, and rötheln, in connection with incubation, eruption, temperature, and state of the tongue, cervical glands, and throat.—Dr. **Broadbent** concurred in the view that the disease depended upon some organic contagium. Among the etiological moments were mentioned the varying liabilities of families, of social classes, and of race. In France the name of scarlet fever inspired no terror, the disease being regarded by the public and by the profession as relatively devoid of danger. In many families an inverse relation had been observed to exist between the liability to scarlet fever and the liability to measles. With reference to surgical scarlet fever occurring in cases where no definite exposure to the poison could be traced, Dr. Broadbent suggested that the depression of vitality consequent upon wounds might produce a susceptibility for diluted doses, which in health exercised no evil influence. A case was mentioned which occurred after tracheotomy, and led to the nurse being subsequently affected. Reference was also made to suppressed scarlet fever, and to cases in which a form of puerperal fever was the outcome of the scarlatinal poison; the appearance of genuine symptoms of scarlet fever under similar circumstances was a comparatively hopeful indication. Dr. **Mahomed** dwelt upon the fact that scarlatina was not always propagated by contact with infectious persons. He remarked upon its occasionally endemic character, and quoted cases in which it had repeatedly occurred in houses, associated with other cases of septic poisoning, and was clearly traceable to sanitary defects. He thought it not unfrequently a "drain-disease." Although he did not believe in its spontaneous generation, yet he thought it very probable that a comparatively innocent germ or ferment could take on more malignant character; in fact, he believed in the evolution of the poison. He referred to the recent observations on the jequirity fermentation, as throwing light on the relation of bacteria to disease, of which he thought we knew very little; he thought it quite as probable that the disease caused the bacteria, as that the bacteria caused the disease. He strongly affirmed the risk arising from desquamation; which, he stated, could not be prevented, though it might be diminished by the use of antiseptic inunctions. He had seen the infection retained and transmitted for the longest periods by slight cases, in which the desquamation was fine and powdery; he had known such a case convey infection eleven weeks after the commencement of the illness. With regard to surgical scarlet fever, Dr. Mahomed regarded it as the same disease as ordinary scarlet fever; he had seen such cases transmit the ordinary disease to others. He stated that the disease in this form was generally mild, and that it ran an abbreviated course in its incubation, fever, sequelæ and desquamation. The albuminuria occurred much earlier in such cases than in the ordinary disease. Dr. Mahomed believed that scarlatinal poison was highly dangerous to puerperal women. Its most common effect upon them was to produce a more or less malignant form of septicæmia. He regarded those cases as fortunate which, having been exposed to scarlatinal poison during the puerperal state, developed recognisable scarlet fever. Although it was possible for such cases to have the disease mildly, he believed that it was more commonly severe; he had made *post mortem* examinations of two such in which typical puerperal peritonitis was associated with true scarlatina. Concerning diagnosis, Dr. Mahomed held that we must be most lenient in judging of the mistakes of others. Some cases it was impossible to diagnose correctly. He had known cases with normal temperatures on the second day. He wished to know the experience of members concerning the indications afforded by convulsions during the early stages of the disease. In his experience they were almost invariably fatal. With regard to the diagnosis of rubeola, he disagreed with Mr. Cripps Lawrence as to the duration of the premonitory symptoms; he had seen the characteristic enlargement of the glands three or four days before the appearance of the rash. He did not think that rubeola ever desquamated profusely, and had preferred to change his diagnosis when cases thought to be rubeola had so desquamated. He had placed two such cases in the scarlatinal ward without their contracting the latter disease.—Mr. PEPPER, after reviewing the evidence in favour of the disease being due to the agency of micro-organisms, pointed out that it was reasonable to expect that an open wound might admit the infection, and that in such a case the symptoms would develop more rapidly by reason of the direct absorption of the poison. In some instances the period of incubation of surgical scarlet fever had not exceeded twenty-four hours. In his own experience at the Fever Hospital, cases of surgical scarlet fever had generally done well.—Mr. W. B. OWEN drew attention to the existence of a mode of transmission hitherto overlooked, but calling for serious vigilance. In a charity-school, six children who sickened simultaneously with the disease were found to have had access to a bunch of flowers which was subsequently traced back to a house infected with scarlet fever.

Upon a motion by Mr. PEPPER, seconded by Dr. ALDERSON, the discussion was adjourned to May 17th.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 15TH, 1884.

J. WHITAKER HULKE, F.R.C.S., F.R.S., President, in the Chair.

Cirrhosis of the Liver.—Dr. F. C. TURNER showed microscopical specimens, illustrating the occurrence of embolism in cirrhosis of the liver. The liver, which was coarsely granular, presented well-marked cirrhotic changes; the cirrhotic tracts were traversed by large vascular channels, and at the borders of the lobules were numerous tortuous biliary ducts. The most remarkable feature in the specimen was the presence of detatched liver-cells and detached fragments of liver-tissue, together with fragments of the epithelial lining of the bile-ducts, imbedded in blood-clot, in certain branches of the portal vein. In one situation was a laceration of liver-tissue with a blood-clot containing liver-cells. It appeared, therefore, that a laceration had taken place, and that portions of blood-clot and fragments of the lacerated hepatic tissue had been swept into the portal circulation. The condition was of interest in connection with the occurrence of fat-embolism after fracture of bones. The specimen probably illustrated the mode of production of embolism in fracture, and probably pointed to the frequent occurrence of embolism by fragments of tissue in cases of rupture of the liver and other solid organs. The development of biliary ducts was probably a part, or collateral result, of increased growth of tissue in the portal canals, which again was a part of the general cirrhosis.—Dr. CARRINGTON enquired whether there was evidence of extravasation in any other parts of the liver than the portal veins.—Dr. GOODHART observed that the case seemed to throw some light on the nature of biliary cirrhosis, with regard to which there were two theories; one attributed it to proliferation of the ducts from irritation, the other supposed them to originate from liver-cells. He thought that Dr. Turner appeared to take the same view as he did himself, and regarded biliary cirrhosis not as a distinct thing, but as merely an acute form, so to speak, of ordinary cirrhosis of the liver.—Dr. F. C. TURNER briefly replied. The clots containing the liver-cells were met with in a large number of the vessels, but only in one portion of the liver, namely, in the neighbourhood of the laceration.

Abscess of the Brain.—An interesting case of abscess of the brain was related by Dr. CAYLEY. The patient was a young man aged 18. Three years before his death, he suffered from a severe attack of pleurisy; he recovered to a considerable extent, and his health was moderately good up to February 15th, 1884, when he began to suffer from headache. On February 16th, he had an attack of hæmoptysis, and had some vertigo; he also somewhat suddenly lost power in the left arm and leg, was confused, and vomited. When admitted on February 20th, he complained of severe frontal headache; the extensors of the wrist were quite paralysed, and there was loss of power in the flexors of the left arm, and the left leg was weak; he answered questions slowly, and appeared confused in mind; later in the day, he had clonic convulsions, which affected the limbs on the left side, but not the face, and were not attended by loss of consciousness; he vomited several times. The frontal headache continued very severe, in spite of treatment. The ophthalmoscopic examination revealed no marked morbid change. On February 24th, there was a temporary recovery of power in the arm, which only lasted a very short time; the temperature sank much below normal, and he died. The necropsy showed that there was a large abscess in the centrum ovale on the right side, which reached almost to the surface near the ascending parietal convolution. In the temporo-sphenoidal lobe on the left side was another large abscess.—The PRESIDENT commented on the exceedingly low temperatures observed; in six instances of intra-cerebral abscess, he had noted this extreme abasement of temperature. It seemed to be a valuable diagnostic point as distinguishing cerebral abscess from diffuse intracranial suppuration.—Dr. EWART made some remarks on the occurrence of cerebral abscess after intra-pulmonary disease.

Primary Cancer of the Liver.—Dr. W. J. TIVY exhibited a liver the seat of primary malignant disease. The patient was a woman aged 51. In 1861, she noticed a lump in her right side. She had long suffered from psoriasis. The motions were unaltered. When she first applied, during the summer of 1883, she had recently been getting thinner, and had suffered a good deal of mental worry; she presented a cachectic appearance; the abdomen was much distended, and was dull on the right side, where a large nodulated tumour could be felt on palpation; it occupied the hypochondriac and iliac regions, and extended beyond the middle line in front. She experienced no pain. On November 27th, 1883, she had a slight epileptic fit; on November 30th, she had another epileptic attack, and never regained consciousness until her death on December 4th. A partial examination was made after death. The liver, which was greatly enlarged, was not adherent, except slightly to the parietes posteriorly. No secondary deposit was anywhere found, and ascites was entirely absent. The liver weighed nine pounds; the right lobe was an infiltrated mass; the remainder of the liver was occupied by numerous tumours; the tumours were harder than encephaloid, but softer than scirrhus. No examination of the brain or spinal cord could be made. He imagined the growth was originally of a scirrhous nature, but had subsequently taken on an encephaloid process. The long duration of the tumour, probably twenty years, and the entire absence of secondary deposits, were remarkable points in the case.

Cerebro-spinal Meningitis.—Dr. CARRINGTON showed specimens from two cases of cerebro-spinal meningitis. 1. A Swedish seaman, aged 23, was admitted, on March 3rd, into the Seamen's Hospital; he was in a dull, stupid, and irritable condition; he stated that he had been ill for fourteen days; recently, he had suffered from intense frontal headache, weakness, languor, and unsteadiness of gait; he had been shipped at the Cape, and paid off on February 12th, in Belfast. He was very restless, groaning, frowning, and evidently suffering intense pain in the head; there was marked rigidity of the neck, and retraction of the head, and occasionally a sort of tetanic spasm. On March 5th, a copious crop of herpetic vesicles appeared about the face, and a purplish erythematous patch over the lower intercostal spaces, upon which a few herpetic vesicles developed two days later. Both the superficial and the deep reflexes were absent on March 7th, and did not reappear; on March 8th, there was incontinence of excreta, and by March 11th the signs of optic neuritis were definite. The rash faded, but the other symptoms continued, and he became more and more comatose, and died on March 13th. The temperature was febrile throughout. At the necropsy, a patch of purulent lymph was seen to cover the under surface of the pons; the Sylvian fissures were matted together; the lateral ventricles contained an excess of turbid fluid, with patches of purulent lymph; the brain at and below the corpus callosum was much softened. There was a patch of purulent lymph on the anterior surface of the cord, just above the cauda, and on the posterior surface, from the seventh dorsal nerves downwards the arachnoid was bulging with purulent lymph. Beyond dilatation of the pelves of the kidneys, there was no disease elsewhere. 2. The second case was also a Swedish seaman; he was twenty years of age, and was admitted on March 17th. His ship had come, he said, from Gothenburg; and he had been on shore three weeks, and had suffered from headache and pain in the loins for seven days; but he was so dull and irritable that very little information could be got from him. The neck was stiff, and retraction of the head was well marked. He gradually grew more and more comatose; muscular twitchings became marked; the excreta were voided into the bed; and, on March 23rd, facial paralysis and partial paralysis of the right arm were noticed. Optic neuritis was present on the following day; and on March 25th, 1884, he died. At the necropsy, the cerebral convolutions were seen to be flattened; the sulci were obliterated; and the visceral arachnoid was dry and sticky. The subarachnoid space was distended with clear fluid; the Sylvian fissures were matted together; the lateral ventricles were dilated with turbid fluid; the corpus callosum, fornix, and the boundaries of the third ventricle were soft and diffluent, but the rest of the brain was of normal consistence. The spinal cord was firm. The membranes were sticky; but, except a very small amount of lymph on the lower two inches of the posterior surface, there was no noticeable lesion. In spite of every inquiry, and the assistance of Dr. Collingridge, Medical Officer of the Port of London, the cases could not be traced further than has been above stated; and no connection with other cases could be made out. It was worthy of note that the upper part of the cord was in both cases quite free, although retraction and rigidity of the neck had been well marked in both cases.—Mr. B. JESSETT said that on one occasion he had met with three fatal cases of cerebro-spinal meningitis occurring in rapid succession in a battery of artillery which had made a short voyage in a foul vessel.—Dr. F. C. TURNER showed the spinal cords from two cases which had recently died in the London Hospital. The patients were admitted on March 6th and 16th, thus showing a coincidence with the dates of Dr. Carrington's cases that was at least remarkable. In both cases, the onset seemed to have been quite sudden. The first patient was a black sailor, who was quite well on March 4th, but became delirious and unconscious in the evening, and died on March 9th. The other patient was a workman, between 30 and 40 years of age, whose symptoms were much the same. He was found in the street in an incapable state, and was removed at first to the police-station. The necropsy showed purulent exudation in both cases over the vertex of the cerebrum, and also along the posterior aspect of the cord. Retraction of the head was a marked symptom.—Mr. ERNEST CLARKE had met with a similar case in a child in Lewisham, near Greenwich. It had been a perfectly healthy child during the six weeks of its life, until it was suddenly taken ill one evening, vomiting, and slightly convulsed. When Mr. Clarke saw it on the second day, the most marked symptom was extreme disturbance of the respiratory rhythm, seven or eight rapid respirations being followed by a prolonged pause. There was no retraction or rigidity of the neck. The child died within forty-eight hours. A *post mortem* examination of the brain showed that it was covered with lymph and pus. The ventricles were dilated, and filled with turbid fluid. The cord and the rest of the body could not be examined. No other cases had been observed in the neighbourhood before or since.—Dr. CARRINGTON, in reply, observed that the symptoms in an early stage were very liable to be confounded with those produced by alcoholic intoxication.

Congenital Tumour of Back.—Mr. DAVIES-COLLEY showed a tumour removed from the back of a boy, aged 16. The history given was that the tumour had been present at birth, and had gradually grown until about a month before admission, when it enlarged more rapidly, and became ulcerated. It occupied the back between the fourth and tenth dorsal spines, and measured five inches and a half by four inches and a half, and was elevated two inches and a quarter above the surface; the pedicle was eleven inches in circumference, and was very short. The skin was freely movable over the tumour, which was lobulated, and firmer than an ordinary lipoma. The tumour, after removal, showed on section a white shining fibrous stroma, with a number of intracystic growths, which shelled out with very little effort, leaving ovoid cavities. These growths, on microscopic examination, were seen to consist of delicate fibrillated connective tissue, enclosing fusiform cells with elongated nuclei. He was inclined to believe that the tumour was originally of a polycystic character, with development of fibro-sarcomatous growths in the cysts.—Mr. BUTLIN said that it was highly probable that all congenital tumours of this class were lymphatic-cavernous tumours; the lymphatic spaces became filled with intracystic growths, probably derived from the fibrous tissue between the cysts. He would not look upon this tumour as sarcomatous, with probably no tendency to spread into surrounding parts.

Enchondroma of Lung.—Dr. NORMAN DALTON showed specimens from a case of mediastinal tumour; the most prominent symptom during life had been thrombosis of both external jugular veins. There was a large mass of glands in the mediastinum, and a tumour, about the size of an apricot, in the upper lobe of the right lung; it consisted of masses of hyaline cartilage, which occupied the walls of the air-cells.

Card Specimens.—Dr. F. C. TURNER: (1) Two specimens of Duodenal Ulcer. Fatal Hæmorrhage. (2) Ulceration of the Pylorus. (3) Spinal Cord from two Cases of Cerebro-Spinal Meningitis.—Mr. ARBUTHNOT LANE: (1.) Fracture of Hyoid Bone, with Deformity of Cricoid and Thyroid Cartilage. (2) Fracture of seventh and eighth Costal Cartilages. (3) Diphtheria of Larynx spreading upwards to the Pharynx.—Dr. CARRINGTON: Cancer of Gall-Bladder.—Mr. SUTTON: (1) Dissection of Stump of Leg two Years after Amputation. (2) Separation of Epiphysis of Fibula.—Dr. BARNES: Calculus Excised from Vagino-Urethral Septum.—Dr. HALE WHITE: Hour-Glass Constriction of Stomach.

MANCHESTER MEDICAL SOCIETY: MICROSCOPICAL SECTION.

H. ASHBY, M.D., President, in the Chair.

Papilloma of Bladder.—Mr. BILTON POLLARD showed sections of a recurrent tumour of the female bladder, which had been excised by Mr. Whitehead. The original growth was a typical villous tumour; the recurrent growth, on the contrary, presented none of the appearances of a villous tumour, but consisted of a tuberous mass about the size of a hen's egg. Sections through the substance of the growth showed it to consist of an intermixture of large epithelial cells of various shapes, and of strands of fine connective tissue. In parts, an alveolar arrangement was discernible, but under a low power an arborescent distribution of vessels in the midst of the connective tissue elements showed these to be the stems of stunted papilliform processes; these, however, were so closely compressed together, that the epithelial coverings of adjacent papillæ appeared, on section, as a collection of cells in an alveolus. The tumour was therefore regarded as a closely arranged papilloma.

Rodent Ulcer.—Mr. F. T. PAUL (Liverpool) read a paper upon the histology of rodent ulcer, and showed sections and drawings from twenty-one cases. He regarded the affection as a chronic carcinoma of the skin, in which the epithelial elements developed very differently in different cases. The two types were "tubular" and "acinous" carcinoma; but they were frequently associated in the same case. Mr. Paul did not regard the fact that the growth might happen to spread in any particular element of the skin, as any proof that it took its origin in a similar structure, and he showed specimens in which hair-follicles, sebaceous glands, and sweat-glands were all infiltrated side by side. Sections of rodent ulcer were shown, which could hardly be distinguished from some of "sweat-gland" adenoma, and others which were exactly like a solid sebaceous growth from the scalp. There was also one case of rodent ulcer of the nose, composed of cells like those of the rete mucosum in very narrow columns, and quite unlike the structure of any of the other specimens. The growth had lasted fourteen years, so that it could not be regarded as a form of ordinary epithelioma, and moreover, there were no nest-cells present. It was, therefore, clear that, when a sufficient number of cases of rodent ulcer were examined, in some or other of them a higher evolution in the direction of all the various epithelial skin-structures would be found, and this might be taken as an indication that its origin was probably not in any particular gland, but in the skin as a whole. The chronic habit of the growth was of sufficient importance to account for the more complex development of the epithelial infiltration than was to be met with in epithelioma, and some sections were shown of what was presumed to be the precancerous stage of rodent ulcer and of epithelioma, in each of which the first change apparent under the microscope was diffused over an appreciable area of skin.—Dr. DRESCHFELD exhibited sections of rodent ulcer, in some of which the development was traceable from the hair-follicles, whilst in others the sebaceous glands were evidently the starting-points of the new growth. Dr. Dreschfeld also exhibited sections of rodent ulcer, which showed marked endarteritis obliterans, and also cell-infiltration, both inside and outside the lymphatics (endo- and peri-lymphangitis), and remarked that, though endarteritis was not uncommon in epitheliomatous tumours, it was rarely found to such an extent as in rodent ulcer. This appearance might possibly explain some of the characteristic clinical features of rodent ulcer, *e.g.*, the slow growth of the ulcer, the ulcerative character which the disease had from the very commencement, and the non-implication of lymphatic glands. Whilst the endarteritis explained the first mentioned, the blocking up and compression of the lymphatics might, it was suggested, prevent the invasion of the neighbouring lymphatic glands.—Dr. H. G. **Brooke** and Mr. **Young** also showed sections of rodent ulcer, and took part in the discussion which followed Mr. Paul's paper.

LIVERPOOL MEDICAL INSTITUTION.

March 27th, 1884.

Robert Gee, M.D., President, in the Chair.

Tubercular Disease of the Urinary Organs.—Dr. **Rich** showed the urinary organs from a male, aged 19. He had a strong tubercular history; had suffered from cough twelve months, and pain in the loins four months. Recently micturition had been frequent and painful; he had lost sleep and appetite, and wasted rapidly. The urine was examined for tubercular micro-organisms, but none were found; there was a copious deposit of pus; nodules were felt in the prostate. At the *post mortem* advanced tubercular disease was met with in each kidney, and the mischief had spread down the ureters into the bladder, which was extensively ulcerated. The prostate was entirely tubercular, and both epididymes were affected.—Mr. **Paul** called attention to the value of nodules of tubercle in the prostate in diagnosing tuberculosis of the urinary organs, as pointed out by Mr. Reginald Harrison.

Acute Yellow Atrophy of the Liver in a Child.—Dr. **Greves** showed the viscera of a child, aged 1 year and 8 months, with the following history. At Christmas the child had a slight attack of jaundice, from which it quite recovered. On February 23rd a fresh attack commenced, with some feverish symptoms, but no vomiting, diarrhœa, or pain. On March 6th the child was admitted. It was well nourished, and had a good family history. It was deeply jaundiced, and there were a few purpuric spots in the skin. The liver was distinctly enlarged, slightly tender and hard; there were no ascites; temperature, 99°. On March 11th it was somewhat drowsy and irritable; there was no albumen, leucine, nor tyrosine in the urine. On March 15th it was very restless, tossing about and screaming; there were slight convulsive movements of the right arm, and the liver was smaller and softer, but more tender. On March 16th the child was quiet; breathing was heavy; it cried when disturbed; temperature, 100.2°. On March 17th it was more convulsed; breathing was stertorous; the pupils were dilated and sluggish; the temperature rose through the night to 104°, notwithstanding sponging. Convulsions recurred, and the child died the next morning with a temperature of 108°. *Post mortem*, the liver weighed 12½ ounces, was of a yellow ochre-colour, with some brownish patches, soft and shrunken. The appearance of lobules was quite lost. The gall-bladder contained a little yellowish bile, and the ducts were quite free. There was no duodenal catarrh. The cortex of the kidneys had undergone acute fatty degeneration, but the other organs appeared healthy. Under the microscope, the liver-cells contained bright yellow fat-granules, and many were not recognisable at all as liver-cells; they were blackened by osmic acid. Leucine and tyrosine were not found, nor had the micro-organisms described by Dr. Dreschfeld at present been detected.

Congenital Sarcoma of the Kidney.—This was shown by Mr. **Paul**. The growth occurred in a female child, and was first noticed at the age of 6 months. It grew very rapidly, associated with extreme emaciation, and ended fatally at the age of 1 year. When admitted under Dr. W. Williams, one month before death, the tumour was much too large to admit of any question of operation. It sprang from the left lumbar region, and filled almost the whole abdomen. The upper part was cystic, and about a pint of brown thin fluid was drawn off with the aspirator. The lower part was all solid, but so soft as to communicate a sensation of fluctuation. At the *post mortem* examination the growth weighed 6 pounds, the rest of the body weighing 10 pounds. It had probably commenced in the region of the hilus, as normal kidney encapsuled the lower part of the tumour. Its chief vascular supply was the renal artery, enlarged and elongated. On section the growth was of brain-like consistence and appearance; externally soft and homogeneous; in older parts, rather more dense, and showing tracts of large soft-walled vessels, hæmorrhages, degenerated but not necrosed-looking patches, and other irregularities of structure. The large cyst at the upper part appeared to have originated from softening of a clot. It had no intracystic growth, nor proper cyst-wall. Under the microscope, the young growth consisted of a vascular embryonic connective tissue, resembling the embryonic subcutaneous tissue of an early embryo; and it very clearly, in other parts, passed through the various stages of development of cellular tissue, showing first an intercellular fibrous stroma, and ultimately a perfect areolar tissue, in which were well grown yellow elastic fibres. Mr. Paul said that this specimen strongly supported the advantage of classifying these distinctly congenital growths by themselves. He believed that when carefully examined thoughout, they would all be found of a complex character, and resembling the ultimate evolution of that portion of the protovertebral somite from which they took their origin. To place a tumour containing (accidentally) striated muscular fibres in a class by itself, and to regard the above specimen as a variety of round celled sarcoma, was to neglect what was perhaps the clearest indication that we had in the whole series of tumours for a sound basis of classification.

Injury to the Foot.—Dr. **Crawford** showed a patient in whom an unusual amount of repair had taken place after loss of the tarsal bones, due to injury.

Replenishment of the Vitreous Humour.—Mr. C. G. **Lee** discussed the possible sources of a fresh supply of the vitreous humour after its loss at an operation for cataract. He considered that the vitreous body itself was inactive, and, *per se*, incapable of being irritated. He had seen a cysticercus in the vitreous chamber, without the slightest sign of irritation. The only possible sources of fresh secretion were the choroid, and the structures which secreted the aqueous humour. Mr. Lee decided in favour of the latter, and showed how suitable a medium the aqueous was to supply a loss of vitreous humour.

Cases of Acute Pneumonia and Pleuro-pneumonia, with some remarks on Septic Pneumonia.—Dr. **Caton** read a paper on this subject. After some introductory remarks on the pathology of the ordinary sporadic form of pneumonia, the author adduced a considerable amount of evidence in favour of the existence of a form of epidemic and contagious pneumonia. Numerous examples of epidemic outbreaks were quoted, in most of which the pleura was affected as well as the lung, and in which there was also a tendency to inflammation of other serous membranes. It was shown that a certain amount of parallelism exists between the sporadic and epidemic pleuro-pneumonia of cattle on the one hand, and the sporadic and epidemic pneumonia and pleuro-pneumonia of man on the other. A description was given of the pneumonia-micrococcus of Friedländer, and a specimen kindly lent by Dr. Dreschfeld was exhibited. Dr. Caton then narrated his own experience in the treatment of pneumonia at the Northern Hospital. During the years 1879 and 1881, the cases admitted were of a very severe type; the pleura was commonly affected as well as the lung, and in several instances the pericardium and the membranes of the brain were also involved. In 1881, out of a total of 17 cases admitted, 14 proved fatal; after 1881, the cases of pleuro-pneumonia became very few, and the death-rate fell almost to zero. A table was shown, exhibiting the pneumonia-mortality in all the hospitals of the city, from the year 1876 to 1882 (obtained from the reports of the medical officer of health). The deaths from pneumonia were seen to rise from 63 in 1876 and 79 in 1877, to 134 in 1879 and 172 in 1881; after which they declined. Dr. Caton thought it probable that the city had been visited by epidemic pneumonia during the years mentioned.

ACADEMY OF MEDICINE IN IRELAND: SURGICAL SECTION.

W. Colles, M.D., F.R.C.S.I., in the Chair.

Foreign Bodies in the Knee-joint.—Sir **George Porter** read a paper on this subject. He gave a summary of how these bodies were formed in the knee-joint, stating that they varied in number, size, and colour. Having mentioned the symptoms and treatment, he described two cases of foreign bodies in the knee-joint that he had recently cured by the direct incision, with full antiseptic precautions. The first case was that of a soldier of the 5th Dragoon Guards, who suffered from a loose cartilage for the last four months. The second was that of an eminent Dublin gunsmith, who had had a large pistol-bullet lodged within his knee-joint for thirteen years. Both cases were most successful. Sir George Porter said that these two cases were, he thought, additional proofs of the great advantages of antiseptic surgery.—The **Chairman** said that the late Mr. Alcock, in his work on *Surgical Experience in the Peninsular Campaign*, recorded several cases of balls penetrating the knee-joint having been successfully treated.—Mr. **Thomson** said that it was not pretended that wounds of the knee-joint did not recover before Listerism was established. But it was contended that, under other conditions, the uniform success was not that which was obtained under Listerism.—Mr. **Stokes** said that the second case was of special importance, as confirming the statement of Sir William Mac Cormac, in a lecture in New York, concerning the principle (long neglected by military surgeons) of not interfering immediately with gunshot injury involving any large articulations. His great experience in two campaigns enabled him to lay it down, as far the best surgery, not to probe the wound too freely and make diligent search for foreign bodies immediately on reception of injury, but to wait until matters got into a quiescent state; and then, if the foreign body became troublesome, cut down upon it.—Mr. **Ormsby** bore testimony to the difficulty experienced in fixing the loose cartilage in the case of the soldier. The indirect or subcutaneous incision was formerly preferred as the safest, and least likely to be followed by diffuse suppuration of the knee-joint. In the last case in which he saw direct incision performed without antiseptic precautions, diffuse suppuration of the joint ensued, ultimately necessitating amputation. Under the Listerian method, direct incision could be performed with small risk.—Mr. **Bennett**, while appreciating antiseptic surgery, cautioned practitioners against being too ready in relying upon its efficacy.—Mr. **Miles** thought Listerian enthusiasts took too much credit for the success of that treatment.—Sir **George Porter**, in reply, agreed with Mr. Bennett that a rheumatic case should not be interfered with.

Pistol-Wound of the Cerebellum.—Mr. **Thomson** read a paper on pistol-wound of the cerebellum. The subject was a detective officer, shot in an affray. There were two wounds. one in the occipital bone, about an inch to the right and an inch below the occipital protuberance, the second in the left arm. The apex of a bullet was found on the right margin of the bone-wound in the skull. The right lobe of the cerebellum corresponding to the wound was crushed by fragments of bone and lead to the depth of half an inch. There was a clot between the right parietal bone and the dura mater, and, on the inner surface of the same bone, the mark of impact of lead. The base of the bullet could not be found for some time, and it was then discovered embedded, in its own depth only, in the brain-substance of the left hemisphere, at the anterior and inferior portion. The fragment had evidently passed between the dura mater and the vault of the skull from right to left. A similar case was noted by Larrey. The person charged only fired one shot, so that the second was from some other pistol. Mr. Thomson discussed the questions 1, Could a person standing in the position of the alleged assailant have inflicted the wound on the back of deceased's head? 2, Could a person with such a wound of the cerebellum have advanced upon his assailant, as it was proved deceased did after the first shot was fired? 3, Is a wound of the cerebellum immediately fatal? He believed that the wound could have been inflicted; that it was possible that a person so struck could advance, though in a "drunken" manner; and that such wounds were not necessarily fatal.—Mr. **Bennett** called attention to two points: first, that of a bullet being cleft upon the bone, and so misleading in the investigation; and, secondly, the fact that the cerebellum could be wounded superficially, and it might be deeply, without phenomena. A sailor, whilst on deck, was struck by a falling iron, twenty or thirty pounds in weight, which grazed the top of his head, and the wound, an inch and a half long, overlay the cerebellum. When admitted to Sir P. Dun's Hospital, the man presented no cerebral symptoms. There was considerable depression of the inner table and some loss of bone, and the brain-substance escaped. The wound was treated on the simplest principle, and in three weeks it closed. Dr. **Henry Kennedy** said it was not the wound of the brain, but the hæmorrhage, that did the mischief.—Mr. **Lentaigne** corroborated Mr. Thomson's account of the *post mortem* examination, but differed as to the bullet having travelled between the dura mater and the bone, there being no lead-streak along the supposed track.—Dr. **M'Ardle** mentioned two cases showing that the cerebellum could not be extensively injured without co-ordination being impaired. Mr. **Ormsby** saw no difficulty in believing that the bullet took the course indicated by Mr. Thomson. A quay-labourer, who fell into the hold of a ship, walked home, and next morning went to an hospital complaining of a severe pain in his head. Thence he went to the Meath Hospital. On being put to bed, he became unconscious, and symptoms of brain-compression were apparent. He died seventy-two hours after the fall. A *post mortem* examination revealed an extensive fracture of the base of the skull, with laceration of the cerebrum and cerebellum.—Dr. Fraser and Mr. Corley made some remarks, and Mr. Thomson replied.

SUBSECTION OF ANATOMY AND PHYSIOLOGY.

J. Mallet Purser, M.D., President, in the Chair.

Microphotography.—Dr. **Scott** exhibited specimens of microphotography, and the camera by which they were produced. Dr. Dickenson's instrument was a very good one, but too expensive, and he devised the camera himself by which the photographs exhibited were produced. The instrument was so simple and cheap that anybody possessed of a penknife and the lid of a cigar-box could, with a little mechanical skill, make one for himself. The photographs proved what the instrument could accomplish. Sections of the gastric glands and duodenum were sufficiently sharp as to bear enlargement to diagram-size for a lecture-theatre. Practically, the working of the camera was on the same principle as that shown by Dr. Dickenson. In Dr. Dickenson's camera, there was an arrangement for sliding the ground glass in and out of its place. In this one, however, the sensitive plate was simply laid in the place previously occupied by the ground glass. The removal of the camera from the microscope proved not to alter the focus. In this way, after an exposure of two minutes, he took pictures.—The **President** asked whether there was any risk of the light getting in at the side, and whether the pictures exhibited were taken by daylight.—Dr. **Scott** said they were taken by a half-inch paraffin-lamp, not even a duplex. He had not found the slightest difficulty about the admission of light.—Mr. **Abraham** inquired what kind of stains Dr. Scott found most suitable.—Dr. **Scott**, in reply, said that, speaking from a photographic point of view, he thought red stains were the best, such as carmine, which brought the stained portions out perfectly black and sharp. A blue stain, or even a colourless object, if sharp, like a diatom, carefully treated, came out well. If a section were very thin, it had better be stained with some red dye; but he had photographed a colourless diatom sufficiently sharp to bear enlargement up 10,000 diameters. One of the enlargements exhibited was 1,500 diameters, and yet sufficiently sharp for a lecture-theatre,—Mr. **Abraham** said the photographs were very sharp, and that the method of producing them was a good one, and, therefore, of great advantage to pathological and microscopic observers.

Epiphysal Lamina on the Basi-occipital Bone of an American Tapir.—Mr. P. S. **Abraham** stated that, on examining the skull of a young American tapir which died last year in the Zoological Gardens in Phœnix Park, a well defined sutural line, was found near the anterior border of the basi-occipital bone (bordering upon the junction with the sphenoidal bone), on the superior surface. On applying the point of a knife, a thin lamina of bone was prised up. In position and appearance, it bore a strong resemblance to an epiphysal ossification, and reminded him of the ring-like epiphysis often connected with the vertebral centre. It was so closely appressed, and evidently beneath the level of the periosteum, that he did not think it to be an accidental ossification of the dura mater; it rather seemed to be of an epiphysal nature. Up to the present, he had not succeeded in finding a second example.—Mr. J. **Freeman Knott** said the last book he had been reading on the subject was Hannover's, *On the Primordial Cartilage.* This author made two vertebral segments of the basilar portion of the skull, and said that the junction of the vertebral portion was found at the spheno-occipital suture. According to this view, Mr. Abraham's epiphysis would correspond to the superior accessory disc of the upper segment.

The Accessory Nerve of Willis.—Mr. J. **Freeman Knott** gave a classified list of the chief varieties in the origin and course of the spinal accessory nerve that had fallen under his observation, and compared them with the published records of other observers. This was followed by a historical sketch of the progress of our knowledge of the functions of this nerve, in which special attention was directed to its influence on the cardiac movements.—The **President** remarked that François-Franck had experimented on different animals, and believed that in most cases it was utterly impossible to tear out the spinal accessory without injuring the roots of the pneumogastric to such an extent as to spoil the experiment.

Bequests and Donations.—The Baroness Lionel de Rothschild has bequeathed £10,000 each to the London Hospital and to the Evelina Hospital for Sick Children; £3,000 to the West London Hospital; £2,000 each to the Jewish Convalescent Home, to the German Hospital, Dalston, and to the Metropolitan Free Hospital; £1,000 each to the Buckinghamshire General Infirmary, to the Royal Sea-bathing Infirmary, Margate, to the Royal Hospital for Incurables, Putney, and to the Earlswood Asylum for Idiots; and £500 each to St. George's Hospital, and to the Jewish Ladies' Lying-in Charity.—Mr. G. S. Gibson has bequeathed £2,000 to the Saffron Walden Hospital.—The East London Hospital for Children has received £2,000, under the will of Miss Anne Jay of Lausanne.—Mrs. Mary Anne [illegible], of York, has bequeathed £500 to the Earlswood Asylum for Idiots.—Mr. William [illegible] has bequeathed £200 to the West London Hospital, Hammersmith.—Sir William Henry [illegible], of Blackheath, has bequeathed £500 each to the Earlswood Asylum for Idiots, the Royal Hospital for Incurables, Putney, and the Royal Kent Dispensary, Greenwich.—The Goldsmiths' Company have given £[illegible] to the Royal Free Hospital.

REVIEWS AND NOTICES.

A Practical Introduction to Medical Electricity. By A. de Watteville, M.A., M.D., B.Sc. Second Edition, with eighty-nine Illustrations, and Plates of the Motor Points. London: H. K. Lewis. 1884.

We have transcribed the statement on the title-page that the volume before us is the "second edition," but it would be more correct to say that Dr. de Watteville, having once written a book on medical electricity, has now written another and a better. The tone of the book is thoroughly scientific; and, if the views and hopes expressed with regard to the therapeutic application of electricity appear at times over-sanguine, this is only what we must expect, and indeed desire; for, unless the advocates of a somewhat novel means of treatment be possessed by some little enthusiasm, there is not much hope that it will be pushed into general use. Dr. de Watteville believes that he has found a happy mean between excessive enthusiasm and premature discouragement, and perhaps he is right. Though thus not wanting in enthusiasm, he most sternly warns away the mere dabbler in electro-therapeutics, and insists, first, that the laws of electricity should be understood; and, secondly, that it should be used in an intelligent manner and in measured quantities. The first chapter, therefore, on electro-physics, which takes up nearly half the book, very fully and explicitly lays down and explains the laws of electricity, from the most elementary to the more abstruse; so that a person really desiring information, but quite ignorant of the subject, may take up the study of this volume with the confidence that every step will be thoroughly discussed and explained. We are aware that the Doctor of Medicine who stands in need of such instruction ought to be as extinct as the dodo; but we fear that, in spite of preliminary examinations in science, the general diffusion of ignorance is still very considerable. Indeed, were this otherwise, were our present means of teaching and learning science more effectual, there would still remain a necessity for such a chapter as this on electro-physics; for electricity is a comparatively young science, and is constantly moving in the direction of greater precision. Especially is this the case with regard to measurements of current-strength; and upon this point Dr. de Watteville, as the readers of his first volume may remember, has very strong opinions. He recommends the use of the galvanometer graduated in milliamperes, which enables the physician to measure and register, for future reference and comparison, the strength of current used in every instance, to compare the resistance in the circuit, and to measure the electro-motive force in circuit. The "ampere" is the unit of current-strength adopted by the International Congress of Electricians; the milliampere is the thousandth part of an ampere, and is the most convenient unit to use in electro-therapeutics, as its multiples correspond to the strength of currents which can be advantageously used in therapeutics. A current of one milliampere, about the weakest ever so employed, is yielded by two to four Daniell's cells, when the parts of the human body usually selected are included in the circuit by means of two electrodes of moderate size. Granting readily that this accuracy of measurement is a consummation devoutly to be wished, it is yet to be feared that it will be long before the use of the galvanometer becomes the rule rather than, as now, the rare exception; and this chiefly because of the difficulty of obtaining a really trustworthy instrument at a moderate price. If that difficulty can be overcome, then a comparatively short time will be required to accomplish a much needed reform. The galvanometer is, of course, only capable of measuring the strength of continued currents; and there exists, as yet, no instrument for measuring the strength of faradic currents. The only measurement of the faradic current which can be employed is based on the measurement of the distances between the secondary and primary coils; but the results thus arrived at cannot be compared from instrument to instrument. But, though this is the case, Dr. de Watteville shows that the galvanometer can be of the greatest service when used to ascertain the degree of resistance encountered by the current. For instance, let us suppose that, in making an examination of the ulnar nerves on the two sides, we find that the left ulnar is excited when the coils of the faradic apparatus are 200 millimetres apart, and that we have to raise the graduated bar until the coils are only 150 millimètres apart in order to excite the right ulnar, it is very natural and very common, but quite erroneous, to assume that the electro-excitability of the right ulnar nerve is less than that of the left. An examination with the galvanic current and the galvanometer is now necessary, in order to ascertain the resistance encountered in the tissues; and, if it should result from this that the resistance on the right side is greater than on the left, in about the proportion mentioned above, then it would appear that the excitability of the nerve was the same on both sides; the increase in strength being required, not to stimulate the nerve, but to overcome the resistance in the tissue.

The descriptions of apparatus, batteries, coils, collectors, rheophores, and electrodes, are clear, and the advice as to the choice of these instruments judicious.

The chapters on electro-physiology and electro-diagnosis are worthy of careful perusal, especially the latter, in which the difficult and rather obscure subject of the "Reaction of Degeneration" is dealt with in a masterly manner, which makes clear one of the dark places of neuropathology. Dr. de Watteville has stated in forcible language the difficulties of electro-diagnosis, and has emphasised the need for caution and experience; but it must be allowed that the nature of the difficulties has not permitted him to do much towards diminishing them. Still, if a difficulty that is known be half surmounted, then the careful student of Dr. de Watteville's book will have advanced one step; constant practice will alone enable him to take the next.

Having thus cleared his subject of obscurity and ambiguity, Dr. de Watteville is able to deal with the application of electricity to the cure of disease in a succinct and practical way, which renders the chapter on electro-therapeutics very valuable for reference in the consulting-room; and its usefulness from this point of view is enhanced by the addition of six plates of the "motor points." Altogether the book is to be thoroughly recommended as at once scientific and practical; indeed, it is a good example of the fact that a clear scientific comprehension of a subject is by far the shortest road to the successful practical application of a method, the true royal road to learning.

On the Treatment of Spinal Curvatures by Extension and Jacket, etc. By H. Macnaughton Jones, M.D. London: J. and A. Churchill. 1884.

To the numerous subjects in surgery and medicine upon which Dr. Macnaughton Jones has published books, he has now added another: *The Treatment of Spinal Curvatures.* The "essay" before us contains the records of his personal experience of the plaster-of-Paris jacket treatment, to which he appends the opinions of some other surgeons. Reference is also made to felt jackets.

While expressing his great confidence in the use of the jacket, Dr. Jones does not consider it infallible. He mentions the case of a girl who died in an epileptic convulsion while wearing a plaster jacket, and the parents attributed the fatal result to the constriction of the chest by the rigid jacket. He further states that in "some cases of chronic bronchitis, and where more serious lung-mischief developed during its use" he has had to remove the jacket. He has had to remove it in a few cases of angular curvature with abscesses.

On a few occasions, when the patients have fainted during suspension, he has immediately taken them in his arms, removed the straps, and, "on recovery, completed the first application of the bandages in the horizontal position; but, as a rule, the operation of applying the jackets has not been attended by these disagreeable results, and the author is a firm supporter of Dr. Sayre's views. Dr. Jones refers to Mr. Noble Smith's plan of treatment as appearing to him favourable for some cases.

The latter part of this essay consists of "Remarks upon some Affections of the Hip, Knee, and Ankle Joints."

NOTES ON BOOKS.

A Few Practical Hints for Travellers in the Tropics. Compiled from various authorities by Rolph Leslie, M.D. London: Phipps and Connor, Tothill Street, Westminster.—Dr. Rolph Leslie was formerly physician to the government of Trinidad. He has recently returned to England after acting as physician to Sir Frederick Goldsmid's expedition to the Congo. He has since been appointed Surgeon-General of the Lower Congo. When a man with such a record takes up his pen to write some practical hints on the maintenance of health and the treatment of the commoner diseases of tropical climes, the function of criticism need hardly extend beyond a bare announcement of the fact. The pamphlet before us will be useful to young medical men going for the first time into the tropics, but its language is so simple and free from technicalities, and the directions given so definite and precise, that it will be an invaluable guide for everybody and anybody who can understand plain English. Such subjects as ague, bilious remittent fever, dysentery, and rheumatism, are concisely dealt with, a short account of the symptoms being followed by some plain directions for treatment. The directions for the management of cases of snake-bite are extracted from an article by Sir Joseph Fayrer, and are such as could be carried out by any intelligent person. The short Instructions for first Aid to the Wounded afford the sort of information required in an emergency, and the pamphlet concludes with an excellent illustrated article on the treatment of the apparently drowned.

Handbook of Hygiene and Sanitary Science. By GEORGE WILSON, M.D. London: J. and A. Churchill.—Dr. Wilson's excellent little *Handbook of Hygiene* appears now in the fifth edition, with a chapter on vital statistics, and a special section on dwellings. The subjects of domestic hygience have been eliminated from the present edition, and are more fully treated in a small supplementary volume, entitled, *Healthy Lives and Healthy Dwellings.* Dr. Wilson acknowledges his obligations to the *Sanitary Record*, and to other journals, the information contained in which he has largely made use of. This handbook is a readable and well arranged digest, which well deserves its popularity.

DR. BYROM BRAMWELL'S *Handbook for Post Mortem Examinations*, published by Maclachlan and Stewart (Edinburgh), will be found greatly to facilitate the complete and systematic performance and record of *post mortem* examinations. Each note-book contains pages of headings for fifteen complete and twenty-three partial examinations. We strongly recommend the use of this note-book in hospitals, and also in private, especially in medical, practice.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

ANTISEPTIC SURGERY AND OPERATING COATS.

By JOHN WARD COUSINS, M.D.LOND., F.R.C.S.,

Surgeon to the Royal Portsmouth Hospital.

BEFORE the introduction of Listerian surgery, the protecting dress of the hospital-surgeon generally consisted of an old cast-off coat, which he carefully preserved for his own use, and the stains and hæmatic spots, which accumulated upon its surface, bore indisputable testimony to the fact that it had seldom been submitted to the wholesome processes of cleaning and brushing. Even at the present day "old clothes" are articles of frequent recognition in the operating theatre, appearing as the distinguishing garb of inveterate despisers of bacteria and infective particles, although many surgeons with advanced antiseptic notions are to be seen arrayed in clean linen or mackintosh protectors. Again, in private practice, surgeons seldom consider it essential to provide themselves with an operating garment as part of their equipment. They perform their surgical work either without any sort of personal protection, or else they vainly rely upon some extempore and inefficient method. During the performance of their duties, they are rightly regardless of themselves and their immediate surroundings; but, at length, having accomplished their task and secured the safety of their patient, they become powerfully convinced, by a process of self-examination, of the dire necessity of a hurried journey homewards to cleanse and change their clothes, and thus they suffer needless discomfort, loss of time, and sometimes considerable personal damage. Now, surely, this is no coloured description of the inconvenience which often attends the performance of operations without efficient protection for the ordinary dress.

Some will feel inclined to laugh at the little evils I have endeavoured to portray, and may even consider them too insignificant to demand a remedy. Others, perhaps, may cherish a strange attachment for a venerable and well bespattered coat which has proved a cover to them during many an anxious and heroic effort; but such sentiments must not hamper science, and our strongest prejudices must wither before the teachings of experience. The application of "strict antiseptic precautions" involves the complete exclusion of all septic influences, with even the obliteration of every channel through which they may possibly obtain an entrance; and to insure this isolation, it became essential, not merely to wash away the floating particles of the surrounding air, but also to select, with the most scrupulous attention, every material and every object in contact with the patient. "Cleanliness is next to skill" must ever be a motto strictly applicable to the practice of modern surgery.

Now, having in the past patiently suffered the penalty of my own indifference to dress-protection, and having also experienced on many occasions the damping and saturating effects of carbolic spray, I have been compelled to contrive a special coat adapted for the practice of antiseptic surgery. It affords complete immunity to the wearer from the common inconveniences which attend the performance of surgical operations, and it has now proved so valuable for the purpose, that I am desirous of recommending it to the consideration of all who are destitute of any similar device, and who will, therefore, be glad to know of a "ready made" garment suitable for all the emergencies of practice. It consists simply of a light waterproof and very portable overcoat made of mackintosh material (Fig. 1), which can be very readily put on, and is then large and loose enough to be worn over the ordinary dress during cold weather. It is by no means an inelegant costume, with an upright and close-fitting collar to protect the neck and to prevent

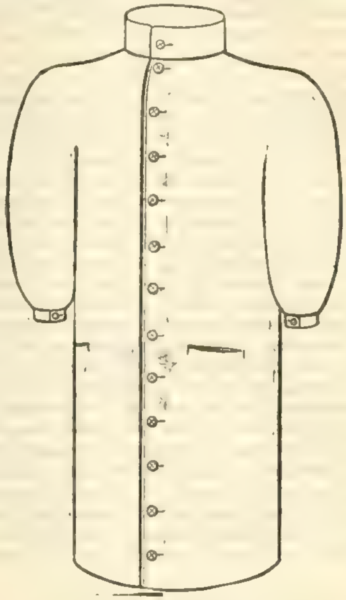
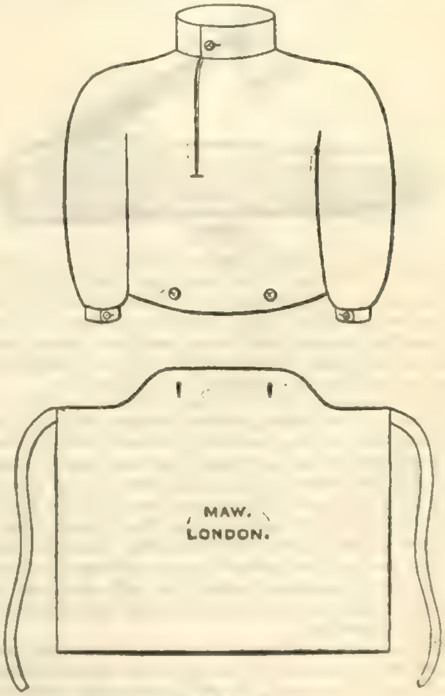


Fig. 1.



Figs. 2 and 3.

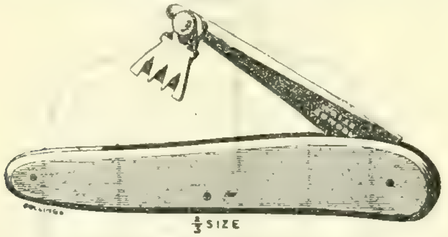
staining the linen. It possesses also a special arrangement of the sleeves, which are cut full and short, for the purpose of holding the turned-up coat and shirt; at the same time, they are made to encircle tightly the arms, three inches above the wrists, thus excluding the entrance of fluid and giving complete freedom to the hands.

The coat is made by Messrs. Maw, Son, and Thompson in three convenient sizes to suit the varying height of individuals, and as a single garment it covers the entire dress from the neck to the feet. It can be obtained also in the form of a jacket (Fig. 2) and apron (Fig. 3); and, as partial protection is sufficient for many minor proceedings, surgical dressing, and midwifery-practice, these separate garments will be found very convenient. They are also equally well adapted for pathological workers and for students of anatomy.

In conclusion, I have recommended the use of a special operating dress on the ground that the surgeon, in the performance of professional work, is entitled to secure, as far as possible, his own personal comfort; at the same time the subject certainly is worthy of consideration from a far higher standpoint. It becomes the bounden duty of the surgeon to protect himself, if by so doing he is aiding the complete application of precautionary measures which conduce to the security of the patient, and the success of the surgical treatment. By many disciples of the modern system my suggestions will not be despised, and the rapidity and completeness with which such a cover can be washed and cleaned, after each operation, will appear to them a strong recommendation for its adoption. Our convictions on the intense value of applying every little precaution compel us to cast aside for ever "old clothes" and dusty garbs as unworthy operating garments, as they must be regarded as possible vehicles of septic contamination to the patient; and, therefore, in honour to our great surgical reformer, whose genius and life-work have crowned him with enduring fame—let us with one consent, and with the enthusiasm of devoted germicides, universally commit them to the flames.

THE SAFETY CORN-CUTTER.

Messrs. Weiss and Sons have brought under our notice a handy little instrument, the invention of a surgeon, which will be found by very many to be a great boon. The small cutting blade is so protected by a silver shield that there is no possibility of its slipping and cutting deep; thus the least experienced or handy person may use it with perfect safety. The handle is of ivory, the blade of steel, and the shield of silver. In using the instrument, it is necessary to hold it horizontally with the shield upwards, and with its teeth towards the operator, and gradually pare down the corn to the level of the surrounding skin. Any collection between the shield and the blade may be removed with a fine needle, or more thoroughly by unscrewing the screw and slipping off the shield. Left-handed persons should fix the shield on the opposite side of the blade.



Presentation.—Dr. Shaw, medical superintendent of the Haydock Lodge Asylum, has, on its becoming known that he had accepted another appointment, been presented by the officers, attendants, and servants of that institution, with a handsome case of scientific instruments, and an illuminated address expressive of the high esteem in which he has been held by them during his term of office, extending over nearly five years. The presentation was made at a ball to which Dr. Shaw had invited the subscribers and others, to the number of eighty. Dr. Shaw, in acknowledging the gift, expressed his gratification at the substantial proof which they had given him that his services had been appreciated.

Suicide of a Medical Man.—Mr. Wells, a medical practitioner in Cricklade, visited Cirencester a few days ago to consult his solicitors. As he was leaving the room, he swallowed a quantity of cyanide of potassium, and died in a few minutes. Mr. Wells was well known in the district, and had been the possessor of considerable property; but his position had been adversely affected by the agricultural depression of the last few years.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1884.

Subscriptions to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 19th, 1884.

SANITARY ASPECTS OF LONDON GOVERNMENT.

The local government of the metropolis has admittedly been a proper subject for reform any time since the very first Commission of Inquiry into Municipal Corporations, and for want of such reform thousands have yearly suffered in health and pocket. A good many people, official and unofficial, have made attempts to grapple with the question; but the immensity of the problem, and the preponderating influence of those interested in the *status quo*, have hitherto paralysed all efforts to provide for London a municipal organisation worthy of its unique position and importance. For three sessions in succession the present Cabinet have put in the forefront of their legislative proposals a reform in the government of London; but it was not until the 8th of the present month that the country was put in possession of even the principles of the Government measure. There has meanwhile been much talk and much speculation as to its nature; and, in anticipation of a Draconian edict that should sweep all existing authorities into inglorious limbo, preparations have been made to "fight the Bill," as the Lord Mayor picturesquely put it, "line by line." The proposals which Sir William Harcourt sketched to the House on Tuesday week, are much more moderate than was in threatened quarters expected; and it will be interesting to see the attitude which the Common Council will adopt with reference to the Bill. Its reception by the press has been uniformly favourable; and though it may well be doubted whether the somewhat antiquated and enfeebled foundation of the old corporation can bear without strain the imposing superstructure proposed to be reared upon it, it cannot be denied that, in the words of Sir William Harcourt, "it is an honest and painstaking effort to grapple with a question which, in a very great degree, affects the happiness and the welfare of four millions of people."

The grand principle of the Bill may be expressed in a few words. It enlarges the powers of the Corporation, which at present sways a few hundred acres in the City, so as to cover the whole of the 122 square miles within the purview of the Metropolitan Board of Works. It retains the Lord Mayor in all his ancient pomp and grandeur; and, though it deprives him of the solace of a Board of Aldermen, it leaves his Show, his banquets, and his City palace untouched and untarnished. To the reformed Common Council of 240 members will be made over all the duties, including the highly important sanitary functions, now performed by the Corporation itself, the Commission of Sewers, the vestries and district boards, and other bodies who now fret the ratepayer's soul. London is to be a county by itself, with all the powers and privileges appertaining thereto. The new Common Council is to be elected by the ratepayers, and the elections are to be triennial. It will have practically supreme power over the metropolis, for there is no provision for appeal to a higher authority; and, although a Government auditor is to be appointed to check the accounts, he is to have no power of surcharge.

With the creation of this new Common Council, and the absorption into it of the various authorities who now exercise sway over the metropolis, Sir William Harcourt has—no doubt wisely—contented himself. He leaves all details to be worked out by the Council itself. For the intimate sanitary supervision of the various districts—a task obviously beyond the powers of a single body—he creates district councils, which, however, are to possess no independent power of their own, but are only to perform the functions delegated to them by the central council. Apparently in despair at mapping out any districts likely to be satisfactory, the Home Secretary leaves for the present the districts of the existing vestries and boards of works, as the areas to elect district councils of their own, though he gives power to the new Common Council to alter such districts as it sees fit.

The remainder of the Bill is practically detail. The essence of it is that, instead of the motley collection of local authorities who now more or less mismanage the metropolis, one thoroughly representative and absolutely responsible body is to be created, with supreme power over what will in future be the county of London. It may be doubted whether the grafting of this new body upon the old Corporation will prove an unqualified success. The methods of work of the latter in the past are not such as are calculated to inspire hope for the future. True, there will be a considerable leaven of the Metropolitan Board of Works, which, with all its faults, has been a businesslike and wide-awake body; but the Corporation officials may be expected to have the preponderating influence, and we much fear that their organisation is incapable of so severe a strain as the cares of the enlarged London will put upon it. This, however, ought not to be a permanent impediment to the work of the new municipality; and probably few people would wish to see the ancient traditions of the City of London, as reflected in its Corporation, absolutely set aside and buried by the creation of a brand new authority with no history to boast of. A good many vested interests are attacked by the Bill; but those that ought to be protected receive due consideration, whilst those that are indefensible anachronisms are swept away without pretence. The measure is not, perhaps, theoretically perfect; but it is practical and sensible; and we hope that the Corporation and the vestries will recognise the wisdom of supporting, instead of attacking it.

THE GILBERT SCOTT INQUISITION.

THE leading articles which have appeared in the general press on this interesting and important inquiry, display a sadly scant knowledge of the legal and medical circumstances of lunacy. From time to time, something occurs to remind the public that each man's tenure of reason and of freedom is uncertain and precarious, and for a day or two the public instructors write about lunacy and lunatics in a confused and blundering manner, into which, so far as we know, they do not fall on any other subject whatever. Thus the newspapers writing of the Scott case, and thinking evidently of another case, raise the question of the efficiency of the law with regard to the admission of lunatics into asylums, apparently forgetful of the wide difference existing between those two instances. In the Gilbert Scott inquiry, it was proved by one party, and granted by the other, that at the time the lunatic was admitted into Bethlem Hospital, he was suffering from mania, with delusions of persecution, and that all the documents and proceedings relating to his admission were in legal form. It was given in evidence that Bethlem was selected for Mr. Scott's care and treatment, because a larger proportion of patients are cured in that institution than in others; and because, it might have been added, that no official or other person at Bethlem has the slightest pecuniary interest in the detention of a patient, but that everyone's interest is engaged in promoting recovery and discharge. Bethlem is a pure charity, like Guy's or St. Bartholomew's Hospitals. Until agricultural depression recently curtailed its revenues, no patient was permitted to pay one farthing for his maintenance and treatment there; and now that in a few instances the moderate payment of two guineas a week is permitted, all profit, if there be any, arising therefrom goes to supplement the revenues, which are expended on the maintenance of the great majority of the inmates still maintained gratuitously. Every Wednesday, the patients admitted into Bethlem during the week are seen, and, if need be, examined, by the managing committee, who subsequently examine the friends of each patient as to his history and circumstances. If all institutions for the insane resembled Bethlem, the need of highly stringent laws to regulate the admission of patients would be less obvious.

Another point on which the general press has shown poverty of information, is the difference between what are called Lord Chancellor's lunatics and lunatics under certificate. As a class, the Lord Chancellor's lunatics enjoy a far greater degree of freedom, and are deprived to a far less extent of the enjoyment of life than certificated lunatics. Of the Lord Chancellor's lunatics, 34.6 per cent. are under home-treatment in private dwellings, generally in their own houses or in the houses of their friends, and 65.4 per cent. are in asylums. Of the certificated lunatics, 5.9 per cent. only of patients who are not paupers are under home-care in private dwellings, and 94.1 per cent. are confined in asylums. (Bucknill's *Care of the Insane.*)

The Lord Chancellor's lunatics are maintained according to a detailed scheme of expenditure settled and ordered by the Lords Justices according to each lunatic's capacity for the enjoyment of life, and means of paying for it. The lunatics under certificate are maintained according to the terms of any bargain which the man who signs the order may make with the proprietor of a private lunatic asylum, or with any other person who may undertake the maintenance and custody of the lunatic.

The advantages of inspection, of early notice of recovery, and of early release, are all in favour of the Lord Chancellor's lunatics as compared with certified lunatics; and it is strange that, considering all these matters of difference, in which the advantages are so distinctly in favour of one class as compared with the other, that there has not been a rush to place all lunatics having property under the beneficent and careful protection of the high official deputed by the Sovereign to exercise one of her more ancient prerogatives. No doubt, the reason why this has not taken place is the costliness and the uncertainty of inquisitions of lunacy compared with the summary, certain, and economical proceeding of placing an insane person under certificates, a difference well illustrated by the proceedings to which Mr. Gilbert Scott has been subjected last July and recently. The medical history of Mr. Scott's case was not an uncommon or perplexing one. He had been a distinguished student at Cambridge, and became a Fellow of Jesus College. Before his mental illness, he was proved to have been a perfect gentleman in demeanour and conduct, a charming companion, and, in later years, a loving and exemplary husband and father. We have not space to summarise the evidence of the subsequent change in character and demeanour.

The existence of insane delusions at various periods of his life was given in evidence, and he had been twice certified as insane, first by Dr. Allchin and Mr. Bond, and next by Dr. Maudsley and Dr. Savage. In virtue of these certificates, he had been committed to asylums for treatment and cure.

There can, we think, be little doubt in the mind of any one who has carefully studied the whole case for the purpose of forming an accurate opinion, that Mr. Scott's delusion respecting the existence of a police conspiracy against him was, at the time of inquisition, as strong as ever. Certainly his delusions with regard to his having been drugged, and with regard to his wife's misconduct, were as strong as ever down to the date of the inquisition, for they are proved, the first by his admissions on March 28th, and the second by a letter written by him during the inquisition. On January 31st, a careful and skilled examination of Mr. Scott was made by Dr. Crichton Browne, under order of the Lords Justices, and we hold it to be greatly [illegible], that the result of this examination was never allowed to [illegible], [illegible] did not demonstrate the continuance of either of Mr. Scott's delusions in unabated vigour.

The judge, in his able and [illegible] summing up, very wisely left the expert evidence out in the cold, with the deprecatory remark that it was guided by well known principles of human nature. He depended almost entirely upon the undisputed conduct, and the letters and post-cards written by the alleged lunatic, and from these he was able to construct such a picture of insanity, that no reasonable man could well doubt its exact fidelity. Throughout the conduct of the alleged lunatic one saw the changed man—the cultured English gentleman, exemplary in all his relations, social and domestic, changed by insanity so as to bring him frequently into the hands of the police, and so that he would have been severely punished had not the irresponsibility of the madman been recognised; changed, so as to lead to wanderings by night and accidents by day, and to unsafe associations which were quite opposed to the habits of the sane man; changed in appearance and in dress, so as to be sometimes neglected, ragged, and dirty; sometimes, as at the inquisition, got up in attire strange to the usual habits of a learned and staid professional man; changed in demeanour, in character and conduct, and influenced by persisting and dangerous delusions. Is such a man capable of managing himself and his affairs—affairs meaning, not his art or his profession only, but, as Mr. Justice Denman expressed to the jury, all the affairs of life—his wife, his children, and his home? A man may write letters in sensible terms about his business, as Mr. Scott did even in the first fever of his maniacal attack; but a man's management of himself and his affairs means the management of all the circumstances and relations of his life, and this it is which a man, suffering from excitement and delusion caused by disease, cannot do; and this it is which, in order to prevent the wreck and ruin of himself and his family, the law will, when duly set in motion, not permit him to pretend to do.

MEDICAL MEN AND LIFE-ASSURANCE.

WE may say, without fear of contradiction, that the relation of medical men to life-assurance is a subject that does not sufficiently engage the attention of the profession, nor, indeed, of the medical press. And yet the importance of life-assurance, both to the public and to the profession, is ever growing. Its present extension would not have been anticipated twenty or thirty years ago; and the position it has already reached will, in all probability, stand in as small or even smaller proportion to that attained twenty years hence. In a pamphlet before us, Dr. J. F. Stone, of Philadelphia, tells us what the growth has been in the United States, between 1769 and 1882. In the former year the policies in force were 50,000, whilst in the latter they had reached to 660,000. But "these figures, large as they are" (it is added), "do not fairly represent the growth of assurance-business." And Dr. Stone goes on to say that, under what is known as the prudential or industrial system, providing for the insurance of small sums, by the "payment of a weekly pittance...hundreds of thousands of such policies have been issued within a few years, and the number is rapidly increasing." This statement refers specially to the United States, but it is equally true of Great Britain; where, besides private ventures of the prudential office type, there exists a state department having ramifications, its agents and offices, in almost every town and village possessing a post-office. It would seem, however, that the success of the post-office assurance-schemes has not been so great as its projectors had hoped; nevertheless, it has brought life-assurance to the attention and the doors of the humblest classes, and has encouraged thousands to accept its providential benefits.

It is a legitimate contention, on the part of Dr. Stone, that life-insurance was, in its origin, essentially an outgrowth of medical science, inasmuch as it was by the labours of medical men that the law of the absolute uniformity in the average duration of life, when large numbers are compared—the basis on which life-insurance rests—was demonstrated. To Dr. Heysham of Carlisle the assurance-companies were especially indebted for the collection of the data whereon the Carlisle tables, generally employed until a recent date, were constructed; and, continuously since the time of that industrious statistician, by no class of men have the vital statistics of our country been more cultivated and advanced than by the members of our profession.

Whilst we may invoke these as facts beyond dispute, we have to challenge to ourselves an equally important share in the working out of the principles of life-assurance. Hence the medical practitioner is called upon, in the interests of the offices, to intervene to shield them against lives that would disturb the balance of their calculations and unduly tax their funds. At the same time, whilst acting in behalf of the welfare of the office employing him, and of all those, indeed, who are beneficially concerned in its success, the medical referee has to bear in mind how serious a matter it is to reject, or to report unfavourably of, the life submitted to his examination; and how detrimental even to himself a mistake may prove.

A quotation from Dr. Stone's able address may here be made advantageously. "With a clear conception" (he writes) "of the purpose of his examination, the physician will do well to remember that the applicant for insurance stands in a relation the very reverse of that occupied by a patient. The latter comes for relief, and is ready to aid, so far as he can, in the discovery of his ailment. The former approaches with the assumption of health, and the examiner must detect, unaided, any fallacies in that assumption;" and it may so happen that the would-be assurer is a rogue, and his object and interest to deceive.

What an insurance-society requires at the hand of the medical examiner is well expressed by the concluding formal question introduced in the papers of the New England Mutual Office. "Is the person, in your opinion, as good a life for assurance as the average of persons of the same age who are of sound constitution, in good health, and whose family history is good; and do you, acting in the interests of the company, advise the acceptance of the risk?"

Now it may be asked, do the life-assurance companies generally pursue the best plan for securing such an opinion of so much value and importance to themselves? We doubt it, and would, for the purpose of discussion, ask—are they wise in the regulations they adopt for conducting the medical examinations they require? Are the elaborate examination-papers they issue necessary to the object in view, and the means best adopted to their purpose? To these questions we must distinctly say no.

The strings of questions they submit to medical men may be literally called "leading strings." They presuppose that the professional examiner is so indifferently educated in the method of examination, that he need be guided in every detail; and in not a few offices the distrust of the skill and judgment of their referees would seem so considerable, that an array of questions is submitted truly formidable in number, and, we may also add, absolutely irritating. Yet, whatever be the elaboration of the examining paper, it will fail whenever the referee is content to give the categorical answer "yes" or "no" to the questions, to furnish a reliable basis for the valuation of a life. A string of questions contrived for general use, however long, cannot bring out the whole life-history of an individual; nor can it exhaust the entire category of morbid states and symptoms. A personal interview, and the careful examination by a medical man of experience, will be suggestive of points for inquiry and consideration, which, by reason of their individual bearing, cannot find place in general forms. And it may happen that the results forthcoming do more seriously affect the valuation of a life, than all the responses together elicited by the formal examination-paper. Further, the offices would do well to inquire what security they have by the prevailing system of obtaining a reliable opinion based on a sufficient examination, and free from fear or favour on the part of the examiner. They must see that, as in all commercial affairs, they must secure efficiency; and, to this end, the work they require must be adequately remunerated, and the workers be duly selected. Hitherto, these conditions have not been sufficiently attended to. On the present occasion, we cannot enter upon a discussion of the fees paid to medical examiners; suffice it to say they are not what they should be. Touching the other matter, our decided opinion is that a reform is needed. To distribute their examination-papers broadcast, as some offices do, among medical men who are nominated by district agents, or who hold the position of being the usual attendants upon the proposers for assurance, we consider a mistake. It is not the way to get the best opinion; it fails to establish an interest in life-assurance work, or a bond between an office and its referees; and everyone who has had to do with life-insurances knows what power the agents of offices can exercise over the business of examination and those who conduct it; for it is, in some aspects, an unfortunate circumstance that the pecuniary interests of agents are primarily and directly bound up with the amount of business they can transact—the number of policies they can get accepted. If this be the case even partially, the power of selecting medical referees should certainly not be lodged in the hands of local agents.

As in all occupations, so in conducting life-assurance examinations, practice must carry with it some recommendation; and it would seem only a judicious proceeding on the part of assurance-societies to concur in the appointment for specified districts of medical men of recognised position and attainment, whose opinion then would carry due weight, and possess a special value. Appointments so arranged would awaken more interest in the duties performed, and be better worth holding, than is the almost nominal post of referee, as at present allotted promiscuously among medical men by the several offices in existence.

In conclusion, whether life-assurance authorities agree with us or not in the above criticisms and suggestions, they cannot fail to recognise that the present system of medical referees and of examination of lives has inherent weaknesses which frustrate more or less its utility; moreover, that it owes its existence to no thoroughly thought out principles, but is rather the child of accident, starting into existence in the early history of life-assurance, and not developing commensurately or in harmony with its growth and the results of experience.

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THE Customs receipts under the head of wine for the year 1882-3 show a decrease of no less than 20 per cent. when compared with those of the year 1878, representing a loss to the revenue of £335,000.

IT is satisfactory to learn, on the authority of Mr. Woodall, M.P., that since the operation of the Employers' Liability Act, fatal accidents in collieries have been reduced from a proportion of 8½ to 3½ per thousand.

THE Board of Management of the London Temperance Hospital announce that His Grace the Duke of Westminster has consented to lay the foundation-stone of the wing of this hospital on Thursday, April 24th, at 3 P.M. Admission will be by ticket.

THE President and Council of the Society for the Study and Cure of Inebriety have issued cards to an inaugural luncheon in the rooms of the Medical Society, 11, Chandos Street, W., on Friday, April 25th, at 2 o'clock; after which an inaugural address will be given by the President at 3.30. Lord Shaftesbury, Sir T. Spencer Wells, Dr. Cameron, M.P., Dr. Farquharson, M.P., Dr. W. B. Carpenter, F.R.S., and Dr. Alfred Carpenter are expected to attend.

A SERIOUS prevalence of typhoid fever has occurred at that part of Whitehaven known as Mount Pleasant, the circumstances of which seem to be highly favourable for the extension of the disease. Twelve cases were under treatment last week at the Bransty Hospital, and we learn with regret that one of the local medical men has contracted the disorder. So far, the action of the authority has been limited to the issue of notices to the owner of fourteen tenements which have been condemned as unfit for human habitation, requiring that the houses shall be closed, though no steps have yet been taken to carry the order into effect.

SCARLET FEVER BY POST.

A CORRESPONDENT of the *Medical and Surgical Reporter* (March 1st) narrates a case where it seems tolerably certain that scarlet fever was transmitted by means of a letter. At least, there is much less room for doubt than in many cases where such a cause is popularly assigned. The outbreak was in a country house half a mile distant from the nearest neighbour, and the family had occupied the house for three years; the children had not been away from the farm for two months, and no one had been in the house who had had the fever, or been where it was. In fact, no case of the disease had been known or heard of by the physician for some months anywhere in the county. It appeared, however, that the mother had received a letter from her brother only a short time before, stating that his family had just lost a child from scarlet fever. This letter contained a photograph. The letter was received only seven days before the first child was taken sick, and the children all handled the letter and the photograph.

SHUTTING THE STABLE-DOOR.

WE cannot too urgently reiterate the advice we gave last week, that the vestries and sanitary authorities should take steps to bring before the people the immense importance of general revaccination to avert recurrent epidemics of small-pox. Small-pox, once so murderous to children, now strikes chiefly the adult population who have neglected the essential precaution of revaccination after the period of adolescence, when the protective influence of early vaccination has worn out. At an inquest held by Dr. G. Danford Thomas into the circumstances attending the death of a child, striking facts were proved which emphasise our advice. Robert Mitchell, a carpenter, the father of the child, stated that his wife and two other children were now in an hospital, suffering from small-pox. The deceased child was three months old, and had not been vaccinated. Witness's son, aged 5 years, was first taken ill a fortnight ago, and, not knowing what was the matter with him, they treated him themselves. Witness's wife was afterwards taken ill, and then the baby was attacked with the same disease, and died on Tuesday last. The landlady of the house stated that her husband had also been taken ill with the same disease, and had been removed to the hospital, but was not expected to live. Dr. Fennell said that two of the children affected had not been vaccinated. The provision of small-pox hospitals and isolation-houses is, unfortunately, necessary in the presence of such cruel ignorance and neglect, and of the general neglect of revaccination; but the stable-door should be shut before the steed is stolen. It is tedious to repeat the overwhelming evidence of the protective power of revaccination, viewed from the experience of the army and navy, the nurses in small-pox hospitals, the police, and postmen. The very shifting of the maximum of mortality from infant to adult ages speaks volumes to all who are not deaf to reason, and blind to the most patent facts. With careful vaccination of infants, and increased revaccination, the amount of disease and death from small-pox would be reduced [illegible] figures; and untold suffering, as well as enormous [illegible] spared the community.

THE EASTER MANŒUVRES.

THE medical arrangements for the Easter Monday [illegible] at Dover were carried out under Deputy Surgeon-General Stewart, Principal Medical Officer South-Eastern District. Two temporary field-hospitals were pitched, one at Archer's Court for the attacking force, under Surgeon-Major Riordan, A.M.D., assisted by Acting-Surgeon J. [illegible], 1st London Rifle Brigade; the other at the Rifle Ranges, for the defending force, under Surgeon-Major Preston, A.M.D., with Acting-Surgeon C. Lewis, East Kent Volunteers. No arrangements were made at Army head quarters for a divisional bearer-company to be present, as it

Portsmouth. As the bearer-column is the most useful outcome of modern field-surgery, it is to be hoped that on a similar occasion, in future, it may not be wanting. That the opportunity, however, might not be lost of practising the methods of rendering first aid on the field, regimental surgeons of volunteer-corps, in communication with their commanding officers, were directed to send a stretcher-party of trained men to the field-hospital, before the commencement of the fight, there to draw a stretcher, field-haversack, and water-bottle for use with each corps, and to accompany it in action. A man or two of each corps was told off to fall out, at intervals during the engagement, as if wounded, with a ticket on his person describing the nature of the supposed injury. The stretcher-party, on coming up with him, rendered the necessary first aid, and removed him afterwards to the ambulance, where he was inspected by a medical officer, and an opinion pronounced on the propriety of the means adopted. After the removing of the dressing, splints, etc., the man returned to the ranks. This practice was carried out admirably. No serious cases of sickness or injury occurred. Three men of the attacking force were detained in hospital during the day. Two of these, belonging to the 3rd Middlesex, were young men, suffering from exhaustion induced by fatigue, and, as was ascertained, irregularities and want of food; the third was an elderly man, a Colour-Sergeant of the 3rd West Kent, who fell out whilst marching up-hill to Archer's Court; he was much exhausted, and complained of symptoms referable to the heart, the action of which was feeble and irregular. He was conveyed to his hotel in town in an ambulance. During the afternoon, two cases of sprained ankle were detained in the field-hospital with the defending force. They were taken to the railway-station in an ambulance, and left for London with their corps. It should be mentioned that some of the corps had stretcher-parties accompanying them, under their medical officers, fully equipped, among which the ambulance-detachment of the Tower Hamlets was conspicuous.

DISUSE OF STIMULANTS.

In his interesting and able report of the Derbyshire County Asylum for 1883, just issued, Dr. Murray Lindsay states that the discontinuance of beer to patients and staff as an article of ordinary diet had been attended by most satisfactory results. The average cost for wines, spirits, and porter for the sick had been reduced from 2d. per patient per week in the four years, 1868-71, to 1¾d. in 1880; 1d. in 1881 and 1882; and ½d. in 1883. The death-rate had been slightly higher in the four years 1868-71 than in the last four years of diminished expenditure on alcoholic stimulants, though the number of patients had been considerably higher during the latter period. Oxford, Ipswich, and Bristol had discontinued beer, and at the new Surrey County Asylum the same course had been adopted. In twenty-nine English asylums beer had been either partially or entirely discontinued; and if complete returns could be procured, probably in the majority of pauper asylums beer would be found to have been excluded from the ordinary dietary.

THE LEEDS GENERAL INFIRMARY.

At the last annual meeting of the governors of the General Infirmary at Leeds, some important alterations were made in the conditions under which the medical officers are appointed. Last year, the surgical staff was increased, and this year a similar alteration is made in the number of physicians. In future, there will be two physicians with charge of in-patients, in place of three, but there will be two assistant-physicians in charge of out-patients, who will also represent the physicians in their absence. Dr. T. Clifford Allbutt, F.R.S.; Mr. C. G. Wheelhouse, F.R.C.S.; and Mr. T. Pridgin Teale, M.A., F.R.C.S., who will shortly have completed twenty years' service, will become respectively Consulting Physician and Consulting Surgeons, with the right to retain six beds each. "It is a great satisfaction," says the Report, "to feel that, under this arrangement, the hospital will not entirely lose the services of these eminent men, who will, moreover, as members of the weekly board, still have a voice in its management; but the board cannot allow this long and close connection to partially cease without placing upon record their gratitude for the zealous and able services rendered to the infirmary, and to medical science in general, by these distinguished men, who have done much to raise this hospital to its present high position." In the financial part of the report presented at this meeting, the most satisfactory feature was undoubtedly the steady increase in the sum contributed by work-people in Leeds and its neighbourhood to the infirmary; it rose from £619 in 1874, to £2,266 in 1883.

DEATH FROM CHLORAL.

A death occurred recently at Stockton from an overdose of chloral under very distressing circumstances; the victim was Dr. John Middleton, Surgeon-Major (retired) A.M.D. Dr. Middleton had been in bad health (the necropsy revealed fatty degeneration of the heart, liver, and kidneys), and had taken chloral to procure sleep, but not, it was believed, habitually. He would appear to have taken the overdose inadvertently, for he called his servant, and told her that he had "taken too much chloral;" but she, finding that he had fallen into a tranquil sleep, left him alone for about three-quarters of an hour, so that medical assistance was sent for too late, the patient being dead when Dr. Beatty arrived.

ST. JOHN AMBULANCE ASSOCIATION.

With the concurrence of the Principal Medical Officer in the Devonport Garrison, classes for the troops have recently been held in connection with the St. John Ambulance Association, and have been attended by officers, non-commissioned officers, and men of all ranks. Surgeon W. B. Allin acted as lecturer, and Surgeon-Major Alex. Turner as examiner. The latter has forwarded to St. John's Gate a most eulogistic report on the excellence of the knowledge displayed, especially as regards practical work and the first treatment of the wounded. This is shown by the fact that the whole of the candidates for examination, which took place in the presence of the Principal Medical Officer, are recommended for certificates, the numbers being as follows: Royal Marines, 6; 2nd Battalion South Lancashire Regiment, 22; 2nd Battalion Highland Light Infantry, 34; and Commissariat and Transport Corps, 12. Among the officers are Lieutenant Colonel S. J. Graham, C.B., Major H. J. L. Norcock, Captain R. H. Hall, Lieutenant E. A. Snow, and Assistant Commissary-General J. A. Scott.

INFECTIOUS CASES IN THE PORT OF LONDON.

The rules made by the London Port sanitary authority for the removal to hospital of persons infected with a dangerous and infectious disorder who are brought within the port by any ship or boat, have now received the sanction of the Local Government Board. Under these rules every master, or other person having charge of a ship arriving in the Port of London, must, within two hours after she has called or been moored at Gravesend, or if she do not call or be moored at Gravesend, then within two hours after she has passed Greenwich, or arrived at her destination if not proceeding so high up the river as Greenwich, take all requisite steps for the removal to hospital of any person on board such ship suffering from any dangerous and infectious disorder. For this purpose he must, on the ship passing or calling at Gravesend, or being moored there, give notice to the medical officer of health of the port sanitary authority stationed there, that there is on board the ship a person suffering from a dangerous and infectious disorder; or if for any sufficient reason he have not given such notice when the ship passes Gravesend, then he must, as soon as practicable afterwards, give notice to the medical officer of health of the port sanitary authority at the office of the authority at Greenwich. The medical officer of health must, as soon as practicable, ascertain whether the person referred to in the notice is suffering from a dangerous and infectious disorder; and if, in the opinion of the medical officer of health he be so, and he can properly be removed, and proper accommodation can be procured in one of the hospitals to which the port sanitary authority are entitled to remove patients, the master must forthwith cause such person to be removed to the hospital according to the directions of the medical officer of health. The diseases affected by these rules are diphtheria, erysipelas, measles, scarlatina, small-pox, typhoid or enteric fever, and typhus fever; and the penalty for infraction of the regulations is £5.

METROPOLITAN HOSPITALS RENAMED.

THE Metropolitan Asylums Board has forwarded circular communications to the various local bodies of the metropolis, informing them that in future the Board's hospital at Hampstead will be known as the North-Western Hospital; that at Fulham as the Western; that at Stockwell as the South-Western; that at Deptford as the South-Eastern; that at Homerton as the Eastern; and that the proposed hospital at Winchmore Hill will be known as the Northern Hospital.

DR. L. P. YANDELL.

THE many warm and affectionate friends of Dr. Lumsford Yandell, of Louisville, will learn with regret that he is no more. Like his brother, Dr. David Yandell, he was much loved and valued by numerous English friends, whom his cultivated intelligence and manly and affectionate character had attached to him. He was a fine type of the chivalrous, fearless, and original-minded American physician and gentleman—a type which is well known, much valued, and always warmly welcomed here. He succumbed to the effects of malarious fever, contracted during the civil war.

QUEEN'S COLLEGE MEDICAL SOCIETY, BIRMINGHAM.

A MEETING of the Queen's College Medical Society was held in the Library of the College, on Wednesday, April 9th; the President, Hugh Thomas, Esq., in the chair. Mr. J. Hall-Edwards read a paper "On the Disposal of the Dead," in which he strongly advocated the introduction of cremation, as being the most perfect method; from the point of view both of the sanitarian and of the political economist. A long and lively discussion followed, at the termination of which, Mr. Hall-Edwards proposed the following resolution, which was seconded by Mr. W. F. Spiller, and carried unanimously: "That the members of the Queen's College Medical Society disapprove of the present system of burying the dead, and desire to substitute cremation, as being the most scientific method of disposal."

THE SICK PAUPERS OF LONDON.

THE Local Government Board has had prepared a summary of the expenses incurred by the guardians of the several unions and parishes in the Metropolis during the half year ended Lady Day, 1883, for the several purposes hereafter stated, and repayable from the Metropolitan Common Poor Fund. The half year's bill is a heavy one, the total amounts of which are as follow: For maintenance of lunatics and insane poor, £73,611; maintenance of paupers suffering from fever or small-pox, £9,692; medicine and surgical appliances, £659; salaries of officers, £73,688; rations of officers, £22,525; compensation for loss of office, £1,860; registration fees, £5,679; vaccination fees and expenses, £6,135; and expenses of ambulance, £2,425. If the vaccination fees were larger, the outlay on maintenance, rations, and salaries would be many thousands smaller.

MENTHOL.

SEVERAL years ago, Mr. L. Genois writes in the *Polyclinic*, there appeared in the American drug-market an oil of peppermint, put up in long narrow stout glass vials enclosed in pasteboard boxes, decorated with Chinese or Japanese characters. This article was sold under the name of menthol, or Japanese oil of peppermint. It was recommended as a specific for many nervous affections, met with great favour within a short time, and although not widely known, it found quite an extensive sale. Suddenly, however, and when it seemed that a steady demand was created, it disappeared from the market, and has since, as far as M. Genois' experience goes, been unobtainable. Seemingly, as a substitute for it, there has recently been introduced the stearoptene, or crystalline solid, separated by fractional distillation of peppermint-oil. It is claimed to be prepared only from Japanese mint, *M. arvensis* var. *purpurescens*. This "menthol"—the only product to which the name belongs—is an alcohol. Its formula is $C_{10}H_{19}HO$. It is also called mint camphor. It is the active and odorous principle of peppermint-oil, is a snow-white, crystalline solid, freely soluble in alcohol, ether, chloroform, carbon disulphide, oleic acid, and most essential oils. When pure, it is not oily, and distils entirely, without decomposition, at 212° C. From a circular issued by Messrs. Cocking and Co., of Yokohama, it appears that menthol was first made known in Europe fifteen years ago. Its Japanese name is *Hakka No-Sei* or *Hakka Hari*. It has been used in Japan for nearly two centuries. The consumption of it there is now very large and constantly increasing, it being employed for headache, etc., much as we employ smelling salts. It is most extensively used, however, in the form of a powder called *Hotan*, consisting of menthol, salep, cloves, crab's eyes, musk, etc. In England, crystals of menthol, compressed or moulded in cones, have for some time been sold for local use in facial neuralgia and headache, in which we can state that it has repeatedly proved of great service. It has antiseptic and germicide properties. Dr. Cutter, of New York, has called attention to its use in epidemic influenza. A convenient way of giving menthol is by inhalation; any simple form of inhaler can be used. It can also be administered by an atomiser, a solution of four grains in an ounce of warm water being used. Menthol is now being manufactured by Wyeth Brothers, of New York, in the form of neat compressed pencils, for local application. These are put up in holders of about two inches in length. Dr. J. C. Wilson has had made a menthol stick cosmetic, with the active ingredient massed at one end; this is also a convenient form for use. The proportion of menthol contained in Japanese oil of peppermint is greater by far than that in American or English, amounting in some cases to nearly 66 per cent. Many uses for this agent will suggest themselves to physicians, but it has so far been little employed, owing, no doubt, to its comparative scarcity and consequent cost; but arrangements are now being made to give it a wide distribution, and in a short time it will take its place as a regular remedial agent.

SANCTITY OF COMMUNICATIONS BETWEEN PATIENT AND DOCTOR.

THE following is stated in the *Maryland Medical Journal*, on the authority of Mr. Willoughby N. Smith, of the Baltimore bar, and Lecturer on Medical Jurisprudence in the College of Physicians and Surgeons, as being the state of the law in the United States with respect to the sanctity of communications imparted in confidence to a physician by a patient. In the absence of any statutory provision to the contrary, it is well settled that a physician or surgeon may be *compelled* to disclose any communication made to him in professional confidence. (*Stephens' Digest of Evidence*, Art. 117.) The States which have enacted statutes changing this common law rule are the following: Wisconsin, New York, Michigan, Iowa, Minnesota, Missouri, Ohio, Indiana, and Nebraska. The statute of Wisconsin provides that "no person duly authorised to practise physic or surgery shall be *compelled* to disclose any information which he may have acquired in attending any patient in a professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon." (*Wisconsin Revised Statutes*, Section 4075.) The statutes adopted in New York, Michigan, Minnesota, Missouri, Ohio, Indiana, and Nebraska, provide either that a "person duly authorised to practise physic or surgery" shall not be "competent" o that he shall not be "allowed" to make the disclosure. But by the statutes of Iowa, Indiana, and Minnesota, such testimony "may be received with the consent of the patient" in all cases; and in Minnesota, the prohibition, in the absence of such consent, is confined to civil cases; the "regular physician or surgeon" may be *compelled* in that State, in criminal cases, to disclose communications reposed in him in confidence by a patient while in actual attendance upon the patient in the capacity of medical adviser.

DEATH OF M. J. B. DUMAS.

M. J. B. DUMAS died on April 11th at Cannes from chronic bronchitis. He was born in July 1800, at Alais, and was therefore in his 84th year. During his long and brilliant career, well deserved honours fell thickly on him. In 1832, his numerous memoirs established his reputation, and he was elected member of the Academy of Sciences in Paris. He was likewise Professor at the Faculty of Sciences and the Faculty of Medicine at the College de France. In 1850, during three months, he held office as Minister of Agriculture and Commerce. In 1875, M. Dumas was elected a member of the Academie Française. In 1863, he received the grand cross of the Legion of Honour. M. Dumas may be considered, after Lavoisier, as the second founder of the science of chemistry. Want of space does not permit us to give a detailed account of his researches and discoveries. Those on amyl-alcohol are the most important. His discovery of the law of substitutions would alone give him rank among the most eminent chemists. These researches were the origin of the dispute between Dumas and Berzelius. M. Dumas' principal works are the *Traité de Chemie Appliquée aux Arts* (1828 to 1846); *Précis de Chemie Physiologique et Médicale; Precis de l'Art de la Teinture* (1841); *Leçons de Philosophie Chimique des Etres Organisés* (1841). M. Dumas, in co-operation with M. Boussingault, published a weekly periodical, *Les Annales de Chimie*. In 1869, the London Chemical Society awarded him the gold medal instituted in honour of Faraday. His death leaves vacant the place of perpetual secretary to the Academy of Sciences.

A SAVING, AND WHAT TO DO WITH IT.

IT is stated that the London water-companies have had their income reduced by upwards of £240,000 this year by the decision in the Dobbs case. We doubt, however, whether any individual ratepayer feels much the better for the particular saving in his costs, or whether London, as a whole, can be said to benefit by it. It is a pity that this quarter of a million yearly cannot be applied to a great public civic purpose. It would quickly solve the dwellings question and the open spaces question, and might then be applied to aid in the elevation of the recreation of the poor, which, undoubtedly, ought to be subsidised by the State or by the rich.

AN ETHICAL POINT IN OBSTETRIC PRACTICE.

A DISTRESSING fatality was inquired into by the Leicestershire coroner at Desford last week. Mrs. Bailey, wife of a baker, had arranged with Mr. Durden, a surgeon, to attend her during her confinement. He did attend, but, finding that her husband insisted on being present, retired from the case. Somebody went after him in a trap, but he declined to return, and the woman expired before another medical man could be secured. The verdict returned was death from want of medical attention, the husband being mainly responsible. A correspondent writes to us on this subject: All must regret the sad termination to this deplorable case; in the justice of this particular verdict, however, I agree, as the doctor warned the husband beforehand of his intention to retire if he were not left in undisturbed possession of the bedroom. But, as to the general question of the husband's presence in the room at the time of his wife's confinement, I am of opinion that the feeling of the profession is not entirely on the side of those practitioners who would prohibit it. With many obstetricians, it is a matter of complete indifference. Most husbands prefer (very naturally, I think) to be absent from the room during the time of the wife's suffering; but, when a husband expresses a desire to remain in the lying-in chamber during the labour, I am confident that the medical attendant for many reasons best exercises his wisdom in permitting the intrusion. A little tact will often avoid the difficulty, if the practitioner greatly object to the husband's presence; but, if the latter persist in remaining, the former is not, on that account, called upon to leave the patient, with whom is his chief concern, for whose welfare he is responsible, and for whom he is professionally bound to do his best.

SANITARY DWELLINGS.

THE Royal Commission is making considerable progress with its inquiry. It is hoped that it may be in a position to report before the prorogation of Parliament, so that some practical legislation may take place next year.

SMALL-POX AT WHITSTABLE.

IN spite of the precautionary measures adopted by Dr. Robinson, on behalf of the Blean Sanitary Authority, for the prevention of the spread of the small-pox epidemic recently brought to Whitstable by a seaman from Sunderland in so strange a manner, another person has just developed the contagion, and been removed to the hospital-tents provided. The single case imported into Canterbury has so far been successfully isolated. Mr. Sladden, the sanitary inspector of the Blean Union, and nine or ten other persons, are affected.

THE CORONERSHIP OF THE CITY OF LONDON.

IN consequence of the death of Mr. W. J. Payne, the coroner for the City of London and borough of Southwark, the Court of Common Council, at a meeting held on Wednesday, appointed (following the precedent of 1872) the Town Clerk to perform the duties of coroner until the further order of the court, in whose gift the office of coroner lies; and he has in turn nominated a temporary deputy. It is announced that Mr. Wynn E. Baxter, one of the coroners for the county of Sussex, and Mr. W. J. Soulsby, barrister-at-law and private secretary to the Lord Mayor, are candidates for the vacant office. The medical profession will also, we are glad to learn, be represented by a competent candidate, Dr. Wynn Westcott, the present Deputy-Coroner for Central Middlesex. A committee of the court has been appointed to inquire into the duties and emoluments of the office of Coroner, and to report thereon to the court, together with a statement of the qualifications necessary in the person to be elected to the office.

DEATH OF ANOTHER CORONER.

MR. JOSEPH ROGERS, coroner for the Tonbridge district of the county of Kent, has just died from pleuro-pneumonia, following injury to the leg in an accident which occurred three weeks ago.

CREMATION.

A MODEL of the crematorium used for the first cremations in England in modern times, has recently been added to the Parkes Museum of Hygiene. The subject of cremation does not come within the scope of the International Health Exhibition, but the Council of the Parkes Museum intend to organise, during the summer, a representative collection of models and drawings of apparatus used for cremation. Any persons willing to assist in making the collection are requested to communicate with the Secretary, at the Parkes Museum, Margaret Street, W.

DR. C. THEODORE WILLIAMS.

WE are glad to learn that Dr. C. Theodore Williams is making good progress towards recovery. The convalescence from the long and severe attack of typhoid fever, lasting fifty days, has been slow, but has now become so well established that we may probably hope to see Dr. Williams again in London by the end of this month.

SCOTLAND.

GLASGOW ROYAL INFIRMARY.

IN the JOURNAL of March 15th we alluded to some proposed changes in the visiting staff of this hospital, whereby the number of indoor physicians was to be curtailed by not filling up a vacancy which had occurred in their number. At a recent meeting of the directors it was definitely decided to adopt the proposed change, and, in addition, to appoint another surgeon, so that the staff of the hospital will in future consist of four physicians and six surgeons, for attendance on the in-patients. No time has as yet been fixed for the new regulation to come into force. It is only right to state that this change is being carried out in face of the almost unanimous dissent of the medical members of the committee. To the appointment of an additional surgeon these gentlemen see no objection, but that this is to necessitate a corresponding diminution in the number of visiting physicians seems to them unfair, and detrimental to the interests of the hospital as well as the students. It is from the chairman of the committee that this alteration has emanated, and he has carried along with him all the other lay members of the Board, but these gentlemen undertake a grave responsibility when they initiate such a change as this, contrary to the opinion of their medical colleagues, who alone should be the judges in such matters. How intimately the whole question is bound up with the interests of the patients and the successful prosecution of the clinical teaching is well seen in a very vigorous protest against the change issued by Dr. Ebenezer Duncan, one of the medical members of the committee.

THE SPREAD OF SMALL-POX.

FOR some time small-pox has been present in Glasgow, and in connection with this recent outbreak some facts of interest were brought out by Dr. Russell in his last report of the health of the city. Of the twenty-four cases reported during the fortnight ending March 28th, eleven were associated in two groups, of which the first comprised six cases, all confined to a carter and his family, residing in the northern district of the city, while the second included five compositors, all employed in one office, but living in different parts of the town. The first of these latter, when discovered, said an apprentice had been absent two days, a fortnight ago, and on his return he remembered seeing on his arms, as he went about with his sleeves rolled up, spots just like those on himself. When this apprentice was examined, the stains of the modified small-pox eruption were still visible, and further enquiry showed that he belonged to a family living on a stair from which several cases had been removed, and in which re-vaccination had been declined by the other inmates. Dr. Russell has very properly drawn attention to these cases, as they illustrate well the insidious and obscure paths by which small-pox spreads; and he draws from them the important conclusions that, when small-pox is threatening, any cutaneous eruption should be regarded with suspicion, not alone by persons who may be so attacked, but also by their employers and foremen: further, that the only safety lies in re-vaccination for those brought into contact with the disease, no matter how trifling and mild the cases may have been.

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IRELAND.

BELFAST ROYAL HOSPITAL.

IT is intended to hold a bazaar and fancy fair, in aid of the funds of this institution, in the coming winter; and last week a preliminary meeting took place of the female assistants connected with the large firms in Belfast, for the purpose of taking the necessary steps for supporting so desirable a project. It was arranged that, in addition to the special tables provided by separate firms, there should be one large general table, to which the contributions of the working classes should be sent, and that it should have a prominent place at the bazaar. It was also decided, in addition, that collecting-cards should be issued from the hospital, and furnished by the collector to all the works in town, so that thousands of the workpeople should try to raise a large sum of money in small subscriptions, the amount thus contributed to be credited to their table.

LUNATICS IN THE CORK WORKHOUSE.

DR. NUGENT, Inspector of Lunatic Asylums, has reported very favourably of the condition of the lunatic patients in the Cork Workhouse. They are 151 in number; and he states that they are all carefully attended to, and their various dormitories well ventilated.

ADULTERATION IN THE COUNTY DOWN.

DR. CAMERON, analyst for the county, in a recent report, states that there has been a remarkable improvement in the purity and quality of the articles submitted to him for analysis last half-year, as compared with previous periods. At first, the proportion of articles sent for analysis which proved to be adulterated was nearly 20 per cent.; but last half-year it was only 5 per cent.

THE SPREAD OF INFECTIOUS DISEASES.

DR. MOLONY of Sligo has recently forwarded a memorial, signed by eighteen medical officers of health, and which has been approved of by the sanitary authorities of the Sligo, Boyle, and Carrick-on-Shannon Unions, to the Commissioners of National Education, in reference to the spread of infectious diseases in the Irish National Schools. The memorial points out that, in rural districts, the spreading of infectious diseases to which children are liable is often due to the recklessness or ignorance of parents who send their children to school from homes in which scarlatina, whooping-cough, or measles, etc., may exist, thereby making the school a centre of contagion, whereby the lives of children from healthy homes are endangered, and often sacrificed. The memorialists believe that, owing to the present system of payment by "results" to school-teachers, it could hardly be expected that they would use any exertion to carry out rules under the Public Health Act which refer to the prevention of the spread of infectious diseases, as, by their doing so, their interests would be considerably injured. As regards this latter, the Commissioners have stated that, in the case of any national school closed on the certificate of a sanitary officer, they have always treated the teaching-staff with the utmost consideration compatible with their rules. The memorialists, however, are of opinion, and most will agree with them, that until some system of medical inspection of schools is established, and the school-teachers are required to report to the medical inspector whenever they become aware of an outbreak of infectious diseases dangerous to life, either in the vicinity of the school or the homes of their pupils, the public health will suffer, and human lives will be lost.

THE LATE CHARLES BLAKE LEWIS,

SURGEON, A.M.D.

IT is proposed, we read in the *Indian Medical Journal*, by several friends of the late Surgeon C. B. Lewis, Army Medical Department, to erect to his memory, in the chapel of King's College medical school, a memorial brass. We need scarcely recall, to any of our readers who had the value and honour of his friendship, his genial and cheery comradeship, his devotion to that military career which has found so untimely an end, and his prowess in the athletic world. He lost his life from cholera in Egypt. He would probably have still been living had he not persisted in remaining at his duty in the cholera camp, when the seeds of the disease were already in him. Subscriptions will be received either by the Secretary of the North-Western Provinces and Oudh Branch of the British Medical Association at Allahabad, or by Surgeon Andrew Duncan, 1st Bengal Cavalry, Rawal Pindi. The subscription-list will be open for one month.

THE TERCENTENARY OF EDINBURGH UNIVERSITY.

A CORRESPONDENT writes: The University of Edinburgh, the tercentenary of which has this week already been the occasion of much festivity, and is the subject of a great demonstration now commencing, is the youngest of the Scotch universities, having been founded by James VI in 1581. It was not, however, until the latter half of the seventeenth century that the foundations were laid on which was reared in the early part of the next century the great medical school of this university. From an extended and able series of preliminary articles in the *Scotsman*, I cull some particulars to which Edinburgh graduates and others of the medical profession will be glad to refer.

The School of Medicine in the University of Edinburgh was the creation, not of the patrons or senatus of the College, but of those who carried on the craft of healing in Edinburgh; and due to their desire for better and more systematic education for the profession. From the beginning of the sixteenth century, the Guild of Chirurgeons had been one of the most important in the City of Edinburgh; and from James VI's time down until the Reform Bill, the Deacon of the Chirurgeons and his successor, the President of the College of Surgeons, sat in the Edinburgh Town Council. During the sixteenth century, the members of the Guild in Scotland, as in England, combined bone-setting with hair-cutting (barber-surgeons); but in 1722, the barbers set up a guild for themselves. Harvey's publication of his theory of the circulation of the blood, in 1628, gave a great impulse to medicine south of the Tweed, which more slowly reached the north.

The names of Sir Robert Sibbald and Pitcairn will be remembered as being the foremost of the medical reformers of this time. Sibbald, about 1666, was instrumental in establishing the Botanic Gardens; and, in 1681, with Pitcairn and others, founded the College of Physicians. The next step toward securing better medical education was taken by the College of Surgeons. In 1694 the Guild of Chirurgeons obtained a charter, and in 1695 an Act of the Scottish Parliament gave the chirurgeon-apothecaries power to examine "all who practise anatomy, surgery, or pharmacy in the three Lothians, and the counties of Peebles, Selkirk, Roxburgh, Berwick and Fife." In the same year in which William III granted the charter, systematic instruction in anatomy began. The Corporation of Surgeons was in this matter rather forestalled by an enterprising member of their society, Alex. Monteath, who obtained, on October 24th, 1694, a grant from the Town Council of "those bodies that dye in the Correction-House," and of "the bodies of foundlings that dye upon the breast." The members of the corporation made a similar request ten days after; but the rival schools did not long continue in opposition, as Monteath retired from the field. In 1597, the surgeons built a new hall, on the grounds of the Blackfriars, immediately to the south of the old High School. In this quaint house, with its queer octagonal-shaped wings, the Edinburgh school of medicine saw the light. At first, the lectures on anatomy were delivered by various members of the Corporation. The Town Council regulations allowed a subject to be kept for ten days only, and each day a different member of the "Surgeons" delivered a demonstration on a fourth part of the body (*see* Professor Struther's *Edinburgh Anatomical School*), but in 1705, the course was altered, and the Corporation appointed one of their number, Robert Elliot, as sole lecturer; and he was followed by Drummond and M'Gill. In 1720 the real founder of scientific medical teaching in Scotland, Alexander Monro, appeared on the scene. He it was who, more than any other man, helped to build up the medical school of Edinburgh; he was only 23 years of age when he began his career as a teacher. Alexander Monro began lecturing in October 1720 in Surgeons' Hall, although he was recognised by the Town Council as Professor, and received from it a salary of £15 per annum. The Town Council granted Monro a "theatre for dissections" within the College buildings; and he removed thither from the Surgeons' Hall.

In 1726, an even more important advance was made. The Town Council nominated Andrew Sinclair and John Rutherford Professors of the Theory and Practice of Medicine, and Andrew Plummer and John Innes Professors of Medicine and Chemistry in the College of Edinburgh, recounting that they had been teaching for some time previously with success, under the patronage of the Council. The minute then gives these four professors "full power to examine candidates, and to do every other thing requisite and necessary to the graduation of doctors of medicine, as amply and fully, and with all the solemnities, that the same is practised and done by the Professors of Medicine in any College or University whatsoever."

Thus three important steps were made toward the formation of a medical school—the founding of the Physic Gardens, the beginning of the School of Anatomy, and the institution of medical degrees. There was yet a fourth step to be taken before the school was fully equipped for teaching—the institution of a great hospital. This important work was carried out through the energy of two most remarkable men—Professor Monro and Provost Drummond.

Professor Drummond was Provost in 1726, when the Medical Faculty was instituted; and, until his death in 1766, he continued to watch over and to foster the town's College. Of all the services he conferred on it, perhaps none is greater than the share which he took in promoting the building of the Edinburgh Royal Infirmary. In 1721, the year after Monro commenced teaching in the College of Surgeons, a futile attempt was made to start an hospital. Four years later, the College of Physicians took the matter up, and commenced collecting funds, and gradually obtained sufficient money to enable it to open a small house for the accommodation of patients, in August 1729. This hospital was attended gratuitously by six surgeons, foremost among whom was Alexander Monro. The stock of the infirmary gradually increased, so that the managers were warranted in applying for a charter, which was granted by George II, on August 25th, 1736. It was then resolved to proceed with a larger hospital, and, in August 1738, the foundation was laid of that old building in Infirmary Street, in which so much sickness and pain has been relieved.

The infirmary, as opened in 1741, was certainly a noble institution to have been created in a town which cannot then have numbered 40,000 inhabitants, and was certainly more in keeping with the lofty ideas of its founders than with the size of the city of Edinburgh. It contained accommodation, in the house which Edinburgh students know so well, for 228 beds, "besides cells for mad people," consulting-rooms for physicians and surgeons, waiting-rooms for students, and a theatre "where upwards of 200 students may see chirurgical operations."

The celebration of the tercentenary of the University has been an occasion of large and general interest, and delegates have been in attendance from most European countries. The proceedings commenced on Tuesday with the students' graduation ceremonial, when Lord Inglis, the Lord Chancellor of the University, presided, supported by Sir Alexander Grant, and an address to the graduates was delivered by Professor Calderwood. The proceedings on Wednesday opened with a service in St. Giles's Cathedral, the arrangements being of a brilliant and impressive character. A large body of distinguished visitors, among whom were M. Pasteur, Sir James Paget, Sir J. Risdon Bennett, Professor Helmholtz, Professor Virchow, and the members of the Royal Colleges of Physicians and Surgeons, joined in the procession. At a public luncheon given in the afternoon by the Principal and the professors of the medical faculty, Sir Alexander Grant stated that £130,000 had been subscribed by private friends for the new medical schools, and this sum had been augmented by the Government. Amongst the speakers were Sir James Paget, Dr. Billings (New York), and Sir Joseph Lister. The proceedings throughout the week have been one continued series of receptions, banquets, balls, dramatic entertainments, etc., and the public and other buildings have been lavishly decorated.

I shall give you next week the full list of the medical delegates who attend to represent their respective universities, as well as those who have received honorary degrees. St. Andrew's University is represented by Mackintosh and Bell Pettigrew; Glasgow and Aberdeen, by Cleland, Ogston, Stirling, Struthers, Hay, Hamilton; from London, Sir Wm. Jenner, Sir Andrew Clark, Sir William Bowman, Mr. Marshall, Mr. Erichsen, Sir James Paget, and Sir Joseph Lister have arrived or are expected, as well as Owen, Huxley, and Tyndall; from France, Pasteur, Charcot, Ball, and Bert; from other countries, Virchow, Donders, Helmholtz, Saxtorph, and Recklinghausen. Sieveking, Maudsley, Acland, Bristowe, Carpenter, Hutchinson, Brunton, Ferrier, and Billings from America, have all either arrived or are expected.

On Thursday morning the conferring of honorary degrees on the chief members of the world of science, literature and art, took place in the United Presbyterian Synod Hall, which was completely filled. The Chancellor presided. The delegates from universities and other learned bodies presented congratulatory addresses. Honorary degrees in divinity and law were conferred on many of the most eminent men, many of the latter on members of the medical profession. Chancellor Inglis read a congratulatory telegram from the Prince of Wales, and delivered an address heartily welcoming the representatives from all parts of the world. He sketched briefly the history of the university, pointing out what had most conduced to its success during three hundred years, and mentioning the men who had most contributed to it.

The Royal College of Physicians of Edinburgh entertained a number of guests at luncheon in the hall of the College after the graduation ceremonial.

The following congratulatory address of the Royal College of Surgeons of England was presented on the 17th instant to the University of Edinburgh:—"The President, Vice-Presidents, and Council of the Royal College of Surgeons of England hereby offer their warmest congratulations to the University of Edinburgh on its attaining the third hundredth year of its existence. They avail themselves of this auspicious occasion to acknowledge the great public benefits rendered in the past by this ancient university, in the promotion of education, the encouragement of learning, and the cultivation of science. They desire especially to accentuate their acknowledgment of the prominent position held by the university in whatever relates to the accumulation and diffusion of medical and surgical knowledge. They trust, in the centuries to come, the University of Edinburgh may, with other like institutions, long pursue its honourable career and fulfil its high destiny."

At a meeting of the Senate of the University of Dublin, held on Saturday last, an address to the University of Edinburgh, on the occasion of its tercentenary, was adopted. Allusion was made in the address to the connection between the two universities in their respective ages and their aims of study, especially in the study of medicine, in the following terms: "Inter diem natalicium vestræ Academiæ et nostræ non multo plus quam lustrum unum intercessit. Ut ætate pæne æquales, ita studiorum similitudine connexæ, per tot annorum continuitatem rei medicæ pariter incubuimus; pariter, disciplina empirica neglecta, ad medicinam promovendam Scientias quæ vocantur Naturales, quasi ancillas, adscivimus. Sorori juniori liceat in hoc gloriari, quod sit ambabus facies, ut non una, ita 'Nec diversa tamen, qualem decet esse sororum.' Nec rei tantum medicæ, sed literarum et scientiarum, cultu, et bonis, artibus universis, inclaruit Edina." And the Rev. Dr. Haughton, in speaking to the motion for the adoption of the address, said that the Universities of Edinburgh and Dublin were born within seven years of each other—Edinburgh preceding Dublin by seven years, the former having been established by James VI of Scotland, afterwards the English King James I; while Dublin University, as everyone knew, was founded by the "lion-hearted" daughter of Henry VIII, Queen Elizabeth. The two universities had certain objects in common, which they carried out; and one of the most important objects—to which attention was called in the address—was the early recognition of the importance of modern medicine. Up to the foundation of the two Universities of Edinburgh and Dublin, medical science was empirical—its professors were followers of Hippocrates and Galen; but, about the year 1700, these two universities became aware that the medical science of the future must be founded on anatomy, chemistry, and the natural sciences; and it was an interesting fact that, whereas in Edinburgh the study of practical anatomy commenced in 1705, it began in Dublin in 1711, so that Dublin followed Edinburgh in that respect at about the same interval of years as was between the dates of their respective foundations. From that time—now near 170 years—the two Universities of Edinburgh and Dublin claimed to have taken precedence of all other universities, either in the United Kingdom or the colonies, in the scientific treatment of medicine.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following report from the Board of Examiners of the Royal College of Surgeons was adopted by the Council of that institution on Wednesday last.

The Committee has to report to the Council that the present regulations of the College relating to candidates rejected at the primary examinations for the diploma of member, whereby such candidates before admission to re-examination are required to produce additional certificates of anatomical and physiological study, are inconsistent with the regulations of the scheme of February, 1883, for constituting an Examining Board in England by the Royal College of Physicians and this College, in which it has been agreed that the rejected candidates shall be admissible to re-examination after the lapse of a certain period without the production of any further certificates.

The Committee therefore recommends that paragraphs 8 and 9, Section IV, of the Regulations for the Diploma of Member, as follows, be rescinded, viz.:

8. A candidate referred on the Primary Examination is required, prior to his admission to re-examination, to produce a certificate that he has pursued, to the satisfaction of his teachers, his anatomical and physiological studies in a recognised medical school during not less than three months subsequently to the date of his reference.

9. A candidate referred upon the Primary Examination, who shall not obtain more than half of the total minimum number of marks, is not readmitted to examination until after the lapse of six months, and is then required to produce a certificate of the performance of dissections during not less than three months, and of having pursued, to the satisfaction of his teachers, his anatomical and physiological studies in a recognised medical school during six months subsequently to the date of his reference.

And the Committee further recommends the Council to adopt the following rule, relating to candidates rejected at the primary examination, in lieu of the foregoing paragraphs 8 and 9, Section IV of the regulations, viz.:

8. A candidate referred on the primary examination is not admitted to re-examination until after the lapse of a period of not less than three months from the date of his reference; and, if he shall not obtain more than half of the total minimum number of marks, is not admitted to re-examination until after the lapse of six months from the date of his reference.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
IV*a*. Diphtheria, sanitary.
V. Syphilis, acquired.
V*a*. ,, inherited.
VI. Acute Gout.

URGENT.—*The Committee needs 150 more cases of Pneumonia, and hopes that they will be sent in as soon as possible.*

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
161A, Strand, W.C.

September, 1883.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH WESTERN PROVINCES AND OUDH BRANCH. Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

NORTH OF IRELAND BRANCH. A general meeting of this Branch will be held in the Belfast Royal Hospital on Thursday, April 24th, at 12 o'clock. Members desirous of reading papers are requested to communicate as early as possible with the Honorary Secretary. ALEX. DEMPSEY, M.D., 26, Clifton Street, Belfast.—April 2nd, 1884.

NORTH OF ENGLAND BRANCH.—The spring meeting of this Branch will be held at Newcastle-on-Tyne on Wednesday, April 30th. Members desirous of reading papers or exhibiting patients or specimens are requested to signify their intention to the Secretary at their earliest convenience. DAVID DRUMMOND, M.D., Honorary Secretary, Newcastle-on-Tyne. April 8th, 1884.

YORKSHIRE BRANCH. The spring meeting will be held at the Beckett Hospital, Barnsley, on Wednesday, April [illegible] at [illegible] P.M. Members intending to read papers are requested to communicate at once with ARTHUR JACKSON, Honorary Secretary, Sheffield.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—A special meeting will be held at the Medical Institute, on Thursday, April 24th. The President, Dr. Foster, will take the chair at [illegible] P.M. Dr. Burney Yeo (London) will open a discussion on Pneumonia.—G. RICKARDS, Honorary Secretary, 14, Newhall Street, Birmingham. —April 14th, 1884.

SOUTH-WESTERN BRANCH.—The annual meeting of this Branch will be held at Exeter, on Wednesday, May 21st. The President-elect, Dr. Lewis Shapter, kindly invites all members to lunch at his house in the Barnfield, from 12 to 1.30 P.M. The order of business will be as follows: 1.15 P.M., Meeting of Council at the Devon and Exeter Hospital; 1.30 P.M., General Meeting at the Devon and Exeter Hospital. The annual dinner will take place at Pople's New London Hotel, at 6 P.M. The Exhibition of the Devon County Agricultural Association opens on May 21st, so opportunity of visiting the show will be afforded to members attending the meeting. Members intending to read papers or make communications at the meeting are requested to give notice to S. REES PHILIPPS, M.D., Honorary Secretary, Wonford House, Exeter.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.—The annual meeting of this District will be held at the Sandown Hotel, Sandown, on Thursday, April 24th, at 4 P.M.; James Neal, M.D., President, in the chair. Agenda—1. Annual Statement of Accounts and Election of Officers. 2. An Address by the President-elect, J. Groves, M.D. 3. Paracentesis with Slow Evacuation; with Exhibition of Instruments: J. Ward Cousins, M.D. 4. Calculi recently removed by Lithotrity: J. Ward Cousins, M.D. Gentlemen who are desirous of introducing patients, exhibiting pathological specimens, or making communications, are requested to signify their intention at once to the Honorary Secretary. Dinner at Sandown Hotel, at 6 P.M.; charge, 6s., exclusive of wine. Members intending to dine are requested to send in their names to the Honorary Secretary before Tuesday, the 22nd instant.—W. E. GREEN, Honorary Secretary.

SOUTH WALES AND MONMOUTHSHIRE BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at Llanelly on April 2nd; EBENEZER DAVIES, Esq. (President), and ten members being present.

New Members.—Messrs. George Fisher, Aberdare; James Sheehy, Victoria, Ebbw Vale; Robert S. Stewart, M.B., County Asylum, Bridgend; William H. Evans, Cardiff; E. M. Knowling, M.B., Tenby; and H. E. Williams, Newport, were elected members of the Association and Branch; and Mr. Richard Edmunds of Cwmbran, near Newport, a member of the Branch.

Communications.—The following communications were read.

1. Dr. Talpade (Morriston) read a paper on Asiatic Cholera, supporting the theory of its non-contagious character, by the relation of his personal experiences on board emigrant ships from Calcutta to Assam. He also considered that water was rarely a vehicle for the poison; and expressed his opinion that the unsanitary conditions under which the people lived was an important factor in producing the disease; and that the determining cause was to be found in a peculiar atmospheric condition, some of the characters of which were an oppressive, still air, laden with moisture and deficient in ozone.—The President, Mr. Latimer, and others, took part in the discussion that followed.

2. Mr. D. Arthur Davies (Swansea) read short notes on several cases of Migraine, with comments relating chiefly to treatment; and expressed a hope that the attention lately paid to this complaint, and allied disorders of the nervous system, by pathologists, clinical observers, and others, might soon result in our being able to apply our remedies more scientifically, and with more confidence of success.

3. Mr. J. Farrant Fry (Swansea) read notes of a case of Aortic Aneurysm. The *post mortem* specimen was shown. A male, aged 33, had syphilis. A pulsating tumour gradually formed from the aorta, eroding the costal cartilages, etc. Paralysis of the vocal cords was well seen with the laryngoscope. Death occurred from rupture into the left pleura. After death, three aneurysms of the aorta were found, the vessel itself being greatly diseased. Mr. Fry mentioned, as points of interest: 1, that bleeding into the pleura was going on for some hours before death, the man expressing himself better, and the prominent swelling in the chest steadily disappearing; 2, that though the man had had a severe attack of rheumatic fever twelve years before, there was no disease of valves (mitral) nor of the pericardium.

WEST SOMERSET BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at the Railway Hotel, Taunton, on Thursday, April 3rd, at 5 P.M.; J. D. ADAMS, M.D., President, in the chair. Eighteen members and one visitor attended.

By-Laws.—A letter from Mr. Fowke, General Secretary of the Association, dated December 4th, 1883, requesting that the by-laws of the Branch may be revised to bring them into accordance with the altered articles and by-laws of the Association, and that a copy may then be sent to him for the approval of the Council, was read.

It was resolved: "That Mr. Fowke's letter be referred to a committee, consisting of the following gentlemen: Mr. Alford, Mr. Iles, and Dr. Kelly; and that they be requested to consider and report upon the subject."

Homœopaths.—A letter from Mr. C. G. Wheelhouse, President of the Council, dated February 29th, 1884, asking the opinion of the Branch with regard to (1st) the admission of homœopaths as members of the Association; and (2nd) the retention of those homœopaths who are already members, was read.

It was resolved: "That the Branch thinks it undesirable to re-open and discuss any questions connected with homœopaths."

Medical Reform.—A letter from Dr. Waters (Chester), detailing steps taken by the Reform Committee in relation to the Medical Bill now before Parliament, and urging that the Association should make strenuous efforts to secure its being passed, was read. Dr. Kelly also called attention to the form of petition, ready for signature, which had been sent to every member, in the JOURNAL of March 15th.

It was resolved: "That Dr. Adams, as President of the Branch and chairman of this meeting, be requested to write to the County Members for West Somerset, and convey to them that the eighteen medical practitioners here assembled, and being all residents in the district, are very desirous that the Medical Bill now before Parliament should become law; and beg to express an earnest hope that Mr. Stanley and Mr. Elton, as their representatives, will give the Bill all the support in their power."

It was further resolved: "That Dr. Kelly, as Honorary Secretary of the Branch, be requested to write to Sir H. James and Mr. Allsopp, the Borough Members for Taunton, to the same effect."

Representative of the Branch on the Council of the Association.—A letter from Mr. Fowke, dated February 21st, 1884, drawing attention to the new by-laws, under which it becomes necessary that the name of the representative chosen for the ensuing year must be returned to him before June 30th, was read.

It was resolved: "That John Prankerd, Esq., of Langport, be elected as representative of this Branch on the Council of the Association for the ensuing year."

Discussion.—After dinner, the subject of Chorea, which had been selected by the Council as being one of those on which the Collective Investigation Committee desired information, and with a view of promoting and encouraging the useful work of that committee, was introduced; and the meeting was invited to answer the following questions: "What is your experience as to the pathological anatomy of chorea, with special reference to concomitant heart-disease? and, What treatment have you found most useful?" Dr. Long Fox of Clifton, who kindly undertook to open the discussion, read a very interesting paper, in which he dealt systematically with the above questions, stating concisely the cream of all that had been written by the best authors on the subject, as well as giving the result of his own still more valuable observations and investigations. He kept the meeting in wrapt attention for more than half an hour. Answers were then given by most of the other gentlemen round the table, and Dr. Fox made some observations in reply.

Vote of Thanks.—A cordial vote of thanks to Dr. Fox was passed. Dr. Fox intimated that his paper, or a portion of it, would probably appear shortly in the *Bristol Medico-Chirurgical Journal.*

Communications.—The following communications were made and discussed.

1. A case of *Ante mortem* Clot in the Aorta, by Engledue Prideaux, Esq., and preparation of the same exhibited.

2. Treatment of Antiversion of the Uterus by a new form of Pessary. The pessary, designed by Mr. Prideaux, was exhibited and explained by him.

3. A case of Pernicious Anæmia, by George Cordwent, M.D.

4. A successful case of Induction of Labour at the Eighth Month, by T. J. Ollerhead, Esq.

BRITISH MEDICAL ASSOCIATION.

FIFTY-SECOND ANNUAL MEETING.

THE Fifty-second Annual Meeting of the British Medical Association will be held at Belfast, on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1884.

President: A. T. H. WATERS, M.D., F.R.C.P., Senior Physician to the Royal Infirmary, Liverpool.

President-elect: JAMES CUMING, M.D., F.K.Q.C.P., Physician to the Royal Hospital, Belfast.

An Address in Medicine will be delivered by Sir ANDREW CLARK, Bart., M.D., Physician to the London Hospital.

An Address in Physiology will be delivered by PETER REDFERN, M.D., Professor of Anatomy and Physiology in Queen's College, Belfast.

An Address in Obstetric Medicine will be delivered by GEORGE H. KIDD, M.D., Consulting Obstetric Surgeon to the Richmond and Hardwick Hospitals, Dublin.

SECTION A. MEDICINE.—*President:* J. W. T. Smith, M.D. *Vice-Presidents:* G. F. Duffey, M.D., Dublin; Alexander Davidson, M.D., Liverpool. *Secretaries:* Richard Ross, M.D., 7, Wellington Place, Belfast; Thomas Barlow, M.D., 10, Montague Street, Russell Square, London.

SECTION B. SURGERY.—*President:* Sir William Mac Cormac, London. *Vice-Presidents:* J. K. Maconchy, M.B., Downpatrick; J. W. Browne, M.D., Belfast; John Chiene, F.R.C.S., Edinburgh. *Secretaries:* John Fagan, F.R.C.S., 1, Glengall Place, Belfast; Bennett May, F.R.C.S., 16, Temple Row, Birmingham.

SECTION C. OBSTETRIC MEDICINE.—*President:* Clement Godson, M.D., London. *Vice-Presidents:* Sir William Millar, M.B., Londonderry; William Stephenson, M.D., Aberdeen. *Secretaries:* W. Walter, M.D., 20, St. John Street, Manchester; Brice Smyth, M.B., 13, College Square, East, Belfast.

SECTION D. PUBLIC MEDICINE.—*President:* Charles Cameron, M.D., M.P. *Vice-Presidents:* John F. Hodges, M.D., Belfast; David Davies, M.R.C.S., Bristol. *Secretaries:* H. S. Purdon, M.D., 60, Pakenham Place, Belfast; Shirley Murphy, M.R.C.S., 158, Camden Road, London.

SECTION E. OPHTHALMOLOGY.—*President:* W. A. McKeown, M.D., Belfast. *Vice-Presidents:* W. A. Brailey, M.D., London; Edgar Browne, M.D., Liverpool. *Secretaries:* Joseph Nelson, M.D., 1, Glengall Place, Belfast; R. N. Hartley, M.B., 38, Cookridge Street, Leeds.

SECTION F. PHYSIOLOGY AND PATHOLOGY.—*President:* W. S. Greenfield, M.D., Edinburgh; *Vice-Presidents:* J. J. Charles, M.D., Cork; D. C. McVail, M.D., Glasgow. *Secretaries:* A. H. Young, F.R.C.S., 96, Mosley Street, Manchester; T. Sinclair, M.D., 15, College Square, East, Belfast; R. S. Anderson, M.D., Galway.

SECTION G. THERAPEUTICS.—*President:* Thomas John Maclagan, M.D., London. *Vice-Presidents:* Matthew Hay, M.D., Aberdeen; W. Whitla, M.D., Belfast; Walter Smith, M.D., Dublin. *Secretaries:* George Gray, M.D., Castlewellan, County Down, Ireland; W. Murrell, M.D., 38, Weymouth Street, London.

SECTION H. PSYCHOLOGY.—*President:* G. H. Savage, M.D., London. *Vice-Presidents:* Daniel Hack Tuke, M.D., London; Isaac Ashe, M.D., Dundrum. *Secretaries:* A. S. Merrick, M.D., District Hospital for Insane, Belfast; S. Rees Philipps, M.D., Wonford House, Exeter.

Local Secretaries: John Moore, M.D., 2, Carlisle Terrace, Belfast; Alexander Dempsey, M.D., 26, Clifton Street, Belfast; John W. Byers, M.D., Lower Crescent, Belfast.

Treasurer: William Whitla, M.D., Belfast.

TUESDAY, JULY 29TH, 1884.

2 P.M.—Meeting of Council.
3 P.M.—General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M.—General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock.

WEDNESDAY, JULY 30TH, 1884.

9.30 A.M. Meeting of Council.
11.0 A.M.—Second General Meeting. Address in Medicine.
2 to 5 P.M. Sectional Meetings.

THURSDAY, JULY 31ST, 1884.

9.30 A.M. Meeting of Council.
11 A.M.—Third General Meeting. Address in Physiology.
2 to 5 P.M. Sectional Meetings.
6.30 P.M. Public Dinner.

FRIDAY, AUGUST 1ST, 1884.

10 A.M. Address in Obstetric Medicine.
11 A.M.—Sectional Meetings.
2 P.M. Concluding General Meeting.

SATURDAY, AUGUST 2ND, 1884.

Excursions.

March 7th, 1884. FRANCIS FOWKE, *General Secretary.*

A MEDICAL HOME IN ROME. For the benefit of the 15,000 foreigners who visit Rome each year a small medical home is to be established in a house with a large garden in the best and healthiest part of the town. This *casa di salute*, or house of health, provided with every requisite for a traveller suddenly seized with illness, will be a great boon very much needed by every nationality, and especially deserving of the support of English travellers, who form so large a part of the foreign visitors to Rome.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Obliteration of the Biliary Ducts without Jaundice.—Chloride of Methylene.—Nitrous Oxide and Oxygen for Prolonged Anæsthetisation.—A Mixture of Ether and Air as an Anæsthetic.—The Toxic Power of Alcohols.—Peritoneal Transfusion.—The Danger of Purgatives after the Third Week in Enteric Fever.—Enteric Fever contagious in Military Hospitals.—The Paris Hospitals.—Medical Visits to the Poor.—Treatise on Sanitation.—Danger of hastily Burying Dead Cholera-Patients.—Medical Congress at Copenhagen.—Consumption of Tobacco in France.

M. HANOT, at a recent meeting of the Biological Society, described a case of obliteration of the biliary ducts unattended by jaundice. The stools were perfectly colourless; the colour of the integuments remained normal. The necropsy furnished evidence of the obliteration of the ductus communis choledochus; also degeneration of the liver and the intrahepatic vessels. Suppression of the biliary secretion, apparently due to the pathological condition of the liver, explains the absence of an icteric tint of the integuments. At the Tenon Hospital, a somewhat similar case was treated. The stools of the patient were colourless, but there was no sign of icterus. The liver was greatly increased in size. Abdominal tympanites was also present. This latter symptom M. Hanot attributed to paralysis of the coats of the intestines, resulting from the suppression of the bile, which, by contact, furnishes a stimulus. M. Hanot regarded the obliteration of the biliary ducts as improbable in this case, and believed the absence of an icteric tint to be due to the suppression of the biliary secretion—a veritable "acholia." The general condition of the patient was very satisfactory. M. Albert Robin made a careful analysis of the urine of the patient at the Hospital Tenon, and came to the conclusion that biliary secretion was effected but imperfectly; there was a total absence of pigment.

MM. Regnauld and Villejean, in a memoir entitled "Recherches Pharmacologiques sur le Chlorure de Methylene," affirm that the substance sold under this name is frequently, if not always, a mixture of chloroform and methyl-alcohol. The physiological action of the true chloride of methylene (CH_2Cl_2) resembles that of chloroform only in producing insensibility. Anæsthesia resulting from chloroform is accompanied by muscular resolution. When chloride of methylene is the agent, epileptiform and choreic crises are constantly present.

M. Paul Bert stated, in a communication to the Biological Society, last May, that anæsthesia can be obtained by administering nitrous oxide at a normal pressure, alternately with a mixture of nitrous oxide and oxygen. Dr. Aubeau, in a recent communication to the Society on the same subject, states that he has found that a mixture of 6, 5, or 4 litres of oxygen, and 100 litres of nitrous oxide, produces anæsthesia in the human subject instantaneously. Its action on man is more rapid than on dogs. Prolonged operations can be performed whilst the patient is kept anæsthetised by administering, by M. Bert's method, nitrous oxide, at a normal pressure, alternately with the mixture of oxygen and nitrous oxide already stated. M. H. Billard has, in accordance with the directions of Dr. Aubeau, constructed an apparatus for administering the anæsthetic.

M. Paul Bert has recently made a series of experiments to determine the advantage of ether mixed with air as an anæsthetic. A mixture of twenty grammes of ether with 100 litres of air, kills a dog in 2 hours 25 minutes; 25 grammes of ether and 100 litres of air, in 2 hours 15 minutes; 30 grammes of ether to 100 litres, in 43 minutes; 50 grammes to 100 litres, in 38 minutes. M. Bert has observed that the expansion-movement of respiration gradually diminishes. The heart-beats are normal. The animals exhibited a state of intense excitement, which lasted five minutes.

M. Dujardin-Beaumetz, in a memoir on the toxic power which alcohols are capable of exerting, has described the general effects [illegible] on pigs to be: sanguinary diarrhœa, vomiting, congestion, and hæmorrhage of the intestines; little or no gastritis; congestion of the liver; fatty kidneys, a normal condition in pigs; congestion of the lungs proceeding from two causes, alcoholic irritation, and inertia of the animals under experiment; breathlessness, atheromatous degeneration of the aorta, tremblings, weakness, hyperæsthesia, [illegible], and an unhealthy state of the cellular tissue. The author considers ethylic alcohol relatively harmless, but potato alcohol decidedly dangerous. Alcohol, according to M. Dujardin-Beaumetz, aids waste; it renders combustion slower by robbing blood-corpuscles of a certain quantity of oxygen; hence the antithermic property of alcohols, which reaches its maximum in a poisonous dose and destroys the hæmoglobin and the blood-corpuscles. Alcohol has a direct effect on the nerve-centres, sometimes determining tonicity, at others the condition described as drunkenness.

M. G. Hayem has injected dogs' blood into the peritoneum of goats. A few hours after the operation, the cerebral blood-vessels of the animal presented a large proportion of dog's blood-corpuscles; which are more than twice as large as those of the goat, and can be easily distinguished. Whilst absorption is in full activity, the dog's red corpuscles are observed circulating in the thoracic duct of the animal under experiment. The lymphatics absorb a considerable portion of the blood injected, and the presence of the corpuscles in the thoracic duct proves that they are not destroyed in the lymphatic glands. The value of M. Hayem's experiments has been practically tested by some Paris surgeons. M. Richet in a note to the Académie des Sciences, recognised the importance of M. Hayem's experiments, but observed that clinical facts do not entirely agree with the experimental results. In the human peritoneum absorption is effected very slowly; when blood escapes into the peritoneum during operations, it accumulates without presenting any marked evidence of absorption.

M. Mahent, of Caen, has read before the Académie de Médecine a memoir, in which he points out that purgatives are necessary at the onset of typhoid fever, but should be administered with the greatest prudence after the third week, when intestinal ulceration may be present.

M. Laveran communicates to the Société Médicale des Hôpitaux an article which has appeared in the *Archives de Médecine Militaire*, in which he has collected a number of cases demonstrating that enteric fever is directly contagious in military hospitals, and pointing out the urgent necessity for adopting preventive measures.

The *laïcisation* of the Paris hospitals has been hotly discussed at several of the recent meetings of the Municipal Council. At the meeting of the Council on April 4th, M. Quentin, Director of the Assistance Publique, treated the question in a logical and liberal spirit. He declared that *laïcisation* must continue, but it must be effected with prudence. At present there are more lay nurses than sisters of charity in the Paris hospitals. M. Quentin considers the establishment of lay nurses in hospitals a wise precaution, inasmuch as religious orders fluctuate; sometimes they reckon numerous devotees, at others only a few novices. It may also come to pass that the French Parliament will suppress religious orders. These possibilities must be guarded against. M. Pechon proposed that in consideration of the statement made by the Director of the Assistance Publique, the administration should be asked to replace in the Paris hospitals and medical asylums, during the year 1884, 150 sisters of charity by lay nurses, to be chosen from the municipal institutions organised for the training of nurses; and that the best *infirmières* from the Paris hospitals should be sent to the municipal schools to qualify themselves as accomplished nurses and matrons. The propositions were adopted by 43 votes against 6.

In a small treatise issued by the Société Française d'Hygiene, and crowned by them for merit, entitled *La Propriété de l'Individu et de la Maison*, Dr. E. Monin exposes with clearness the principles of hygiene, and also points out how they can be practically observed. M. Bouley has presented the work to the Académie des Sciences, and criticised it favourably.

M. Netter, in a letter to the Académie des Sciences, points out the danger of too hastily burying persons who appear to have died from cholera. They frequently present a condition which resembles the physical aspect of death.

The Minister of Public Instruction informs the Académie de Médecine that M. Trélat will represent the Ministry of Public Instruction at the International Medical Congress in Copenhagen.

In France, during the year 1883, 35,621,834 kilogrammes of tobacco were smoked, representing a money-value of £14,848,699 11s. 2½d.

PARKES MUSEUM.—At a meeting of the Council of the Parkes Museum, held on April 9th, the following gentlemen were elected members: The Rt. Hon. Sir Charles Dilke, Bart., M.P.; Sir T. H. Farrer, Bart.; Sir T. Spencer Wells, Bart.; Sir Henry Thring, K.C.B.; Dr. W. Roth, Surgeon-General of the Saxon Army; Mr. Francis Galton, F.R.S.; Dr. G. D'Arcy Adams; Dr. Hubert Airy; Mr. Benjamin Baker, C.E.; Mr. Charles Barry, F.S.A.; Mr. W. Cornwallis Cartwright, M.P.; Mr. Arthur Cates, F.R.I.B.A.; Mr. Charles Hancock, F.S.A.; Mr. J. Douglas Matthews; Mr. Ernest Turner, F.R.I.B.A.; Mr. A. M'Morran; Mr. S. F. Monier Williams; Mr. C. E. Paget; and Mr. Shadworth H. Hodgson.

AMERICA.

[FROM A SPECIAL CORRESPONDENT.]

The New Surgeon-General of the Navy.—Official Delegates to the International Health Exhibition and Medical Congress.—Army Medical Titles.—A New Health-Official.—The New and Old Code Parties.—Patent Medicine League.—Study of Physiology in Public Schools.—A Quack Analysis of Urine.—The Obsequies of Surgeon J. Marshall Ambler.

THERE has been great interest taken in the selection made of the new Surgeon-General of the Navy; some hope was entertained by the friends of Dr. Wales—who are many—that he would have been allowed to retain office for a second time; they have, however, been disappointed. Dr. F. M. Gunnell, who has been recently appointed to succeed Dr. Wales as Surgeon-General of the Navy, is a native of Washington, and a graduate of Georgetown University, and of the Columbian University, Washington. He stands high as a physician and as an officer, having served in the Medical Corps 35 years, 17 of which were spent at sea.

The following notice appears in the official orders of the army.

"*Medical Corps U.S. Army.*—Ordered to Europe: Lieutenant-Colonel Joseph B. Brown and Major John S. Billings, surgeons U.S. Army, will proceed to London (England) and to Copenhagen (Denmark) to attend the International Health Exhibition to be held at the former place in May next, and as delegates to the International Medical Congress which is to meet at the latter place in August next, and will include Berlin (Germany) in their route to and from Copenhagen."

You will notice the peculiar military designations of our medical officers, they receiving as prefixes the combatant designations of relative rank, which is thought important here, although I am told that it sounds strange in English ears. A Bill has been introduced by Mr. Logan before the Senate, entitled—"To define the title and duties of certain officers of the Medical Department of the Army." In effect, it makes the six medical officers who hold the rank of colonel to be styled assistant surgeons-general, and to rank in the order of seniority of dates of their commissions to that rank of colonel. The second section gives to the medical officers bearing rank as lieutenants-colonel the title of deputy surgeons-general.

Dr. Alfred Ludlow Carroll, of New Brighton, New York, an able and cultured physician and sanitarian, well known and I believe much esteemed in the British Medical Association, of which he is an enthusiastic admirer, as also of the BRITISH MEDICAL JOURNAL, has recently been elected Secretary to the New York State Board of Health to fill the vacancy occasioned by the death of Dr. Elisha Harris. The appointment is highly approved here.

There has, as you know probably, been a great commotion in the profession here for the last twelve months or more, owing to a division of opinion as to the maintenance of the "Old Code," which prohibits consultation with any but regular physicians. After stormy debates, which threatened to wreck the scientific prosperity of the New York Academy of Medecine, the subject has been tabooed there altogether. The New York State Medical Society has been rent in twain by the contending parties, and a new association of exclusive supporters of the "Old Code" has been formed; but now the *Medical Record* comes out with a charge—which is, however, energetically denied—that the newly elected president of this Association has been a party to the irregular consultations which it is formed to prevent. Much ill-blood has been created, and widespread dissensions. But so it must always be when principles have to be fought out sternly, and without compromise; and, in such a cause, sacrifices must be endured cheerfully.

The retail druggists have, it is announced here, formed an union to oppose the underselling of patent or proprietary medicines, and to maintain the list-price. As a large majority belong to the union, the wholesale houses have been compelled to fall in line, and hereafter the people will have to pay the printed price or do without their sure cures for rheumatism, consumption, and diabetes, liver-regulators, and universal panaceas in general. The reason for forming the union is briefly summed up in the following suggestive quotation. "The miserable practice of selling goods at starvation rates has led to the general adulteration of drugs, medicines, and foods. Dirt takes the place of food, inert matter is introduced into powdered drugs, whereby the therapeutic power of important medicinal agents is rendered ineffectual, the physician's skill is baffled, and the patient suffers."

On February 11th Mr. Blair introduced a Bill (No. 1484) to the Senate, which provides for the study of physiology and the effect of intoxicating, narcotic, and poisonous substances upon life, health, and welfare, by the pupils in the public schools of the territories and district of Columbia. The first section of this Bill simply reiterates the title, specifying in addition that the simple rules for the preservation of life and health shall be taught, and that the substances referred to are those in common use by the people. Section 2 reads: "That teachers in the public schools shall be qualified to teach accordingly, and suitable text-books shall be used to facilitate the study and instruction provided for in the first section of this Act; and such textbooks shall be subject to rejection from use if found to be objectionable by the Commissioners of Education."

We are much infested with quacks of every sort; we try, however, to get some amusement out of them, a slight consolation for all the harm they do us. At a recent meeting of the Medical Society of Columbia, the president laid before the Society an examination of urine, which a man, calling himself Dr. W. H. Hale, had made for a very intelligent patient. "Analysis of Urine.—Specific gravity, 120; excessive alaline; hippuric acid, 7 to 10 per cent; traces of nerve-casts; acid reaction; temperature, 93°.—W. H. HALE.—(True Copy.—MCARDLE.)"

The remains of the heroic J. Marshall Ambler, the medical officer who perished after glorious and noble deeds of self-denial and dutiful self-sacrifice in the Polar expedition of the ill-fated *Jeannette*, very recently arrived home under escort, and were buried with every mark of public esteem and regret, in his native town in the interior of Virginia. An extremely interesting obituary notice of this medical hero appears in your contemporary, the *American Medical Journal* (journal of the American Medical Association), which should be widely read. Such a name and such a fate belong to, and should be inscribed in the records of honour of the medical profession in every English-speaking country, and, indeed, throughout the civilised world.

CORRESPONDENCE.

THE MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

SIR,—Although I have not the honour to be a member of the medical profession, I sometimes have the privilege of seeing your interesting JOURNAL, and, from a somewhat long experience of the value of self-help, I have taken a lively interest in the proposed Medical Sickness, Annuity, and Life-Assurance Society from the commencement. I should not, however, have presumed to write to you, but that I am myself a member of a somewhat similar society, and I have been struck by a letter in your issue of March 24th, in which the writer complains that in a case of death nothing would be repaid to the family of the assured. But surely it is worth something more than the mere money-value of the premiums for ten or twenty years during which the assured may not have had any sickness, to have had during that time the absolute security that sick-pay was assured in case of need; and the Society, which has incurred the risk of being called upon to provide sick-pay, could hardly be expected to return any of the risk-money. In the department with which I have the honour of being connected, there is a provision by which all persons whose lives are assured in a particular office, can, if they please, assign any bonuses which may accrue to them to a particular society; and the society, in return for this, undertakes to pay to the widow or children of the member a fixed annuity, let the assured die when he may; but a member outliving his wife and children has no claim whatever upon the society which will obtain his bonuses. He has safely bridged over a number of years during any one of which, had he died, his wife or children would have been entitled to an annuity; and in return for this he is obliged to allow his bonuses to accumulate for the benefit of others.

If I might be allowed to add a few words, I should like to say that it seems to me, as an onlooker, a matter of regret and surprise that a large and self-denying body like the medical profession has been so long without a sickness assurance society; and still more so, that now that such a society has been established a much larger number have not joined it. It is apprehended that but few medical men omit to provide for their families by life-assurance in case of death. Is it much less necessary to make some provision for themselves in case of sickness? The proposed society may not be absolutely the best, but it seems to be the best possible, and the extreme caution with which it has been launched must commend itself to the judgment of all. Its promoters appear rightly determined to establish it upon sound actuarial principles. Surely such a society has claims to much more general support than it has hitherto received, its success should mark the dawn of a new era in the medical profession.—I am, sir, your obedient servant,

Z.

April 7th, 1884.

*** We insert the above letter as an expression of opinion from an observer who is precluded from membership; and we do so the more readily, as it successfully and briefly defines the true principles of mutual insurance against risk, about which there seems to be a good deal of misconception. We join in the hope that the membership may rapidly increase. Doubtless, many who had not previously looked into the matter are somewhat disappointed that the rates are higher than they, in their inexperience, anticipated; while it is known that others are awaiting the time, now nearly at hand, when the Society will, by the operation of the rules of payment, come into active financial operation, and be able to show a handsome invested balance. In the meantime a considerable number of members have joined in a comparatively short period, and good progress continues to be made; while, what is perhaps still more encouraging, inquiries and expressions of interest and approval are received so constantly as to point conclusively to the success of the Society.

EDUCATIONAL OVER-PRESSURE.

SIR,—May I be permitted to make one or two remarks suggested by your very able leader on educational over-pressure, which appeared in the JOURNAL of the 12th inst.

For some years it has seemed to me that the system of education adopted in this country was injudicious, unsuitable, and in certain instances positively injurious to health. Therefore I have long been an enemy to over-pressure, and on various occasions, both in public and private, ventured to express a decided opinion on the subject. And although that opinion was frequently ridiculed, it is satisfactory to find that at the present time corroboration has taken the place of ridicule.

On February 27th, 1884, the following memorial was presented to the Bradford School Board, signed by fifty-three medical men practising in Bradford (myself amongst the number).

"We the undersigned medical men of Bradford, believing that the evening brain-work is undesirable and frequently injurious to young children, most earnestly beg the Board to give effect to the resolution passed at the recent meeting at St. George's Hall, to the effect that home lessons should not be enforced on children under ten years of age."

Two gentlemen, without the knowledge of the rest who had signed the memorial, no doubt with the best intentions, but unfortunately as I think, undertook to present the document, and in so doing made certain statements with regard to the increase of brain-disease which were regarded by the Bradford School Board and public generally as emanating from the whole body of medical men (fifty-three). And I gather from your leader that they have been viewed by yourself in a somewhat similar manner.

It is but right, however, to inform you that the fifty-three gentlemen are responsible for the petition pure and simple, as I have stated it, and for nothing else. In consequence of the statements above mentioned, circulars were issued from the School Board to all medical men in Bradford, asking them for evidence of the production of brain-disease from over-pressure. In order, therefore, to emphasise their memorial and consolidate their position, the medical men at a subsequent meeting (of which I happened to be the chairman), determined unanimously to adhere strictly to the words of the memorial, and again respectfully requested the School Board to give effect to it.

With regard, sir, to the increase of brain-disease from over-pressure, it may or may not be the case, but the difficulty of proof is so great, that I imagine it is wiser not to make the attempt. Statistics are of a certain value, but they are not infallible. From them it is only possible to obtain some very general information. It is well to remember that there are many causes of brain-disease, besides educational over-pressure, in constant operation. The intense mental anxiety arising out of the great commercial depression under which this country has been labouring during the last decade is quite sufficient to account for some increase in brain-disease. And there are other causes doubtless working in the same direction.

But it is very important to bear in mind, apart from the brain, that the injudicious and unsuitable mental tasks imposed upon both teachers and taught, have a tendency to produce serious functional disturbance of many other organs. This, I think, is a point which requires more attention. The stomach is especially liable to suffer. If we search for injurious results of educational over-pressure in the brain, and in the brain only, I believe, that we shall overlook some valuable evidence. The prominence which has recently been given to this subject in the medical profession, as well as in both Houses of Parliament, cannot fail to produce a good effect. It is to be hoped that the over-pressure recently existing has received a salutary check, and that henceforth the stomachs and other organs, in addition to the brains of our children, will be treated more rationally and with greater consideration.—I am, sir, yours obediently,

Bradford, April 16th, 1884. EDWARD T. TIBBITS, M.D.Lond.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

SIR,—I shall be obliged if you will kindly permit me to make known through your columns that an association is being formed for the purpose of promoting the interests of members of the Royal College of Surgeons of England. The whole government of the College is in the hands of the 1,100 Fellows, the 16,000 Members being absolutely precluded from expressing their views except through the medium of the public press. Speaking generally, the objects of the Association will be to obtain a voice in the management of the College by securing a general meeting of the Fellows and Members of the College every six months; to promote the dignity and value of membership of the Royal College of Surgeons of England; and to concern itself with the welfare of members and of the profession at large. I shall be glad to receive the names of any members who may be willing to co-operate.—I am, sir, your obedient servant, JAMES ROCHEID FORREST.

59, Lowden Road, Herne Hill, London, S.E.

INDIA AND THE COLONIES.

INDIA.

JAIL-MORTALITY IN INDIA.—The jail-mortality of India still stands at a very high rate: Bengal, 42.56 per 1,000, Madras, 42.62, and Bombay, 33.5; and 42 per 1,000 were constantly sick. Bowel-complaints, respiratory diseases, cholera, and anæmia and debility, or constitutional exhaustion, were the chief causes of sickness and death.

SMALL-POX IN MADRAS.—The epidemic of small-pox continues to rage with great violence at Madras. For some time past the weekly mortality returns of that city have shown a death-rate from small-pox and other causes of about 85 per 1,000 per annum. At a meeting of the Madras Corporation, held the other day, the president read a note describing the present epidemic and the difficulties of coping with it. The chief of these is the widespread superstition among Hindoos that small-pox is a goddess whose visits should not be interfered with in any way. The mortality is mainly among unvaccinated children. An Act making vaccination compulsory has been passed by the local Council, and the Viceroy's assent obtained by telegraph. It is hoped that it may have the effect of checking the disease. The present year seems characterised by an exceptional development of small-pox throughout India. The disease is epidemic, and is causing great mortality in Rangoon, and also in several cities of Upper India. It is described as above the average in Calcutta, and appears to prevail to a greater or less extent in almost every large city in the country.

WEST INDIES.

MORTALITY IN BERBICE.—The high mortality of Berbice, and especially of Stanley Town, is attracting still much public attention, and deserves active treatment by the authorities. A sanitary service is urgently required, overlooked by competent health-officers. The suggestions of Dr. Grieve ought to be dealt with by Government. A serious responsibility is incurred in permitting unchecked the heavy preventible sickness and mortality which prevail. A local Branch of the British Medical Association might render valuable service here in this matter.

SOUTH AFRICA.

SMALL-POX.—It is reported that small-pox has broken out in the Carnarvon Hospital at Kimberley. Only two cases are said to have occurred, both ending fatally. It would appear that the disease was first detected in a native working on the establishment; and, further inquiries being instituted, "unmistakable symptoms of the fatal epidemic" were discovered in the dead body of another awaiting burial, the cause of whose death was certified by the medical superintendent, Dr. Wolff, to have been pleuropneumonia. The result was the occupation of the place by a company of police, the placing of the whole building in rigid quarantine, and the issuing of a warrant against the medical officer for culpable neglect or intentional concealment. But this was not all; for, a member of the force having only the day before the discovery left the hospital, it was considered necessary that the police-barracks should share in the general fumigation and disinfection. At a meeting of the Town Council which followed, one of the members of the Sanitary Committee appears to have asserted that he had actually found in one portion of the building a native dying of small-pox, and in another the body of one dead of the same disease. He thought that there would be some danger to the town, because it was not known how far the disease might spread; and he thought, moreover, that steps should be taken to prevent Dr. Wolff from driving about the town, as he was known not to have fumigated himself, nor, indeed, to have taken any steps to prevent the spread of the disease. It would be interesting to know, in the first place, what steps the sanitary member took to fumigate himself, and what experience he had had of infectious diseases, that he should take upon himself the diagnosis of the cases. In the next place, how is it possible for a man to know when he has rendered himself innocuous, even supposing he has taken every precaution—a proceeding which, in times of an epidemic, would be practically an impossibility? That Dr. Wolff could have done much to prevent the spread of small-pox, we very much doubt; indeed, we are convinced that, by driving about, and thus exposing himself to the air, he did quite as much to aid disinfection as if he were to subject himself to a spray of carbolic acid or any other deodoriser.—Small-pox is reported to be raging in the Baralong territory. Many of the inhabitants have died of the disease, and others are dying. All the survivors are suffering severely from famine.

AUSTRALIA.

THE UNIVERSITY OF MELBOURNE.—How large and important an institution the University of Melbourne has become may be judged, says the *Australian Medical Journal*, from the number of graduates connected with it. The following are the numbers holding degrees, a good many of them, of course, having been admitted *ad eundem gradum:* Doctors of Laws 15, of Medicine 55, of Music 1; Masters of Arts 173, of Laws 6; Bachelors of Arts 127, of Laws 82, of Surgery 70, of Medicine 79; Civil Engineers 32. The number of graduates must not be taken as equal to the total of these, a good many persons holding more than one degree. The average number of students attending lectures is probably about 300.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

NEW READERS AND LECTURERS. The General Board of Studies propose to appoint, early in Easter Term, a number of Readers and University Lecturers, including the following: a Reader in Botany, stipend £100; University Lecturers in Botany, in Animal Morphology, in Advanced Physiology (three), all at £50, except in Animal Morphology, to which £100 is assigned. The University Lecturers will, for the most part, be chosen from such College Lecturers as open their lectures to the University generally; but the Board is not necessarily restricted to such, nor to persons who may apply. It is understood that two lectures a week during each term shall be the minimum during two terms for each lecturer receiving £50 *per annum.* As far as possible, the University Lecturers are to give special personal attention to their pupils, so as to obviate as much as possible the necessity of private tuition in the subject of the lectures; and the students' fees are to be understood as payment for this personal supervision. The Special Board for Biology and Geology have published a report showing urgent need for a Senior Demonstrator in Elementary Biology and Animal Morphology, at £200 a year; the classes have grown enormously, consequent on recent changes in the M.B. examinations. They recommend that the Lecturers, by whose aid Mr. Sedgwick carries on the work of the late Professor Balfour, shall be appointed University Lecturers—Dr. Hans Gadow in the Advanced Morphology of Vertebrates, and Mr. W. F. R. Weldon in that of Invertebrates. Moreover, they consider an Assistant Demonstrator, as well as other occasional demonstrators, are required.

THE excellent series of papers on the "Homes of the Bristol Poor," which originally appeared in the columns of our enterprising contemporary the *Bristol Mercury*, have been reprinted as a shilling pamphlet of 102 pages. If the Royal Commission intend to make a provincial tour, Bristol ought certainly to be one of the first places visited.

MEDICO-LEGAL AND MEDICO-ETHICAL.

MEDICAL CHARGES.

A CASE tried in the Huntingdon County Court, on April 2nd, raises the old question as to what are reasonable charges for medical attendance. The plaintiffs were Giles and White, who practice at Caxton, in Cambridgeshire; and the defendant was the Rev. Robert Bonner Feast, curate in charge at Papworth St. Agnes, which place is distant seven miles from Caxton. The claim was for a sum of £25 15s. 6d., for attendance on the defendant's wife during her confinement, and was calculated at the rate of 10s. 6d. a visit. Mr. Giles had told the defendant beforehand what the charge would be, and had also told him that the earlier attendances were unnecessary; but the defendant sent for him, and consequently Mr. Giles, or his assistant, had frequently attended Mrs. Feast, before the confinement as well as during it. The confinement itself was a severe one, and required a great deal of attention. The defence was that the charges were excessive for a person in the position of the defendant, who was a curate at £130 a year, though his wife had another £500 a year of her own; and a sum of £11 0s. 6d. had been paid into court. Mr. Giles and his assistant, and other medical gentlemen, deposed that the charges were not excessive, considering the amount of work that had to be done; and, as we gather from the report before us, Mr. Giles's statement as to the agreed charge per visit was not contradicted. After a long hearing, the jury split the difference between the claim of the plaintiffs and the amount paid into court, and gave a verdict for a sum of £20 13s. This was apparently a compromise, and, like most other compromises, seems unsatisfactory. Unless the jury saw some reason for thinking the charges to be excessive, they ought not to have deducted anything from the amount of the bill. Medical practitioners, like other professional men, are entitled to be paid for their services; and, in the absence of any express agreement as to charges, are entitled to be paid at the ordinary rates. In this case, there was evidence as to a special agreement having been made; and, apart from that, the charge of 10s. 6d. for a visit, which necessitated a seven miles' drive as well as the time and skill actually devoted to the patient, seems to be very moderate. Presumably, Mr. Feast might have procured medical attendance for his wife without sending so far as seven miles, and he called in Mr. Giles because he preferred his attendance. In any case, he must have known that Mr. Giles had a long drive to take, and ought to have considered that the drive would have to be paid for. When their friends and relatives are ill, people send naturally and properly for medical aid; and at that time they do not consider the question of expense. Afterwards, when the bill is sent in, and they have perhaps forgotten the amount of time and attention which has been devoted to them, they are apt to consider the amount excessive, and to demand a reduction. We believe that medical men, sooner than go into court, are often content to make considerable reductions from the amount of their legitimate charges. But when they have to go into court in order to establish their rights, it seems hard that their claim should be arbitrarily reduced apparently according to the caprice of a jury. If there be any other explanation of the partial success of the defendant in the case under our notice, the report we have fails to show it. As far as we can see, Mr. Giles has lost part of his due; and is another victim to the bad, but in some cases necessary, practice of giving credit.

FEES PAID TO CORONERS.

SIR,—The coroner for my county called on me on Saturday, July 28th, 188[illegible], and asked me if I could go over to a village, distance about six miles, and make a *post mortem* examination, and give evidence at an inquest. He said he should pay me a fee of three guineas, the same, he informed me, as he had allowed another medical man, and which statement I verified by asking the man he named, and he said that it was so. After the inquest was over, the coroner [illegible], and said "I will send you your fee on Monday [illegible]." He [illegible] for some weeks. I wrote him a civil note to remind him. To that I got no answer. Twice since then have I written, but never could get any answer from him at all; he simply ignored my notes, so I determined to see him in person, and called with the letters. He was not in. After two or three futile attempts to find him at home I saw his partner. Having explained my case to him, he promised to see the coroner, etc., that a cheque should be sent me without delay. This I accordingly did receive on March [illegible], 188[illegible], but, to my astonishment, for two instead of three guineas. Accompanying it was a note, stating that two guineas were all that was allowed by the county; no word of apology for the great delay, or for the trouble and annoyance I had been put to. Can you, sir, advise me if I should take any, and, if so, what steps to recover the rest of my fee?—I am, etc., J. H. H.

*** The fee for making a *post mortem* examination and giving evidence thereon at a coroner's inquest is fixed by law at the sum of two guineas (see Medical Witnesses Act, 6 and 7 Will. IV, section 2). By the Act 1 Vict., c. 68, s. 2, it is enacted that "the coroner shall, immediately after the termination of the proceedings at any inquest, advance and pay such remuneration or fee to every medical witness summoned under the provisions of the said Act, and the amount thereof shall be paid to the said coroner in manner hereafter mentioned." In every case where a medical practitioner is required to attend an inquest, or to make a *post mortem* examination, he should receive a written or printed summons, the form for which is provided for by Act of Parliament, and such summons should be duly signed by the coroner. Other modes of requiring attendance, such as verbal communications or letters, are irregular, and liable to be misunderstood. The coroner in promising, or in paying three guineas, probably made a mistake, which he has rectified in J. H. H.'s case. Complaints of irregularity in payment of fees on the part of coroners should be addressed to the Home Secretary, who will cause due inquiry to be made.

CORONERS AND MEDICAL WITNESSES.

SIR,—A woman died suddenly on Sunday, the 9th instant; her son came to me, as I had about four months previously prescribed for her; I went to the house, and saw the body. I gave information to the police, who act here as coroners officers, telling them I could not certify. On Monday evening, the coroner, who is a solicitor, and holds other public appointments in the town, sent one of his clerks to tell me an inquest would be held on the body at 2.30 P.M. on Tuesday, and would I please attend. I am a public vaccinator, and I vaccinate every Tuesday at 3 P.M. Knowing, from previous experience, that the coroner is not punctual, I told the clerk to ask if he would kindly arrange for some other time, as I had my vaccination to attend to. I had an answer the next morning, saying that the coroner could not fix any other time. I then went to the coroner, and told him I could attend at 2.30 P.M., but I was afraid he would not be there in time. He said he did not think of my public appointment at the time he arranged the inquest; he asked me where my station was. I told him (about 400 yards from the place where the inquest was to be held). He said he could manage so that I should get off in time to keep my other appointment. I was at the public-house where the inquest was to be held at 2.30 P.M., and was kept waiting until 3 P.M., when the coroner arrived.

The coroner swore in the jury in the usual way (the jury, by-the-bye, were summoned to attend at 2.15 P.M., and, as a fact, had been waiting from that time), and afterwards addressed them as to the particulars of the case on which the inquiry was held, and then proposed to the jury to go and view the body. I then asked the coroner if he would be pleased to take my evidence before viewing the body (as, I know, has been frequently done here); he declined to do so. I told him I had been waitiug since 2.30, and it was then past 3; and, as he was aware, I was due at 3 at the vaccination-station. He said he could not help that. I told him I could not possibly wait until the jury got back, and, therefore, left, to get to the station at 3.15, and find at least fifteen mothers, with babies, waiting.

I afterwards was told he called in another medical man, and took his evidence. I called upon the coroner the next morning, and told him I thought I was entitled to a fee for the time I was kept waiting. He said, certainly not, as I did not give evidence; and, further, I was liable to contempt of court for leaving the inquiry before it was over. I drew his attention to the fact that it was no fault of mine my evidence was not taken, as I was there for half an hour over the specified time waiting to tender it; but he became very uncivil, and declined to discuss the matter further with me; so I left, telling him I should take further proceedings.—I am, etc., A TEN YEARS' SUBSCRIBER.

*** We cannot but sympathise with "A Ten Years' Subscriber" in his troubles as experienced between the coroner's court and the vaccination-station. It would, perhaps, have been well, however, if our correspondent, as soon as he found that he was practically required to be at two places at the same time, had arranged with his deputy or a neighbouring practitioner to attend for him at the vaccination-station pending the termination of the inquest, as it is impossible to say beforehand how long an inquiry may continue. Such an arrangement as suggested would have obviated all the unpleasantness which afterwards occurred. Medical witnesses who, having been duly and properly summoned to attend an inquest, "absent themselves or depart without leave," are subject to a fine of £5, or, as the coroner observed, "are liable to contempt of court." The coroner could not have taken our correspondent's evidence before the jury had been properly sworn in and had viewed the body. All this takes time, especially in the country, and must be taken into consideration by the medical witness.

We cannot, however, help thinking that the coroner—if our correspondent's statement be correct—was somewhat lacking in that courtesy and politeness which should certainly mark the conduct of all public officers.

THE TITLE OF M.D.

THE law as to the qualifications which entitle a man to practise medicine in this country is clear enough, but it seems that some persons, who should know better, are ignorant of it. A report has been sent us of a case tried recently in a county court in Cheshire, in which the solicitor who appeared for the plaintiff made a violent attack on Mr. Howard, the medical gentleman concerned in the case, on the ground that he had put the initials M.D. at the foot of a certificate, whereas he stigmatised him as unqualified. Mr. Howard stated that he is a licentiate of the King and Queen's College of Physicians, Dublin, and has been registered on the *Medical Register*, but apparently he has never taken a degree as doctor. Under these circumstances, it seems that both parties were in the wrong. The letters M.D. certainly are supposed to indicate that the person who uses them is a doctor of medicine, and, though the [illegible] by general practitioners, who have never taken the degree [illegible], is not [illegible] appropriated. On the other hand, every one who is on the *Medical Register* is entitled to sign certificates in a medical capacity. Mr. Howard [illegible] the licence [illegible] which entitles him to practise [illegible] in the country, [illegible] legally qualified [illegible] ought to have known better than to state [illegible], but he has no right to sign himself M.D., and the [illegible] calculated to mislead. Properly qualified practitioners [illegible] the titles to which they are strictly entitled, and [illegible]. It is important both for the profession and the public that unqualified persons should be detected, and prevented from practising medicine, but [illegible] those who have the qualification use words that suggest they have another, the difficulty of distinguishing between qualified and unqualified persons becomes increased, and the public are inclined to think that the assumption of such a word as doctor by an altogether unqualified person is a very venial offence. Medical men should be careful not to mislead the public as to the nature of their qualifications.

THE INTERNAL DISCIPLINE OF THE MEDICAL PROFESSION.

SIR,—Recently we saw by the papers that a clergyman of the established Church, having been found guilty of drunkenness, had been suspended from his functions for eighteen months by action of an ecclesiastical court.

I was not long since staying in a town, and I was assured by my friends that a medical man practising in the town was very frequently drunk. Is there no means of expelling or suspending men guilty of such conduct? If there is not, the sooner a means is devised the better, as it seems to me that medicine will never rise to the highest position unless its internal discipline is more developed. I take it that there could be easily a means; and just as, in the Army, an officer is cashiered for any unsuitable conduct, or, in the Church, a man can be suspended, so a "court medical" should have power to try offences against the dignity of the profession.

Doubtless the man to whom I refer had the licence of some of the British corporations, and these corporations seem to me to be in duty bound to guard the interests of their graduates by expelling evil-doers. When, for example, the College of Surgeons superseded the local guilds of barber-surgeons, it should also have undertaken the duties of the old guilds in maintaining internal discipline. It could only do so by having grand censors in London at the headquarters of the College, and nominating country censors in every county or city who could report on erring brothers. Either that should be done, or the ordinary citizens should have power to formulate charges against medical men, not in the ordinary courts, but before their colleges.

We are all liable to go astray; but in the Army, if a man do so, he is "run out," and so it should be in medicine.

When the new Medical Bill cuts the ground from under the feet of the existing corporations, and they see their very existence threatened, they may then awake to the need of exercising a closer supervision over their graduates. These colleges should be really the headquarters of select corps, from whose midst men acting against the best interests of medicine should be expelled.

Woolwich. G. H. J. EVATT, M.D., Surgeon-Major, A.M.D.

MILITARY AND NAVAL MEDICAL SERVICES.

PROMOTION IN THE ARMY MEDICAL DEPARTMENT.

SIR,—I am glad to see that this subject is discussed in your columns, for it is one that bears materially on the question of zeal and efficiency in the Medical Department of the Army.

One step which, if taken, would greatly assist to remove the present hopeless stagnation in the promotion of Surgeons-Major to the rank of Brigade-Surgeons, and Brigade-Surgeons to Deputy Surgeons-General, would be the compulsory retirement of Deputy Surgeons-General after five years in that rank, and Surgeons-General after three.

Doubtless this move would be a hardship to administrative officers, but some pecuniary bonus would soften it. It must be remembered that in an important matter like this the interests of the few should be sacrificed for the benefit of the many.

As it has been shown by your correspondent, in the BRITISH MEDICAL JOURNAL of March 22nd, that in the reign of former Directors-General some regulation has been brought in benefiting the Department, let the present Director-General suggest some measure, and press it forward on the authorities, to facilitate promotion; as it is generally understood amongst the officers of the Medical Department that the purport of many questions be addressed during the sitting of Lord Morley's Committee, pointed to the fact that he considered the promotion to Brigade-Surgeons rank was granted after too long service.

The Surgeons-major now awaiting promotion have completed twenty-six years service, and may still have to wait for the next rank some months.

X. Y. Z.

INDIAN MEDICAL SERVICE.

SIR,—I beg you will grant space for a few lines for the enlightenment of young medical men who may be considering the eligibility of the Indian Medical Service as a means of living and serving their Queen and country.

I will, in this letter, point out two ways in which the honey of "unemployed pay" (a surgeon without "interest" is now on "unemployed pay" for some years) may be turned to gall, the bitterness of which, under a tropical sun, and perchance in a cholera camp, does not last only for the brief space of a season.

1. Employment at a station-hospital. The Army Medical Department and the Indian Medical Service are perfectly distinct; there is no exchanging from the one to the other. Now, Indian Medical Service surgeons are constantly employed at station-hospitals, and I maintain that it is not right to make Indian Medical Service surgeons do Army Medical Department work and pay them less than they pay their own surgeons; and the system that compels Indian Medical Service surgeons to do Army Medical Department work at a lower rate of pay than Army Medical Department surgeons, is invidious and obnoxious, and is as derogatory to one's dignity as being made to undersell a professional brother. And, moreover, there is nothing to prevent the total elimination of Army Medical Department surgeons from the station-hospitals, because Indian Medical Service surgeons can be made to do the work on less pay. Of course, the surgeons-major in charge would be Army Medical Department men.

2. Interest. Any Indian Medical Service surgeon may be kept doing duty at a station-hospital on "unemployed pay," while his junior is given a well paid appointment in the same station—*e. g.*, the garrison-surgeoncy of Bangalore, which has just been given to a man who passed last of his batch, while there were three men senior to him in Bangalore on "unemployed pay;" two of the three were in the same batch, and passed out of Netley some places above this "lucky" man.

I enclose my card, and am, sir, yours faithfully, "RETIRED."

NAVAL MEDICAL DEPARTMENT IN THE SOUDAN.

SURGEON T. D. GIMLETTE has again been noticed in despatches. Commander Ernest Rolfe, in a despatch to Sir William Hewett, K.C.B., commander-in-chief on the East India station, dated March 16th, writes as follows with reference to the second expedition against Osman Digna.

"Dr. Gimlette acted as medical officer to the force at both actions. I have already expressed my opinion of this officer's conduct in the first engagement, and need only now say that it was equally meritorious on the second occasion."

IMPROVED HEALTH OF OUR INDIAN ARMY. -The nineteenth report of the Sanitary Commissioner with the Government of India, just issued, gives a very satisfactory showing of the continued diminution in the mortality-rates of the European army of India, under the measures taken by the advice of the sanitary and medical officers. The death-rate for the year was 12.07 per 1,000 from all causes, against 16.86, 24.85, 24.28, and 21.46 in the four respective preceding years. The rate for the ten years 1870-79 was 19.34. This death-rate is the lowest yet recorded for the three presidencies. The invaliding rate is equally satisfactory: 33 per 1,000, against an average of 43 for 1870-79. A like abatement of mortality is apparent in the figures for each presidency. The Bengal mortality was 13.17, against 21.00 in 1870-79; Madras, 10.25, against 17.69; Bombay, 10.37, against 15.27. The death-rate of troops stationed on the hills was 8.65 per 1,000. The leading causes of death were enteric fever, cholera, dysentery, hepatitis, apoplexy, and remittent and continued fevers: all causes which admit probably of yet further reduction, as sanitary works are extended and sanitary precautions strengthened, under the growing influence and highly cultivated knowledge of the Indian medical officers.

THE late Inspector-General Thomas Wallis M'Donald, R.N., whose death is announced, served (says the *Broad Arrow*) as assistant-surgeon of the *Conflict* on the coast of Africa, where he was promoted for his services during an epidemic of fever at Fernando Po. With the late Admiral Henderson he served next in the *Phœnix* steamer on the coast of Spain during the first Carlist war, and was then, from 1841 to 1845, surgeon of the *Bellcisle*, under the late Sir John Kingcome, arriving on the China station in time to witness the closing operations on the Yang-tse-Kiang (medal). The *Belleisle* was then employed in conveying troops back to India. Mr. M'Donald's next service was from 1845 to 1848, as surgeon of the *Hibernia*, the present flag-ship at Malta, when she carried the flag, in the Mediterranean, of Sir William Parker, with the late Admiral Peter Richards as flag-captain. In January 1848, he was appointed to the Royal yacht *Victoria and Albert*, on her being commissioned by Lord Adolphus FitzClarence, and with her he continued until his promotion to deputy inspector in July 1854. His last employment was as chief of the Royal Hospital, Yarmouth. He retired as inspector-general in 1865.

COLONEL R. HARRISON, C.B., C.M.G., R.E., A.Q.M.G. of the Aldershot Division; Surgeon-General W. A. MacKinnon, C.B.; and Deputy Commissary-General of Ordnance J. T. Barrington, have been appointed a Committee on Movable Field-hospital Equipment.

HOSPITAL AND DISPENSARY MANAGEMENT.

CORK FEVER HOSPITAL.

THE annual report of this institution shows that there were last year 446 patients treated, of which 245 were cases of typhus fever. This latter was an increase of 73 as compared with 1882; but of those treated, only 14 died, making the very low mortality of 5.71 per cent.; and, deducting three cases hopeless on admission, 4.48 per cent. This result compares very favourably with the mortality of the year previous, which was 9.3 per cent. In a financial point of view, the institution is not in as flourishing condition as its friends would desire. The year was commenced with a debt of £789, while the expenditure, including salaries, amounted to £2,843, leaving a balance due of £1,204. The Corporation made grants amounting to £1,300, the citizens only subscribing £292. As it is generally believed that the hospital is a necessity, it is to be hoped that funds may be forthcoming so as to maintain the institution in a thoroughly efficient manner. A great many of the artisan class, and those above it, object to go to the workhouse fever hospital, and to a great extent, when ill with fever, are admitted to the Cork Fever Hospital; but if so, they certainly should expect to pay a certain amount for the cost of their maintenance while in hospital. This appears, however, to be the exception rather than the rule, as we learn that private patients only contributed a sum of £23 2s. towards the funds of the hospital.

CORK OPHTHALMIC AND AURAL HOSPITAL.

FROM the sixteenth annual report of this most valuable institution we learn that, during last year, 1,647 patients were treated at the hospital, of whom 154 were admitted to the wards. At the commencement of last year, the resources of the hospital were hampered by a debt of upwards of £400, principally incurred in adding two new wards to the hospital. These are intended for patients of the better class, who, while wishing for the advantage of hospital treatment, may at the same time secure greater privacy and comfort by the payment of an extra charge. To place the hospital out of debt, steps were taken, which resulted in a sum of £410 being raised for the purpose. Out of an income of £456 for the year, only £143 was obtained from the public, the remainder being received from paying patients, and from union schools and other institutions who send their inmates for treatment to the hospital. The opportunities for the study of affections of the eye, ear, and throat, afforded by the large number of cases presenting themselves for operation, have been willingly accorded to students attending the Queen's College and others, and have been largely taken advantage of by them.

SOUTH CHARITABLE INFIRMARY AND COUNTY HOSPITAL, CORK.

THERE were 986 intern cases treated last year, the average number of beds in occupation amounting to 71 daily, while the extern patients nearly reached 14,000, a number 1,853 in excess of the previous year. In a financial point of view, the hospital appears to be suffering, in common with other institutions of a similar kind; and, on January 1st of last year, it was worse by £295 than in 1882, and by £164 than in 1883. Besides this, the present year commenced with a debt of £78 19s. 1d., and the trustees, in drawing the attention of the public to this matter, state that unless the deficiency is met promptly, no resource will be left except the painful one of reducing the number of beds, and thus closing the doors of the hospital against many urgent appeals of distress.

THE BELFAST NURSES' HOME.

THE twelfth annual report of the Belfast Nurses' Home and Training School, though short, is very satisfactory. Last year the staff consisted of 31 trained nurses and 10 probationers; this year it numbered 33 nurses and 13 probationers. An arrangement has been made with the Dublin Nurses' Training Institution to train nurses for them, not more than two at a time. The first two entered on their year's training last June. As it is necessary to keep a sufficient number of probationers to supply the demand for nurses, it has been found needful to fit up a large room on the first floor as a dormitory. This has caused some outlay for furniture; still the Home is free of debt; and this is the more encouraging as there was much sickness in the house last year, and at one time nine nurses were incapacitated. The nurses have attended 208 private cases during the year, being 32 more than last year. But the sum realised last year was £43 in excess of that which was earned this year £758 as against £715. An important change has been made in the management of the Home. The committee have long felt that the establishment did not require both a lady superintendent and a matron, so they have determined to do away with the latter office, and to engage a working housekeeper to attend to details under the supervision of the lady superintendent.

GLASGOW OPHTHALMIC INSTITUTION.

THE report, which was read and confirmed at the fifteenth annual general meeting of the supporters of this institution, shows that, in addition to a considerable number of patients remaining on the books at the beginning of the year, 3,012 new cases had been admitted, of which 2,627 were dispensary patients, while 385 were taken into the hospital for treatment. These figures show a decrease of 302 out- and an increase of 8 in-patients, as compared with the previous year. Of the 3,012 cases treated during the year, 2,876 were cured, 84 relieved, and 52 were dismissed as incapable of further benefit. Owing to legacies received in the past twelve months, the financial year closed with a balance to the credit of the institution of £128. Altogether, the work done during the year has been of a satisfactory nature, and has justified the addition of ten beds, recently made by the directors. At the annual meeting, a very proper tribute of respect was paid to the late Mr. White of Overton, who had been a warm friend to the institution ever since its establishment in 1870.

CAMBERWELL PROVIDENT DISPENSARY.

THE report of the above institution for 1883 states that, during the year, 3,567 cards of membership were issued, many of which were for whole families, the total number of persons entitled to treatment being 10,677. The number of cases of illnesses was 11,306, which obviously is made up by many of the members appearing more than once in the return; and, allowing for this, the average is an extremely high one; 16,255 visits were made to patients' homes, and 30,722 consultations given at the dispensary or the houses of the medical officers, the number of prescriptions being 81,040. There were 307 confinement-cases, and 462 members who received the advice of the dentist. The members' payments amounted to £1,114 4s. 1d., and of this all but £10 19s. 5d. was divided between the medical staff (consisting of six local practitioners), under the following heads: Attendance, £812 19s. 8d.; midwifery-fees, £230 5s. The establishment-expenses, drugs, etc., amounted to £541 2s. 2½d., the drugs costing £253 7s. 8d. These amounts were made up by contributions and donations. The Committee acknowledge the receipt of a grant from the Hospital Sunday Fund (£84 7s. 6d.), "but regret that for this, the sixth consecutive year, nothing has been received from the Hospital Saturday Fund." The accounts show that, although payment is made to the medical staff, the proportion it bears to their duties is small. The Committee limit the membership to persons in receipt of a low scale of wages—thus preventing undue competition with the practitioners in the neighbourhood, and confining the benefits to persons who would otherwise be driven to the hospitals.

THE ROYAL HOSPITAL FOR CHILDREN AND WOMEN.

THE Lord Mayor presided at the annual meeting of this hospital. The report for the past year showed that the number of in-patients was 465, against 474 in 1882; the out-patients 6,874, against 6,722; and the attendance of patients 27,849, against 27,363; 220 sick children were visited at home during the year. The Lord Mayor, in moving the adoption of the report, said that the institution originated out of the universal dispensary established in Doctors' Commons in 1810. Subsequently the operations of the charity were carried on in the Waterloo Road, and the institution was changed in its character, becoming increasingly useful. Adjacent premises had recently been acquired at considerable cost to enlarge the hospital and provide additional light and air. There were now 53 beds for in-patients, and since the original establishment of the institution more than half a million patients had been treated. The expenditure was £3,000, and there was a deficiency of £400 last year to be met, in addition to £1,400 from subscriptions to cover current expenses.—Dr. Hamilton seconded the motion, which was unanimously adopted.—Votes of thanks to the honorary officers, and to the Lord Mayor for presiding, closed the proceedings.

HOSPITAL FOR CONSUMPTION, BROMPTON.

A QUARTERLY court of the governors of this excellent charity was held at the hospital recently, Mr. T. P. Beckwith in the chair. The report of the Committee of Management stated that during the past quarter the charity had continued to carry on its work on a more extended scale, the number of applicants admitted having been larger than in any former corresponding period. The committee found cause for satisfaction and encouragement in the amount of new subscriptions received. They could not, however, too strongly and too frequently impress upon the friends of the hospital the fact that the opening (in 1882) of the new extension, with its 137 beds, added enormously to the expenses of the charity, and that, but for the continued liberal support, the usefulness of the hospital must be curtailed, as the income is altogether inadequate to the maintenance of the institution, now containing 321 beds. Dr. Henry T. Waugh had been elected resident medical officer. The number of patients admitted since November 29th had been 340; discharged, many greatly benefited, 319; died, 46; new out-patient cases, 3,387. The report was adopted, and a cordial vote of thanks to the chairman closed the proceedings.

VACCINATION.—Mr. J. C. Roberts, of Peckham Rye, has been awarded by the Local Government Board the sum of £58 11s. for efficient vaccination. This is the fourth grant he has received.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

LEGISLATION ON DAIRIES AND MILKSHOPS.

The following Memorial of the Council of the National Association for the Promotion of Social Science has been presented to the Lords of Her Majesty's Most Honourable Privy Council. This memorial resulted from the paper read by Mr. Ernest Hart at the late meeting of the Association.

1. The Social Science Association, in its capacity of an organisation designed with the special function of promoting reforms for the physical, moral, and material welfare of the people, has recently directed its attention to the existing state of the law for the sanitary regulation and supervision of dairies, cowsheds, and milkshops, and for the prevention of epidemics of diseases arising from the drinking of infected milk. 2. It has been proved to the satisfaction of the memorialists that the existing law on the subject is very imperfect; and that it is, moreover, very imperfectly and partially carried out. 3. The clause in the Contagious Diseases (Animals) Act of 1878, designed for the registration and inspection of dairies and milkshops, imposed the duty of such registration and inspection upon the veterinary authority of each district—an authority which, save exceptionally, possesses no sanitary organisation or machinery whatever. 4. As a consequence, the Orders of Council framed under the above clause have remained to a large extent a dead letter, especially in the rural parts of the country, from which the milk-supply is mostly derived, and which stand, therefore, in the greatest need of supervision. 5. Her Majesty's Government, recognising the validity of the considerations pressed upon it by various sanitary organisations, as to the imperfection of the present machinery for the regulation of dairies and milkshops, prepared and introduced, in the last session of Parliament, a Bill transferring the duty of such regulation from the veterinary authorities to the local sanitary authorities, and the duty of making Orders for the efficient carrying out of the law from the Lords of the Council to the Local Government Board. 6. Owing to pressure of business in the House of Commons, this Bill could not be proceeded with, and had to be withdrawn. 7. Appreciating the importance of the subject, the memorialists decided to consider specially at the annual congress of the Social Science Association, held at Huddersfield last October, the question of the desirability of taking "any and what further measures to prevent the spread of zymotic diseases through the milk-supply of our towns." 8. The papers read at the meeting on this subject, and the discussions thereon, have convinced the memorialists of the urgent necessity of further measures being adopted for the safe-guarding of our milk-supplies. 9. It has been proved to the memorialists that, during the last twelve years, at least 53 epidemics of typhoid fever, 17 of scarlatina, and 12 of diphtheria and throat-illness, have been due to the drinking of infected milk in the United Kingdom alone, causing suffering and misery to some thousands of people, and killing nearly six hundred persons. 10. The public has no security against the recurrence of these epidemics, fresh instances of which are, indeed, arising month by month, unless active and sustained measures are taken by authorities properly constituted and equipped for the registration and systematic inspection of dairy-farms and milkshops, and for the enforcement of adequate and sufficient by-laws for ensuring the wholesomeness of the sanitary surroundings and of the operations of the dairy. The memorialists, therefore, pray that Her Majesty's Government will re-introduce at an early date the Bill transferring the duty of regulating dairies and milkshops to the duly constituted sanitary authorities of the kingdom, and will use its best endeavours to assist in such Bill becoming law without delay.

WESTMINSTER UNION: ELECTION OF GUARDIANS.

In the British Medical Journal of March 29th, we drew attention to an effort that was being made to bring about a change in the constitution of the Westminster Board of Guardians, and we have now the satisfaction of announcing that the most complete success has attended the same. All the old members of the Board who supported the master of the workhouse in his treatment of the sick and aged poor, and who suspended Dr. Joseph Rogers on what we ventured to state at the time were most flimsy charges, have been outvoted, and a new Board has been elected, consisting of thirteen gentlemen who have never held office before, and five of the old members, who persistently voted for the master's resignation, and who sided heartily with Dr. Rogers in his persecution by the majority.

We congratulate Dr. Rogers on this complete triumph over his opponents. The victory is due, we understand, to the most determined efforts which were made by lady-visitors to the Westminster Workhouse; by the clergy, both Anglican and Roman Catholic, of both parishes, who personally canvassed; and by many influential ratepayers, who made great sacrifices of time and trouble in enforcing on their neighbours the necessity that existed for displacing the guardians who had persistently supported the master.

We further hold that the result of this election in Westminster will considerably strengthen the hands of the Poor-law Medical Service throughout the country, as it demonstrates most conclusively what can be achieved when a man has a just cause, active sympathisers, and energy and determination.

CONTAGIOUS DISEASES ACTS.

We have received a communication from the "Committee of the National Medical Association for the Repeal of the Contagious Diseases Acts," commenting on the return lately issued by the Government, of which we made a brief analysis in our number of March 29th. Without entering into argument with the committee respecting figures dated so far back as 1876 and 1866, we are glad to be in accord with them that the "diseases not being classified, the return is absolutely valueless for tracing the course of the only malady that official witnesses before the late Select Committee of the House of Commons declared to be sufficiently serious for legislation;" and we trust that they will agree with us as to the propriety of delaying to take action until full information on this important part of the subject shall have been given. We agree with them also in disapproving of the compulsory detention of women in hospital, which will but retard their voluntary application, and is worse than useless, unless combined with compulsory examination and admission.

THE EPIDEMIC OF SORE-THROAT AT DOVER.

Sir,—In a letter on this subject, published in the Journal of April 12th, Dr. Parsons endeavours to controvert the conclusion arrived at in my report. I notice, however, that Dr. Parsons's experience does not apply to the facts described by myself; and his letter would not, therefore, need any reply, but for the importance of the subject and the danger of any one being led astray by false premisses. Dr. Parsons says that a large proportion of cases fell to his share in hospital and private practice "both before and after" the special outbreak referred to by Dr. Robinson. Therefore, Dr. Parsons argues from a set of cases totally distinct from those to which I refer; and this, perhaps, may account for the fact that Dr. Parsons's views are not those shared by other members of the profession in Dover. I distinctly said, in my report, that the cases narrated were those which occurred during the week ending February 9th, and thus endeavoured to avoid such generalisations as Dr. Parsons cautions against, but actually commits himself. Dr. Parsons says the cases seemed to him to be of "epidemic catarrhal tonsillitis, probably of atmospheric origin." I venture to say, in the interest of sanitary science, that such a generalisation is far more to be deprecated than an attempt, however feeble, to solve the cause of a remarkable epidemic upon proven facts. The facts, not hastily elicited, but collected step by step, and, as I believe, clearly established, were as follows.

Milch-cows, at a farm in the country, were attacked with foot-and-mouth disease on or about January 14th. The milk from the cows was, during the last week in January, sent into Dover and mixed with other milk belonging to a certain dairyman, and thus delivered to his customers. On the four days, February 3rd, 4th, 5th, and 6th, 184 of this milkman's customers, and on the following three days 17 more, were attacked with a peculiar affection of the mouth and throat, the various symptoms of which I described, as also the sequelæ and complications which were so characteristic of blood-poisoning. But the remarkable coincidence in the outbreak was this: that the persons attacked were those supplied with milk by the implicated milkman. In 42 streets widely separated, the persons attacked on the particular days referred to were those supplied by this dairyman; whilst other persons living in the same localities, supplied by other milkmen, escaped the malady. Surely here was displayed a common cause at work, far more specific and palpable than some vague speculation and unknown atmospheric condition. As corroborative evidence of the infective character of the milk, I may mention, that samples taken for examination were found to present such characteristics as have been discovered in milk from cows suffering with aphthous fever. Further, a dog to whom was given some of the milk suffered from an affection of the mouth and one foot, simulating the disease in cattle; and, if further proof were wanting, it might be adduced in the fact that a second simultaneous outbreak of cases occurred amongst the customers of another milkman, who had been supplied, a few days previously to the invasion, by milk from the infected farm. With such evidence of tainted milk and its effects, anyone desirous of being convinced, need not, I think, hesitate to accept the stern logic of facts.—Yours faithfully,

M. K. ROBINSON, M.D.

Dover, April 12th, 1884.

HEALTH OF ENGLISH TOWNS.—During the week ending the 12th instant, 5,403 births and 3,418 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons. The annual rate of mortality per 1,000 persons living in these towns, which in the two preceding weeks had been 20.8 and 22.7, declined to 20.4 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow:—Leicester, 14.9; Bristol, 15.0; Huddersfield, 15.8; Sheffield, 16.1; Bradford, 18.7; London, 19.1; Plymouth, 19.4; Birmingham, 20.2; Derby, 20.3; Leeds, 20.9; Bolton, 21.1; Birkenhead, 21.2; Nottingham, 21.9; Norwich, 21.9; Blackburn, 22.2; Newcastle-upon-Tyne, 22.4; Salford, 22.5; Liverpool, 22.6; Sunderland, 22.9; Preston, 23.1; Hull, 23.3; Oldham, 23.4; Brighton, 24.0; Manchester, 25.6; Cardiff, 30.2; Halifax, 30.7; and Wolverhampton, 31.3. In the twenty-seven provincial towns the death-rate last week averaged 21.4 per 1,000, and therefore exceeded by 2.3 the rate recorded in London. The 3,418 deaths registered last week in the twenty-eight towns included 522 which were referred to the principal zymotic diseases, against 471 and 529 in the two preceding weeks; of these, 192 resulted from whooping-cough, 142 from measles, 63 from scarlet fever, 49 from "fever" (principally enteric), 28 from diphtheria, 25 from diarrhœal diseases, and 23 from small-pox. These 522 deaths were equal to 15.3 per cent. of the total deaths, and to an annual rate of 3.1 per 1,000. In London the zymotic rate was equal to 3.4, while it was 2.9 in the twenty-seven provincial towns, among which it ranged from 0.5 in Blackburn, and 0.6 in Hull, to 4.5 in Newcastle-upon-Tyne, 4.6 in Leeds, and 5.1 in Portsmouth. The deaths referred to whooping-cough, which had been 143, 154, and 184 in the three preceding weeks, further rose to 192 last week, and showed the highest death-rates in London, Bolton, and Salford. The fatal cases of measles, which in the two previous weeks had been 135 and 143, were last week 142, and caused the highest proportional fatality in Wolverhampton, Leeds, Oldham, and Portsmouth. The 63 deaths referred to scarlet fever were 12 less than those returned in the preceding week; this disease caused the highest death-rates in Leeds, Sheffield, and Newcastle-upon-Tyne. The 49 fatal cases of "fever" showed an increase upon the numbers recorded in recent weeks, and showed the highest death-rate in Bolton. The deaths referred to diphtheria in the twenty-eight towns, which in the two preceding weeks had been 20 and 28, were again 28 last week; 17 were recorded in London, 2 in Portsmouth, 2 in Leicester, 2 in Leeds, and 2 in Cardiff. The fatal cases of small-pox in these towns, which had been 17 and 21 in the two previous weeks, further rose last week to 23, of which 8 were recorded in London, 4 in Liverpool, 3 in Newcastle-upon-Tyne, 2 in Birmingham, 2 in Sheffield, 1 in Derby, and 1 in Hull. The rate of mortality from diseases of the respiratory organs, judged by the metropolitan returns, was again considerably below the average; the deaths referred to these diseases in London, which had been 359 and 357 in the two preceding weeks, further declined last week to 285; they were 186 below the corrected weekly average number, and were equal to an annual rate of 3.6 per 1,000. The causes of 86, or 2.5 per cent. of the 3,418 deaths registered last week in the twenty-eight towns were not certified, either by medical practitioners or by coroners. In London, the proportion of uncertified deaths did not exceed 0.9 per cent., while it averaged 3.8 per cent. in the provincial towns, and showed the largest excess in Wolverhampton, Preston, Huddersfield, and Hull.

HEALTH OF SCOTCH TOWNS.—In eight of the principal Scotch towns, having an estimated aggregate population of 1,254,607 persons, 883 births and 609 deaths were registered during the week ending the 12th inst. The annual rate of mortality, which in the four preceding weeks had steadily increased from 20.9 to 24.1 per 1,000, further rose last week to 25.2, and exceeded by 4.8 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns the death-rate was equal to 17.2 in Leith, 18.7 in Aberdeen, 19.7 in Dundee, 22.3 in Edinburgh, 23.5 in Perth, 27.9 in Greenock, 28.6 in Glasgow, and 41.0 in Paisley. The exceptionally high rate in the last-mentioned town was due to the epidemic prevalence of measles. The 609 deaths registered last week in these towns included 41 which resulted from whooping-cough, 19 from measles, 15 from diarrhœal diseases, 12 from "fever," 10 from diphtheria, 6 from scarlet fever, and not one from small-pox; in all, 103 deaths were referred to these principal zymotic diseases, equal to 16.9 per cent. of the total deaths, and to an annual rate of 4.3 per 1,000, which exceeded by as much as 1.2 per 1,000 the average zymotic death-rate recorded last week in the twenty-eight English towns. In the Scotch towns, the lowest zymotic death-rates were 1.7 and 2.1 in Perth and Greenock, whereas the rate was equal to 4.2 in Glasgow and in Edinburgh, and to no less than 14.3 in Paisley, of which 9.8 per 1,000 was due to measles. The fatal cases of whooping-cough, which had increased in the four previous weeks from 22 to 42, were 41 last week, and included 21 in Glasgow and 14 in Edinburgh. The deaths referred to measles, which in the two preceding weeks had been 14 and 11, rose to 19, of which 11 were returned in Paisley and 4 in Glasgow. The 12 fatal cases of "fever" showed a further increase upon recent weekly numbers: 3 occurred in Leith, 2 in Glasgow, and 2 in Aberdeen. The deaths from diphtheria, which had been 18 and 12 in the two previous weeks, further declined last week to 10, of which 7 were returned in Glasgow and 2 in Aberdeen. The 6 fatal cases of scarlet fever showed a slight further increase upon the numbers returned in recent weeks, and included 3 in Glasgow. The mortality from diseases of the respiratory organs in these Scotch towns was below the average, and was equal to an annual rate of 5.3 per 1,000, which, however, considerably exceeded the rate last week from the same diseases in London. As many as 91, or nearly 15 per cent., of the 609 deaths registered last week in these towns were uncertified.

HEALTH OF IRISH TOWNS.—During the week ending Saturday, April 5th, the total number of deaths registered in the sixteen principal town-districts of Ireland was 469. The average annual death-rate, as represented by the deaths thus registered, was 28.4 per 1,000, the respective rates for the several districts being as follow, ranging in order from the lowest to the highest: Drogheda, 8.5; Galway, 10.1; Armagh, 10.3; Sligo, 14.4; Kilkenny, 21.1; Londonderry, 23.2; Belfast, 24.7; Dublin, 28.1; Dundalk, 30.6; Lurgan, 30.8; Limerick, 33.7; Newry, 35.1; Cork, 37.6; Waterford, 41.7; Lisburn, 43.5; Wexford, 64.1. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 3.0 per 1,000, the rates varying from 0.0 in Galway, Kilkenny, Drogheda, Wexford, Lisburn, and Armagh, to 9.6 in Sligo; the 3 deaths from all causes registered in the last named district comprising 1 from scarlatina, and 1 from whooping-cough. Among the 103 deaths from all causes registered in Belfast, were 4 from scarlatina, 1 from typhus, 1 from diphtheria, and 3 from diarrhœa; among the 58 deaths in Cork, were 1 from measles, 2 from typhus, 1 from whooping-cough, 1 from diphtheria, and 2 from diarrhœa; and among the 18 deaths in Waterford, were 1 from scarlatina, 2 from whooping-cough, and 1 from diarrhœa. In the Dublin Registration District, the deaths registered during the week amounted to 199. Twenty-three deaths from zymotic diseases were registered, being equal to the number for the preceding week, but 6 under the average for the fourteenth week of the last ten years; they comprised 9 from scarlet fever (scarlatina), 2 from typhus, 3 from ill-defined fever, 3 from enteric fever, 3 from diarrhœa, 1 from erysipelas, etc. Thirty-seven deaths from diseases of the respiratory system were registered, being 3 over the number for the week ended March 29th, but 17 under the average for the fourteenth week of the last ten years; they comprised 27 from bronchitis, and 4 from pneumonia or inflammation of the lungs. The deaths of 13 children (including 6 infants under 1 year old) were ascribed to convulsions. Five deaths were caused by apoplexy, 9 by other diseases of the brain and nervous system exclusive of convulsions, and 11 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 42 deaths, and cancer 3. Three accidental deaths were registered. In two instances the cause of death was "uncertified," and in 25 other cases there was "no medical attendant." Forty-seven of the persons whose deaths were registered during the week were under 5 years of age (20 being infants under 1 year, of whom 4 were under 1 month old), and 49 were aged 60 years and upwards, including 20 persons aged 70 and upwards, of whom 8 were octogenarians. During the week ending Saturday, April 12th, the total number of deaths registered in the sixteen towns was 384. The average annual death-rate represented by the deaths registered was 23.3 per 1,000 of the population, the respective rates for the several districts being as follow: Lurgan, 0.0; Dundalk, 8.7;

Newry, 10.5; Armagh, 15.5; Belfast, 20.6; Dublin, 22.1; Lisburn, 24.2; Limerick, 24.3; Cork, 28.6; Sligo, 28.9; Kilkenny, 29.6; Galway, 30.3; Waterford, 32.4; Londonderry, 33.9; Wexford, 34.2; Drogheda, 46.5. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.7 per 1,000, the rates varying from 0.0 in Limerick, Galway, Newry, Kilkenny, Wexford, Lisburn, Lurgan, and Armagh, to 11.6 in Waterford; the 14 deaths from all causes registered in the last-named district comprising 2 from scarlatina and 3 from typhus. Among the 86 deaths from all causes registered in Belfast were 1 from diphtheria and 2 from diarrhœa; the 11 deaths in Drogheda comprised 1 from scarlatina and 1 from whooping-cough; among the 6 deaths in Sligo were 1 from typhus and 1 from whooping-cough; and 19 deaths in Londonderry comprised 1 from scarlatina, 1 from whooping-cough, and 1 from diarrhœa. In the Dublin registration district the deaths registered during the week amounted to 155. There were only 14 deaths from zymotic diseases registered, being 12 under the average for the corresponding week of the last ten years, and 9 under the number for the week ended the 5th inst. Thirty-eight deaths from diseases of the respiratory system (including 21 from bronchitis and 7 from pneumonia) were registered. The deaths of 9 infants under 1 year old were ascribed to convulsions. Three deaths were caused by apoplexy, 8 by other diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 16 deaths, mesenteric disease 7, and cancer 2. In 1 instance the cause of death was "uncertified," and in 21 other cases there was "no medical attendant." Forty-one of the persons whose deaths were registered during the week were under 5 years of age (27 being infants under 1 year, of whom 8 were under 1 month old), and 39 were aged 60 years and upwards, including 18 persons aged 70 and upwards, of whom 4 were octogenarians, and 1 (a woman) was stated to have been aged 93 years.

HEALTH OF FOREIGN CITIES.—It appears from statistics published in the Registrar-General's return for the week ending April 5th, that the death-rate was recently equal to 27.2 in Bombay, and to 65.5 in Madras. The high rate in Madras was mainly due to the prevalence of small-pox, which caused 186 deaths. Eighteen fatal cases of cholera were recorded in Madras, and 4 in Bombay; while the death-rate from "fever" was about equally high in both cities. According to the most recent weekly returns, the annual death-rate in twenty-two of the principal European cities averaged 30.2 per 1,000, and was no less than 7.5 above the mean rate last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was equal to 42.7, showing a decline from the still higher rate in the previous week; the 759 deaths included 45 from measles, 28 from "fever," and 11 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate did not average more than 21.4, the highest rate being 23.5 in Stockholm. Scarlet fever caused 5 deaths in Christiania and 4 in Stockholm, and 5 deaths were referred to diphtheria and croup in Copenhagen. The death-rate in Paris rose to 28.2; 67 deaths resulted from diphtheria and croup, 50 from measles, and 47 from typhoid fever. In Brussels, the rate was 27.3, the deaths including 7 from small-pox, and 10 from diphtheria and croup. The rate in Geneva was so high as 45.0; the deaths from "fever" in this city, which had been 10 and 21 in the two previous weeks, were again 21 in the week ending March 29th. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 27.2, the highest rate being 28.2 in Amsterdam, where the 196 deaths included 20 from diphtheria and croup. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 29.4, and ranged from 22.5 and 23.2 in Dresden and Berlin, to 37.0 in Buda-Pesth and 40.2 in Prague. Small-pox caused 46 deaths in Prague, and 3 both in Vienna and Buda-Pesth. The death-rate was 43.4 in Turin and 28.6 in Venice; the 211 deaths in Turin included 20 from measles and 7 from croup. The 119 deaths in Lisbon included one fatal case of small-pox, and were equal to a rate of 30.5. The recorded death-rate averaged only 22.9 in four of the principal American cities, and ranged from 17.8 in Brooklyn to 24.4 in New York. Typhoid fever caused 21 deaths in Philadelphia, and diphtheria showed more or less fatal prevalence in each of these American cities.—It appears, from statistics published in the Registrar-General's return for the week ending the 12th instant, that the death-rate recently averaged 40.6 per 1,000 in the three principal Indian cities; it was 25.4 in Bombay, 30.5 in Calcutta, and 76.9 in Madras. Small-pox caused 217 deaths in Madras, 20 in Calcutta, and 6 in Bombay; and the deaths from cholera were 49 in Madras, 31 in Calcutta, and 6 in Bombay. According to the most recently received returns, the average annual death-rate per 1,000 persons estimated to be living in twenty-three of the largest European cities was 30.4, and exceeded by no less than 10.0 the mean rate during the week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 39.2, and showed a further decline from the still higher rate in the four preceding weeks: the 697 deaths included 44 from measles, and 20 from "fever." In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 21.4, ranging from 18.0 in Christiania, to 24.0 in Stockholm; scarlet fever caused 3 deaths in Stockholm, and 2 in Christiania. In Paris the death-rate rose to 29.6 (against but 19.2 in London), and showed a further increase upon the rates prevailing in preceding weeks; the deaths included 54 from diphtheria and croup, and 43 from typhoid fever. The 225 deaths in Brussels, including 6 fatal cases of small-pox, were equal to a rate of 27.2. In Geneva, the 55 deaths included 12 from "fever" (against 21 in each of the two previous weeks), and corresponded to a rate of 40.5. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 28.0, the rate being 24.1 in Rotterdam, 25.7 in the Hague, and 30.4 in Amsterdam; in the latter city, 20 more deaths resulted from diphtheria and croup, and 5 from scarlet fever. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 29.5, and ranged from 22.0 and 22.5 in Dresden and Berlin, to 36.8 in Munich, 37.4 in Breslau, and 42.7 in Prague. Small-pox caused 49 deaths in Prague, and 4 in Buda-Pesth; and diphtheria showed the largest proportional fatality in Trieste, Dresden, and Berlin. The death-rate averaged 33.8 in three of the principal Italian cities, being equal to 21.7 in Venice, 34.9 in Rome, and 39.3 in Turin. Small-pox caused 4 deaths in Rome, and 3 in Turin; and measles 15 in Turin and 14 in Rome. The 150 deaths in Lisbon included 3 from "fever" and 2 from small-pox, and were equal to a rate of 38.4. The rate in four of the principal American cities averaged only 22.8, ranging from 20.1 in Baltimore, to 24.8 in New York. Typhoid fever caused 14 deaths in Philadelphia; the fatal cases of diphtheria in these American cities have recently shown a decline.

PAYMENTS TO POOR-LAW MEDICAL OFFICERS.

SIR,—Would you kindly inform me, as medical officer of the parish, whether I have any legal claim against the guardians for the following cases.

1. M. B., aged 29, was attended by a midwife during her confinement. A few days after, I received an order from the relieving officer to attend her, as she was suffering from flooding and great weakness, and which I did until she became convalescent.

2. I was sent for to attend A. M., aged 21, during her confinement, but was unable to obtain my fee; the woman had received, on two different occasions, parish orders for medical attendance during the time she was pregnant. I have written to the guardians about it; but, from what I am told, they do not appear disposed to allow anything.

I have enclosed my card and beg to subscribe myself

A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.

*** In reference to our correspondent's query, we quote for his guidance Art. 181, General Consolidated Orders: "In cases in which any medical officer, either for the workhouse or a district, shall be called on by order of a person legally qualified to make such order to attend any woman in or immediately after child-birth, or shall, under circumstances of difficulty or danger, without any order, visit any such woman actually receiving relief, or whom the guardians may subsequently decide to have been in a destitute condition, such medical officer shall be paid for his attendance and medicines by a sum of not less than ten shillings, nor more than twenty shillings, according as the guardians may agree with such officer."

Our correspondent would appear to have a clear case in both instances, and, if the board refuses to pay, he has his remedy by summons in the county court; but such procedure must not be delayed.

LEAD-POISONING BY SERVICE-PIPES.

SIR,—Allow me, in answer to your correspondent, who asked in your last week's issue whether an action had ever been taken against a local authority in consequence of lead-poisoning, to quote the case of "Milnes versus the Mayor and Corporation of Huddersfield," which was heard in Leeds and in London last year; and, as the medical attendant of the plaintiff, and a witness at the trial, to give him a brief résumé of the facts of the case.

Mr. Milnes, who is a solicitor practising in Huddersfield, suffered very severely from the effects of lead-poisoning, insomuch that the "wrist-drop" which supervened prevented him from carrying on his professional work for several months. He also became so seriously affected in his nerve-centres, with delirium, etc., that for two or three days his life was in imminent danger. The source of the poison was traced to the service-pipe of his dwelling-house, which was rather unusually long; and, inasmuch as the water in the main wes peculiarly soft, and for some time contained a trace of free acid, probably sulphuric, both of which tended to dissolve the inevitable coat of carbonate of lead deposited on the interior of the service-pipe, and more especially as the corporation by-laws specified that all such service-pipes shall be constructed of lead, he decided, as soon as he was sufficiently recovered, to sue the corporation for the damage caused to his health and business, and danger to his life, assessing such damages at £[illegible],000.

The case was first heard at Leeds assizes in August 1883, before Judge Mathew and a jury. The Solicitor-General, who appeared on behalf of the defendants, admitted the lead-poisoning through the service-pipes, but repudiated the responsibility of the corporation. The jury, whose special function at this trial was to assess the damages, laid these at £2,000 for the plaintiff. The case was transferred to London for argument on a point of law (that of the responsibility of the corporation), and the judge decided in favour of the defendants.

Mr. Milnes appealed against this decision, and was supported in his opinion by many leading men in his profession, and by an article in the *Law Times*, and the case was brought before the High Court of Appeal last November. The judges of that court upheld the decision of Judge Mathew, and gave a verdict against the plaintiff with costs. It is probable, however, that the case will again be heard before the House of Lords this year, with what result time alone will show.

Your correspondent will doubtless be highly instructed in reading the whole evidence which he will find in detail in the law-reports of [illegible], or I shall be pleased to give him any further particulars he may wish to know.—Yours truly, [illegible], M.B.Lond.

Mossley Hill, Liverpool.

VACCINATION: GAIN OR LOSS.

SIR,—Reviewing Emeritus Professor Newman's [illegible], you [illegible] the incompleteness of some of his figures in respect to small-pox. [illegible] concerned to support or condemn any theory. It is not a little difficult [illegible] the varying and very emphatic statements in respect of small-pox [illegible], if one is unacquainted with our national vital statistics.

However [illegible] of years may show decrease of small-pox [illegible] certain periods, yet over ever so few or many years, no consecutive reductions can be shown, [illegible] the course of typhus, etc. For instance, the [illegible] periods are as follows for small-pox, typhus, enteric, and fever.

	Small-pox.	Typhus, Enteric & Fever.	
1850-54	279	[illegible]	per million.
[illegible]	[illegible]	[illegible]	"
1861-65	[illegible]	[illegible]	"
1866-70	104	[illegible]	"
1871-75	411	[illegible]	"
1876-80	[illegible]	[illegible]	"
1881	[illegible]	[illegible]	"

The five-year periods altered by Registrar-General.

The [illegible] most striking is the irregular upward [illegible] of small-pox. Of course, by halting here, and beginning there, [illegible] black and white to favour a theory is possible. But that is not statistical evidence.

Take another statistical comparison; the years of heaviest and lightest mortality by all disease during the past twenty years, with division at a death-rate of 22,000 per million.

[illegible]

	All causes.	Small-pox.
1864	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
1870	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
1871	[illegible]	1,012
[illegible]	[illegible]	[illegible]
[illegible]	22,190	[illegible]

[illegible]

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	21,041	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
1881	[illegible]	[illegible]

Nothing would be easier than to misinterpret these figures [illegible]. But when we have no [illegible] we must confess that they prove conclusively that small-pox does not rise and fall with the death-rate. The disease is erratic. With five times the amount of small-pox for 1871 that there was in 1875 we yet have [illegible] per million living! With small-pox 1,012 per million in 1871, we yet have considerably fewer deaths on the whole, than in 1875, when small-pox was so trifling.

[illegible]

[illegible] vaccination gaining in the number of its willing and unwilling victims year by year, till the limit is, apparently, now reached, beyond which increase is not possible.

[illegible]

[illegible] the individual, and certain opportunities for infection.

[illegible] equally from this cause.

Small-pox, on the other hand, does not arise from local unsanitary conditions, but the opportunities for infection vary very much at different times. The only means at our disposal is to diminish the susceptibility of individuals, the opportunities for preventing the introduction of disease among the community not being under the same control as they would be were they due to some physical condition which could be altered. That the susceptibility of the community to small-pox has been considerably diminished as the result of improved legislation with regard to vaccination can be readily seen by reference to the 43rd Report of the Registrar-General, where the lesson is also learnt that children have been protected from disease out of all proportion to adults, children being those who derive benefit from the Compulsory Vaccination Act. From this report we extract the following figures.

Mean Annual Deaths from Small-pox per Million [illegible] Life-Period.

	All ages.	Under 5.	5 to 10.
Vaccination optional (1847-53)	[illegible]	[illegible]	[illegible]
Vaccination obligatory, but not efficiently enforced (1854-71)	[illegible]	[illegible]	[illegible]
Vaccination obligatory, and more efficiently enforced by vaccination-officers (1872-80)	[illegible]	[illegible]	[illegible]

REPORTS OF MEDICAL OFFICERS OF HEALTH.

GUILDFORD RURAL DISTRICT.—The most important event in the sanitary history of this district for 1882 was a severe outbreak of diphtheria at Pirbright. On investigation, the disease appeared to have existed some four or five months previous to the first reported outbreak. No fewer than 106 cases were found to have occurred from January to December, but only nine cases proved fatal. Children under 15 suffered most severely, and all the fatal cases were those of children under 12 years of age. It was further ascertained that the incidence of the disease fell chiefly upon children between the ages of 3 and 12, while children under 3 were comparatively free from attack. There can be no doubt that the village school played a most important part in the epidemic, though to what extent, and in what manner, is not altogether clear. On no less than four occasions during the year did the medical officer consider it necessary to close the school. On each of these occasions the cases at once diminished or ceased, and, as far as was known, no throat-illness existed amongst the children when the school re-opened. But as soon as the school operations commenced, in a short time numerous cases appeared of a serious and fatal character. During each closure of the school, all houses and clothing had been disinfected, and no child was allowed to return to school from an invaded house until some weeks had elapsed from the first seizure. Each time the school-building was fumigated, lime-washed, and even the very books and maps destroyed. It could not be any unsanitary condition of the building, for that was all that could be desired. On the whole, Mr. Smith professes himself unable to solve the mystery of the successive outbreaks of the disease. The general death-rate was 12.5 per 1,000, and the zymotic death-rate 0.9. This latter figure would have been yet more favourable had it not been for the epidemic of diphtheria above referred to. The proportion of deaths in children under one year of age, to registered births, was 78.8 per 1,000, a very low rate even for a rural district.

HEXHAM RURAL DISTRICT.—The sanitary history of this district during 1882 is very fully set forth in Dr. Maclagan's annual report; but there is nothing that calls for special comment. The birth-rate showed a considerable diminution, compared with that for the previous year, being 28.4 per 1,000 against 30.6; while the death-rate (15.6 per 1,000) was just a shade below that for 1881. The zymotic death-rate also compared favourably with its immediate predecessor, being 1.1 per 1,000. The decrease in the infantile mortality forms a healthy feature in the year's statistics. In 1881, the deaths from infantile diseases were equivalent to 19 per cent. of the total deaths, and 2.98 per 1,000 of the population; while, in the year under notice, only 16 per cent. of the total deaths, and 2.5 per 1,000 of the population, were due to these causes. Dr. Maclagan dwells at some length upon the causes of the excessive loss of infant life in this country; and strongly condemns the practice of insuring infant lives, as tending, "if not to infanticide, certainly to actual neglect," simply because "if death happens, no money loss is incurred, but, on the contrary, [illegible] is the result."

ISLINGTON.—To use Dr. Tidy's own words, "the [illegible] for the year 1882 in this parish was singularly uneventful." The [illegible] per 1,000 was the lowest [illegible] per 1,000 points to the conclusion that the [illegible] of this parish was fully [illegible]. Of the 5,264 deaths registered, [illegible] year. To the principal zymotic diseases [illegible] which 149 deaths resulted, [illegible]. Whooping-cough was the most fatal of [illegible], and caused 299 deaths, "the highest number (with the exception of 1880, when the number was the same) ever recorded in any one year as referable to this disease." Measles and scarlatina were again decidedly epidemic; but, with two exceptions, the mortality from diarrhœa was the lowest recorded for twenty years—owing largely to the wet summer. The remainder of Dr. Tidy's report is chiefly occupied with some interesting details of analyses of water, and of articles under the "Sale of Food and Drugs Acts," in the course of which he states that, as analyst of the parish, he has already analysed 1,123 samples. The sanitary circumstances of the district might, perhaps, have been dealt with at greater length.

HUDDERSFIELD.—In his report for 1882, Dr. Cameron dwells at considerable length upon the infantile mortality in his district. The general death-rate per 1,000 inhabitants 22.4 though less favourable than that for the exceptionally healthy year 1881, was lower than the average mortality for the thirteen preceding years. The ratio of deaths in children under one year of age to every 1,000 births was 183, being at the rate of 10 per 1,000 above the average of the five previous years. The mortality from zymotic diseases was 2.63 per 1,000, or 0.16 per 1,000 higher than the average of the five years 1877-1881. From small-pox not a single death resulted, and there was a decrease in the mortality from scarlatina, continued fever, and diarrhœa. This decrease was unfortunately more than compensated for by the increased death-rate from measles, diphtheria, and whooping-cough. Measles prevailed in epidemic proportions, chiefly during the third quarter of the year, the death-rate from this disease being 964 per million, against an average of 316 for the five preceding years, or fully three times that average. The epidemic of measles was followed by an unusually high mortality among young children. One hundred and five deaths occurred during the five weeks in August in children who had not completed their fifth year, or 21 per week. On Dr. Cameron drawing the attention of his authority to this excessive infantile mortality, special sanitary measures were adopted, the effect of which was seen in the following month, when the mortality of children under five years of age fell to 54, or 13 per week, instead of 21. Dr. Cameron is evidently throwing his heart into his work, and seems determined that no efforts shall be wanting on his part to render his district one of the healthiest in the kingdom.

IPSWICH.—Although the general health of this borough, during 1882, did not compare favourably with that of the previous year, which was the healthiest on record, it was considerably above the average. The birth and death rates were respectively 32.2 and 20.7 per 1,000, and the zymotic death-rate was 1.86. The percentage of deaths in children, under one year of age, to registered births, was 14.2; while 36.3 per cent. of the total deaths were those of children not five years old. Although small-pox was introduced into the town on no less than four different occasions, not a single death resulted from this disease. The most serious outbreak was that among the sorters at a rag-warehouse, to an account of which Mr. Elliston devotes several pages of his report. In the course of his observations he says: "Looking at all the circumstances of the case, I have come to the conclusion that the infection was brought into the rag-warehouse in a certain parcel of white rags, during the first ten days of December; and that the mode of reception of the infection by the first case was by inhalation of the infectious dust from the rags, he having worked next to a window overlooking the lane, close to the rag-warehouse door. Some of the other cases probably contracted the disease in a similar manner, and there is very little doubt that about the 15th or 16th of December one of the rag-sorters took home the infection to her mother in the dress she had been working in." The ages of the persons attacked were:—one between 10 and 15; two between 15 and 20; six between 20 and 30; and four between 30 and 40. "These figures," in Mr. Elliston's opinion, "show that, after twenty years, the protective influence of the primary vaccination becomes weakened, and should be renewed on attaining the age of puberty."

LIMEHOUSE.—Although much useful sanitary work was accomplished in this district during 1882, there is nothing which calls for special comment. The birth-rate, 38.8, and the death-rate, 25, per 1,000, were slightly above the average for the ten preceding years. The infantile mortality, though excessive—nearly half the total deaths were those of children under five years of age—was not above the average. From the seven principal zymotic diseases 283 deaths were registered, representing a death-rate of 4.8 per 1,000 living. A serious outbreak of scarlatina occurred in July, and so great were the demands upon the resources of the London Fever Hospital for patients suffering from the disease in this and other districts, that, in October, the authorities decided not to receive any fresh cases on the orders of vestries. Mr. Rogers very properly takes advantage of this circumstance to call the attention of his Board to the extremely precarious nature of hospital accommodation for non-pauper patients which at present exists in the metropolis. The death-rate from diseases of the respiratory organs was considerably above any reported by Mr. Rogers during his tenure of office, it being nearly double the average. No less than half the total deaths were attributed to whooping-cough and bronchitis. This high rate was almost entirely due to the prevalence of severe fogs in the month of February, which made such havoc that the death-rate of this district rose to 44, and that of London to 35, per 1,000.

TAUNTON URBAN AND RURAL DISTRICT. The most striking feature in Dr. Alford's report for 1882, is his account of an epidemic of diphtheria, with which the borough and its vicinity was visited. During the early part of the year the medical officer was kept in ignorance as to the existence of the disease, which was thus enabled to gain a firm footing. Although 39 deaths resulted from the epidemic, "the visitation will," so Dr. Alford hopes, "be turned to good account in removing those evils which unfortunately exist. For although, in almost every case, the disease may be traced to direct infection, still there can be no doubt that a fitting locality is found for its spread where sewers are not ventilated, and house-drains and soil-pipes (often in the centres of houses) are faulty. Added to this, the season was one prone to encourage the spread of the disease." The general mortality (23.8 per 1,000) was larger than the average of the nine preceding years, but, in addition to the epidemic referred to, two circumstances accounted for the excess:—(1) The extension of the limits of the borough; and (2) a steady increase of the population. Considerable progress was made during the year in sanitary matters. Operations were commenced for an improved water-supply, and a house to house inspection by the sanitary inspector "brought to light many nuisances never dreamt of." Dr. Alford has again to deplore the non-compliance with his demand for sewer-ventilation, and it is sincerely to be hoped that his Board will no longer delay the carrying out of an improvement which cannot fail to materially decrease the abnormally high death-rate of the borough.

MERTHYR TYDFIL. There is nothing in Mr. Dyke's report for 1882 that calls for special comment, except the continuance, during the early part of the year, of scarlet fever, and an epidemic of measles, which broke out in September. Between July 1st, 1881, and June 30th, 1882, 350 deaths, of which 112 occurred in the year under notice, resulted from the former disease. These figures show a death-rate, when calculated on the whole population, of 7 per 1,000, but when calculated upon the number of children living in the parish under 5 years of age, it resulted that 1 out of every 30 children under 5 years died of scarlet fever in 1882. To measles 56 deaths were registered, of which 45 were those of infants under 3 years of age, and 11 were school children. In speaking of the epidemics of scarlet fever and measles, Mr. Dyke draws attention to the beneficial results which arose from the closing of schools, "for when," he states, "these maladies were allowed to diffuse their blighting influences among certain populations, as in Dowlais, the epidemics continued to prevail for at least four months, while in districts in which the closure of schools was insisted on, the spread of the malady was checked in 14 days, sensibly diminished in 28 days, and ceased within 42 days." Both the general and zymotic mortalities were high, the respective rates being 23.8 and 4.3 per 1,000. The proportion of deaths in children who had not attained their first year to registered births was over 15 per cent.

PADDINGTON.—Dr. Stevenson's report for 1882 presents no special features of interest; the birth-rate was 26.8 per 1,000, and the death-rate 16.3. This latter ratio is slightly higher than that for each of the two preceding years, but compares favourably with the rate recorded in many previous reports. During the year there were 396 deaths of infants under one year, and 663 of children under five years of age, representing respectively 22.4 and 37.5 per cent. of the total deaths. Of the zymotic diseases, whooping-cough and measles were of the most fatal. The mortality from measles was greatly in excess of any reported since 1875, with the exception of that for the year 1876; but the scarlatina mortality was the lowest recorded for eight years. The general death-rate is considerably lower than that for the corresponding period in the metropolis generally, and the average rate in England and Wales. The report might usefully have contained some particulars as to the sanitary improvements which are being made in the district.

ST. ASAPH RURAL DISTRICT.—An unsatisfactory feature in the sanitary history of this district for 1882 was a marked increase in the infantile death-rate, which rose from 95.1 to 113.5 per 1,000 births, whilst the proportion of infant to other deaths rose from 14.1 to 17.8 per cent. The number of uncertified deaths was also in excess, and in this Dr. Lloyd Roberts thinks can be found an explanation for much of the increase in the infantile mortality, since medical assistance was not sought to relieve sufferers in their last or fatal illnesses. Probably the intense depression in trade may account for the large number of cases of sickness which were unattended by medical men, and this view is supported by the increase of out-patients at an adjoining infirmary. Speaking generally on the subject, Dr. Roberts thinks that neglect in providing medical assistance in times of illness is as much a cause of sacrifice of life from preventible causes, as is want of care in the sanitary condition of dwellings and their surroundings, which invite zymotic disease. In regard to this group little of interest occurred, the death-rate representing 0.18 per 1,000, while the general death-rate was equal to 16.1. But little progress was made in sanitary work, which seems to have been due in part to the uncertainty which then existed as to the arrangements for officering the district.

NORTHAMPTON.—Mr. Lee Cogan's report contains a very complete account of the circumstances attending outbreaks of zymotic disease. Small-pox was imported into the borough at the commencement of 1882, and between January and April 24 cases occurred, all of which were treated in the hospital. In watching the progress of these patients, Mr. Cogan found the beneficial effects of vaccination strikingly manifested. Those who had never been vaccinated had the disease in its severest forms, while it was very evident that the longer the time which had elapsed from the date of the performance of infantile vaccination, or, in other words, the older the patients who had not had recourse to re-vaccination, the more seriously were they attacked with small-pox. The mildest cases were those of children aged from seven to 13 or 14 years, who had been successfully vaccinated in infancy; such patients suffered very slightly. Three deaths were recorded from the disease in the hospital. Two of these were men, aged 42 and 50 years respectively, neither of whom had been vaccinated, while the third case was that of a child, about whose vaccination there were great doubts. Simultaneously with the outbreak in the town, the disease appeared in the workhouse, where 16 cases occurred, with four deaths,—one an unprotected infant three weeks old, and three adults, aged 78, 79, and 87 years. These old people were said to have been vaccinated in childhood, but the operation was never again performed. The type of the disease they suffered from was only mild, and there is little doubt that their great feebleness, due to advanced age, prevented their being enabled to throw off even a mild attack of small-pox. Special efforts were made to check the spread of the disease, with such success, that in one district alone no fewer than 400 children above the normal number were vaccinated during the outbreak. Mr. Cogan speaks in high terms of approval of the assistance rendered by the Hut Hospital, which, he strongly urges, should always be maintained in a fit condition for the immediate reception of patients.

CHELTENHAM.—A special feature of Dr. Wright's report for 1882 is the account which it contains of the preliminary steps taken towards the provision of a public abattoir. A number of towns, which have already provided themselves with this important sanitary adjunct, were visited by Dr. Wright, who has set out in a practical manner the experience gained by him during his inspection. At the date of the report, there were eighteen slaughter-houses in the town, of which eight were satisfactory and ten very unsatisfactory, both as regards position, structure, and arrangements. Constant applications are being made for licences to open fresh houses; but, as these are refused, the provision of an abattoir has become a great public necessity; and, by way of encouragement, Dr. Wright reminds his authority that there is no reason why the establishment should not be quite self-supporting. As no reference is made to this subject in the report for 1883, it is to be presumed that the abattoir scheme has not further progressed. A mild form of measles prevailed during the first half of 1882, from which 20 deaths were recorded—all, with one exception, being children under five years of age. In 1883, 18 cases of measles were returned, but there were no deaths. The fatal cases in 1882 were caused chiefly by pulmonary mischief, in consequence of too early an exposure of the little patient during convalescence from the primary affection. In 1882, diarrhœa accounted for 27 deaths and enteric fever for 4, the total mortality from zymotic causes being 53, with a death-rate of 1.1 per 1,000. In 1883, a mild form of scarlatina lurked about the district, 59 cases being recorded, with four deaths. Diphtheria was the cause of 5 deaths, and whooping-cough and diarrhœa of 9 each. The general death-rate was 18.4 per 1,000 in both years. Special attention has been directed to the condition of cottage property; and the systematic work which has of late years been devoted to the amelioration of the homes of the poor is bearing good fruit, upwards of 100 dwellings unfit for human habitation having been demolished. A building company is already at work erecting comfortable houses in the place of these hovels, and the improvement which will be effected will be one of no little sanitary importance

BERMONDSEY.—The birth-rate in this parish during 1882 (39.8 per 1,000) was lower than any recorded during the eleven preceding years, while the death-rate (21.8 per 1,000) "exceeded that of the three previous years, but was just within the limit of the decennial average." The increase in the general mortality was largely due to the prevalence of measles and whooping-cough, which, together, accounted for 287 deaths out of a total of 1,913. It was to the presence of these two diseases to such a fatal extent that the large zymotic mortality (4.79 per 1,000) was chiefly attributable. From measles alone, the rate was 1.24, and from whooping-cough 2.03. As is to be expected in districts where the zymotic death-rate is high, the infantile mortality was considerable. Of the total deaths, 1,913 in number, no fewer than 552 were those of children who had not attained their first year, showing a proportion of 158 deaths to every 1,000 births registered. Diseases of the respiratory organs caused 481 deaths, or 25 per cent. of the total mortality. Diseases of this class were particularly fatal to children under five years of age, accounting for 246 deaths out of a total of 1,077. In a parish such as Bermondsey, there must always be a very large and varied field for sanitary improvements, and not the least pleasing feature in Dr. Dixon's report is the expression of his entire satisfaction with the manner in which the sanitary inspector performed his duties during the year.

CALCUTTA.—In the prefatory remarks to his report on Calcutta for 1882, Dr. McLeod states that owing to fresh instructions, annual reports are in future to be prepared for the official year (ending March 31st), in place of the calendar year as heretofore. The utility of this arrangement is very questionable, and its adoption cannot fail to be productive of considerable confusion when instituting comparisons. The fault, however, does not lie with Dr. McLeod, who has conveniently appended the statistics of the first three months of 1883 in the shape of a supplement, thus maintaining a continuity of record. The fatal prevalence of cholera, which was mainly responsible for the increased death-rate (30.4 per 1,000), and its association with certain meteorological conditions, is ably dealt with in the report. During the first quarter of the year, the heavy rain of the 11th and 12th February was followed by a slight abatement of the disease, and the scanty showers of the 14th, 16th, and 24th were coincident with a rise. The second half of May was rainless, and was succeeded by a rapid increase in the weekly mortality. The disease seems to have yielded, but somewhat stubbornly, to the heavy showers of June; but the influence of rain was not so well marked as in former years. During the third quarter, the usual depression in the disease was exhibited. In December there was a rapid increase, described by Dr. McLeod as a well marked abnormality, the deaths numbering 411 against a mean of 134. This excess does not seem to have been peculiar to Calcutta, since a similar increase was noted in the surrounding districts. Altogether cholera was fatal in 2,240 cases, the higher death-rates being recorded in the most unsanitary portions of the city. A gratifying feature of the general mortality statistics was a remarkable diminution in the deaths from small-pox, which numbered 17 only, a smaller total than in any year of the preceding decade. The deaths returned as from enteric fever fell from 569 in 1881 to 175 in 1882, but Dr. McLeod thinks that the correctness of this figure is open to grave doubt. Inquiries in the various institutions have confirmed his view that the disease is very seldom met with in the large hospitals of Calcutta. Diarrhœa and dysentery account for 1,454 deaths, "fevers" for 3,618, and "other causes" for 5,848. The year was marked by the display of considerable activity in the sanitary department, the outcome, in a great measure, of public opinion. Various measures for improvement have been insisted upon, and their comprehensive adoption cannot fail to assist Dr. McLeod in his energetic and painstaking, but very uphill work.

BRADFORD, YORKSHIRE.—Owing to trade-depression, but little real progress was made towards improving the sanitary condition of this populous borough during 1882, and Mr. Butterfield's report is chiefly interesting for the able review it contains of the zymotic mortality. Early in January, an outbreak of small-pox occurred at Armley Gaol, in the borough of Leeds, which at the time was unprovided with any means for isolating persons suffering from the disease. At Bradford, special measures were adopted, including the opening of the infection hospital to all comers, which not only saved the town from an outbreak of small-pox, but materially prevented the spread of infection to Leeds and adjoining districts. Subsequent cases of the disease were promptly notified and isolated; but the fact that nearly six hundred children are annually unaccounted for as regards vaccination is one that cannot be contemplated with complacency. As Mr. Butterfield well observes, a slight relaxation of vigilance, or the concealment of a single case, might readily kindle an epidemic which would overtax the resources of the authority and lead to much misery and expense. There was an extensive epidemic of measles, which accounted for 213 deaths, the largest mortality being registered amongst the crowded Irish population of the West Ward. From scarlet fever, fatal in 66 cases, fewer deaths were registered than since 1873; and the mortality from whooping-cough (94) was a little under the average for the past ten years. With a view of assisting Dr. Ballard, of the Local Government Board, in his protracted inquiry into the subject, much attention was devoted to an examination of the circumstances attending the fatality from diarrhœa. Altogther, 230 persons lost their lives from this disorder; and, of 128 cases investigated, it was found that 45.4 per cent. were infants brought up by hand, 25.2 per cent. were both hand-fed and suckled, and that 29.4 per cent. were alleged to be entirely breast-fed. None of the deaths occurred in houses occupied by the well-to-do; the mortality being almost exclusively confined to the poorer and artisan classes, and especially to illegitimate children. Enteric fever was very prevalent in three wards of the borough during the autumn months. To neither the water nor the milk-supply was the increased frequency of the disease attributable. Several cases, some fatal, occurred in houses of the better class; and in all these there was evidence of defects in arrangements which permitted the influx of sewer-air. The deaths from zymotic causes represented 3.2 per 1,000, while the general death-rate was equal to 21.3.

EPPING RURAL DISTRICT.—A work of great importance to this district was accomplished during 1882 by the erection of an infectious hospital at Rood Street, though the medical officer has to deplore the absence of a most necessary adjunct in the shape of a disinfecting apparatus. With respect to vital statistics, the most striking feature in Mr. Fowler's report is the increase of zymotic mortality, which, for the year under consideration, was at the rate of 2.6 per 1,000 population, or twice the rate for the previous year. To diphtheria, of which there were several separate outbreaks, and whooping-cough, this increase was chiefly due. Of the 31 cases of diphtheria, no less than 20 terminated fatally. We should have been glad of more detailed particulars as to these cases. The birth-rate was 27.9 per 1,000 inhabitants, and the death-rate 17.2, the figures for the previous year being respectively 31.4 and 14. The rate of infantile mortality was 126.6 per 1,000 births registered. The drainage-system of the district received special attention during the year, and considerable improvements were effected in the water-supply.

HANLEY.—The birth-rate in this borough during 1882—39.5 per 1,000 of the population—was considerably lower than the rate in any of the eleven preceding years, in which it ranged from 47.2 (in 1872) to 42.4 (in 1881). The death-rate was equal to 22.3 per 1,000 living, against 22.9, 23.5, and 20.9, in the three previous years. The rate of infantile mortality was the highest recorded during the period 1872-1881, excepting that for 1879. The proportion of deaths in children under one year of age to registered births was 20.6 per 1,000, while 53.2 per cent. of the total deaths were those of children who had not attained their fifth year. Dr. Walker states that "the largest increase in the deaths of infants occurred in those referred to premature birth, which rose from 24 in 1881 to 49 in the year under notice, representing an exceptionally large proportion of deaths from this cause." Of the total deaths, 150, or 13.6 per cent. of the total, were attributed to the principal zymotic diseases. The deaths resulting from scarlet and enteric fevers were much about the average; the fatal cases of measles, on the other hand, were less than in any year since 1877. In concluding his report, Dr. Walker draws attention to the sanitary work accomplished during the year, of which he speaks in high terms.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 10th instant, and, when eligible, will be admitted to the pass examination.

Messrs. W. H. R. Rivers, H. J. Tylden, C. J. Davenport, W. H. Hamer, H. C. O. Schofield, and B. W. Quartley-Papafio, students of St. Bartholomew's Hospital; J. J. Clarke, of St. Mary's Hospital; G. C. W. Wright, H. M. Doyle, C. F. Wright, and W. Parker, of the London Hospital; W. Goss, W. J. Colborne, and E. Edwardes, of the Charing Cross Hospital; W. A. Furnstone, H. L. Williams, and W. R. Clay, of the Middlesex Hospital; J. T. Calvert, and H. P. Helsham, of St. Thomas's Hospital; and H. W. Drew, of Guy's Hospital.

Four candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months.

The following gentlemen passed on the 15th instant.

Messrs. F. W. Green, and G. L. Turnbull, of St. Bartholomew's Hospital; J. T. Thomas, and L. A. Bidwell, of St. Thomas's Hospital; A. J. Gedge, A. E. Richardson, J. Godding, C. F. Fenton, A. B. Roxburgh, of the London Hospital; E. Buckell, S. E. Holder, C. W. Jecks, S. P. Hosegood, of University College; H. R. Davies, L. Remfry, and G. de V. Belson, of St. George's Hospital; W. R. Ackland, of Charing Cross Hospital; W. H. B. Moore, of King's College; H. B. Brackenbury, of Westminster Hospital; T. Fisher, and C. F. Routh, of Guy's Hospital; J. H. Tonking, C. T. Quiller, E. C. Stabb, H. J. Smyth, of St. Thomas's Hospital; A. C. Richards, H. J. Hawthorn, H. G. Lys, L. C. E. Calthrop, of the London Hospital; F. H. Andrews, of St. Bartholomew's Hospital; J. O. Tunstall, F. S. Toogood, of University College; T. W. Gibbard, G. C. Jones, A. E. Hensley, of King's College; H. S. Cooper, of the Westminster Hospital; C. W. Hogarth, H. V. Rake, of Guy's Hospital; and H. E. Mann, of St. George's Hospital.

Six candidates were referred for three months.

It is stated that as many as 245 candidates have entered their names for the pass examination for the diploma of the College.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 10th, 1884.

McCarthy, Philip Augustine, Victoria Road, Battersea Park.
Russell, Robert Hamilton, King's College Hospital.
Vernon, Frederick William, Manor House, Poplar.

At the Preliminary Examination in Arts, held at the Hall of the Society on April 3rd, 4th, and 5th, 1884, the following candidates received certificates of proficiency in General Education.

Second Division.—J. C. Arnold, S. F. Barber, F. Breese, *a*H. W. Clarke, E. M. Cornell, S. A. C. Dallas, M. Drummond, *a*C. C. Eardley-Wilmot, *a*T. W. Eden, T. H. English, A. R. S. Freeland, L. P. S. Gane, A. W. George, A. J. Greene, *a*W. Hague, J. A. Hamilton, B. M. Harrison, *a*G. C. B. Hawes, J. E. F. Hosking, E. Huntley, W. H. Mawdsley, R. L. S. Nuthall, H. C. H. Parham, A. Pollard, H. Robinson, H. N. Robson, *a*A. J. Sharpin, S. Smith, *a*A. F. Stabb, J. Terry, C. A. Truman, E. Wilkinson, C. E. Williams.

Those marked thus (*a*), have passed also in Elementary Mechanics.

The following have passed in Elementary Mechanics alone.

C. R. Morley, S. A. Rowley.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the monthly examinations for the licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, March 10th, 11th, 12th, and 13th, 1884, the following candidates were successful.

For the Licences to practise Medicine and Midwifery.—H. B. Beatty, Dublin; G. O. Cuppaidge, Kingstown, Dublin; R. Hickson, Kingstown, Dublin; B. R. Johnston, Ambleside, Westmoreland; M. Moher, Aberdeen, N.B.; G. R. Williams, Larne, co. Antrim; S. R. Wills, Rathkeale, co. Limerick.

For the Licence to practise Medicine only.—J. Craig, Dublin; C. P. Kelly, Navan, co. Meath; H. R. Todd, Dublin.

For the Licence to practise Midwifery only. R. Henry, M.D.R.U.I., Donaghadee; P. Neary, Ardee, co. Louth.

The undermentioned Licentiates in Medicine of the College, having complied with the by-laws relating to membership pursuant to the Supplemental Charter of December 12th, 1878, were duly enrolled members.

J. Christal, Lic. Med. 1875, Cootehill, co. Cavan; C. S. Grant, Lic. Med. 1877, Gold Coast Colony, West Africa.

At the monthly examinations for the licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, April 7th, 8th, 9th, and 10th, the undermentioned candidates were successful.

For the Licences to practise Medicine and Midwifery.—T. G. Drake, Clonskeagh, Dublin; G. A. Dreaper, Castlecomer, co. Kilkenny; M. E. Keating, Enniscorthy, co. Wexford; R. Murphy, Balbriggan, co. Dublin; J. A. Purdon, Belfast; F. J. W. Stoney, Cloughjordan.

For the Licence to practise Medicine only.—W. E. O'Connor, Terenure, co. Dublin; J. Robinson, Kilrathmurray, co. Kildare.

For the Licence to practise Midwifery only. J. E. McGrath, Smyrna, Asia Minor.

The following candidate was examined and passed in the subjects of the first professional examination.

F. Mandel.

The following candidates for the Fellowship and Honorary Fellowship, duly proposed and seconded at the business meeting held on Friday, January 4th, 1884, were balloted for and elected.

To the Fellowship.—W. J. Smyly, M.D.Univ.Dub., 1876; M.K.Q.C.P., 1882; Gynæcologist to the City of Dublin Hospital.

To the Honorary Fellowship.—1. H. W. Acland, C.B., M.D.Oxon., 1848; M.D. Dub. (*honoris causa*), LL.D.Cantab. et Edin., (*honoris causa*); D.C.L.Durham; F.R.C.P.Lond. 1850; Fellow of the Royal Society; President of the General Medical Council. 2. T. Crawford, M.D.Edin., 1845; Director-General of the Army Medical Department,

MEDICAL VACANCIES.

The following vacancies are announced.

ALTON RURAL SANITARY AUTHORITY.—Medical Officer of Health. Salary, 80*l*. per annum. Applications by April 23rd.

ANDERSON'S COLLEGE DISPENSARY, Glasgow.—Surgeon for Diseases of the Ear. Applications to David Wilson, 42, Bath Street, Glasgow.

ANDERSON'S COLLEGE DISPENSARY, Glasgow. Superintendent of the Outdoor Visiting Dispensary. Applications to David Wilson, 42, Bath Street, Glasgow.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.—Vacancy on the Honorary Acting Staff of the Out-patients. Applications to H. C. Fulford, [illegible], Augustus Road, Edgbaston, Birmingham, by May 10th.

CHELTENHAM GENERAL HOSPITAL.—Junior House-Surgeon. Salary, [illegible] per annum. Applications to the Honorary Secretary, by May 2nd.

CHESHIRE COUNTY ASYLUM, Parkside, Macclesfield.—Medical Superintendent. Salary, 500l. per annum. Applications by May 3rd.

DENTAL HOSPITAL OF LONDON AND SCHOOL OF DENTAL SURGERY.—Medical Tutor. Salary, 40l. per annum. Applications by April 21st.

DEVONSHIRE HOSPITAL, Buxton.—Assistant House-Surgeon, and act as House-Apothecary. Salary, 50l. per annum. Applications by April 19th.

GENERAL HOSPITAL, Birmingham.—Resident Surgical Officer. Salary, 130l. per annum. Applications by April 26th.

GENERAL HOSPITAL, Birmingham.—Resident Registrar and Pathologist. Salary, 100l. per annum. Applications by April 26th.

GENERAL INFIRMARY, Leeds.—Three Resident Assistants. Applications by April 26th.

JERSEY GENERAL DISPENSARY.—Medical Officer. Salary, 120l. per annum. Applications by May 1st.

LIVERPOOL INFIRMARY FOR CHILDREN, Myrtle Street.—House-Surgeon. Salary, 85l. per annum. Applications by April 19th.

MIDDLESEX HOSPITAL.—Assistant Obstetric Physician. Applications by April 29th.

MORPETH DISPENSARY.—Resident Medical Officer. Salary, 100l. per annum. Applications by May 5th.

PARISH OF BRACADALE.—Medical Officer. Salary, 108l. per annum. Applications to the Rev. John M'Lean, Manse of Bracadale-by-Portree.

PAROCHIAL BOARD OF KIRKCOWAN.—Medical Practitioner (qualified). Salary, 52l. per annum. Applications to Peter Gordon, Inspector of Poor, by May 1st.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Conservator to the Museum of the College. Applications by May 3rd.

ROYAL INFIRMARY, Glasgow.—Surgeon. Applications to H. Lamond, 93, West Regent Street.

ST. BARTHOLOMEW'S HOSPITAL, Chatham.—Assistant House-Surgeon. Salary, 100l. per annum. Applications addressed to the Clerk to the Trustees, endorsed, "Application for Assistant House-Surgeon," by May 1st.

ST. MARY'S HOSPITAL, W.—Electro-Therapeutical Assistant. Applications by April 26th.

TOWN AND DISTRICT HOSPITAL, Newark-upon-Trent.—House-Surgeon and Secretary. Salary, 100l. per annum. Applications by May 1st.

WEST END HOSPITAL, 73, Welbeck Street, W.—Physician. Applications by April 21st.

WHITECHAPEL UNION.—Resident Assistant Medical Officer. Salary, 150l. per annum. Applications by April 28th.

MEDICAL APPOINTMENTS.

Buxton, Dudley W., M.D., B.S., M.R.C.P., appointed Administrator of Anæsthetics to the Hospital for Women, Soho Square, *vice* Tom Bird, Esq., resigned.

Druitt, Lionel, M.D., appointed Medical Officer to the No. 7 District of the Lambeth Union, *vice* R. Gillard, M.R.C.S.Eng., resigned.

Haslam, George James, M.D., appointed Honorary Physician to the Hulme Dispensary, Manchester, *vice* George Bowman, M.D., resigned.

Luckman, Edward Llewellyn., M.R.C.S., L.R.C.P., appointed Surgeon to the Altrincham Hospital and Dispensary, *vice* W. O. Jones, resigned.

Middleton, A. H., L.R.C.S.I., appointed House-Surgeon to the City of Dublin Hospital, *vice* J. D. Pratt, M.B.

Money, P. F., M.R.C.S., appointed Resident Medical Officer to the Rochester and District Friendly Societies' Medical Association.

Montgomery, S., L.R.C.P., L.R.C.S.Ed., appointed Medical Officer and Public Vaccinator to the Ovenden District of the Halifax Union, *vice* J. Steele, M.R.C.S., deceased.

Oliver, J., M.B., appointed Assistant-Physician to the Hospital for Women, Soho Square, W.

[illegible], S., F.R.C.S., appointed Assistant-Surgeon to the Hospital for Women, Soho Square, W.

Rogers, W. G. Taylor, B.A., M.B., M.Ch. Trin. Coll. Dublin, L.M.K.Q.C.P.Ireland, appointed Medical Officer of Health and Public Vaccinator to the [illegible] District of the Mitford and Launditch Union, Norfolk, *vice* S. H. [illegible], M.R.C.S.Eng., resigned.

Ryder, Richard, M.D., L.R.C.P.Ed., appointed Certifying Surgeon under the Factory Acts for the Nailsworth Districts, Gloucestershire.

Startin, James, M.R.C.S.Eng., Surgeon to St. John's Hospital for Skin-Diseases, appointed Honorary Consulting Surgeon to the Sheffield Public Hospital for Diseases of the Skin.

Westby, George, M.K.Q.C.P.I., L.R.C.S.I., appointed Honorary Assistant Surgeon to the Liverpool Hospital for Cancer and Skin Diseases.

[illegible], [illegible], L.R.C.P.Lond., M.R.C.S., appointed Resident Accoucheur to the London Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

Napier.—At [illegible], Royal Terrace, Crosshill, Glasgow, on the [illegible], the wife of Alex. Napier, M.D., of a son.

[illegible].—On the 10th inst., the wife of R. H. [illegible], M.B., B.Sc.Lond., Medical Superintendent of the Fulham Infirmary, of a daughter.

MARRIAGE.

Rake—Crauford.—On the 20th March, at the Cathedral, Port of Spain, by the Right Rev. the Bishop of Trinidad, Beaven Neave Rake, M.D.Lond., Government Medical Officer, Trinidad, eldest son of Thomas Beaven Rake, M.R.C.S., of Fordingbridge, Salisbury, to Margaret, elder daughter of the late Lieut. William Crauford, of St. Kitt's, W.I.

DEATH.

Joseph.—On the 3rd of April, at Oaklands, Builth, South Wales, Thomas Morgan Joseph, M.R.C.S., L.R.C.P., late of Gladesville, near Sydney, Australia, in his 41st year, deeply mourned.

Royal Hospital for Diseases of the Chest.—At the meeting of the Council held on April 8th, it was, on the motion of the Chairman, unanimously resolved: "That the Council of the Royal Hospital for Diseases of the Chest, City Road, desire to record their profound sorrow at the sudden death of H.R.H. the Duke of Albany, K.G., etc., and feel, and desire most humbly to express, the deepest sympathy with Her Most Gracious Majesty the Queen, the patron of the hospital; with Her Royal Highness the Duchess of Albany; and with H.R.H. the Prince of Wales, K.G., etc., H.R.H. the Duke of Edinburgh, K.G., etc., H.R.H. the Duke of Connaught, K.G., etc., and H.R.H. the Duke of Cambridge, K.G., etc., vice-patrons of the hospital; and with the other members of the Royal Family, in their most painful bereavement." The Secretary was instructed to send copies of this resolution to Her Majesty the Queen, to the Duchess of Albany, and to the other members of the Royal Family connected with the hospital.

Diabetic Neuralgia.—The fact that diabetic patients are especially liable to certain forms of neuralgia has long been recognized, but it is only within the last few years that the subject has received the attention it deserves. The *Revue de Médecine* for March, 1884, contains a paper by Dr. Cornillon, in which the chief characteristics of the affection are carefully summed up. It is most frequent in the sciatic nerve; but the brachial plexus and the fifth pair have also been attacked. It is not an early symptom, and most of the patients had suffered from diabetes for several years before this complication was observed. The pain is nearly always symmetrical, very acute and intractable; it recurs at irregular intervals, chiefly during the night. The attacks are similar in many respects to those caused by chronic lead-poisoning, but the examination of the urine and the history of the case are sufficient for the diagnosis. The treatment must be directed chiefly against the causal disease; but morphia, salicylate of soda, and galvanism have occasionally been found useful.

The Friendly Societies' Medical Alliance.—The sixth annual conference of representatives from the Friendly Societies' Medical Association, has been held in the old Town Hall, Leicester, when there was a large number present from the principal towns of the United Kingdom. The president stated that the members numbered about 164,000, and the number of associations was 42. The statement of accounts was presented. The report of the committee on the medical agency, which was of a satisfactory character, was read by the general secretary and adopted. Mr. G. Abbott (Sheffield) read a paper on the "Development of the Alliance," which dealt with the employment of medical officers, the purchase of drugs, and the providing of medical certificates. He advocated the establishment of a combined infirmary and convalescent home, where members of the association might be remitted as occasion required. It was resolved that the next conference should be held at Lincoln. A vote of thanks to the officers brought the proceedings to a close.

Royal Institution.—The arrangements for the lectures after Easter, include two lectures by Dr. Klein on the "Anatomy of Nerve and Muscle" to be given on Tuesdays, April 22nd and 29th. Professor Gamgee will give five lectures on the "Physiology of Nerve and Muscle," on Tuesdays, May 6th to June 3rd; Professor Dewar, seven lectures on "Flame and Oxidation," on Thursdays, April 24th to June 5th; and Professor J. G. Bonney, four lectures on the "Bearing of Microscopical Research upon some large Geological Problems," on Saturdays, May 17th to June 7th.

Presentation.—Dr. Colebrooke, of Southborough, Kent, has been presented with a purse of £500 and an illuminated address by a large circle of friends anxious to mark their appreciation of his fifty years services by some token of regard.

St. Mary's Hospital.—Lord Carlingford, K.P., Lord President of the Council, has consented to preside at the festival dinner, to be held at the Freemasons' Tavern, on Wednesday, May 7th, in aid of the extension fund of St. Mary's Hospital.

Dr. R. F. Woodcock, of Wigan, has been presented by the ladies of his class in connection with the St. John Ambulance Association with a handsome silver plate tea and dessert service, together with an illuminated address, as an acknowledgment of the trouble he has taken in preparing them for examination.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY ......St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS. Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Whipham: Suppurative Disease of the Stomach. Dr. J. Ewart (Brighton): On the Treatment of Simple and Sloughing Dysentery by Large Doses of Ipecacuanha given morning and evening only. At 8 o'clock, Mr. J. Sampson Gamgee (Birmingham) will show a New Sponge, to abolish Sponge-Infection.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. F. B. Jessett: An Inquiry into the Cause of the Increase of Cancer in England and Wales. Mr. C. Macnamara: Epiphysitis. Mr. F. J. Gant: A Pelvic and Parietal Tumour of the Abdomen; Removal by Operation, and Recovery.

WEDNESDAY.—Hunterian Society, 8 P.M. Dr. Hughlings Jackson: Case of Charcot's Joint-Disease in Locomotor Ataxy. Dr. Fletcher Beach: On Atrophy of the Brain.

FRIDAY.—Clinical Society of London, 8.30 P.M.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE LOST MEDICAL WORK.

SIR,—In the numbers of the JOURNAL for February 23rd and March 1st, is a note on Wolveridge's *Speculum Matricis*, asking that if any reader should know of a copy he would communicate with the honorary librarian of the Obstetrical Society. I wrote to the Society on March 1st, saying that I had a copy bought about the year 1865 at a sale, either at Sotheby and Wilkinson's, or at Puttick and Simpson's, I cannot now remember which, along with other somewhat scarce medical books. As I see no notice of my letter in the reports of the Society's meetings, I beg to send you a short account of the little book, as some may feel an interest in it.

It is a small volume, only [illegible] inches by [illegible], the bulk occupied by a dialogue between Dr. Philadelphus and Mrs. Eutrapelia, the midwife; at the commencement are several laudatory and commendatory compositions in verse by Dr. Jonathan Ashe, of Oriel College, Oxford; Dr. Aquilla Smith, of Cork, and others; and there are over thirty engravings. The book is unfortunately imperfect at the end, wanting three or four leaves, but is otherwise in excellent preservation. In all, there are about 210 pages, many of them having only five or six lines of letterpress, so that a copy of it would not involve much time or labour.—I am, etc.,

J. L. JARDINE.

Capel, Surrey, April 5th, 1884.

INFECTION THROUGH THE AIR.

SIR,—Mr. W. H. Power, in his report "On the Influence of Fulham Small-pox Hospital on the neighbourhood surrounding it," makes the following statement (*vide Tenth Annual Report of the Local Government Board*, 1880-81, supplement, page 350).

"Familiar illustration of that conveyance of particulate matter which I am here including in the term 'dissemination,' is seen summer and winter in the movements of particles forming mist and fog. The chief of these are, of course, water-particles; but these carry [illegible] about with them, in an unaltered form, other matters that have been suspended in the atmosphere, and these other suspended matters, during the almost absolute stillness attending the formation of dew and hoar-frost, sink earthwards, and may often be recognised after their deposit. As to the capacity of fogs to this end, no Londoner needs instruction; and few persons can have failed to notice the immense distances that scent of flowers, of hayfields, of the sea, as well as other and less pleasing odours, can travel on the 'air-breaths' of a still summer's night. And there are considerations that require us to believe particulate matter to be more easy of suspension in an unchanged form during any remarkable calmness of atmosphere. Even quite conspicuous objects, such as cobwebs, may be held up in the air under such conditions. Probably there are few observant persons of rural habits who cannot call to mind one or another still autumn morning, when, from a cloudless though, perhaps, hazy sky, they have noted, over a wide area, steady descent of countless spider-webs, many of them well nigh perfect in all details of their construction."

I do not desire, in this communication, to ascertain whether variola-virus possesses such an extensive virulence and subtilty of nature as he tries to make us believe, by bringing together this curious but hybrid concatenation of natural phenomena, but to ascertain the modes which bring them into display; and I rely on the scientific attainments of the members of the profession for their explanation.

1. Is the stillness of the air (which, according to Dr. Parkes, means in this country the movement of the air between six and twelve miles an hour) necessary for the formation of fogs and mists, and their descent? I have known mists in the tropics prevail with the land and sea breezes, and experienced severe fogs in the Mediterranean and the Bay of Biscay in the windy weather.

2. Is the stillness of a summer's night necessary for the wafting of scents from flowers, etc.? I have very frequently experienced the fishy smell of the sea between twenty and thirty miles inland in India, during brisk sea-breezes and tide-time, and much less perceptible at other times. Equally so has been my experience with the smells of forests and scents of flowers when, during breezy weather, they are more and better perceptible to the olfactory nerves, even from the opposite banks of a river more than half a mile in width when the wind is facing.

3. Is not the *modus operandi* of the descent of cobwebs quite different from that of the formation of fogs and mists, and wafting of smells and scents? My experience tells me that they are detached, during windy weather, from houses, hedges, and trees, carried some distances, and descend during so-called quiescence of atmosphere?—I am, etc., M. D. MAKUNA, M.R.C.S.Eng., L.R.C.P.Lond.

QUEEN'S PLACE, WHITECHAPEL.

WITH reference to the allegations contained in a letter of Dr. F. J. Allan, addressed to the *Students' Journal*, on the subject of a report which was published in this JOURNAL of November 17th of the sanitary condition of Queen's Place, it should be stated that the report in question was not founded upon any statements such as he considers they were "evidently based on," but was furnished by a highly experienced sanitary commissioner, instructed by us to visit Queen's Place, and to report what he saw. Dr. Allan's subsequent communication received careful attention; but, on re-investigation, substantial and independent evidence was afforded of the correctness in all main points of the report published. Of any circulars which may have been issued, we, of course, know nothing, and now hear of them for the first time.

PRELIMINARY EDUCATION.

SIR,—It would be of great interest to the profession if members could learn how many out of the 230 applicants at the College of Preceptors examination in March were sons of medical men, and thereby test the middle class education of the present day. Two hundred and thirty parents in a position to enter their sons, and we naturally suppose train them for an arduous profession, had only 55 of their number sufficiently educated to qualify for registration as medical students. Now, to my parental mind, there must be a mistake somewhere; either the examination is too severe, or the teaching defective—a most important question for parents, and I may add schoolmasters also. Our children pass years of their lives under the care of supposed teachers, and how lamentable the result! Can we suppose that the 175 failures were all lazy boys? I am, etc.,

W. S.

CARBOLISATION OF THE SICK-ROOM.

"M. H." will be obliged for information as to the proportion of carbolic acid which it is desirable that the air of a sick-room should contain, in the treatment of phthisis and whooping-cough.

*** We think our correspondent "M. H." will find that a solution of carbolic acid 1 in 40, if diffused well over the room by means of a bronchitis kettle, will be of sufficient strength for this purpose. We are not prepared to say that this or any other more concentrated vapour will show any decidedly beneficial influence upon either disease.

CHLOROFORM SYNCOPE TREATED BY REVERSING.

SIR,—On December 14th, I began to operate on a lady, aged 41, for the removal of a scirrhus of the mamma. After examination of the heart, which we found normal, Dr. Watt commenced administering chloroform, but the cardiac action becoming very excited, a mixture of chloroform and ether was used. She was some minutes going under the influence, but there was scarcely any struggling, and the pulse was full, though jerky. I had not finished the incisions round the tumour when she suddenly became livid and the pulse ceased. Artificial respiration was begun, the tongue drawn forward, and strong ammonia applied to the nostrils, without avail. I then hastily jumped on the bed, and seizing her legs raised the body, allowing the head to touch the bed. In a few seconds, the colour returned to the lips, and the pulse to the wrist. Artificial respiration was soon resumed; hot water applied to the region of the heart; and she became sufficiently conscious to speak and to swallow some brandy and ammonia, soon, however, relapsing [illegible] again. I again reversed with the same result, [illegible] returned, and after applying the battery (for which I had sent previously) without success, I again reversed, and this time with a satisfactory result, as we were enabled, by the use of the battery and ammonia, to establish respiration.

I consider this case worthy of record, as the successful termination was clearly due to reversing the body, it being impossible, apparently, to stimulate the nerve-centres by any other means; and it is a method of treatment which I think is not used so often as it ought to be, judging by the reports of such cases, as I only remember having seen it mentioned in one instance, and it is one so easily and quickly adopted.

I may add that, two days afterwards, I completed the operation without an anæsthetic, [illegible] before the operation, and [illegible] brandy and water at the time. The patient made a good recovery. I should also say that she had taken chloroform several times before at her confinements—another instance of the immunity of parturient women from the dangers of chloroform. I am, etc.,

ALFRED [illegible], L.R.C.P.E., M.R.C.S.E., Surgeon to the Oamaru Hospital, New Zealand.

DR. H. J. SMITH, Blackshear, Georgia, U.S.A.—Your letter has been [illegible] Dr. Allin[illegible].

OPHTHALMOSCOPES.

SIR,—Kindly inform me through the JOURNAL which is the [illegible] ophthalmoscope [illegible]; and oblige, yours, etc.

[illegible], March 15th, 1884. WM. W[illegible].

For a short text-book of ophthalmology, *The Student's* [illegible] (2nd edition, Churchill, London, 1884) is probably the best. [illegible] Lawson, [illegible] Renshaw, London, of which a new edition [illegible] is clearly and concisely written.

POSTAL MICROSCOPICAL SOCIETY.

SIR,—The Postal Microscopical Society [illegible]

[illegible]

Mr. Alfred Allen, 1, Cambridge Place, Bath, is the Hon. Secretary, [illegible]

I am, sir, yours truly, C. P. COOMBS, M.D. Lond., President.

Castle Cary, April 12th, 1884.

THE PREVENTION OF FOOTBALL-CASUALTIES.

WE are glad to notice signs that, within the ranks of football-players, a healthy feeling is growing up with regard to the brutal violence which too often disgraces matches played in nearly all parts of the country. The writer of the "Football Notes" in the *Manchester Courier* advises that the umpires should be empowered peremptorily to order off the ground notoriously rough and rowdy players; and, after quoting at length our remarks in a recent issue, observes that, sooner or later, our criticism must "be seriously laid to heart if the game of football is to hold its place in public estimation."

ANALYTICAL CHEMISTRY.

SIR,—In reply to the letter signed "J. C. M.," which appeared in your issue of January 12th, I beg to say that, if your correspondent will apply to the Secretary of the Institute of Chemistry, Somerset House Terrace, W.C., for a prospectus, he will be able to gather from that what is required from candidates before presenting themselves for examination.—I am, sir, your obedient servant,

H. S. CARPENTER.

The Metropolitan Laboratory, 32, Holborn Viaduct, London, E.C.

SIR,—The following information may, perhaps, be of assistance to "J. C. M.," who made an inquiry concerning this subject in the JOURNAL of January 12th. A competent analytical chemist must have had a thorough training in chemistry, inorganic and organic, theoretical as well as practical. He must possess a sound knowledge of physical principles and laws; and an acquaintance with elementary mathematics, at least, is indispensable to him. He must have, in addition, more than a superficial knowledge of botany and zoology, and, in particular, be a good microscopist. It will be seen that a course of study, extending over a period of about four years, is absolutely necessary.

The first named and chief of the requirements above enumerated can only be attained by attending courses of lectures, well illustrated, experimentally and otherwise, at a good college or school where chemistry and physics are thoroughly and efficiently taught, such as University College, London, the Owens College, Manchester, the older universities, the Royal College of Science, South Kensington, and the medical schools attached to some of our larger hospitals. These institutions are provided with experienced lecturers and demonstrators, and well fitted laboratories.

The attendance of the lectures must be supplemented by daily practical work in the laboratory, which work must include the making of the different gases, the devising and fitting up of various forms of apparatus, chemical manipulation generally, and the qualitative analysis of substances gradually increasing in complexity of composition. During this portion of the course (which will occupy from one and a half to two years), the subsidiary subjects most suitable for study are mathematics and physics, under which latter heading are included hydrostatics, pneumatics, electricity, magnetism, heat, light, and acoustics. Quantitative analysis may be commenced in the second year, and must be continued, in its different branches, throughout the third and fourth years, during which period, also, the preparation of various organic compounds may be proceeded with. Subsidiary subjects which may at this stage be conveniently studied are botany and zoology, and much attention should now be paid to the use of the microscope. The fourth year cannot be better spent than in the private laboratory of some analyst of experience and repute, where a practical knowledge will be acquired of various special methods of analysis not usually taught in collegiate laboratories.

It may be remarked, parenthetically, that the course of chemistry forming part of the ordinary medical curriculum, is not by any means sufficient for a man desirous of taking up analytical chemistry as a profession. This follows almost as a matter of course, however, from what has been already written.

The foregoing is a rough sketch of the general course of study which must be pursued by one who wishes to be an analytical chemist. The order of the subjects and time occupied of course vary somewhat, as circumstances modify cases.

A properly trained and really competent analyst is, in the fullest sense, a scientific man. Combined with a thorough knowledge, theoretical and practical, [illegible] he must have [illegible] insight into several subsidiary ones. Without these requirements, a man attempting to fill the difficult and responsible position of an analytical chemist, can neither have reliance on himself, nor be relied on by others.—I am, sir, your obedient servant,

EDWD. G[illegible] CLAYTON, F.C.S., Member of the Society of Public Analysts.

Chemical Laboratory, Holborn Viaduct.

THE REGULATIONS OF THE UNIVERSITY OF DURHAM.

SIR,—In answer to your correspondent in the JOURNAL of March 29th, I beg to say that it is proposed to present a memorial to the University of Durham, praying that all practitioners who have been qualified for ten years may be eligible for the examination for the M.D. degree, without any restriction as to age. I [illegible] that the [illegible] to the proposed alteration [illegible], and as the memorial would have weight proportionate to the number of signatures, I [illegible] that all who are in favour of the proposed change would write to [illegible], at the office of the JOURNAL; and should such a number of [illegible] in favour of the proposed change as would give the movement a reasonable chance of success, the movement may then make an active step in the [illegible] direction, and a committee be formed to consider the best way of [illegible] the desired change. I am, sir, yours truly, [illegible]

SOCIAL PURITY.

SIR,—Can you tell me of any literature in pamphlet form [illegible] Social Purity Association [illegible]

[illegible] "Sexual Hygiene" [illegible] St. Bartholomew's Hospital, and Mr. [illegible] at [illegible] Hall, [illegible] by addresses [illegible].—Very faithfully yours,

HIKTOS.

HOUR-GLASS CONTRACTION OF THE UTERUS.

SIR,—The subject of hour-glass contraction of the womb between the expulsion of the child and placenta, has lately been much discussed in the JOURNAL, and many cases attributed to the uneven application of a binder. Within the past four years I have seen three cases, and in none was there a binder applied nor ergot given. In all the cause was adhesion of the placenta to the womb. For myself, I cannot see how the binder could produce it, and should like an explanation. If this was the case, how many cases attended by midwives would be converted into hour-glass contractions?

In some of the northern counties, few women are delivered without the aid of a binder. One woman is generally set aside to pull till child and afterbirth are both expelled, and often the binder is rolled up like a rope; yet, out of [illegible] cases attended by myself, and where, according to the custom, the binder was used, I never saw a single case of hour-glass contraction. I am of the opinion that, in most cases where it exists, adhesions of some kind may be found as the sole cause.—I am, sir, yours, etc., T. A. MITCHELL.

Catford, S.E.

THE CHARLIER SHOE.

DR. HORACE S. HOWELL sends a communication, stating that he has been much interested in the recent correspondence on this subject, and, wishing to be cautious, has had one of his horses shod with the Charlier shoe, and, at the same time, has sought for the experience of some other person who has worked his horse for a year, shod in the same way, but he cannot find such a person. Dr. Howell's coachman went to inspect an alleged case, but found that the horse was shod in front with Charlier shoes that were not let into the hoof flush with the sole, but only half way, so as to differ but little from the ordinary shoe; the hind feet were shod with the common shoe, with a calkin on the outer heel. Dr. Howell has watched hundreds of horses, and not observed the new kind of shoe in use. He asks if any of our correspondents can throw light on this obscure subject, for it seems incredible that no one should have tried the experiment, and if any one will give the benefit of successful experience in the use of the Charlier shoe, he will be doing a great service to many. Veterinary surgeons, blacksmiths, grooms, and coachmen do not look on the new system with favour.

DRYNESS OF PALM OF HAND.

SIR,—Can you, or any of your readers, kindly give me any advice which will benefit extreme dryness of palm, amounting almost to contraction, in a gouty subject?—I am, etc., SUFFERER.

⁂ The precise nature of a complaint of the kind described can only be ascertained by inspection of the affected part. "Sufferer" should consult his regular medical attendant.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following were the questions on Anatomy and Physiology submitted to the 256 candidates for the diploma of member of the Royal College of Surgeons, at a meeting of the Board of Examiners on March 31st. They were required to answer four, and not more than that number, out of the six questions. A. *Anatomy.*—1. Describe the dissection down to the bones of that portion of the palm of the hand which lies to the ulnar side of a line drawn from the middle of the annular ligament to the cleft between the ring and middle fingers. 2. Describe the course and relations of the veins which terminate in the inferior vena cava. 3. Enumerate the various kinds of joints met with in the human body, and give examples of each kind. 4. Describe the structures filling in an intercostal space, and give their relative positions. 5. Describe the attachments, connections, relations, and actions of the biceps flexor cubiti. 6. Give a dissection displaying fully the external circumflex artery of the thigh and its branches. B. *Physiology.*—1. Describe the excretory functions of the skin. What relations exist between these functions and those of the lungs and kidneys? 2. Describe the different forms of peripheral nerve-endings in man, and state the functions of each. 3. What are the evidences of the circulation of the blood? State the forces by which that circulation is maintained. 4. Describe the formation of the placenta. What are the functions of this organ? 5. Describe the blood-supply to the different parts of the kidney, and the relation of this supply to the secretion of urine. 6. Describe the mechanism of voice and speech.

SIR,—I should be greatly obliged if you, or any reader, could inform me of any home or institution into which a consumptive patient, paying about 10s. or 15s. per week for his maintenance, may be received.—Yours obediently, X.

GUNPOWDER MARKS.

SIR,—Would any of your readers kindly suggest any remedy for the black disfiguring marks of the face produced by the explosion of gunpowder?—I am, etc., M.D.

EXAMINATIONS AND THE MEDICAL BILL.

THERE is no reason against sending a student up for the first professional examination of the Royal College of Physicians, pending the passing or rejection of the new Medical Bill. The action of the Bill, if it pass, will not be retrospective in such a case. We cannot say whether the College of Physicians may change their system of examination if the Bill be passed.

POLYPUS OF THE RECTUM.

THE case of our correspondent Mr. R. Howard appears to have presented the usual features of this disease. It is often taken for prolapsus, and strangulation of its pedicle by the action of the sphincter is a frequent complication; until this occurs, there are often no symptoms in any way annoying to the patient. Constant desire to defæcate is a usual result of irritation around or above the anus from any cause. These growths are generally adenomata. The results of treatment are very satisfactory, and ligature of the pedicle and cutting away of the growth, as practised by Mr. Howard, is the best way of dealing with a rectal polypus.

DANGERS OF FALSE TEETH.

SIR,—In the JOURNAL for February 2nd, Mr. Stevenson has drawn attention to the risks involved by wearing false teeth improperly made or applied. An instance of the kind, happily without a fatal termination, happened to myself during my residence as house-surgeon at the West Herts Infirmary. When administering ether to a woman, during a protracted operation, I discovered that the patient was becoming rapidly asphyxiated. Upon opening the mouth, and dragging the tongue forward, a plate containing three incisor teeth was seen projecting from the pharynx, seized with forceps, and with some difficulty extracted. It was similar in construction to that referred to by Mr. Stevenson. It is needless to remark that I have carefully examined the teeth previously to giving an anæsthetic since this occurrence. I am, sir, your obedient servant,

Newcastle-under-Lyme. HERBERT E. PARKES.

COMMUNICATIONS, LETTERS, etc., have been received from:

Our Aberdeen Correspondent; Mr. J. Vesey Fitzgerald, London; Dr. Myers, London; Sir Eardley Wilmot, London; Dr. Robertson, Kimberley; The Secretary of the International Health Exhibition; Dr. J. Farquhar, Harrogate; Mr. J. J. Campbell, Castle Douglas; Dr. Lionel Druitt, London; Dr. T. Cranston Charles, Streatham; Mr. Alfred J. Bisdée, Banwell; Mr. G. T. Broatch, Aylesbury; Mr. G. Knapp, Southampton; Mr. F. B. J. Baldwin, Rotherham; Dr. J. O. Affleck, Edinburgh; Mr. C. E. Smith, Stratford; Mr. Hamilton, Aberdeen; Dr. John Blair, Shotts; Dr. Collier, Homerton; Mrs. Joseph, Builth; Dr. Donovan, Romsey; Dr. Waters, Chester; Mr. H. A. Powell, Beckenham; Messrs. Maskelyne and Cook, London; Dr. Norman Kerr, London; Mr. J. Ogilvie, Bolton; The Board of Management of the London Temperance Hospital; Mr. A. Simpson, Perth; Mr. J. Burdett Moxon, Grantham; Mr. H. Hendley, London; Our Belfast Correspondent; Mr. T. M. Stone, Wimbledon; Dr. J. F. Goodhart, London; Mr. J. Hall-Edwards, Birmingham; The Secretary of the Royal Medical and Chirurgical Society; Mr. J. White, London; Dr. H. S. Howell, London; Dr. Murrell, London; Dr. Ewart, London; Dr. Hodgson, London; Dr. C. P. Coombs, Castle Cary; Mr. Henry Chayne, London; Dr. Brailey, London; The Secretary of the Harveian Society; The Secretary of the Charing Cross Hospital Medical School; Mr. E. J. Hutchings, Southborough; Dr. J. C. Reeves, Dayton, Ohio; Messrs. Spiers and Pond, London; Mr. John Whitehouse, Smethwick; Mr. A. Cuthbertson Lynn, Newcastle-on-Tyne; Dr. Glascott, Manchester; Dr. Henry Harris, Trengmeath, Redruth; Dr. E. Creswell Baber, Brighton; Dr. Althaus, London; Mr. John Taylor, Ticehurst; Mr. G. S. Mahomed, Bournemouth; Mr. J. R. Semple, Crawley, Sussex; Mr. Roger Williams, London; Dr. Strange, Worcester; Our Paris Correspondent; Dr. M. Ross, London; Dr. Casey, Windsor; Dr. Shuttleworth, San Remo; Dr. Redfern, Belfast; Dr. Manson, Strathpeffer Spa; Dr. H. de Tatham, Ahmednagar, India; W. S.; Mr. C. L. Crompton, Southport; The Secretary of the Lunatic Asylum for British Guiana; Our Edinburgh Correspondent; Mr. L. Humphry, Cambridge; Dr. Fisher, Lytham; Dr. Joseph Rogers, London; Sir Edmund Lechmere, London; Mr. C. Clark Burman, Belford; Dr. J. Molony, Collooney; Mr. C. R. B. Keetley, London; Dr. B. O'Connor, London; Dr. Suckling, Birmingham; Mr. Thomas Blair, Leeds; Mr. H. R. Fuller, London; Dr. C. J. B. Williams, Cannes; Mr. E. Matthews, Redditch; Mr. G. Davies, London; Dr. Robinson, Dover; Dr. R. Ryder, Nailsworth; Dr. J. L. Crombie, North Berwick; Mr. A. I. Garland, Oamaru, New Zealand; Mr. Beaven N. Rake, Port of Spain; The Secretary of the Royal Medical Benevolent College; Our Dublin Correspondent; Mr. J. Holmes, Limerick; Mr. Francis Cooks, Cheltenham; Mr. James Oliver, London; Dr. Paul, Liverpool; Dr. Swanzy, Dublin; Dr. Howard, Paris; Mr. Robert Reid Rentoul, Liverpool; Dr. V. D. Harris, London; Dr. A. Hill Griffith, Manchester; Messrs. B. Benjamin and Sons, London; Dr. S. Rees Philipps, Exeter; Dr. Mackay, Greenwich; Mr. T. A. Mitchell, Catford; Dr. McCombie, New Cross; Dr. Crew, Alderley Edge, Cheshire; Mr. Septimus Farmer, Chorley, Lancashire; Mr. Henry Skaife, Alfriston, Sussex; The Secretary of the Leeds Fever Hospital; Dr. J. C. Ogilvie Will, Aberdeen; Mr. John Powell, Ewyas Harold, Hereford; Mr. Arthur Jackson, Sheffield; Our Glasgow Correspondent; Dr. R. J. Roulston, London; Dr. T. W. Myles, Dublin; Dr. E. T. Tibbits, Bradford; Dr. H. J. Smith, Blackshear, Georgia, U.S.A.; The Honorary Secretary of the Clinical Society of London; etc.

BOOKS, ETC., RECEIVED.

Anatomy of the Inguinal and Femoral Regions. By E. L'E. Ledwick. Dublin: Fannin and Co. London: Baillière, Tindall, and Cox. 1884.

Memoirs of Life and Work. By C. J. B. Williams, M.D., F.R.S. London: Smith, Elder, and Co. 1884.

Corpulence and Its Treatment. By Dr. W. Ebstein. Translated by Professor A. H. Keane, B.A. London: H. Grevel. 1884.

Diabetes Mellitus; A Synopsis of Its Pathology, Physiology, Etiology, Incipient and Progressive Symptoms, Causes of Death, Sugar Tests, and Treatment. By Harvey J. Philpot. London: Sampson Low, and Co. 1884.

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AN ADDRESS

ON THE

USE OF OPIUM AS AN AID TO SURGERY.

Read before the West Kent District of the South-Eastern Branch.

By GEORGE POLLOCK, F.R.C.S.,
Consulting Surgeon to St. George's Hospital.

IT has ever been my thought, that every man's personal experience, gained over a series of years in a large hospital, should not be allowed to run to waste, but that it is the duty of every one who has travelled through such rich fields of experience to render some account of his stewardship, in whatever manner may appear to him most desirable; more especially so, if his attention have been drawn to any particular points of practice. Unless there be some record of his observations, the fruits of his work fail to be of advantage for long, when otherwise they might effect some permanent good.

It is with these views, that I have ventured to think a few observations on the use of opium in surgical practice may prove of some slight interest on the present occasion; and although, I fear, I may have little new to say on such a subject, still I trust that what little I have to bring to your notice will give rise to discussion, and thus elicit the opinions and the results of the experience of others, equally capable of throwing some light on the subject and of adding to our practical information.

My attention was early drawn to the beneficial effects of opium, by my teacher and friend, Mr. Cutler, many years surgeon to St. George's and the Lock Hospitals, and also some time surgeon to the Second Life Guards, in all of which positions his opportunities of observation were considerable in the use of opium. These early impressions were strengthened in my mind when, as a student, I read the works of Travers "On Constitutional Irritation." Therein I found the practical teaching of the one confirmed by the writings of the other.

I shall hereafter have to refer to some observations of the latter on the importance of the administration of opium in certain conditions of the system; but at present I wish to restrict myself to the more practical question of what I have myself observed, and the general conclusions arrived at as to the advantages and disadvantages of opium in practice.

In Squire's last edition of the *Companion to the British Pharmacopœia*, a work of great value to the profession, he says "opium has three main physiological effects. It diminishes pain (insensibility), it causes sleep, it arrests secretion, excepting that of the skin, which it promotes" (p. 225).

This appears to me a very inadequate estimate of the beneficial uses of opium. As far as my experience permits me to value its properties, it certainly has great influence, in what manner I do not venture to explain, not only in arresting secretion, but in helping to restore healthy action in most conditions of ulceration and slough; in giving tone and support under many circumstances, and especially in soothing and quieting the nervous system in gangrene or mortification of the extremities; with not unfrequently a very satisfactory local result. In the latter class of cases, opium frequently appears to help in maintaining life until the condition of the part is no longer an immediate source of danger, or it places the patient in a state which enables the surgeon to undertake with some hope the local treatment of the diseased extremity.

I feel sure that those whom I have the honour to address, will support me as to the importance of the observation that the medical element in surgery cannot be too strongly insisted on. Robert Liston's observation to me on this subject is to the point, "that the work of a surgeon should be that of a physician, and something more." Travers truly says: "The medical treatment, a duty not less responsible than the operative, belongs to the surgeon."

It is in the various conditions of gangrene that opium may be said to stand alone as useful and powerful for good. Whether the gangrene be the result of injury in old age, or whether it appear in an ulcer in advanced life, kept open by neglect, or rendered more irritable from exposure—in fact, in almost every condition approaching to gangrene, or partaking of it, save two or three to which I will hereafter refer, the administration of opium may and should be had recourse to; always with safety, frequently followed by great advantages, and not unfrequently helping to restore the patient to health and prolonged life. "If I were to restrict my pharmacopœia for gangrene to a single drug," writes Mr. Travers, "I should choose opium without hesitation, as being that alone for which I could find no substitute, and of most general efficacy in allaying the irritation, and upholding the powers of the constitution. As for any other narcotics save opium, they are not worth the mention."

I must here also quote the forcible words of Dr. J. A. Wilson, formerly Physician to St. George's Hospital, on the value of this drug: "How full of wonder," he writes, "how worthy of admiration, is the drug whose rule is sleep. Opium, when in active circulation through the body, influences all nutrition, and modifies every secretion. Its effects on particular functions are so marked and various that, observing them separately, we fail to consider them in their combination. Opium is alterative in the widest sense of the term, and should never be prescribed for the use of a part, but in remembrance of its power over the whole. The more frequent application in medicine of the rule thus inferred from opium, would correct much that is now bringing reproach in its practice."

In the forms of gangrene above alluded to, pain is often a forerunner, and most frequently a very marked symptom, of the threatened evil. The patient will complain of great suffering, if the limb be lowered, or the foot placed on the ground. This condition appears to be due generally to some defective arterial circulation and nerve-disturbance. I have frequently examined the main arteries in such instances, and found them pervious; but with, perhaps, here and there, and generally, some evidence of atheroma. Probably, in all such cases, some arterial degeneration is usually present. In many, the pain is often, beyond any expression, in advance of, and far greater in proportion to, the local change.

The pain of diseased artery is a very marked point, and practically important; insomuch that, in continuous pain, with obscure cause of explanation, I have usually been inclined to prognosticate the arrival of some later positive evidence of diseased artery, or, in its absence, the existence of cancer. The importance of pain as a symptom cannot be too closely considered; it will usually be found, sooner or later, a prominent feature in threatening or established gangrene due to arterial defect.

It is in cases of gangrenous ulcers that we have, in opium, a sure helpmate and a certain friend. Administered internally, it arrests or modifies any tendency to ulceration or sloughing; it soothes pain; it appears to husband the power of the patient; the irritable surface or gangrenous edge, under its influence, generally and soon becomes changed to a clean healthy granulating surface, surrounded by its characteristic whitish margin of skin. The external application of opium, in some convenient form, appears occasionally to assist towards such beneficial results, but seldom or never is potent, of itself, to curb the action of ulceration.

In senile gangrene, I know nothing, as regards medical treatment, which can compare with the internal use of opium. It alone will mitigate the severe pain of this formidable malady; it alone appears capable of affording that comfort which may render life tolerable, and, perhaps, tends to prolong it until the wished-for line of demarcation appears, and the condition of the patient becomes such that local treatment may be more advantageously called into action. Under any circumstances, in senile gangrene, opium may be used freely; under the worst forms, it should be used with the view to modify suffering, and ease the few remaining hours of life, when a fatal termination may be surely prognosticated. There are, however, certain conditions of gangrene in which the use of opium internally, as far as my experience tells me, does not appear to influence in any favourable degree. There are few rules in life without an exception; and I fear, as in medicine, so in surgery, our rules must be allowed to have many exceptions.

The condition of gangrene in which the use of opium must not be depended on for good, in which indeed, if trusted in solely, it would prove worse than useless is, first, that of traumatic spreading gangrene. If I may be allowed to express myself strongly on this particular point, I would say that it would be almost culpable to trust one moment to its administration in such a case. I shall be glad to profit by the experience of those whom I have the honour to address, as to treatment in this form of gangrene. It must be allowed to be a most urgent condition; formidable in character, and one that requires early and energetic treatment, if life is to be saved. With loss of time, we lose the favourable opportunity for acting while operative interference is alone justifiable and promissory of good. Delay is always dangerous; and any trial of medical rather than of local treatment will surely terminate in disappointment, even under circumstances in which it might be anticipated that the latter would fail to save life. Again, in the well known form of gangrene attendant on diabetes, opium brings little or no help. It may soothe, it may modify discomfort, but it is not required to relieve pain; pain is usually a minus quantity in this peculiar form of gangrene. The latter is, like senile gangrene, frequently seen to commence at the extremities of the lower limbs, is moist in character, and often spreads rapidly under the integument rather than implicating it to an equal extent. In its progress, it is usually seen to extend along the planes of cellular tissue, and not to involve all soft structures alike. It is usually the forerunner of death in old and confirmed cases of diabetes.

In severe cases of carbuncle in association with diabetes, we meet with similar results. In such cases, no healthy attempt to limit slough appears capable of being established. It may be truly said, "the pitcher is broken at the fountain"; the urine gives evidence of excess of sugar. We may pretty surely write it down, that the commencement of slough or gangrene, in a diabetic patient, is usually the commencement of the end, and that the end is generally not far removed.

Gangrene, when the companion of diabetes, is the outcome of some deteriorated condition of the fluid which circulates, the original cause of which is no question of the present; but over this condition opium appears to possess no influence. The other, senile gangrene, is the result of vessels incompetent to supply sufficient fluid nourishment to certain parts, and consequently these parts die. In such cases, opium, however it may act, certainly must be considered our sheet-anchor in the storm the constitution has to encounter.

What has been said as regards the use of opium in traumatic spreading gangrene, and gangrene in diabetes, applies also to a great extent to gangrene the result of embolism.

In the various forms of phagedæna, I have seen most satisfactory results follow on the internal use of opium. I would especially urge the importance of, and benefit from, its free administration in all cases of this formidable evil. It has fallen to my lot to see much of sloughing sores—phagedæna in its every variety, in hospital and in private—as the result of syphilis or of dissipation, and attendant on accidents or operations.

The administration of opium in such cases is nothing new to advocate; it has been recommended by many besides myself. Sir Joseph Fayrer, in his *Clinical and Pathological Observations in India*, relates the particulars of a case of sloughing ulcer of the foot, in which the doses of opium were pushed to seven and a half grains every three hours before the sloughing process was arrested (p. 154.) But I have reason to believe it is not so generally appreciated as it deserves to be, and as it would be if more generally and completely tested. I say so for this reason: my experience as one of the examiners of candidates for Her Majesty's medical services has brought me into contact with gentlemen connected with all the schools of medicine in the United Kingdom. My communications with them, now extending over a period of several years, and consequently including a very considerable number of candidates, has resulted in the conclusion that the general teaching as to the treatment of such cases is rather towards dependence on local than on constitutional treatment. I do not presume to say that the former is wrong; I ought rather to say that it is right, when no other treatment can be had recourse to at the moment. It is severe, while that of the internal use of opium is the reverse. If the latter prove equally efficacious, it is, to my mind, much to be preferred for many reasons.

In the eleventh volume of the *Medico-Chirurgical Transactions* will be found a paper by Mr. Wellbank, on the advantages of the application of nitric acid in phagedæna. Mr. Wellbank does not appear to have used opium freely. However, whatever was his treatment by opium, it failed; while the application of pure nitric acid, in each case reported by him, was followed by an arrest of the sloughing. I only consider it just to Mr. Wellbank to state thus much; while, in contrast to his treatment, I can state that I have never once had recourse to the application of nitric acid in cases of phagedæna or sloughing sores, in private or in hospital practice; nor have I ever found the use of opium internally to fail in such cases.

It is some years since a young woman was admitted into St. George's Hospital with a sloughing sore of the labium, engrafted on some syphilitic contamination. She was placed under the care of Mr. Cutler, who at once ordered opium to be given freely internally, while externally a chloride of sodium wash was alone used. The case yielded to this treatment most satisfactorily, and the patient soon left the hospital well.

Within a fortnight of the admission of this case, a woman in the next bed but one, the subject of ulcer over the patella, the result of abscess of the bursa, was attacked by rapid sloughing of the sore. Being under the care of Mr. Cutler, she was placed under a similar plan of treatment to the former, without the application of any escharotic. She recovered in an equally satisfactory manner.

It would be tedious to relate how many cases of active sloughing sores, phagedænic in every character, were subsequently admitted into the hospital for some months. Not only were they abundantly supplied from without, but all recent cuts or wounds admitted into the hospital had the tendency to take on similarly diseased conditions.

I had ample opportunities of watching a large number of cases. All that came under my immediate notice were simply treated with opium, in one form or another; no escharotic was used, nor did any appear necessary. Lotions of chloride of soda or lime were the usual local applications. I cannot recall a single instance in which the result was not satisfactory, with the exception of a very few cases which succumbed to pyæmia. In one case, large doses of laudanum, somewhat freely administered, produced rather alarming symptoms of narcotism for a short time, but the patient ultimately perfectly recovered.

As I have already stated, I believe that the treatment of phagedæna by opium has of late not been sufficiently considered, and I have been consequently desirous to bring the subject more prominently to the notice of the profession. I could not have desired a better opportunity to ventilate the question than through the discussion of it by the present audience. No one better than the military surgeon is able to test its value, or judge of its beneficial effects when adopted. He is able to weigh its worth under many climatic conditions denied to the private practitioner; and, from critical observations of cases placed entirely under his supervision and control, is able to note the results with an accuracy not often readily or successfully achieved by those not thus publicly employed.

In all cases of syphilitic phagedæna, in hospital and in private practice, I have alone trusted to the internal use of opium, and have never been disappointed. It has proved as certain in arresting phagedæna of the penis or labium, of syphilitic origin, as surely as it has been found to arrest a sloughing sore elsewhere, following a cut or any other local injury.

Of course, in all such cases, external applications, to ensure disinfection and to destroy smell, are not to be neglected. I know nothing better than a solution of sulphurous or chromic acid, to be followed by iodoform as soon as sloughs have separated. Chromic acid (1 in 2,000 to 4,000 of water) has the advantage of being a very cheap and most efficacious deodoriser; while, as a disinfectant, nothing, I believe, can surpass it. It destroys all smell of disagreeable or offensive discharges at once on application; and, as it must be used largely diluted, it becomes one of the cheapest disinfectants and deodorisers at present obtainable. I am indebted to my friend, Mr. Peter Squire, for my knowledge of the value of chromic acid as a disinfectant.[1]

In private practice, it is always a matter of some importance to avoid such painful applications as pure nitric acid, however useful it may prove as a remedy, provided an equivalent can be gained by a more soothing plan of treatment. I would not wish to imply by this statement that we may employ that in hospital practice which we would avoid in private. But there are many facilities for recourse to measures of a severe character without giving pain, in hospital, which are not as readily accessible in private, and especially in country practice.

I have now to draw attention to the consideration of the use of opium in a class of cases in which, as far as my experience carries me, it has not been much adopted or advocated. All who have attended to the poor will have met with sad specimens of ulceration and sloughing of the mouth, in children of the lower and destitute classes.

In my younger days, I was taught to treat such with the internal use of chlorate of potash, bark, etc., introduced, as best they could be, in some form of fluid nourishment. Local stimulating or caustic applications were in free use. The results were most unsatisfactory—not unfrequently fatal; and, even in recovery, the ravages of slough and subsequent contractions told the tale of havoc and the helplessness of our measures.

A few years since, two instances of this character of ulceration of the mouth came under my care in St. George's Hospital. In one case, a child about eight years of age was admitted with extensive ulceration of the inner side of the cheeks, lips, and gums. The parts were so tender that it was with difficulty that the child could be induced to open her mouth. The breath was offensive, the saliva abundant, the cheeks and lips swollen. The surface of all the ulcerated spots was in a slightly sloughy condition, though superficial in extent. The inner surfaces of the mouth were generally tumid, and excessively tender on movement. The child could with difficulty, on account of the tenderness, partake of food, even in a liquid form; all solids were entirely refused, they could not possibly be masticated.

Having formerly, in similar cases, observed the futile results of tonics, local astringents, etc., I decided to try the effects of opium. If opium was potent for good in the treatment of sloughing of external parts, it occurred to me that some benefit should be derived by its administration in this instance. The child was ordered to take three drops of laudanum in a teaspoonful of water every four hours, until observed to be drowsy—the dose only to be omitted while drowsiness lasted. The benefit of this treatment was very marked in a few days. Pain had been so reduced, that the child was soon able to take plenty of nourishment. However, some days after the improvement had been fully marked, a slight relapse took place, and the sores were observed to be in a less healthy condition. On inquiry, it was ascertained that the nurse had, by some mistake, omitted the medicine. It was immediately ordered to be resumed, and was continued until the child was well, all ulceration of the mouth being healed.

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[1] Since these words were written, death has removed from us this much esteemed chemist.

It will be noted that the only constitutional treatment in this case was the administration of laudanum in water, continued until the last trace of ulcer had disappeared. When the child entered the hospital, it would scarcely partake of sufficient food to support life long; it had great difficulty in deglutition. The local treatment was simply a wash of warm water and Condy's solution of permanganate of potash, to modify the offensiveness of the mouth-secretions. Under the treatment pursued, it was most satisfactory to observe how soon these simple means subdued pain, rendered the child able to feed well, and how rapidly the ulcerated surfaces assumed a healthy healing condition. The accidental omission of the laudanum for a few days, was an additional testimony in its favour; for a marked relapse set in, but was at once arrested by its resumption.

The early arrest of pain in such a case as I have described is, in my opinion, one of the very great advantages gained by this form of treatment. While suffering from the pain, the child is almost starved; relieved of it, food is soon enjoyed by the little patient, and nourishment is well marked in its improved looks. Pain, added to want of sufficient nourishment, rapidly deteriorates and destroys life in the young; and it is the mitigation of the former which materially contributes towards an efficient supply of food, and renders this form of treatment so happy in its results.

Soon after the admission of the case just related, a second opportunity presented itself for the trial of this treatment, under almost identical conditions. The case was again that of a little girl under my care in St. George's Hospital. The condition of the mouth was very similar to that of the first case, equally ulcerated and equally painful, with as much difficulty in partaking of food, and extreme pain in all movements of the mouth. Similar treatment with laudanum in water was adopted, and no other drug was administered. The improvement was marked, steady, and satisfactory, and the child left the hospital well. I may mention that in neither case did contraction of the mucous surfaces follow on recovery, to an appreciable extent.

In 1882, I was consulted by a gentleman with a peculiar state of mouth, such as, in an adult, I had never previously met with. On the inner side of each cheek were patches of ulceration with superficial sloughy surfaces. The anterior half of the upper surface of the tongue was in a somewhat similar condition, though more superficial in extent. On the under surface of the tongue, on each side, there were somewhat deeper ulcerated patches, some deeper than others. Many teeth were defective; at their base the gums were more or less ulcerated. There was much salivation, fœtid breath, much pain in and difficulty of articulation. Nothing but fluid food could be taken, nor had his diet for some time past consisted of aught else, so great was the pain on the introduction of solids into the mouth. "This condition," to use the words of the patient, "commenced as far back as the previous Christmas (1881), with thick white spots on the tongue, which gradually spread down towards the point." Ulceration slowly but steadily followed, until it assumed the condition above described.

Constitutional treatment with iodide of potassium and various local applications, terminating with that of pure nitric acid, had been tried without benefit when he called to consult me. The appearance of the mouth did not, to my mind, in any degree point to syphilitic complication; nor were there any indications elsewhere to make me doubt the statement of the patient, that he was entirely ignorant of any venereal taint.

The disease was in no respect associated with epithelioma. It appeared to be simply a thoroughly bad intractable specimen of ulceration of the tongue, gum, and cheeks, due to some obscure constitutional defect, and such as I had heretofore observed only in children of the ill-fed and poorer classes.

As the patient had previously been seen by Sir James Paget, I proposed a consultation with him about the case as a somewhat singular one, and to this consent was readily given. We both were agreed as to the non-syphilitic character of the complaint, to whatever else it might be due. One only possible explanation as to its cause was, the well-water at the patient's country residence had been found to be much contaminated by sewage. It was, however, difficult to attribute anything to this circumstance, as the water had long ceased to be used for domestic purposes. Under the circumstances mentioned, I suggested the simple use of opium internally, with Condy's solution and water as a mouth-wash to mitigate the smell from the offensive saliva and discharge from the sores.

He commenced to take twenty drops of laudanum three times a day in water. With regard to diet, he was to take as much milk, raw eggs, etc., as he could comfortably digest. This treatment was commenced on May 13th, when the patient weighed ten stone thirteen pounds. Quinine was added to the opium a fortnight later, as he complained of weakness; but pain had much subsided, and he had greatly improved by being able to take more solid food. Gradually some of the defective teeth were attacked or removed by my friend Mr. Vasey; and, as each disappeared, so the ulcerated gum at its base assumed a healthy surface, and slowly healed without any local application.

In six weeks he had greatly improved; his weight had increased to eleven stone three and a half pounds. The laudanum was now reduced to forty minims in the twenty-four hours, and, on July 5th, to thirty minims. The decrease was in accordance with the improvement. The local wash was occasionally changed, but there was no evident advantage gained by the application; one of weak nitric acid and bichloride of mercury appeared to afford most local comfort.

To curtail a long story, I may say that the opium-treatment was continued till late, in the autumn, when the patient was so greatly improved, that it was no longer considered requisite.

There have been occasional but slight relapses, and still some defective teeth would be better removed. But the patient has long since resumed his professional work; has no difficulty in masticating solid food, as far as the remaining defective, and a large deficiency of, teeth will allow him; and is in every respect in excellent health.

The steady marked improvement in this singular case, under the simple administration of opium, would help to justify the opinion stated, that the ulceration was not of a syphilitic origin, and that the result of the administration of the opium also justifies the statement that the treatment was appropriate and satisfactory.

I look back on this case as a typical one—one of great importance, as illustrative of benefit and comfort from the soothing, rather than an heroic, plan of treatment. The application of the nitric acid to the ulcerated surfaces within the mouth, to which the patient had submitted prior to his visit to me, was described by him as something horrible in suffering; yet, he added, had it been considered desirable to persevere in its use, he would endeavour to submit to it, to rid himself of the painful disease from which he had so long suffered.

I give the particulars of this case for what they are worth; as far as my experience tells me, and I may add that of Sir James Paget also, such cases do not often occur in adult life; they are by no means rare in childhood. But, whether seen in adult or in early life, the treatment by opium has so far proved successful, whereas, under similar circumstances, other measures have been known to fail. Under such conditions, the facts related appeared to me worthy the attention of those whom I have the honour to address.

The advantages of the internal use of opium in obstruction of the bowels is too well known and too highly appreciated to justify me in occupying time in dwelling long upon its beneficial effects. So, too, as regards its use in cases of hernia after operation, in inflammation of bowels from external violence, and in other injuries of the viscera. In my student days, the usual treatment, after an operation for hernia, commenced with small doses of Epsom salts frequently repeated. I have many notes of such cases; nor even at this period is it uncommon to be consulted about cases of obstruction, in which purgatives have been administered not wisely or too well, and when opiates would most probably have done more good.

Opium administered after an operation for hernia may be continued, and usually with advantage, until the bowels are naturally relieved, or by the aid of enemata. My rule has long been never to allow an aperient of any kind until a free passage has been independently established. So, also, in constipation due to the well known block in the cæcal region, whatever the cause may be which gives rise to it. If a rule, hard and fast, and without an exception, might be laid down in treatment, it would, I think, apply [illegible] to those cases that aperients be withheld, and opium administered until natural evacuations have been established.

Of the use of opium in [illegible], I need say little but in its praise. Under many such conditions, patients may be said to live on opium;

some even fatten on it. It not only gives relief to pain, but renders life tolerable, under circumstances in which it would otherwise be one continuous term of suffering or agony till relieved by death. It need only be limited in dose by its effect; it is the only drug we can depend on to lessen the severity of a surely advancing disease, and need not be stinted by any rule which would apply to the treatment of disease not of a fatal or malignant character.

The tolerance of opium in many cases is very remarkable, the quantity being only measured by its quieting effects.

I wish to offer a few remarks of caution in the administration of opium, when requisite under any circumstances for a continuance. Constipation is one of the evils to be guarded against. Sir Benjamin Brodie was in the habit of advising us, in the wards of St. George's Hospital, to prescribe calomel occasionally, when opium was requisite for a continuance. It will, also, not unfrequently be found absolutely necessary to relieve the rectum by enemata, or even occasionally to break down hard accumulations of fæculent matter plugging up the rectum, but incapable of being voluntarily expelled.

Under the latter circumstances, a frequent desire to defæcate should arouse the suspicions of the medical attendant. A digital examination will at once clear up any doubt. I would urge the advantage of this examination whenever such symptoms are present, and the importance of not taking for granted that the bowel has been sufficiently emptied.

Not unfrequently does opium disagree in a capricious manner in certain individuals; in one, it may be the quantity, in the other, the quality of the ingredient.

As an instance of the former, I may mention a case related to me by the late Dr. Latham. A lady consulted him on account of a chronic diarrhœa of some standing. Her first request was that he would not prescribe any form of opium, as it acted like a poison upon her. Dr. Latham's reply was characteristic; he said, "Whatever is powerful for evil in medicine is powerful for good, if the right dose be ascertained." He ordered his patient to take one drop of laudanum in a teaspoonful of water after each motion. He did not see his patient again for many months, when he accidentally met her at a friend's house. She recalled to him the circumstances of her visit and his advice; upon which he replied, "I concluded you thought me an old fool, and threw away my prescription." "No," she replied. "I at once had recourse to it, and became quite restored to health and strength, and I am never without a supply of the medicine."

Again, it will constantly be found that one form of opium cannot be tolerated when another will effect all that is desired. A lady under my care, the subject of severe cancerous trouble, cannot take solid opium without great discomfort, depression, and vomiting; whereas Battley's solution of opium relieves from pain whenever taken, and procures refreshing sleep, and does not in any degree disturb the stomach. In the case of a professional friend suffering from extreme irritability of the bladder, due to alkaline urine, the result of too liberal indulgence in Vichy water, I found it difficult to overcome this irritability, even after the urine became acid. The bladder had acquired a most irritable condition, probably rendered worse by the nervous temperament and professional anxieties of my patient. No preparation of opium appeared to suit, but rather increased than diminished his general discomfort. At last, I had recourse to codeia, the result of which was most immediate and satisfactory. Codeia is often useful as a sedative in bladder-trouble, complicated with enlarged prostate, when other opiates fail to provide comfort.

I need say little of the abuse of opium. My task—a pleasurable one—has been to speak of its advantages when and where its use is indicated. But we must not shut our eyes to the tendency on the part of patients to continue its use when once commenced, but after it has ceased to be requisite. When I was house-surgeon at St. George's Hospital, a woman was admitted under the care of the late Mr. Keate with a large sloughing wound of the leg. The sloughing was arrested by the free internal use of opium. Some years passed, when I was consulted by the same woman as an out-patient. I casually referred to her original condition, when she replied that her leg had remained well since then, but that she had become a confirmed opium-eater from the time she quitted the hospital. In no respect did she appear the worse for the indulgence.

I have endeavoured to confine myself to what experience has led me to consider the practical value of opium in surgery. In sloughing sores, in gengrone, in almost every variety of acute ulceration, it will be found a help to the surgeon; and in his adoption of it in such cases he will rarely find himself disappointed. If this communication should in any degree aid to render that adoption favourably considered, the object of the writer will be entirely gained.

REMARKS
ON
UNRECOGNISED OR MASKED CEREBRAL TUBERCULOSIS.*

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I AM afraid that the title I have chosen for my paper this evening does not accurately suggest the object I had in view in writing it. In looking through the fatal cases that have been under my care during the last two or three years, I found that they included a considerable number in which tubercles were found either in the brain or in the cerebral meninges, or in both. In this, of course, there is nothing very remarkable; for cases of cerebral tubercle are unfortunately very common, and they gravitate largely to hospitals. But I observed also that there were several among them in which the presence of tubercles in the brain or its membranes was concealed, or rendered doubtful, during life, in consequence of the association therewith of other diseases which seemed adequate to explain the patients' symptoms; and one or two in which the apparent cause of cerebral symptoms might have been taken to exclude the possibility of their dependence on tuberculosis. It was to these cases that I determined to call your attention this evening; because, while several of them have clinical or pathological features of special interest, they all seem linked together by the common clinical difficulty which the name that head my paper was intended to express.

The first two cases I shall quote are cases of children who, supposed to be perfectly healthy at the time, received blows on the head which were immediately, or almost immediately, followed by cerebral symptoms leading to death at the end of about three weeks.

CASE I. *Tubercular Meningitis; Symptoms following immediately on a Blow on the Head; Death; Necropsy.*—A boy, aged 10, a pupil at a board-school, was said to have had perfectly good health up to May 30th, 1879. On that day, his schoolmaster boxed his ears two or three times; and shortly afterwards he complained of headache, was sick, and went home. From that time until June 17th, he suffered more or less constant pain in the back of the head and neck; he was frequently sick; there was a marked tendency to constipation; and he lost flesh and strength. His pulse was observed to be slow, and his tongue clean. He had no fit. On the 17th, he passed into a state of partial coma.

On the next day, the 18th, I saw him with his medical attendant. He lay in bed, taking no notice of what was going on round about him; his respirations were for the most part attended with groaning; and occasionally he uttered some stereotyped phrase. When addressed loudly, he opened his eyes, but he made no answer, and took no further notice. His pupils were unequal, but there was no obvious squint, nor, indeed, any other definite paralytic symptoms; the conjunctivæ were congested. He had passed his evacuations into the bed since the previous day. There was no sign of thoracic or abdominal disease, no rash, no ear-affection, no sign of injury to the head. The tongue was coated. His coma gradually became more profound; and he died, without any important change of symptoms, on the afternoon of the 21st.

The *post mortem* examination (at which I was present) was made on the 22nd. The body was emaciated. On removal of the skull-cap, the surface of the brain was found flattened and dry, and the pia mater uniformly and much congested. There was slight inflammatory thickening along the intergyral spaces and large vessels. A good deal of inflammatory deposit occupied the confluxes at the base of the brain; and numerous small but distinct tubercles were scattered over the medulla oblongata and pons Varolii, about the circle of Willis, and along the fissures of Sylvius. There was great excess of fluid in the lateral ventricles, with much congestion and thickening of the velum interpositum and choroid plexuses, and abundance of tubercles in the velum. The brain-substance was fairly healthy. There was no evidence of injury to the bones of the skull or to the soft parts within. The lungs, pleuræ, heart, and pericardium were free from tubercles, and healthy. The abdominal organs were not examined.

CASE II. *Tubercular Meningitis: Symptoms coming on after a Blow;*

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[1] Read before the South London District of the Metropolitan Counties Branch.

Death; Necropsy.—J. A. B., a boy two-and-a-half years old, was admitted under my care on April 8th, 1882. He had had good health up to the present illness, with the exception that, about a year previously, he had had two convulsive fits, attributed to teething. On March 21st, he accidentally fell downstairs, cried, and said he had hurt his head; but he soon recovered, and continued well until the 24th, on which day he refused his food. In the night he was sick. The next day he ran about; but he was feverish and fretful, and still refused his food. He continued in much the same state for the next fortnight, suffering especially from loss of appetite, sickness, and constipation. On the 31st, he took to his bed; and from that time till his admission he passed his evacuations involuntarily. On April 7th he had a fit, attended with loss of consciousness, distortion, and lividity of face, and convulsive movements of the hands. He remained unconscious ever since.

He appeared to be a well developed, well nourished child. He was almost wholly unconscious; took no notice when spoken to; but withdrew his limbs when they were pinched or pricked. He generally lay on his back, but occasionally placed himself on his side. He presented occasional slight convulsive movements, which were also induced whenever he was moved or the attempt was made to feed him. The limbs tended also to became rigid at these times. The face was flushed. The eyes were opened occasionally, but usually kept closed; there was no squint; the pupils were equal, of medium size, insensible to light. Respiration presented the Cheyne-Stokes character in a well marked form. The *tache cérébrale* was fairly well developed. Reflex phenomena were natural. The thoracic and abdominal viscera were apparently all healthy. There was no albumen in the urine. The temperature in the morning was 99.2°, but it rose in the course of the day to 101.8°.

During the 9th he still remained unconscious, and had several fits. The temperature varied from 102.8° in the morning to 100.1° in the evening. No paralyses. The optic discs and retinæ were healthy.

On the 10th he still remained unconscious; and, excepting that his temperature gradually fell from 101.2° in the morning to 97.4° in the evening, his condition underwent no material change up to the time of his death, a little after 7 P.M.

Necropsy.—The convolutions of the brain were flattened, and the surface dry. There was a little recent lymph in the subarachnoid tissue at the base; and numerous grey tubercles existed about the fissures of Sylvius, crura cerebri, and pons Varolii. The brain-substance generally was healthy, and was free from tubercular deposits. The ventricles were distended with serous fluid, and the white matter around them was softened. There was an encapsuled calcareous mass in the apex of the left lung, and a few miliary tubercles in its neighbourhood. Miliary tubercles were also found in the liver and spleen. All the other organs were healthy.

REMARKS.—The above cases were, apart from their apparent causes, more ordinary cases of tubercular meningitis, and would naturally, by most medical men, have been regarded as such during life. That also was the view which I took of them. At the same time, they were attended with some obscurity, and there were some grounds for entertaining an opposite opinion with regard to them; and I looked, therefore, with more anxious interest than I usually do to the revelations of the *post mortem* room. In both of them, and especially in the first, the symptoms followed so immediately on the blow, that it was difficult not to believe that the cerebral mischief was due to the blow; in neither of them was there any clinical evidence whatever of abdominal or thoracic tuberculosis; in neither of them was there any paralysis of the ocular or other cerebral nerves, which is common in inflammations at the base of the brain; and in the only one examined ophthalmoscopically the optic discs were healthy; but, on the other hand, there were no signs whatever of disease of the ear, or any evidence of damage to the skull. The *post mortem* examination in each case revealed, as was anticipated, the presence of tubercular meningitis, but it showed also that the tubercles were few in number and small in size, and that the tubercular affection was therefore in an early stage. There is no sufficient reason, of course, to suppose that the tubercular deposit was caused by, or even supervened on, the blow upon the head. Doubtless the natural course of events in each case was, first, the deposition of tubercles, unattended with marked symptoms or obvious deterioration of health; and second, the supervention of inflammation and dropsy excited by the local injury, to which, and not to the tubercular deposit immediately, the patient's symptoms and death were due. There is no reason, so far as I know, to doubt that, in all cases of cerebral tuberculosis, the early stage of tubercular deposition is unattended with symptoms, and that it is only at a later period, when the tubercles either have attained considerable bulk, or have implicated specially important parts, or have become associated with inflammatory mischief, that such cases become recognised clinically as cases of cerebral tumour or tubercular meningitis, as the case may be. Both of the cases I have narrated, and more particularly the first of them, convey an important warning to schoolmasters, and others who have to do with children, and are in the habit of chastising them. There are parts of the body which seem made for corporal punishment, and on which it may be inflicted to any reasonable extent without injury. They should confine their attention to these. I need scarcely add that the danger of serious mischief from comparatively slight blows on the head is not limited to those who are the subjects of latent tubercles. Rupture of the membrana tympani is not unfrequently caused by boxing the ears; and I recollect very well, some few years ago, being called to the death-bed of a young man who was dying from abscess of the brain connected with ear-disease. The history was that he had had some deafness and discharge from his ear for some years, but that he had never had any severe suffering from it, and was in fact in good health until (about a week before his death) he was knocked down by a blow of the fist inflicted straight upon his lower jaw. This was immediately followed by intense pain and other symptoms referable to the ear, and, within a day or two, by those of fatal cerebral disease.

The next two cases are instances of disease of the internal ear, in both of which cerebral tuberculosis was discovered after death, but in neither of which (I am bound to confess) did I suspect the presence of this complication during life; in the first, because, as a matter of fact, there were no symptoms to justify any such diagnosis; in the second, because, although the child's symptoms were exactly such as might be caused by tubercular meningitis, I was misled by the history and presence of ear-disease into attributing them to brain-mischief secondary to this affection.

CASE III. *Caries of Temporal Bone: Facial Palsy: Tubercular Tumour in Brain: Pulmonary Tuberculosis. Death, apparently from Exhaustion: Necropsy.*—Mary C., aged 2½, was admitted under my care on May 31st, 1883. She had had measles and whooping-cough, and for a year had suffered from a discharge from the left ear. Three days before, without obvious cause, her face became drawn to the right. She had not suffered specially from earache; and she had had no headache, no drowsiness, no squinting, no vomiting.

On admission, she was pale, but not emaciated. She had an offensive discharge from the left ear, and complete paralysis of the left portio dura; but there was no other paralysis; and, excepting that the child had a slight cough and a little occasional coarse crepitation over both lungs, she seemed healthy.

She gradually became weaker; but there was very little further change in the child's condition during the month she was in the hospital. The ear continued to discharge profusely, but she had very little pain in it, and no swelling or tenderness in the neighbouring parts. The facial palsy remained unchanged. She was inclined to be drowsy, but was not irritable, was perfectly sensible, and never had convulsions or any paralysis save that of the portio dura. She had no sickness; took her food fairly well, excepting towards the last; and her bowels were regular. Her pulse and respirations were rapid; and her temperature presented remarkable variations; in the morning, it was always subnormal, ranging usually from 95° to 97°; in the evening, it was almost always between 102° and 103.8°. On two or three occasions, the evening temperature varied from 99° to 101°. Her cough, though not very troublesome, continued to the last. The *tache cérébrale* was always producible. The ear was examined on two or three occasions; but the discharge was so profuse, that no clear view of the bottom of the meatus could be obtained. During the last few days, she became very weak and very drowsy, and, without any special symptoms, died, apparently from exhaustion, on the morning of June 30th.

Necropsy.—The body was much emaciated. The dura mater was firmly adherent to the skull, especially in each temporal region. That over the left temporal bone was a little thickened; and there was a slight amount of inflammatory lymph between it and the bone in this situation. The convolutions were flattened. There was no congestion or inflammation of the pia mater, and no appearance of miliary tubercle. The substance of the brain was soft, and the lateral ventricles contained a large quantity of serous fluid. In the right superior parietal lobule was a caseous tubercular mass as large as a small walnut; this was imbedded in the brain-substance, and extended almost to the outer edge of the lateral ventricle. Two similar masses, each of the size of a pea, were found in the left occipital lobe, at its extreme posterior edge. The left temporal bone, at the junction of the squamous and petrous portions, was superficially carious, granular, and presented pin-hole perforations. The external surface of the temporal bone, adjacent to the attachment of the pinna, was in a similar condition. The external meatus was completely bare and carious.

The aqueductus Fallopii was involved in the carious and necrosed bone, and the facial nerves were destroyed. There were no traces of the auditory ossicles. The carotid canal and jugular fossa were not affected. The lungs were adherent by old adhesions, and thickly studded with caseous masses. In the apices were many small cavities. The bronchial glands were enlarged and caseous. The mesenteric glands were caseous. The remaining organs were generally healthy.

CASE IV. *Tubercular Meningitis associated with Chronic Otorrhœa: Psoas Abscess: Convulsions: Coma: Paralysis of both External Recti and of Superior Rectus and Levator Palpebræ of Right Side.*—Rosina C., aged 9, was admitted under my care on April 9th, 1883. When two-and-a-half years old, she fell and injured her spine, and subsequently presented a bend in the lumbar region. Three years before admission, she had scarlet fever, since which time she had been deaf, and had had a discharge from her right ear. Two weeks before admission, "an abscess broke" in this ear, and there was an offensive discharge from it up to the 6th. The patient was frequently sick from the commencement of her illness up to the same date; but she continued to run about and play as usual. On the evening of the 7th, she had an epileptiform fit; and on the 9th she had a second. The convulsions affected both arms and both legs equally.

The child, on admission, was fairly healthy-looking. She was drowsy, but very irritable, and frequently uttered the "hydrocephalic cry." There was no paralysis of the limbs, and no squint. The pupils were dilated, the right most so; and they acted little, if at all, to light. The tongue was coated. There was no vomiting. She had retention of urine. Temperature 102.2°.

April 10th. She was in much the same state, drowsy, irritable, and complained of headache. There was no paralysis of the limbs; but both external recti now acted imperfectly, as also did the right superior rectus and levator palpebræ. Both pupils were dilated, but the right was the larger. The *tache cérébrale* was well marked. The hydrocephalic cry was frequent. The tongue was coated; there was no sickness; the bowels were confined. The urine was retained and had to be drawn off by the catheter. There was no affection of the chest. On examination of the right ear, perforation of the membrana tympani was discovered, but no discharge. It was assumed, however, that the child was suffering from cerebral complication of ear-disease, and six leeches were applied to the mastoid process. The temperature to-day varied from 102.2° in the morning to 100° in the evening.

April 11th. The child gradually became comatose, with stertorous breathing, very feeble pulse, coldness of limbs, and falling temperature. When death occurred, in the course of the morning, the temperature was a little below the normal.

Post Mortem Examination.—The dura mater and skull were healthy. The surface of the brain was flattened, and somewhat dry, and the pia mater was a little congested. The membranes covering the medulla oblongata, pons Varolii, crura cerebri, and parts between these and the lamina cinerea were thickened, rough, and studded with a small number of minute grey tubercles. The surfaces of the fissures of Sylvius were adherent, and also presented a few small tubercles. The presence of these bodies was confirmed by microscopic examination. There was very little fluid in the ventricles, which were not at all distended. The substance of the brain was wet, but otherwise healthy. The fornix was somewhat softened. The vessels at the base were healthy. The sinuses were all healthy. The affection of the ear had not extended to the surface of the petrous bone, and there was no disease whatever in the dura mater covering it. The only other morbid conditions discovered were some caries of the lumbar vertebræ, and a double psoas-abscess. But although the spine was bent, there was no disease of the bony surfaces immediately surrounding the spinal canal; no inflammatory products in the canal, and no affection of the spinal cord or nerves. There were no tubercles in the lungs or elsewhere.

REMARKS.—In the first of the cases just narrated the child was suffering from advanced ear-disease, which had implicated the aqueductus Fallopii, and destroyed the trunk of the portio dura, and had involved the dura mater in the neighbourhood of the petrous bone. But, although there were tubercular masses of some size imbedded in the substance of the brain, they had caused no symptoms whatever; there was no meningitis, and death was due mainly, if not exclusively, to exhaustion, referable in part to the profuse discharge of pus from the ear, in part to pulmonary tuberculosis. In the second case, the child's latter symptoms and death were doubtless attributable to tubercular meningitis. It is noticeable, however, that the tubercles were few and small, and the meningeal inflammation slight; but that, excepting for vague prodromal symptoms, lasting about two weeks, the progress of the case was unusually rapid, extending only to about five days.

The last case to which I propose calling your attention is one which naturally falls into the same category as the two which have just been discussed; but, altogether, it was a case of much greater interest than either of these, and deserves individual consideration. It was that of a little girl who, two or three months before she came under my care, showed signs of paraplegia, without definite local signs of spinal disease; who, a week or two before I saw her first, had some protrusion of the left eyeball, and fulness in the corresponding temporal region; who suffered (during the twenty weeks she was under my care) from incomplete and somewhat varying paraplegia, presumably due to vertebral caries; from exophthalmos on the left side, with swelling in the left temporal region, and (later) discharge from the left ear, manifestly dependent on disease of the bones forming the wall of the orbit, and in the neighbourhood of this part; and who, a week or two before her death, manifested signs of cerebral mischief, of which (in combination with gradual exhaustion) she died.

In this case, caries of the vertebræ and of certain of the bones of the skull was discovered *post mortem*, as had been expected. There was also some inflammation of the portion of the brain in relation with the carious bone; but, further, there were miliary tubercles (scarcely tubercular meningitis) in the usual situation at the base of the brain. Their presence had not been suspected, and probably had had no influence on the patient's symptoms, or the event of the case. I may call atention to a practical point illustrated by both the fourth aud fifth of my cases; to wit, that while both presented vertebral caries with pretty abundant suppuration, associated in one case with angular curvature, and in the other with paraplegia, neither of the patients presented the slightest pain or tenderness in the back.

CASE V.—*Caries of Sphenoid Bone with Protrusion of Eye-ball, Softening of Brain and Meningeal Tubercles: Caries of Dorsal Vertebræ and Paralysis: Death: Necropsy.*—E. M., a little girl, aged 7, was received into one of my beds on March 17th, 1880. The father had had syphilis followed by eruptions, and had latterly been suffering from progressive muscular atrophy. One brother had a blow on the head, followed by the separation of a sequestrum, and died of psoas abscess; and a sister, after an injury to the wrist, had an abscess in her forearm, followed by the discharge of a necrosed portion of the ulna.

The child was well until last Christmas, when she became dull and spiritless and inclined to mope. During January she began to complain of pain in her legs, but at first had no difficulty in walking. About the same time, she seemed to suffer from general tenderness, and would scream when she was lifted up. Before long, it was noticed that her legs were weak, and that also she had difficulty in sitting up. About three weeks before admission, the paralysis of the legs had become complete; and then, or a little later, the left eye was observed to protrude. Subsequently a swelling made its appearance on the left temple.

She was a spare, delicate looking, sensible child. There was marked exophthalmos of the left eye, but she could close the lid. There was no impairment of the motion of the eye, and no inflammation. The pupils were equal and acted to light; the optic discs were healthy. In the left temporal region, just outside the orbit, there was a doughy, obscurely fluctuating, ill-defined swelling. There was no paralysis of the jaw, tongue, or arms. The legs were completely paralysed, but sensation remained perfect. The superficial and deep reflexes were increased. Ankle-clonus was readily developed, and the legs were apt to become stiff and to present paroxysms of trembling. The evacuations were passed involuntarily. There was no curvature and no tenderness at any part of the spine; there were no bed-sores; there was no disease of thoracic or abdominal organs. Pulse, 96; respirations, 24; the urine was of specific gravity, 1025, phosphatic, without albumen.

There was very little change in her condition during the next three or four months. She did not lose feeling in her legs, nor did she recover power over them, and all the phenomena of spastic paralysis remained well marked, possibly even became somewhat increased. She occasionally acquired power over her evacuations, lasting even for several days at a time; but for the most part, and latterly, her evacuations escaped involuntarily. She improved a little in health and spirits, and at no time complained of pain or tenderness in the course of the spine. The prominence of the left eye varied a little from time to time, and once a patch of congestion appeared on the outer and upper part of the conjunctiva. The swelling in the temporal region increased a little, and became somewhat more diffused.

On July 4th, I noted that there had been slight œdema of the left eyelids for a week or two; and, now, that the œdema of the upper eyelid had much increased, and was attended with congestion; that a circumscribed swelling, with an indistinct sense of fluctuation (as though an abscess were presenting), could be felt in the upper and outer part of the upper eyelid; that the eye was a little less prominent than it had been, and slightly displaced downwards and inwards; and that there was still no pain in the parts.

On the 12th, some purulent discharge escaped for the first time from the left ear; there was, however, no ear-ache or deafness. The temporal swelling was somewhat smaller. The protrusion of the eyeball had increased, and the swelling in its vicinity was larger, redder, and more distinctly fluctuating. A day or two afterwards the swelling was punctured with a fine trocar and cannula, but no fluid escaped.

On the 20th, I remarked that the swelling above the eye had become larger, but that the eye was somewhat less prominent; that pus had continued to escape from the left ear, and that the temporal swelling had almost disappeared; and that the child had for some days been able to move its legs freely, but that they were liable to become rigid and to tremble convulsively.

About this time, however, the child's temperature began to rise, attaining on one occasion an elevation of 103.4°; her appetite fell off, and her health began to fail. She complained at first of nausea, and soon was sick after everything she took, and rapidly lost flesh and strength. She still had no pain or tenderness in the back, and still retained the power of moving her legs voluntarily. She was now fed with nutrient enemata.

July 30th. She had a very restless night, calling and crying out constantly. She was apparently sensible, but spoke very indistinctly. Her pupils were dilated, equal. There was no paralysis of the face or arms. She had no discharge from the ear this morning. The swelling above the eye fluctuated. Temperature normal.

July 31st. She slept well and did not cry out all night. She had taken no food by mouth, and had been sick only once after medicine. She was drowsy. She put out her tongue when told; it was thickly furred. The left pupil was larger than the right. She had no pain in the head. Temperature normal. In the evening she was about the same. Pulse, 108; respirations, 24; temperature, subnormal. There was no pain in head, and no sickness nor discharge from the ear that day. There was no facial or ocular paralysis, but the tongue deviated distinctly to the left.

August 1st. She was much weaker. Her tongue was dry, protruded to the left. The pupils were equal. Pulse, 108; respirations, 36, attended with much rattling in the throat. Some hours later (at 1.30 P.M.) she had not spoken, but seemed sensible. The left pupil was more dilated than the right, and was unaffected by light. The tongue deviated distinctly to the left. The swelling above the eye fluctuated. There was no sickness, no fits. She waved her arms about, and picked at her nose; and had occasional twitchings of the muscles of the shoulder and back. The *tache cérébrale* was readily obtained. Pulse, 120; respirations, 30, attended with rattling in the throat. There was no sickness, nor discharge from the ear. She died shortly afterwards.

Post Mortem Examination.—The body was much emaciated. The left eyeball projected. There was ecchymosis of the corresponding upper eyelid. The left temporo-sphenoidal lobe of the brain was firmly adherent to the greater wing of the sphenoid bone and to the posterior border of the lesser wing. The arachnoid at the base of the brain was a good deal thickened, and of an opaque yellow colour. Surrounding the vessels of the base, and especially along the fissures of Sylvius and connected with the duplicatures of pia mater in the adjoining sulci, were numerous minute grey tubercles. There was great increase of subarachnoid fluid, but in all other respects the membranes were healthy. The ventricles were slightly distended with fluid. The substance of the left temporo-sphenoidal lobe was considerably softened, and was readily broken up by a stream of water. But there was no abscess; and the brain-substance, with this exception, was healthy. The nerves at the base were apparently healthy. In the left orbit, the upper and outer osseous boundary (including the orbital plate of the frontal, the greater wing of the sphenoid, and the orbital portion of the malar bone) was partly stripped of periosteum, carious, and bathed in a considerable accumulation of thick matter. There was also a collection of cheesy pus under the left temporal muscle, connected with denudation and caries of the portion of the sphenoid here situated. The bodies of the third, fourth, and fifth dorsal vertebræ were largely destroyed by caries; the pedicles of the same vertebræ were carious and brittle; and the laminæ of the third and fourth were also involved. The bodies of the vertebræ were comprised in an abscess, extending from the second to the sixth vertebra, occupying the posterior mediastinum, but not affecting in any degree the adjoining pericardium and pleuræ. The affected portions of the vertebræ bounding the spinal canal were also bathed in pus, which was chiefly accumulated in front between the bodies of the vertebræ and the dura mater of the spinal cord. The anterior and posterior common ligaments were partly destroyed. The accumulation had evidently caused some pressure on the spinal cord. The dura mater was adherent at one point to the vertebræ; but the membranes were in the main healthy. The portion of cord corresponding to the diseased vertebræ was very pulpy. The rest of the cord appeared healthy. There was a little early inflammation at the base of the right lung; but no tubercles were discovered in the lungs or any other organ. The remaining thoracic and abdominal viscera, including the kidneys and bladder, were healthy. No disease of the temporal bone was discovered; nor was the communication (which doubtless existed), between the abscess under the temporal muscle and the external auditory meatus, traced.

REMARKS.—The facts which one or two of my cases seem to illustrate, and which I could have illustrated more fully had that been my sole, or even main, object, namely, that there is a period in the early progress of cerebral tuberculosis in which the presence of cerebral mischief is not revealed by symptoms; and that the symptoms which attend the presence of meningeal tubercles are, for the most part, due less to the tubercles themselves than to the inflammation which sooner or later accompanies them; suggest a question of no little importance, which I should have liked to discuss had I not already taken up fully as much of your time as, on the present occasion, I have any claim to do. The question is whether the progress of cerebral tuberculosis, like that of pulmonary tuberculosis, admits of being arrested; and whether, too, the cure of tubercular meningitis, that is, of tubercle with its inflammatory complication, is within the range of practical therapeutics. The first half of the question is, of course, exceedingly difficult to solve. It may be observed, however, in reference to it, that tubercular tumours are, judging from their clinical history, often very chronic in their progress, extending, it may be, over several years; and that occasionally the membranes of the brain seem, judging from *post mortem* examination, to be the only part of the body affected with tubercle. Both of these are facts comprising an element of hope as to the latter half of the question. I may say for myself that I have, on several occasions, had patients under my care, or have seen them in consultation, in whom the history and symptoms rendered it almost certain that they were suffering from tubercular meningitis, but in whom recovery took place. That the patients recovered from meningitis of the base was certain; but whether from meningitis the consequence or accompaniment of tubercle, I have never (fortunately or unfortunately, according to the point of view from which one regards it) had the opportunity of placing beyond doubt. At any rate, the belief that we may, even though very rarely, check the progress of cerebral tubercle, and cure the inflammation of tubercular meningitis, is calculated to encourage us in our dealings with such cases, and to justify us in persisting in reasonable treatment, and in hoping against hope.

THE DIAGNOSTIC VALUE OF THE DISCOVERY OF KOCH'S BACILLI IN SPUTUM.

Read in the Section of Medicine at the Annual Meeting of the British Medical Association, 1883.

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HAVING completed a series of observations on the sputa in 110 cases of diseases of the chest, with a view to ascertaining the presence of Koch's bacilli, I have thought it well to publish the results, not because the number is sufficient to justify any broad generalisations, but because practical contributions to the subject appear to be needed. My observations have been made almost exclusively at the Royal Chest Hospital, where I had abundant opportunities of obtaining specimens under favourable conditions, and of discovering the precise condition of the patient. In every instance, all important particulars of symptoms and physical signs were entered in a note-book at the time of examination, and the further history of the individual was added subsequently, when it could be ascertained; and, in a very large number of the cases (especially those in which the result was negative at first), the experiment was repeated several times.

It may be well to state, by way of preface, that the value of these and all similar observations depends wholly upon a staining reaction. It is practically impossible for clinical observers to repeat the steps of Koch's well known experiments and therefore to [illegible] the "pathogenetic" organisms, we are obliged to content ourselves with certain staining methods by which, it is said, the "bacillus of tubercle" alone is coloured.[1] For I think it must be confessed that (except in their staining reaction) there is nothing obviously characteristic in the appearance of these bacilli. It is possible that a very wide experience might enable an observer to detect some distinctive features; but those who do not possess such experience, and yet are familiar with the great variety of rod-shaped bodies of all sizes which abound in decomposing albuminous matter, and which seem to be constantly present in the mouth and pharynx, will be slow to venture on any identification of species from a mere consideration of dimension or shape. The same bacteria seem to be capable of assuming various appearances under various conditions. Again, it is evident that a mere series of staining experiments upon sputa can throw no light whatever upon the important question, whether the presence of certain bacilli in the body is the true and only cause of a particular disease. But, though the scope of our inquiry is thus limited, it is clear that we may attain to important results in the course of extended observations. If, for instance, it should be proved that bacilli staining in a particular manner occur invariably in the sputa, etc., of one disease, and never occur elsewhere, we should have reason to be satisfied with our staining method[2] as a reliable means of diagnosis, although such experiments alone would not justify us in making any positive assertions as to the specific character of the organisms, or their precise relation to the disease in question.

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[1] [illegible]

In list A, which includes the sixty-five cases in which bacilli were found in the sputa, an extremely condensed report is given of the diagnosis of the disease by symptoms and physical signs; the progress or termination of the case is added; and, when a very unusual number of bacilli were observed, the fact is recorded. The cases are thrown together roughly in a certain order; thus the first fifteen are instances of the last stage of pulmonary phthisis; Nos. 16 to 46 are less advanced cases, in which, however, there could be no question as to the nature of the disease; and the remainder are either examples of incipient phthisis, or cases in which the diagnosis was very doubtful at the time of examination.

Since it is evidently of great importance to ascertain the truth of the statement that these bacilli do not occur in the sputa of other diseases besides phthisis, I have added in list B a list of the cases in which I have searched for them in vain. It will be readily understood that the two lists have not a precisely equal value. Of all the cases in the first list, the positive assertion can be made that bacilli were present, while of those in the second, I can only say that I did not find them. It is, of course, impossible to state absolutely that they did not exist in some part of the expectoration not examined. The cases in list B are so various, that no attempt at classification has been made. It is to be regretted that, many of the persons examined being out-patients who ceased attending at the hospital after a few weeks, it was impossible, in a large number of instances, to observe the progress of the case, or to ascertain its termination.

A.—*Cases in which Bacilli were found in the Sputa.*

1. Female, aged 20, advanced phthisis. Died soon afterwards; diagnosis confirmed *post mortem.*

2. Male, 38, acute phthisis; stated duration five weeks large vomicæ. Died. Diagnosis confirmed *post mortem.*

3. Male, 27, empyema, chronic phthisis, vomicæ. Diagnosis confirmed *post mortem.*

4. Female, 36, chronic phthisis, advancing excavation. Died three months afterwards. No *post mortem* examination.

5. Male, 22, phthisis far advanced; swarms of bacilli; died in a fortnight; no *post mortem.*

6. Female, 23, chronic phthisis, extensive excavation; bacilli very numerous. Died in a month; no *post mortem.*

7. Male, 32, chronic phthisis, vomicæ at both apices. No longer under observation.

8. Male, 39, chronic phthisis, advanced; swarms of bacilli; died in ten days. *Post mortem,* very extensive excavation.

9. Male, 35, chronic phthisis, advanced; swarms of bacilli. Patient left hospital in a dying condition.

10. Female, 30, acute phthisis, vomica. Died a week afterwards; no *post mortem.*

11. Male, 33, chronic phthisis, advanced. Died in a month. *Post mortem,* extensive fibroid changes in upper lobes, small cavities; acute tubercular formations; lardaceous disease.

12. Male, 16, chronic phthisis; much excavation. Left hospital worse.

13. Male, 21, chronic phthisis, large vomicæ in one lung; swarms of bacilli; becoming gradually worse.

14. Female, 14, chronic phthisis, with probable acute changes; vomicæ. Died in a fortnight; no *post mortem* examination.

15. Female, 27, advanced phthisis of two years' duration; frequent hæmoptysis. Died in three months; *post mortem,* lungs riddled with cavities.

16. Female, 25, chronic phthisis; small vomicæ in left lung. No change whilst under observation.

17. Male, 32, chronic phthisis, probable vomicæ; very little fever; swarms of bacilli. Discharged better.

18. Female, 35, chronic phthisis. Improved.

19. Female, 9, consolidation of upper left lobe after empyema. No longer under observation.

20. Male, 29, chronic phthisis, probable small vomicæ in left lung, bacilli numerous. No longer under observation.

21. Male, 38, chronic phthisis, bronchitis. Worse when last seen.

22. Male, 40, "senile" phthisis, extreme general degenerative changes, slow emaciation, no severe chest-symptoms, small crepitations at one apex, bacilli very numerous. Still under observation.

23. Male, 31, chronic phthisis. No marked change during several months.

24. Male, 36, phthisis; one year's duration; disorganisation at both apices, bacilli numerous. Died two months after leaving hospital.

25. Male, 15, phthisis, apparently acute, vomica in one lung, bacilli numerous. Severe symptoms subsided, and patient left hospital better.

26. Male, 21, phthisis, apparently acute. Only a short time under observation.

27. Male, 18, diabetes, signs of advancing lung-disorganisation. Becoming worse.

28. Female, 19, chronic phthisis, signs of vomica in one lung, but little fever. Improved.

29. Female, 32, acute phthisis. Still under observation.

30. Male, 36, chronic phthisis. Improved.

31. Male, 29, chronic phthisis, vomicæ; bacilli very numerous. No longer under observation.

32. Male, 20, chronic phthisis, much pyrexia, other symptoms not severe. Improved.

33. Female, 33, chronic phthisis, bronchitis. Improved.

34. Female, 19, chronic phthisis, vomicæ. Improved.

35. Female, 33, chronic phthisis. Improved.

36. Male, 18, signs of consolidation at left apex, no symptoms of severity. Still under observation.

37. Male, 36, chronic phthisis. Under observation for several years; old vomica.

38. Male, 28, acute phthisis. When last seen, becoming rapidly worse.

39. Male, 28, phthisis mainly laryngeal, dulness and fine crepitations at left apex. Still under observation.

40. Female, 23, chronic phthisis, signs of disorganisation limited to one apex. Improved.

41. Male, 28, chronic phthisis, small vomicæ. No marked change.

42. Male, 49, chronic phthisis of very old standing; under observation for several years; retraction at apices, probable small cavity left side, emphysema. No fever, no loss of flesh during the last year. Swarms of bacilli. Still under observation.

43. Female, 24, chronic phthisis, symptoms for a year, but little fever, probable small cavity left apex. Bacilli very numerous. Improving.

44. Male, 31, chronic phthisis, symptoms for five years, much retraction of lungs. Still under observation.

45. Male, 35, chronic phthisis, small cavities. Still under observation.

46. Male, 46, phthisis probably acute; hectic; slightly impaired resonance and crepitations after coughing, at one apex. Bacilli very numerous. Still under observation.

47. Male, 19, phthisis apparently very early; ailing for some months; no symptoms of severity; signs of loss of elasticity at apex of right lung. Swarms of bacilli. Still under observation (three weeks after first examination), no marked change.

48. Male, 41, incipient phthisis. Still under observation.

49. Male, 50, "quite healthy" till two months ago; a good deal of

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[2] In these experiments, I have always used Ehrlich's method or Heneage Gibbes' modification. The possible sources of error in the examination of sputa are so evident that it is only necessary to refer to them briefly in a note. In dealing with the contents of the air-passages, it is impossible, for obvious reasons, to adopt the precautions which are usual in investigations about micro-organisms. If it be the case that the "tubercle-bacillus" exists in phthisical breath and in the atmosphere, it is clear that we cannot be absolutely certain that specimens occurring in sputum have not been accidentally introduced from without; they may have been inhaled by the patient, and subsequently expectorated, or they may have fallen on the sputum just after expectoration, or at any time before staining. So long as this is the case, we must avoid speaking too positively of our results. Practically, however, it is safe to assert that this mode of introduction must be rare, and that, when bacilli are found in at all large numbers in a particle of sputum, it is in the last degree improbable that they can be mere accidental intruders.

fever, anorexia, and emaciation; suspicious signs at apices. Improving somewhat under treatment.

50. Male, 42, acute pleurisy a month ago, ill defined signs of change at apex. Still under observation.

51. Male, 32, incipient phthisis; no noticeable change lately.

52. Male, 24, bronchial catarrh, suspicious signs at one apex. Since first examination, definite signs of phthisis have developed.

53. Male, 23, early phthisis? Signs doubtful: occasional slight hæmoptysis during the four months of his attendance at hospital; some loss of flesh. Bacilli not found till recently. (Diagnosis has become certain since.)

54. Male, 49, chronic change at one apex (impaired resonance and rough breathing), no fever or other important symptoms. No longer under observation.

55. Male, 39, chronic bronchitis and emphysema; change of old standing (possible cavity) at right apex. Bacilli very numerous. Improved.

56. Male, 30, subacute bronchitis; note flat at one apex; very little fever. No change whilst under observation.

57. Male, 40, empyema, doubtful signs of disease at apex of opposite lung. Gaining flesh since free opening of empyema. Temperature not normal.

58. Male, 35, acute pleurisy with effusion, suspected phthisis. Left hospital.

59. Male, 42, incipient phthisis. No longer under observation.

60. Female, 39, general bronchitis, obscure signs of change at right apex, emaciation. (A positive diagnosis of phthisis has since been given.)

61. Male, 48, chronic bronchitis and emphysema. Improved under treatment, but, when last seen, there were definite signs of phthisical mischief at the apices.

62. Male, 38, acute pneumonia of left base; ill for eight weeks before examination; imperfect resolution, continued pyrexia, night-sweats. Left hospital with signs of disease at base and apex.

63. Male, 26, early phthisis, distant breathing, and obscure crepitant sounds at right apex. Losing flesh recently.

64. Female, 19, cardiac disease congenital? Doubtful changes in lungs. Loss of flesh. Evening temperature elevated. Still under observation.

65. Female, 32, chronic bronchitis, early change at one apex.

B. *Cases in which no Bacilli were found in the Sputa.*

1. Female, aged 12, emphysema, bronchial catarrh, cyanosis. Died suddenly; no *post mortem*.

2. Female, 66, pleural effusion (blood-stained), consolidation of apex of lung; frequent hæmoptysis; emaciation. *Post mortem*, Mediastinal cancer invading lung.

3. Female, 56, chronic bronchitis. Discharged relieved.

4. Male, 30, chronic disease of right lung, probably phthisical; examination soon after severe hæmoptysis. No longer under observation.

5. Female, 30, subacute bronchitis. Relieved.

6. Male, 39, a few days after severe hæmoptysis, physical signs of limited consolidation at left base; no fever. Discharged relieved.

7. Male, 39, acute pneumonia, left base. Recovered.

8. Male, 22, chronic pleural effusion; operation; high irregular temperature; death from pyæmia; no phthisical changes in lungs found after death.

9. Male, 13, pyrexia, catarrh, suspicion of tuberculosis. Recovered.

10. Male, 21, slight hæmoptysis, no definite signs of disease. No further symptoms developed.

11. Male, 5, empyema, bronchitis. Cured.

12. Male, 48, doubtful changes at apices; suspicion of early phthisis. No longer under observation.

13. Male, 33, acute pleurisy, bronchitis. Relieved.

14. Male, 30, chronic bronchial catarrh, signs of consolidation at apices? No change whilst under observation.

15. Male, 57, consolidation with retraction of right apex; no fever. No longer under observation.

16. Male, 33, early phthisis; sputum very scanty. Became worse. No longer under observation.

17. Male, 62, right pleurisy, suspicious sounds at apex; no fever. No marked change in condition.

18. Female, 26, mitral regurgitation, bronchial catarrh, emaciation. Improved.

19. Male, 41, chronic bronchitis. No change.

20. Female, 38, chronic interstitial pneumonia with great retraction, and displacement of organs. No longer under observation.

21. Male, 23, endocarditis, high irregular temperature, suspected change at one apex. *Post mortem*, acute endocarditis, pleural adhesions.

22. Female, 28, chronic bronchitis. Improved.

23. Female, 17, slight morning hæmoptysis, source uncertain; some bronchial catarrh. Symptoms disappeared.

24. Female, 53, anasarca, dilated heart, cyanosis, patches of consolidation in lungs. *Post mortem*, granular kidneys, endocarditis, acute lobular pneumonia.

25. Male, 39, subacute bronchitis. Discharged cured.

26. Male, 25, slight hæmoptysis. Still under observation: no signs of disease.

27. Female, 53, chronic bronchitis and emphysema. Still under observation.

28. Male, 67, emphysema, probably dilated bronchi, consolidation at one apex (old damage? history of hæmoptysis 14 years ago). Still under observation, improving.

29. Female, 37, emphysema, retraction of one apex; cough for many years. Still under observation.

30. Male, 22, slight hæmoptysis, bronchial catarrh. Symptoms disappeared.

31. Male, 43, acute pleurisy, bronchitis. Relieved.

32. Male, 34, acute pleurisy, bronchitis. Relieved.

33. Female, 33, old change at one apex, no symptoms of gravity. Still under observation.

34. Male, 20, chronic bronchial catarrh with very copious secretion. Still under observation.

35. Male, 6, broncho-pneumonia right base. Still under observation, recovering.

36. Male, 37, emphysema, probable fibroid changes in lungs. Discharged relieved.

37. Female, 38, chronic bronchitis, extreme emphysema, old change (fibroid) at one apex. Still under observation.

38. Male, 26, diabetes, bronchial catarrh, [illegible] of pulmonary disease. Still under observation.

39. Male, 45, emphysema, [illegible] condensation and signs of possible cavity in right lung (bronchiectatic?). Attending hospital for several months, improving in all respects. No fever.

40. Female, 41, thoracic aneurysm, some bronchial catarrh

41. Male, 45, dilated heart, tricuspid regurgitation, emphysema.

42. Female, 50, mitral stenosis, pulmonary congestion.

43. Female, 66, chronic bronchitis.

44. Male, 18, acute bronchitis. Recovering.

45. Male, 29, acute pleurisy with effusion; high fever, subsiding.

It is, I should think, almost impossible for anyone to carry out a methodical series of examinations such as [illegible] without becoming convinced that the presence of Koch's bacilli in the sputa has an intimate connection with that morbid condition (or those conditions) known as pulmonary phthisis. What the nature of the connection may be, whether the bacilli are the cause or products of the disease, is (as already stated) altogether beyond the scope of this inquiry, which deals only with the diagnostic value of the discovery of the organisms. The broad result of the above experiments is this: the great majority of specimens of bacilli-containing sputa were from undoubtedly phthisical patients, and the remainder from persons who, in all probability, suffered from the disease; while the specimens of sputa free from bacilli were, as a rule, from cases where the lungs were either healthy or affected by some totally distinct morbid process. The few exceptions to this latter assertion, and the instances in which the bacilli were repeatedly sought for in vain, and at length found at some later period, lead me to the conclusion that, while the presence of these organisms is, in all probability, positive evidence of phthisis, their absence under certain circumstances does not negative the existence of the disease. The question of the precise nature of the physical change in the different cases in List A has been purposely avoided, since no useful object would seem to be gained by assigning disputed titles, such as "bronchopneumonic," "fibroid," and "tubercular." For the present purpose, at all events, pulmonary phthisis may be considered as one disease—the disease which, with great variations in its mode of onset, and the acuteness of its course, [illegible] both lungs, commences with localised consolidation, passes on to softening and excavation, is attended by the train of symptoms known as "consumption," and presents certain [illegible].

I may observe, in passing, that [illegible] which would be considered examples of different diseases by those who hold the view that more than one affection is included in the clinical term phthisis. If it should be demonstrated that the bacilli are the essential elements of tubercle, and stand in a causal relation to the change, then, of course, these and similar experiments would go a long way towards proving the unity of the disease.

It has been just observed that, under certain circumstances, bacilli are not found in phthisical sputa. So far as my experiments entitle me to give an opinion, these circumstances are mainly as follows. 1. If a patient be directed to cough and expectorate, very commonly the result of the examination will be negative. It would seem that such purely voluntary expulsive efforts may merely dislodge the secretion of the larynx and neighbouring parts, and may fail to bring to light bacilli existing in the deeper air-passages. In all cases, it is well to wait for natural expectoration, that is, to wait till the natural upward movement of the contents of the tubes has caused such an accumulation as to excite the reflex action of coughing. It is needless to say that this is sometimes quite hopeless; in certain cases, there is no natural expectoration, the cough is "dry." I lately made a *post mortem* examination on a patient who died of acute pulmonary tuberculosis, who never expectorated during her illness; in the secretion of the bronchi there were many bacilli; during life, the disease could never have been diagnosed by their means. 2. There is reason to believe that, at a certain stage of phthisis—a very early stage—bacilli are not present in the sputum. My impression is that they do not appear till there is some actual breaking-down in the lung, but I cannot prove this.[3] 3. The existence of general bronchial catarrh in a severe form may render it difficult to find the organisms. On several occasions, I have failed to discover them in patients with advanced phthisis whilst suffering from this complication. Provisionally, we may accept the explanation that the bacilli are so widely separated by the abundant bronchial secretion, that one may examine a good deal of the sputum without happening to light upon a specimen.

Some writers have gone so far as to assert that it is possible to ascertain the amount of lung-damage, and even to venture on a prognosis, by observing the number of bacilli present in the expectoration. I can scarcely think that our present methods are exact enough to warrant such deductions. It should be remembered that the thin layer of sputum on a slide is a quite infinitesimal portion of the whole expectorated; and unless the organisms were equally distributed throughout the mass (and they certainly are not), it would be obviously rash to attempt to judge of the quantity in a patient's lungs or secretions by examining three or four, or even thirty or forty such samples. The particles of sputum selected might be comparatively free from bacilli, while neighbouring particles might swarm with them. On the whole, it must be acknowledged that there are very many sources of error and uncertainty in the test. Nevertheless, it seems to me to be true that the bacilli are seldom, if ever, found in such large numbers in the sputa of early phthisis as they are after the formation of vomicæ. I have only once seen what I call "swarms" in the table, where there was no reason to suspect actual excavation; and in that case (No. 47) I should be slow to deny the possibility that the disease may have advanced so far.

On the other hand, I have examined many cases of extensive excavation, and discovered only very few bacilli. Moreover, the finding of "swarms" seems to me to reveal nothing about the extent of the morbid process or its acuteness. Cases 17, 22, 42, 43, and 55 show that immense numbers may exist in instances where there is limited excavation, little constitutional disturbance, and, on the whole, a good prognosis. The grouping of the bacilli in densely aggregated masses, which has been lately described as a matter of consequence, seems to me to be of equally uncertain significance. The observations of Balmer and Fräntzel about the prognostic importance of the degree of development (size, segmentation, spore-formation) of the bacilli require confirmation; and I must add that there is reason to believe that some apparent differences in form may be due to slight differences in the method of preparation.

What value, then, are we to attach to the discovery of these organisms as a means of diagnosis? Probably the majority of phthisical patients, when they come under observation, present such characteristic signs and symptoms, that testing of the sputum is practically unnecessary. But there are certain chest-diseases which simulate phthisis, and in which the signs and symptoms may mislead a practised observer; and there are forms of phthisis in which the diagnosis must be always doubtful. I need only refer to the difficulties met with in malignant disease of the lung, chronic pleurisy, chronic pneumonia, bronchiectasis, incipient phthisis, phthisis, with extensive bronchitis masking the physical signs, and phthisis, with deep-seated changes obscured by surrounding emphysema. If we find bacilli in the sputum, we may venture on the diagnosis of phthisis. If we do not find them, we cannot absolutely deny the existence of the disease. But if we do not find them, after repeated searches under favourable conditions, in a case where there are definite signs of lung-damage, or in a case where the disease has lasted so long that, if it were phthisis, we might reasonably expect disorganisation somewhere, then we are justified in suspecting that some other process is at work, or that the phthisical process has been arrested.

The conclusions that may be drawn from the experiments above recorded may be thus summarised.

1. Koch's bacilli occur in the sputa of pulmonary phthisis, acute and chronic, in all its forms.
2. They do not occur in the sputa of other common diseases of the chest.
3. They may probably be found in every case of phthisis which has advanced to the stage of breaking down of tissue.
4. The discovery of very few bacilli in the sputum conveys no certain information as to the gravity of the case. Their occurrence in enormous swarms in all probability denotes excavation.

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[3] How far the case may be altered in tubercular laryngitis, I cannot say; I have had no opportunity of examining the sputum in this disease, except when there were well marked pulmonary changes. By "actual breaking-down in the lung," I do not mean that such coarse lesions are necessary as give rise to obvious signs of disorganisation; probably very minute foci of liquefaction are sufficient.

FOOD AND RICKETS.

BY ROBERT WILLIAM PARKER, M.R.C.S.Eng.,

Surgeon to the East London Hospital for Children.

THE part which artificial food plays in the production of rickets has always been insisted upon, and by most authors it is regarded as the primary and chief, not to say sole factor, in the production of this now widely spread affection.

The writer of this present paper, while fully conceding the importance of a suitable diet for young infants and children, cannot but feel that the constitutional factors are a little too much left out of consideration, and that a sufficient value is not placed on the growing influence of heredity in the production of rickets; he believes, until these circumstances are more fully recognised and acted upon, that infantile rickets will develop in increasing proportions, and that, as a consequence, our improved sanitation and hygienic institutions notwithstanding, infantile mortality will become even greater than it is at present; and this, too, from causes which must be classed as preventable.

Rickets occurs very widely, and under very different social conditions; about the only point which can be said to affect all children alike is the matter of nursing, using the word, of course, in its widest sense, and including under it not merely suckling, but maternal care generally. Nature clearly intended that the food of an infant should be its mother's breast-milk. Do all children get it? Do those children who do get it escape rickets? On the other hand, do those children who do not get breast-milk always show signs of rickets? In the first place, it will be well to define what is here meant by rickets. Is it to be considered and classed as a disease; and if a disease, is it local or general? Are there degrees of severity? Is any part of the process physiological; and, if so, where is the normal line to be drawn? Or is it only a condition incidental to childhood, like dentition, through which, more or less, all must pass?

On referring to authors, rickets will be found described among the cachexiæ of early life, and attention is particularly drawn to the fact that it is a general disease, affecting not the osseous system only, but the nervous, the digestive, and respiratory systems likewise. When this is the case, doubtless the sum-total is disease. On the other hand, are these various systems implicated—that is to say, appreciably so—in all cases? and if not, what shall such cases be called? Shall we agree upon some name to be given to the cases in which bone-lesions are the only manifest ones; and upon another for the cases in which the nerve-lesions predominate; and upon yet another for the cases where the abdominal signs are alone appreciable; although the local pathological anatomy in each of the three cases would prove identical with what we now call rickets, when all the conditions are found together in the same subject?

The following may be regarded as a typical case, and would be accepted by most authorities. A child about 2 years of age, unable to stand, with a large belly and offensive stools "on and off;" with a large square-shaped head, with unclosed fontanelle; often covered, and especially when asleep, with a profuse perspiration; said to be the subject of "catching of the breath" (laryngismus stridulus), and to "twitchings and convulsions;" with a chest compressed at the sides and prominent sternum, and with the junctions between the cartilages and ribs enlarged and "beaded," the epiphyses of the bones large, especially those at the lower end of the radii, giving the child the appearance of being "double-jointed."

On the other hand, would the diagnosis of rickets be correct if only one or two of the foregoing conditions were present, and perhaps not over well marked? For instance, should enlargement of the radial epiphyses be regarded as rickets when no other signs are present? Such a condition, whatever it be called, is immensely common, and often the only sign of disease. Yet this condition, and the histologico-pathological changes of which it is the result, are by some considered as pathognomonic of rickets, and, indeed, as the only pathognomonic signs we possess. Even in its worst form, however, this enlargement is only premature development, physiological in kind, though pathological in time, and one which seldom leads to any permanent change.

Passing on from the definition of rickets, the question of food shall be briefly considered. Do children, who are suckled and well suckled, ever suffer from rickets? The answer is, most undoubtedly they do; this at once introduces some element as a cause, other than mere artificial feeding. Little need be said in this place on the subject of suckling; its advantages both to mother and child are so obvious that one can only wonder why so many children are deprived of their natural food. Excluding a certain number of mothers who die; some whose breasts do not secrete milk, or secrete very scantily and for a very short time; some whom special forms of acute disease part from their infants—a very small percentage of the total number of mothers—what a considerable number of the remainder forego, on very trivial grounds, the duty of suckling; and of this number what a considerable proportion—I regret to say it—are encouraged by their medical attendants to do so! It may be replied, Where is the harm, if suckling is not a certain preventive of rickets? But, on the other hand, if an infant develop rickets even when breast-fed, how much worse will be its condition, if it have to trust entirely to artificial feeding. Experience amply confirms my statement (that suckled children get rickets), and it alone would suggest that privation of natural food is not the only cause of rickets. Very often, too, a child who is not suckled fails to receive other motherly attentions; it may be either before or after its birth, or both, for a mother's duty begins not with the birth of her child, but with its conception.

The constitutional element which thus enters into the argument raises the question of predisposition and receptivity. It is in this way, I imagine, that rickets occurs among the socially well-to-do. For no class can with impunity long neglect the laws of hygiene. The relatively close circle from which husbands and wives can be drawn, obliges a certain class of the population to utterly disregard questions of heredity, and the weakening influences of frequent intermarriages are well known. Among other classes, late hours, and the various exactions of social life, or the hurry and worry of keeping up appearances, take the place of the physical hardships and not unfrequent semi-starvation which obtain among the lower classes, and both act alike on the constitution of the pregnant mother, and on the fœtus *in utero*. After birth, however, the child of the rich, even if not suckled, has every attention and every care which money can procure, while the poor child continues to experience the deprivations inseparable from its surroundings.

The former is probably less frequently suckled than the latter, given child for child, and then artificial food begins to play its part. Among the poor, it is a very exceptional circumstance for the child not to be suckled, though few are brought up on breast-milk entirely; either the milk is not secreted in sufficient quantity, or it is not "satisfying" in quality; or the mother has to go out to work, and must needs trust her child during the day to the care of a neighbour, who feeds it "on the bottle." Here, again, artificial food comes into play. There is a widespread belief among poorer women, that, so long as they continue to suckle their infants, they will not again become pregnant; and for this reason many mothers continue to suckle their children for long periods (more or less up to two years of age): a practice which is a fertile source of rickets, less by supplying insufficient food to the child than by exhausting the mother's strength, by depreciating her health, and so acting indirectly on her next child. On the other hand, if there be some truth in this widespread belief—and there doubtless is—it indicates that suckling is one of the means which nature adopts to keep children from harm, but mothers from too frequent pregnancies; and it should be an inducement to mothers to practise the little self-denial which these maternal duties entail, and which save them from the more exhausting and exacting cares incidental to too rapid child-bearing.

It is unusual, at the present day, to see a child who has not some of the signs of rickets; and this is due, in the writer's opinion, to what, in the present paper, he has spoken of as the "constitutional factor." It is, however, though not at all exclusively, among the very poor that the extreme degrees are met with, that is to say, among those in whom both the constitutional and dietetic shortcomings are combined, aggravated, and persistent.

The artificial food to which reference has often been made, under whatever high-sounding name it may be disguised and sold, is, after all, either some form of flour (baked or unbaked, and containing more or less starch), or milk, fresh or preserved, alone or combined with other ingredients. Neither of these substances in itself is hurtful, as many thousands can testify who have thriven upon them. Even if some other kinds of food besides breast-milk be occasionally given, "bits off the table what we eat ourselves," as the phrase goes in the out-patient room, how very difficult it is to prove that the rickets depend on these causes!

The ingredient in food to which is ascribed the chief part in the production of rickets is starch; and the object of the various methods of "preparing" artificial food for infants is the reduction of the insoluble starch into soluble dextrine. Is it not a little strange that so harmless and bland a substance as starch—one which forms a large proportion of our food in later life—should lead to the serious lesions which we find in severe rickets? If starvation were to result, there would be less surprise; but the severer forms of rickets are beyond understanding, unless other than food-causes be invoked. It cannot be questioned that many children thrive on artificial food, and that many would die if it were not given to them. It is also certain that a varied diet proves very useful in many cases, where even breast-milk fails to satisfy a child. Lastly, the question of starch-indigestion rests, at best, on a narrow foundation, although it has attained such a widely spread acceptance.

The immense amount of rickets which is now met with, not alone in hospital, but also among well-to-do patients in private practice, renders it incumbent on all, and especially on those who concern themselves with children's diseases, to insist on the importance of due care and precautions on the part of the expectant mothers. It can never be too strongly impressed upon them that maternal duties commence at the time of conception, and that neglect of common-sense precautions during this all-important period will surely react on the infant, and entail upon it evils which no subsequent care can entirely remove.

The inquiry is important, and is one on which each reader should individually come to a conclusion without being too much biassed by the "influence of authority" in these, as yet, largely "matters of opinion."

"Est turba semper argumentum pessimi."

The writer hopes that the question of diet, as the sole or chief cause, will be reconsidered from the present standpoint; for, unless and until it is generally admitted that other and important causes are at work, and probably responsible for the increase of the disease, little can be done to arrest it.

The views set forth are offered as suggestions rather than as dogmatic assertions; and for the most obvious of all reasons. The object will have been attained if more attention is in future directed to the circumstances surrounding mothers during gestation, with a view to minimise the "constitutional factor" in the causation of rickets.

It would be beyond the limits of the present paper to enter into the connection, if any, between rickets in children and dyspepsia in adults. Who shall say that some of these rickety children do not represent the naturally dyspeptic portion of mankind, and that both suffer less from the effects of unsuitable food than from a natural weakness of the digestive and assimilative systems?

NOTES ON RESUSCITATION OF THE NEWLY BORN AND ON THE TREATMENT OF POISONING BY ANÆSTHETICS.

By CHARLES EGERTON JENNINGS, L.R.C.P.Lond.,
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REFERRING to the debate, at the Royal Medical and Chirurgical Society on March 11th, on "Artificial Respiration in Stillborn Children," it seems that the chief point in connection with the subject was either omitted in the discussion, or not reported in the JOURNAL.

Whilst resident accoucheur at the London Hospital, I was once performing artificial respiration, after Silvester's method, with insufficient assistance, in a cottage, on an infant, when it appeared that the chest could not expand, since the air, immediately on entering the larynx, forced the epiglottis, *ipso facto*, like a valve, over the superior orifice of the organ.

The nurse—an ancient one, and not one of an intelligent order—

could not be trusted to hold the tip of the child's tongue, small and slippery, with firmness. Perceiving that a darning-needle lay threaded on a pincushion, I thrust the needle through the tongue, and directed forcible traction to be made on the loop of thread, whilst artificial respiration was recommenced. Never do I recollect a case, of like character, where signs of animation appeared so quickly; which, since they vanished on relaxation of the tongue, and reappeared at once on the renewal of traction, were clearly due to that proceeding.

I venture to attach the greatest importance to forcible traction on the tongue, as a preliminary to artificial respiration in the newly born, not merely having tested the efficacy of the plan on subsequent occasions, but having read in an article in Holmes's *System of Surgery* (third edition) that Sir Joseph Lister considers it invaluable where life is jeopardised by inhalation of chloroform.

But a careful consideration of the arguments which this great surgeon adduces to prove his view that "the beneficial effect of this procedure cannot be explained mechanically, but must be developed in a reflex manner through the medium of the nervous system" (*op. cit.*, vol. iii, p. 604) fails, to my mind, to convey conviction of the stability of the theory, since it seems more probable that, in chloroform-poisoning and in the asphyxia of new-born babies, the laryngeal apparatus is flaccid, owing to paralysis of its muscular apparatus, caused in the former instance by the specific action of the anæsthetic, and, in the latter, due to previous disuse.

If this explanation be accepted, nothing is easier to understand than the frequent failures which follow artificial respiration, when the tongue has been previously withdrawn from the mouth, and the success which attends Silvester's method (the precaution having been adopted) as a means of resuscitating the newly born, or of preventing death from anæsthetic poisoning when solely threatened by laryngeal obstruction.

Should death appear imminent from causes other than laryngeal obstruction, only one method remains which can possibly avert dissolution—when the respiratory movements have ceased; when the circulation has stopped or is stopping, when galvanism has failed, and when the administration of diffusible stimuli, either in the form of inhalation or *per cutem*, would be useless—namely, the intravenous injection of fluid (medicated or otherwise), accompanied, under most circumstances, by simultaneous depletion. Five points would thus be gained; first, the re-establishment or the maintenance of the circulation; secondly, the removal of part of the poison, and dilution of the remainder; thirdly, where loss of blood had occurred, repletion of the vascular system; fourthly, the opportunity for administering a physiological antidote, *e.g.*, in the case of chloroform, ammonia; and, fifthly, the employment of the most powerful cardiac stimulant with which we are acquainted.

It may be added, in support of this method, that last summer, when about to commence an experimental transfusion (*vide Lancet*, September 1st, 1883), by the kind permission of Dr. Pye-Smith, in his laboratory at Guy's Hospital, I noticed that one of the animals, deeply under the influence of mixed narcosis, seemed on the point of expiring, but re-animation speedily followed the performance of the operation.

The report of a fatal case of inhalation of ether, from St. George's Hospital, by Mr. Holmes (BRITISH MEDICAL JOURNAL, March 15th, 1884, p. 508) is my excuse for calling attention to this plan of treatment.

ENTERIC FEVER FROM CONTAGION.

By ROBERT DENHAM PINNOCK, M.B., C.M.,
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THE following notes on an outbreak of typhoid fever, which recently came under my notice, will, I think, be read with interest by those who are still gathering arguments in favour of the contagion-theory of the above disease. The village of Greendale, with a population of about one hundred all told, is about thirty miles from this city, and is situated partly in a valley, and partly on the sloping ground rising from one side of a watercourse which runs through the valley. This watercourse, in the dry season, is merely a chain of waterholes. The cottages are irregularly distributed, and every one is separated from its neighbour by a distance of from fifty to two hundred yards. The water-supply is chiefly from the creek, though some of the residents have wells; and a few collect their roof-water in iron or galvanised tin tanks. Only a few of the more important dwellings, such as the school-house, hotel, and store are provided with closets; and these are generally separate from the house, and are ordinary cess-pits, except at the school-house, where the excreta are received into receptacles, which are emptied when necessary, and the contents buried. By the great majority of the inhabitants, the calls of nature are responded to in the most convenient spot in the vicinity of their dwellings, and household slops and refuse of all kinds are in most cases thrown out of the back door. There is thus every opportunity, during the summer, for noxious odours and vapours to rise around the dwellings, and, during the rainy season, for the fæcal and other accumulations on the surface to be washed down to the creek, or to be carried directly, or by soakage through the soil, into the wells and water-holes at a lower level. Yet, in spite of all these unwholesome conditions, which have always existed, the schoolmaster informed me that to his certain knowledge there had been no case of typhoid fever for the last eight years, and, on inquiring for me amongst the oldest inhabitants, he could not find any record of a single case having ever occurred before.

The three nearest settlements are respectively six, seven, and seven miles distant.

The first case of the disease occurred in a girl named H., aged 22, who had been servant in a house in Melbourne where the complaint existed at the time she came home (March 14th). She became delirious, and took to bed seven days after arrival, and was over two weeks before showing any signs of improvement. Her mother sickened eighteen days, her sister (aged 19) sickened twenty-two days, and her brother (aged 23) twenty-seven days after her arrival, and all went through regular attacks of typhoid fever. They were all remarkably strong and healthy before. They lived in a small cottage on the slope of the hill; the pigstye was a few yards from the house; slops and refuse were thrown out at the back; excreta were also thrown out at the back during the time of sickness, and not covered with earth. Their water-supply was from the creek, but after the first member of the family became ill they got it from the school-house tank.

A child, P. (aged 4), living two hundred yards lower down the hill, took the fever six weeks after H.'s arrival from Melbourne. The P.'s got their water from a well close to their house, and their milk from the H.'s. The next attacked was Mrs. M., who used to go and nurse the eldest H. girl and her mother. After about three weeks of this self-appointed task, she complained of pain in the head and back, and shivering; and, though she did not lie up, she felt unwell, and suffered from diarrhœa. The M.'s lived on the slope of the same hill as the H.'s, but three hundred or four hundred yards on one side of them, and not much below the same level. Their water-supply was from a zinc roof, and collected into an iron tank; and their milk came from a dairy several miles away.

Mrs. M.'s little girl, aged 3 (the only child), sickened a few weeks after her mother gave up nursing the H.'s, and went through a rather severe attack of the fever. In fact, all the cases narrated were severe attacks except Mrs. M.'s.

Mrs. M.'s child was the last case of which I heard. The cessation of the disease I attribute to the fact of a heavy and continuous rainfall occurring just after she became ill, which flooded the surrounding country, and no doubt washed away the remaining germs of the disease.

CLINICAL MEMORANDA.

CASES OF FACIAL ERYSIPELAS WITH LOW TEMPERATURE.

DR. CAVAFY's article, under the above title, in the BRITISH MEDICAL JOURNAL of March 29th, I have read with much interest, and especially because certain points discussed therein have recently engaged my attention in preparing a paper on the contagiousness of erysipelas, which appeared in the *Practitioner* of December last.

In that paper I stated my conviction—a conviction based upon some exceptional opportunities of observation—that "in cases of facial erysipelas, as they ordinarily present themselves in practice, whatever secondary varieties may exist, there are primarily two distinct forms to be dealt with, viz., the infective and the non-infective forms, or, as the distinction may otherwise be expressed, true genuine erysipelas and spurious or pseudo-erysipelas." I added, "Without venturing to indicate in what ratio these two forms stand to one another as to frequency of occurrence, I am quite sure that I have again and again seen and treated cases of the latter—cases in which the local affection has followed exposure to heat or cold, or other injurious influences, and the fever and general disturbance have been comparatively insignificant. Mr. Jonathan Hutchinson, in his paper 'On Certain Diseases Allied to Erysipelas,' clearly recognises their existence when he says, 'These forms of erysipelas, which are due to local irritation are, I think, almost always mild. It is when the disease is due to contagion that it assumes its greatest severity.'"

Dr. Cavafy, giving only a condensed account of his five cases, has not said anything etiologically as to their antecedents; whether or not, that is, there had been in any of the instances exposure, on the one hand, to the specific infection of genuine erysipelas, there being co-existent traumatic receptivity, or, on the other, to any source of local irritation causing damage to the cutaneous tissues. That the cases may be variously regarded, and that some may prefer to rank them as instances of spurious erysipelas, Dr. Cavafy admits. Clearly, his own view is that they are examples of true erysipelas, but mild ones. Allowance being made here, as elsewhere, for occasional individual peculiarities, and for now and then disturbing influences at work causing more or less deviation from the type, it is, I believe, well recognised as a rule that the presence of marked fever and constitutional disorder in any given case of erysipelas proclaims, and the more emphatically the greater their intensity, that the same is of the genuine or infective class. And in this connection it is worthy of remark that all the six instances in the human subject, in which Fehleisen successfully performed inoculation with his pure and cultivated micrococci, exhibited a high degree of pyrexia, the maxima of temperature attained ranging from 104° to 106.8° Fahr. Not less, however, as it seems to me, does the converse of this rule apply; that is to say, that the absence of fever and of constitutional disturbance, although there may be hardly any difference perceptible in the local phenomena, denotes that the case is non-infective and spurious. Undoubtedly, marginal extension of the inflammation is an essential characteristic of the genuine disease; but I have suggested (*loc. cit.*) that, at an early stage at least, this may be simulated by the other or non-infective form.

With every such aid to diagnosis, however, there will always be, as Dr. Cavafy points out, a certain residuum of cases in which will be more or less room for doubt. How are we to preceed in regard to them? Assuming the correctness of Fehleisen's researches and the validity of the conclusions to which they lead, shall we search for the specific micro-organism in the tissues of the inflamed part, the lymph-spaces, just as in a case of doubtful scabies we should search for the sarcoptes; the discovery in the one case, as in the other, setting all doubt at rest? Obviously this means of diagnosis, however desirable from one point of view, would not often be available, and indeed to many it may appear visionary to allude to it; so that, until in some future day, perhaps, this method become more feasible, or an equally crucial test be devised, we can only make the best use of the means we possess, and, taking Dr. Cavafy's advice, see to it that, if we err at all, we err on the safe side.

HENRY F. A. GOODRIDGE, M.D.,
Bath.

ENTERIC FEVER ASSOCIATED WITH RHEUMATISM [1].

DR. FINLAY read notes of five cases at the Clinical Society on March 28th; and, as one has recently occurred in my practice, I take the liberty, not only of stating the facts of the case, but my reasons for not believing in the supposed rheumatism.

On February 6th, a widow lady of very sound constitution and excellent general health, left two years ago with a young family, did not feel well. On the 7th, she had a rigor, which continued most of the day as a feeling of chilliness, accompanied by headache and pains in the limbs. On the evening of the 10th, I first saw her, and at once sent her to bed. From the 10th to the 16th, she had symptoms like acute rheumatism—high temperature, great pain in the joints, with an abiding acute pain in the right knee, and so forth. I treated the case with salicine, etc., and pronounced it rheumatic fever; but all the while I thought it very unlike a typical case. However, from the middle of December to that period, I had had an uncommonly large number of cases of acute rheumatism, and I thought this might be one in a modified form. The salicine did no good; and on the evening and throughout the night of the 16th-17th, there was profuse diarrhœa. The stools on the 17th showed unmistakably the nature of the affection, and the rash on the abdomen was out in perfection. The case went on as a smart typhoid case, and began to slacken speed on the seventeenth day, counting from the day of the rigor; the tongue began to clean, and the temperature-rhythm to decrease. By the twenty-first day, the fever had seemingly left. The patient had a smart mental upset, and the ball went rolling again. From this time to the fortieth day, my patient had the severest symptoms—diarrhœa, high temperature, etc.—that I have ever seen. During the second attack, Dr. Broadbent saw her with me; and I think my patient has to thank a sound constitution, cold baths, and the most exquisite nursing by a nurse of Mr. Wilson's staff, assisted by relatives, for her recovery.

This case is my seventy first of a series of recoveries; one only, the sixty-fourth, dying. This sixty-fourth case had pleuropneumonia for the first ten days. Two other cases began as pleuropneumonia. One was a young patient, who was an asthmatic; the other was a young man with bad family-history, and himself the subject of severe chest-symptoms. Dr. Wane was associated with me throughout the first case, with an occasional visit from Sir William Jenner and Dr. Walshe.

It is so common here for enteric cases to mimic pneumonia for the first few days, that I never see a case of pneumonia about which I am not suspicious.

My explanation is this: that the juices surrounding and saturating the brood of young organisms in Peyer's patches are absorbed into the blood-vascular system, and then try first one door, then another, to escape; their favourite door being the pleura. That it is neither rheumatism nor pleuropneumonia, in the ordinary sense of these terms, I feel certain; for, if so, why is it nearly always the joints and the lungs? Why should it not be the bronchi, or the urinary mucous membrane, or a dozen other structures?[1]

WILLIAM FEARNLEY, L.R.C.S.Edin., Elgin Road, W.

SURGICAL MEMORANDA.

SUCCESSFUL OPERATION FOR HERNIA IN A WOMAN AGED SEVENTY-FOUR.

I WAS called to see Mrs. S., 74 years of age; and, on arrival, I found her suffering from pain in the abdomen. She had been sick and had hiccoughed the previous day. Her bowels had acted in the morning. She knew she was ruptured, but did not think this illness had anything to do with it, as the gut was not down as it usually was. Her pulse and respiration were good. I found a knob, about as large as a small walnut, at the external abdominal ring. I tried to reduce it, but could not. I gave her one grain of opium every four hours. The next day, she expressed herself as being much better; she had no pain, no sickness; she had taken fluid food, passed flatus, etc.; but the bowel was not returned.

I decided, on consultation with my colleague, Mr. Penruddocke, to wait still longer. The following morning, a message came to say that she was very sick. Mr. Penruddocke and myself at once prepared to operate. We found her suffering from stercoraceous vomiting, and looking very anxious; but with a pulse, skin, and temperature natural. She was put under the influence of the A. C. E. mixture; and I had little difficulty in finding and relieving the stricture, and returning the gut. We left her very comfortable, and gave her a grain of opium every four hours.

The next day, she had passed two healthy motions, but had still some fæcal vomiting. Her pulse and temperature were normal. She made an uninterrupted recovery, and in ten days was well. The wound healed by first intention. No antiseptic measures were adopted, further than the use of carbolic oil as a dressing for the wound.

WILLIAM COX, M.R.C.S., Winchcombe.

WOUND OF ABDOMINAL PARIETES WITH PROTRUSION OF UNINJURED INTESTINE.

KRISHNA RAMA, Hindu, aged 50, was admitted into hospital, at Ahmednagar, on February 10th, 1884, having been gored by a bullock a few hours before. Two coils of small intestine (one of them a foot long, the other about fifteen inches) protruded from a wound in the right side of the abdomen about three inches above Poupart's ligament; the intestine itself was uninjured, but was very dirty, having been wrapped up in a muddy cloth. Although the wound in the skin gaped considerably, the actual wound in the muscular wall of the abdomen was not more than two inches long, its direction being parallel with the fibres of the external oblique muscle. Having first carefully cleansed the intestine from all foreign matter with a sponge which had been kept in carbolic solution, I gently and gradually returned it into the abdomen, and brought the lips of the wound together with four stout silk sutures (taking care to include the peritoneum). I then applied a firm pad of dry lint and a spica bandage, and kept the patient on his back, with his knees drawn up and supported by pillows, and a turn of bandage above the knees tying the thighs together. For the first three days I gave him half a drachm of laudanum morning and evening, adding twenty grains of chloral to the evening dose; for food I kept him on two pints of milk daily, and nothing else; on the third day I allowed arrowroot with the milk, and gradually lessened the dose of opium. The bowels were moved on the third day. The temperature never rose above 100.4°, nor the pulse above 96. On the fifth day the temperature fell to normal, and did not rise again. I removed the sutures on the thirteenth day, and he was discharged cured, with the wound perfectly and firmly healed, on March 10th, twenty-nine days from the date of his admission.

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[1] Just before my case commenced, a child, not far off, had rheumatic fever (?), which ended in typhoid fever exactly [illegible]. It was not my case, and I only mention it in the interests of the subject.

H. De Tatham, M.D., M.R.C.P.Lond., Civil Surgeon,
Ahmednagar.

THERAPEUTIC MEMORANDA.

BROMIDE OF ETHYL AS AN ANÆSTHETIC.

The British Medical Journal for March 1st of the current year contains an article upon the Bromide of Ethyl as an Anæsthetic, by Mr. W. Roger Williams. It is, confessedly, supplemental to an effort which is being made in this country to re-introduce the drug as an agent for the production of surgical anæsthesia. Deeply sympathising with every effort to increase our resources, and lamenting deeply the imperfections of all the agents now in use, I yet cannot but think this a mistake. Independent of the very bad record which stands against this drug as an anæsthetic, my opinion is sustained by the results of several self-inhalations; and, as this is a test not very frequently applied, I beg leave to present the results of a few trials, believing them to be of interest at this time. The observations were published in the *Cincinnati Lancet and Clinic* for April 10th, 1880, and are here abbreviated as much as possible, only the important points being given. I was attended by two medical friends, who noted and recorded the facts of which I could not be conscious.

1. Inhalation was made in the recumbent position, four hours after a moderate breakfast. The first and immediate sensations were a sharp pungent impression on the air-passages; a sense of warmth, rapidly extending over the body; and exhilaration. Already, with the second inspiration, I felt a decided influence upon the brain, and began to talk. A rapid beating in the ears is a constant symptom with me in inhaling chloroform, which I have often done, and immediately precedes entire loss of consciousness. I remarked its presence now, and also its early appearance. It could not have been later than the third, or possibly the fourth, inspiration when I observed it, and this, as with chloroform, was the last sensation. Upon opening my eyes, I immediately remembered all, could talk clearly, and had no confusion of thought; felt a slight sense of nausea, and a feeling of languor. Eight minutes afterwards, I got up and walked about without dizziness, and am confident I could have done so sooner. The pulse, on beginning, and just after ascending the stairs, was 80. Two drachms were administered. The symptoms began after two inspirations. I spoke of general warmth, pleasant sensations, and beating in the ears. Anæsthesia was produced in one minute and a quarter; in another quarter minute it was profound, as tested by the knife-point. The pulse, during the first minute, ran up nearly to 100, then fell during the next minute to about 78, feeble and intermittent. The pupils were unchanged, and normal. There was no struggling or excitement, but tetanic clutching of the inhaler. Anæsthesia lasted one minute and a half, and awakening was without mental confusion. Seven to eight minutes later, the pulse was 64.

2. I was not sure of the purity of the article used, and attributed the irregularity of the pulse to that cause. I therefore obtained another specimen from another house. Inhalation was conducted as before. I aimed to take it more slowly than the first time, and counted the respirations carefully. I experienced the same grateful and pervading glow of warmth all over the body, counted to the seventh inspiration, and beating in the ears was again the last impression. The pulse, before, was 80; at the end of the first minute, 120; for one minute and a half, 100; at the end of two minutes, 78; there was no irregularity or intermittence. The pupils were unaffected. Total unconsciousness was produced in one minute; consciousness returned in three minutes.

3. Fifteen minutes afterwards, I made another inhalation; putting two drachms in the inhaler instead of one. The impression on the air-passages was much stronger, and caused coughing. I counted to the third inspiration, and became insensible. The pupils, as before, were unaffected. The pulse, before the administration, was 78; at the end of the first minute, 124; at one minute and a half, 100; two minutes, 78; there was no irregularity or intermittence. Anæsthesia was produced in one minute. At the end of three minutes from the time of beginning, I arose and walked across the room with effort. In eighteen minutes, I was driving to see a patient. Not the slightest nausea was experienced after these two inhalations.

These observations establish fully the great pleasantness of bromide of ethyl as an anæsthetic, the remarkable rapidity of its action, and the wonderful rapidity with which its influence passes off. Do they inspire confidence in its safety? Is not such violent perturbative effect on the heart's action dangerous *per se?* I would draw special attention to a few sentences above, in view of the fact that the statement is made, by the friends of the bromide, that they use it only for the early stages of anæsthesia. J. C. Reeve, M.D.,

Dayton, Ohio, U.S.A.

REPORTS OF HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.

OVARIOTOMY TWICE SUCCESSFULLY PERFORMED ON THE SAME PATIENT.

(Under the care of Mr. Manby.)

[Reported by J. W. Batterham, M.B., B.S.Lond., House-Surgeon.]

H. S., aged 30, an unmarried domestic servant, was admitted for the first time in February 1881. Her family history was good. She had only been laid up once, three years earlier, when a "tumour," which had taken five years to attain the "size of her two fists," was removed from the front of the right thigh at Stafford Infirmary.

About the middle of the year 1878, pain attracted her notice to a small tumour on the right side of the abdomen. This increased in size till eight months before admission, when it was much diminished by tapping at Stafford Infirmary. It had rapidly increased in size since that time.

She was a small woman (under five feet), in good general health. The catamenia had been regular since their appearance at the age of 16. Small patches of brown discoloration of the skin were scattered all over the body. The abdomen was distended, and the umbilicus everted. One inch above the umbilicus, the circumference of the abdomen was 38½ inches (the right semi-circumference being larger by half an inch). The measurement from pubes to umbilicus was 6½ inches, from the umbilicus to the ensiform cartilage 10 inches, to the left anterior superior iliac spine 9¼ inches, and to the right anterior superior iliac spine 8¼ inches. The abdominal prominence was dull on percussion, and there was resonance in both flanks. The thoracic viscera were pressed upon and respiration somewhat impeded, and there was slight œdema of the ankles at night; vaginal examination showed that the uterus was normal in size, but displaced upwards and forwards in the pelvis. The urine was normal.

On March 3rd, 1881, ovariotomy was performed with Listerian precautions. The incision was 4½ inches long, extending, in the median line, from a point two inches below the umbilicus to the pubes. Two gallons of thick viscid fluid of yellowish colour were evacuated from the cyst. Adhesions being broken down, the cyst was removed. The pedicle was tied with carbolised silk. A glass drainage-tube was inserted into the pelvis through the lower angle of the wound. The use of this was discontinued after twenty-four hours. The stitches were removed on the third day, the wound being nearly healed. The temperature, which had never risen above 100.2°, was normal on the fifth day. On the eighth day, however, it rose to 100°, and some hardness was detected in the right iliac region.

On the twenty-seventh day after the operation (February 20th), an abscess burst through the lower end of the cicatrix, and continued to discharge until May 8th, when the ligatures of the pedicle came away through the sinus. She was discharged on May 31st, 1881.

Towards the end of her stay in the hospital, a small movable swelling, which slipped from beneath the pressure of the fingers, was noticed on the left side of the abdomen.

At the end of the year 1883, she again appeared at the hospital, complaining of "a lump" which she had noticed in the abdomen six months before, and which was increasing in size. She was in very good health. The catamenia were regular. The abdomen was lax, and the old cicatrix was stretched, forming a pouch in the median line. An ovoid mass, about twelve inches in circumference, was readily felt on abdominal palpation. It was elastic and freely movable from flank to flank and from umbilicus to pelvis, where it could then be felt by vaginal examination.

Ovariotomy was performed, with antiseptic precautions, on January

3rd, 1884. An incision two and a half inches long was made by the side of the cicatrix of the former operation and midway between the umbilicus and pubes. The cyst, being non-adherent, was readily squeezed through this incision without preliminary tapping. The pedicle, which consisted of the left Fallopian tube, was long. It was tied with carbolised silk, and returned. The wound was closed by five deep and six superficial sutures of carbolised gut. No drainage-tube was used. The wound was dressed antiseptically four times during the next eighteen days; the dressings were then discontinued.

There was no sign of peritonitis after the operation, and the highest temperature was 101.4° on the third day. By January 27th she was able to get up daily, and on February 2nd was discharged quite well.

REMARKS BY MR. BATTERHAM.—It may be remarked that the small abdominal tumour noticed during the patient's first convalescence was in all probability the ovarian tumour removed on her second admission. Had the left ovary been examined when the cyst of the right was removed, the patient would probably have been saved the risk and inconvenience of a second operation.

THE GUEST HOSPITAL, DUDLEY.

STRANGULATED FEMORAL HERNIA IN AN OLD WOMAN, AGED 81: OPERATION: RECOVERY.

(Under the care of Dr. EDGAR UNDERHILL.)

[Reported by Mr. CECIL MURIEL, Resident Medical Officer.]

ELIZA S., aged 81, was admitted on the evening of August 29th, 1883, with symptoms of strangulated hernia. For the eight years before admission, she had had a femoral hernia on the left side, and had worn a truss for it. The truss had not always kept the rupture up, but previously she had been able to retain it herself. On the evening before admission, the rupture came down suddenly. She immediately complained of great pain, and vomiting commenced. A doctor was sent for, and taxis tried, but unsuccessfully. He advised immediate removal to the hospital, but she was not brought there until the evening of the next day.

On admission, a small strangulated femoral hernia was discovered on the left side. Operation was decided upon. The carbolic spray (1 in 40) was kept going for two hours before the operation, but not during it. The patient refused to take any anæsthetic. A small incision about two inches long was made over the tumour, and the structures were carefully divided on a director down to the sac; the stricture was found to be outside the sac, but the sac could not be returned, being adherent to the tissues around at its lowest part. The sac was opened, and the hernia was found to consist of a small knuckle of intestine embedded in omentum. The gut, which was adherent to the omentum, was separated, and returned to the abdomen, the omentum being left. The wound was sewn up with silk, and covered with an antiseptic absorbent pad, and a spica-bandage applied. The patient bore the operation very well, and never uttered a sound until the sutures were put in. An ounce of brandy was given by the mouth before the operation, and half an ounce during it. She suffered no pain subsequently, the sickness stopped, and she passed a very good night; her urine was drawn off every four hours.

On August 31st, she had again passed a very comfortable night; the temperature in the morning was 100°. As she was rather troubled with flatus, an enema containing two tablespoonfuls of castor-oil and one drachm of tincture of assafœtida was administered, and she was much easier afterwards. The temperature in the evening was 101°.

September 1st. She had passed a fair night, but was still troubled with flatus; an enema containing half an ounce of castor-oil and two drachms of spirits of turpentine was administered, and she was relieved afterwards. As she complained of her chest feeling tight, a mustard-plaster was applied to the chest, and a mixture containing ten minims of aromatic spirit of ammonia, and ten minims of tincture of squill was given to her every four hours. The temperature in the evening was 99° Fahr.

September 3rd. She had passed a very good night. As there was some suppuration in the wound, one of the sutures was removed, and poultices applied. Half an ounce of castor-oil given by the mouth acted well. The temperature in the evening was 98.4°.

September 5th. She had not passed such a good night. Breathing was laboured, and fine crepitation was detected at the base of both lungs; poultices were applied over each base alternately. A fine spray of steam was kept going from a kettle. In the evening she had a rigor lasting fifteen minutes; the temperature afterwards was 10[illegible]° Fahr.

On September 6th she was much easier. The temperature in the morning was 101°, but breathing was still laboured. She was ordered champagne. The temperature in the evening was 101°. She had a severe rigor at 9 A.M. on September 8th, lasting thirty minutes. The temperature was 102.8°. There was effusion at the basis of both lungs, and friction-sounds above. In the evening the patient was collapsed; the radial pulse was hardly perceptible, and she was bathed in cold perspiration. The temperature was 96°. Hot water-bottles were applied to the feet, mustard-plaster to the chest, and four ounces of brandy were given during the night.

September 9th. The temperature in the morning was 97.6°. She was better, and the pulse was firmer, the breathing was easier. She was ordered a mixture containing acid and bark. The temperature in the evening was 99° Fahr.

September 10th. The effusion at the base of the left lung had increased, that of the right side had remained stationary. The temperature in the evening was 100°.

September 12th. She had passed a very good night; the wound had almost healed, and there was no pain in it. The friction-sounds over the left lung in the mid-axillary line were still heard. The temperature in the evening was 100°.

On September 13th the effusion on the left side was found to be increasing. She took very little food, and passed both her motions and water under her. The temperature in the evening was 97°.

September 16th. During the last two days the patient had changed for the better. The effusion at the base of the right lung had disappeared, that at the left nearly so; the friction-sounds on the left side had diminished in intensity. She was very weak, and still passed her water without her knowledge. She got up, into an armchair, for the first time.

September 19th. She was getting gradually stronger; the wound had healed, and she took her food well. The temperature was normal in the morning and evening. She had control over her bladder.

When the patient was discharged, on October 8th, she was able to get up for some hours each day, in an armchair, could walk by herself a little, took her food well, and had perfect control over her bladder and rectum. The effusion at the base of the left lung had disappeared.

When seen at her own home, on November 1st, she said that she was able to attend to her usual household duties, and felt stronger now than she had done for months.

REMARKS BY DR. EDGAR UNDERHILL.—There are several cases on record of successful operations for strangulated hernia in patients as old, or older, than the above; but few, if any, have had to contend with such severe pulmonary complications afterwards. Probably in this case, if an anæsthetic had been given, the result would have been less fortunate.

[We may refer our readers to an interesting report of another successful operation for hernia in a woman of advanced age, though not so old as this patient, published in the BRITISH MEDICAL JOURNAL, March 22nd, 1884, p. 555.]

UNIVERSITY COLLEGE HOSPITAL.—At the annual general meeting, the chairman called attention to the very serious financial condition of the charity, and also to the necessity for the immediate provision of a large sum of money for the building of a nursing home, the present accommodation for the nurses being unsuitable and inadequate. Loans have been promised at interest from the bankers, amounting in the aggregate to £7,500, and current expenditure defrayed out of legacies which in more prosperous times would have been invested. The year has closed with a debt of £8,500. The reliable income amounts to only £6,500, whilst the necessary expenditure is over £19,000 *per annum*. This being the jubilee year of the hospital, a great effort will be made to place the funds upon a more satisfactory footing; and, with this object in view, the Lord Mayor has consented to preside at a public meeting to be held at the Mansion House on June 16th.

BEQUESTS AND DONATIONS.—Mr. Edward Kirk Norris, of Northenden, bequeathed £1,000 to the Manchester Royal Infirmary, and £500 each, to St. Mary's Hospital and Dispensary, Manchester, the General Hospital and Dispensary for Sick Children, Pendleton, and the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, Lancaster. The Salop Infirmary, Shrewsbury, has received [illegible] under the will of Mr. John Lloyd [illegible], of [illegible]. The Royal Hospital for Diseases of the Chest has received [illegible] in memory of the late [illegible], of [illegible]. Mr. [illegible] has given [illegible] to the London Fever Hospital. The [illegible] Company has given [illegible] to Miss Mary Wardell's Convalescent Home for scarlet fever.

WOMEN DOCTORS.—It is said that there are about two thousand four hundred female physicians in the United States.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 18TH, 1884.

Sir ANDREW CLARK, Bart., M.D., LL.D., F.R.C.P., President, in the Chair.

Osteo-Arthritis.—Mr. HOWARD MARSH read an abstract of the report of the committee on Mr. Lund's case of osteo-arthritis. The main conclusion arrived at was that the arthritic affection was probably due to changes in the central nervous system, and that the affection was allied in its nature to Charcot's joint-disease. The presence of other forms of joint-affection was eliminated by a process of exclusion.

Primary Laryngeal Perichondritis.—Dr. DE HAVILLAND HALL read a paper which was a sequel to a paper read before the Society on April 28th, 1882. The subsequent course of the case showed how untrustworthy negative histories were, as the *post mortem* examination revealed marked syphilitic lesion, so that the perichondritis was almost certainly of syphilitic origin. The patient, a man, aged 25, was admitted into Westminster Hospital on October 9th, 1882, wearing a tracheotomy-tube, for the purpose of having his stenosed larynx dilated. The day after his admission, painful swellings developed in the joints and in the muscles. These disappeared under the use of large doses of iodide of potassium and the inunction of blue ointment; but the pain and febrile disturbance prevented any treatment of the laryngeal stenosis. In the beginning of February 1883, the patient left the hospital free from pain, but very emaciated. He was then lost sight of till July 2nd, when he was readmitted into the hospital, suffering from albuminuria and diarrhœa, and he died two days later. The necropsy showed constriction at the junction of the larynx and trachea, the aperture only admitting a No. 12 catheter; above the point of constriction, the mucous membrane was normal; below, thickened, of a dark chocolate-colour, and its surface bathed by a layer of yellow pus; the right cricoid cartilage was partially absent. The liver was a marked example of the fatty and lardaceous degeneration, and there were perihepatic and perisplenic adhesions.—In reply to the President, Dr. DE HAVILLAND HALL said that he had arrived at no definite conclusion with regard to the nature of the joint-disease.—The PRESIDENT had met with arthritic affections following slight operations in various parts of the body. A tumour was not to be considered as either aneurysmal or syphilitic simply because iodide of potassium caused its subsidence. He instanced a case of cancer which was materially improved, and the pain relieved, by the use of large doses of iodide of potassium.—Dr. HALL, in reply, remarked how very rapidly and completely the tumours he described had disappeared under iodide treatment.

Tuberculous Tumours of the Larynx.—Dr. PERCY KIDD described a case. A patient, aged 50, who had suffered from cough, hoarseness, and shortness of breath for eight months, came under observation as an out-patient at the Brompton Hospital, in the following condition: Chest; there were signs of consolidation of the upper part of the left lung, with complete absence of *râles*. Larynx normal, with the exception of the vocal cords. On the posterior extremity of the left cord was a spherical tumour as large as a small pea. On the corresponding part of the right cord there was a small pinkish prominence. The pulmonary condition remained unchanged for months, scanty obscure *râles* being heard occasionally, but more often being absent. There was very slight increase in size of the laryngeal tumour, but the prominence on the right cord gradually assumed the proportions of a tumour which, like that on the other cord, resembled a pea in shape and size. There was no further growth of the tumours. Ten weeks after his first visit the patient was admitted into the hospital in consequence of a spasmodic laryngeal attack in the out-patient room, from which, however, he soon recovered. For the four months he remained in the hospital he had slight spasmodic attacks from time to time, depending upon the varying degree of swelling of the aryepiglottic folds. The tumours remained unaltered, and there was no change in the pulmonary condition. The aortic second sound was noticed to be much accentuated, and occasionally a systolic murmur was heard under the left clavicle, which was thought to be due to aortic dilatation or aneurysm. The patient was discharged after his condition had become stationary, the physical state of his chest and larynx being unaltered. A month later he appeared in the out-patient room with signs of excavation of the left lung, and with much swelling of the aryepiglottic folds, but without any change in the appearance of the tumours. He was readmitted in a very weak state, and gradually became worse. The laryngeal obstruction increased so much that tracheotomy had to be performed during a spasmodic attack, in order to save his life, but he sank two days later. The *post mortem* examination revealed pulmonary phthisis of a fibroid type in the left lung, tubercular ulceration of the posterior wall of the larynx and of the trachea, with symmetrical pea-sized tumours situated over both processus vocales; atheroma and dilatation of the aorta; granular contracted kidneys; fatty liver; tubercular ulceration of the colon. A microscopical examination of the tumours showed that they were an outgrowth from the lateral aspect of the inter-arytenoid fold, and consisted of collections of subepithelial miliary tubercles, and of a cellular infiltration of the mucosa and sub-mucosa. Tubercle-bacilli were found in abundance in the miliary tubercles and in the cell-infiltration. In the *Wiener Med. Presse*, April, 1883, Schneitzler recorded a case in which he diagnosed multiple tuberculous tumours of the larynx. The tumours were removed with the guillotine, and proved to consist of aggregations of miliary tubercles. Schneitzler believed that his was the first case in which such tumours had been recognised during life.—The PRESIDENT inquired whether Dr. Kidd had heard or known of a case of laryngeal tumour of non-tubercular nature when disease of the lungs of phthisical character existed.—Dr. KIDD explained that the diagnosis of phthisis was only made after the larynx had been involved.—Dr. WHIPHAM said that he had recently had a case which illustrated the appearance of tubercle in the larynx before the occurrence of physical signs in the lungs. When first examined, an enlargement of the ventricular bands and swelling of one arytenoid cartilage were observed. It was not until some time later that physical signs appeared at the apex of one lung, and this coincidently with swelling of the other arytenoid cartilage.—In reply to the President, Dr. WHIPHAM said that there were no other evidences of syphilis.—Dr. DE HAVILLAND HALL spoke of the frequency with which phthisis and syphilis affected the larynx at the same time. Dr. Kidd's case was exceedingly rare and valuable. It was difficult till now to believe that a tubercular tumour could remain so long as nine months without ulceration.—The PRESIDENT suggested that the non-ulceration might be explained by the secondary production of fibroid tissue in the tubercular tumours.—Dr. KIDD had never heard of a case of tubercular tumours in the larynx prior to his own. Since his paper was written he had seen two somewhat similar ones. The fact of the persistence of tubercular tumours without ulceration for nine months, was to him an extraordinary occurrence. He gave brief outlines of the other cases he had recently observed.

Three Cases of Cancer of the Rectum.—Mr. CRIPPS read the notes of three cases of cancer of the rectum in which he had excised the lower part of the bowel, the operations having been performed respectively seventeen months, eighteen months, and four years ago. In the first case, that of a man, aged 68, the symptoms had existed for two years. The disease consisted of a hard irregular mass on the posterior and right wall of the rectum, about two-thirds of the circumference of the bowel being involved, the disease not extending more than two inches and three-quarters from the anus. The lower three inches of the bowel were removed, with the exception of about one-fourth of its circumference on the anterior wall. The patient was much troubled during his convalescence from symptoms arising from enlarged prostate, but was discharged in a satisfactory condition so far as the bowel was concerned. At the end of a twelvemonth, his medical attendant wrote that he was alive and comparatively comfortable, no return of the disease could be detected, but he was unable completely to retain his fæces. Mr. Cripps had examined this patient since sending in the paper, and found that he was suffering considerably from prostatic troubles. There was some hardness in this neighbourhood, but no certain symptoms of recurrence. The second case was that of a lady, aged 60. The disease extended all round the bowel on the anterior wall, nearly as high as four inches. Mr. Cripps did not regard the case, from its extent, as a very favourable one for operation, but at the wish of the patient undertook its removal. The bowel had to be dissected for two inches from the peritoneum. The patient made a very satisfactory recovery; she suffered much from contraction, but there was no recurrence for more than a year. The disease then recommenced. The last case was that of a lady, aged 40, who was recommended to the author by Dr. Matthews Duncan. The disease consisted of a hard ulcerated mass, involving one-half the circumference of the bowel to a height of two inches, and filling the ischio-rectal fossa. The disease was removed in July, 1880, and proved, under the microscope, to be a typical example of adenoid cancer. The patient had been frequently examined since. She had completely regained her old strength and health, had no pain or discomfort whatever, and remained, after nearly four years, perfectly free from any symptom of recurrence. Mr. Cripps remarked that he was much indebted to Mr. Butlin for his assistance in the operations performed.—Mr. MORRANT BAKER had operated on three cases of rectal cancer. One had died, and two were very greatly relieved. In one instance, a large portion of the recto-vaginal septum was removed, but no great amount of discomfort seemed to be incurred by the necessary incontinence of fæces. In another case, the result was very much more satisfactory in every way.—Mr. WALSHAM'S experience was also limited to three in number. The first case died three months after operation; the second case died on the third day after surgical treatment, probably from septicæmia; in the third instance, the whole of the disease could not be extirpated. The patient, however, made an excellent recovery, and continued well for a time, but lately a recurrence had set in. He advised the inspection of the rectum with the patient under the influence of an anæsthetic. In the operation he preferred the scissors to the *écraseur*. He raised the question whether it would not be well to remove as much of the disease as possible, even though all could not be taken away.—Mr. C. T. DENT thought that removal of the disease ought to be practised if the finger could reach beyond the disease with the patient under the influence of chloroform. The influence of the contraction had to be overcome, but he considered that incontinence of fæces was generally most distressing.—Mr. BARKER spoke of a case which occurred in a man aged 56, in whom he had removed an epithelioma which affected only the greater portion of the rectal wall. Three months later, although the man said he had no difficulty in defecation, Mr. Barker found very great contraction of the rectum about one inch above the anus. Owing to a valvular arrangement, the result of the operation not having involved the whole circumference of the bowel, the discomfort from constriction was extremely slight. Recurrence of the tumour led to a second operation, which was followed by cellulitis and death. A second case also succumbed to a similar form of cellulitis. The operation was nevertheless, in his opinion, of great value, and ought to be practised.—Mr. RICKMAN GODLEE gave an outline of a case which occurred in a man aged 60, in which a cancerous nodule existed in the posterior part of the rectum. In this case he used Paquelin's cautery, by which hæmorrhage was entirely prevented. Afterwards there was constriction of the rectum, accompanied by incontinence of fæces. Dilatation was practised, but not with complete relief of all the symptoms. In some cases it might be advisable to perform colotomy. Mention was made of a case in which repeated scraping away of the epithelioma was practised, with the effect, apparently, of prolonging life and rendering the patient more comfortable.—The PRESIDENT said it did not appear from the discussion that operation clearly prolonged life. He felt sure that carcinoma of the rectum was of much greater duration than was ordinarily supposed. He briefly related a case which had occurred in a lady under his care.—Mr. CRIPPS, in reply, said that, contrary to Sir Andrew Clark's experience, he should say that the expectancy of life was not greater than a year or a year and a half. As regarded after-operation, however, he mentioned one case on which he had operated eight years ago; and, notwithstanding two recurrences, which were also surgically treated, the patient was probably still alive and well. He agreed in general with Mr. Walsham's remarks that scissors were better than the cautery unless the disease extended very deeply. He considered that it was extremely important that the finger should be got well beyond the disease. The mobility of the rectum was, however, a still more important point, as showing the amount of deep extension of the disease. Contraction of the bowel was far more serious than the inconvenience of incontinence of fæces. He would rather have any amount of incontinence to deal with than one of intractable stricture. A free posterior division of the contraction, or colotomy, was a last resource in such cases. Verneuil had recommended the free posterior incision of rectal stricture.

Tubercular Meningitis.—Dr. ANGEL MONEY communicated a paper on a remarkable case. The patient was a female infant, aged 9 months when first seen on December 7th, 1883. It appeared that the child had enjoyed good health till about five months previously, when it had the measles, but apparently recovered completely in a short space of time. On November 27th, the child had a fit, shortly after which the left arm and leg were found to be completely paralysed. The intelligence was, so far as could be judged, unaffected. The corporeal state was decidedly one of great fatness. The condition of hemiplegia seemed to be slowly passing away, until December 27th, when a series of fits set in, unconsciousness supervened, and the patient died on January 2nd. On January 1st, there was hurried and somewhat Cheyne-Stokes breathing; the pulse was regular, 96; but there was no fever. The temperature on the morning before death, however, was taken in the rectum, and found to be 107°. At the necropsy, the brain was soft and pale, with considerable excess of pale clear fluid in the lateral and fourth ventricles, but without glueing of the cerebellum to the posterior boundaries of the last named ventricles. There were signs of not recent meningitis, chiefly at the base; and a large branch of the right middle cerebral artery was found to be thrombosed. The other organs showed signs of tuberculosis. A minute vegetation existed on the smaller flap of the mitral valve. In his remarks on the case, Dr. Angel Money pointed out the difficulties of diagnosis. He said that, in children, the symptoms and signs of disease were singularly wanting, especially when one had to do with the brain. A mass of disorganisation in a child would produce much fewer signs than an equal amount of damage in an adult; and this was still more the case the younger the child.—Dr. BERNARD O'CONNOR asked, in the absence of the usual premonitory symptoms, cephalalgia and vomiting, whether there was any coldness of extremities, and whether dentition was delayed.—Dr. GLOVER referred to an interesting case of evanescent paralysis. A man who worked in the cattle-market became hemiplegic at intervals. After a time, these recurrences of evanescent hemiplegia disappeared; but, later still, vertigo was complained of; and headache, with weakness and inequality of pupils, developed.—Dr. TONGE-SMITH remarked on a case of transient paralysis of the face and other parts, which happened in a child who subsequently presented a fever-curve just like that of typical enteric fever, though the ultimate issue showed that the case was really one of tubercular meningitis.—Dr. HERON related a case of evanescent paralysis not connected with tubercular disease. The subject was a business-man who presented one afternoon the signs of facial paralysis, with deviation of the tongue and thickness of speech. These signs passed away in a few hours, to be followed by death the next morning.—Dr. ANGEL MONEY, in reply, said that the child had cut the two lower incisor teeth; the left leg and arm were cold, as compared with the right; the paralysis was not evanescent, and was almost certainly due to thrombosis of a large branch of the right middle cerebral artery.

Living Specimens.—The following were shown. Mr. CHARLES STONHAM: Recurrent Nasal Polypus, which had been operated on after Lawrence's plan.—Mr. BELLAMY: Cystic Hygroma (?) of the Neck.—Mr. ROBERT W. PARKER: Congenital Hypertrophy of a Limb.

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 21ST, 1884.

ARTHUR E. DURHAM, F.R.C.S., President, in the Chair.

Antiseptic Absorbent Sponge.—Mr. SAMPSON GAMGEE showed an artificial antiseptic sponge of his invention. A small capsule, containing eucalyptus or other antiseptic, was enclosed in absorbent cotton,. outside this was a layer of cocoa-nut fibre, and outside this more absorbent cotton-wool, the whole being enclosed in gauze. When about to be used the capsule could be broken by a blow of the fist, and the absorbent cotton then became permeated with the antiseptic. Mr. Gamgee said that the "sponges" could be manufactured at a very trifling cost (probably about a shilling a dozen), and might, he hoped, come into use as a cheap substitute for ordinary sponges; they possessed this great advantage, that when required for use they were certain—however long they might have been kept—to be antiseptic; and, being so cheap, they might always be destroyed after being used. The sponges will be manufactured by Messrs. Burroughs and Welcome.

Phlegmonous Inflammation of the Stomach.—Dr. WHIPHAM read a paper on this subject, which will be published shortly.—Dr. S. O. HABERSHON, expressed his agreement with Dr. Whipham's view, that it was necessary to distinguish between circumscribed and diffuse suppuration. Very few cases could be traced to direct local irritation of the stomach. He had only met with diffuse inflammation allied with pyæmia, puerperal fever and other general conditions, and probably it was owing to this combination that it was so seldom diagnosed.—Sir JOSEPH FAYRER had only met with diffuse inflammation of the stomach, and only in connection with general conditions, such as pyæmia; in cases of septic peritonitis he had frequently encountered purulent infiltration of the stomach. The causation of the condition described by Dr. Whipham seemed to [illegible]. After some remarks from Dr. [illegible], Dr. Whipham, [illegible] said that he was unable to explain how the condition was produced.

Treatment of Dysentery by Ipecacuanha.—Dr. [illegible] (Brighton) began his paper by saying that [illegible] the congestive, exudative, and ulcerative stages of acute dysentery was not generally recognised, but that [illegible] opinion existed as to the best way to [illegible] that five or ten grains were full doses, and that the small quantity was compensated for by frequent administration. The object of this was to avoid depression, but, in Dr. Ewart's opinion, it had the opposite effect, since the stomach was [illegible] from the depressing influence of the drug. To give doses of [illegible] every twelve hours was the most satisfactory mode of administering the drug. A the commencement of the disease, the drug might be given more frequently for a short time, but if the disease did not at once yield, it was best to resort to unfrequent doses. He endeavoured to avoid the production of emesis, and was careful to maintain the patient's strength by a nutritious fluid diet. Dr. Ewart supported his views by several cases, and referred to numerous others. With regard to the pathology of dysentery, he observed that Dr. E. A. Parkes had first cleared up the subject by assigning to the changes in the solitary glands their true significance. Dr. Ewart classed these changes under four stages: (1) Injection; (2) Enlargement from exudation; (3) Rupture of capillaries; (4) Molecular disintegration of the wall and escape of the contents of the swollen gland. More rarely the rupture took place into the submucous tissue. He desired especially to insist on the value of ipecacuanha in sloughing, as distinguished from gangrenous, dysentery; it appeared to check the progress of the sloughing, and favoured recovery by the return of those parts of the mucous membrane still in an early stage of inflammation to the normal condition. He excluded, of course, cases where the sloughing or gangrene was so extensive that recovery was hopeless, and also cases with marked asthenia with extreme irritability of the stomach, where the effect of the drug might be obtained by small enemata or by the subcutaneous injection of emetia.—Dr. MAIR had found the treatment by large doses of ipecacuanha of greatest value in the acute stage of the disease. He had not found the treatment successful in the sloughing form, but had had the most satisfactory results with injections of nitrate of silver.—Sir JOSEPH FAYRER agreed with the general principles of treatment laid down by Dr. Ewart, but he did not object to the production of vomiting. Dysentery, if it could be put under treatment at an early period, could be completely controlled by ipecacuanha. In severe sloughing or gangrenous dysentery, ipecacuanha was, of course, useless to stop the sloughing, but it could control the further extension of the dysenteric process.—Dr. EWART, in reply, said that he specially excepted severe sloughing and gangrenous dysentery, where no treatment was of any use. Large doses of ipecacuanha were of greatest value in those cases of dysentery which were apt to run on to chronic dysentery or to abscess of the liver.

Card Specimens.—Dr. RADCLIFFE CROCKER: Bromide of potassium rash in site of recent vaccination-scars, mimicking vaccine-pustules.—Mr. A. PEARCE GOULD: Ulceration of finger consecutive to injury of median nerve.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 22ND, 1884.

GEORGE JOHNSON, M.D., F.R.S., President, in the Chair.

An Inquiry into the Cause of the Increase of Cancer in England and Wales. By F. B. JESSETT, F.R.C.S.—The author regarded the increased death-rate from cancer, to which attention had been drawn by the Registrar-General in his last annual report, as signifying a positive increase in the prevalence of cancer, rather than as being open to explanation on the ground of greater accuracy of diagnosis, as suggested in the report. On examination of the statistics for ten years, the increase was found to be from 9,945 deaths registered in 1872, to 13,542 deaths in 1881; or, taking the death-rate, from 431 per 1,000,000 in 1872, to 520 in 1881. On analysis of the Registrar's returns for the different counties, the death-rate from cancer in the fen-districts was seen to be much higher than elsewhere, with the exception of London, Devon, Somerset, Gloucester, and North Wales, which places the author excluded from account on special grounds. Cancer was more rife in low-lying, damp situations; but heredity, increased by intermarriage, had probably much to say to its prevalence in the "cancer-district"—the fen-counties above alluded to. The increasing mental strain in the struggle for existence might tend to account for the increased development of cancer among persons predisposed, and these points ought to be borne in mind in advising those predisposed to the disease.—Dr. HERBERT SNOW thought that epithelioma ought to be separated from carcinoma and sarcoma in any classification, and that the absence of this subdivision vitiated the statistics of the Registrar-General. He thought nervous depression had much to do with the causation of cancer. Epithelioma was a purely local disease, in the causation of which heredity played no important part.—Mr. HARRISON CRIPPS said that some calculations he had made about eight years ago from the Registrar-General's reports had led him to results so startling and paradoxical as to be inevitably inaccurate. He had come to the conclusion that the returns were all vitiated by the frequent alterations made in the mode of classification. For instance, the death-rate seemed to be higher in London than elsewhere, but further investigation showed that the rate differed very greatly in different districts; thus, taking the average of ten years, in the West-end it was double what it was in the East-end of London. He could not see that Mr. Jesset had adduced any statistics affording any real evidence that cancer was due to worry. Education, at any rate, could not at present be credited with causing an increase in the death-rate from cancer. The hospital-patients who now suffered from cancer had not suffered from modern educational theories; neither could it be said to be especially common among the professional classes, but rather the contrary. He thought there was a strong probability that too much was made of the doctrine of inheritance; it was founded on two species of evidence—common notoriety, and statistics. In Sir James Paget's statistics of 460 cases of cancer, there was a family-history in 1 in 4, but in only 37 cases were the parents affected, or only one parent in 25. The evidence with regard to heredity through members of the family other than parents Mr. Cripps rejected, for reasons assigned in a paper published in the *St. Bartholomew's Hospital Reports*, vol. xiv. He had collected statistics of 180 cases in St. Bartholomew's Hospital, and found that the number of cases in which the parents had suffered from cancer was 1 in 28. Now, taking the returns of the Registrar-General for the ten years 1861 to 1870, he found that in round numbers 2,000,000 people died above the age of twenty years, and that of this number 8,100 died of cancer, so that in the whole community the death-rate from cancer was 1 in 29 of the deaths above twenty years of age; from this it appeared that the death-rate from cancer among the parents of cancerous patients was little if at all above that among the whole community, and that cancer in the parent in no way increased the liability of the offspring to suffer from the same disease.

Epiphysitis. By C. MACNAMARA, F.R.C.S.—Synonyms for the disease were diffuse ostitis of children, osteomyelitis during period of growth, suppurative periostitis, acute necrosis. This disease, fully described by M. Gosselin in *Arch. Gen. de Med.* for 1858, but hardly recognised by English authorities, seemed to exist independently of acute osteomyelitis. In this paper epiphysitis of the tibia was alone referred to, and the author brought forward five cases of the disease in that bone, illustrating the various phases of the disease, and showing that it might run its course (*a*) without affecting either the ankle or knee-joint; (*b*) that it might give rise—1, to necrosis of the entire diaphysis; 2, to abscess of the bone; 3, to diffuse sclerosis and enlargement of the tibia. The disease consisted in inflammation commencing at the line of junction of the diaphysis and epiphysial cartilage. From this line the inflammatory action extended along the soft structures contained in the cancellated tissue and Haversian system of the diaphysis, involving the contents of the medullary canal and the deep layers of the periosteum. In many cases the inflammatory action quickly led to suppuration or to necrosis of the diaphysis; the diaphysis of the bone might thus be entirely destroyed without the epiphysis and neighbouring joints being affected. If arthritis occurred, it was a secondary affection. Epiphysitis did not always lead to necrosis of the diaphysis. Early treatment often saved the bone, and the active changes in the bone might subside. If abscess were formed in the cancellated tissue of the bone, the surrounding osseous tissue underwent a condensing ostitis. In other cases the inflamed diaphysis became simply sclerosed with increased periosteal growth. With regard to the symptoms of the disease, two of the five cases brought forward were at first mistaken for articular rheumatism. The disease commenced with great pain and swelling in the proximity of a joint and general pyrexia. The limb became much swollen and of a brawny hardness, abscesses formed, and in many cases the necrosed diaphysis could be felt. Symptoms of septicæmia often followed. In other cases the disease subsided, and ultimately signs of local abscess or of diffuse sclerosis manifested themselves. With regard to treatment, he recommended in the early stages of the disease, free incision down to the extremity of the affected diaphysis, and drainage of the part, and, in severe cases, trephining the bone at one or more places. When the greater part of the diaphysis was necrosed it ought to be removed, dissecting the periosteum from it. A new tibia would often form. Should the tibia not re-form, the fibula would increase in size, and with proper appliances would form a very serviceable limb.—Mr. TIMOTHY HOLMES would join issue with Mr. Macnamara on almost every point raised by the paper. In the first place, he objected to the name, which he thought was improperly applied to a disease in which the epiphysis itself was not attacked; the disease was not confined to the period of childhood, but occurred also in adults, where the epiphysial cartilage had disappeared, so that the name, he thought, could not be defended on the ground that the disease was an inflammation of the epiphysial cartilage; neither did he think that this cartilage could be seriously implicated or destroyed, since the bone grew and elongated after the disease had subsided. Chassaignac had published a complete description of the disease, under the name of acute periosteal abscess, and in a paper published about twenty years ago he (Mr. Holmes) had adopted Chassaignac's name, and had closely followed his description. There was a disease of the epiphysis which had been described by Mr. Thomas Smith under the name of "acute arthritis of infants," and by Mr. A. E. Barker as "epiphitis." He thought that a name so nearly like ought not to be given to a group of cases in which acute periostitis or acute osteomyelitis were the prominent lesions. With regard to the mode of origin of the disease, he did not believe that it began in the epiphysis; he had seen diaphysial necrosis following on inflammation starting elsewhere; as a rule, the inflammation began in the deeper layer of the subperiosteal tissue, more rarely in the medulla. The "chronic abscess of bone" of Brodie, which was consequent on a contusion, and began at the site of the injury, ought to be separated entirely, he thought, from the acute disease of bones which was allied to septicæmia, and was so often seen in children. With regard to treatment, he might observe that by division of the periosteum it was, in his experience, commonly possible to avoid trephining the bone, though he admitted that, if Mr. Macnamara's contention that osteomyelitis was always present were correct, the practice would be a good one.—Mr. **BARWELL** was also of opinion that the name was a mistake. The result of a true epiphysitis was necrosis of the epiphysis, and the inflammation extended with great ease to the opposite joint. He exhibited a specimen of necrosis in both bones of the knee from epiphysitis. With regard to the occurrence of osteomyelitis along with acute periostitis, he would remark on one valuable sign of such a concurrence; when, in cutting down on to the bone, large blotches of oil were found under the periosteum, then, as a rule, the medulla would be found to be severely inflamed, the great tension set up squeezing the oily matter out of the bone. He thought Mr. Macnamara had hardly done justice to English surgeons. He had himself described inflammation of the epiphysis, true epiphysitis about fourteen years ago. For complete necrosis of the whole shaft of the bone, he had frequently performed removal of the whole diaphysis, leaving only the epiphysis. When the bone was not at once reproduced, he would recommend the exercise of much patience, as it might be reproduced after a very long period.—Mr. **THOMAS SMITH** strongly objected to the name applied by Mr. Macnamara. He had himself described the condition under the term "acute necrosis of growing bones." Further, he thought that, under the one term, Mr. Macnamara had included several other diseases which might be separated. In his experience, the process which accompanied this acute necrosis had a pyæmic character, and he wished to ask Mr. Macnamara whether, in his cases, the symptoms were those of pyæmia or septicæmia. The whole of the diseased bone from which the periosteum was raised, did not always die, and he was therefore inclined to question the wisdom of removing the whole diaphysis. He had observed that when the whole diaphysis was removed, ulceration was exceedingly liable to occur over the surface of the tibia, owing apparently to adhesion of the skin to the periosteum and consequent diminution of elasticity.—Mr. **F. J. GANT** thought there was a want of co-relation between the pathology, symptoms, and treatment of the disease, owing, as he believed, to more than one form of disease being classed together.—Mr. **MACNAMARA** had put forward the name because the disease commenced between the epiphysial cartilage and the diaphysis, and extended either into the medulla or beneath the periosteum. He believed that the cases described under the term acute periostitis, were really cases of disease commencing at the epiphysial line, and spreading along the medulla and along the periosteum, and that acute periostitis did not occur without this epiphysitis. Chronic abscess generally began at a time of life before the diaphysis and epiphysis were blended, and were, in his belief, due to epiphysitis, although, no doubt, chronic abscess might be produced by other causes. In his cases, the symptoms were of the septicæmic type; there were no repeated rigors, and no secondary abscesses. There was a sero-purulent inflammation of the affected joint, and other joints were also implicated, so that the disease, in the early stage, was not unlike rheumatism.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 2ND, 1884.

H. GERVIS, M.D., President, in the Chair.

Spondylolisthesis.—Dr. F. **NEUGEBAUER**, jun., showed specimens and photographs illustrating the production of spondylolisthesis, and presented books on the subject. His remarks have already appeared in the *Annales de Gynécologie*, February, 1884. Remarks were made by the **PRESIDENT**, Dr. **BARNES**, and Mr. W. **ADAM**. The specimens were referred to a subcommittee.

The late Duke of Albany.—The **PRESIDENT** proposed that letters of condolence be sent from the Society to Her Majesty the Queen and H.R.H. the Duchess of Albany, on the sad occasion of the death of H.R.H. the Duke of Albany. This was unanimously agreed to, and the President undertook to write the letters.

Bilateral Dermoid Cysts.—Dr. **CARTER** showed two dermoid cysts removed after the death of a single woman, aged 50, one of the cysts being also cancerous.—Mr. **THORNTON** made some remarks on Dr. Carter's case.

Hernia and Prolapse of the Vagina.—Mr. **DORAN** read a paper on the relations of prolapse of the vagina to hernia, illustrated by two pedigrees. The paper described cases of women affected with prolapse of the anterior wall of the vagina, where a very marked family history of hernia existed. The genealogies of the patients were given in a tabular form. The cases all tended to prove the close relation between hernia of the intestine and displacements of the female pelvic viscera.—Dr. **MATTHEWS DUNCAN** had long taught that intestinal hernia and procidentia uteri were alternative conditions. The whole of Mr. Doran's excellent paper was a part of the great subject of the retentive power of the abdomen or its pressure-relations.—Dr. **CHAMPNEYS** said that, in the work of Landau on movable kidney, various associated conditions were mentioned; hernia was found in seven per cent., descent of the uterus or vagina in thirteen per cent., "retroflexion" in fifteen per cent., and pendulous belly in twenty-five per cent. No explanation is given of the term "retroflexion," but it probably meant the condition known as retroflexion with descent, or, rather, descent with retroflexion. It was his habit to inquire of patients suffering from descent of the pelvic organs as to family histories of hernia, prolapsus uteri and prolapsus ani. One such history was the following. A woman, aged 52, had had procidentia since the age of 27, her eldest daughter, aged 30, had had procidentia since the age of 21; all her three sons had prolapsus ani as children.—Dr. **HORROCKS** said allowance must be made for the fact that in the same family it often happened that circumstances obliged all the members to do hard work.—Mr. **DORAN**, in reply, said that the history of rupture was often difficult to obtain, as the condition was naturally concealed, especially between the different sexes, and also between those of very different ages. In some cases the bladder was not displaced in descent of the vagina and uterus. He had recently seen a case of apparent cystocele in which no part of the bladder was prolapsed. The distinction between prolapse of the generative organs with and without cystocele was an interesting question to solve in relation to hernia.

Electricity in Parturition.—Dr. **KILNER** read a paper on the use of the induced current during parturition. The effects of the current were the relief of pain, prevention of fatigue and *post partum* hæmorrhage, equalisation of the pulse, increase in frequency and strength of the uterine contractions, and the prevention of vomiting. The pain from stretching of the vulva was, however, not alleviated by it; nor did it to any extent relieve pain in cases of instrumental labour. The author now employs the coil (shown) in nearly all cases. In about three hundred cases, *post partum* hæmorrhage only occurred twice. The coil sometimes failed to increase uterine contractions when most needed. After its use for an hour or an hour and a half, it exercised its sedative action, and no longer increased the contractions. In some cases, it produces violent and almost continuous contractions. In one case, a contraction lasted fifteen minutes. No prognosis with regard to these points could be made. It had no effect in diminishing after-pains. It generally prevented or stopped vomiting. Statistics were given, and directions for use.—The **PRESIDENT** said that an agent which increased uterine action while lessening pain was almost too good to be true; but parturient women would be grateful for such a method.—Dr. **PLAYFAIR** had tried the current, and it had proved a failure—perhaps from want of special skill; but, if special skill were needed, it could not be [illegible] used. Its effects in diminishing pain were slight, and not to be compared with other means at our disposal. A battery was a [illegible] thing to carry about, and was likely to alarm patients. As an oxytocic, he had found it useless. Dr. Kilner compared its action with that of ergot, which should never be used to accelerate delivery. Uterine manual pressure was the best and safest oxytocic.—Dr. **WALTER** had used the current for more than seven years [illegible] of the uterus after the expulsion of the placenta, and found it [illegible] superior to ordinary means. He had found it useful in *post partum* hæmorrhage.—Dr. **HORROCKS** asked for details [illegible] inflammation, hæmorrhage, and whether [illegible]. In this respect, electricity had always hitherto [illegible].—Dr. [illegible] had found the electrical current useful in [illegible]. In [illegible], a man would walk into his study like an old person, and would [illegible] as erect as a soldier. He had also dispersed [illegible] by its frequent use, and tumours of the breast.—Dr. **MURRAY** thought that, if the electric current had such power as had been described, the possibility of rupture of the uterus would have to be remembered. He had used it for hæmorrhage, but considered its value very doubtful.—Dr. KILNER replied that, as regarded the lessening of pain, the current was more under control than an anæsthetic, and never caused sickness. He had never seen a case of rupture of the uterus.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, MARCH 19TH, 1884.

D. J. LEECH, M.D., President, in the Chair.

Excision of the Knee.—Mr. A. BOUTFLOWER showed a case of excision of the knee, recovering with a movable joint. He remarked that such a result was extremely rare. The patient was a boy 9 years old, with strumous disease of the knee; the limb was ankylosed, extremely flexed, and had not touched the ground for some years. The operation was performed on June 22nd, 1883. The ends of the femur and tibia were removed, the synovial membrane was scraped away, the patella was removed, and the limb was placed in a Watson's splint. On the fourteenth day the wound was entirely healed, and within a month he could walk across the ward. The temperature never reached 100°. The boy walked with a slight limp, and bent his knee to an angle of about 120°. Scarcely any cicatrix was visible over the incision, the only mark being where the drainage-tube was inserted. Owing to the absence of the extensor tendon, there was some fear of displacement of the bones; but as nine months had now elapsed since the operation, he had good hopes that this danger might be averted.

Subcutaneous Nodules in Rheumatism.—Dr. EDGE showed a boy, aged 14, suffering from heart-disease, who presented a number of subcutaneous nodules. He had had an attack of acute rheumatism twelve months before coming under observation. The nodules came out in successive crops, and were identical in character and situation with those described by Drs. Barlow and Warner. They varied in size from a pin's head to a large hazel-nut, and were somewhat numerous, forty-four having been observed during the progress of the case.

Bilateral Paralysis of the Abductors of the Larynx.—Mr. A. H. YOUNG exhibited a girl, aged 9, suffering from bilateral paralysis of the abductors of the larynx, in consequence of which tracheotomy had been performed. The patient had always experienced some little difficulty in breathing, apparently the result of hypertrophy of the tonsils, but, four months before coming under notice, this difficulty had markedly increased, and had recently become alarming, especially during sleep, when it was accompanied by great noise. On her admission into the Salford Royal Hospital, the dyspnœa was seen to be purely inspiratory and constant. It was associated with great stridor, and both symptoms were markedly intensified during sleep. There was no aphonia. Laryngoscopic examination at once revealed the nature of the case. Shortly after admission, the symptoms became so urgent that tracheotomy was performed. The patient rapidly recovered, with the symptoms in every way alleviated. No cause could be ascertained to explain the production of the paralysis.

Pityriasis Rubra.—Dr. KINGSBURY (Blackpool) reported a case of this disease, which he had seen in consultation with Dr. Anderson. The patient, aged 25, had been ailing for three months, but, when seen, appeared to be rapidly sinking. He lay completely prostrate, unable even to raise himself in bed without help. He was suffering acutely, every turn in bed causing great pain, and the weight of the bedclothes oppressing him. From the scalp to the soles of his feet, the skin was intensely red; here and there, on the forearms and calves, were patches simply appearing erythematous; in other parts, there were loose scales, of varying thickness, and having an uneven wavy appearance. In size, these scales varied from coarse dandriff to a crown-piece. A large house-bucket was filled in a week by the epidermis swept from his bed. The nails were thickened, dark, and uneven. On the inside of the thighs, there was a trace of moisture. There was no itching. The temperature was normal; the pulse very feeble, the urine albuminous. There was total loss of appetite. There was a most offensive odour from the epidermis. Many drugs, including arsenic, and applications had been tried; but, after persisting for about two months with the unguentum picis liquidæ and an iron and quinine mixture, the patient recovered, and, after a short stay in the country, was able to resume his work. This man was a grocer's assistant, and his illness seemed to have begun in that form of eczema known as "grocers' itch." Hebra summed up his experience by saying that "this disease always ends fatally." Dr. Liveing had had two cases; one terminated fatally, and a *post mortem* examination revealed chronic renal disease; the other case recovered. Dr. Henry Thompson's case was also followed by a *post mortem* examination, but no organic disease could be detected. Dr. Finny, of Dublin, reported a case of recovery. The chief characteristics of the disease seemed to be: 1, Its universal extent; 2, the quantity of the desquamation, and its offensive odour; 3, the exquisite tenderness of the skin and its extreme redness; 4, the dryness of the surface.

Sprains of Elbow-joint.—Mr. DACRE FOX read a short paper on sprains of the elbow-joint, and described his method of treatment by means of pads and firm equable pressure.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, MARCH 7TH, 1884.

JAMES CARTER, F.R.C.S., President, in the Chair.

Fatal Poisoning by Yew.—Mr. BALDING (Royston) related this case. A servant-girl aged 24, in good health, complained one day to her mistress of headache, but did her work as usual. Her mistress saw her in the evening at eight o'clock. The next morning the mistress went to her servant's bedroom and found her dead in bed. She was lying on her face, and was quite cold. The medical man who was sent for found her quite cold; the face and chest were livid; the pupils were of medium size. There were no marks of violence, and no signs of vomited matter. From external evidence, he considered that the deceased was pregnant, and had been dead about two or three hours. The medical evidence given at the inquest was that all the organs were healthy except the stomach, the mucous membrane of which was inflamed. It contained some brownish fluid and four or five pieces of green leaf, which had apparently been cut up. The uterus contained a five months' fœtus. All the other organs were healthy. The mistress and the gardener both mentioned that the deceased had asked them if yew were poisonous, and the latter noticed that some sprigs of yew had been recently broken off a yew tree in the garden near the house. Mr. Balding alluded to other cases recorded of yew-poisoning in which the symptoms related to the cerebro-spinal system and gastric irritation. He felt convinced that the deceased had died of yew-poisoning, although apparently death had taken place in less than nine hours. It was a well known fact that horses and cattle sometimes died from eating yew, but children frequently ate the berries with impunity. It was not clear in which part of the tree the poisonous principle resided; but it was certainly, under some conditions, a very active one. Mr. Balding thought it very probable that the yew was used more often for procuring abortion than was commonly supposed.

Uric Acid.—Dr. LATHAM read a paper on the formation of uric acid in animals, its relation to gout and gravel, together with an explanation of the mode of action of some of the remedies used in the treatment of these diseases. Dr. Latham pointed out that the beneficial effects of remedies used in gout and gravel were due either to the removal from the system of glycocine (calomel and rhubarb, for instance, causing biliary discharges from the alimentary canal), or to the remedies combining with glycocine, as benzoic acid and salicylic acid do, and so preventing the formation of uric acid; or, if the uric acid existed in the blood, by decomposing it with such remedies as iodide of potassium. Hydriodic acid in the laboratory decomposed uric acid into carbonic acid, ammonia, and glycocine; and Dr. Latham attributed a similar effect to iodide of potassium in the system. He further pointed out that the imperfect metabolism of glycocine might in another way, by its oxidation in the tissues or in the blood into oxalic acid, lead to the development of the so-called oxalic acid diathesis. He thought it probable that the nervous symptoms which sometimes preceded gouty attacks were due to the presence of oxalic acid formed in this manner.—The discussion on this paper was adjourned.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, MARCH 21ST, 1884.

T. O. DUDFIELD, M.D., President, in the Chair.

Offensive Businesses.—The PRESIDENT called attention to the appeal case, Passey *v.* Oxford Local Board, in which the late Lord Chief Justice Cockburn and Mr. Justice Lopes had upheld the decision of the magistrates, at a Petty Session at Oxford, that the business of the appellant (Passey), a rag and bone merchant, carried on by him at Oxford, was, as a matter of fact, a noxious and offensive one; and, as a matter of law, was of the same character as the six trades specified in Section 112 of the Public Health Act, 1875. He argued, therefore, that the said business was of the same character as the trades enumerated in Section 3 of the Slaughter-houses (Metropolis) Act, 1874; and gave reasons for the opinion that the business of a rag and bone merchant should be scheduled and regulated under that section, and carried on under by-laws, as the only effectual way of preventing recurring nuisance. He added that the Local Board (Metropolitan Board of Works) had declined to schedule the business, on the application of the Kensington Vestry, on the ground that "the businesses to which the Act of 1874 refers are businesses which include processes of manufacture of a more or less offensive character, and that it did not appear to the Board that the mere collection of a mass of refuse-matter into one place was a 'business' within the meaning of the third section of the Act." But, in the Oxford appeal case, the judges had arrived at a different conclusion, deciding that a "business, in order that it may be brought within Section 112 of the Public Health Act, 1875, should be *ejusdem generis* with those specified in that section." "Those businesses," the late Lord Chief Justice said, "seem to include animal matter with the bones stored in the premises, and the mere exposure of bones with animal matter may be very offensive." The President remarked that, in addition to "bones" and other forms of animal matter at many of these shops, large quantities of fat, often in a foul and offensive condition, were collected prior to removal to the fat-melter, where the regulations require it to be so stored as not to be a nuisance by escape of offensive effluvia into the open air; and he urged that, if the business of a rag and bone merchant were regulated by by-laws, all offensive matters would have to be so stored that they could not become a cause of nuisance. Moreover, if nuisance did arise, it would only be necessary to prove a breach of the by-laws, and the offender would be fined; whereas, under the Nuisance Removal Acts, endless difficulties arose, and it was found practically impossible to prevent the frequent recurrence of cause of complaint.

Copper-Poisoning.—Mr. G. H. Fosbroke, Medical Officer of Health to the Stratford-on-Avon Combination of Sanitary Authorities, read a paper on some suspicious cases of copper-poisoning which had come under his notice.

The Manufacture of White Lead, and its Effects on Health.—Mr. F. M. Corner, Medical Officer of Health for Poplar, described two fatal cases of poisoning of women working in a lead-factory.—Mr. Shearer, Mr. Wynter Blyth, Dr. Dixon, and Dr. James Stevenson, took part in the discussion which followed.

MIDLAND MEDICAL SOCIETY.

Ordinary Meeting, April 2nd, 1884.

G. F. Bodington, M.D., President, in the Chair.

Orbital Cellulitis and Abscess.—Mr. Eales recorded several instructive cases which had come under his care. While not denying that this condition might occur spontaneously, more especially in the rheumatic and gouty, he thought that, if traumatism, erysipelas, and pyæmia were excluded on the one hand, and disease in the neighbouring bones and cavities on the other, few cases could be classed as spontaneous. The teeth should always be carefully examined, as they were often the cause of orbital cellulitis. Loss of sight from atrophy of the optic nerve often followed these cases, and was probably due to optic neuritis, or to thrombosis of the retinal vessels.

Hypertrophied and Sacculated Bladder.—Mr. Chavasse showed a specimen of this condition from a patient aged 71, who for many years had suffered from a tight urethral stricture. It was finally necessary to perform perineal section, but pneumonia proved fatal twelve days after the operation. The saccules were three in number, the two largest being of the size of a hen's egg, the smallest equal to the dimensions of a walnut. No calculi were present; the kidneys of the patient were slightly granular.

Enchondroma of Upper Extremity.—Mr. Haslam showed a boy, aged 13, with enchondromata of the fingers of the right hand and forearm. It was noticed first on the ring-finger when about four years of age, and attributed by the parents to an injury. The forearm was about one inch and a half shorter than the left. There was a growth at the lower end of the ulna, another on the olecranon, and the head of the radius was pushed forwards on to the anterior aspect of the humerus, apparently by another growth in the neighbourhood of the capitellum, but notwithstanding this dislocation the movements of the forearm were as free as those of the other side.

Reflex Amblyopia.—Mr. Priestley Smith exhibited a series of perimeter-charts from patients suffering from reflex amblyopia. The condition was characterised by a variable concentric contraction of the field of vision. It had given rise to much speculation. Charcot had attributed it to central lesion, but there was reason to believe that it was in all cases a true peripheral anæsthesia, caused by reflex contraction of the blood-vessels which nourish the retina. Reflex amblyopia appeared to imply an over sensitive state of the nervous system, together with some determining or exciting cause. The exciting causes in the cases exhibited were fright or shock in one case, excess of brain-work at school in two, extraction of molar teeth in one, injury of the other eye in one, disease of the ovaries and Fallopian tubes in one. In the last named case one eye had been permanently blinded by thrombosis during temporary lowering of the ocular circulation, and the other was many times threatened in the same manner, but recovered completely after the removal, by Dr. Malins, of the ovaries and Fallopian tubes. In several of the charts the characteristic tendency to rapid fatigue of the retina, while under examination, was visible in the peculiar spiral form taken by the line bounding the field of vision.

Sphygmographic Tracings.—Dr. Suckling showed pulse-tracings, taken with Dudgeon's instrument, from cases of mitral disease, aortic disease, pneumonia, aneurysm, atheroma, Bright's disease, and constipation, and he pointed out the use of the sphygmograph in localising thoracic aneurysms, and in the prognosis of pneumonia.

ACADEMY OF MEDICINE IN IRELAND: MEDICAL SECTION.

Friday, March 14th.

William Moore, M.D., President, in the Chair.

A Case of Congenital Cardiac Disease with Interventricular Communication.—Dr. Boyd described the case he exhibited as one of congenital communication between the ventricles in a child ten years old. The child had been delicate from birth, and, as an infant, had been very near dying. Recognising the case as one of cardiac disease, on examination he found a systolic murmur localised between the nipple of the left breast and the middle of the sternum, on a line with the nipple, extending upwards to the cartilage of the third rib on the left side. Within this boundary the murmur was loudest. There was more or less hypertrophy of both ventricles. The left ventricle, acting stronger in its contraction than the right, caused, in his opinion, the hypertrophy of the right, which, in this, was greatest. There was a possibility of some congenital obstruction at the pulmonic orifice to help to produce this, as the murmur was propagated towards this opening.

A Rare Form of Skin-Disease.—Dr. Wallace Beatty read a paper describing two cases affected with a peculiar form of skin-disease, resembling, in some of its features, urticaria pigmentosa. The patients were two brothers, aged respectively 15 and 12 years. The disease first appeared at the age of 12 in the elder brother's case, and at the age of 11 in the younger. The courses of the affection appeared to be as follows. An itchy spot manifested itself without any appearance of eruption. The patient scratched it. Redness, and sometimes, according to the elder brother's statement, an appearance like lobes were seen. This subsided, and, in a few hours, a slight raised pimple was observed, pin-head size, or a little larger. This soon flattened, enlarged, and became dull brown pigmented, forming a circular spot about three-eighths of an inch in diameter, presenting to the finger passed over it, either the feel of normal skin, or of skin rather tougher than normal. This pigmented skin-spot was unaltered by pressure. After a little, the centre became whitish, the pimpling remaining brown, and finally the brown colour disappeared, leaving white spots of different sizes, the greater number smaller than the brown macules. Some of these white spots were on a level with the surface of the skin and firm to feel, while others presented minute depressions, somewhat thimbled, or minute grooves radiating from the centre, appearing like scars. All these varieties, pimples, brown macules, macules with a brown pimpling and whitish centre, and white spots, were present on various parts of the body, the front and back of the chest being most affected. A mottled appearance was thus produced, which was specially evident on the back. The abdomen and genitals were spared; the face was only a little affected, and the flexor aspect of the limbs but slightly affected. Dr. Beatty could not develop factitious wheals. There was no reason to suspect syphilitic taint. The disease, while it resembled urticaria pigmentosa in the presence of some itchiness, wheals produced by scratching, and subsequent pigmentary changes, was distinguished from all the cases of that disease hitherto [illegible] in the following points. 1. The disease commenced several years after birth. 2. The spots were at first flat papules, [illegible]. They were not, as in most of the cases of urticaria pigmentosa, in the form of tubercles or nodules, and localised infiltrations. 3. The third stage, the formation of white spots, was peculiar.—Dr. Walter Smith said there could be no question that the disease described was one of great rarity and of considerable practical importance, on account of the possibility of confounding it in younger patients with erysipelas, and in the elder with scars left by secondary rash. He had seen both boys some weeks before, and was struck by the peculiar features of the disease as described by Dr. Beatty: the trophic changes and the production of scars without any vesication, pustulation, or breach of surface. It was not easy to give the disease a name other than that mentioned by Dr. Beatty—urticaria pigmentosa. Of the ordinary form of urticaria, the usual features were suddenness of onset and rapid evanescence. The eruption here began early in life, persisted for months and years, and went through cycles of aggravation and decline, and in these respects presented marked features of contrast with ordinary urticaria. It was a question whether it should be put under the same heading at all. Anyone who looked at the pictures of Mr. W. Morrant Baker's cases in the Clinical Society's *Transactions*, would say the eruption approximated nearer to Dr. Beatty's case than the illustration in Dr. Tilbury Fox's *Atlas*. Dr. Beatty had laid stress on the differences observed in his own case as compared with those already recorded. As there had been only nineteen cases recorded, the natural history of the disease, if it had any, was not exhausted, and therefore it was obvious Dr. Beatty might have an opportunity of recording features in the disease hitherto not met with by other observers. As to what could be done for patients suffering from the disease, there was little to be said beyond the fact that they must be content to await the will of the great Healer of all diseases.—Dr. **Finny** said it was usual to find pigmentation following a great many eruptive diseases. There was a red or blood-spot where there had been scratching, and it was quite possible the rash of the itching spot might be pruritus; but there were also spots on the back. The case was a great puzzle, and the chief point of interest was the importance of distinguishing it from the congenital and acquired forms of specific disease.—Dr. **Beatty**, in reply, pointed out that the spots developed spontaneously, and that, at all events, it was obvious that all of them could not have been produced by artificial scratches.

Paralysis in a Child.—Dr. **MacSwiney** reported the particulars of a case of temporary spinal paralysis in a boy aged 6 years, and exhibited the patient quite recovered. The boy had whooping-cough for three months. After this he was exposed to rain and cold for hours on an outside car, and got an attack of tonsillitis. This was treated with local application of caustic solution, and was cured in a week. About this time also he commenced to cut four permanent molar teeth, which caused much pain. Now it began to be noticed that he was unsteady on his legs in walking. This feebleness of gait increased rapidly, extending upwards through the trunk to the arms. The muscular feebleness became daily worse, and finally, in a very short time, he was universally and completely paralysed. He could not stand; was not able to use his hands to bring food to his mouth; had to be fed; lay in the bed quite helpless, and was lifted out and in as occasion required. All this time his general health was good. He ate and slept well; looked healthy and intelligent; his muscles were not in the least atrophied; his voice was natural; he protruded his tongue in mid-line; his sphincters were unaffected; he had no fever. The electrical contractility of his muscles was unimpaired. The "sole of the foot" reflex was present. The "patellar tendon" reflex could not be demonstrated. Regarding this latter, Dr. MacSwiney found experimentally that it was not manifested in several young boys, and he raised the question—Was it present in such subjects at all? Mobility rapidly returned to the muscles, and in three weeks' time he was as well as ever. The case closely resembled Laudry's disease in all important particulars. There was motor paralysis spreading rapidly from below upwards, unaccompanied by fever, not involving sensibility, the bladder or the rectum, without atrophy or change in the electrical excitability of the muscles. These were also the salient points in paralysis acuta ascendens. As to its etiology, it was not anæmia of the antero-lateral columns of the cord from exhaustion, consequent on the pertussis. His good condition and health were inconsistent with this. It was not the result of exposure to cold. This had expended itself in the attack of tonsillitis. It was not due to intestinal worms. Anthelmintics brought none away. It was not chorea-paralysis, in which there were clonic spasms where the paralysis is never universal, and where general health is always impaired. It was not diphtheria-paralysis, because this began in the soft palate and pharynx, and is incomplete, is denoted by loss of Faradic contractility, anæsthesia, dysphagia, nasal voice, defective eye-accommodation, amaurosis, accompanied with a fatuous idiotic expression of face. There remained reflex paralysis from dentition. To this Dr. MacSwiney attributed the initiation of the symptoms. He lanced the gums. Coincidently with this, the patient got better and soon became well. His view of the series of pathological events was, exalted reflex irritability, excited by difficult dentition, producing a dynamic lesion of the cord, unaccompanied, he assumed, by any structural alteration, and culminating in this attack of transitory spinal paralysis. —Remarks were made by Dr. **Henry Kennedy**, Dr. **Gunn**, Dr. **Nixon**, and the **President**, and Dr. **MacSwiney** replied.

Etiology of Climatic Fevers in India.—Dr. A. N. **Montgomery**, at the request of Surgeon-Major Gore, read a paper on the etiology of the common climatic fevers of the Kuneron Hill Ranges.—The discussion was postponed.

REVIEWS AND NOTICES.

A Manual of Physiology, for the Use of Junior Students of Medicine. By **Gerald F. Yeo**, M.D.Dubl., F.R.C.S., Professor of Physiology in King's College, London, etc. Pp. 632. London: J. and A. Churchill, New Burlington Street.

As written by one who has had so much experience, as a teacher and examiner, of the difficulties which beset the medical student in the study of physiology, this book of Dr. Yeo's should receive attention. It is addressed to junior students of medicine, and has been written with a view to introduce specially to them those subjects which are most useful in the practice of medicine and surgery. The scope of the book is somewhat greater than that of Huxley's *Lessons*, and, in plan, is much the same as Kirkes' *Handbook*, to which in many respects it bears much resemblance.

We notice, first of all, that there is some account of the structure of the various tissues and organs of the body; and, while agreeing most heartily with Dr. Yeo that, in a book of this kind, an account of the structure and relationship of the organs, with the functions of which the student has to become familiar, should be inserted, we cannot hope that the very meagre account which is contained in this manual will be of much use. The plan of making a student get up physiology out of three or four text-books, although it appears to be fashionable at the present time, will not, we think, increase his chance of doing well at the examination-table. As regards, however, the histology in this work, it will not remove the necessity of getting up that subject out of a special book; this will be at once evident when we mention that the subject of cartilage is dismissed in twenty lines, development of bone in fewer, and the structure of muscle in less than four pages. The chief part of the book is devoted to physiology proper, and to physiological chemistry. Nearly the whole of the former appears to us to be exceedingly good and readable, especially those sections on digestion, the circulation, the phenomena of muscular contraction, vision, and hearing. The account of the coagulation of the blood is not so satisfactory, either in matter or arrangement; it, moreover, overlooks Hammersten's investigations on the subject, which we cannot help thinking worthy of place beside Schmidt's.

The account of the nervous system is carefully written, and is good as far as it goes. We should have been pleased to have seen, however, more notice taken of the data which pathology supplies as to the functions of various parts of the cerebro-spinal axis. The section on reproduction and development will, no doubt, be useful as an introduction to the subject. The physiological chemistry is much the same as in other books; we see that there is a new classification of nitrogenous bodies into (1) plasmata, *e.g.*, protoplasm and blood-plasm, complex bodies forming the active portion of all tissues; (2) albuminous bodies, bodies entering into the formation of, and which can easily be obtained by analysis of, group 1—albumins, *e.g.*, serum-albumin; (3) albuminoids, *e.g.*, gelatine; (4) bodies containing nitrogen, being intermediate, bye, or effete, products of tissue-manufacture, *e.g.*, lecithin, urea, etc. To the last three groups, there is no objection; but to the first there appears to be this one, that it assumes protoplasm to be a definite chemical compound, which, even if true, is certainly likely to make a beginner think of it as a body like sodium-chloride; whereas the chief characteristics of it which he ought to dwell upon are the possession of what are called its vital properties. We note the following minor points. Fatty bodies are still treated of as hydrocarbons. Cholesterin, because it is an alcohol, no doubt, is not treated of as a fatty body, although chemists consider it to be such. Taurocholate of sodium is said to exceed the glycocholate in human bile; other authorities state the reverse. The characteristic spectroscopic bands of Pettenkofer's test are not given, although the student is told to observe them. The connection between the colouring of the bile, blood, urine, and fæces is not made sufficiently clear.

The style of the composition of the book is, no doubt, fitted to a beginner, as Dr. Yeo has been careful to dispense as far as possible with technical terms; but this is somewhat to the disadvantage of the general reader.

Such of the illustrations as are different to those found in text-books similar to the one we have in hand, are to a great extent taken from Cadiat; some of them are remarkably good, as are also the new diagram of the cardiac nerve-mechanism, the drawings of the recording apparatus, and of Ludwig's kymograph. The figures 54, 55, 68, and 69 are, however, anything but satisfactory.

THE FILARIA SANGUINIS HOMINIS, AND CERTAIN NEW FORMS OF PARASITIC DISEASE, IN INDIA, CHINA, AND WARM COUNTRIES. By PATRICK MANSON, M.D., C.M. London: Lewis. 1883.

THE name of Dr. MANSON is well known in medical and scientific circles in England and on the Continent of Europe. During a lengthened career in China, he has earned the reputation of being a keen investigator and accurate observer, as well as a medical man of great practical attainments. He has, by his writings, secured for a local publication in China, with a very limited circulation (we mean the *Imperial Customs Medical Gazette)*, a publicity in the scientific world not surpassed by many standard medical serials. The volume which he has now published contains, in a convenient form, a summary of his best contributions, some of the papers being reprinted in full. It was necessary that this volume should appear. No writer on systematic medicine could omit to notice the investigations of Dr. Manson in these subjects which he has specially made his own; whilst the references to them were necessarily difficult of access. By bringing his papers together in one handy volume, the record of his work is put within the reach of the whole profession. The largest part of the volume is taken up with an account of the *Filaria sanguinis hominis*, and a description of the extraordinary problems with which the habits of this parasite compels us to deal. The first chapter is a reprint of a paper contributed to the Pathological Society's *Transactions* for 1881, and gives an abstract of our knowledge of the life-history of the filaria, and of its pathological significance. In the succeeding chapters a more detailed account is given of the evidence on which the author has founded his conclusions. Two new and interesting diseases—endemic hæmoptysis and tinea imbricata—are described in the volume.

It is impossible yet to form an idea of the wide scope which Dr. Manson's investigations may have in the prevention of disease. If he be correct (and the chain of evidence seems very complete) we can understand how, by hindering the access of the mosquito to drinking-water, or by filtration, or cooking, elephantoid diseases may eventually be entirely prevented. As Dr. Manson observes, in the life-history of most of the parasites of which we possess a little knowledge, there is a weak point where man may step in and arrest development.

In his preface, Dr. Manson deprecates the criticisms of his readers. He asks their consideration on account of the constant interruptions incident to private practice with which he had to contend, and to disadvantages unknown to his more fortunate co-labourers at home. He refers to the absence of a good library, of competent assistants, and of friendly advice and criticisms; the depressing influence of a hot climate, and the prejudices of his native patients. No one would hesitate to give every consideration due to a man working under these circumstances; but, when we come to peruse the volume, we are bound to say that we find very few traces of their effects.

We wish that the majority of the contributions to medical literature would bear comparison, in point of clear diction, well recorded observations, and sound reasoning, with this interesting and original book. There has not much appeared of late years, in medicine, that seems to us to be more attractive and more convincing than the chain of reasoning by which Dr. Manson traces the various forms of elephantoid disease to the nature and habits of the filaria sanguinis hominis.

Dr. Manson's original papers have been too recently and too fully noticed in our columns to render it necessary that we should enter into this subject in detail; but we have much pleasure in recommending our readers to provide themselves with this valuable volume. The work must necessarily be in the hands, or within the reach, of all who are engaged in the teaching or study of pathology.

HYDATID DISEASE. WITH SPECIAL REFERENCE TO ITS PREVALENCE IN AUSTRALIA. By JOHN DAVIES THOMAS, M.D.Lond., F.R.C.S.Eng. Adelaide: E. Spiller.

It is somewhat startling to learn, as we are informed by this writer, that, in Victoria alone, two hundred fatal cases of hydatid disease are known to have occurred in the past fourteen years; and that the total number of people suffering from the parasite, in that one colony, may be reckoned at three thousand during the past twenty years.

With the exception of Iceland, essentially the home of the hydatid, the Australian colonies are found to be more infested with this disease than any other part of the world, or probably than all the rest of it put together. Moreover, it appears that the tendency to the disease has increased, is increasing, and, according to our author, although it ought to be diminished, no effectual steps have been taken to effect this, nor does the need for prophylaxis appear to be recognised by the authorities. These facts more than justify Dr. THOMAS in calling attention to the subject, as he has done in the work under our notice in a very able and painstaking manner.

In actual bulk, the major part of his book is occupied by a careful and well written description of the morphology and life-history of tapeworms and of echinococcus. This description, however, does not, and does not pretend to, bring out new facts; but is a summary of what is known on the subject through the labours of Cobbold, Kuchenmeister, Von Siebold, Huxley, and others. This part of the book is clearly and easily written, and, in the absence of the original works, may well prove of service to any one getting up the subject. But the real value of the work lies in the statistical information here brought together, probably for the first time, as to the geographical distribution of hydatids, and the conclusions which are to be drawn as to the causation of the disease. In the author's opinion, there are four chief factors in the spread of hydatid disease in a given country—namely: the number of dogs; the number of domestic herbivora; the opportunities afforded to man and the herbivora for swallowing the ova of echinococcus; and the opportunities afforded to dogs for swallowing infected organs of the herbivora. He points out that Australia is a country which fulfils these conditions more completely than any other large continent—as one with many sheep and many dogs, who often eat the offal of the sheep, raw; where the water-supply is scanty, and often procured from "bogs, swamps, water-holes, and dams, on the banks of which dogs may deposit the eggs, to be blown in by the winds or washed in by the rains."

It is obvious that, of all the factors, the number of dogs, and the opportunities allowed them of infecting themselves, are the ones most under control, or possibility of control; and Dr. Thomas discusses the measures which ought to be taken by the State to that end; of these, the most important are the registration of dogs and the destruction of all stray prowlers, the prohibition of dogs from entering slaughter-houses, or eating offal or uncooked meat, and the protection of all water-tanks and reservoirs.

The tables of the relative mortality from hydatid disease compared with other illnesses, and of its absolute mortality, are very full and complete for the Australian colonies; but, although the author has attempted to compare those colonies with European and Asiatic countries, the information at his disposal has not been sufficient to make the comparison of much value.

The inhabitants of the colony of Victoria are undoubtedly under great obligations to Dr. Thomas, for having laid before them information which concerns their welfare in the highest degree, in such a very readable form; but, although this book will naturally have a greater interest for the dwellers in Adelaide than in London, it is one which should be read by all who may be concerned in the study of helminthology.

NOTES ON BOOKS.

Endemic versus Imported Origin of Cholera in Egypt: an Argument based on Sir Guyer Hunter's Report to Her Majesty's Government. By J. GODFREY THRUPP.—This short pamphlet is a brilliant exercise in dialectics. Grant the author's premises, and his conclusion, or theory, or whatever he would prefer to call it, must necessarily be admitted. But the pamphlet is more than its title pretends; it contains a clever *ex parte* statement of the case against the theory of the contagious nature of cholera. It would be wholesome reading for the more thoughtless of the adherents of the "germ-theory" of disease. Probably neither this theory nor the theory put forward by Mr. Thrupp will be found capable of explaining all the facts. It is commonly supposed—and Mr. Thrupp evidently is among the number of those who entertain the supposition—that the two theories, the theory of a specific contagium, or *contagium vivum*, and the meteorological or localist-telluric theory, are mutually exclusive. Such, however, is not the case; the one is the complement of the other. We would recommend any person interested in the subject, and desiring a dispassionate statement of observations, to read the chapter on cholera in Dr. Creighton's translation of Hirsch's *Handbook of Geographical and Historical Pathology*, which the New Sydenham Society has recently published. The question of the endemicity of cholera in Egypt is another question, and it must be admitted that Sir Guyer Hunter has, in his reports, supplied evidence on this head of the first importance. This has been neatly summarised by Mr. Godfrey Thrupp.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 26th, 1884.

MEDICAL LEGISLATION.

THE importance of an amendment of the existing law as to the misuses or illegal assumption of professional titles has been clearly shown by recent proceedings taken by the Liverpool Medical Defence Association.

On Thursday, April 17th, at the City Police Court, before Mr. Raffles, stipendiary magistrate, Signor de Tomanzie, an Asiatic, practising medicine in West Derby Street and Minshull Street, was summoned for infringement of the Medical Act of 1858. Mr. Segar prosecuted, and Dr. Commins, M.P., defended. The informations proceeded on were two, laid under the 40th Section of the Medical Act, and charged him with unlawfully, wilfully, and falsely taking and using the title of Doctor of Medicine, thereby implying that he was registered under the Act. He had given instructions to put in the *Courier* and *Evening Express* an advertisement which was headed "Signor de Tomanzie, M.D.," and the door of his residence bore a plate with the name of "E. de Tomanzie, M.D., surgeon," in large letters, and underneath that were the letters "Ind." in smaller and thinner letters. On the railings was a plate with the words, "Dr. de Tomanzie, accoucheur." This, it was contended by Mr. Segar, was clearly a representation that the defendant was either a physician or a doctor of medicine, and was entitled to practise as such. There was no such medical title as "doctor of Ind." Evidence was called to prove these facts.

Dr. Commins, in defence, produced a diploma which, he said, the defendant had got from a qualifying body, in British Burmah, and which entitled him to call himself a doctor of medicine, and to practise surgery. If he were rightly instructed, the informants were medical men in the neighbourhood, and it appeared to him to be a matter of professional jealousy. The defendant had not falsely pretended to be a doctor of medicine, because he held a diploma; the evidence in proof of it could scarcely be brought all the way from Burmah.

In reply, Mr. Segar contended that the case could not have been better proved.

Mr. Raffles said that the whole question was whether the defendant wilfully and falsely held himself out as a doctor of medicine. He, Mr. Raffles, did not say what the diploma produced might be worth, but he thought he might go so far as to say that the defendant held himself out as M.D. in the advertisement, but he could not say that the defendant did so falsely and wilfully, and therefore the summonses were dismissed.

The clause of the Medical Act of 1858, under which the defendant was charged, is as follows:

"Clause XL. Any person who shall wilfully and falsely pretend to be, or take or use the name or title of, a Physician, Doctor of Medicine, Licentiate of Medicine and Surgery, Bachelor of Medicine, Surgeon, General Practitioner, or Apothecary, or any name, title, addition, or description, implying that he is registered under this Act, or that he is recognised by law as a Physician, or Surgeon, or Licentiate in Medicine and Surgery, or a Practitioner in Medicine or an Apothecary, shall, upon a summary conviction for any such offence, pay a sum not exceeding twenty pounds."

The Liverpool Medical Defence Association has submitted very important facts and representations to the Government in illustration of the difficulties which beset prosecutions for illegal practice, and has given examples of the great expense incurred even in successful prosecutions, owing to the absence of any provision to throw the costs on the transgressors. These costs are, in some cases, so heavy as to make serious and even ruinous demands on the funds of the defence associations. Further, the associations are naturally composed of *bonâ fide* registered medical practitioners, and, as in the case of "Signor de Tomanzie," the imputation of "professional jealousy" is freely and almost invariably suggested as the real ground for the proceedings. It is most desirable that the profession should be relieved from the odium unfortunately attaching to such proceedings, although manifestly undertaken in the interest of the public.

The constitution of the new Medical Council proposed in the present Bill of the Government, in accordance with the report of the Royal Commission, will bring it more into harmony with the profession than has hitherto been the case, and cause it to realise more fully how expedient it is: "That persons requiring medical aid should be enabled to distinguish qualified from unqualified practitioners." These words form the preamble of the Medical Act of 1858, the specially assigned object of the Act, though the Medical Council may fairly be said to have ignored it.

Once the Government Medical Bill becomes law, the prosecution of offenders against the Act will be properly relegated to the Public Prosecutor, and the profession thereby spared the expense and the odium at present inseparable from such proceedings.

The Medical Reform Committee have specially endeavoured to strengthen the penal clauses against the false assumption and illegal use of professional titles. In Clause 22, sub-clause 4, it is stated: "On and after the said appointed day, if any person who is not a registered medical practitioner, and who practises or professes to practise or publishes his name as practising medicine or surgery for gain, or who receives any payment for practising medicine or surgery,

"(*a*) Uses the designation of, or represents himself to be, a physician, surgeon, doctor, or apothecary; or,

"(*b*) Uses any designation or description denoting that he is qualified by law to practise medicine, surgery, or midwifery, he shall, on summary conviction be liable to a penalty not exceeding £20."

The words "falsely and wilfully," employed in the Act of 1858, are omitted, and will no longer be available to bar conviction.

When the Bill passes the second reading and goes into Committee, amendments may be moved still further to improve these clauses, but every effort must first be made, and without delay, to assist the Government to overcome the opposition of the corporations, who are struggling hard to maintain existing monopolies.

PETTENKOFER ON COAL-GAS POISONING.

As is well known, Professor von Pettenkofer has been engaged for many years in investigating the connection between varying conditions of the soil and outbreaks of disease; and one of the most telling illustrations which he has adduced in support of such a view, has been the entrance of illuminating gas into the basement of houses as a result of leakages often situated at considerable distances from the affected rooms. The elucidation of this matter has led the distinguished professor of hygiene at Munich, and his pupils, to inquire very minutely into the question of poisoning by coal-gas in the abstract; and his lecture on this subject formed one of the most interesting of the series of addresses which were delivered in connection with the International Health Exhibition recently held at Berlin.

In the January number of *Nord und Süd*, Dr. von Pettenkofer has published a concise summary of his own and of his pupils' observations, which will be a welcome addition to our literature on this subject; and we only regret that space will not permit our doing more than drawing attention to some of the salient features of his paper. He points out that the air of rooms may be vitiated by gas either in its crude state, or in a state of combustion. When gas is burnt, the air of the room is not altered in any way other than it is by the respiratory process of healthy men; it gives off carbonic gas, water, and heat, and consumes oxygen. The flame of a single stearine candle contributes as much heat to a room as one man, it consumes almost as much oxygen, it contributes more than half the amount of carbonic acid, and a third of the amount of aqueous vapour. A single gas-flame, which is about equal to twelve candles, augments the temperature of a room as much as eight men, contributes as much carbonic acid as three, and nearly as much aqueous vapour as five, whilst it consumes almost as much oxygen as six men. These facts make it very obvious why it is that a crowded room, when lighted with gas, becomes so much more unwholesome than it does when frequented by an equal number of persons in daylight. As compared with candle-light, however, gas is to be looked upon as a hygienic improvement. In proportion to the amount of illumination, gas heats and vitiates the air of a room less than candles, for twelve candles give rise to 336 grammes of carbonic acid per hour, against 164 grammes contributed by a gaslight of the same brilliancy, and consume 348 grammes of oxygen against 200 grammes consumed by a coal-gas flame.

It is thus seen that gas when burnt in a room has the same effect upon the quality of the air as the breathing of a crowd of people; but an escape of gas is a different matter, for, in its unburnt state, it is a powerful poison. Instances of such poisoning are by no means unfrequent; and, strange to say, the greater number have taken place in houses where gas had never been laid on. Several very striking illustrations of this are given in the paper, one of the most instructive having occurred not long ago at Roveredo. A family, consisting of father, mother, and two grown-up daughters, inhabited the ground floor of a house. One morning, the two girls awoke feeling ill, and with a severe headache, but they recovered during the day. This experience was repeated on the second and the third night, when it occurred to the mother that possibly a heated stove in the girls' room had been the cause. On the fourth night the stove was not kindled, and the mother decided to sleep in the same room as her daughters. The door not having been opened on the following morning, a search was made, and it was found that all three persons lay insensible in their beds; the two girls were quite dead, and the mother died a few days afterwards. A canary was also dead in its cage, and a dog lay senseless on the floor. There was no gas laid on in the house, but it was found that a pipe leaked in the street about 35 feet from the wall of the house. In some of the instances cited, the leakage was found to be more than 100 feet from the affected dwelling.

Orfila's experiments demonstrated that the poisonous property of coal-gas was, in the main, due to the presence of carbonic oxide, about ten per cent. of which is contained in it; and some experiments conducted by Gruber, in Pettenkofer's laboratory, went to show that animals which were ascertained to be peculiarly sensitive to an exceedingly small admixture of carbonic oxide with the air which they breathed, were nevertheless able to withstand a large amount of illuminating gas from which the carbonic oxide had been eliminated. It is, consequently, greatly to be desired that some practical method, workable on a large scale, might be devised, by which this carbonic oxide could be removed from coal-gas, just as means have been devised for getting rid of sulphuretted hydrogen by hydrated peroxide of iron, and of carbonic acid by slaked lime. Carbonic oxide affects the blood-corpuscles by displacing the oxygen in them and forming a combination with their hæmoglobin—a condition which, even to an extremely limited extent, is incompatible with health. Gruber, however, has shown, by experiments on himself and on animals, that the poison is not cumulative—that it is not the duration but the degree of concentration which is of the greatest moment. A mixture of one part of carbonic oxide per 1,000 of air produces decided symptoms of poisoning, and a mixture of over four per 1,000 may be fatal in the course of 30 to 60 minutes. Primarily carbonic oxide appears to affect the blood, but the symptoms are manifestly due to the action of the altered blood on the brain and spinal cord. The respiratory centre in the brain appears to be affected at the onset; this is succeeded by weakness and uncertainty of voluntary movements, with stupefaction, followed, in severe cases, by convulsions and death. Headache was a prominent symptom in the various instances cited of carbonic oxide poisoning in houses. Pettenkofer speaks of having experienced this, and also the loss of co-ordinated muscular movement, in his own person whilst conducting some experiments on ventilation; and he makes the observation that doubtless Gruber's rabbits suffered in like manner, though they could not put their feelings into words. The existence of headache and loss of co-ordinated movements are, further, painfully exemplified in one of the instances cited of families having been poisoned by the entrance of gas from the soil into a dwelling, to which we cannot refrain from referring—that of a poor woman and her son who occupied a bed-room in the basement of a house. The mother was found dead one morning in her bed with a wet cloth wrapped round her head, which had evidently been placed there with the view of mitigating the headache which preceded her death; and her son, a lad aged 18, was found to have collapsed on the floor, quite dead likewise, and with his clothes on. The people in the upper stories had heard him playing his zither during the earlier part of the night, with the object, it was afterwards surmised, of endeavouring to dispel the symptoms aroused by the carbonic oxide; but, losing the power of co-ordinated movements, he appears to have dropped on the floor.

The question naturally arises, why is it that, in some instances of the foregoing character, death occurs in the first night, whereas in others warnings, so to speak, have been furnished for two or three consecutive nights? It cannot well be that the amount of gas which escapes from the main pipe in the street varies materially, as the cracks do not increase and diminish from time to time. The statistics of this class of gas-poisoning afford valuable assistance in replying to such a query. It so happens that, in nearly all instances, the poisoning has occurred during the night, and, further, that it has occurred during cold weather. Out of twenty-two instances recorded in Munich, twenty have occurred in the winter months. Pettenkofer's explanation is that in winter the heated houses act on the soil-air beneath them like, to a certain extent, so many cupping-glasses; and it is well-known that cupping-glasses only act so long as the air within them is warmer than the air outside, and the more marked the difference in the temperature, the greater is the force exerted. Hence, to a great extent, variations in outside temperature exercise a marked influence in the amount of gas which gets into a dwelling.

Acting on his suggestion, one of his pupils, Dr. Welitschkowsky, undertook a series of experiments to ascertain what the chief factors were which influenced the direction taken by gas when it leaked into the soil. At a distance of several yards from the Hygienic Institute an iron gas-pipe was driven into the earth for a distance of about six feet, the free end of which was connected with a gasometer. Surrounding this pipe a dozen other pipes were driven into the earth at varying distances, so that when gas was turned on into the central pipe it was possible to ascertain the proportion of gas in the air which was aspirated through each of the dozen encircling pipes. It was soon found that of the various meteorological factors, temperature was the only one which exerted a marked influence; and it was noted that, whereas in the summer the proportion of gas to air aspirated through the several encircling tubes was tolerably equal, there was in the winter a most marked tendency for the gas to escape towards a set of tubes in one direction, namely, towards the Institute, and in a direct line towards the boiler in the basement from which the entire building was heated. Thus the "cupping-glass" property of a heated dwelling was demonstrated beyond all question.

It has further been noted that in instances of gas-poisoning through the soil no appreciable odour existed, a circumstance which is explained by another set of experiments conducted by Biefel and Poleck, who demonstrated that such gas in passing through soil was deprived of every trace of odour, and that the soil was capable of continuing to exert this deodorising property for a considerable period, until, in fact, it became completely saturated with the gas. The danger, consequently, of a leakage in the street may be even greater than a direct leakage in the house itself. The sting, so to speak, is present in both cases, but in one it is unaccompanied by a rattle.

What proportion of coal-gas in atmospheric air can be looked upon as decidedly poisonous? Taking Gruber's observations already cited as to the dose of carbonic oxide which exercises a decidedly deleterious influence, and assuming that coal-gas ordinarily contains ten per cent. of it, it follows that an atmosphere which barely contains one per cent. of coal-gas commences to be poisonous. From one to four per cent. the evidence of the poison becomes much more marked, though even such an atmosphere may be breathed for several hours without fatal consequences; but when the proportion rises to between four and six per cent., there is the greatest danger to life.

When gas escapes from a pipe in a building, its presence can be recognised by its odour long before it accumulates in sufficient quantity to be highly deleterious; but when a current of odourless coal-gas finds its way into a room from the soil, it becomes a more difficult matter to decide as to the steps which should be taken, for it would hardly be justifiable to summon the servants of the gas-company to open up the street for the purpose of ascertaining whether a leakage had occurred, simply because a person was suffering from headache and other symptoms which suggested to him the possibility of gas-poisoning. Such a thing, Pettenkofer says, is quite unnecessary, for means may be taken to test the suspected air for carbonic oxide; and Professor Fodor has devised a process which will detect one part of carbonic oxide in twenty thousand of air. In the meantime, the remedy is to throw open the doors and windows, and to allow the latter to remain slightly open in all cases where there is a suspicion of gas entering the house from the soil. This will serve not only to permit the deleterious air to escape, but will also diminish the tendency which exists for the gas to enter the house. The more firmly the doors and the windows fit, the stronger the current of soil-air which will be drawn into the room. It seems very clear that, had the rooms in which the instances of gas-poisoning cited by Dr. Pettenkofer occurred been moderately well-ventilated, or even the window been slightly lowered, or a pane of glass broken, few, or perhaps none of the cases, would have proved fatal.

It seems to us by no means unlikely that not a few deaths which are due to gas-poisoning of this kind may escape detection, especially in towns where the streets are covered with asphalte and other impermeable substances. One of the cases cited by Dr. von Pettenkofer may well serve to illustrate this particular view of the question. The instance was that of a priest, who for several days had been extremely unwell, without any appreciable cause. He had, however, observed that he felt worse on very cold days. Typhoid fever was diagnosed, and one night it was expected that he would die. One of the reverend gentleman's parishioners, seeing him in this condition, declared her belief that he was suffering from gas-poisoning, notwithstanding the fact that gas was not laid on in the house. She was, however, firm in her opinion; and, although the medical attendant represented that the patient was too weak to be moved, she ordered a carriage, had him carried into it, and driven away into another house. By the time they had arrived at their destination, which was at no great distance, the reverend gentleman had so far recovered as to be able to step out of the conveyance unassisted, and walk up the steps of the house. The sequel, moreover, is equally strange and instructive. It appears that this gentleman was accustomed to keep his room, which was in the basement of the building, exceedingly warm—much more so than his companion who lived in the next room, and who had as yet experienced no such unpleasant symptoms. On the departure of the patient, his room was ventilated, and the fire allowed to go out. Strange to say, the occupant of the adjoining room awoke on the following morning with symptoms precisely similar to those which his friend had experienced. A strict inquiry was instituted, and it was found that a leak existed in the gas-pipe in the street. This incident serves to illustrate how easily a mistake in diagnosis may occur under circumstances of this character, and to demonstrate that the direction of a subsoil current of escaping gas may shift from room to room; for it is manifest that, in the instance narrated, it found its way into the room which was warmest on both occasions—the second priest's room having become the warmest as soon as the adjacent room was vacated.

Although the text of Dr. von Pettenkofer's paper is "poisoning by illuminating gas," and though the sermon keeps closely to the text, it is, nevertheless, very obvious that the lesson which he wishes to convey has a far wider application—for it would embrace all gaseous and other emanations which may reach our dwellings from the soil on which they stand. The paper is written with all the vigour and perspicuity which characterise all his writings—writings which have long ago placed him in the first rank, not only as a scientific observer, but also as a popular exponent of all matters affecting public health.

THE "GOUTY KIDNEY."

Professor Virchow recently gave an address on the "Gouty Kidney," ("Nephritis arthritica"), which is reported in the *Berliner Klinische Wochenschrift* for 1884, No. 1.

The literature of the subject, he said, is not so satisfactory as might be expected. The question of uric acid concretions is mixed with it, whether as renal gravel or calculi, or as vesical calculi. We possess works with such titles as "Gout, Stone, and Gravel" which by their very titles presume such a connection. The speaker could not, from his (mainly anatomical) experience, agree with this. As to stone in the bladder, in most cases there is no gout at all; and as to renal concretions, there is great doubt about any connection with gout. He would deny at once the existence of any necessary coincidence, and so far he had never seen any special tendency to renal calculi in his gouty patients.

But one point, often overlooked, must be remarked, namely, the rather frequent existence of gouty cases without any paroxysmal attacks. *Post mortem*, we meet with cases showing the chief coarse characteristic changes due to gout, when during life no gout has been suspected. There are thus a paroxysmal gout and a latent gout; and we might almost accept the old view of a gout of the rich, and a gout of the poor, provided we struck out chronic deforming arthritis, which certainly has no connection with chronic uric acid arthritis.

Paroxysmal gout is evidently connected with an excess of highly nitrogenised tissues in the body, but it is erroneous to think that this depends on a too free consumption of such substances in the food. The peculiar disposition of the body shown by the accumulation of uric acid, does not depend on the diet: some other condition underlies it, as to which the speaker would offer no opinion. He would only say that, given the gouty diathesis, and it might be inherited, it would show itself under the most different kinds of diet.

Turning now to the kidney, there is one special form of gout in which uric acid deposits are found in the kidney, not merely as "gravel" in the pelvis or calices, but rather as fine deposits in the kidney itself, in the uriniferous tubules. They are only found in the tubules of the medullary portion, and may appear to the naked eye as fine white striæ. On examining with the microscope, colourless rhombic tablets are found, and not mere needles, as in tophi. By careful sections at such sites, these accumulations are found to occur in dilated portions of the straight tubes, which here present a kind of varicose dilatation. In the vast majority of cases, similar deposits are found in the smaller joints, especially those of the great toe. Do uric acid deposits ever exist in the kidney alone; and could gout be affirmed merely from their presence there? As a fact, they are very seldom missing from the smaller joints when found in the kidney. Professor Virchow, however, is inclined to regard the presence of renal deposit as a proof, in itself, of gout. Some other condition of the body may be yet proved, in which such deposition may occur, but at present we only know of the gouty condition that causes this. In such kidneys as the above described there is usually, as Garrod has already shown, a chronic interstitial inflammation, mostly in the cortical substance, and away from the deposits. There is no particular inclination as a rule to parenchymatous alteration of the epithelium of the tubules. Our knowledge of this affection is of no slight interest, for cicatricial nephritis is by no means rare; we know already the endocardial form, also the syphilitic form, and here we have the gouty form. This form is called gouty (although as a rule gout has not been clinically indicated in such cases during life) simply from its co-existence with the uric acid deposits in the tubules. In more advanced cases, there is more atrophy of the glomeruli and tubules, the cortex has almost disappeared, and the whole kidney is shrunken. The point first raised, whether that form of nephritis which is complicated with uric acid deposits be of gouty nature when no tophi can be found in the auricles or smaller joints, must be left for further investigation. Meanwhile, Professor Virchow presumes that there can be a gouty nephritis without "gout."

The exciting element of this nephritis cannot be the deposit; for this occurs in the medullary tubes, while the inflammation is mainly cortical. Similarly, in a joint, the crystals of the acid urate of soda occur at first within the cartilages and the ligaments, while the inflammation begins in the synovial membrane. It is evidently not the deposit, *but the uric acid still in solution in the tissues*—the *gutta*—the exudation which sets up the gout. And here we reach the question "Can there not be a gouty nephritis without urate deposits at all?"

Professor Virchow concludes by describing his own illness last year. He had never had an attack of gout, but there were two small swellings on his fingers, which were red and tender. Suddenly, extreme irritability of the bladder set in, and albumen with cylinders and pus-globules was found in the urine. The pus was abundant, and could not be explained, while the urine was scanty and was passed with great pain. One day, he examined it again with the microscope, and, on adding acetic acid, masses of crystals of uric acid appeared. He at once adopted an alkaline course of treatment, which quickly and effectually cured him. Here the irritant was the excess of uric acid, still dissolved, in the urine—the *gutta*—which caused the intense purulent catarrh.

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THERE is a vacancy in the medical staff of the Hospital for Consumption, Brompton, for an assistant-physician.

THE discussion on Scarlet Fever at the Harveian Society of London has been adjourned to May 15th, and not May 17th, as stated at page 764 of last week's JOURNAL.

A MEETING of the Provisional Executive Committee of the Medical Sickness, Annuity, and Life-Assurance Society will be held at 38, Wimpole Street, W., on Wednesday, April 30th, at 4 P.M.

DR. G. E. PAGET, Regius Professor of Physic in the University of Cambridge, has sufficiently recovered from a slight attack of pneumonia to be able to attend to his professional duties. The recent reports in the daily press, stating that Dr. Paget has been dangerously ill, were entirely without foundation.

DR. JOSIAH WILLIAMS, F.R.G.S., of Sheffield, who, early in 1882, spent some time in the Soudan, and visited in his travels many of the wild tribes inhabiting that country, has prepared a work, already in the press, which cannot fail to be of interest at the present time. It is entitled, *A Few Months in the Soudan.*

THE medical officers and lecturers of Charing Cross Hospital Medical School have issued invitations to a *conversazione* to be held in the school-buildings, 62, Chandos Street, Strand, on Thursday, May 1st, at 9 o'clock.

THE Empress of Germany has always taken a deep interest in all practical questions connected with the nursing of the sick, and Her Majesty has now invited a number of persons eminent in this department to meet at Berlin during the present week, to consider the best way of utilising the latest experiences and practical improvements in hygiene.

THE Sanitary Commission of Alexandria has directed that all vessels coming from Bombay and Calcutta shall be kept under surveillance at Moses Source during twenty-four hours. If cholera-cases be on board, or if deaths have occurred from cholera, a week's quarantine at El Tor is enforced. Rigorous measures have been adopted with regard to all vessels crossing the canal.

THE ELECTION OF FELLOWS AT THE COLLEGE OF PHYSICIANS.

A CURIOUS, and probably unprecedented incident, recently occurred at the College of Physicians. We understand that at the last Council, summoned for the nomination of Fellows, there was no quorum, and that, consequently, no nominations could be made. As such an incident was entirely unforeseen by the by-laws, which provide that the nomination of Fellows shall take place only on one special day, it has, we believe, been necessary to alter the by-laws, and to appoint another day, next month, upon which the postponed election may take place.

CHARBON.

A LABOURER from a riverside wharf was recently admitted into St. Bartholomew's Hospital, suffering from malignant pustule; the local condition was well marked, the central black eschar being surrounded by a vesicular zone, the glands behind the jaw were greatly enlarged, the temperature was high, and the man was very ill. Mr. Morrant Baker excised the "pustule" without any delay, and the patient immediately began to improve, and is now convalescent. The origin of the case has been investigated by Mr. John Spear of the Local Government Board, and it has been ascertained that the man had been handling hides imported from China.

HOSPITAL ACCOMMODATION FOR THE PORT OF LONDON.

THE new hospital for the Port of London, the commencement of which we announced in the JOURNAL some time since (see Vol. 1, 1883, p. 1134), was formally opened last week by the Lord Mayor. The ceremony was performed in the presence of the members of the Port Sanitary Committee, the Metropolitan Asylums Board, and the Gravesend Town Council. The hospital only provides for patients arriving on board ship; and in cases where charges can be recovered, the corporation have power to enforce payment at the rate of five shillings per day, though it is doubtful whether this provision will be stringently carried out. The erection of this hospital completes the very effective arrangements of the Port of London for combating any threatened outbreak of infectious disease.

THE NEW EDITION OF THE BRITISH PHARMACOPŒIA

WE are led to believe, from the recent report of the Pharmaceutical Committee to the General Medical Council, that the new edition of the *Pharmacopœia* is in active preparation. The committee, in addition to the important aid rendered by Messrs. Redwood, Attfield, and Bentley, have very wisely looked also to those sources from which information, whether chemical or pharmaceutical, was likely to be obtained. Application was made to the various medical authorities, and several valuable reports have been received from them. Though but little information was obtained from the Pharmaceutical Society, to whom application was also made, several eminent practical pharmacists and manufacturing chemists have placed any knowledge they possessed, likely to be useful, freely at the disposal of the committee. The communications received from this source have given great satisfaction, we have reason to believe, to the committee, and will receive the fullest consideration at the hands of the editors. There is good reason to anticipate that, acceptable as was the last edition, the new edition will be even more highly appreciated by the profession.

MIDDLESEX HOSPITAL.

ARRANGEMENTS are in progress for buying the leases of the adjacent houses which have been for some time rented, and acquiring an additional house, and of carrying out a well considered and extensive scheme of providing: 1, accommodation for the medical staff; 2, rooms for the servants; 3, an additional ward for male cancer-patients; 4, a sick-room where any member of the staff can be isolated if attacked by severe or infectious illness; 5, a rearrangement of the out-patient department, long urged on the weekly board by the surgeons and physicians, who have found it almost impossible to carry on their work under the present inconvenient arrangement, an arrangement adapted for the wants of 1745, not of the increased population of 1884. The buildings in question are in a tumble-down condition, and must be replaced. The cost of these alterations and improvements will be £20,000. Towards this a sum of £5,000 (to be specially devoted to the male cancer-ward) has been received.

DR. HOWARD'S TREATMENT OF ASPHYXIA.

DR. BENJAMIN HOWARD has recently repeated, at the Hôpital de la Pitié in Paris, in the wards of M. Verneuil, and at the Salpêtrière, in the wards of Professor Charcot, the demonstration which, on a former occasion, he gave at the Royal Medical and Chirurgical Society, on the mechanism and the treatment of asphyxia. It will be remembered that the leading facts of Dr. Howard's demonstration are that the traction of the tongue universally employed does not suffice to raise the epiglottis, and the only manner in which this can be ensured is by placing the head and neck in the position of forced extension. This position separates the tongue from the pharynx, augments the calibre of the pharyngeal opening, and establishes a large and free passage from the nostril to the lungs. M. Verneuil, at the close of the demonstration, made some observations expressing his interest in the demonstration, and his acceptance of the facts.

ENGLISH WORK IN EGYPT.

MR. CLIFFORD LLOYD and Dr. Cruickshank are making rapid and surprising reforms of the Egyptian prisons. The new sanitary Commission are equally energetic; but their task is Herculean. The state into which the Egyptian infirmaries and hospitals have been allowed to lapse is past belief. The Cairo correspondent of the *Times* writes:—"As I have reason to believe that my telegrams sent last year, giving an account of the disgraceful state of the Abbassiyeh madhouse, exercised a beneficial effect, I feel it a duty to humanity to report the following facts relative to the condition of the so-called infirmary at Tourah, close to Cairo. This establishment contains at present a hundred and thirty-eight human beings, who are living like wild beasts, in a state of filth and neglect that is simply indescribable. Each individual is supposed to receive from the Government one franc per month, as well as three loaves of bread and proper clothing. I have now before me an Arabic petition, written by one of the inmates, who states that the money is never paid, and that they receive little or no bread. On one occasion, they had nothing to eat but clover, and on another beans. The petitioner begs that he may be removed to the convict prison, to better his condition. The inmates comprise old and young, men, women, and a large number of children of both sexes. Amongst them are several raving madmen, who are sometimes chained, and sometimes at liberty; whilst through the mixed crowd two black men are walking about stark naked, and others are in every stage of the most loathsome diseases. The whole condition of the place is too disgusting for words."

MEDICAL OFFICERS OF SCHOOLS' ASSOCIATION.

ACCORDING to the proposal in the JOURNAL of March 8th, the first meeting of the above-named new society was held at Christ's Hospital, London, on April 16th, when many medical men, representing all classes of schools, were present. The objects of the association were declared to be (1) mutual assistance in promoting school hygiene; (2) meetings for the consideration of all subjects connected with the special work of medical officers of schools; and all present or retired medical officers of schools, of children's hospitals, and medical men specially engaged in the study of the ailments of the young, are eligible as members. It was decided to hold three general meetings in the course of the year, the next in July, during the conference on school-hygiene to be held at the International Health Exhibition. The following gentlemen were elected on the Council. *President:* Surgeon-Major Evatt, Royal Military Academy, Woolwich. *Vice-President:* Dr. Fuller, Lancing College. *Honorary Secretary:* Dr. Alder Smith, Christ's Hospital. *Treasurer:* Noble Smith, Esq. *Members of Council:* G. Armstrong, Esq., Wellington College; W. Armstrong, Esq., Royal Hospital School, Greenwich; Dr. Haig-Brown, Charterhouse; Dr. Brett, London Orphan Asylum; Dr. Fletcher Beach, Darenth Asylum; Dr. Adams Clarke, Leavesden School; Dr. Ingle, The Leys School, Cambridge; Surgeon-Major Lever, Military College, Oxford; Dr. Prangley, North Surrey District Schools; Dr. Shelley, Haileybury; H. Statham, Esq., The Foundling; Pridgin Teale, Esq., Leeds. The Secretary (Dr. Alder Smith) will be glad to receive the names of any medical men wishing to become members of this association.

STOMACH AND STUDY.

GREAT care needs to be taken, while every effort is made to satisfy the material necessities of board-school children, and fill their bellies as well as exercise their brains, that such effort does not degenerate into wholesale demoralisation of worthless or indolent parents. The most satisfactory solution will be found—as has been already successfully done in some localities—by organising a supply of good wholesome food and comfortable clothing for all board-school children who need them, and whose parents are willing to pay just sufficient to make the business self-supporting. This leaves the responsibility with the Home Secretary of establishing day feeding-schools, for the children of those who cannot pay, at the cost of the rates, and it is with these that the greatest care must be taken to avoid pauperising the poor. A well-known correspondent points out that, for those who can pay the little which is required for cheap and wholesome food, it is a high office of charity to supply the means, by having a kitchen adjacent to the school, where the children may help in the cooking and learn the art of making cheap and good food. The addition of comfortable clothing is hardly less important, and shews another of the great wants of the poor, and how it, too, can be supplied at the cheapest rate by wholesale purchases on the club principle. This clothing also is to be paid for, probably by weekly instalments, which the children themselves would be greatly interested in bringing punctually. To show the danger of gratuitous supplies of clothing, it may be mentioned that, for ten years, Mr. Francis Peek supplied the Charity Organisation Society with £1,000 a-year, in order that no child should be kept away from school for want of boots; but for the last two years it was found necessary to discontinue it, in consequence of its being found that three-fifths of the boots were pawned almost immediately by the parents. How difficult it is to help those who will not help themselves! but this is skilfully obviated by the committee, which obtains payment at a commercial rate for what it supplies. Some winters ago, the Rev. Mr. Bardsley organised a supply of soup, which, after paying the cost of fuel, and five shillings for the cook's trouble, he was able to sell at a penny per quart—enough, with a good lump of bread, for two children. If the efforts of this committee should show the way to the establishment of cheap kitchens for the poor, it would be performing the greatest good, and removing one of the temptations to drink; but anything like gratuitous distribution soon reacts in the lowering of wages, and finds its way into the pockets of the middleman. We can give further working particulars to any of our readers who are interested.

THE FEMALE URETHRA.

For several years the attention of anatomists and surgeons has been frequently directed to a pair of ducts situated one on each side of the female urethra. They appear to be almost, if not quite, constant, and, morphologically speaking, they were hailed on their discovery as positive proofs of the persistence of the efferent duct of the Wolffian body in woman. Coblenz and others have frequently traced Gaertner's ducts in domestic animals, from the parovarium to the walls of the urethra; Kocks, Kleinwächter, and especially Skene, of Brooklyn, all describe the ducts found in the urethra of the human female. They appear to be subject to a localised catarrhal inflammation, and to be frequently involved in urethritis; Böhm, of Vienna, and several French surgeons have described this affection, and recommend the introduction of a probe coated with nitrate of silver when the discharge becomes chronic, the ducts being laid open if that treatment fail. Recently, Dr. Max Schüller, of Berlin, has published the results of a long series of dissections, in the form of a monograph entitled *Ein Beitrag zur Anatomie der Weiblichen Harnrohre*, and his conclusions tend to subvert the theories of Skene and the morphologists, the ducts appearing to be the outlets of a pair of very distinct glands. Dr. Schüller states that, between the longitudinal folds of urethral mucous membrane that converge towards the meatus, numerous pores and depressions may be found. On each side of the middle line, posteriorly, rises a ring of mucous membrane surrounding an orifice, into which a sound of from one to four millimètres in thickness can be passed for from half a centimètre to two and a half centimètres upwards. This is the duct, and the pair have been found by Dr. Schüller in subjects of every age from fœtal life to the eightieth year, "almost constantly." Inflammation of the urethral ducts can be diagnosed when discharge from the meatus exists, without scalding pains during micturition. On horizontal section, the duct appears as a slit, with a contour the more and more irregular from involutions and elevations of its lining membrane, the higher up the section is made, until it can be traced to its termination above as a gland made up of a collection of short tubules. The orifice of the duct is lined with a thick layer of squamous epithelium covering erectile tissue, the rest of the canal is invested with stratified transitional epithelium, covering vascular submucous tissue that contains plain muscular fibres. In old subjects the ducts are much contracted. Dr. Schüller has traced their origin in the fœtus to the same period of embryonic life as that wherein the other structures composing the urethral mucous membrane are developed, and he can find no communication between them and the duct of Gaertner.

IS CANCER INCREASING?

We have been told frequently of late that cancer is increasing, and becoming more securely planted in our midst; and, if this be so, it is an important fact, but of such terrible significance, that we must needs require the most conclusive evidence. The Registrar-General distinctly says in his last report that the increase is not a genuine increase, but is due to increased accuracy of diagnosis, which is constantly tending to increase the number of deaths registered as due to definite diseases, at the expense of the more indefinite groups. Such a statement, we may assume, would not be put forth without the sanction of Dr. William Ogle, the Superintendent of Statistics, and one of the best of living vital statisticians; we may derive some comfort from this, and may at least suspend our judgment until the publication of the decennial summary of the Registrar-General; indeed, until that is published, the materials for an accurate judgment hardly exist in a form in which they can be easily analysed. Meanwhile, we may point out one consideration which seems to have been somewhat overlooked. Excluding sarcoma, as we may do without materially affecting the proportion which the figures bear to each other, we may say that cancer is a disease of late maturity and early senility; especially is this the case with men. Now, the death-rate from all causes has materially declined, and the average expectation of life is greater at the present time than it was a quarter of a century ago. Practically, it will be safe to assume that a greater number of people live into the period of maturity and senility, and therefore a greater number live into the age when cancer is prevalent. We might expect, therefore, to find more people dying of cancer at the present time than a quarter of a century ago. There is this further hopeful feature, that a comparison of the ages at which people die now and formerly appears to show that the deaths are taking place now at a more advanced age; the percentage of deaths from cancer above 55 years of age is materially greater than it used to be. Lastly, the number of deaths among men is increasing more rapidly than among women; and about that fact there is this hopeful feature, that, if we take 100 deaths from cancer among men, and 100 among women, we shall find that a far larger number of the male deaths occur after 65 than of the female deaths. About a third of the total mortality from cancer among men occurs after 65, while only a quarter of the total mortality from cancer among women occurs after that age. It would seem, therefore, that the increase in the deaths from cancer is due, in part, to an increase in the number of people who reach the cancer age, in part to an increase among men at an advanced age, and in part perhaps also to a genuine increase in the grasp of the disease over the population.

THE SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.

The new Society for the Study and Cure of Inebriety was inaugurated by an able and temperate address from Dr. Norman Kerr. From it we gather that the object of the Society is to study inebriety with a view rather to its cure than its prevention, and this apparently for two reasons, partly because organisations for prevention are already at work in considerable force, but chiefly because the relation between drunkenness and disease is fully recognised by the Society, and because heredity is believed to be one of the most important factors in the causation; the habitual drunkard transmits a deteriorated organisation to his descendants in a vast number of cases, a nervous organisation in a peculiar condition of unstable equilibrium as regard alcohol, so that the alcohol-habit is very easily set up. Drunkenness, said Aristotle, is voluntary madness. "Alas," added Dr. Kerr, "in our time it is often a madness which is not always voluntary." It is very right and proper to declaim against drunkenness as a vice or a crime, but it is necessary to recognise that it is also in the majority of cases a disease, and to study its pathology; this was the gist of the address which advocated also that the proper treatment was complete and immediate withdrawal of alcohol, the patient remaining under control, in bad cases, until the craving had entirely disappeared; with this was to be combined the treatment of any concomitant disease, such as dyspepsia, or nervous disease. The address, which will be published by Mr. Lewis, of Gower Street, will repay perusal.

THE HILTON FAGGE MEMORIAL.

At a meeting of the committee of the "Hilton Fagge Memorial," held at Guy's Hospital on April 8th, the following resolutions with reference to the disposal of the fund were adopted. "That a memorial tablet, at a cost not exceeding £50, be erected in the chapel of Guy's Hospital to the memory of Charles Hilton Fagge, and that the number of subscribers be stated upon it." "That the remainder of the fund be placed in the hands of Mrs. Fagge and two trustees, to be disposed of by them at their discretion for the benefit of the children." A committee, consisting of the treasurer of the fund (Dr. Wilks), the honorary secretaries, and Dr. J. H. Galton, was appointed to carry out the first resolution. Mr. Arthur Durham and Mr. Edmund Galton have kindly consented to act as trustees, in accordance with the second resolution. It was announced that the sum collected for the purposes of the memorial was nearly £1,100.

POISONED ARROWS.

DR. R. CAMPBELL, Civil Surgeon of Tezpore, has, the *Indian Medical Journal* reports, made some experiments with the poisoned arrows taken from the Aka after the raid at Balipara last November. He feels certain that the poison used is dried aconite-root, pounded and fastened on the arrow's head by a gum. As a rule, the shafts and the heads are separate pieces, so that, in trying to pull the arrow out of the wound, the head is left in. He recommends the hypodermic injection of liquor ammoniæ, two parts to one of water; and syringing out of the wound with solution of nitrate of silver, forty grains to the ounce, as the most useful treatment.

PAPER TOWELS.

IN the surgical dispensary of the Philadelphia Polyclinic, Dr. Roberts has, we read in the *Medical and Surgical Reporter* of that city, been using with much satisfaction Japanese paper handkerchiefs for drying wounds. Sponges are so seldom and with such difficulty perfectly cleansed after being once used, that they are never employed in the hospital. Ordinary cotton or linen towels are much preferable to sponges, which, if dirty, are liable to introduce septic material into wounds. The paper towels, however, answer the same purpose as cotton ones, and are so cheap that they can be thrown away after being used. The cost of washing a large number of ordinary towels is thus avoided. The paper towels are scarcely suitable for drying hands, after washing, unless several towels be used at once, because a large amount of moisture on the hands soon saturates a single towel. For removing blood from wounds, a paper towel is crumpled up into a sort of ball, and then used as a sponge. Such balls absorb blood rapidly. The crude ornamental pictures, in colour, on the towels, are of no advantage, nor are they, as far as known, any objection.

SPLENECTOMY.

MR. KNOWSLEY THORNTON removed a multilocular cystic spleen by abdominal section (median incision), at the Samaritan Hospital on Tuesday the 16th instant. The patient was a single girl, aged 19, and the tumour had been slowly growing for two years. Latterly it had increased much more rapidly, and caused a considerable amount of pain. The patient is progressing satisfactorily. During the tying of the pedicle she suffered severely from shock, and for some minutes her life was in danger, but she revived directly the tumour was cut away, and the drag taken off the pedicle. The specimen will be shown and the further progress of the case reported at the Pathological Society.

SANITARY JURISDICTION OVER CARAVANS.

IN reference to our remarks that appeared in the JOURNAL of March 22nd last (*see* page 573), as to the attempt of several metropolitan vestries to obtain statutory jurisdiction over itinerant showmen, we observe that a clause has been introduced into the Jarrow Improvement Bill, 1884, constituting a "caravan" a "house" within the meaning of the Public Health Act. This is, we believe, the first attempt that has been made to secure such powers, though the present state of the law, under which an ordinary caravan on wheels, although used as a dwelling, cannot be regarded as a house, is admittedly unsatisfactory.

PUBLIC VACCINATION AT DEWSBURY.

FOR the past eight or nine months, the Dewsbury guardians have persistently refused to appoint public vaccinators for the Mirfield and Thornhill districts of the union, except on condition that the elected candidates agree to be responsible for any injury that may result from the operation. Two medical men were communicated with, and both very properly refused to accept the appointments on such terms. The Local Government Board have informed the guardians that they are legally bound to appoint public vaccinators as vacancies occur, an opinion maintained by the law officers of the Crown, and urge them at once to proceed with the election, and "thus render it unnecessary for the Board to take measures for enforcing compliance with the requirements of the law in this respect." Notwithstanding this, an attempt to nominate two candidates was, at the last meeting of the guardians, negatived by an amendment setting out that a resolution passed in 1875, giving general directions to the vaccination-officer to proceed against all defaulting persons under the Vaccination Acts, be rescinded, and that, in future, he report all cases of default to the guardians, and take their instructions thereon before taking legal proceedings against any person. A copy of this resolution was agreed to be sent to the Local Government Board for their approval and sanction, and, pending their reply, no further steps are being taken to fill vacant appointments. In thus again refusing to comply with the requirements of the law, the guardians are incurring a very grave responsibility. Should small-pox spread in these districts, which have been uprovided with means of public vaccination for the best part of a year, the guardians will be directly responsible.

THE CONTAGIOUSNESS OF MEASLES.

THE belief, so tenaciously held by many working-class mothers, that their children must at some time or the other suffer from the various forms of zymotic disease, and the sooner the better, has much to answer for. A recent epidemic of measles at Coventry, to which Dr. Fenton refers in his last report, demonstrates very clearly the fallacy of this belief, the disease in this instance exhibiting a tendency to attack children who had already suffered from it. The fact of having had a previous attack did not afford much immunity. Many cases came under notice of children having the disease a second and third time. The lightness with which this disorder is regarded, the impossibility of effecting isolation at home, and the extreme vigilance of the educational authorities in pressing children to school, form almost insurmountable barriers in the way of dealing with epidemics of measles.

SCOTLAND.

BY the recent death of the Duke of Buccleuch, the Chancellorship of the University of Glasgow has become vacant.

FEVER has been very prevalent of late in Paisley, in consequence, it seems, of the unsanitary condition of parts of the town. Under these circumstances, the local authorities should lose no time in removing causes which in any way seem to favour the origin and spread of the disease.

THE Glasgow Water Commissioners have resolved to go to Parliament on an early date for power to procure a supplementary water-supply. Whether this is to be done by the construction of a second aqueduct and the taking of an additional supply of water from Loch Katrine, or whether some other source in the vicinity of Loch Katrine should be looked to, has not yet been decided.

UNIVERSITY OF ABERDEEN.

THE graduation ceremonial for conferring medical degrees took place in this university on Tuesday, April 15th. There was an unusually large number of graduates. The list will be found elsewhere.

THE FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

THAT the proposed medical legislation, as embodied in the new Medical Act Amendment Bill, has led to a good deal of activity on the part of the Scotch corporations, is seen in the Conjoint Examination Scheme recently brought before the General Council of Medical Education and Registration; but we understand that it is in contemplation to form a still closer bond of union between two of these bodies, namely, the Royal College of Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow. As the matter stands at present, it is under consideration how a complete amalgamation between these two corporations may be carried out, and we believe that a committee is at present sitting settling the numerous details of such a scheme.

GLASGOW UNIVERSITY.

THE summer session in the medical faculty of this university commences on May 1st. Judging from the numbers who have come forward during this month for the preliminary examination, the entries should be quite up to former years. The report of the General Council, to be submitted to the next half-yearly meeting of the members, sets forth, regarding the extension of buildings for the medical school, that the University Court is both ready and willing to give its sanction to any scheme for the better accommodation of the medical classes, on the necessary funds being raised for that purpose. In reference to any fresh legislation dealing with the Scotch universities, we believe that similar opposition would again be shown to any measure such as the Universities Bill of last year; but the proposed Medical Act Amendment Bill would not be opposed by the medical faculty of the University, save, perhaps, in one or two matters of detail, such as the composition of the Examining Board for Scotland.

THE PROPOSED CREMATION BILL.

THIS measure, which has emanated from Dr. Cameron, one of the members for Glasgow, has naturally attracted some attention in Scotland. A perusal of the text of the Bill shows that it has no intention of making cremation the compulsory mode of burial amongst us, but that it merely aims at placing it under such regulations that it may be carried out in a legal and becoming manner. Thus, a main feature in the proposed Act are the safeguards which it raises in preventing cremation being resorted to for the removal of all traces of deaths which might not have occurred from natural causes, and this it strives to do by rendering it illegal, under severe penalties, to proceed with cremation, or any other disposal of the body, until a formal certificate of death has been granted by the medical or other authority. Of course, it only seems right that persons should be allowed to carry out a mode of burial which, so far, the highest legal authorities have declared is not contrary to the law of this land, and there is nothing unreasonable in Dr. Cameron's effort to ensure its being done decently, and preventing its being a dangerous incentive to crime; but we are not sanguine of the Bill passing, seeing that the Home Secretary will oppose it; and he is sure to have the support of a legislative assembly whose individual members are very conservative as to the disposal of our dead.

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IRELAND.

THERE were at the beginning of this week two cases of small-pox under treatment in the Belfast Workhouse.

LISTOWEL WORKHOUSE.

THE writ of *certiorari* to quash a sealed order of the Local Government Board removing Mr. Dillon, the medical officer of this workhouse, was before the Court of Queen's Bench last week. Mr. Justice Lawson, in delivering judgment, said the Local Government Board was a great public department entrusted with the superintendence of the administration of the Poor-laws throughout the country, and they were vested with large powers. Under the thirty-third section of the Poor-law Act, they had power to remove any officer at their discretion for unfitness, incompetency, or neglect of duty. In the exercise of their discretion, they had declared Dr. Dillon unfit; and, supposing they gave no reason whatever for it, he did not see what power the court had to review what they had done. However, the reason was disclosed by Dr. Dillon, who had candidly stated that he gave Dr. Fitzmaurice a sum of money, which led to his resignation. In the face of such an offence at common law, any public department ought to declare that Dr. Dillon was unfit to hold office; and if that was not done, those offices might be put up to public competition. He agreed that the Board had rightly exercised their discretion; at the same time, he was free to believe that neither Dr. Dillon nor Dr. Fitzmaurice knew exactly the legal consequences of what they did. The application therefore was refused.

THE MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

THE *Journal of the British Dental Association* has the following.

We are anxious to call the attention of members to a most excellent and much needed society, recently established under such conditions as can scarcely fail to ensure success. We refer to the Medical Sickness, Annuity, and Life Assurance Society. It is an offshoot of the British Medical Association, its formation having been carried out at the annual meeting held at Liverpool in August last; it, however, draws its members from the profession at large, and is in no way limited to the members of the Association. Its objects are the provision of a fixed allowance to members temporarily incapacitated by illness or accident, the payment of annuities to those who live beyond a certain age, or of a sum of money at the death of the subscriber. These advantages may be subscribed for together or separately, with the proviso that in all cases sick-pay shall cease when the subscriber reaches sixty-five years of age, unless provision have been made for the payment of a regular annuity. Our reason for bringing this Society specially under the notice of our readers is that, at a meeting of the Executive Committee, held on March 27th, a communication having been received from Mr. Gilbert Walker, L.D.S.Eng., of Duke Street, Manchester Square, inquiring whether dental practitioners would be eligible as members of the Society, it was proposed by Mr. Sibley, and unanimously agreed to, that "any qualified registered dentist, holding the diploma of L.D.S. of the Royal College of Surgeons of England, Scotland, or Ireland, be eligible as a member of the Society." It will be evident that this Society meets a much needed want in the best possible way. The Secretary is Mr. C. J. Radley, of 26, Wynne Road, S.W., from whom all particulars may be obtained.

ROYAL COLLEGE OF PHYSICIANS.

AN ordinary meeting of the College was held on Thursday, April 24th, Sir W. JENNER presiding.

The following gentlemen were admitted members of the College: J. A. Coutts, M.B., Cambridge; H. M. Murray, M.B., London; J. J. Pringle, M.B., Edinburgh; L. Robinson, M.D., California; J. E. Squire, M.D., London; and E. W. White, M.B., London.

Licences to practise were granted to fifty-one gentlemen who had passed the required examinations.

The Examiners for the Murchison Scholarship reported that fourteen candidates had been examined for this scholarship, that all the papers were of a high standard of merit, and that they recommended for election Mr. J. Bland Sutton, of the Middlesex Hospital. They added that the merits of Mr. R. Fortescue Fox were nearly equal to those of the successful candidate.

The Scholarship was accordingly awarded to Mr. Sutton.

Dr. Acland brought forward for the second time his motion to the effect that two Vice-Presidents should be appointed. This was carried. The Committee which had considered suggestions for the mode of appointment of the Vice-Presidents reported that, in the old statutes of the College, there was mention of an officer entitled Pro-President, who was appointed by the President. They therefore recommended that the College should revert to its former practice, and that the President should annually select two of those who had served the office of Senior Censor to be Vice-Presidents, holding office for one year only, and ineligible for re-election. Considerable discussion followed, in the course of which it was pointed out that, if this proposal were adopted, there would in a few years be no one eligible for election to the office. Finally, on the motion of Dr. Moxon, the words, "until after the lapse of five years," were added to the proposal of the committee; and, thus amended, the proposal was adopted.

It was resolved that, instead of holding a *conversazione* this year, there should be a banquet, on a day to be fixed by the President; and a committee was named to make the necessary arrangements.

A by-law was passed, for the second time, to enable the election of Fellows for this year to take place on the last Thursday in May instead of the last Thursday in April.

The report of the Medical Bill Committee was referred again to that committee for further consideration.

THE TERCENTENARY OF EDINBURGH UNIVERSITY.

THE tercentenary festivities of Thursday and Friday have been, if anything, of a more interesting character than those which distinguished the earlier proceedings. The reception of delegates in the Synod Hall, which I briefly noted in our last week's issue, was a spectacle not soon to be forgotten. Every European State save Spain, Turkey, and Greece was represented, and the display of the many brightly coloured robes showed a marked contrast to the sombre gowns of the Scottish professoriate.

Among the distinguished delegates present were the following:

Copenhagen—M. H. Saxtorph, Knight of the Danebrog and Danebrogs-man, and Knight of the Order of St. Stanislaus, Professor of Clinical Surgery. Dorpat—Dr. Freidrich Hoffman, Professor of Special Pathology and Clinical Medicine, Councillor of State. Dublin—Trinity College—Rev. Samuel Haughton, M.D., D.C.L., LL.D., F.R.S., Senior Fellow and Senior Lecturer in the College. Ghent—Professor Gustave Boddaert, Chief Surgeon of the Civil Hospital. Konigsberg—Professor Dr. Güterbock. Leyden—Dr. D. Doijer, Professor of Ophthalmology, Rector of the University. London—Wm. B. Carpenter, C.B., M.D., LL.D. (Edin.), F.R.S. Louvain—Professor M. P. J. van Beneden, LL.D. (Edin.) Lund—C. J. Ask, M.A., Doctor of Physics, K.C.G.V., K.P.S., Professor of Surgery and Obstetrics. Munich—Professor Dr. Max von Pettenkofer. New Brunswick — Dr. Atherton, L.R.C.P., L.R.C.S. Prague—Dr. Hans Chiari, Professor of Pathological Anatomy. University of Pennsylvania—Dr. John S. Billings. Berlin—Royal Academy of Sciences—Rudolf Virchow, M.D., Hon. F.R.S.E., Professor of Pathology, University of Berlin. Dublin—King and Queen's College of Physicians in Ireland—Dr. William Moore, President of the College; Royal College of Surgeons of Ireland—Dr. W. J. Wheeler, President of the College. Edinburgh—George William Balfour, M.D., President of the Royal College of Physicians; Royal College of Surgeons—John Smith, M.D., F.R.C.S., F.R.S.E., President of the College. Glasgow—Faculty of Physicians and Surgeons—Andrew Fergus, M.D., President of the Faculty. London—Edinburgh University Club—Edward Henry Sieveking, M.D., F.S.A., F.R.C.P.L., Physician-Extraordinary to Her Majesty the Queen, Physician-in-Ordinary to His Royal Highness the Prince of Wales; Guy's Hospital Medical School—Samuel Wilks, M.D., F.R.S.; King's College—W. O. Priestley, M.D., F.R.C.P., Consulting Physician to King's College Hospital; Medical School of St. Bartholomew's Hospital—Dyce Duckworth, M.D.Edin., F.R.C.P.Lond., Physician to the Hospital; Royal College of Physcians—Sir Risdon Bennett, M.D., LL.D.Edin., F.R.C.P.L., F.R.S. Royal College of Surgeons—John Marshall, F.R.S., President of the College; St. Thomas's Hospital—John Syer Bristowe, M.D., F.R.C.P., F.R.S., Senior Physician and Joint Lecturer on Medicine. University College—John Eric Erichsen, F.R.S., Surgeon-Extraordinary to the Queen, Emeritus Professor of Surgery and Clinical Surgery, University College, London, and Consulting Surgeon to University College Hospital. Manchester—Edinburgh University Club—John Thorburn, M.D., Professor of Obstetric Medicine in Victoria University, and President of the Club. Paris—Académie de Médecine—Dr. Henri Gueneau de Mussy; Académie des Sciences—Louis Pasteur, Member of the Academy.

The honorary degree of Doctor of Laws was conferred upon the following medical men and scientists, by the Chancellor:—George William Balfour, M.D., President of the Royal College of Physicians, Edinburgh; Fordyce Barker, M.D., LL.D., President of the New York Academy of Medicine; John S. Billings, M.D., Washington, D.C., U.S.A.; Sir William Bowman, Bart, M.D., Hon. F.R.S., London; John Syer Bristowe, M.D., F.R.C.P., F.R.S., St. Thomas's Hospital, London; Professor Dr. A. Chauveau, l'Académie, Lyons; Sir Andrew Clark, Bart., M.D., LL.D., London; Surgeon-General Thomas Crawford, M.D., Director-General, Army Medical Department; Professor John Eric Erichsen, F.R.S., London; W. H. Flower, LL.D., F.R.S., Director of the Natural History Department of the British Museum, London; Professor Edward Frankland, Normal School of Science, South Kensington Museum; Sir William W. Gull, Bart., M.D., D.C.L., LL.D., F.R.S., London; D. Rutherford Haldane, M.D., F.R.S.E., Edinburgh; Rev. Samuel Haughton, M.D., D.C.L., F.R.S., Trinity College, Dublin; Professor H. von Helmholtz, Hon. F.R.S.E., Berlin; Sir William Jenner, Bart,, K.C.B., F.R.S., London; Thomas Keith, M.D., F.R.C.S., Edinburgh; John Marshall, F.R.S., President Royal College of Surgeons, London; H. Maudsley, M.D., F.R.C.P., London; Dr. Henri Gueneau de Mussy, Académie de Médecine, Paris; Professor Ollier, Lyons, France; Sir James Paget, F.R.S., F.R.C.S., D.C.L., London; Louis Pasteur, Membre de l'Académie des Sciences, Paris; Professor Dr. Max von Pettenkofer, Munich; W. O. Priestley, M.D., F.R.C.P., Consulting Physician to King's College Hospital, London; Sir John Watt Reid, K.C.B., M.D., Director-General, Medical Department, Royal Navy; M. H. Saxtorph, Professor of Clinical Surgery, University of Copenhagen; Edward Henry Sieveking, M.D., F.S.A., F.R.C.P.L., Physician Extraordinary to H.M. the Queen, London; John Smith, M.D., F.R.C.S., F.R.S.E.; Professor B. J. Stokvis, Amsterdam, Holland; Rudolph Virchow, M.D., Professor of Pathology, University of Berlin; Patrick Heron Watson, M.D., F.R.C.S.E., Edinburgh; Samuel Wilks, M.D., F.R.S., Guy's Hospital Medical School, London. The same degree was also conferred, *in absentiâ*, on Dr. Samuel Gross, Professor of Surgery in Jefferson College, Philadelphia; Dr. J. Henle, Professor of Anatomy in the University of Gottingen; Dr. Joseph Hyrtl, Emeritus Professor of Anatomy in the University of Vienna.

At the luncheon given by the College of Physicians in their Hall in Queen Street, many of the distinguished foreigners were present as guests, most of them being members of the medical profession. No toasts were proposed nor speeches made. Immediately afterwards there was a reception by the Royal Medical Society. The Presidents of the Society received their guests, and the various rooms in the Society's premises in Melbourne Place were decorated for the occasion. The reception was in every way a success, most of the foreign guests having attended it; such as were former members of the Society entered their names in a book as a souvenir of their visit. Next came a reception by the Faculty of Advocates, which was attended by nearly two thousand people, the spacious Parliament Hall, the libraries, and corridors were thronged. The Dean of Faculty of Advocates received the guests. Thursday finished with the great banquet to the guests, given in the Drill Hall, Forrest Road, and at which over 1,300 sat down to dinner, these consisted of the guests, the university authorities, the General Council, and a considerable number of students. Lord President Inglis, Chancellor of the University, presided, and on each side of him were fully thirty of the men whose names are most honoured in science, art, literature, and theology. After the feasting part of the banquet was over, the toasts of the evening were given, and among foreigners well known to all, the principal speakers were: Lowell, Pasteur, Virchow, Helmholtz, and Lesseps, while of British celebrities, there spoke, Sir Stafford Northcote, Sir Lyon Playfair, Lord Rosebery, the Bishop of Durham, Sir Fred. Leighton, Sir John Lubbock, Canon Westcott, Sir Henry Maine, etc. The speech most likely to be interesting to medical readers was that of Professor Virchow, who said: "It is not merely an accident that the foundation of the Edinburgh Medical School was also a work of the reformers. Scientific medicine, as we know it to-day, is very young. At the same time, and upon the same field, when the great war between despotism and religious liberty broke out, a legitimate rebellion arose against that dogmatic medicine which had been recognised by the Church and received into her system. It was in the 16th century that the first great victories over Galenism were won by Vesalius and Paracelsus. Observation, experiment, criticism, triumphed over tradition, research over speculation. To be sure, we are proud to represent a branch of human knowledge of the highest antiquity. Medicine, like theology, derives its descent from priestly traditions, and we rejoice to be able to trace our genealogy to the time of the first establishment of Hellenism, upon the islands off the coast of Asia Minor. But it is not the materia of Hippocrates that we teach our students to-day. The old humoral pathology has lost its basis since Harvey showed that the blood is a circulating spirit, not a parenchymatous juice. The University of Edinburgh was closing its first century before the new doctrines were generally accepted, and only about that time medicine began to be converted from an art into a science. But then its progress was a rapid one. Five generations of men after the common calculations, perhaps ten generations of professors, sufficed to produce that great reform in medicine, whose fruits we now enjoy, but which is not yet completed. During this whole period, the members of the schools of Edinburgh stood in the first line of the active champions; and I am happy to say that, through all these years, a hearty alliance existed between the Edinburgh school and German medicine. Since the time when William Cullen continued in clinical medicine the work commenced by George Ernst Stahl and Diedrich Hoffman, until this day, the spirit of reciprocal esteem, and of mutual help, has filled all hearts, and sustained the confidence in the final triumph of the common flag. The Munros and the Bells, the Simpsons and Listers were also our masters. I, myself, if I turn my eyes around me, I see immediately before me, and after our great Schwann, the much lamented Goodsir, and I find after me a long series of younger friends, whose scientific education I helped to guide in the same direction as I think that distinguished professor would have conducted them. A professor is not only a teacher, *docendo discimus.* I know what I myself have received, and what science has received from scholars. The modern professor is not charged to construct new dogmas; his duty is to educate independent observers. For this purpose large and well appointed institutions are put under his charge. Each of them should be a school of workers. We of the older generation, we had not such rich institutions for our instruction as the present students enjoy; we had not the same facilities of working as our assistants now possess. Therefore, we expect that our assistants will excel us, and that our students will overtop our assistants. This university is now so rich in new and admirable institutes of the largest size, that we must perhaps express the wish that that size may not diminish the immediate influence of the teachers. May the spirit of true science never disappear from these buildings! May they serve to increase not only the welfare of the city, not only the glory of this land, but also the science of medicine throughout the world."

On Friday, the proceedings commenced by a breakfast given by the Royal College of Surgeons, and attended by many of the guests. It was presided over by Dr. John Smith, President of the College. Drs. Smith, Hume Watson, Drummond, etc., spoke, as also did Drs. Moore of Dublin and Marshall of London (Presidents of the Colleges of Surgeons respectively), while the genial assemblage had the treat of a short speech by Virchow, delivered in English. The next event in the programme of Friday was one looked forward to with eager interest—namely, a reception by the students, at which there were to be the chief home and foreign celebrities, and at which several of them were to speak. The meeting was held in the large Synod Hall of the United Presbyterian College, and was attended by over one thousand students; guests and strangers occupied the galleries and wings, while the students occupied the body of the hall. Sir Stafford Northcote, Rector of the University, head and representative of the students, presided. Addresses to the students were delivered by Mr. Lowell, the Rev. Dr. Beets, M. Lesseps, Professors Virchow, Pasteur, and Helmholtz, Count Saffi, Lord Reay, and Mr. Browning. MM. Lesseps and Pasteur addressed the meeting in French, and Virchow in German, while Helmholtz and Saffi spoke in English. Each speaker was received enthusiastically by the students, listened to with rapt attention, and cheered to the echo, with the audience standing at the close of his address. Space forbids this week even extracts from these speeches, but their perusal is thoroughly well worth the time it would occupy, more especially the thoughtful utterances of Virchow on his relation to Darwinism and Haeckel; and the account that Helmholtz gave of his own early struggles, and the solemn question he put to himself when a practitioner, and we purpose to publish them fully next week. Lord Reay replied for the students; and the meeting, unique in its circumstances, closed as one of the most successful in a galaxy of successes.

On Friday afternoon, the students entertained the guests to a high-class and thoroughly enjoyable concert, which was conducted by Sir Herbert Oakley. Thereafter, the Royal Scottish Academy had a reception of over two thousand persons, whom they entertained in the picture-galleries of the Academy and Scottish National Gallery, with good music, exquisite paintings, and suitable refreshments; this reception was thoroughly enjoyable. In the evening, Edinburgh was illuminated in a style that can never be forgotten.

The last public event was a notable one—a symposium in the Drill Hall, attended by over 2,000 persons, among whom were most of the distinguished guests, many of the university and civic authorities, and at least 1,200 students. It was admirably conducted; and here, under the genial chairmanship of Sir Stafford Northcote, a pleasant two hours were spent in speeches, song, and story, the Chancellor, Sir Lyon Playfair, Dean Macdonald, and others, vieing with each other in their efforts to please, while much excellent music was supplied; and altogether this monster symposium will be remembered as one of the happiest events of the tercentenary. Everyone is to be congratulated on the part he played in the events of the festival, whether Chancellor, Rector, Principal, professor, graduate, student, or guest, and the hearty cooperation of the Municipality reaffirmed the strong bond existing, happily, between town and gown in Edinburgh. Where all have done so much to render the celebration a success, it would be invidious to mention any one individual; so we shall content ourselves by saying that one of the most noteworthy, one of the most unexpected, and one of the most remarkable features during the celebration, was the prominent part taken by the students, through their Representative Council, in entertaining the guests, in aiding the university authorities to organise, and, through their Rector, in contributing so much to the splendid success of the three hundredth birthday of their university.

THE HOSPITALS ASSOCIATION.

The second meeting of this association was held in the rooms of the Medical Society of London, Chandos Street, Cavendish Square, on Wednesday evening last, the 23rd instant. Major Ross, M.P., occupied the chair, and there was a large attendance both of ladies, including the matrons of several of the London hospitals, and of gentlemen. The question under discussion was the following: "How far should our hospitals be training-schools for nurses?" Papers upon the subject were contributed by Dr. J. S. Bristowe, and by Miss E. C. E. Lückes, Matron of the London Hospital. It was universally admitted that nurses should receive systematic instruction; and Dr. Bristowe advocated their being taught in the hospitals and infirmaries, where there are sick to be nursed, skilled nurses competent to teach the art they practise, and skilled medical men ready to take their share in the nurses' education, where, in short, all the appliances for an efficient school of nursing exist. Dr. Bristowe described the nurses and the nursing system which obtained in hospitals some forty years ago, and contrasted with it the immensely improved nursing of the present day. He described in detail the Nightingale School of Nursing established at St. Thomas's Hospital in 1860, and continued until now with the happiest results to all concerned, medical officers, patients, medical students, and nurses themselves. He showed that the concurrent carrying on of the two schools of medical students and of nurses at St. Thomas's had been of mutual benefit. Generally more than thirty probationer nurses were in residence at the hospital, who were educated not only for its purposes, but for the purposes of other hospitals, infirmaries, and nursing institutions. The demand for trained nurses for the sick was growing year by year; and in nursing a career, presenting many grades, was gradually unfolding itself which was suitable for women of almost all social stations. Hence the facilities for teaching them must be largely increased, particularly at all hospitals with medical schools attached and at the better workhouse infirmaries. The nursing school also ought to be under the immediate control of the governors of the institution to which it is attached, in order that the two schools might be carried on harmoniously beneath the same roof. As regarded the question of expense, Dr. Bristowe thought that subscription-hospitals could scarcely be expected to maintain efficient nursing-schools, and that possibly special funds might be collected by subscription for the purpose; but that such nursing-schools should be made, as far as possible, self-supporting, the probationers paying for themselves, or through their friends, a proportion of the expense incurred on their behalf.

Miss Lückes advocated the establishment of nursing-schools for the sake of the patients, for the purpose of relieving the long hours and overwork from which hospital-nurses suffer, and for the sake of the public, whose demand for trained nurses far exceeds the supply. All nurses need not be equally competent. An efficient nurse might have probationers beneath her, as a cook in a kitchen worked with kitchenmaids whom she could superintend. There should not be an undue proportion of probationers passing on through the hospitals, and a certain proportion of them should be bound to give time in return for their training. All nurses, from whatever social grade, should receive the same identical practical training; only on completion of training should distinctions begin. Nurses and probationers should be relieved of the large amount of housework which too often falls to their share. Nurses should have less time on duty than is usually expected of them, and nursing interests should be subservient to those of the medical school.

In the discussion that followed, Dr. Kingston Fowler mentioned that, at Addenbrooke's Hospital, Cambridge, the cost of nursing the patients had been reduced by the payments received from the probationers, and by those received for the services of the nurses sent out into the town of Cambridge. Two large London hospitals, which paid to a nursing-home about £5,000 yearly, might have nearly saved that amount if they could have sent out their nurses to private cases. Private nursing institutions supplied a want which could be better met by hospitals.

Mr. Timothy Holmes supplied the most trenchant remarks during the debate. He urged that the first use of hospitals was that they should teach practitioners of medicine and surgery. That teaching had benefited untold millions, and saved more lives than could any political arrangement. Firstly, a hospital should be a place for medical education; secondly, for the relief of suffering; and thirdly, for the training of nurses, all of which objects should be considered in due proportion by those exercising their management. The public should not be called upon to subscribe for the training of nurses, more than they were for the training of medical men; the schools of nursing should be self-supporting. The nurses should be admissible by their superintendent, and controlled and dischargeable by the medical officers, as were medical students. The authorities of St. George's Hospital could not, unfortunately, establish a school of nursing, as they could obtain no extension of their premises.

Mr. H. C. Burdett thought nursing was not yet sufficiently appreciated by the authorities of hospitals. The nurses' food should be improved. They should also have a fund for sickness and old age; and if ill, they should be sent to some institution apart by themselves, and away from other patients among whom their working hours were passed. Every hospital should train its own nurses; all nurses should be trained alike, whatever their social position; and they should be housed, fed, and properly paid.

Mr. Macnamara thought hospitals could not be made efficient schools of training for nurses, unless there was thorough harmony between the superintendent of the nurses and the medical officers; that such superintendent should be appointed by the medical staff, and should be responsible for the nurses and probationers, who should be entirely under her control.

Mr. Michaeli thought that training schools for nurses should be self-supporting; whilst Mr. Haggard thought that the lower classes of nurses could not pay for their training. Probationers should not be pushed through the wards at too great a pace, otherwise the hospitals suffered.

Dr. Percy Smith thought medical men could give instruction in clinical matters to nurses and probationers; but that the instruction of these latter in elementary anatomy, chemistry, etc., was often quite wasted. The Chairman thought parish infirmaries could hardly be made places for the supply of trained nurses to the public, otherwise the ratepayers would complain. At subscription hospitals, the only way to accomplish the end was to educate a few more probationers and nurses than were wanted for the supply of the institution itself, and to let those leave whose services were not required. At the Middlesex Hospital there was a fund put aside for certain benefits to the nurses in illness and old age, but he found that after three or four years of hospital work, the nurses, as a rule, left the hospital, and sought occupation elsewhere.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

Meetings of the Council will be held on Wednesday, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

Cards for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
IVa. Diphtheria, sanitary.
V. Syphilis, acquired.
Va. ,, inherited.

Note.—The further 150 cases of pneumonia asked for by the Committee have now been received, and will be included in the forthcoming issue of the *Record* in July. The Committee hope that cases will still be communicated, as opportunity may occur, with a view to a further report upon the subject in the future.

Inquiries will almost immediately be issued upon the habits of aged persons who may have attained or passed the age of 80 years, and upon the occurrence of Albuminuria in apparently healthy persons.

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
April, 1884. 161A, Strand, W.C.

Notice.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

The North-Western Provinces and Oudh Branch.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons Shirley Deakin and W. A. Morris, 8, City Road, Allahabad.

Yorkshire Branch.—The spring meeting will be held at the Beckitt Hospital, Barnsley, on Wednesday, April 30th, at 3 p.m. Members intending to read papers are requested to communicate at once with Arthur Jackson, Honorary Secretary. Sheffield.

South-Eastern Branch: East Surrey District. The next meeting will be held at the Greyhound Hotel, Croydon, on Thursday, May 8th, at 4 p.m.; Henry G. Thompson, M.D., of Croydon, in the chair. Dinner will be served at 6 p.m., precisely; charge 7s., exclusive of wine. The following communications, etc., have been promised. The Chairman: Some Clinical Cases. Mr. Arthur Durham: Orchitis. Dr. Urban Pritchard: Chronic Suppuration of the Tympanum. Dr. F. A. Mahomed: The Prognosis and Treatment of Bright's Disease. Dr. P. Horrocks: (subject uncommunicated). Mr. H. G. Plimmer will exhibit specimens of Bacilli. All members of the South-Eastern Branch are entitled to attend this meeting, and to introduce professional friends.—J. Herbert Stowers, M.D., Honorary Secretary, 23, Finsbury Circus, E.C.

South-Eastern Branch: East Kent District. The annual meeting of this District will be held at the Kent and Canterbury Hospital, on Thursday, May 8th, at 3 p.m.; Dr. Robinson of Dover in the chair. The President will bring forward the subject of the recent Throat-Epidemic at Dover, supposed to be traceable to the Milk-Supply. The dinner will take place at the Fountain Hotel at 5 p.m. Members desirous of introducing patients, exhibiting pathological specimens, or making communications at the meeting, are requested to give notice at once to T. Whitehead Reid, Honorary Secretary, 34, St. George's Place, Canterbury.—April 23rd, 1884.

North of England Branch.—The spring meeting of this Branch will be held in the Library of the Newcastle Infirmary, on Wednesday, April 30th, at 2.30 p.m. The revised rules of the Branch will be presented. The following papers will be read: Dr. Mantle: Acute Rheumatism, and its Etiology. Mr. Williamson: On the Effect of Strong Lights upon the Eye. Dr. Drummond: On a Strange Neurosis. The following patients will be shown: Dr. Adamson: A Man operated upon for extensive Disease of the Tibia and Fibula. Dr. Hume: A Man with a Rectal Tumour, on whom the operation of Colotomy was performed. Dr. Lyon will show the Suprarenal Capsules from a case of Addison's Disease. The members and their friends will dine at the County Hotel, at 5 p.m. Dinner, 6s. 6d., exclusive of wine. —David Drummond, Honorary Secretary, Saville Place, Newcastle-on-Tyne.

East Anglian Branch.—The annual meeting of this Branch will be held at Colchester (by the kind permission of the owner, J. Round, Esq., M.P.), in the ancient Castle, on Thursday, May 15th; John Lowe, M.D., President; Mr. Robert Francis Symmons, Surgeon of the Essex and Colchester Hospital, President-elect. Gentlemen desiring to read papers or to bring any subject before the meeting are requested to give immediate notice to either of the Honorary Secretaries.—W. A. Elliston, M.D., Ipswich, M. Beverley, M.D., Norwich, Honorary Secretaries.

PROCEEDINGS OF COUNCIL.

At a meeting of the Council, held in the Council Room, Exeter Hall, London, on Wednesday, April 9th, 1884, present, Mr. C. G. Wheelhouse, President of the Council, in the chair; Dr. W. F. Wade, Treasurer; Mr. Alfred Baker, Dr. G. B. Barron, Dr. M. M. De Bartolomé, Dr. T. Bridgwater, Dr. A. Carpenter, Dr. C. Chadwick, Dr. J. Ward Cousins, Dr. G. W. Crowe, Dr. A. Davidson, Dr. J. Langdon H. Down, Dr. D. Drummond, Dr. T. Eyton-Jones, Dr. B. Foster, Dr. E. Long Fox, Dr. C. E. Glascott, Dr. W. C. Grigg, Dr. C. Holman, Prof. G. M. Humphry, F.R.S., Mr. T. V. Jackson, Mr. Evan Jones, Dr. H. T. Lanchester, Dr. W. G. Vawdrey Lush, Mr. C. Macnamara, Dr. F. A. Mahomed, Mr. F. Mason, Dr. W. Withers Moore, Mr. R. H. B. Nicholson, Dr. C. Parsons, Mr. J. Prankerd, Mr. R. J. H. Scott, Dr. A. Sheen, Dr. R. C. Shettle, Mr. S. W Sibley, Dr. E. M. Skerritt, Dr. A. Strange, and Dr. E. Waters,

The minutes of the last meeting, of January 16th, and special meeting of February 14th, were submitted for confirmation, and no objection having been raised, they were signed as correct.

Read letters of apology for non-attendance from Dr. A. T. H. Waters, Mr. Husband, Dr. Clifford Allbutt, Mr. Sympson, Dr. Strange, Dr. Rees Philipps, Dr. McVail, Mr. Dix, and Dr. Duffey.

Read letter from Dr. Duffey, Honorary Secretary for Ireland, resigning the office of Honorary Secretary for Ireland.

Resolved: That the grateful thanks of the Council be given to Dr. Duffey for his assiduous work, and the able manner in which he has laboured to advance the interests of the Association for so many years as Honorary Secretary for Ireland. That in accepting the resignation of Dr. Duffey as Honorary Secretary for Ireland, the Council do not consider it necessary to continue the office, as the excellent organisation of Irish Branches made during Dr. Duffey's term of office render it unnecessary.

The by-laws of the Lancashire and Cheshire Branch, as revised, were considered.

Resolved: That the words "of the Branch" be inserted after the word "member," in the fourth line of By-law 10, and, with this alteration, the By-laws of the Lancashire and Cheshire Branch be approved and confirmed.

Resolved: That the application of the Association of Fellows of the Royal College of Surgeons, to have an announcement of their annual meeting inserted in the daily journal of the Belfast meeting be granted.

Read letter from Surgeon-Major Evatt proposing a metropolitan meeting and a provincial meeting of the British Medical Association.

The letter was ordered to be laid on the table.

Read letter from Surgeon-Major Boileau respecting the Oudh and North-West Provinces of India Branch.

The President of the Council reported that he had forwarded a reply, together with memorandum of the Editor on the subject, to Sir William Jenner's communication, of which the following are copies, but that he had received no reply or acknowledgment.

TO THE COUNCIL OF THE BRITISH MEDICAL ASSOCIATION.

63, Brook Street, Grosvenor Square, W., November 6th, 1883.

Gentlemen,—The undersigned, being members of the British Medical Association, desire to express to the Council the decided opinion they entertain of the impropriety of violating the confidences of the sick-room by publishing in the JOURNAL of the Association the details of the illness of a patient.

The publication of such details can serve no useful end, and can only gratify morbid curiosity.

That particulars respecting the sufferings of well known sick men may possibly be admitted into other journals is no argument in favour of their appearing in a journal published by our Association, one object of which is to uphold the honour and dignity of the profession of medicine. The Association publishes the BRITISH MEDICAL JOURNAL, and for all that appears in it unsigned the members of the Association are indirectly responsible. We therefore trust the Council will see fit to take some steps to prevent our JOURNAL being the vehicle for disseminating the details of the illness of named individuals.

WILLIAM JENNER, GEORGE BURROWS, JAS. RISDON BENNETT, WM. N. GULL, ANDREW CLARK, A. B. GARROD, RICHARD QUAIN, JAMES PAGET, JOHN MARSHALL, HENRY W. ACLAND, W. MOXON, J. RUSSELL REYNOLDS, G. E. PAGET, SAMUEL WILKS, GEORGE JOHNSON, P. H. PYE-SMITH, HERBERT DAVIES, A. W. BARCLAY.

63, Brook Street, Grosvenor Square, W.

Dear Mr. Wheelhouse,—The enclosed refers to a subject on which I know the profession feel strongly. I send the letter to you as President of the Council of the Association, and trust you will be good enough to place it before that body. I am sure the Council will give the subject careful consideration.—Yours very faithfully, WILLIAM JENNER.

REPLY OF THE PRESIDENT OF COUNCIL.

Hillary Place, Leeds, January 22nd, 1884.

My dear Sir William,—In accordance with my promise, I laid your memorial on the subject of "Medical Bulletins" before the Council of the British Medical Association, at its meeting on Wednesday, January 16th, and was instructed by the Council to forward to you the accompanying reply, with a memorandum on the subject by the Editor of the JOURNAL. Believe me, dear Sir William, yours faithfully, C. G. WHEELHOUSE,

President of the Council of the British Medical Association.

To Sir William Jenner, Bart., K.C.B., etc., etc.

The Council of the British Medical Association receives, with satisfaction, a memorial so numerously and so influentially signed as the one now presented to them.

Regretting much the serious error which has recently been committed in the JOURNAL, they entertain, equally with the memorialists, the most complete approval of the sentiments therein expressed, and will gladly, so far as is in their power, endeavour to give them effect.

The practice is of old standing, and the memorialists will not find difficulty in remembering many instances of a similar nature.

Had the two Colleges, influential members of both of which are found amongst the memorialists, been ready to discourage leading members of their own bodies when committing similar errors, the recent instance, wanting such distinguished example, would probably not have transpired.

The memorialists will perceive that already action has been taken to prevent similar abuse, as the following memorandum from the Editor of the JOURNAL will prove. C. G. WHEELHOUSE,

President of the Council of the British Medical Association.

Sir William Jenner, Bart., K.C.B., etc., etc.

MEMORANDUM ON THE ABOVE BY THE EDITOR OF THE JOURNAL.

1. The practice of the JOURNAL, during a long series of years, has been to communicate with the medical attendants in charge, and to issue the information which they have furnished, avowedly for publication. It has not been thought that they would supply for publication details which were a violation of the confidence reposed in them, or intended only to gratify morbid curiosity. The details in question have, for the most part, been furnished by eminent members of the medical profession, including, in numerous instances, some of the most distinguished of the signatories of the above document.

2. It is suggested that a primary responsibility in this matter rests with the medical attendants, and that it would be proper that the principle regulating the limits within which such information may be supplied to the medical journals for publication, should be indicated broadly by the Colleges for the guidance of their Fellows. Such an expression of opinion would have a general effect, and would obviate inequalities of procedure, otherwise likely to arise in the future and to lead to troublesome discussions.

The Editor concurs in the opinion that the practice in question has, of late years, grown to an extent which might fairly be considered as an abuse; the advisability of some regulation by the Colleges to prevent abuse was expressed in the JOURNAL of November 3rd, 1883.[1]

In view of the above document, which indicates the opinion of the leaders of the profession, that stricter limits than heretofore should be imposed in respect to any publication concerning the illness of public persons of eminence (in whose general progress, during periods of anxious illness, the public and the profession are often, however, very deeply interested), the Editor will hold in view the necessity of exercising a more rigid censorship. He has hitherto chiefly relied upon the fact that only information supplied by the principal medical attendants was depended on, and has felt full confidence in their judgment.

The President of the Council reported that he had, on behalf of the Association, sent an address of condolence to Her Majesty and the Duchess of Albany upon the sad and sudden death of the Duke of Albany.

Resolved: That the same be approved and entered on the minutes.

The humble address of Her Majesty's most faithful servants the members of the British Medical Association.

We, Your Majesty's most humble servants, the members of the British Medical Association, desire, with reverence and concern, to convey to Your Majesty, and through Your Majesty to Her Royal Highness the Duchess of Albany, an expression of the profound and heartfelt grief with which we, in common with all classes of Your Majesty's loyal subjects, have received the intelligence of the sudden and mournful death of His Royal Highness the Duke of Albany.

We desire to offer to Your Majesty, and to Her Royal Highness the Duchess of Albany, such sympathy as it is befitting your loyal subjects should lay at your feet on so sorrowful an occasion, and with profound respect to entreat Your Majesty to accept the same as the only tribute which our love and affection is permitted to offer.

Signed, on behalf of the members of the British Medical Association,

C. G. WHEELHOUSE, President of the Council of the Association.

Hillary Place, Leeds, April 2nd, 1884.

Exception was taken to two of the candidates for election as members.

Resolved: That the remainder of the candidates, viz., 192, whose names appear on the circular convening the meeting, be, and they are hereby, elected members of the Association.

Resolved: That the minutes of the Journal and Finance Committee of to-day's date, together with the financial statement for the year 1883, be approved and adopted, and that the financial statement, as certified by the auditors as correct, be published in the JOURNAL, in accordance with By-law 33.

Resolved: That the gentlemen whose names are as follows be the Subcommittee to consider the change of premises, in accordance with minute 911: Dr. Parsons, Mr. Vincent Jackson, Dr. Bridgwater, Dr. Ward Cousins, Dr. Grigg, Mr. Macnamara, Dr. B. Foster, Mr. Wheelhouse, Dr. Wade, and Dr. Chadwick.

Dr. Grigg withdrew the motion of which he had given notice, viz.:

That the abstract of the minutes of the adjourned annual meeting, No. 871, be referred for correction to the Subcommittee appointed to report on the proposed alterations of the by-laws relating to the Branch organisations.

Resolved: That the minutes of the Scientific Grants Committee of to-day's date be approved and adopted, and the recommendations contained therein carried into effect.

The Treasurer reported that he had purchased £1,623 Great Northern, and £1,000 North-Eastern Railway 4 per cent. Debenture Stock, and that the seal of the Association had that day been affixed to the transfers.

The President of the Council reported that the Committee on Branch Organisation had met the previous day, and that their recommendations would be printed and placed in the hands of the members of the Council for consideration at the next meeting of the Council.

Resolved: That the President of the Council, the Treasurer, and Dr. C. Holman, be appointed a Subcommittee to draw up the Annual Report of Council.

Resolved: That the best thanks of the Council be presented to the General Secretary, Mr. Fowke, for the able and energetic manner in which he met the difficulties of issuing the JOURNAL in due course on the occasion of the late fire in the Strand.

That the above resolution be entered on the minutes.

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[1] The following are the quotations referred to: B. M. J., p. 884.

"We do not say that the practice has never been abused, is not open to abuse, and a fair subject for discussion."

"Let the College of Physicians, some of whose most distinguished Fellows are much experienced on the subject, consider it, with a view to laying down, if possible, general principles or formulæ which may afford a more precise, and possibly, more uniform rule of practice than now exists. We should welcome such guidance; and so undoubtedly would many physicians and surgeons, whose practice brings them into positions in which they are called upon to decide how, when, and where to furnish such information. The voice should, if it is to be useful, speak not obscurely, but in plain words."

FINANCIAL STATEMENT FOR THE YEAR ENDING DECEMBER 31st, 1883.

Revenue Account, or Profit and Loss for the Year ending December 31st, 1883.

Dr.		£ s. d.	£ s. d.
Editor		500 0 0	
Sub-Editor		225 0 0	
Assistant Editor		200 0 0	
			925 0 0
Contributors			1,060 0 7
JOURNAL:—			
Printing		4,542 1 9	
Paper		2,303 2 11	
Postage		1,346 5 6	
Address Bands		189 4 8	
			8,380 14 10
Wood Engraving			47 8 11
Reporting			124 16 9
JOURNAL EXPENSES:			
Editor's Postage .. £31 10 6 Postage of JOURNAL Slips .. 28 17 2		60 7 8	
Boy's Wages		27 17 0	
Newspapers		9 5 3	
Telegrams, etc.		7 8 7	
Sub-Editor's Expenses		4 7 3	
Editor's Expenses		13 2 0	
„ Clerk's Expenses		5 2 6	
Rent of Telephone		20 0 0	
			147 10 3
Editor's Clerk			118 15 0
COMMITTEES:—			
Collective Investigation:			
Salary of Secretary	£200 0 0		
Travelling Expenses	100 0 0		
Printing, etc.	183 0 2		
Cost of *Collective Investigation Record*:			
Printing, Paper, and Postage	167 8 4		
Reports	55 15 0		
		706 1 6	
(*Less received for Sales and Advertisements of "Record," see contra.*)			
Scientific Grants, 1883-84		300 0 0	
Scholarships		46 3 0	
			1,052 4 6
Auditors' Fee			63 0 0
General Secretary			600 0 0
Assistant Secretary (twenty-four days)			13 11 7
Office Salaries and Wages			749 4 0
Rent			310 10 5
Taxes, Parochial, Gas and Water-Rates		132 8 6	
Fire Insurance		11 7 0	
			143 15 6
MISCELLANEOUS PRINTING:—			
Printing in connection with Committees, Advertisements, Association Printing, and JOURNAL and Editor's Printing		279 5 8	
Printing, Annual Meeting, Liverpool, Daily Journal, and Members' Cards, 1883		189 4 6	
			468 10 2
Reprints			76 19 0
Postage			325 19 8
SUNDRY OFFICE EXPENSES:—			
Committees		20 8 0	
Copying and Assistance		219 1 2	
Travelling Expenses		13 14 6	
Travelling Expenses of Clerks		32 17 11	
JOURNALS bought		2 19 4	
Sectional Expenses		15 15 6	
Cleaning Offices		48 16 6	
Sundries and Petty Cash		116 17 2	
			470 10 1
STATIONERY:—			
Account Books, Ledgers, Pens, Ink, Paper, etc.			213 7 5
Coals			11 0 0
Sundries			45 0 2
Repairs and Alterations			41 5 7
Bank Charges			9 18 9
Branch Charges			1 11 7
Legal Expenses			201 18 10
Plant Depreciation Fund			300 0 0
Premises Redemption Fund			150 0 0
Furniture and Fittings			56 6 6
			16,709 2 8
Subscription losses from death, etc.			291 7 8
Advertisement Discounts, Allowances, etc.			1,140 5 5
Profit for the year carried to Balance Sheet			2,404 6 9
			£20,545 2 6

Cr.]		£ s. d.
Subscriptions		10,602 14 6
Ditto former years		24 4 6
Advertisements		7,917 4 0
Sundry Sales of JOURNAL		952 17 11
Collective Investigation Record Sales and Advertisements		141 7 2
Ditto Ditto Reprints		67 3 1
Sundries—Reading and Binding Covers		37 12 7
One year's Dividends on £5,132 0s. 0d. Consols	150 15 2	
Ditto £1,780 Midland Railway 4 per cent. Debenture Stock	69 12 2	
Ditto £2,000 L. & N. W. Railway 4 per cent. Debenture Stock	78 4 7	
Ditto £1,845 L. & S. W. Railway 4 per cent. Debenture Stock	72 2 10	
Ditto £1,767 G. W. Railway 4 per cent. Debenture Stock	69 2 1	
Ditto £743 N. E. Railway	29 1 0	
		468 17 10
Scientific Grants unused		46 1 1
Discount on Printing, etc.		266 2 10
Sale of Waste		20 17 0
		£20,545 2 6

Balance Sheet, 31st December 1883.

LIABILITIES.

Dr.]	£ s. d.	£ s. d.
Subscriptions paid in advance		519 18 3
Advertisements ditto		193 0 1
Wood Fund		25 0 0
Contributions		542 12 6
Reporting		22 15 0
Engraving		20 14 6
Printing JOURNAL		210 10 9
Paper for JOURNAL		394 16 5
Sundries		1 2 6
Miscellaneous Printing		41 7 9
Committees		1 11 6
Due to Secretaries of Branches		4 7 6
Reports of *Collective Investigation Record*		55 13 0
Stationery		31 8 8
Copying and Assistance		18 18 0
Repairs		16 5 3
Scientific Grants		30 0 0
Law Charges		193 11 8
Fire Insurance, etc.		28 12 4
Coals and Gas		6 12 0
Plant and Type		91 15 3
Plant Depreciation Fund	950 0 0	
Added for 1883	300 0 0	
		1,250 0 0
Premises Redemption Fund	475 0 0	
Added for 1883	150 0 0	
		625 0 0
Due to General Secretary		25 13 7
		4,351 6 6
Balance on 1st January, 1883	16,675 18 0	
Profit carried from Revenue Account	2,404 6 9	
Balance, being total of excess of Assets over Liabilities		19,080 4 9
		£23,431 11 3

ASSETS.

Cr.]	£ s. d.	£ s. d.
Subscriptions—Amount due		975 15 7
Advertisements—Amount due		2,129 11 6
Sundry Sales—Amount due		85 0 11
Due from Hastings Memorial Fund		8 15 0
Alterations of Premises at Cost		1,157 11 11
Furniture and Fittings		319 4 5
Plant and Type at Cost		1.670 19 1
Postage of JOURNAL, amount due		126 0 0
Interest due on £5,132 0s. 0d., Consols	75 7 7	
Ditto £2,000 L. & N. W. Railway 4 per cent. Debenture Stock	39 3 3	
Ditto £477 due from Hastings Memorial Fund	9 6 10	
Ditto £1,780 Midland Railway 4 per cent. Debenture Stock	34 17 2	
Ditto £1,767 G. W. Railway 4 per cent. Debenture Stock	34 12 2	
Ditto £1,845 L. & S. W. Railway 4 per cent. Debenture Stock	36 2 7	
Ditto £743 N. E. Railway 4 per cent. Debenture Stock	14 11 0	
		244 0 7
Carried forward		£6,716 19 0

	£ s. d.	£ s. d.
Brought forward		£6,716 19 0
Reserve Fund:—		
£5,132 0s. 6d. Consols at cost	4,967 10 0	
£2,000 L. & N. W. Railway 4 per cent. Debenture Stock at cost	2,2[illegible]1 7 0	
£1,780 Midland Railway 4 per cent. Debenture Stock at cost	2,01[illegible] 1 6	
£1,767 G. W. Railway 4 per cent. Debenture Stock at cost	1,[illegible]91 6 3	
£1,845 L. & S. W. Railway 4 per cent. Debenture Stock at cost	2,11[illegible] 13 6	
£745 N. E. Railway 4 per cent Debenture Stock at cost	[illegible] 6 7	
		14,214 4 10
		£20,931 3 10
Cash in hand:		
At London and Westminster Bank		2,500 7 5
		£23,431 11 3

Stewart Fund.

£579 invested in 4 per cent. Caledonian Railway Debenture Stock, in the name of the British Medical Association.

Dr.]—1883.		£ s. d.	£ s. d.
Jan. 1.	To Balance brought down		13 5 5
	,, Interest one year £400	15 12 7	
	,, Half year's Interest on £179 Caledonian Railway 4 per cent. Debenture Stock	3 10 1	
	,, Cash	200 0 0	
			219 2 8
			£232 8 1

Cr.]—1883.		£ s. d.
Nov. 13.	By Purchase of £179, 4 per cent. Debenture Stock, Caledonian Railway	179 3 5
Dec. 31.	,, Balance carried down	53 4 8
		£232 8 1

Middlemore Fund.

£500 invested in 4 per cent. North British Railway Debenture Stock, in the name of the British Medical Association.

Dr.] 1883.		£ s. d.
Jan. 1.	To Balance brought down	9 18 8
	,, Interest one year at £500	19 10 5
		£29 9 1

Cr.]—1883.		£ s. d.
Dec. 31.	By Balance carried down	29 9 1
		£29 9 1

Hastings Fund.

£477 invested in 4 per cent. London and North Western Railway Debenture Stock, in the name of the British Medical Association.

Dr.]—1883.		£ s. d.
Jan. 1.	To Balance brought down	46 10 0
	,, Cash	18 12 6
	,, Balance carried down	113 12 6
		£178 15 0

Cr.] 1883.		£ s. d.
Dec. 31.	By Cash	178 15 0
		£178 15 0

We have examined the foregoing Accounts with the Books and Vouchers of the Association, and find the same to be correct.

March 27th, 1884. PRICE, WATERHOUSE & CO.
44, Gresham Street, London, E.C.

LANCASHIRE AND CHESHIRE BRANCH: INTERMEDIATE MEETING.

THE first intermediate meeting for 1884 was held at the Mining School, Wigan, on Tuesday, April 8th, at 2 P.M.; Dr. LEECH JONES presiding. Ninety five members and visitors were present.

Communications.—The following communications were made:

1. Dr. Walter mentioned a case of Suppurating Dermoid Cyst of the Ovary.

2. Mr. Wm. Berry read a paper upon Surgical Dressings.

3. Dr. Davidson described a case of Hystero-Epilepsy in a Boy in which metallotherapy, and magnetotherapy were employed.

4. Dr. Frederick Roberts, London, read a paper on Local Treatment in connection with the Respiratory Organs. At its conclusion a vote of thanks, proposed by Dr. Davidson, and seconded by Dr. Leech, was carried by acclamation.

5. Dr. Leech read a communication on Paraldehyde.

6. Mr. Whitehead read a short paper upon the Treatment of Hæmorrhoids, and demonstrated the application of the electric and oxyhydrogen light in surgical practice.

7. Mr. Brown, Bacup, read a paper on the new Medical Bill, and the duty of general practitioners, and of the British Medical Association in particular, thereto. Thereupon, Dr. McNaught, of Boothfold, proposed, and Dr. Wearing, of Blackburn, seconded, "That Dr. Brown's paper be published in the JOURNAL, and considered by the Medical Reform Committee." Dr. Edward Waters, Chester, moved, Dr. Wallace, Liverpool, seconded, "that the previous question be put," which was carried.

8. Dr. Wallace showed specimens of Excision of Uterus for Malignant Disease; Pyosalpinx and Myofibroma of the Broad Ligament.

Exhibitions.—A handy electric-light apparatus, for use with the speculum, devised by Dr. Kershaw, of Middleton, was shown in the exhibition-room, where there was an exhibition of the newer forms of medical and surgical instruments, by Messrs. Wood, of Manchester. Messrs. Armstrong Brothers showed a selection of microscopes, optical instruments and models. Messrs. Woolley and Co. exhibited specimens of new drugs and special preparations. Messrs. Mottershead furnished a series of peptonised foods and digestive preparations, and showed some of the later forms of medical batteries.

Dinner.—At five o'clock 46 members dined together at the Victoria Hotel.

BATH AND BRISTOL BRANCH.

THE fifth ordinary meeting of the session was held at the Grand Pump Room Hotel, Bath, on Thursday evening, April 17th; E. CROSSMAN, Esq., President, in the chair. There were also present thirty-seven members and two visitors.

New Member.—The following gentleman was elected a member: H. T. Rudge, M.R.C.S., L.R.C.P.Edin., Bristol.

1. Rule 10 of the Branch Rules was altered by the substitution of By-law 17 for Law 26, and by the insertion, after "annual," of the words "or a special."

2. A letter was read from the President of the Council, asking the opinion of the Branch with regard to (*a*) the admission of homœopaths as members of the Association, and (*b*) the retention of those homœopaths who are already members.

The following resolutions were proposed, seconded, and carried unanimously.

1. "That, in the opinion of this Branch, no homœopathic practitioner should be admitted as a member of the Association."

2. "That the General Council be empowered to remove any homœopathic practitioner from the Association on the recommendation of the Council of the Branch in whose area the said practitioner resides."

Communications.—The following communications were made.

1. Dr. Aust Lawrence brought forward some short notes on cases of Uterine Polypi removed by operation. Dr. Swayne made some observations on the cases.

2. Dr. Spender read a paper on Sciatica and its Allies, and their Treatment by the Bath Thermal Waters. Drs. Stewart and Swayne, and Messrs. Bartrum, Collins, Waugh, and Mason, joined in the discussion which followed.

3. Mr. T. P. Lowe read some notes of a case of Sarcoma of the Tibia, and showed microscopical specimens of the growth.

NORTH-WEST PROVINCES AND OUDH BRANCH.

THE twenty-fourth meeting of this Branch of the British Medical Association took place on Tuesday, February 5th, at the residence of Dr. Murray Thompson, Allahabad. There were present: Brigade-Surgeon G. A. WATSON, I.M.D., in the chair, and seventeen members.

New Members.—The following gentlemen were elected members of the Association and Branch: Surgeon Syed Hassan, M.B., I.M.D., Surgeon A. H. Keogh, M.D., A.M.D., Surgeon R. Shaw Simpson, M.B., A.M.D., Surgeon Charles Tyrell, A.M.D. The following were elected members of the Branch, being already members of the Association: Brigade-Surgeon W. H. Corbett, M.D., A.M.D., Surgeon-Major W. M. Courtney, I.M.D., Surgeon-Major T. O'Farrell, M.D., A.M.D., Surgeon-Major J. Barry, M.D., A.M.D., Surgeon Raglan Wykeham Barnes, A.M.D., Surgeon Sinclair Westcott, A.M.D., Surgeon Hayward Whitehead, A.M.D. Dr. **Boileau** drew attention to the difficulty of collecting out-station members' subscriptions, and also to the small number of original communications sent in to the Branch. He pointed with gratification to the printed list of eighty-three members.

Specimens.—Brigade-Surgeon **Corbett** showed some very interesting new specimens of foods, drugs, and instruments.

Catheter-Fever.—Surgeon J. **More Young** read a paper on the causation of so-called catheter-fever. He expressed the belief that surgeons in India, living in a country with a malarious climate, and who had seen much of the phases of the disease, would be more likely to ascribe it to a kind of blood-poisoning, than to accept the nervous theory. But before going into its causation, he drew an outline, for clearness sake, of each of its three types, using Sir Henry Thompson's classification. The first, the acute transient, was the most common form. One of the worst attacks of acute transient he ever saw, seized a strong young soldier four hours after his bladder was completely emptied by the passing of a Holt's dilator through a urethral stricture. After a period of extreme rigor, attended with rise of temperature, he passed through a hot stage, then a sweating stage. He described the three types of the disease: the acute transient; the acute recurring; and the chronic or remittent type. Having referred to the opinions expressed by Sir A. Clark and others in the discussion at the Medical Society of London, he called attention to the very close parallel between the types of catheter-fever and those of malarious fever. He did not wish to prove their complete analogy; but the closeness of their clinical relationships pointed to a similarity of causation. In all types of malaria, there was a virulent material in the blood, and an acute transient attack—a series of recurring attacks—and remittent fever merely differed in regard to saturation with the poison, constitutional strength, and general excretory power. A theory about catheter-fever must be one which would embrace all the types of it. A theory founded on kidney-disease necessarily did not do so. A nervous theory did, but only made them more unintelligible. Rigors following at once the passage of an instrument into the urethra ought not to be included under this term "catheter-fever." They were purely reflex phenomena. He thought that there could be little doubt that the symptoms of catheter-fever were due to blood-contamination, the true acute transient representing the successful attempt of nature to rid herself, once for all, of what was offending; and the chronic representing a more insidious struggle, where a feeble nature was, as often as not, finally overcome. He believed that the bladder was the main inlet for the poisonous material; that the symptoms were not due to retention of effete products by unhealthy kidneys, but to a re-introduction into the circulation of these, already excreted and in a septic condition; and that thus there was produced a kind of septo-uræmia. To understand how this took place, it was necessary to consider the condition of the bladder before and after "entrance into catheter-life." When, in long-standing cases of destructive disease associated with overflow of urine, the bladder was suddenly emptied by the catheter, a local condition ensued which, in his opinion, was the precursor and cause of the so-called catheter-fever. The atrophy of the muscular element in the bladder-wall, and development in its place of stiff connective tissue, prevented that corrugation of the mucous membrane and close appliance of the vesical walls against one another, which were absolutely necessary to the proper regulation of the local blood-pressure. Consequently, the blood-vessels, bereft of their long-accustomed support by the pent up urine, were taken at a disadvantage; an active congestion was set up; and absorption by endosmosis of the remaining urine, which was usually of a low specific gravity and swarming with micro-organisms, was rendered inevitable. Every successive emptying of the bladder, unless tone were in the meantime established, meant a further passage of urine into the circulation, and a consequent remittence or intermittence of febrile symptoms. Where the use of the catheter was begun at a comparatively early stage, this result did not happen; and the explanation of this was, not that the kidneys were still, for the most part, normal, but that the necessary degree of atony of the bladder-walls had not been reached. What had been said of the bladder applied, in some cases equally well, to the ureters and pelves of the kidneys, through which, also, some absorption of urine might go on. It was probable that congestion of the kidney-substance proper as a result of release from pressure of urine would not be great, if indeed any at all. The absence of any of the usual clinical signs of congested kidney was a notable fact, and threw additional light, though negative, on the true starting point of the fever. Upon the functional activity of the kidneys would greatly depend the prognosis of the case. And yet experience had shown that the general excretory power had been so weak, or the absorption of the material so continuous, that death had ensued where no appreciable renal lesion had been found. Death under such circumstances, however, must be exceedingly rare.

The point on which he wished to insist was, that the withdrawal of the urine was the efficient cause of the subsequent fever—a withdrawal which, in relation to the mucous membrane of the bladder, acted after the fashion of a cupping-glass, subverted the osmotic relationships of the vesical blood-vessels, and thus caused a peculiar train of symptoms, which would be much more faithfully described by such a name as septo-uræmia than by such a phrase as "catheter-fever." The author thought that his view of the matter suggested a mode of dealing with certain cases which was worthy of trial. It appeared to him that in all cases of men advanced in life, who had been suffering for years from an enlarged prostate, or other destructive disease causing habitual retention of urine, and more especially when they presented evidence of grave kidney-affection, the only safety lay in drawing off the urine by degrees. He suggested that, after drawing off a certain proportion of the urine, some antiseptic or stimulating solution, such as boracic acid, should be injected; that a larger and larger proportion should be withdrawn at each visit, still continuing the substitution of the antiseptic solution, until, proceeding gradually in this way, the bladder-walls had had time to recover a proportion of their lost tone; and at the same time the urine had been deprived of its septic properties. A consideration of a very similar nature forbade drawing off at one sitting the whole contents of a chronic hepatic abscess—a consideration, namely, that there would be either a large influx of atmospheric air, or a vastly increased production of pus from the congested abscess-walls. Exactly similar directions were given for the treatment of chronic cases of pleuritic effusions, serous or purulent. Theoretically, he believed that, as the bladder went on contracting to a greater and greater extent, treatment should be so directed that it should always be kept full, so as to prevent any loss of pressure. Still, in the great majority of cases, even treated in a gradual way, some absorption of urine would take place; but it should not be septic urine, and in a few days, with care, absorption ought to cease altogether. It seemed to him that were this plan acted upon, and some tonic constitutional treatment at the same time persisted in, death from this peculiar fever would be a rare event.—A discussion followed, in which Dr. Corbett, Mr. G. C. Hall, Mr. Watson, Dr. M. Thomson, Mr. Gaisford, Dr. Boileau, Dr. H. S. Smith, Mr. W. A. Morris, and the author, took part.

COLLECTIVE INVESTIGATION OF DISEASE.

MEETING OF THE GENERAL COMMITTEE.

A **meeting** of the General Committee was held at 161A, Strand, on Wednesday, April 9th, 1884, at noon, Professor **Humphry** in the chair. Present: Dr. A. Sheen (Cardiff), Dr. Mahomed, Mr. George Eastes, Mr. Shirley Murphy, and Mr. Oswald Browne (for the Secretary).

Letters regretting inability to attend were received from Dr. Cavafy, Dr. John H. Galton, Dr. Charles Parsons (Dover), Dr. Trend (Southampton), Dr. Jones Morris (Portmadoc), Dr. Cresswell Rich (Liverpool).

The minutes of the previous meeting having been read and confirmed, the minutes of the Standing Subcommittee were read. These contained a recommendation that the returns received upon Puerperal Pyrexia, together with a report upon them by Dr. Galabin, should be included in the forthcoming issue of the *Record.* In accordance with resolutions of the Committee at their last meeting, a modification of the card on the Etiology of Diphtheria had been issued, and a form of inquiry had been drawn up concerning the habits of aged persons who had attained or passed the age of eighty years.

This inquiry, with a memorandum written upon the subject Professor Humphry, was then considered and approved by the Committee.

An inquiry concerning albuminuria occurring in apparently healthy persons, which had been recommended by the Subcommittee, was received and considered by the Committee, with a memorandum upon the subject written by Dr. Mahomed and Dr. Burney Yeo.

A letter was read by Mr. **Eastes** on behalf of the South London District Committee, suggesting Somnambulism as an important subject for investigation. Mr. Eastes read also a letter which he had received from Dr. Hack Tuke, enclosing a form of inquiry already issued by him upon this subject. The matter was referred for the consideration of the Standing Subcommittee.

MEETING OF COMMITTEE.

A meeting of the Committee was held at 161A, Strand, on Thursday, April 10th, at 2 P.M., Professor **HUMPHRY** in the chair. Present: Dr. Mahomed, Dr. Bowles (Folkestone), and Mr. Oswald Browne (for the Secretary).

On the recommendation of the Subcommittee, it was decided that the *Collective Investigation Record* should be next published in July, and an estimate of the expenses attaching to its issue was received and considered by the Committee.

An inquiry concerning albuminuria in apparently healthy persons, and another concerning the habits of aged persons, were presented from the General Committee, with a recommendation that they should be issued at an early date; and it was decided that steps should at once be taken to print and circulate these inquiries.

Dr. MAHOMED reported that, in reply to a communication sent by him on behalf of the Committee to Professor Lange, the Honorary Secretary of the International Medical Congress (Copenhagen), it had been arranged that the subject of International Collective Investigation of Disease should be brought before a general meeting of the Congress by representatives of the Committee of the British Medical Association, with a view to some organised action being taken to promote such inquiries.

The Committee decided to invite Sir William Gull, Bart., M.D., F.R.S., to represent them upon this occasion.

The CHAIRMAN read a letter from Dr. Herringham, and the Committee acceded to a request that, during his absence from England, Mr. Oswald Browne might be allowed to undertake the work of Secretary.

LIST OF RETURNS RECEIVED IN MARCH, 1884.

I.—PNEUMONIA (80).

Francis J. Allan, M.D.; John E. Allen, Esq.; A. J. Alliott, Esq. (2); A. de W. Baker, Esq.; George Beatson, M.D.; Wm. Berry, Esq.; C. Biddle, Esq.; J. Mackenzie Booth, Esq.; Chas. Boyce, M.B. (3); Essex Bowen, M.D.; C. Broomhead, M.D. (2); H. Langley Browne, Esq.; W. Bruce, M.D.; Mactie Campbell, M.D.; J. G. Clendinnen, Esq. (2); S. D. Clippingdale, M.D.; E. O. Daly, Esq.; H. Denne, M.D.; L. Drutt, M.D.; James Edwards, Esq.; Thomas Fielding, M.D.; D. C. Firth, Esq.; D. O. Fountaine, Esq.; George R. Fraser, Esq.; J. Farrant Fry, Esq.; T. W. H. Garstang, Esq.; Chas. E. F. Gerald, M.D.; J. W. Gooch, Esq.; A. O. Grosvenor, M.D.; A. Hamilton, Esq. (2); M. K. Hargreaves, M.B. (2); W. L. Hunter, M.D.; P. W. Macdonald, M.B.; D. J. Mackenzie, M.D.; J. I. Mackenzie, M.B.; F. B. Mallett, M.D.; H. Cowley Malley, M.B.; P. Miall, Esq.; J. Mulvany, M.D.; W. Mumford, Esq.; J. Bernard Neale, Esq.; James Neil, M.D.; Thos. J. Ollerhead, Esq.; Fred. S. Palmer, M.D.; Robert Park, M.D. (2); C. H. Parkinson, Esq.; T. Fredk. Pearse, M.D. (2); Thos. F. Raven, Esq. (3); C. J. Renshaw, M.D. (2); Richd. Rice, Esq.; A. W. Mayo Robson, Esq.; G. T. Schofield, Esq.; W. Sellers, Jun., M.B.; C. E. Shelly, M.B.; Herbert Slowman, Esq. (2); P. Caldwell Smith, Esq.; H. O. Stuart, Esq.; Arthur Sutherland, M.B.; H. Coupland Taylor, M.D.; James Taylor, Esq.; F. T. Underhill, Esq. (2); W. W. Vaughan, Esq.; E. G. A. Walker, Esq.; J. Walters, M.B.; G. H. Whitaker, Esq.; J. W. Wolfenden, Esq. (2).

II.—CHOREA (9).

A. M. Adams, Esq.; J. Bellingham, Esq.; John Buxton, M.D.; A. Hamilton, Esq.; Duncan J. Mackenzie, M.D. (2); Wm. J. Mackie, Esq.; Peter Tytler, M.D.; J. Walters, M.B.

III.—ACUTE RHEUMATISM (15).

J. Bellingham, Esq. (2); E. O. Daly, Esq.; J. Mackenzie Booth, Esq.; Wm. Frew, M.B.; Edwd. G. Gilbert, Esq. (2); A. Hamilton, Esq. (2); Duncan J. Mackenzie, M.D.; Wm. J. Mackie, Esq. (2); E. G. A. Walker, Esq. (2); J. W. Wolfenden, Esq.

IV.—DIPHTHERIA (Clinical, 4).

Alfred Harvey, M.B. (3); Edward T. Wilson, Esq.

IVa.—DIPHTHERIA (Sanitary, 1).

Edward T. Wilson, Esq.

VII.—PUERPERAL PYREXIA CARDS (3).

Augustus H. Cook, Esq.; J. Holroyde, Esq. (2).

VII.—PUERPERAL PYREXIA FORMS (13).

Moses George Boggs, Esq.; J. G. Catageorgiades, M.D.; Augustus H. Cook, Esq. (2); William J. Cox, Esq.; Fred. B. Fisher, Esq.; Walter Main, Esq.; George T. McKeough; William Nomi, M.D.; Martin Perry, M.D.; A. M. Stalker, M.B. (2); Wm. Henry Wright, Esq.

CORRESPONDENCE.

MEDICAL MEN AND LIFE-ASSURANCE.

SIR,—Your article on life-assurance should be read by the directors of our assurance-companies, many of whom do not appreciate the advantages of having trained experts connected with their offices. In London, it is true, there are specially selected medical referees for all large offices, but in the provinces, the medical examiners are chosen in a haphazard manner.

Allow me to direct your attention to the way in which medical referees are chosen by some offices. I shall not say "in uno disce omnes," but I may say that the practice I am about to describe is very general. The —— Assurance Company is one of our largest offices; its business is pushed by active agents. The district agent here appoints the medical referees. He makes a periodical raid on certain towns. He called on me, and offered me the position of medical referee. I accepted; but, as soon as I heard the condition, that I was to insure my life in his office, I curtly refused. He told me "premium" would be covered by "fees." He very soon was able to obtain another in my place, a gentleman who insured his life.

For one year, this gentleman examined for the office in question. The second year, there were not many fees. The active agent went to another medical man, appointed him medical referee on the same conditions, and gave him whatever business there was.

The first medical man who was appointed wrote to the head office. He obtained no redress. The same agent will probably next year appoint another medical referee, and thus increase his own commission and the number of insured in his district. He has the character of being a smart man, and has an ambition to occupy a higher position. The question of commission is a very important one to the agent. If the medical examiner be known to be strict and conscientious, the agent will not bring many patients to him. There is no commission for rejected candidates for life-assurance. Sharp agents will take doubtful lives to "sharp" men who are willing to play into agents' hands—the result being fees for both.

In the insurance world, there are "offices and offices," "agents and agents."

Many bad lives are passed annually; plainly, many frauds are committed. Directors in town may not know of these frauds, but if not, they should be enlightened.—Yours truly,

MEDICAL REFEREE.

SIR,—Allow me to express my cordial approval of your article on life-assurance examinations. The imbecility of the forms supplied to us is of course notorious, but a few companies, such as the "Eagle," wisely ask no questions, but only ask for a report, and the "Rock" does almost the same. I need not say that I enjoy writing a report for the "Eagle" and "Rock" far more than filling up details of an applicant's "temperament," "colour of hair and eyes," and so forth, which I have to do, say, for the "British Empire."

But far more important are your remarks on the selection of examiners. I do not hesitate to say that the laxities in these respects of most offices add enormously to the premiums required of survivors. I never dare speak publicly of this, partly because I have as much insurance-work as I want, partly because I am unwilling to point to any respectable young general practitioner as incompetent. But constantly I find large offices no longer sending cases to me, and find they have been taken to the relative, or home-doctor, of some clerk in the office—men who may be quite unaccustomed to consultation-work. Applicants are thus passed, as if for a working man's club, and within the last few weeks two cases thus passed by small local doctors, instead of by myself (as the old referee of those two companies), died; one of aortic regurgitation (for which I had declined to consider his application, and spared him a "decline"), and one of phthisis. I have no interest in the matter but a public one, and I write to you privately, but hammer at the subject. To select referees of standing, and to refer all cases to them, would save thousands a year to English offices.

Yours truly, A PROFESSIONAL PHYSICIAN.

THE RECENT DISCUSSION ON PELVIC SURGERY AT THE HARVEIAN SOCIETY.

SIR,—In the JOURNAL of April 12th, Mr. Lawson Tait writes a letter on the above subject which contains the following passage: "And I have ascertained that he altered the proof of the secretary's correct report, and inserted this misstatement." I have called the attention of the Honorary Secretary of the Harveian Society to this statement, and shall be obliged by your publishing the enclosed letter received from him in reply.—Yours truly,

J. KNOWSLEY THORNTON.

22, Portman Street, W., April 22nd, 1884.

"SIR,—In reply to your letter, I have no hesitation in asserting that the statement to which you refer is incorrect. Not having myself been supplied with a proof of the report in question from any of the medical journals, I could not have submitted the proof to you for correction. On the contrary, the notes of your remarks were furnished by yourself at my request, and embodied in the usual way in the report which was sent to the journals.—I remain, sir, yours sincerely,

"WM. EWART, M.D., Honorary Secretary
Harveian Society of London.
"J. KNOWSLEY THORNTON, Esq."

MEDICO-LEGAL AND MEDICO-ETHICAL.

MEDICAL ETIQUETTE.

SIR, A. and B. are two practitioners, residing about four miles apart; A. being old established, B. having recently succeeded to his practice.

In December, 1881, A. was attending Mrs. H. (new comers to the neighbourhood) in her first confinement, not far from B.'s house, and, wanting assistance, was asked to consult B., which he did. Fourteen months afterwards Mr. H. called on B. and requested him to attend his wife in her second confinement (taking place in a few months). B. refused, saying they were A.'s patients. A little while afterwards Mr. H. came again, and said he had informed A. that they were going to leave him and seek other medical advice, also that, even if he (B.) did not attend, they should not employ A. again. B. then consented to attend, and did so.

Again; a little while ago a Mr. D. called on B. and asked him to go at once and see his wife, who had been ill some time, and (he said) appeared to be sinking. On B. questioning him, he said A. had been attending, but he had that day told him not to attend any more, as he had offended them, and they wanted to change their medical man. B. suggested that he should meet A. in consultation, but this Mr. D. refused, saying he had told A. not to come any more. When B. arrived, he found that A. had just been, and that Mrs. D. had consented to a consultation, which was arranged for two days after. At the solicitation of Mr. D., A. went upstairs and just spoke to Mrs. D., but did not enter into the case or express any opinion whatever. Unfortunately, B. was prevented from meeting A. at the time appointed, by an urgent case of his own; he wrote to A. to that effect, and offering so meet him at any other time. In the evening, Mr. D. came to B.'s house and said A. had given up the case entirely, and would be very pleased if B. would take it on, which he accordingly did, and attended next day.

Has B. acted in any way unprofessionally towards A.: 1st, in attending Mrs. H. in her second confinement, and ever since; 2nd, in going to see Mrs. D.; 3rd, in taking the case of Mrs. D. into his own hands?—I am, etc.,

X. Y. Z.

⁂ 1. Under the circumstances related, B. does not appear to have acted unprofessionally towards A. in attending Mrs. H. in her second confinement.

2. In the absence of A., and the non-existence of urgency of the case, B., notwithstanding the husband's solicitation, should, according to the strict letter of the *Code of Ethics*, have scrupulously refrained from visiting Mrs. D. until the time appointed for the consultation.

3. Assuming that B. had loyally assured himself that A. had, as a matter of fact, resigned the case—not otherwise—he was justified in taking charge of the patient.

PAYMENTS OF COURT FEES.

SIR,—I beg to call your attention to the circumstances of a case that has recently been before two magistrates at the County Police-court, Manchester.

On January 1st, owing to a quarrel that had recently taken place, I was waited on by a wounded man, requesting my attendance at the police-court to give professional evidence on his behalf. This I declined to accede to, stating that, if the magistrates required my services, they would send me word in the usual form. In the course of a few hours, the police served me with a summons, ordering my attendance at the police-court (a distance of five miles from my residence) on January 4th. I obeyed the summons, and attended the court. Owing to a cross summons, the case was adjourned to January 8th. Instructed by the police, I again attended the court, and again gave my professional evidence. The case being concluded, I applied for my fee of two guineas, on account of the two separate attendances. To my astonishment, the magistrates refused to pay it, stating that they had no power in the matter; furthermore, they said that, if I wanted my fee, I must apply to the man who had been wounded, and in whose favour I had given my evidence. I declined to do anything of the kind, explaining that I had refused to attend the court on the man's account, but, when served with the police-summons, I considered that it was compulsory for me to obey it. Furthermore, I asked them how it was that, if they could compel me to attend court, they had no power to grant me a fee. As I could get neither fee nor satisfaction, I left the court.

I have since laid the whole circumstance before the notice of the Home Secretary, who, after the expenditure of a large amount of paper, politely informs me that he cannot interfere in the matter. I shall be glad to know what protection a man has against such procedure. If he decline to obey the summons, everyone knows the consequence; on the other hand, a witness in a Crown prosecution cannot refuse to be sworn. As the law stands, we have no protection in such a case. Magistrates seem to be able to summon a medical man to court at their discretion, and inform him that they have no power to pay his fee. Cannot the Parliamentary Committee of the British Medical Association use their influence in getting it so amended, that medical men are not exposed to such acts of injustice as we are at present liable to?—I am, sir, yours truly,

CHARLES E. SMITH, L.R.C.P.Lond., M.R.C.S.

Stretford, near Manchester, April 8th, 1884.

⁂ Our correspondent should have apparently made terms with the wounded man before attending the court. It is clear that, as Mr. Smith was able to give professional evidence, the wounded man must have been his patient. In an ordinary assault-case, the police would have nothing to do with the case beyond serving the summonses on behalf of the complainant. The State does not, and probably never will, undertake to pay the fees of medical men when summoned by private parties. Perhaps if Dr. Smith were to bring an action in the county court against the wounded man, for his professional remuneration, he might recover a fee of half a guinea for each attendance.

TITLES ON DOOR-PLATES.

SIR,—Would you kindly inform me if it is proper to append the letters "F.R.C.S. to one's name on the door-plate? Yours truly,

A MEMBER.

⁂ Although there is not, so far as we are aware, any written medico-ethical rule condemnatory of the affix of such letters on the door-plate of a medical practitioner, it is contrary to immemorial professional usage, and, in our opinion, inadvisable.

THE INTERNAL DISCIPLINE OF THE MEDICAL PROFESSION.

SIR,—Dr. Evatt has drawn the attention of the profession to a very serious defect in the want of discipline over the conduct of medical men. Almost any kind of misconduct of a moral or medico-ethical character is tolerated. The corporations, colleges, universities, or Medical Council, exercise no power over such matters, therefore no remonstrance or caution is given to the offender. As a rule, grave misconduct brings its own punishment quickly and effectively. The British Medical Association is also very defective on this point. I have never heard of any member being expelled or suspended for any misconduct, unless he has been struck off the *Register*, except for non-payment of subscription. There are certain misdemeanours and acts of an unprofessional character which ought to be dealt with by the Association. Every Branch ought to have a board of censors, whose duty it would be to deal with all questions of a medico-ethical character, etc. I hope the suggestion will be taken up by the Council.—Yours, etc.,

JNO. BROWN, L.R.C.P.Lond.

Bacup, April 19th, 1884.

MEDICAL CHARGES: GILES AND WHITE v. FEAST.

SIR,—There is a slight inaccuracy in the report of this case contained in your publication of the 19th instant, which, as solicitor on behalf of the plaintiffs, I should be glad if you would correct.

It was not proved at the hearing, as stated in your report, that "the claim was for £25 15s. 6d. for attendances on the defendant's wife during her confinement, and was calculated at 10s. 6d. a visit," nor that "Dr. Giles had told the defendant beforehand what the charges for the confinement would be." On the trial, however, the defendant raised the plea that 10s. 6d. was to be the fee for each and every visit, which Dr. Giles denied; and, in answer to a question by the learned judge, the jury found that no such agreement had been made, nor as to the fee to be paid for the confinement generally, believing, therefore, Dr. Giles's evidence that the 10s. 6d. a visit referred to the preliminary ones only.

Two other medical gentlemen were called, who, in view of the excessively difficult and trying nature of the case, swore that the charges were fair and reasonable; and one of them stated that he should certainly have charged more than the plaintiffs had, and the other corroborated Dr. Giles's statement as to nature of services rendered; and it is indeed a mystery how, in the face of this evidence, and of the summing-up of the learned judge, the jury should have found a verdict for less than the amount claimed.

I may add that the jury were directed by the judge to dismiss from their minds the defence that the charges were excessive for a person in the defendant's present position, and were only to take into consideration his position at the time the doctor's services were rendered.—I am, sir, your obedient servant,

St. Ives and St. Neots, Hunts, April 21st, 1884. ARTHUR E. CRANFIELD.

SIR,—A young gentleman, a recent graduate in medicine, returned to his native parish, and, while waiting for something to turn up, indulged in a little private practice in his immediate neighbourhood. To this, I, the medical officer of the parish, made no objection; but I certainly thought he was going a little too far when he certified a member of a family (whom I had been in the habit of atttnding) into the district asylum as a pauper lunatic. I accordingly wrote, and requested an explanation as to how he came to show such a want of courtesy towards me, ignoring me entirely; but all the satisfaction I received was a reply to the effect "that the people had sent for him, and he failed to see that he had been guilty of any discourtesy." Your opinion will, therefore, oblige, as it is very desirable that newly fledged practitioners should learn that there is such a thing as "medical ethics."—I am, sir, yours faithfully, A PARISH DOCTOR.

⁂ Though it is, we believe, the ordinary rule of the parish authorities to obtain, in cases of pauper lunatics, the necessary certificate from their medical officer, we are not aware of any legal impediment to such document being given by other duly qualified medical practitioners; and, in the above mentioned case, we think it not improbable that, as a young practitioner on the threshold of active professional life, he was ignorant of the practice, and unwittingly deviated therefrom. Be that as it may, a courteous reminder of the relative duties of practitioners to each other can scarcely fail, in others than those of a perverse nature, to induce reflection, and thereby eventually teach the lesson of wishing to do as one would be done by.

A PROVINCIAL MEMBER should commence his action against the lunatic himself, in his own name. The lunatic should appear by a "next friend," but it rests with those who have charge of him to get one appointed.

SIR,—Will you kindly tell me what are the powers a "committee" has over a lunatic, especially as to taking him out of the asylum in which he may be confined? whether he can do this from his own authority, or whether it be necessary for him to ask permission of some one (and, if so, who?) in authority? Local legal opinion seems undecided on the point, or, rather, ignorant thereof. In the particular case to which I refer, the patient was placed in an asylum by the relation who was afterwards made "committee."—I am, etc.,

A CONSTANT READER.

⁂ The powers of the "committee of the person" of a chancery lunatic comprise fixing and varying his place of abode, selecting his attendants, regulating his establishment, and providing generally for his comfort, subject to the scheme of maintenance fixed by the Masters in Lunacy. The power of the committee to vary his place of abode is also affected by any order or direction which may have been given by the masters restricting it; in which case their leave must be obtained. In any case, notice of removal must be sent to the Board of Visitors. "A Constant Reader" will find the powers of the "committee of the estate" given at length in Pope's *Law and Practice of Lunacy*, 1877.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

SCHOOLS AND INFECTIOUS DISEASES.

In our issue of April 12th, we commented upon a memorial from the medical officers of health practising in Sligo and other towns in Tubbercurry Poor Law Union, presented to the Commissioners of National Education in Ireland, referring to the consequences arising from the spread of infectious diseases to which children are liable from "schools as centres of contagion." We have now before us the reply of the commissioners, and a letter addressed by Dr. John Molony, medical officer of health of Collooney, published in a recent issue of the *Daily Express.* These documents necessitate some further comments. Our medical brethren believe that, if the teachers of schools were wholly, or even partially, relieved from pecuniary loss when their schools were closed owing to the prevalence of contagious febrile diseases, they would be more ready to communicate with the health-officer at the outbreak of sickness, and thus aid in preventing the diffusion of the malady. The Commissioners, in substance, say that when a school has been closed by medical certificate, they have always treated their teachers with the utmost consideration compatible with their rules, that during the time the school is closed the salary of each teacher is continued in full, and that, when necessary, they sanction the postponement of the results-examination to some subsequent period of the year. We cannot but think that the reply of the Commissioners is fair, and covers the whole ground as far as the teacher is concerned.

The education laws require that every child shall attend school; the sanitary laws require that no person infected by disease, or liable to spread infection, shall be exposed, etc. Hence, the duty of the teacher is plain; he should not require, but forbid the attendance of any infected or infective scholar. The managers of the schools are bound by the Education Code, upon the facts being reported to them, to seek for guidance from the sanitary authority when contagious fevers affect any scholars of their school, and to acquiesce with the opinion of the medical officer of that authority. The Commissioners, if satisfied upon the circumstances of each case, are bound to see, through their inspector, that the Laws of Public Health, and the enactments of the code carrying out those laws, are faithfully obeyed. It appears then that, if the laws of the land be faithfully carried out by each and all the authorities entrusted with their administration, no harm should happen to the healths of school-going children, and no pecuniary loss should fall upon school-teachers.

While thus pointing out the position of teachers, managers, and commissioners of education, we must not lose sight of the responsible duties expected to be undertaken by medical men. The teacher complains that he is damaged in his pocket by fever-sicknesses occurring to his scholars. The attendance of the doctor upon children sick of fevers is to him a source of profit. Can we expect the doctor to diminish the probability of gain by the information he is expected to give of the existence of infective disease among his patients, who may have relatives attending the school? Yes, we do expect this act of self-negation; and we may proudly say that the rule of the profession is to aid by every means the diminution of the spread of contagious maladies.

There is, however, one great work to be carried out in these matters. No man would willingly see a little child suffer from a preventable disease. No man would willingly compel a little child to go into a crowded schoolroom where infected children are received; hence, it appears to us that our medical brethren, knowing full well the infective power of febrile diseases, the means by which they are spread, the plain and easy way of avoiding infection—"go not nigh thereto"—should clearly explain to their friends, to sanitary and to educational authorities, the means of prevention of the spread of diseases in schools stated in our notice of April 12th. While they may confidently state that these means have, in numberless instances, been proved to be effectual, they may add that they have the published approval of the Educational Department in Ireland and in England.

Health of English Towns. In the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons, 5,818 births and 3,773 deaths were registered during the week ending the 19th instant. The annual rate of mortality per 1,000 persons living in these towns, which had been 22.7 and 20.4 in the two preceding weeks, rose to 22.5 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow:—Derby, 13.1; Brighton, 14.8; Leicester, 16.1; Huddersfield, 17.0; Hull, 19.9; Plymouth, 20.0; Birmingham, 20.2; Blackburn, 20.3; Birkenhead, 20.7; Newcastle-upon-Tyne, 21.0; Bristol, 21.1; Salford, 21.2; London, 21.4; Sunderland, 21.6; Halifax, 22.5; Bradford, 22.7; Sheffield, 23.6; Norwich, 25.4; Liverpool, 25.5; Portsmouth 25.5; Preston, 25.7; Nottingham, 26.2; Cardiff, 26.2; Leeds, 28.4; Oldham, 28.5; Wolverhampton, 28.6; Manchester, 28.7; and Bolton, 28.7. In the twenty-seven provincial towns the death-rate last week averaged 23.4, and therefore exceeded by 2.0 the rate recorded in London. The 3,773 deaths registered last week in the twenty-eight towns included 189 which resulted from whooping-cough, 159 from measles, 88 from scarlet fever, 40 from "fever" (principally enteric), 37 from diarrhœa, 24 from diphtheria, and 17 from small-pox; in all, 554 deaths were referred to these principal zymotic diseases, against 529 and 522 in the two preceding weeks. These 554 deaths were equal to 14.7 per cent. of the total deaths, and to an annual rate of 3.3 per 1,000. In London, the zymotic death-rate was equal to 3.8, and exceeded by 0.9 the average rate in the twenty-seven provincial towns, among which it ranged from 0.3 and 0.8 per 1,000 in Hull and Leicester, to 4.2 in Manchester, 4.5 in Liverpool, and 6.7 in Wolverhampton. The deaths referred to whooping-cough in the twenty-eight towns, which had increased in the four preceding weeks from 143 to 192, were last week 189, and caused the highest death-rates in London, Liverpool, Manchester, and Bolton. The fatal cases of measles, which had been 143 and 142 in the two previous weeks, rose to 159; this disease showed the largest proportional fatality in Norwich, Nottingham, Portsmouth, and Wolverhampton. The 88 deaths from scarlet fever showed an increase of 15 upon the low number in the preceding week, and caused the highest death-rates in Liverpool, Cardiff, Preston, and Sheffield. The deaths referred to different forms of "fever," which had increased from 33 to 49 in the four previous weeks, declined again last week to 40, and caused the highest proportional fatality in Bradford. The 37 fatal cases of diarrhœa differed but slightly from the average. The deaths referred to diphtheria in the twenty-eight towns, which had been 28 in each of the two previous weeks, declined to 24, of which 18 were returned in London. The fatal cases of small-pox in these twenty-eight towns, which in the four previous weeks had steadily increased from 13 to 23, declined last week to 17, of which 11 occurred in London, 2 in Liverpool, 2 in Newcastle-upon-Tyne, 1 in Wolverhampton, and 1 in Sheffield. The prevalence of small-pox in London has recently shown an alarming increase; during the past ten weeks the number of small-pox patients in the Metropolitan Asylum Hospitals has increased from 97 to 405; the number of admissions during last week, however, showed a decline from the average weekly number during the past month. The rate of mortality from diseases of the respiratory organs, judged by the metropolitan returns, was considerably below the average; the deaths referred to these diseases in London, which had been 357 and 285 in the two preceding weeks, rose again to 318; they were 99 below the corrected weekly average, and were equal to an annual rate of 4.2 per 1,000. The causes of 106, or 2.8 per cent. of the 3,773 deaths registered last week in the twenty-eight towns were not certified, either by medical practitioners or by coroners. The proportion of uncertified deaths in London did not exceed 1.8 per cent., while it averaged 3.6 per cent. in the provincial towns, and showed the largest excess in Sheffield, Salford, Oldham, and Halifax.

Health of Scotch Towns. During the week ending the 19th inst., 933 births and 562 deaths were registered in the eight principal Scotch towns, having an estimated aggregate population of 1,254,607 persons. The annual rate of mortality, which had steadily increased in the five preceding weeks from 20.9 to 25.2 per 1,000, declined last week to 23.3, which exceeded by 0.8 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns the death-rate was equal to 14.8 in Leith, 15.1 in Perth, 18.7 in Dundee, 21.3 in Edinburgh, 23.6 in Greenock, 25.2 in Glasgow, and 38.3 in Paisley. The very high rate in the last-mentioned town was due to the continued fatality of measles. The 562 deaths registered last week included 96 which were referred to the principal zymotic diseases, against numbers increasing from 74 to 103 in the four previous weeks; of these, 29 resulted from whooping-cough, 16 from measles, 16 from diphtheria, 15 from diarrhœal diseases, 12 from scarlet fever, 7 from "fever," and 1 from small-pox. These 96 deaths were equal to 17.1 per cent. of the total deaths, and to an annual rate of 4.0 per 1,000, which exceeded by 0.7 the average zymotic rate recorded last week in the twenty-eight English towns.

The lowest zymotic rates in the Scotch towns were 1.6 in Leith, and 1.7 in Perth, whereas the rate was equal to 4.3 in Greenock and 8.9 (of which 4.5 was due to measles) in Paisley. The deaths referred to whooping-cough, which had been 42 and 41 in the two preceding weeks, declined to 29, of which 15 occurred in Glasgow, 6 in Edinburgh, and 3 in Dundee. The 16 fatal cases of measles were 3 less than the number in the previous week, and included 5 in Edinburgh, 5 in Paisley, 3 in Glasgow, and 3 in Dundee. The deaths from diphtheria, which had been 18, 12, and 10 in the three preceding weeks, rose again to 16, of which 5 occurred in Aberdeen, 4 in Greenock, and 4 in Glasgow. The 7 fatal cases of "fever" showed a decline of 5 from the number in the previous week, and included 4 in Glasgow, where a death from small-pox also occurred. The mortality from diseases of the respiratory organs in these towns was below the average, and equal to an annual rate of 4.5 per 1,000, which slightly exceeded the rate for the same diseases last week in London. As many as 89, or 15.7 per cent., of the 562 deaths registered last week in these towns were uncertified.

MILITARY AND NAVAL MEDICAL SERVICES.

PROMOTION IN THE ARMY MEDICAL DEPARTMENT.

SIR,—There is a precedent in the course suggested by your correspondent, "X. Y. Z.," in the JOURNAL of the 19th instant. By a former warrant, a bonus was given to officers of the administrative ranks retired at 60 years of age for the good of the service as a whole. Medical officers specially promoted to deputy and surgeon-general out of their regular turn have no grievance at all if retired after five and three years in the rank respectively, as they have been amply repaid for anything they ever did by the higher pay drawn. Had they been in the combatant branch, they would have only obtained brevet promotion. Under older warrants, no inspector-general of hospitals could hold that rank for longer than three years. In the Indian Service, the tenure is limited to five years, with a bonus on retirement. Several such officers have been for years blocking promotion, and so obliging us good men to retire on the lower scale of pension, a grievous hardship to the many.—I am, etc., A. B. C.

FIELD HOSPITALS.

SIR,—A short time ago a military paper announced that a committee was about to be, or had been (I forget which) formed to consider and report upon the best equipment for Field Hospitals, and that a competent officer had been appointed president. Now, what I wish to enquire is, would it not be more in consonance with common sense to allow military medical officers to consider, and report to the military authorities, on such a strictly military medical professional subject? Suppose, for example, that a committee was about to be formed to consider and report upon the best equipment for the mounted branches of the service, I daresay cavalry officers would be very much astonished if an admiral of the Fleet was appointed president of the committee. And yet our combatant critics are no means sparing of abuse should the Field Hospital arrangements exhibit any want of perfection of equipment on service. Much better let our military surgeons manage their own affairs is the humble opinion and advice of—Yours faithfully,

EXPERIENTIA.

HOSPITAL AND DISPENSARY MANAGEMENT.

A NEW HOSPITAL.

A NEW hospital erected at Gravesend by the Corporation of the City of London, for the reception of patients suffering from infectious diseases, was on April 17th opened by the Lord Mayor. The new institution is to serve the purposes of the Port of London; and the work of its establishment has been performed under the authority of the Port of London Sanitary Committee of the Corporation, by whom the cost of its maintenance will be undertaken. The new building has taken the place of the hospital-ship *Rhin*, an old French battle-ship, which during the last eleven years has been placed by the Admiralty at the service of the Corporation free of charge. The ceremonial was performed in the pavilion, in presence of members of the Port Sanitary Committee, the Metropolitan Asylums Board, and the Gravesend Town Council. Among those present were the Mayor of Gravesend, Lieutenant-Colonel and Sheriff Cowan, the Mayor of Rochester, the Town Clerk of Gravesend, the captains of the various training-ships on the river, Mr. E. H. Galsworthy (Chairman of the Asylums Board), and Mr. Ernest Hart. The Lord Mayor said everything connected with the hospital had been very carefully considered; and he thought they ought to thank Mr. Lyon, his predecessor, and the committee, very warmly for the great attention they had given to this matter, and for having brought this building, which he believed to be admirably situated and suited for its purposes, to a successful completion. His lordship then formally declared the building open, and handed the keys to Dr. Collingridge, the medical officer. In the evening, the Mayor (Mr. George H. Edwards) entertained the Lord Mayor of London and the Corporation of Gravesend. The opportunity was taken to present the Mayor with his portrait in oil, subscribed for by a few of his London friends.

INDIA AND THE COLONIES.

SOUTH AFRICA.

THE DEATH OF CETEWAYO.—Dr. Scott, who has been in charge of the military hospital at Ekowe, and who was recently in Zululand, has arrived in Durban, where he has stated that, two or three days prior to his death, Cetewayo was unwell. On the fatal day, a sudden change was observed; and a messenger was at once despatched to the Resident (Mr. Osborn), and to the camp to Dr. Scott. Both gentlemen at once galloped off to Cetewayo's kraal, situate about a mile and a half away. On Cetewayo's death being first announced in Durban, it was stated that the Resident and the doctor did not arrive at Cetewayo's kraal until some considerable time had elapsed; but, according to Dr. Scott, this was not the case. He states that he was on horseback, witnessing a polo match, when the messenger arrived, immediately followed by Mr. Osborn. This was at ten minutes past five; and both at once started for the ex-king's kraal, which they reached at about twenty-five minutes to six. Cetewayo was then dead. The doctor wished to make a *post mortem* examination, but was not permitted to do so. Without this, he could not say exactly what was the immediate cause of death; but he suspected it to be heart-disease. As to the rumours and assertions of the natives that the king had been poisoned, he says they are altogether groundless and ridiculous.

AUSTRALASIA.

DEATH OF DR. FLOOD.—The death of Dr. J. W. Flood, at Queenstown, is announced. He was well known on Yorke's Peninsula, in which district he has practised for some time. The deceased gentleman was elected Mayor of Yorketown last year.

THE MELBOURNE MEDICAL SCHOOL.—The Council of the University of Melbourne have adopted plans for the proposed enlargement of the medical school. The design is Gothic, and the buildings, the walls of which will be of Barrabool stone, dressed with Wauru Ponds stone, are estimated to cost £10,000. The Council has decided not to take any steps to obtain a re-hearing of the case recently settled by his Excellency, the Governor, as visitor of University.

THE AUSTRALIAN PLAGUE OF RABBITS.—One of the troubles of the Australian farmer has been a plague of rabbits; the rabbit was introduced as an experiment in acclimatisation, and finding apparently a congenial atmosphere increased and multiplied, spreading over the whole face of the country and destroying the herbage which the farmer intended for the sustenance of his sheep. Numerous schemes for diminishing this plague of rabbits having failed, it occurred to some ingenious person to suggest that some rabbits should be inoculated with tuberculosis, and turned loose to infect their brethren. So bold and dangerous an experiment in pathology, and on so large a scale, naturally excited fears that if successful it might have the undesired result of spreading tuberculosis among the flocks and herds also, and even among human beings. How this fear is justified is now a subject of anxious inquiry before a special Commission; meanwhile outbreaks of tuberculosis among cattle continue to occur, and the *Australian Medical Journal* reports that Mr. Anthony Willows, veterinary surgeon to the Government of New South Wales, sent on a mission to Tasmania, to inquire into a supposed outbreak of tuberculosis in rabbits on a station near Ross in that colony, has telegraphed to the Minister that he had found 37 out of 50 rabbits, caught on the station, suffering from genuine tuberculosis, and that the stock did not show any signs of being affected. In New Zealand, also, large numbers of rabbits are dying of tuberculosis, to the great satisfaction of the farmers, but to the alarm of more far-seeing persons, who fear that the disease may not confine itself to rabbits, and that thus the last state of the colony may be worse than the first, or rather the second or present state.

COMPULSORY NOTIFICATION OF ZYMOTIC DISEASE.—An order by the Governor of Victoria in Council was issued on February 14th directing that "whereas the disease known as typhoid fever is now prevalent in several towns in Victoria, and it is expedient that the Central Board of Health should be enabled to enforce any regulations that may appear to be necessary for preventing the spread of the said disease," the provisions of the Public Health Act, 1883, for the prevention of epidemic, endemic, and contagious diseases, shall be put in force. By the 76th clause of the Act, the medical practitioner in attendance at any house where there is a person suffering from a malignant infectious disease, is directed to furnish the occupier of the house with a certificate, which will enable him to report the existence of the disease to the local board within twenty-four hours of his receiving the certificate. The Central Board of Health, on being duly informed of the fact, will then have power, with the sanction of the Governor in Council, to take such steps as may be deemed necessary, by isolating the house, for example, to prevent the spread of the disease.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 17th instant, and, when eligible, will be admitted to the pass examination.

Messrs. S. A. Tidey, student of St. Mary's Hospital; J. S. W. Chitty, of Charing Cross Hospital; C. C. Burt, of the Westminster Hospital; F. F. Burghard, and G. Black, of Guy's Hospital; A. W. Pearse, and S. B. Cook, of St. Thomas's Hospital; A. J. Macnab, and R. J. Stephens, of King's College; P. J. De Nyssen, of St. George's Hospital; N. R. Howse, and W. D. Calvert, of the London Hospital; W. P. May, and A. J. Lang, of University College.

Two candidates were referred for three months, and one for six months.

For the examination just completed, 256 candidates presented themselves as compared with 222 at the corresponding period of last year. Of this number, 45 were referred to their anatomical and physiological studies for three months, and three for six months, making a total of forty-eight referred candidates.

UNIVERSITY OF GLASGOW.—*Degrees of M.B. and C.M.*—The following candidates have passed the First Professional Examination (Natural History, Botany, and Chemistry).

F. Ashurst, C. Banks, J. A. Brown, J. Bruce, A. Butler, S. S. Dale, T. T. Downie, D. Elliot, W. R. Forrester, W. Gemmell, A. Gray, H. Gray, A. Gunn, E. O. Harrison, R. C. Highet, G. F. Hilliard, R. Hogg, A. D. Hughes, G. J. Imrie, J. A. Jackson, T. Kirkland, J. Marshall, W. Marshall, T. L. Macfarlane, R. M'Ghie, G. M'Intyre, C. A. Mackechnie, W. T. Nicholson, H. Rhodes, H. W. Robinson, W. P. Sandilands, C. E. Scanlan, H. W. Sinclair, J. W. H. Steil, R. Stevenson, E. B. Tant, J. A. Ure, and A. S. Wotherspoon.

The following candidates have passed the Second Professional Examination (Anatomy and Physiology).

W. M. Alexander, M.A., J. Allan, W. C. Allan, S. J. Baird, C. W. Bell, H. D. Browne, A. Bryce, W. Butchart, M.A., A. T. Campbell, R. Craik, W. C. Crichton, J. Currie, G. W. Davis, J. L. Downs, W. J. Giblin, J. R. Gibson, J. D. Gordon, C. Gray, Y. Hamiz, W. Hay, H. Hickin, J. Hogg, J. E. Hunter, W. Huntly, M.A., G. Marshall, J. G. Marshall, A. E. Miller, G. Miller, D. S. MacColl, J. R. R. M'Crindle, T. Macdonald, J. M'Keith, A. Maclachlan, W. M'Millan, C. M'Taggart, M.A., A. H. Richmond, J. Ritchie, J. Rowat, T. Rutherford, B.A., D. Stiell, J. Watson, L. Williams, J. Wilson, M.A., W. Yorke, and R. R. Young. J. W. Shane passed the Second Examination under the old regulations (Anatomy, Physiology, Zoology).

The following candidates have passed the Third Professional Examination (Regional Anatomy, Materia Medica, and Pharmacy, and Pathology.)

A. S. Alexander, S. P. Alexander, W. Allan, A. M. Bankier, J. Brown, H. D. Buchanan, J. Buchanan, J. W. Cameron, W. D. Campbell, Q. Chalmers, R. Cook, C. Court, B. S. Cowen, D. K. Cross, W. Cullen, H. E. N. Dobie, J. Dodd, J. Dunlop, M.A., R. Eaglesham, R. M. Fleming, R. C. Gilroy, J. Graham, E. W. Haydon, W. J. Holme, J. Hughes, H. Kelly, J. A. Kerr, W. Kirkland, T. Mitchell, W. C. C. Muir, J. I. Macarthur, T. C. M'Culloch, J. A. Macdonald, R. Macdonald, D. M. Macphail, A. M. Macrae, H. J. Neilson, J. Parker, W. W. Paterson, A. Richmond, D. Roxburgh, W. Sandeman, W. M. Semple, W. Seright, R. M. Service, W. Shand, W. W. Spence, C. D. Temple, A. Watt, C. Whish, J. White, A. Wilson, J. Wilson, J. S. Wright.

UNIVERSITY OF ABERDEEN.—At the late Medical Graduation Term, the following candidates, after the usual examinations, received degrees in Medicine and Surgery.

Degree of M.D.—A. T. Brand, M.B., C.M., Driffield, Yorkshire; W. C. Brown, M.B., C.M., Penang; S. W. Findlater, M.B., C.M., [illegible]; T. S. Jones, M.B., C.M., Swansea; J. Millar, M.B., C.M., Arbroath; J. H. Moir, M.B., C.M., Burton-on-Trent; C. L. Luckey, M.B., C.M., London; J. H. Walker, M.A., M.B., C.M., North Borneo.

Degree of M.B. and C.M.—H. M. Adamson, Morphie, Montrose; G. H. Allden, Southampton; J. H. Anderson, Aberdeen; J. Anderson, Preston; A. H. Barrett, [illegible], B.A.; C. G. Battiscombe, Blackheath; F. A. Bennet, M.A., Cullen; W. R. Clark, M.A., Edinburgh; J. W. Cook, Allness; A. M. Cowie, Mortlach; J. F. Craig, M.A., Leslie, Insch; G. B. Currie, M.A., Aberdeen; H. M. C. Dalton, Newcastle, New South Wales; G. Duffus, Cullen; W. A. Elmslie, Resthwet, Chapel of Garioch; C. A. Faulkner, Bridlington; J. A. Fehrsen, Graaff Reinet, South Africa; W. R. Forster, Blyth, Northumberland; J. Gordon, Keith; T. B. Graham, Ecclefechan; A. Grant, [illegible]; J. W. Harrisson, Sandwich, Kent; C. R. Lyall, Aberdeen; S. Macdonald, Elgin; F. I. Mackintosh, M.A., Deskford, Cullen; A. Maclean, F.R.C.S.Ed., Thurso; G. Milne, Methlic; J. Mitchell, Aberdeen; J. M. Munro, Inverurie; A. Murchison, Lochcarron; E. Poonen, B.A., India; R. D. Pressan, Aberdeen; A. E. Roberts, London; W. Robertson, M.A., Rathen; W. L. Ruxton, Wakefield; J. Savege, Montrose; W. L. I. Sutherland, Aberdeen; H. Thiele, Bermuda; L. F. Walker, Aberdeen; J. E. Webb, Windsor; J. Will, Ellon; J. T. Windle, Burnley.

Of the above-named candidates, G. H. Allden, W. R. Clark, J. Gordon, A. E. Roberts, and J. Will received their degrees in Medicine and Surgery with honourable distinction.

The John Murray Medal and Scholarship was awarded to A. G. Smith, and will be presented to him along with his diplomas on his attaining the necessary age.

At the same time, A. S. Inglis was certified as having passed all the examinations, but did not graduate.

The following candidates have passed the First Division of the First Professional Examination.

W. A. D. Cooper, J. Crevie, A. B. M. Gunn, N. Macfadyen, N. Mackinnon, G. H. Reynolds, W. Scatterty, J. Webster.

The following candidates have completed the First Professional Examination.

J. R. Anderson, H. Angus, A. F. C. Clark, F. L. Collie, E. G. Coward, A. W. Dalgarno, W. A. Deason, J. C. G. Duffus, G. Findlay, C. F. Forbes, H. F. Forbes, J. W. Fraser, T. H. Fyfe, J. Galloway, W. Greig, A. E. Henderson, W. H. Hewlett, J. E. Holden, A. G. R. Ingram, A. S. Jameson, G. A. Kelman, J. T. Lewis, D. G. G. Macdonald, A. Mackay, R. H. Mackay, J. T. Macpherson, J. Marsden, W. Milligan, A. Milne, J. Nicol, E. R. Orchard, A. A. Phillip, G. M. Reid, D. A. Shirres, A. Simpson, J. W. Smith, R. Smith, J. Souter, R. B. T. Stephenson, J. Taylor, J. D. Thomson, W. D. Urquhart, F. W. Walker, C. F. White, G. Williamson, G. N. Wilson.

The following candidates passed the Second Professional Examination.

C. M. Aird, A. W. Alcock, C. S. Anderson, M. F. Anderson, C. W. S. Barrett, D. M. Brown, J. Christie, A. G. Connan, J. S. Davidson, W. Davidson, J. Duncan, L. Durno, T. B. Gibson, D. Gill, H. W. Godfrey, J. W. M. Gunn, A. E. Henderson, J. D. Hendry, J. W. Hutcheon, F. G. Jones, J. M. Lamb, J. Mackenzie, J. Marr, J. Marsden, A. Milne, J. B. Milne, W. V. Morgan, J. Murray, T. G. Paterson, E. Poonen, P. W. Rattray, C. Robertson, H. Ross, D. Simpson, W. B. Simpson, J. R. Skinner, J. H. Stenhouse, D. Taylor, V. W. Twining.

The next Professional Examination for Degrees in Medicine commences on Saturday, July 19th, 1884.

UNIVERSITY OF EDINBURGH.—The following gentlemen have passed their First Professional Examination for Degrees in Medicine.

C. W. Brown, J. L. Brown, J. Bruce, F. O. Buckland, A. E. Bullock, P. Cairns, J. Cameron, L. B. Christian, J. M. Clarke, A. E. Cox, H. B. Densham (with distinction), D. Drummond, E. H. Ezard, R. S. Forrest, S. C. Fowler, F. S. Genney, J. A. Gibson, A. L. Gillespie, G. F. Grant, S. E. Greg, C. Grobbelaar, A. Thomson, G. Hardyman, C. Harvey, G. Harwood G. S. Hicks, R. N. Highmoor, F. R. B. Hinde, J. R. Holmes, J. R. Hutton, F. A. Juckes, W. Kemp, J. W. Lewis, N. Pelly, W. Scott, L. Segol, W. A. Simpson, H. M. Smellie, C. A. C. Smelt, T. Smith, W. C. Sprague, C. D. Stewart, J. Taylor, A. Thomson, G. K. Thomson, T. H. Underhill, P. J. White, M. C. Wright.

The following gentlemen have passed their Second Professional Examination.

T. W. Bell, F. M. Blumer, A. J. A. Campbell, C. S. Davies, J. H. Dawe, R. Gordon, T. Slingsby-Tanner, T. L. Ferrier, G. B. Goodall, B. Griffiths, T. J. Jones, J. T. Thompson, J. Anderson, J. A. Ashcroft, H. L. Barker, R. N. Bell, R. Beveridge, G. L. Bonnar, D. R. Dow, T. Edwards, R. Fullerton, J. E. Gemmell, J. H. Helm, W. C. Helme, W. H. Hill, H. Hirst, S. Hughes, J. Hunter, J. Hutcheson, A. Kellgrew, F. Kraemer, A. Brewster, J. C. Lamont (with distinction), J. M. Maclennan, R. C. Macwatt, D. G. Marshall, R. T. Meadows, C. H. Melville, C. J. Morton, H. W. Nash, G. Ozanne (with distinction), E. E. Pringle, E. T. Pritchard, A. B. Winder, and H. Worsley.

The following have passed in Anatomy and Physiology.

W. A. Anderson, J. W. Astler, W. H. Bansall, C. M. Bensley, J. W. Black, T. M. Blumenreich, J. Brown, J. M. Campbell, C. Charleton, J. Cockton, W. Craig, A. E. Curtis, A. L. Curtis, D. N. P. Datta, A. Davidson, J. W. Dawes, H. G. Dickman, R. S. H. Freeborn, A. B. Frost, J. W. Gainer, J. Garvie, T. H. Gibson, J. G. A. C. Guthrie, F. W. Hennessy, J. R. Hill, W. R. Hill, R. E. Horsley, F. H. Jeffcoat, J. M'Jerrow, J. Hughes, A. D. M. Macintyre, C. J. R. M'Lean, and H. H. Marshall.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 10th, 1884.

Anderson, James Johnstone, Vine Street, Lincoln.
Birt, Thomas, High Street, Stourbridge.
Brown, Osmand Percy, Percy Circus, Pentonville.
Harrison, Joseph, Wilford Street, Bradford.
Hewen, Henry John, 33, Highbury New Park.
Kirkhouse, George, 1, Romilly Road, Finsbury Park.
Musgrave, Frank Ernest, Leopold Street, Leeds.
Scott, Alfred Langston, Thornton Hill, Wimbledon.
Tatam, Edwin Charles, Wetherby, Yorkshire.
Woodson, Adolphus Arthur, [illegible], Sheffield.

The following gentlemen also on the same day passed their Primary Professional Examination.

Foster, Albert Ernest, Leeds School of Medicine.
Visger, Harman, Bristol School of Medicine.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.—Vacancy on the Honorary Acting Staff of the Out-patients. Applications to H. C. Fulford, 14, Augustus Road, Edgbaston, Birmingham, by May 1st.

BRAINTREE UNION.—Medical Officer and Public Vaccinator. Salary, £80 per annum. Applications by May 9th.

CHELTENHAM GENERAL HOSPITAL.—Junior House-Surgeon. Salary, 20*l.* per annum. Applications to the Honorary Secretary, by May 3rd.

CHESHIRE COUNTY ASYLUM, Parkside, Macclesfield. Medical Superintendent. Salary, 500*l.* per annum. Applications by May 3rd.

GENERAL HOSPITAL, Birmingham.—Resident Surgical Officer. Salary, 130*l.* per annum. Applications by April 26th.

GENERAL HOSPITAL, Birmingham. — Resident Registrar and Pathologist. Salary, 100*l.* per annum. Applications by April 26th.

GENERAL INFIRMARY, Leeds.—Three Resident Assistants. Applications by April 26th.

GROSVENOR HOSPITAL FOR WOMEN AND CHILDREN, Vincent Square, Westminster, S.W.—Physician. Applications by May 7th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistants. Applications by May 3rd.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Assistant-Physician. Applications by May 7th.

JERSEY GENERAL DISPENSARY.—Medical Officer. Salary, 120*l.* per annum. Applications by May 1st.

MACCLESFIELD GENERAL INFIRMARY.—Junior House-Surgeon. Salary, 70*l.* per annum. Applications to the Chairman, House Committee, by May 3rd.

MIDDLESEX HOSPITAL.—Assistant Obstetric Physician. Applications by April 29th.

MORPETH DISPENSARY.—Resident Medical Officer. Salary, 100*l.* per annum. Applications by May 5th.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Surgeon to the Out-patients. Applications by May 12th.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Resident House-Surgeon. Salary, £52 10s. per annum. Applications by May 12th.

PAROCHIAL BOARD OF KIRKCOWAN. — Medical Practitioner (qualified). Salary, 52*l.* per annum. Applications to Peter Gordon, Inspector of Poor, by May 1st.

PAROCHIAL BOARD OF UDNY, Aberdeen.—Medical Officer. Salary, 17*l.* from Board, 25*l.* from private guarantee. Applications to Rev. A. Spencer, The Manse, Udny, by April 30th.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Conservator to the Museum of the College. Applications by May 3rd.

SALOP INFIRMARY, Shrewsbury.—House-Surgeon. Salary, 100*l.* per annum. Applications by May 13th.

ST. BARTHOLOMEW'S HOSPITAL, Chatham.—Assistant House-Surgeon. Salary, 100*l.* per annum. Applications addressed to the Clerk to the Trustees, endorsed, "Application for Assistant House-Surgeon," by May 1st.

ST. MARY'S HOSPITAL, W.—Electro-Therapeutical Assistant. Applications by April 26th.

TOWN AND DISTRICT HOSPITAL, Newark-upon-Trent.—House-Surgeon and Secretary. Salary, 100*l.* per annum. Applications by May 1st.

WEST NORFOLK AND LYNN HOSPITAL.—House-Surgeon and Secretary. Salary, 100*l.* per annum. Applications by May 9th.

WHITECHAPEL UNION.—Resident Assistant Medical Officer. Salary, 150*l.* per annum. Applications by April 28th.

MEDICAL APPOINTMENTS.

Barling, Gilbert, M.B., F.R.C.S., appointed Honorary Assistant-Surgeon to the Birmingham Orthopædic and Spinal Hospital.

Barrs, A. G., M.D.Edin., M.R.C.P.Lond., appointed Assistant-Physician to the Leeds General Infirmary.

Clarke, William Bruce, M.A., M.B.(Oxon.), F.R.C.S.Eng., elected Surgeon to the West London Hospital, *vice* Alfred Cooper, F.R.C.S.Eng., resigned.

Harris, F. W. H. Daite, M.R.C.S., Assistant-Surgeon H.M. Convict Prison, Dartmoor, appointed Assistant-Surgeon to H.M. Convict Prison, Wormwood Scrubbs.

Hodson, Francis Octavius, L.K.Q.C.P., L.M.K.Q.C.P.I., appointed Medical Officer to the Hillston Hospital, Hillston, New South Wales.

Jacob, Ernest H., M.A., M.D.Oxon., appointed Assistant-Physician to the Leeds General Infirmary.

James, J. G. W., M.B., appointed Medical Officer to the Parochial Board of Penny-gown and Torosay.

Lloyd, Rickard William, M.R.C.S.Eng., elected Administrator of Anæsthetics to the West London Hospital.

Macaulay, S., M.D.(Q.U.I.), appointed Medical Officer and Public Vaccinator to the No. 6 District of the Maidstone Union, *vice* J. W. Bury, M.R.C.S.E., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

MARRIAGES.

Michael—Nash.—On April 12th, at St. Michael's and All Angels, Chiswick, by the Rev. A. Wilson, Henry James Michael, Surgeon Army Medical Department, to Ellen, second daughter of W. Nash, Esq., of Bedford Park.

Stelfox—Taylor.—On the 17th inst., at the Parish Church, Leesfield, by the Rev. Canon Whittaker, John Brideoake Stelfox, M.R.C.S., L.S.A., Middleton, only son of the late Thomas Stelfox, of Leigh, Surgeon, to Edith, second daughter of Thomas Taylor, Esq., of Hey Lane House, Lees, Oldham. No cards.

DEATHS.

Field.—On the 21st inst., at the Manor House, Southall, Octavius A. Field, F.R.C.S., late of Sussex Gardens, Hyde Park, aged 72.

Morris.—On the 8th inst., Arthur James Morris, M.B., C.M., at 17, Folds Road, Bolton, Lancashire, in his 27th year.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY ......St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1,30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

Charing Cross.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

Guy's.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

King's College.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

London.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

Middlesex.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

St. Bartholomew's.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

St. George's.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

St. Mary's.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

St. Thomas's.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

University College.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

Westminster.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F.,3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Cayley and Dr. Gibbes: On a Case of Ulcerative Endocarditis, with Microscopic Specimens. Dr. J. Kingston Fowler: A Contribution to the Pathology of Hydro- and Pyo-Salpinx.

THURSDAY.—Harveian Society of London, 8.30 P.M. Clinical Evening.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications respecting editorial matters should be addressed to the Editor, 161a, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 161a, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal should be addressed to the Editor at the office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal, are requested to communicate beforehand with the Manager, 161a, Strand, W.C.

Correspondents who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

We cannot undertake to return manuscripts not used.

WHAT THE COLLEGES DO FOR US.

"**PAMPHLET** with testimonials gratis. Diseases of Women.—Cancer, Tumours, Change of Life, Leucorrhœa (*sic*), and Irregularities cured by the Antiseptic Treatment, without interference, cutting, or caustics, by Dr. Washington Evans, 41, Cambridge Street, Hyde Park Square, London. Consultations daily, or by letter."

The above advertisement (inserted in a recent number of the *Globe*) bears the name of a Member of the Royal College of Surgeons of England, and F.F.P.S.Glasgow! Yet the colleges claim to be continued in their privileges on the ground of their zeal for the dignity of the profession, and their watchfulness over the public professional conduct of their members.

THE HIND FUND.

THE following additional subscriptions have been received and paid to the account of the "Hind Fund" at Messrs. Coutts's Bank.

	£	s.	d.		£	s.	d.
Baylie, W., Esq.	0	10	0	Gandar, T. F., Esq.	1	0	0
Bell, Royes, Esq.	1	1	0	Godson, Dr. Clement	2	2	0
Crawford, Dr. Cooper	1	1	0	Jones, W., Esq.	0	[illegible]	0
Coffin, R. Maitland, Esq.	1	1	0	Read, T. Lawrence, Esq.	1	1	0
Deane, John, Esq.	1	1	0	Strong, Dr. Henry J.	1	1	0

The fund is now closed.

FACTORY SURGEONS.

SIR,—I shall be glad to know, through the medium of the JOURNAL, the surest and quickest channel through which to obtain such appointments; whether the local or principal inspector, or the Home Secretary; if written or personal application is best, and if influence, and in what quarter, is of service. I am, yours truly,

IGNORAMUS.

THE ROGERS' FUND.—Dr. Strange, Worcester, £1 1s.

BUNION SPRINGS.

SIR,—Thirteen years ago a bunion spring, invented by Mr. Miller, an instrument maker of Leicester Square, yielded very satisfactory results. Can any of your readers inform me where such springs may now be purchased, as Mr. Miller has changed his residence?—Obediently yours, RICHARD NEALE, M.D.Lond.

60, Boundary Road, South Hampstead, N.W., March 25th, 1884.

ENUMERATION OF BLOOD-CORPUSCLES.

INQUISITOR desires to know where he can obtain any published information on the variation in the number of white blood-corpuscles in disease, as ascertained by the hæmocytometer or other means.

*** Dr. Gowers, in the first published account of his hæmocytometer (*Lancet*, 1877, vol. ii, p. 797), gives some interesting results, and also in the *Practitioner* for 1878; followed up by Dr. J. W. Hunt in *Lancet*, 1879, vol. i, p. 661, and Messrs. Cutler and Bradford, in *Journal of Physiology*, January 1879. Malassez's book, *De la Numération des Globules Rouges du sang*, Paris, 1873, is useful.

SURGEON asks for information as to the most suitable place in Germany or Italy for a patient suffering from chronic rheumatism.

WESTON'S "VITAL CAPACITY."

SIR,—I was surprised to read, by the account given in a contemporary of Weston's physique, that his measurement round the chest was only 33½ ins. On referring to your account in order to verify this remarkable statement, I find that it does not give the chest measurement, but states his weight to be 9 stone 12 lbs., adding that this represents a loss of exactly 8 lbs. since he started from London four months before. No doubt he is a small man; and this may to some extent account for what some theorists are pleased to call his small "vital capacity." But what confidence can we have in the currently received doctrines, when we find that a man who has performed a feat of sustained exertion absolutely without a parallel in history, would be certainly rejected, alike by the army, the navy, and some branches of the civil service, as being below the regulation standard of respiratory capacity? I am, sir, your obedient servant,

EDWARD HAUGHTON.

LIFE-ASSURANCE AND MEDICAL FEES.

SIR,—I enclose you some papers received from the "Blue Ribbon Life-Assurance Society," proposing in certain cases to pay half-crown fees only for examination and report on cases. I think that such a proposition deserves public condemnation, as I certainly think that a word of warning from you would be of great use.—Very truly yours,

G. S.

*** We have submitted the above letter to an eminent authority on such matters, who writes to us as follows.

It is manifest that, if an insurance-company is to do legitimate business, it must calculate its expenses according to its liabilities. It would be impossible for an insurance company to accept policies from £10 to £50, and pay the medical referee at the same rate as in its business generally contemplating assurances of a much higher value. The promotion of insurance is a great social duty; and it would be a matter of regret if the medical profession made it impossible for small traders and workmen to insure their lives, by insisting upon a rate of fees that no company could afford to pay where the bulk, if not the entire, business, was limited to such small sums as the Blue Ribbon Insurance Company proposes to accept.

It appears that the company, by offering even a small fee, acknowledges the principle that the medical referee's report is essential to safe business, and that that opinion ought to be paid for by the insuring company, and which no one would blame a medical man in large and busy practice for declining, as business which he did not consider sufficiently lucrative. One cannot subscribe to the doctrine that it is in opposition to medical dignity to accept small remuneration, where a higher remuneration would be a bar to a great social boon. While in a case like the present, every one should be allowed to judge for himself, it would be a pity that any steps should be taken to prevent the extension of life-insurance to the humblest homes.

SOCIAL PURITY v. CONTAGIOUS DISEASES ACTS.

SIR,—The inference drawn from the first part of "Hirudo's" letter in last week's JOURNAL is "that the non-enforcement of the Contagious Diseases Acts is the rampant cause of social impurity," and that "social purity cannot be expected until these 'good decrees' come into full force again." How the Contagious Diseases Acts can be called "good," taking the word in its highest and best sense, or can be looked upon as a legitimate and moral cause of social purity, I fail to see. The natural inducement is to encourage immorality and vice, and to gloss them over by a sort of national approval. The Acts in question are immoral in their aim and tendency, also unjust towards women. They may have rescued young girls from a course of prostitution and have prevented the more flagrant evils of street-solicitation. The means by which these are obtained are such that all who calmly look at the question from a moral standpoint will see that the Acts are immoral, and cannot be supported by those who believe that it is wrong to do evil even to gain a supposed good. It is a sad reflection on our police regulations "that vice is rampant in our streets," [illegible]. Would it not be well to legislate for this evil if the present laws are not effectual?—Yours, etc.,

JNO. BROWN, L.R.C.P.Lond.

Bacup, April 19th, 1884.

IN answer to "Hirudo's" inquiry in our last issue, H. C. T. recommends "The White Cross Series" of small books, published by Hatchard's, Piccadilly, as being both sensibly and practically written, and of a moderate price (2d. each). They are, he observes, estimable of their kind, and deserve to be well known and widely circulated.

W. K. FYFFE, Caius College, Cambridge, recommends a most excellent pamphlet, written by the Rev. J. M. Wilson, Head Master of Clifton College, being an address delivered at Cambridge before the "Social Purity Association" there. It is he believes, published by Macmillan (price 2d.).

COCOA-TEA.

SIR,—May I mention, for the benefit of those who may be in the same delicate state of health as I have been, a little matter in connection with "cocoa-drinking" (which is becoming so general in this dyspeptic age). A young lady friend of mine, who was ordered the preparation known as "cocoatina," found it did not quite suit her, and was then recommended by her physician to take "a cup of tea afterwards." Now, I have been a regular cocoa-drinker for the past three years or more, and have tried nearly every prepared kind, as well as the simple infusion of the cocoa nib. Having made the experiment of adding a fourth part of freshly made, and not too strong tea, to three parts of a cup of cocoa (made from Cadbury's cocoa-essence or Schweizer's cocoatina), and finding in the result a most pleasant and refreshing beverage, I think it is a fact worth knowing, for there is no doubt that "cocoa-tea" would answer the requirements of many constitutions, as the cases of people who cannot drink tea, and who find cocoa "too heavy," are so numerous.

Tea is generally made for some members of the household about the time when the cocoa is required by others, so that there is no additional trouble in the preparation of "cocoa-tea," and if it were generally known how agreeably these two vegetable products blend, the one imparting a freshness to, and bringing out the flavour of, the other, I believe "cocoa-tea" would become an universally recommended and well appreciated article of diet.—Your obedient servant,

WM. B.

PRUSSIC ACID.

A FOREIGNER in Poland had to submit his translation of a French or English work on chemistry for the Russian Censor's *imprimatur*. The Censor discovered that "prussic acid" was referred to very often in the book, and he objected to it being so-called. "In Germany," said he to the translator, "they call it hydrocyanic acid, and you must do the same, because 'prussic acid' will be sure to give offence to the Germans, which, at the present moment, is not our policy at all."

W. EMERSON is recommended to apply to a respectable surgeon.

THE LOST MEDICAL WORK.

SIR,—A friend has called my attention to the mode of spelling the name "Aquilla" in my note of last week with two "l's." I believe I wrote it with one "l" only, as it is in the *Speculum Matricis*; and think probably the printer, being accustomed to the spelling adopted by the present distinguished owner of the name in Ireland, charitably corrected my supposed mistake. It would be curious to know how and when the second "l" came into the name. "Extrapeha" should of course have been "Extrapelia."—Yours, etc.,

J. L. JARDINE.

Capel, Surrey, April 21st, 1884.

ACID-TREATMENT OF CHOLERA.

SIR,—On reading an extract in the [illegible] of April 9th, from *Health*, relative to the new discoveries concerning the nature of the cholera-poison, I was struck with the views mentioned as to the alkalinity of the poison, and the probable future of an acid-treatment for the disease. I therefore wish to mention that, in the year 1867 (while in India), I recollect my attention being forcibly arrested in reading an article written in an Indian medical journal of that year, by—as well as I can recollect—Dr. Snitzer, of the Indian Medical Department, about cholera, in which he mentioned numerous cases, both of well developed cholera with collapse, and of symptoms premonitory of the disease, successfully treated by acetic acid. May it not also be the case that the acetate of lead, given as an astringent in the premonitory diarrhœa of the disease, acts chiefly by acetic acid being set free in the stomach to the destruction of the developing bacillus? The acid treatment deserves a trial. I am, etc.,

J. S. Mc[illegible], M.B., Surgeon-Major A.M.D.

HOUR-GLASS CONTRACTION OF THE UTERUS.

SIR,—May I venture to point out the cause of the hour-glass contraction in Mr. Blenkarne's case, which I read in your impression of March [illegible]. Dr. Playfair says that it almost invariably depends [illegible] of the third stage of labour [illegible] the cord [illegible] what was done in this case [illegible] the third stage of labour [illegible] without any [illegible].

[illegible] Why? It was [illegible]. No doubt [illegible] years truly,

J. ROBERTSON DAY, M.R.C.S.Eng., L.R.C.P.Lond.,
Clinical Assistant, Brompton Hospital.

An Appeal.

Sir,—I venture, through the columns of the British Medical Journal, to ask the aid of the profession in the following case. Dr. Wilson, late of Yoxford, Suffolk, after practising in that village for forty-seven years, and having had a very large practice, died in 1848, leaving his widow and four children very badly off. Two children are dead; one (a son) has, unfortunately, gone utterly to the bad; a daughter remains, aged 37, who is always more or less ill, suffering from a weak heart and general debility. Mrs. Wilson has also very bad health, and is 67 years of age. They live on £25 a year, being the rent of a house, and the charity of some few non-medical friends, whom death is gradually removing year by year. Dr. Wilson, on one occasion, was summoned to London by George IV to treat him for an attack of gout, he having a great reputation for curing that disease. His Majesty recovered, but Dr. Wilson received no fee, being only offered a knighthood, which he refused. The family live in a house tumbling about their ears, which is their own property, but, of course, they cannot afford to repair it. Their furniture is nearly all gone, and they are quite incapable of earning any money themselves. My object is to collect enough money to buy an annuity of £25 on the daughter's life, and also to repair the house. I shall be glad to receive any contributions towards a fund for that purpose.—I am, sir, yours truly,
H. A. Collins, M.R.C.S., etc.

Saxmundham, Suffolk, April 7th, 1884.

Subscriptions already Received.—Anonymous, 5s.; F. Vacher, Esq., £2 2s.

M.D. St. Andrew's. Dr. Allen Thomson was elected a trustee of the Hunterian Collection, with Lord Aberdare in 1881. Mr. Gladstone was elected in 1875.

Erratum.—In the Journal of April 12th, page 716, line 14, *for* "reduced," *read* "dilated."

Itching about the Nose in a Child.

Sir,—My patient, aged 10 years, has been troubled for over twelve months with itching about the orifice of the right nostril, which, she says, causes her to twitch the part about in a manner which is disfiguring, and increasingly frequent.

No local cause of the itching has ever been detected. Her appetite is large; her breath frequently offensive in the morning; the bowels are open freely every day, with healthy motion, and during the last few months she has certainly lost flesh. Vermifuge treatment has been unsuccessful. Occasional twitchings are observed in her sleep, which is otherwise perfectly tranquil. Any light on the cause and treatment of the trouble will be welcome.—I am, yours truly,
Pes Planus.

A Member should apply to Mr. Edward East, 18, Clifton Gardens, W., one of the Honorary Secretaries of the British Medical Benevolent Fund, who will furnish him with any information he may require.

Poisoning by Lead Service-Pipes.

Sir,—I beg to refer your correspondent "M. O. H.," who asks a question about poisoning by supply through lead service-pipes (p. 650), to the case of Milnes *v.* Corporation of Huddersfield, which was the subject of a leading article in the British Medical Journal of September 30th, 1882 (p. 636), and was again noticed on October 21st, 1882 (p. 797); and which has since, on appeal, been decided against the plaintiff. In this case the water, which had an acid reaction, became impregnated with lead by passing through the service-pipes of the plaintiff, and the Court of Appeal held that the corporation was not liable, they having delivered a pure or wholesome water from their main. In my opinion, seeing that service-pipes are almost universally of lead, and are known or expected by water-companies to be so, that ought not to be considered a wholesome water, in any just acceptation of the term, which is certain to be poisoned before it can reach the consumer.—Your obedient servant, T. Scattergood.

41, Park Square, Leeds.

E. Snowden should apply for information to the Secretaries of the West Riding of Yorkshire Medical Charitable Society, Dr. Chadwick (Tunbridge Wells), or C. G. Wheelhouse, Esq., Leeds.

Premature Interment.

The *Times of India*, for March 21st, has the following story: On last Friday morning the family of a Goanese, named Manuel, aged 70 years, who had been for the last four months suffering from dysentery, thinking that he was dead, made preparations for his funeral. He was placed in a coffin and taken from his house, at Worlee, to a chapel at Lower Mahim, preparatory to burial. The priest, on putting his hand on the man's chest, found his heart still beating. He was thereupon removed to the Jamsetjee Jejeebhoy Hospital, where he remained in an unconscious state up to a late hour on last Friday night, when he died.

Australian.—The Australian medical papers are the *Australian Medical Journal* and the *Australasian Medical Gazette.*

Action of Vaseline Pomade.

W. H. asks if rapid bleaching and dryness of the hair from the use of vaseline as a pomade has been noticed. In the cases he has seen, the discontinuance of the vaseline, and the use of castor-oil made into a pomade, was followed by the restoration of the hair to its original condition.

A Young Practitioner. We do not understand the allegation of illegality. The practitioner either can or cannot determine the cause of death. He is not bound to go unless he chooses, or to give an opinion unless he can conscientiously do so.

Alcoholic Leg-Pains.

Sir,—With reference to Dr. Clifford Allbutt's interesting letter on "leg-pains," in the Journal of February 23rd—pains which, in the absence of other specific signs, he attributes to alcoholic spinal irritation, may I ask him if he has ever met similar pains, with extraordinary cutaneous hyperæsthesia, due to chlorodyne-drinking (and chlorodyne alone)?—I am, etc.,
W. H.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. T. M. Stone, London; Dr. Barrs, Leeds; Mr. J. Whitehead Reid, Canterbury; Mr. S. Haynes, Stanstead; Mr. R. J. H. Scott, Bath; The Secretary of the Sanitary Institute of Great Britain; Dr. G. K. Poole, Upper Norword; Mr. J. Vesey Fitzgerald, London; The Secretary of the Social Science Association; Mr. Jas. W. Harrison, Sheffield; Dr. H. Drinkwater, Sunderland; Dr. A. R. Barnes, Hastings; Mr. W. Galbraith, Gosforth; Mr. A. Crosbee Dixey, Bourton-on-the-Water; The Secretary of the Charing Cross Hospital Medical School; Rogers W. G. Taylor, Litcham, Swaffham; Prof. Hamilton, Glasgow; Dr. D. G. Brunton, Philadelphia; Mr. A. C. Farrington, Shelfanger Spa, Diss; Mr. Walsham, London; Dr. Robertson, Kimberley, South Africa; Dr. Josiah Williams, Sheffield; The Secretary of the Pharmaceutical Society; The Hospitals Association, London; The Secretary of the Hospital for Consumption, Brompton; Mr. J. J. Banks, Cheltenham; Mr. Lawrence Humphrys, Cambridge; Mr. F. W. D. McGachen, Fenny Stratford; Dr. Neale, South Hampstead; Our Aberdeen Correspondent; Dr. Charles Parsons, Dover; Mr. F. P. Atkinson, Surbiton; Mr. A. Macpherson, Middlesex; The Honorary Secretary of the East Anglian Branch, Ipswich; Mr. J. Knowsley Thornton, London; Mr. Blackett, London; Dr. R. N. Ingle, Cambridge; Mr. J. A. Anderson, York; Mr. S. Hardwick, Bournemouth; Mr. W. D. Wilkes, Salisbury; Surgeon-Major E. J. Jazdowski, Woolwich; Mr. A. T. Myers, Cambridge; Mr. T. L. Downe, London; Mr. E. Skinner, Sheffield; Dr. Hack Tuke, London; The Secretary of the Parkes' Museum; Dr. David Drummond, Newcastle-on-Tyne; Surgeon-Major Orton, Newcastle-under-Lyme; Mr. C. M. Jones, Troedyrhiw; Mr. Terry, Northampton; Dr. Dolan, Halifax; Our Glasgow Correspondent; Our Dublin Correspondent; Mr. A. Grace, Chipping Sodbury; A Lover of Horses; Dr. Clifford Allbutt, Leeds; Mr. E. Hallovan, Nantwich; Messrs. Woodhouse and Rawson, London; Mr. A. Hill Griffith, Manchester; Mr. W. K. Morton, Horncastle; Mr. J. L. Jardine, Capel, Surrey; Mr. A. E. Cranfield, St. Ives; Mr. F. O. Hodson, Hillston; Our Paris Correspondent; Mr. S. H. Lindeman, King's Lynn; Mr. Vincent Jackson, Wolverhampton; Mr. C. T. Kingzett, London; Mr. J. B. Woolly, London; Mr. Richard Greene, Northampton; Mr. A. Cook, Cannock; Mr. E. Noble Smith, London; Mr. J. L. Clifford Smith, London; Dr. T. Robinson, London; Mr. F. Treves, London; Mr. H. Rendell, London; Dr. J. Johnson Bailey, Marple; Dr. Styrap, Shrewsbury; Mr. H. Trueman Wood, London; Dr. G. Harrison Younge, Cawnpore; Dr. Shoemaker, Philadelphia; Mr. W. Berry, Wigan; Mr. W. Harvey, Newton Abbott; E. Ring and Co., Canterbury; Mr. S. Gilder, London; Mr. J. Giles, Caxton, Cambridge; Mr. B. B. F. Borowski, Gipsy Hill; Secretary of the Earth to Earth Society; Dr. H. Coupland Taylor, Todmorden; Mr. H. F. Hayes Newington, Ticehurst; Mr. W. K. Tyffe, Caius College, Cambridge; The Honorary Secretary of the Leeds and West Riding Medico-Chirurgical Society; Mr. Alfred Ward, Rotherham; Mr. H. F. A. Goodridge, Bath; Mr. E. J. Snowden, Ilkley; Dr. R. L. Batterbury, Berkhamstead; Our Birmingham Correspondent; Dr. Herringham, London; Mr. N. C. Collier, London; Mr. A. H. Benson, Dublin; Mr. H. A. Collins, Saxmundham; Dr. Finny, Dublin; Mr. F. A. Eaton, London; Dr. Mortimer Granville, London; Dr. Norman Kerr, London; Mr. Craven, Southport; Dr. Edwards, London; Dr. Hugh Adcock, London; Dr. H. Veale, Sutton, Surrey; Mr. Brown, Bacup; Dr. E. L. Fox, Clifton; Dr. Robinson, Chesterfield; Dr. Fancourt Barnes, London; Dr. Newman, Stamford; The Secretary of the Chelsea Hospital for Women; Dr. Rayner, Hanwell; Mr. R. Clement Lucas, London; Mr. Geo. F. A. Stott, St. Ives; Dr. Dyke, Merthyr Tydfil; Mr. C. Hall Penny, West Enfield; Mr. W. E. Davies, Sherborne; Dr. Josiah Williams, Sheffield; Dr. R. E. England, Dover; The Secretaries of the Manchester Medico-Ethical Association; etc.

BOOKS, ETC., RECEIVED.

Transactions of the National Association for the Promotion of Social Science. Huddersfield Meeting, 1883. London: Longmans, Green, and Co. 1884.

A Treatise on Chemistry. By H. E. Roscoe, F.R.S. London: Macmillan and Co. 1884.

A Text-book of Pathological Anatomy, and Pathogenesis. By Ernest Zeigler. Translated and Edited for English Students by Donald MacAlister, M.A., M.B. Part II. London: Macmillan and Co. 1884.

Sixth Annual Report of the State Board of Health of the State of Connecticut, U.S.A. Hartford, Conn., U.S.A.: Lockwood and Brainard. 1884.

Thirty Years' Experience of a Medical Officer in the English Convict Service. By J. Campbell, M.D. London: Nelson and Sons, Paternoster Row.

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INAUGURAL ADDRESS
ON
CHOLERA: AND ON THE SCIENTIFIC, MEDICAL, AND SANITARY WORK OF ENGLAND IN INDIA.

Delivered before the South Indian Branch of the British Medical Association, February [illegible], 1884.

By Surgeon-General W. R. CORNISH, F.R.C.S., C.I.E.,
Honorary Surgeon to the Viceroy and Governor-General of India; Fellow and President of the Faculty of Medicine, Madras University; President of the South India Branch of the British Medical Association.

We have met to-day for the purpose of inaugurating the South Indian Branch of the British Medical Association. This Association, as you are aware, numbers between 11,000 and 12,000 members of the Medical profession. It includes amongst its ranks nearly all the men of eminence practising in Great Britain, and its Branches ramify throughout the colonial possessions of the British Empire. In India, the South Indian Branch makes the third of the Branch Associations of this important Society. Some of our members are already included in the general list of existing members; but our object is to add to the number, and to unite the various members of the British and Indian Medical Services, who are practising in Southern India; in a society having for its chief objects the honour and welfare of the medical profession, and the prosecution of inquiry and research regarding the many problems, which, being unsolved, still leave medicine without the pale of the exact sciences. Those who have already signified their intention of joining the South Indian Branch of the Association, will do well to make the objects and advantages of the society known to their friends, so that the new Branch may become truly representative of the medical profession in Southern India. Already we begin the labours of our new Branch with a list of fifty-four members, and I trust the time is not far distant when the numbers may be doubled. We labour under disadvantages in regard to frequent meetings, for, in a country like India, we are necessarily a scattered body, and it is not easy for non-resident members to attend and take part in proceedings at head-quarters; but, if members cannot themselves be present, we shall gladly receive their papers, or notes of cases of professional interest; and everyone, according to his opportunities, can take part in the great work of collective research which is now so distinguishing a feature in the operations of the parent Society.

To my thinking, there never was a time in the history of medicine when the need of associations like our own was so urgent as it is now. Not only are they essential to the prosecution of co-operative research in regard to the extension of exact knowledge as to the causation, nature, and treatment of disease; but without a society, such as ours, there can be no common ground of professional union where all matters relating to the obligations of the profession to the public, and to the advancement and dignity of the calling we have adopted, can be fairly discussed and treated. The history of the British Medical Association shows that the Society has gradually forced itself into the position of adviser to the Government in all matters relating to sanitary and medical legislation. It truly represents the thought and feeling of the profession, and its advice and suggestions are cordially welcomed by the Legislature. The British Medical Association has persistently advocated the claims of the medical officers of the army, navy, Indian Government, and the public services generally, to liberal and equitable treatment; and the present position of medical officers of the State departments is in no small degree owing to the [illegible] advocacy of their claims by the official organ of our Association, and by [illegible] medical journal.

In connection, therefore, with the parent society, we have the means of bringing departmental interests to the notice of those who have the power of influencing them; and, when our grievances are real, we may be assured of the powerful support of this great society in making them known. This, I think, is a sufficient reason why the Association should include within its list of members the great bulk of the members of the public medical departments in India. Whatever fate may be in store for these departments in the way of reorganisation, we ought to be prepared for important changes; and it behoves us to take heed that modifications in the character of the services, which the public interests may demand, are made with due and equitable regard to the claims of those who have entered the public services under existing conditions. Gentlemen, I congratulate you on the establishment of the South Indian Branch of the British Medical Association. May it be imbued with the scientific spirit in all its labours, and may the search after truth be abundantly successful. It is hardly necessary that I should remind you that it is within the power of every member to do something in furtherance of the objects of the Association. Those who have not the leisure or opportunity of contributing papers for discussion at our monthly meetings, can certainly assist in the accumulation of facts by the system of co-operative research. The practice recently initiated by our parent Association of drawing up heads of inquiry in regard to special diseases, so that every member may record his experience, as a contribution to a common fund of knowledge, is one full of promise in respect to the diseases of tropical climates; and I trust the day may not be far distant when the true character of diseases like cholera, intermittent and enteric fevers, anæmia, scurvy, and leprosy may be better comprehended than it is at present. In India, we have opportunities for observing certain classes of disease which do not fall to the everyday notice of the practitioner at home, while our brethren in Great Britain have better opportunities than we have of investigating the facts in regard to other forms of disease; and thus the work of the parent Association, and of its several Branches, will be strengthened and improved by the extension of the society's operations to all parts of the British Empire. The mother and her progeny should react on each other by healthy emulation in honest work.

There seems good reason for supposing that we are already on the threshold of a new era in medicine—an era in which things that we see and know at present but dimly, will stand forth revealed in broad and dazzling light. Researches conducted by means of modern appliances would seem, at last, to be lighting the cloud of obscurity which has so long hung over the causation and intimate nature of tuberculous diseases, leprosy, syphilis, the group of specific fevers, and other diseases which are known to be transmitted from person to person, in various ways. It is quite certain that our knowledge of organic germs in association with special diseases is at present only hazy and indefinite; but the labours of M. Pasteur, Lister, Koch, and others, have all been tending in a practical direction, and we may be assured that, now the attention of competent observers has been given to an investigation of the "germ-theory," the subject will not be allowed to rest, until the connection and mutual relations of micro-organisms and structural changes in the living body have been thoroughly explored. The investigation is beset with difficulties, but we know that trained eyes and hands are being brought to bear upon it, and that the progress already made, within a comparatively recent period of time, has been considerable. It is quite possible that, in this inquiry, our knowledge of disease-causation may advance in a swifter ratio than the practical application of that knowledge to the main objects of our profession in prevention and cure; but none the less shall we have made a distinct step onwards, when we know the real connection between organic germs and various diseased conditions of the body.

On this ground I think we may rejoice that the German Government, not content with our present knowledge in regard to the intimate nature of Asiatic cholera, has deputed Dr. Koch and his colleagues to study the subject anew in Bengal, whence, so far as our present knowledge extends, all the great cholera-epidemics the world has known have taken their departure. It may be that the mystery which has perplexed all Indian observers during the last century, and regarding which such widely diverse views have been held, is not destined to be cleared up by the labours of the German Commission, any more than they were by the late investigations of Messrs. Cunningham and Lewis, whose careful and practical experiments, extending over many years, added very little to our former stock of knowledge; but, whatever the results of their inquiries may be, it is [illegible] that the medical [illegible] never abandon the investigation as hopeless and beyond the scope of scientific inquiry. Failures ought not to dishearten us; nor will they, if we keep steadily in view the fact that Nature is every day yielding up her secrets, when interrogated by scientific methods. It is, I think, to be regretted that the British Government should not have [illegible] India some of the most experienced observers who have given their time and attention to such matters. Special investigations of this [illegible] part of the observers; and only those, who have devoted years of work to such studies, can reasonably hope to widen the boundaries of our knowledge.

But while microscopical investigation and physiological experiment must be left mainly in the hands of trained observers, there are many features in the disease we term cholera which may be studied anew by the members of the medical profession in India. It has been the fashion of late years to avoid *post mortem* examinations of persons dying of cholera, and, as a consequence, there has been very little, if any, advance in knowledge of the pathology of the disease. Probably only a limited number of the medical officers now in India have seen for themselves the condition of the organs after death from cholera. At one time, the views of medical men led them to question the expediency of examining bodies dying of cholera, fearing that the results might be injurious to the living; but recent inquiries by the Sanitary Commissioner with the Government of India have shown that persons engaged in attendance on, or in contact with, cholera-patients, are no more liable to be attacked by the disease than any others who live in an infected locality, and the supposed danger of *post mortem* inquiries in cholera is probably no greater than in typhoid fever or any other diseases of that class. The danger to the living would appear to be infinitesimal, and certainly cannot be urged as a reason for the neglect of pathological study.[1] Probably the true reason of the omission to make *post mortem* investigations, is that in the period when cholera-epidemics prevail in a locality, medical officers of all classes are working day and night in behalf of the living, and that they have neither leisure nor conveniences for careful examinations of fatal cases. Still, whatever be the explanation, there is but little doubt that pathological investigation of cholera is not generally followed as it should be.

Again, in the prosecution of our researches on cholera, it seems to me essential that the nature of the disease should be studied in individual cases. The numerical or statistical method of inquiry is useful in dealing with large questions, as to the movement of epidemics, or the conditions of an infected locality, but it will teach us nothing in regard to the nature of the disease, and the effects of the disease on the individual. Experience has taught us that in cholera, as in typhoid fever, no two cases run precisely the same course. It is, therefore, necessary that the disease should be studied and properly observed in individual cases, just as we study and note all other forms of disease.

It is within the experience of all, that an attack of cholera in the individual is often aborted by timely treatment. During an epidemic, what can be commoner than the following typical case? A man is suddenly seized with a feeling of oppression and sinking about the epigastrium, followed by two or three frequent and copious watery evacuations, and, if there be no actual sickness, a feeling of nausea and faintness. Such attacks often occur in the early morning, the patient having gone to bed perfectly well, and slept soundly until the desire to relieve the bowels was felt. Besides these symptoms, there is generally a clammy skin, a weak pulse, and much nervous anxiety. Now, let a case of this nature be treated instantly, by some combination of opium with a diffusible stimulant (a full dose of chlorodyne and brandy is perhaps the best and simplest remedy to be found at hand), let him be put to bed, and have warmth applied to his feet and epigastrium, so as to favour sleep. In nine cases out of ten, when the patient falls asleep, the diarrhœa is checked; and when he awakes, he will feel quite easy and comfortable. In the tenth case, the remedy may fail, and the disease progress until all the symptoms of aggravated cholera appear in their due order.

Now one of the difficulties in regard to the study of cholera is this; that, although we are taught that the contagium of the disease passes off by the bowels, yet as a matter of fact, the only stage of the disease in which we can deal with cholera, with any hope of success, is the stage of early diarrhœa. If we can check that, and procure sleep, the patient suffers no after ill consequence. He enters at once upon a condition of health. But when we are unable to check the pouring out of the fluids of the body into the intestinal tract, the graver symptoms of cholera immediately follow. What becomes of the contagium of cholera, supposing the disease to be due to an infective germ, when the early diarrhœa is checked? How does the contagium escape from the body, or what happens to it within the body, that its usual effects should not be manifested? You will see from these and many other peculiarities of the disease, that there is yet much to be cleared up before we can make any satisfactory progress in understanding the disease. The literature of cholera is already most voluminous, and I suppose there is no subject within the domain of medicine on which so many crude theories and speculations have been entertained. I do not say that all the books and papers that have been written about Asiatic cholera are wrong and misleading, but I do say that it behoves the profession in India to begin any new researches in regard to its nature, by a general confession of ignorance. So far as I know, there is scarcely one feature of the disease, either in its epidemic or in its personal relations, that might not receive new light by careful investigations conducted *de novo*, just as if the whole of the literature to which I have alluded had perished out of the world.

Before I leave this subject of the investigation of the nature of cholera, I would like to say that the disease presents itself to our notice under two forms, the endemic and the epidemic. In this part of India, we have not many opportunities of studying endemic cholera. Many years ago, I thought that cholera was an endemic disease in the town of Madras, but a longer experience of the mortality-returns has shown me that it is not so. For many consecutive months the town death-registration gives no sign of cholera; and this experience is confirmed by the medical officers practising in the city, and who are connected with public hospitals. Endemic cholera occurs most frequently in South India in the delta of the Cauveri, *i.e.*, in the Tanjore and Trichinopoly districts, and also in Malabar. This form of the disease may possibly be identical, as regards symptoms and pathology, with the epidemic form; but there is this peculiarity about it, that it occurs for the most part in single cases, which are not followed by others. A man in previous good health may be seized with vomiting and purging, followed by cramps, sunken features, loss of pulse, and speedy death, in fact, with all the recognised symptoms of Asiatic cholera; yet such a case, whether sanitary precautions be or be not adopted, is not followed by others. A district which is free of epidemic cholera may return three, four, or a dozen cases of this sort in a month, but they occur as isolated cases, and it may be in villages widely separated. My reason for saying that cholera is mostly endemic in Tanjore is, that the registration-returns of that district show cholera in isolated cases, at times when the whole of the neighbouring districts are free of the disease, and inquiries made regarding some of these cases left no doubt that they were of the nature of choleraic attacks. Cases of this kind have been seen occasionally by medical officers in charge of troops, and other bodies of men; and the circumstances under which they have happened showed that they were isolated attacks, unconnected with any epidemic movement of cholera.

In the area of the Gangetic delta, this form of cholera is of common occurrence, so common, in fact, that medical officers of the highest character and repute in their profession, whose experience has been chiefly limited to observation of the disease in its natural home, have generally been foremost in arguing that cholera should not be classed amongst the group of infectious or contagious maladies. I need only refer to the recent discussion on this subject at the Amsterdam medical congress in 1883, to show the views entertained by medical officers of high scientific reputation, whose experience was chiefly Bengal experience. When the great cholera epidemic of 1817 and 1818 passed over India, and the medical officers in Southern India were called upon to record their experience, a considerable number of them testified to their practical acquaintance with endemic cholera, as an ordinary disease of the country, though none then living had ever seen the epidemic variety, until it appeared in 1817 and 1818. That epidemic cholera had appeared in Southern India prior to this, is quite certain, from the experience of Girdlestone in the Madras and Ceylon Hospitals in 1782, and from the Madras Medical Board records of 1786, which give a graphic description of the disease as it broke out in Arcot and Vellore; but for the period between 1786, and 1817, thirty-one years, it seems to be an established fact that cholera, in its epidemic form, nowhere prevailed in the Indian peninsula. Those who had seen it in 1782 and 1786, had passed away before its appearance in 1817 and subsequent years; and the medical officers of the latter period had no experience of an epidemic type of cholera, such as we have been but too familiar with from 1817 down to the present date.

It will be well, therefore, that we should recognise that there is an endemic form of cholera, and also an epidemic form, in any investigations on which we may enter regarding the identity or the specific differences of these two forms of disease. Endemic cholera may be said to have its home in the deep alluvium about the mouths of great rivers, especially of the Ganges. It is influenced by season and temperature; it disappears to a great extent when the surface-soil is covered by water, whether by natural rainfall or artificial irrigation, and reappears and attains its maxim of intensity when the country is beginning to dry up, and the subsoil moisture has receded from the surface. I have been much struck by the similarity in the physical conditions of the soil of the Gangetic and Cauveri deltas, and of the habits of the people in both localities, living, as it were, on slightly raised mounds, surrounded by natural or artificial swamps, and trusting to open pools for water-supply, which, as the land dries, become stagnant, and no doubt frequently polluted.

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[1] Dr. J. M. Cunningham shows that, out of a total of 9,180 persons engaged in attendance on 4,999 cases of cholera, during the last six years, only 170 of the attendants were subsequently attacked.

The epidemic form of cholera, on the other hand, has no special affection for any circumscribed locality, and it is the form with which all practitioners outside of the valley of the Ganges have mostly to deal.

I believe the great majority of those medical men in India who have had opportunities of studying its characteristics, are impressed with the conviction that it is one of those diseases the elements, or germs, of which may be transported from place to place by more than one agency; and, although this view of the nature of cholera is vigorously combated by men whose opinions are entitled to great weight, I am bound to say here, that all my individual experience, extending over thirty years, would lead me to deal with the epidemic form of cholera as a disease favoured in its diffusion, under certain conditions, by human agency. Time will not permit me to go into the details on which this belief is founded, and I should not have alluded to the subject in this cursory way, only that I see that the opinion of the medical profession seems to be veering round to quite an opposite direction.

The epidemic form of cholera visits Southern India at considerable intervals of time. The natural life-period of an epidemic, taking the Madras country as a whole, is about three years; and, in a few localities, it may extend over four years, when it dies out completely, leaving, as a rule, a period of one or more years of absolute freedom. During what may be termed the life-period of an epidemic, the progress of cholera is influenced by seasonal peculiarities. It may attack a locality in the first year of invasion, and be subjected to periods of recrudescence during the two or three following years; or it may exhaust itself with the first attack, leaving that particular area quite free for the remaining period. Likewise, it may pass over certain areas of country in the first year, and attack them in subsequent years. The great fact to be remembered is, that each epidemic period has a life-history of about three years, and that cholera may prevail at any time, in any part of the presidency, once or oftener within such period of three years. It sometimes happens that epidemics of cholera overlap each other, as it were, that a new epidemic may be coming upon us from the north before the old one in the south is quite ended; and hence, to persons who do not study the progress of epidemics with care, from year to year, there may be some difficulty in recognising the truth that each epidemic visitation has a definite life-history of its own.

It is in regard to epidemic cholera that the opportunities of study and research abound in South India. We ought to know more than we do about the conditions favouring the retention in, or hasty disappearance of, cholera from certain localities, and these conditions require to be very carefully investigated. We want also more attention given to the elucidation of facts regarding the first cases which occur in a locality during a period of invasion. This subject is beset with difficulties, because the people are so ignorant and non-observant, that they can give but little help, except in the numerous instances in which they know that the first case has shown itself in a traveller or person coming from another village. Every new epidemic of cholera, if investigated carefully, ought to yield us valuable material for building up a true history of the nature of the disease; and a society such as ours might well determine the lines on which systematic inquiry is desirable.

I must not trespass too long on your forbearance, but you will pardon me, as an old worker in the branch of our profession which seeks to prevent, rather than cure, disease, if I take a brief retrospect of Sanitary work in India.

I came out to India in the days prior to the recognition of special departments for the preservation of health. The Royal Commission on the Sanitary Condition of the Indian Army made its report in the year 1863, and it showed conclusively that, from the beginning of the century until 1856, the annual death-rate of British troops in India had averaged all round 69 per mille of strength. In Southern India the rate was somewhat less; but when I mention that in the ten years ending 1883 the death-rate of British troops in the Madras command was only 10.8 per mille, you will see that the wise and costly efforts made by Government to improve the sanitary conditions of the soldier's life in India, have been attended by a very large measure of success. Vast sums of money have been spent in improving the barrack accommodation, the drainage, and water-supply of military cantonments; and very much has been done, within my own experience, to place the personal hygiene of the soldier, in all that relates to his food, drink, clothing, occupation, and amusement, under intelligent control. I do not mean to say that all has been done that is possible or practicable to do; but every year has seen some progress in these matters, and the British soldier has never before been placed under such favourable circumstances for the maintenance of health as he enjoys at the present time. No doubt we have still too much of enteric fever and venereal disease in the British army; but, with regard to the latter, it is not possible for the Government to protect men from diseases brought about by their personal carelessness and indiscretion, and especially when they will make no effort to help themselves.

Notwithstanding all that the Government can do in sanitary police, there must be a considerable amount of sickness and mortality resulting from causes with which the individual alone can deal, and with which in some degree he may deal when his education has brought home to him the elementary truths regarding the preservation of health. When men learn to eat, drink, work, sleep, and play, as rational beings, there will be a still further reduction in the amount of disease, invaliding, and mortality in the British army. Not only have beneficial efforts been made for the welfare of the British and Indian soldiers, but there has been a steady effort of late years to apply the principles of hygiene in furtherance of the welfare of the large civil population of India. These efforts, owing to the magnitude of the task, have not hitherto yielded such appreciable results as those undertaken on the more limited scale in respect to the Indian army; still a considerable amount of good work has been done through the agency of local boards and municipalities, all of which are the creation of recent years. Those of us who may be spared to see the close of the nineteenth century of the Christian era may reasonably look forward to a time when the Indian population generally will be better acquainted with the laws of health, and apply them with intelligent interest for their own protection. The Marquis of Ripon's scheme of local self-government involves the remodeling of our laws for the guidance of local authorities in all sanitary concerns. The new Bills for district municipalities and local boards of this Presidency, in the drawing up of which I have been honoured by His Excellency the Governor with a prominent position, make adequate provision for the cleansing and conservancy of towns, water-supply and drainage, the control of public and private markets, compulsory vaccination, death-registration, medical attendance of the poor, primary education, and all other matters necessary for the public health, safety, and convenience.

In the rural districts, it is contemplated to have Taluq Boards, working in subordination to the District Boards; and, under the control of the Taluq Boards, the several villages, as regards sanitary measures, will be grouped into unions, and in the formation of these unions we hope to secure the employment of the most important of the village officials. We recognise, in fact, the existence, in this part of India, of the village commune, and entrust the principal members of it, under supervision, with the simple duty of looking after the water-supply and conservancy of the limited area of country comprised in the union. I need not add that, taking as I do the warmest interest in the social progress of the natives of this country, I believe the Bills now under consideration in the Local Legislative Council will, as they become law, add materially to the health, happiness, and prosperity of the people; and that the entrusting of the people themselves with wider responsibilities in the management of local affairs will be of the greatest advantage to the sanitary administration of the country. However dubious the people of India may be in regard to the privilege of taxing themselves for local wants and local objects, there is certainly one object of taxation which is paid for ungrudgingly, and that is the provision of hospitals and dispensaries. As professional men, we may well feel proud that there is a large and increasing demand in the country for educated medical men. Our local boards and municipalities, in all cases, pay the larger share of the salaries of medical officers employed under them, and defray the whole cost of providing instruments, medicines, hospital-furniture, diets, etc. The hospitals and dispensaries in Madras are increasing year by year; and when I think that, twenty years ago, not a single institution of this kind was maintained, except at the cost of Government, and that at the present time there are nearly three hundred centres of medical relief in operation, maintained with the full consent and approval of those who have to pay the cost, I cannot but think that the system which our forefathers brought from the West to the East is greatly and highly appreciated by the people of Southern India. I am perfectly safe in saying that there is no object of expenditure of locally raised taxation which is so generally popular with the people as that of multiplying and extending the centres of medical relief. And, while touching thus briefly on our arrangements for medical relief, I have brought for the inspection of the members of the Association two large volumes on the *Medical Practice of*

India, recently circulated in the Medical Department for annotation and further contribution. These volumes contain all the information at present extant regarding the indigenous materia medica of India; and those who are only superficially acquainted with the subject will be surprised at the length, breadth, and bulk of the record. For myself, I have never had the least doubt that the Indian materia medica was specially rich in valuable remedies, and that one of the duties imposed upon us by the obligations of our profession was to pursue all legitimate inquiry regarding the nature and action of the many drugs which have been used by the people of India, with more or less of confidence and benefit.

If a country be naturally rich in medicinal products, it is all the more necessary that the young men whom we send out to practise their profession, throughout the length and breadth of the land, should be, to a great extent, independent of foreign countries for their remedial agents. A country that yields opium, Indian hemp, nux vomica, rhubarb, senna, cinchona, nitrate of potash, and jalap, to name only a few of our commercial exports, need not be dependent, to any great extent, on the importation of foreign drugs. We want a number of men imbued with the spirit of a Roxburgh, a Whitelaw Ainslie, an O'Shaughnessey, or a Waring, to take up and advance the great work to which these eminent men devoted themselves. The papers to which I allude are drawn up by Dr. George Watt, M.B., and Dr. Warder, of Bengal, apparently in connection with the Calcutta Exhibition; and I hope that all who can do so will help them in the preparation of a compendious Indian materia medica, by noting their individual experience of the various drugs.

With this brief divergence from the subject of sanitary improvements, I will now ask your attention for a moment to the condition of Indian gaols, and the changes effected in them as a consequence of greater attention to the health of prisoners. In these institutions, we have the opportunity of accurate and careful experiment in regard to all matters affecting personal hygiene, and within the period of my own recollection the labours of our professional brethren in India have resulted in an enormous saving of human life. For many years after my attention was directed to the subject, the yearly mortality in Madras gaols averaged from 100 to 120 per 1,000. Under a better dietary, and improved sanitary conditions, the mortality has decreased by more than two-thirds. In this calculation, I omit the results of the great famine-period, as the normal results of gaol-life were vitiated by the inclusion in the statistics of vast number of men dying of slow starvation, which was not attributable to gaol-management. Whenever there may be excessive mortality in a gaol, we may be quite certain that the fault is either in some defect of construction, or locality, or in non-observance of the rules laid down in regard to quality and quantity of food. I make this assertion as the result of a long and intimate acquaintance with the gaols of Southern India.

I may mention, also, a curious fact elicited during the progress of operations for supplying the city of Madras with water. Soon after the establishment of the new water-supply, it was found that guinea-worm, a disease constantly endemic in certain localities of the town, became less and less frequently seen in our public hospitals. In a few years, the disease was practically banished. The native infantry lines at Perambore were formerly noted for the constant presence of guinea-worm. A new regiment coming into these lines was sure to suffer, after a period of from ten to twelve months' residence. These lines are built on a platform artificially raised, and the ground around them was hollowed into artificial tanks, receiving local rainfall and drainage, and used chiefly for bathing, but no doubt the water was sometimes drunk. After standpipes containing the new water had been brought into the lines, guinea-worm disappeared, although the sepoys still used the tanks for bathing purposes. You are aware that the germ of guinea-worm has been said to enter and penetrate through the skin, and that men get it more often by bathing or wading in contaminated water than in any other way; but the facts brought to light in regard to the Perambore barracks show, most conclusively, that the infant parasite does not find its way into the body from the exterior, but by the water taken into the body. I have always had grave doubts in regard to the theory which represented the worm as penetrating the ducts and follicles of the skin; and the present instance shows that a change in the drinking-water, bathing going on as of old in the infecting tanks, has been sufficient to banish the disease from the locality in question. Our natural history of the guinea-worm is still obscure. Of the male worm we have no knowledge whatever, and the female filaria only makes her presence felt in the human body, when her time of reproduction is at hand.

There is another disease of the soil, "elephantiasis," which is confined to very limited areas. It was once very common in the city of Madras, but, if I am not mistaken, it is already on the decrease. With so chronic a disease, it is impossible to say whether the numbers affected by it are increasing or decreasing, without a special census; but my belief is that, with the improved water-supply, we shall find the old cases gradually dropping off by death, with no new ones to replace them. If we go five miles inland from the coast, in the neighbourhood of Madras, we find that the people do not suffer; while in an island to the north of Madras, formed by tidal lagoons, it is said that about one-third of the population are affected by elephantoid enlargements of the skin. The causes of the disease are evidently quite local.

In the widening of the sphere of sanitary operations in India, there will be ample scope for our most zealous labour, and the work will become more and more interesting as the intelligence of the people, and their friendly co-operation in measures for the public good, begin to develop. The results of the sanitary work already accomplished are cheering; and here, as in all other countries which acknowledge sanitary laws and regulations, the efforts to save life and prevent suffering, have not been in vain. I may here allude to recent changes introduced by the local government in the civil medical administration of this presidency, which appear to me to be efforts in the right direction. A civil surgeon is no longer the medical officer of a single station, in which the European officers reside. He is now entrusted with the general supervision and inspection of the sanitary needs of the whole district. He is, in fact, to all intents and purposes, a medical officer of health for an area of country averaging about 8,000 square miles; and within this area he visits all medical institutions, directs a staff of vaccinators, and concerns himself with all measures relating to public health. A district medical and sanitary officer occupies a field of enlarged usefulness, and the highest energies of the Indian Medical Service will find in such appointments ample opportunities of doing good work for the Government and people, and of enriching the records of our Branch association. The district medical and sanitary officer will be aided in his labours by the results of a very careful census of the population, taken in 1881, and published by Government in the last year; and it is now possible for him to note the birth- and death-rates of any village or group of villages in his district, and to bring his sanitary investigations to bear on any particular portion of his district in which disease or mortality may be abnormal.

If any further encouragement be needed for the extension of sanitary care to the vast population of India, we have before us the experience of the Registrar-General of England, who has noted the effect of the Public Health Acts in that country.

In his annual report for 1881 occurs the following passage.

"There is nothing in the series of annual reports issued by this office that comes out more distinctly and unmistakably than the wonderful effect which the sanitary operations of the last decade have had in saving life. The Public Health Act came into operation in 1872. The average annual death-rate for the immediately preceding ten years (1862-71) had been 22.6 per 1,000, and there were no indications whatsoever of any tendency of the rate to fall lower. Indeed, in 1871, the final year of this period, the rate was exactly 22.6. The Act came into force, and at once the rate began to fall, and continued to fall year by year, with almost unbroken regularity until 1881, when it was no more than 18.9."

The Registrar-General goes on to show that about 92,000 lives were saved and 500,000 fewer cases of illness occurred in the English population in 1881 than in 1871, and he shows that the sick and death-rates were still falling.

To take the instance of the City of Madras, in which the death-rate is abnormally high, I am satisfied that, when the law renders vaccination compulsory, we shall no longer hear of small-pox epidemics in which the inhabitants (mainly the young) are swept away at the rate of 200 in a week. Again, the town of Madura, notwithstanding repeated advice and caution since 1870, has neglected to provide its population with wholesome potable water, and, since October 1883, has lost about 1,100 of its population from epidemic cholera. Such occurrences cannot happen under well considered laws, enforced for the health and safety of communities. As a further encouragement to municipalities to provide suitable water for general use, I should here note the remarkable exemption which the town of Madras has enjoyed from epidemic cholera, since it has been at the cost of supplying water to its population, free of soil-contamination. In 1881, and again in 1883, cholera has tried to gain a footing amongst the population; but in each case it seemed to be kept back to the parts of the town which were still supplied by surface-wells, or where the water-supply was mixed or defective. So much were the Municipal Commissioners impressed by the fact in 1882, that they at once proceeded to extend their supply to parts of the town previously unfurnished by pipes; and this year the persistence of cholera in the northern fishing village of Cassimode has induced the Commissioners to undertake a further extension. The reduction in cholera-mortality in the town of Madras will be better understood if I show you that, in the decade from 1857 to 1866, the average yearly number of deaths registered was 1,959. The famine of 1876 and 1877 was a disturbing element, and in these years our water-supply from the new source to a great extent failed; but I will take, for comparison with the above results, the deaths in the six years ending 1883. In this period, 729 deaths were registered from cholera in the city of Madras, or, on an average, 121 in a year. Compare these figures with the average of 1,959 deaths yearly in the decade ending 1866, and you will be able to form some idea of the vast advantages the city at present enjoys in regard to its liability to cholera-epidemics.

The new water-supply was introduced in May 1872, to limited portions of the town; and, in the three years 1872, 1873, and 1874, there were only eleven deaths registered from cholera in the whole town. The Madras water-works, as originally designed by my friend, the late William Frazer, C.E., would have been a very perfect source of supply for the town. Unfortunately, as I think, his scheme was thought to be too expensive, and the town has been supplied with unfiltered water by gravitation, instead of by filtered water under pressure as contemplated in Mr. Frazer's designs. This is so far better than the soil-water of the town area, that, even in its present condition, it has proved a powerful antidote to epidemic cholera, and has certainly banished guinea-worm from the list of local diseases.

And now, gentlemen, let me thank you for the great honour you have done me in electing me the first President of this Association. My time amongst you is fast drawing to a close; but wherever I may be, so long as life and intellectual powers are spared to me, I shall never cease to concern myself in your pursuits, and in the progress of our great and glorious profession. Of the profession to which we belong, it is the fact that our daily pursuits never cease to interest, or afford occupation for our best faculties. Age may creep upon us, but the problems we have to deal with are always young. Of Medicine, more truly than of Cleopatra, it may be said

"Age cannot wither her, nor custom stale
Her infinite variety.

CLINICAL REMARKS

ON

AMPUTATION AT THE HIP-JOINT.*

WITH DETAILS OF THREE CASES AT THE BIRMINGHAM GENERAL HOSPITAL.

By THOMAS F. CHAVASSE, M.D., F.R.C.S.Ed.,

Surgeon to the Hospital.

AMPUTATION at the hip-joint, and removal of nearly one quarter of the body, was deemed to be an impracticable operation until the year 1759, when the Academy of Surgery in Paris proposed the subject for its grand prize, and awarded the same to a surgeon named Barbet for his essay. This impetus gave surgeons fresh opportunities of considering the whole question, but it was not until 1773 that the complete operation was performed; and whether the first operator was a Frenchman, M. Perrault, or Mr. H. Thomson of the London Hospital, is still a matter of doubt. At all events, at a much later date, there does not appear to have been any unanimity amongst surgeons with regard to its utility. Even the eminent Pott regarded disarticulation at the hip as a very dreadful proceeding: for he says, in 1808, "I have seen it done, and am now very sure I shall never do it unless it be on a dead body." But since that time practical surgery has made so many forward strides, that, with the aid of anæsthetics, antiseptics, and certain knowledge of how hæmorrhage can be controlled, the operation is now [illegible] generally regarded with the same distrust.

During the last twelve months in the hospital, we have had four examples of the operation, one case being under the care of my colleague, Mr. Jolly, the other three being my own. In three of these cases, the immediate results were successful, and in the fatal case (No. 3), if the patient's consent could have been obtained earlier, the issue might have probably been more favorable.

It has been computed that amputation at the hip-joint may be performed by forty-four different operations, but, practically, these may be reduced to two, viz., when undertaken for malignant disease, and it is advisable to remove the soft parts of the affected limb as completely as possible, Guthrie's method by anterior and posterior skin-flaps cut from without inwards is, I think, the best procedure; in those cases where the head of the bone has been excised, and removal of the entire limb is subsequently deemed necessary, the operation advocated by Furneaux Jordan offers real advantages, and will, I believe, eventually be found to yield the lowest mortality-statistics.

Two points to which attention must be directed when disarticulation of the hip has to be performed, are, primarily, the hæmorrhage during the operation; and, secondarily, the great shock inflicted upon the patient. The former need not cause much alarm, for the main artery of the limb which has to be dealt with is of large size, and may with readiness be controlled, and, if not controlled, may be easily caught and ligatured; and the smaller vessels can for a time be restrained by sponge-pressure.

In 1820, Guthrie, writing on this operation, says, "the danger arising from loss of blood has proved to be trifling, and no bad consequences have ever resulted from it" (Guthrie on *Gunshot Wounds*). The second complication cannot be so lightly dismissed, and the older the patient the more serious are the effects of shock. In those over twenty years of age who have to submit to this operation, each year of added life seems, in a disproportionate ratio, to increase the risks, and to diminish the chances of a successful issue.

CASE I (dresser, Mr. Evers).—B. G., aged 15, was admitted into hospital on May 5th, 1882. Whilst on her way to school, for some time past, the girl had made a practice of jumping through an old window four or six feet from the ground; and, a month before admission, she slipped and hurt her left leg. On May 2nd, it was noticed that the left thigh began to swell, and a few days later she was sent to the hospital. The patient was anæmic, and had a careworn expression, which made her look older than her years; it was stated that she had always been delicate. The lower end of the left femur, more especially on its internal aspect, was found to be much thickened, and the soft tissues were swollen, hot and painful to the touch. The temperature at night was 102.4°; pulse 120; appetite quite gone.

To verify our diagnosis, two days after admission, a small incision, three-quarters of an inch long, was made on the inner side of the swelling; the forefinger being inserted into the opening, passed at once into soft granulation-tissue. A piece of this removed, on microscopic examination, proved the growth to be a round-celled sarcoma. The exploration caused profuse hæmorrhage from the tumour; and I would direct your attention to the fact that, in exploring a doubtful neoplasm, a disproportionate amount of bleeding from the needle-puncture should lead you to suspect malignancy. The parents of the child declined to have the limb removed.

May 16th.—It was noted that the swelling had much increased in size, and the shaft of the bone appeared to be thickened higher up. Through the exploratory incision there was a fungating protrusion. The temperature was never lower than 101° Fahr., and the patient was rapidly emaciating.

May 27th.—The growth was still increasing rapidly, and was now of the size of a child's head.

[illegible] With the consent of the parents, I removed the limb at the hip-joint. The following were the means adopted for controlling the hæmorrhage. The circulation of the right limb was cut off by means of an India-rubber tourniquet, applied just below Poupart's ligament. The left lower extremity was emptied of its contained blood by means of elevation, and an elastic band applied just above the knee. [illegible] controlled that, from first to last, not two ounces of blood were lost. [illegible] superior iliac spine, and terminated two inches below the tuber ischii. [illegible] of the lower third of the shaft of the femur, and that the femoral and [illegible]

[illegible]

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* Delivered at the Hospital.

The advantages of cutting anterior and posterior skin-flaps from without inwards are three.

1. The muscles, not being divided until both skin-flaps are reflected, the blood-vessels are readily under control before they are severed.

2. Much less of the soft parts are left than by any other plan of procedure; this, in the presence of a malignant neoplasm, is especially desired.

3. The flaps can be accurately shaped, and a near approach to the rectum avoided, a point of importance when Listerism is employed.

The only disadvantage of the method is, that it is not so expeditious as some of the other operations; but, since the introduction of anæsthetics, mere rapidity of execution is not a matter worthy of much consideration.

In the next case, the same method of operating was pursued; although, had the evidence been sufficient to show that the head of the bone was detached from the shaft, in spite of the numerous sinuses which existed, I should have disarticulated by Furneaux Jordan's plan.

Case II. (dresser, Mr. Jones Bateman).—[illegible], aged 5, was admitted September 22nd, 1882, with a history of a fall a year ago. As a consequence, there had been much pain in the right hip and knee-joints, and the formation of many abscesses around the former. He had been an inmate of various other hospitals.

On examination, the patient's right lower limb was one inch and a quarter shorter than its fellow, and the foot was everted. The whole of the shaft of the femur was thickened, with many sinuses leading to necrosed bone. At the lower third of the shaft, a distinct fracture existed. Sinuses were also numerous on the anterior and lateral aspects of the hip-joint.

October 13th.—Operation. Nearly the same precautions against hæmorrhage were taken as in the former case, but a little more blood was lost during the operation. The skin-flaps were made from without inwards, and the head of the femur was found to be quite disorganised, lying loose in the acetabular cavity. The lower one-third of the shaft of the bone was merely held together by two small lateral bands of periosteum, and from this point up to the lesser trochanter, there extended a large sequestrum. The lower fragment of the fracture had a very sharp and prominent apex, rough and granular to the touch.

Owing to the septic condition of the parts before operation, the attempts to asepticise the wounds failed; and, on the fourth day after the operation, modified antiseptic dressings were applied. The shock following the operation was great, but the patient gradually rallied, and, by November 11th, was able to leave his bed.

On December 11th, he went home on crutches, his stump being quite sound. You have now an opportunity of seeing that the lad has become strong and robust; and, by means of his one crutch, we are told that he is able to progress nearly as rapidly as his biped playfellows.

Case III. (dresser, Mr. Jefferies).—E. F., aged 32, was admitted in the beginning of February, 1883. He had on a previous occasion been in hospital for many months, and a year before I had removed the head of his left femur, together with a large portion of his acetabulum, for long standing disease. Ostitis of the shaft of the femur followed this operation, and the continuous amount of pus discharged was from a pint to a pint and a half daily. On the outer side of the upper part of the femoral shaft, various sinuses existed, through which bare bone could be detected. The man was very pale and pasty looking, but had no albuminuria.

February 27th.—Furneaux Jordan's operation was performed. An incision eight inches long was made in the outer side of the limb, commencing just above the great trochanter. At the lower end of this cut another was carried circularly round the limb, dividing the integument. This structure having been reflected, the muscles were then divided, also in a circular manner, and the limb readily removed. Several large pieces of bone were taken away from the ischium. The hæmorrhage was effectually controlled by the digital pressure of my colleagues, Mr. Bartleet and Mr. Archer. About five ounces of blood were lost during the whole operation, and this nearly all came from the branches of the internal iliac artery, and the greatly thickened tissues in the posterior portion of the flap.

No attempt was made to antisepticise the wound. An examination of the ablated limb showed that both the greater and lesser trochanters were carious, and that the shaft of the femur was denuded of its periosteum for half its length. After recovering from the ether, the man vomited very much, but by means of morphia-injections was able to sleep at intervals. Evening temperature, 98°; pulse, 100.

February 28th.—Temperature, morning, 102°; evening, 102°; pulse, 140 and 144. He had been very restless all night, and sweating profusely in a cold clammy manner. The upper extremities were very cold. Efforts at vomiting were constant, and nothing relieved them. In the afternoon, the respirations became sighing. Pulse very small.

March 1st, at 6 A.M., the patient died exhausted, 43 hours after the operation.

The issue in this case was not successful, but the man was over 30 years of age, and had allowed a great drain to his vital powers to continue many months after he had been warned that the limb could not be saved. Although no albumen could be detected in the urine during life, yet his kidneys were found, at the *post mortem* examination, to be enlarged and fatty. I have noted, in several instances, the distressing and constant efforts made to vomit, which were prominent features in this instance, after the same amputation has been effected, and such may be taken as an index to the severe shock to which this operation subjects the patient. The remedies which appear to be of most service are iced champagne in frequent but small doses by the mouth, pancreatised enemata of brandy, beef-tea, and eggs, and morphia cautiously given subcutaneously.

In this last case, I strongly suspect, if the limb had been removed by transfixion or by the skin-flaps method, that, owing to complete exposure of a much larger surface of the soft parts around the hip-joint, the consequent shock would have been greater, and life would not have been prolonged the number of hours it was.

The advantages of Furneaux Jordan's method are said to be these.

1. From the position of the incision, it is very easy to control hæmorrhage, even if you be short-handed, or your assistant be not very dexterous. (It must not be forgotten that the superficial and profunda femorals, instead of one common trunk, have to be dealt with.

2. The large muscles of the thigh around the joint are not directly interfered with, the shaft being as it were shelled out of its muscle-bed. It is, therefore, natural to suppose, and experience has proved the truth of the supposition, that there must be a consequent diminution of nervous shock to the patient; in fact, a diminution probably great enough to turn the scale in his favour.

In actual practice, it will be found that ablation can be performed by this method much more speedily than would at first sight appear; and the resulting stump, although primarily somewhat clumsy looking, after a time, owing to retraction and atrophy of the muscular tissues, is good, and the final result is both artistic and agreeable to the owner.

The mortality after amputation at the hip-joint is high; the statistics of Dr. Sheppard, of Philadelphia, based upon 633 instances in which the operation has been performed for all causes, show that 64.1 deaths occur in every 100 patients. This number includes cases arising in military practice, where, as might be expected, the death-rate is very great, viz., 87.3 per cent. But taking 245 cases in which the operation was undertaken in civil practice, for disease, the mortality is reduced to 41.1 per cent. These numbers have been collected from all sources, and include the earliest attempts.

In the future, I am sanguine enough to think that even this fatality may be reduced; for, if surgeons find that, by Jordan's method, the effects of shock are sensibly diminished, they will not hesitate, in cases of disease of the bone, to advise removal of the lower extremity at an earlier period than is now their custom, and before the patient's vital energies are reduced to the lowest ebb, or amyloid degeneration has commenced.

A FEW REMARKS ON POLITZERISATION, AND A NEW FORM OF POLITZER'S BAG FOR AUTO-INFLATION OF THE TYMPANUM WITH RESPIRED AIR.

By H. MACNAUGHTON JONES, M.D., M.Ch., F.R.C.S.I. & Ed.,
Lately Surgeon to the Ophthalmic, Aural, and Throat Hospital, Cork, and
Professor in the Queen's University, Ireland.

No one can doubt the therapeutic value of Politzer's plan of ventilating the tympanic cavity, and of opening the Eustachian tube. Since Professor Politzer first drew attention to this method of passing air into the tympanum in 1863, to the present date, this practice has become universal with aural surgeons. It is, in my experience, after fifteen years' use of the Politzer bag, a safe, most efficacious, and often permanent mode of relieving deafness due to closure of the Eustachian tube, or collapse of its walls, and an accompanying collapsed and rigid condition of the tympanic membrane. Having practised every proposed modification of Politzer's plan, both as regards appliance and mode of application, I find that the plain bag, with a piece of tubing attached to the pipe or the olive-shaped nozzle of Weber Liel, gives me the best practical results; and that, in manner of application, either the swallowing of a little water—the original suggestion of Politzer—or that of Lucæ, the nasal pronunciation of the vowel *a*, assists most satisfactorily the inflation. Having, as I say, tested frequently all other modifications, I endorse fully the statement in Professor Politzer's work (Cassells' translation, page 152): "A very little experience convinces one that the various proposed modifications of the method of closing the soft palate are inferior to that which I originally proposed." Simple as is this procedure, I find that both surgeons and patients often fail to efficiently practise it. Many years since, in a patient of my own, the use of Politzer's bag was followed by a frontal purulent catarrh most difficult to cure. In another case, I was consulted by a patient who attributed a frontal purulent discharge to violent Politzerisation. I have, in the course of time, come to adopt some suggestions of Gruber, Schwartze, Lucae, and Löwenberg, in inflation of the tympanum. "If I allow," says Gruber, "the patient to incline his head strongly towards one shoulder during this treatment, it is always successful, especially if I pass the nozzle into the nostril which corresponds to the ear into which I wish to inject the air. In those cases in which the air came into the ear of the other side as well, it almost always happened that the patient could feel the passage of the air more strongly in the upturned ear." In the paper read by Dr. Löwenberg in 1876 (International Otological Society's *Transactions*), on the consequences of closed Eustachian tube, he contrasted the change taking place in an artificially shut bronchus with that happening in the tympanic cavity with an intercepted Eustachian tube (*vide* author's aural treatise, page 71). He then suggested, with a view to substitute for atmospheric air a gaseous compound that will not suffer diminution in the tympanum, being as near as possible in its nature to the mixture which results from a previous interchange (and which must necessarily behave quite differently towards the blood in the tympanum from the unaltered air), the periodical inflation of previously respired air, composed of nitrogen, a large quantity of carbonic acid, a very little oxygen, warmed to the body-temperature, and saturated with watery vapour. To get the required compound, the patient is made to take a deep inspiration, hold the breath for as long a period as possible, and then expire. To obtain a quantity of this air, and certainty of interchange, the patient was directed to breathe into a bag of very thin rubber provided with a stopcock, to which a piece of tubing is attached, and through the free end of which the patient several times inspired and expired from and into the bag. An ordinary Politzer's bag with a stopcock attached near to its nozzle, can be filled from this bag once or oftener, and the respired air inflated.

This plan, in cases in which I have found the ordinary inflation to fail, I have, since Dr. Löwenberg's paper appeared, constantly tried, and am inclined to believe that it is occasionally more efficacious. Struck with my experience of the ill effects, or, at any rate, the probable consequences of inflating by the bag, if held vertically, I have always cautioned students and patients to insert the nozzle in a horizontal direction, directing the current of air towards the orifice of the Eustachian tube, and not towards the frontal sinus and the delicate ethmoidal cells. The accompanying drawing, taken from Politzer's *Text-book*, will show the manner in which the bag ought not, in my opinion, to be held.

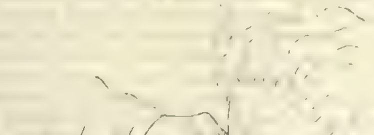
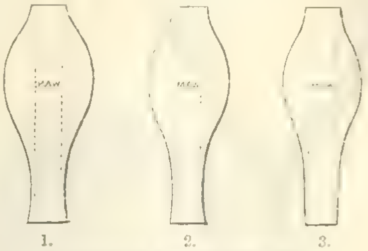


Fig. 1. Bag held vertically (after Politzer).

This bag, for the patient's use in auto-inflation, I have had made for me by Mr. Kerr of Messrs. Godfrey and Cook, Conduit Street, and which can be had of them, answers most conveniently for this purpose. Some glass nasal pieces Mr. Kerr showed me accidentally for another object. I had them modified to suit the procedure of Politzer, and covered with rubber. I have since had them made in vulcanite, and in different sizes. I think that they answer best when covered with rubber, as they take a tighter grip of the nares. In selecting a bag, the nasal pieces should be fitted to the nostrils; or, if the bag be sent for from a distance, be ordered in sizes, say, No. 1, 2, 3. With the simple action of swallowing a little saliva, or the prolonged pronunciation, in nasal fashion, of the vowel *a*, the patient, even a child, can himself inflate the tympanum. It is better, however, if the act is performed when a little water is swallowed. Each bag is made of the finest rubber, and is most compressible, the slightest pressure driving out the contained air. Bag No. 1 (Fig. 2), has a tube and mouthpiece attached for filling the bag with respired air, or chloride of ammonia vapour.



Nasal [illegible] vulcanite.

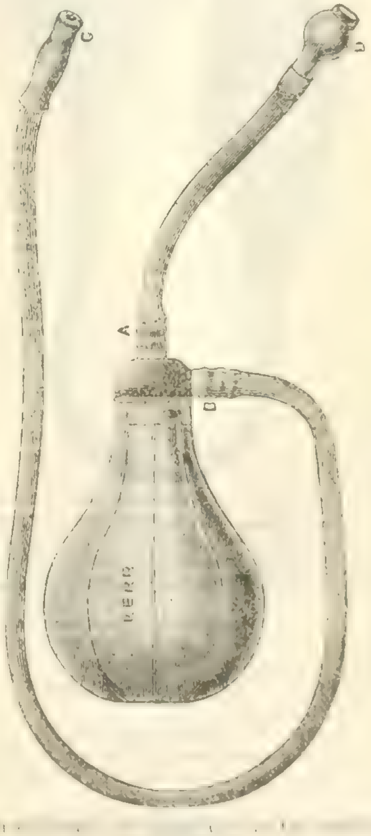


Fig. 2. [illegible]

There are two bag-valves, one at A, the other [illegible]. When the bag is filled by the patient through the [illegible] [illegible] by the valve [illegible] the bag [illegible] again filled by the tube [illegible] No. 2 [illegible] It has attached to it a reservoir A, which is [illegible] by a tube and valve [illegible] the bag for inflation. Another [illegible] valve [illegible] The reservoir is filled in the manner [illegible] the bag at B. By compressing the bag, [illegible] from the reservoir, and the inflation [illegible] is made [illegible]

By a series of acts of compression the reservoir is emptied. I still prefer for personal use with patients, in practising ordinary inflation, the simple Politzer's bag (Messrs. Matthews) with a piece of tubing attached to the nozzle. When the surgeon uses the bag without the respired air, he had better substitute a bit of tubing for the nasal piece. The small bag can be readily used for inflating the cavity of the tympanum with nascent chloride of ammonia vapour. The tube C has only to be attached to the small glass-tube of Kerr's inhaler, and, by compressing the bag the ammonia-vapour will be expelled at the nasal piece D.

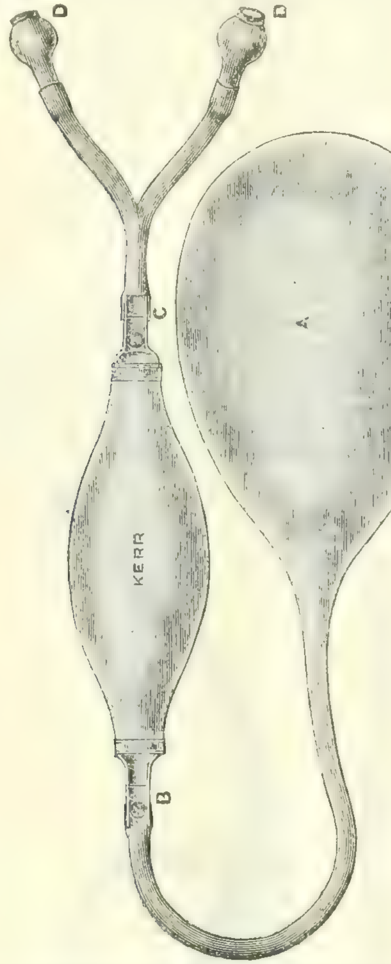
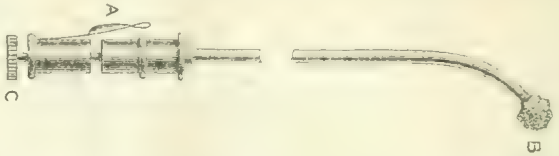


Fig. 5.—Bag with double nasal piece and reservoir for inhalation.

These are the hints I venture to give practitioners when adopting Politzer's method.

1. Let the patient be seated.
2. Incline the head to one side, and try inflation through either nostril; do this for both ears.
3. Direct the current as horizontally as possible.
4. Experimentally ascertain whether any form of nasal phonation, or the act of deglutition, best dilates the aperture of the tube. Adopt this method with the individual patient.
5. If phonation, compress during the pronunciation; if deglutition, observe, while the head is inclined, the elevation of the larynx, and compress the bag just at the commencement of its ascent.
6. In children, phonation is the best act to take advantage of, but direct inflation through the naso-pharynx may be sufficient. We can always inflate when the child cries. Most children, however, if treated properly and gently, are apt to learn to assist, and to submit to Politzerisation. With my bag there is no difficulty. I have several children at present using this small bag; the little patients use the single nasal piece best.

While on the subject of aural therapeutics, I may draw attention to a galvaniser for the tubal muscles of the Eustachian orifice made for me by Mr. Hawksley of Oxford Street. Contact is made with a lever-handle, A; the catheter-portion is capable of being curved at will, and the wire traversing it is connected with a small sponge, B. Either terminal is connected at the screw, C. I have found this instrument of service in cases of tubal innervation, and it is easily applied.



The best battery to use is the small portable bichromate battery of Mayer and Meltzer's, the strength of which can be regulated to a nicety. The current may be completed externally, either by an elastic band and brass button covered with sponge, and applied over the mastoid, or by means of a small laryngeal galvaniser, the brass knob having a little piece of moistened sponge attached, or the vulcanite speculum rheophore may be inserted in the external meatus, and the fine sponge applied to the tympanum.

ON THE ASSOCIATION OF FLAT-FOOT, WEAK ANKLE, ETC., OF PUBERTY, WITH ALBUMINURIA.

By R. CLEMENT LUCAS, B.S.Lond., F.R.C.S.,
Senior Assistant-Surgeon to Guy's Hospital, and Teacher of Operative and Practical Surgery in the Medical School; Surgeon to the Evelina Hospital for Children.

LAST year I published a paper "On a Form of late Rickets associated with Albuminuria" (*Lancet*, 1883), in which I pointed out that a condition characterised by relaxed ligaments especially, but also giving rise to some enlargement of epiphyses and yielding of bones, occurred about the age of puberty, and was commonly associated with albuminuria. This form of rickets I proposed to call the "rickets of adolescents," to bring it into accord with the albuminuria of adolescents described by Dr. Moxon, with which its etiology is identical. I have been accused of clouding the cause of this condition in language which so far obscured my meaning, as to leave the reader in doubt as to what I intended to convey. The unpleasant nature of the topic is sufficient excuse for the obscurity; but I do not wish again to be misunderstood, and I will distinctly state that the invariable cause of this form of rickets associated with albuminuria is masturbation. The absurdity of treating such cases merely by mechanical appliances, by division of tendons, by osteotomy or excision of bones, when there is an underlying habit causing a general constitutional disease, will be at once obvious. It is because hundreds of such cases are being daily treated without reference to the cause, that I feel it right to draw attention to my observation, and leave no further doubt as to my meaning. The unsatisfactory results of the treatment of flat-foot and weak ankles at this period are probably mainly due to the cause having hitherto passed unrecognised. I never now treat a case of flat-foot, knock-knee, weak ankle, or lateral curvature, commencing between the ages of twelve and twenty, without first examining the urine; and in the majority of cases I find albumen present. There are many cases of lateral curvature which begin in the rickets of infancy, and remain unnoticed till gradually exaggerated by growth; and in these the albumen is not present. But take a boy of fifteen, who for some months has complained of aching in his feet, weak knee or ankle, who lately has been noticed to stoop and cannot readily run upstairs, and who, on examination, has a commencing lateral curvature; examine his urine for albumen, and you will have at once an indication of the cause. I believe this is essentially a rachitic condition, in which the ligaments yield earlier than the bones. Some enlargement of the epiphyses of the ankles will, however, almost invariably be found, and less commonly a general epiphysial enlargement is present. The epiphyses being at this age far advanced in ossification, it is but natural that they should show less clearly the changes which are characteristic of infantile rickets. In long standing cases, the resemblance to rickets of infancy becomes more marked. Judging from my out-patient records, fifteen is the age at which this condition is most commonly met with, whilst nineteen brings the greater number of cases of first gonorrhœa, and twenty-five brings commencing strictures.

The two following cases of "rickets of adolescents" have recently attended among my out-patients.

H. F., aged 15, a bookbinder's apprentice, attended first on February 21st, 1884. He had been complaining about a month of aching pain in his feet, especially the left. The pain was in the instep and ankle. He was walking on the inner side of his boot. On examination, it was found that the arch of the foot had yielded, and that the inner ankle was unduly prominent. The lower epiphysis of the fibula, as well as that of the tibia, was enlarged. The ligaments had yielded less on the right side. On treating his urine with nitric acid, a considerable quantity of albumen was precipitated. His complexion was pale, and his forehead prominent. There was considerable beading of his ribs. His throat was congested, and his tonsils large; but of his throat he made no complaint.

The second case came first on March 27th, 1884, when his urine was not examined. H. N., aged 15, a printer's boy, sought advice on account of a weak foot and ankle. The right foot had quite lost its arch, and the ankle-bones were prominent. The left foot was also flat. The wrists were slightly enlarged, but the ribs were not distinctly beaded. When he attended on April 17th, his urine was examined, and found to contain a considerable quantity of albumen.

NOTE ON CHOLECYSTOTOMY.

By LAWSON TAIT, F.R.C.S.

THE patient upon whom I first did this operation, the first successful one of its kind, and the second ever attempted, has remained in perfect health from the date of her operation, August 1879, till now. I have performed the operation thirteen times, and all of the patients have recovered. One old woman died from suffocative catarrh some weeks after the wound was healed, and another case died of cancer of the liver, that being, in all probability, the cause of the distended gall-bladder, for I found no gall-stone which I could remove. Beyond the reach of my finger there was a nodule which, at the time, I believed to be an impacted calculus, but this was not confirmed by any *post mortem* examination, and the subsequent history was that of cancer.

The remaining eleven cases are in perfect health, and the results are perfect with one exception, and that exception has taught me a great deal.

It has, in the first place, satisfied me that my much lamented friend, Dr. Marion Sims, laid down principles from which we are not likely to depart with any advantage, and that he practically perfected this operation, though he did not meet with a successful result in his own case.

Two modifications of the proceedings as advised by him have been suggested and have been put in practice, but they are not based on good reasoning, and have not been successful in practice. The first is a proposal made, I believe, by Sir Spencer Wells, to open the gall-bladder, remove the calculi, and to close it by a continuous suture without attaching it to the abdominal wound. So far as I know, this has been put in practice only once, and the result was fatal. A large quantity of bile was found in the peritoneum; and though this may not have been the cause of death, it is clearly a condition which is unlikely to contribute to success.

But the arguments against this proceeding are much stronger than the mere want of success in a single case. The gall-bladder is an organ subject to periodic filling and emptying, the latter process being accomplished by the contraction of its muscular walls, and this contraction is far more powerful than seems to be believed by any author I have consulted on this point. It also secretes an abundant quantity of clear albuminous fluid from its mucous surface, and this fluid contains—if I may make a conclusion from the few rough experiments I have made on the subject—some kind of ferment. Even if no bile enter the gall-bladder, it speedily fills with this secretion and expels it; so that, if its duct were occupied by a calculus, and a wound in its base were closed by a continuous suture, and not fastened to the abdominal wall, as recommended by Sir Spencer Wells, it is difficult to believe that such wound would remain closed.

It is a matter of extreme difficulty—in fact, I may say it is impossible during the operation of cholecystotomy to be quite certain that all the stones are removed from the duct. This canal is distended by the passage of a calculus, urged forwards by the pressure of the secretion of mucus by the gall-bladder itself. So long as the stone is in the cystic duct, the contents of the distended gall-bladder consist entirely of this clear mucus. After the stone has passed the mouth of the liver-duct, the bile flows into the gall-bladder, its passage into the duodenum is prevented, it is reabsorbed into the system and jaundice is produced. The cystic duct, in its normal state, is of much smaller diameter than the common duct, and the agonising pain of the passage of a gall-stone seems to be limited, in great measure, to this part of its journey, for it is rare, after these severe attacks, that jaundice occurs. After mild attacks jaundice occurs sometimes, and this indicates that the stone is passing, or has passed, through the common duct.

This leads me to say that, should cholecystotomy be performed whilst a stone is in the common duct, and the gall-bladder treated as recommended by Sir Spencer Wells, it is clear that the pressure required to force the stone into the duodenum would be much greater than that required to tear open the stitched wound in the gall-bladder; extravasation of bile into the peritoneum ever afterwards would be inevitable.

Exactly the same argument is to be urged with still greater force against Langenbuch's proposal to remove the gall-bladder. The proposal is intrinsically absurd, for there can be no reason for removing any bladder merely because it has some stones in it. In many (five) of my cases the bladder was suppurating and greatly thickened, but the removal of the stones and the drainage of the bladder for a few weeks completely cured this condition. If the gall-bladder were removed at the time that a stone was lodged in the common duct, the bile must all flow, just as in the other case, into the peritoneum. I understand that Langenbuch's proceeding has been fatal in three out of six cases, where it is known to have been tried. It would have been fatal in three of my own cases if I had employed it, for in three of them stones were thus situated. In two I got the stones out, and in the third the stone is still there. Every drop of bile comes through the fistula, and not any appears to go through the intestines. The fistula is a mere pin-hole, and I have tried to close it three times, always with the result of bringing an agonising colic which lasts till the bile forces its way out through the fistula. This takes about fifty hours. It is clear I shall not succeed in this way, and I propose to open the abdomen again, about an inch to the inner side of the gall-bladder, and crush the stone *in situ* by means of padded forceps applied outside the duct. If a better plan should occur to any of my readers I should be glad to have it, and if it should be practicable and successful, its originator shall have full credit for the suggestion.

Whilst watching these interesting cases of biliary fistula, I have read much of the literature of investigations concerning the function of the bile, and I have been greatly amused to see how utterly futile experiments on animals have been in settling even the most elementary facts of the influence and the uses of the human bile. Thus I have not seen the slightest evidence to believe that either quantity or quality of food, or any drugs which were used for the legitimate treatment of these cases, as morphia, calomel, podophyllin, and rhubarb, have the slightest effect on the quantity or character of the secretion. None of the patients have suffered in any way when even the whole secretion has come through the fistula, in one case for months, save from the inconvenience of the dribbling. Indeed, in a case still under observation, the patient has positively gained in weight, and has greatly improved in health. The stools are almost milk-white, and there is not the slightest evidence of the flatulence and decomposition which is said in the text-books to be the result of biliary fistula.

The conclusion of the surgical experience in these cases is, that the entire possibilities of the treatment of gall-stone and distended gall-bladder are exhausted in Dr. Marion Sims' original paper published in this JOURNAL, that no further extension of it seems possible, and that no further experimentation, such as that of Wells and Langenbuch, seems desirable.

UNUSUAL SYMPTOMS FOLLOWING THE USE OF UNGUENTUM HYDRARGYRI AMMONIATI.[1]

By W. E. GREEN, M.R.C.S.

THE following case came under my notice a few months since, and, as it was altogether unusual, I thought a few notes might be interesting to this meeting.

On July 7th, I was asked to see a [illegible] lady [illegible] town, and, on arriving, was told that she was suffering from [illegible] of the head. I found the patient [illegible] with considerable [illegible] and swelling about the left temple, forehead, ear, and scalp. There was no feeling of heat, and [illegible] but only a feeling of fullness.

The left eye was partly closed by [illegible] of the lids. There was a dirty white tongue, and [illegible] no pain, and the pulse and temperature were normal. [illegible] the patient said that, as her scalp had been scurfy after bathing, she had bought a pot of dandruff-cream, and used it the day before. The symptoms had commenced very soon after the application, and were continually on the increase. She then showed me some small patches of swelling, on which appeared a few vesicles, between the clefts of each finger. Knowing that these preparations often contain white precipitate, I at once asked the patient as to whether she knew that she was peculiarly susceptible to the influence of mercury. She said "Yes;" that some years since, in Germany, her medical man had prescribed an ointment for a small sore behind the ear, and one slight application of it had produced an exactly similar condition to her present one; that he had ascribed it to the use of a mercurial ointment, and cautioned her never to make use of any preparation containing it. A saline aperient was given, and an effervescing medicine to allay the irritable condition of the stomach.

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[1] Read at a meeting [illegible] W[illegible] [illegible] Branch of the British Medical Association.

In the evening, the œdema had much increased, but was principally upon the left side; both eyes were closed; a larger quantity of cream had been used upon the left side.

The next day, all the symptoms were increased, and the chin hung down upon the left side like a great pendulous bag.

The following day, the patient was much better, and in a few days quite well again. In fact, it disappeared as quickly as it came, and there was no loss of strength.

The skin desquamated between the fingers and over the whole scalp. Throughout, the pulse was natural; there was no rise in temperature, no pain, and no prickings or local heat. Had these been present, I should at once have considered the case to be erysipelas, but the whole thing so apparently came as the result of the local application of the cream, as instanced by it also affecting the skin between the clefts of the fingers, presumably because it was more tender in those parts, or else had not been thoroughly washed off, that I could only look upon it as cause and effect, and not as a constitutional affection. I wrote and asked the opinion of Dr. Robert Liveing thereon, which he very kindly gave, as follows.

"I should call the eruption one of acute local dermatitis, produced by unguentum hydrargyri ammoniati (I assume you are right as to its origin). Of course, you are quite right as to its not being erysipelas. It comes much nearer to acute eczema, with much infiltration. I have often seen the eyes closed—in fact, all you describe—from an acute eczema of the head; but in your case—and that is the point of interest—you seem sure of an artificial production from the ointment. I have never met with a case of the kind produced by unguentum hydrargyri ammoniati, which is not usually an irritating application, but I have from a very strong ammonia lotion."

I should add that I found, upon inquiry, that the preparation used did contain about 40 grains of white precipitate to each ounce of the cream.

FIRST AID TO THE WOUNDED IN CIVIL LIFE.

By A. W. MAYO ROBSON, F.R.C.S.,

Surgeon to the Leeds General Infirmary.

THOSE who have had experience in the casualty-department of a hospital in a manufacturing town cannot have failed to notice the very dirty, and consequently septic, condition of wounds when first brought under the notice of the surgeon, rendering it often impossible to give the patients a chance of being treated antiseptically, and thus often leading to the loss of digits, of limbs, or even of life.

Now if, as is at present proposed in military surgery, some simple antiseptic dressing were immediately available, with short directions affixed, the injured might at once have their accidents attended to, and be sent to a surgeon, who would have a clean wound to deal with, instead of a foul sore, which must, of necessity, suppurate.

Messrs. Mayer, Meltzer, and Co., have, at my suggestion, put up such a dressing in little space, and at small cost, which can be supplied to firms, and either kept in the office or distributed to the foremen of departments; each packet having simple directions affixed as follows.

"Do not wash the wound, but simply dust over it, by means of the dredger, a thin layer of the yellow powder. Then apply a layer of the cotton, so as to completely cover the wound. Lastly, apply the bandage just tight enough to keep the dressing in place, until the patient sees a surgeon."

The whole is contained in a small tin case, whose contents are a dredger containing half an ounce of iodoform, a small amount of salicylic wool, and a carbolic gauze-bandage.

OBSTETRIC MEMORANDA.

DECIDUA TUBEROSA ET POLYPOSA.

A PATIENT aged 26, a multipara, three months pregnant, called me in a few days ago. On examination, I felt a mass of membranes, and, through them, a peculiar nodose substance. On passing my fingers further into the womb, the whole mass came away, with comparatively slight after-discharge. The membranes were very tough and thick, and were filled with a dark grumous fluid, with no traces of the fœtus. The uterine surface of the decidua vera was rough, and covered with coagulated blood; and upon the surface of the decidua directed towards the ovum there were large polypoid excrescences, which had caused the peculiar nodular feeling which had been detected on examination. The length of these polypi was from one-eighth to a quarter of an inch; they were devoid of mucous membrane. On section, they appeared filled with coagulated blood, and connected with each other by narrow bands of decidual tissue. According to Lusk, the cause of this variety of decidual inflammation is very obscure. Virchow states that syphilis is the exciting cause, with preexisting endometritis as an additional causative agent. Gusserow suggests that conception soon after delivery may excite the recently formed mucous membrane of the uterus to abnormal proliferation. Other writers state that it is idiopathic. This case I can ascribe to neither of the first two causes; but about three months ago, at the time of her supposed conception, the patient suffered from croupous pneumonia with high temperature, from which she recovered very slowly, and since then her periods appear to have been irregular. This form of decidual inflammation seems generally characterised by early miscarriage, as appears in this case. The patient has since made a good recovery. ALFRED WARD, M.B.,

Austin, near Rotherham, April 19th, 1884.

THERAPEUTIC MEMORANDA.

SUBSTITUTE FOR NITRITE OF AMYL CAPSULES.

IT must often happen to medical men, especially to those practising in the country, that, just when they want some nitrite of amyl capsules for administration in an urgent case, they find they are without them, and cannot obtain them without considerable delay. Although it is easy for the medical man himself to administer a few drops from a bottle by dropping, still it would be very dangerous to leave the bottle with the patient for self-administration, and therefore the remedy cannot be employed till the medical man has again been summoned.

To provide for the above contingency, I think the following plan will be found both convenient and economical. Some small wide-mouthed bottles should be obtained with closely fitting corks, and into each bottle a little cotton-wool should be placed. All that is necessary is to drop the required dose into the bottle, cork it tightly, and invert it. In this inverted position, the nitrite of amyl will retain its properties unimpaired for a considerable time, for some months at least, and can be used by simply removing the cork and applying the bottle to the nose of the patient.

R. L. BATTERBURY, M.D.Lond., Berkhampstead.

BEQUESTS AND DONATIONS.—Mr. John Harding, formerly of Manchester, afterwards of Leamington, bequeathed £3,000 to the Manchester Royal Infirmary, £3,000 to the Salford and Pendleton Royal Hospital and Dispensary, £2,000 to the Royal Hospital for Incurables at Putney, £2,000 to the National Hospital for the Paralysed and the Epileptic, £1,000 to the Manchester Royal Eye Hospital, £1,000 to St. Mary's Hospital at Manchester, £1,000 to the Northern Counties Hospital and Home for Chronic and Incurable Diseases at Ardwick Green, £1,000 to the Midland Counties Idiot Asylum at Knowle, Warwickshire, £500 to the Hereford Infirmary, £500 to the Samaritan Free Hospital for Women and Children, and £500 to the Cancer Hospital.—The Salop Infirmary at Shrewsbury has received £518 8s. 8d., under the will of the Rev. T. B. Parkes, Vicar of Atcham.—Mrs. Eliza Hawkins, of Uttoxeter, bequeathed £500 to the Burton-on-Trent Infirmary.—The Chester Infirmary has received £358 under the will of Mr. C. V. Royle, solicitor.—Major and Captain Thurlow has given £250, and Mrs. Fletcher £100, to the London Fever Hospital.—The Mercers' Company have given two hundred guineas, additional, to the National Hospital for Consumption at Ventnor, on account of the Earl of Northampton's Charity in aid of its funds.—The Merchant Taylors' Company have given £105 to the Royal Free Hospital.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ST. BARTHOLOMEW'S HOSPITAL.

TWO CASES OF TUBERCULAR TESTICLE WITH ANOMALOUS SYMPTOMS.

(Under the care of Mr. WALSHAM, Assistant-Surgeon.)

CASE I.—J. W., a carpenter, aged 52, was admitted on January 29th, 1883, under the care of Mr. Walsham, whose out-patient room he had been attending for the previous few weeks. He stated that, eight weeks earlier, he had had a blow upon the left testicle, and the morning afterwards found it swollen almost to the size it now had. The injury caused him very little pain at the time, and he had had none since. He did not think the testicle was swollen before he received the blow; but of this point he would not be sure, as the blow was the means of first drawing his attention to the organ. He was a healthy-looking man, and said he had always had good health. The left testicle was about the size and shape of a duck's egg. It was oval, smooth, non-translucent, uniformly tense, moderately heavy, and of the same consistency all over. The epididymis could not be felt or distinguished from the rest of the swelling, nor was the spermatic cord at all thickened. The skin over it was healthy, non-adherent, and showed no enlarged veins. Handling caused no pain, and there was but very slight, if any, testicular sensation. No enlargement of the glands in the lumbar region could be felt. There was no evidence whatever of his having had gonorrhœa or syphilis, and he denied ever having had either. A brother and a sister died of consumption, but none of the family, as far as he knew, had suffered from cancer. With the exception of a very slight impairment of the right apex posteriorly, the lungs appeared healthy, as did the other viscera. He was placed on small doses of mercury whilst attending as an out-patient for about three weeks; but, as no alteration in the character of the swelling occurred, he was taken into the hospital, and shown at the weekly consultations. The general opinion expressed was rather in favour of the swelling being sarcomatous, but all felt much doubt as to its exact nature, and it was suggested that it might possibly be a case of hæmatocele or chronic orchitis. Nearly all were in favour of its removal. The testicle was punctured, and found to be solid; a drop or two only of blood escaped, and was examined microscopically, but nothing beyond blood-cells was discovered.

On February 3rd, Mr. Walsham removed the testicle in the ordinary way, the spermatic cord being secured by a stout silk ligature, the ends of which were cut off short, and allowed to remain in the wound. The patient made a good recovery, with the exception that, on February 13th, a small abscess formed to the right of the anus, and, when opened, was found to contain about three drachms of sweet curdy pus. The ligature from the cord came away on February 23rd, and the patient was discharged on February 28th with the wound practically healed.

After removal, the body of the testicle was found uniformly enlarged, whilst the epididymis was healthy. Section through the enlarged body showed it to consist of a hard, grey, uniform, tough substance, traversed by transverse rows of bead-like masses of yellow caseous material, in which were interspersed drops of pus. On microscopic examination, the disease was pronounced to be tuberculous.

CASE II.—William G., aged 33, a bootmaker by trade, was admitted on October 17th, 1883, under Mr. Walsham's care, having previously attended for eight weeks in the out-patient room. He had noticed an enlargement of the right testicle for the last eighteen months, but had had no pain till within the last eight or nine weeks. He had received no blow nor other injury that he could remember, and positively denied ever having had syphilis or gonorrhœa. His father and mother were both healthy and living, and his grandparents had all lived to over seventy. He was the eldest of eighteen children, all, with the exception of three who died in infancy, now alive and well. He was himself married and the father of healthy children. The right testicle was enlarged, and about the size and shape of a Jargonelle pear. It was irregular, uneven, and nodular; firm, resisting, non-elastic, and of the same consistency throughout; the epididymis could not be distinguished from the body of the testis, but the spermatic cord was slightly thickened. The skin was non-adherent, and the tunica vaginalis contained some amount of fluid. There was slight tenderness on handling, and the testicular sensation was nearly lost. The prostate and vesiculæ seminales were apparently healthy. The appetite was good, the bowels regular, and the urine normal. With the exception of perhaps some roughness of the respiratory sounds at the right apex, but without increase of vocal resonance, the lungs and heart appeared sound.

Whilst an out-patient, he was given mercury and iodide of potassium. The hydrocele of the tunica vaginalis rapidly increased in size, and extended up the cord well into the external abdominal ring, causing him severe pain. The hydrocele was tapped, and the patient experienced great relief. It rapidly filled again, and he returned to have the tapping repeated, as the pain, he said, "doubled him up." After a second tapping, it again rapidly filled, and he was admitted into the hospital. The hydrocele-fluid was once more drawn off, and a small trocar and cannula introduced into the testicle, which felt of fibrous hardness, but only a drop or two of blood escaped. The patient was ordered to keep his bed, and was ordered cod-liver oil; but, notwithstanding the rest, the tunica vaginalis quickly refilled as often as it was tapped, and, as the testicle increased rather than decreased in size, and the patient suffered much pain, he was anxious to have it removed. This was accordingly done in the usual way on October 31st, the vessels of the spermatic cord being separately tied with carbolised catgut, and the wound dressed with antiseptic gauze. He made an excellent recovery; the wound was healed by November 10th, and he was discharged on November 13th. The body of the testicle was found to be infiltrated with tubercle, which had, in places, undergone caseous degeneration. The epididymis was of natural size and perfectly healthy.

REMARKS BY MR. WALSHAM.—Here, within the past few months, are two cases of enlarged testicle, the one simulating in many respects malignant, the other syphilitic disease, and both, on removal, turning out to be tuberculous. In neither were the usual symptoms on which we are accustomed to rely in the diagnosis of tuberculous or strumous testicle present; there was no enlargement of the epididymis, no adhesion of the skin, no sign of inflammation, no evidence of tubercle in the prostate, vesiculæ seminales, bladder, or kidneys; and, with the exception of the faintest suspicion of mischief at one apex, no signs of any in the lungs. One, as in malignant disease, was uniformly enlarged, ovoid, smooth, tense, firm, was said to have increased rapidly to its present size, and occurred in a patient over 50; but it gave no pain, it did not increase in size whilst under observation, the spermatic cord was not thickened, it was of the same consistency throughout, and on puncture felt of fibrous hardness and yielded only a drop or two of blood. The other, as in the later syphilitic affections of the organ, was irregular, hard, nodular, associated with a vaginal hydrocele and of slow growth; but there was no history of syphilis, nor any evidence of the patient having had that disease, and no benefit followed the use of syphilitic remedies.

A case almost identical with that first related—of tubercle simulating malignant disease—was recently under the care of my friend and colleague Mr. Butlin; and in this, as in my case, the tumour was of uniform consistency, firm, non-elastic, and yielded on puncture but very little blood. The question of diagnosis between tubercle and malignant disease should not often occur; but in cases with anomalous symptoms, as in the above, the uniform consistency of the tumour, the absence of elasticity, the fibrous hardness on puncture, combined with the very small escape of blood, are signs which, I think, may aid us in distinguishing tubercular affections.

The second case is of interest, inasmuch as, along with the absence of many of the ordinary signs of tuberculous testicle, especially the enlargement of the epididymis, there was present a vaginal hydrocele, which in tubercle is said to be [illegible].

As regards treatment, the condition of the testicles in both cases was found, after removal, to be such that there can, I think, be no question of the propriety of their excision.

BRISTOL GENERAL HOSPITAL.

[illegible]: OPERATION WITH ANTISEPTIC PRECAUTIONS.

(Under the care of Dr. A. E. AUST LAWRENCE, Physician-Accoucheur.)

[illegible]

was pushed through the hymen, and the thick menstrual secretion allowed to drain very slowly off into a basin, placed to receive it. After some time a piece of drainage-tube was placed in the opening, and the orifice of the vagina and the neighbouring parts were covered over with a pad soaked in a solution of carbolic acid in glycerine (1 in 20); and the parts were well packed with iodoform-wool.

The dressings were changed and the urine drawn off night and morning, under the spray of carbolic acid. The bowels were kept confined for three days by opium, and then relieved by an enema; the dressings still being kept in place. The drainage-tube was taken out night and morning, and washed and replaced.

On July 26th, the discharge having ceased, the patient was placed on the operating table, and the orifice of the vagina was enlarged sufficiently to allow any discharges free exit for the future; warm vaginal injections of Condy's fluid were now used, and a plug of carbolised lint kept in the vagina for a few days, when the patient went home perfectly well, and has since menstruated normally.

Remarks by Dr. Aust Lawrence.—When we consider that a large proportion of deaths from this very simple operation have been due to septicæmia, we can realise the value of treating them antiseptically. During the draining off of the menstrual secretion, air rushed in and out during each respiration, but as it had to pass through the spray, and became aseptic, no harm resulted. As it is impossible to prevent the access of air, our object must be to render it harmless, and with proper care there is no reason why perfect antiseptic precautions may not be taken. In my patient's case there was no rise in the temperature, and no bad odour with the discharges. I believe the best way to treat these cases is, to make a very small opening in the hymen, so that the fluid may drain off very slowly; and as long as there is any discharge, to maintain full antiseptic precautions.

GLASGOW OPHTHALMIC INSTITUTION.

CASE OF DETACHMENT OF THE RETINA, WITH COMPLETE LOSS OF SIGHT, CURED BY AN OPERATION.

(Under the care of Dr. Wolfe.)

[Reported by Dr. McGregor-Robertson.]

On September 5th, 1883, S. H., a tailor, aged 38, applied for advice. Three years before, he had lost the sight of his right eye. On examination, that eye was found quite blind; there was almost no perception of light. If the lamp were held at the outer side, a faint flicker of light was perceived, which disappeared as soon as the lamp was moved to the front or nasal side. In other respects, the condition of the eye was bad; the cornea was hazy; there was an opacity of the lens; and the pupil was fixed, and could not be dilated, owing to posterior adhesions. Tension + 1. In addition to the cataract, hazy cornea, and adherent pupil, the nature of the limitation of the visual field indicated a probable detachment of the retina. The condition was, therefore, considered hopeless. With the left eye, the patient could see quite well till two years before; at that time, it also became affected, and gradually grew worse, till the patient was unable to see to walk about. At the date of his presenting himself, the blindness was complete. He could not see the light of a lamp held before him in any direction. This (left) eye also had a nebulous cornea. Examination revealed complete detachment of the retina, and the presence of large flocculi floating in the vitreous humour. The pupil dilated normally; and tension was normal.

On February 3rd, 1884, the patient returned, most anxious that something should be tried for the left eye, as he thought he could not be worse after an operation than he was. On February 14th, accordingly, Dr. Wolfe operated under chloroform. The conjunctiva and fibrous tissue having been opened, the sclerotic was laid bare, and punctured in the posterior hemisphere of the globe in the line of the vertical meridian. Instead of the spurting out of fluid which usually follows the withdrawal of the lance, only a small quantity of serum oozed out each time the flat probe was introduced through the wound. The wound in the conjunctiva was closed with a silk ligature, the eyelids closed with adhesive plaster and lint, and a bandage applied over both eyes. On the sixth day after the operation, when the ligature was removed, vision was found so much improved that the patient could see faces and count fingers at 18 inches distance. The vision was, however, limited to the outer part of the field, the inner part being still a blank. The ophthalmoscope showed a detachment to the lower and outer part of the fundus. The tension of the eye being almost normal, Dr. Wolfe determined to repeat the operation. This was done on March 21st. The patient having been put under the influence of chloroform, the section was made in the space between the inferior and external recti muscles, the eyeball was rotated upwards and inwards, and the lance pushed through the sclerotic in the posterior hemisphere, at the region of the detachment. This time, unlike what happened on the previous occasion, a considerable quantity of serum gushed out as soon as the puncture was made. No ligature was applied; the eyelids were closed with adhesive plaster, lint, and a bandage.

On March 25th, four days after the second operation, the patient could count fingers with ease, even at a distance of several feet; the field of vision was complete; he could read Snellen's type 20 at 15 inches distance, and tell the time, almost to a minute, on an ordinary white faced watch.

Remarks by Dr. McGregor-Robertson.—Since October 1878, when he published his first case, Dr. Wolfe has already recorded five successful cases, but this is the first time that he has ventured to operate a second time, and with such satisfactory results.

This case is the more interesting, in view of the discussion on Detachment of the Retina, at the sitting of the Société Française d'Ophthalmologie, on January 29th. In this discussion, M. Wecker is reported (*Revue Clinique d'Oculistique*, February, 1884, p. 45) as advocating treatment of this affection by the actual cautery applied to the sclerotic, and M. Dor treats it by placing the patient on his back for four weeks, enjoining abstinence from every movement, and by applying a suction apparatus, and injecting pilocarpine; while M. Parinaud commends excising a portion of the sclerotic and repeated tapping, and adds that the tapping can be repeated by the patient himself. No wonder Hirschberg's commentary (*Centralblatt für Pract. Augenheilkunde*, March, 1884) on such practice should be of the inarticulate sort, expressed by a mark of exclamation.

I may add, that this operation has not been practised in this country. In Germany, a form of it, recommended by Hirschberg and Gräfe, has not been successful to the same extent. This Dr. Wolfe attributes to the fact that they puncture through conjunctiva and sclerotic without previous dissection of the conjunctiva, and the serum is permitted to diffuse itself through the fibrous tissue and become absorbed. Thus the operation cannot be performed with the same precision, and is, in some respects, haphazard.[1]

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

Monday, April 28th, 1884.

Arthur E. Durham, F.R.C.S., President, in the Chair.

Ulcerative Endocarditis with Microscopical Specimens showing Micrococci.—Dr. **Cayley** read a paper on a case of ulcerative endocarditis, which, together with Dr. Heneage Gibbes' report on the microscopical appearances, will be published shortly in full.—Dr. **Heneage Gibbes** exhibited the following microscopical specimens: 1. Micrococci in lymph from the inflamed endocardium; 2, micrococci in diphtheritic membrane; 3, vessel in the liver blocked with micrococci; 4, deposit on endocardium covered with micrococci; 5, inflammatory area in skin, showing small masses of micrococci; 6, blood-vessel in spleen crowded with micrococci.—Dr. **W. H. White** thought that the case was a good illustration of the great difficulty of arriving at a diagnosis. The symptoms were often so markedly of the typhoid type, that the disease was liable to be mistaken for enteric fever, or all the symptoms might be attributed to some one of the local complications.—Dr. **T. H. Green** commented on the absence of cultivation and inoculation experiments to establish the dependence of the disease on the micrococci. The irregularity of the temperature distinguished it from typhoid fever, and the diagnosis rested upon the concurrence of a murmur with the irregular pyrexia. Dr. Cayley's case was extremely acute, but Dr. Green detailed one case which came under his observation. A young woman, aged 25, the subject of old mitral disease, suffered for a year and a half from a very irregular type of pyrexia. She was able to go about in fair health until within a few days of her death. In another case, in which the diagnosis was confirmed by necropsy, the patient had been suffering from the disease for six months.—Dr. **A. E. Sanson** said he had recently brought forward a typical case, in which there was very little elevation of temperature. He thought there were a certain number of cases of ulcerative endocarditis which were not due to septic influence, but might properly be called neurotic.—Dr. **S. Coupland** questioned whether it was right to use the term ulcerative at all, as the disease might occur without anything like a septic clinical course. He would call such cases as Dr. Cayley's cases septic endocarditis, or, with Virchow, malignant endocarditis. The presence of micro-organisms was not peculiar to ulcerative endocarditis, as Klebs had found them in ordinary rheumatic endocarditis. As a rule, some septic source could be traced, causing the ordinary endocarditis to take on the septic form. Dr. Osler of Montreal had pointed out a connection between acute pneumonia and septic endocarditis, and that the right side of the heart was, in these cases, as much affected as the left. But pneumonia was not a constant precursor or accompaniment of septic endocarditis. It was still very obscure why a certain number of persons affected with chronic endocarditis became affected with this septic process.—Dr. HENEAGE GIBBES thought that nothing definite could be said as to the connection between the micrococci and the disease. In the present case, he had not been able to find any evidence that the organisms had caused rupture of the vessels and inflammation of the surrounding tissues. The capillaries were, it was true, distended with micrococci, but these might have been developed after death; indeed, he found it difficult to believe that these delicate vessels could have been blocked and distended without causing some inflammatory action.—Dr. CAYLEY thought the term ulcerative endocarditis objectionable. For instance, in this case there was no ulceration. He preferred the term infective pericarditis, or even the German term diphtheritic endocarditis. One form closely resembled typhoid fever; and the resemblance was the more striking, owing to the occurrence of diarrhœa due to intestinal embolism.

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[1] The patient was shown at a meeting of the Medico-Chirurgical Society of Glasgow on April 4th, 1884, fourteen days after the operation, his sight being then remarkably good. In verification of the diagnosis, if such were necessary, it was stated that the man had attended at a sister eye infirmary; and the nature of disease entered on his card of admission was, "irido-choroiditis and separation of the retina."

Hydro- and Pyo-salpinx. -Dr. J. KINGSTON FOWLER said that he had met with fifteen examples of these conditions in the *post mortem* room of the Middlesex Hospital in the course of the last three years. In none of the cases had the condition of the tubes been suspected during life, and clinical details were not reported, partly for this reason, and partly because all the cases were complicated by some other general or uterine affection; in most of the cases, the record of the *post mortem* appearances clearly indicated the course of the disease. The cases showed that the condition was a very dangerous one; many cases of peritonitis really due to this cause being set down to abscess of the ovary, pelvic cellulitis, or pelvic abscess. In eight of the fifteen cases, the condition of the tubes was the immediate cause of death; the disease was pyo-salpinx in all eight, and double in six. Of the eleven cases of pyo-salpinx, death was due to peritonitis in seven. These conditions of the Fallopian tube might be set up by any inflammatory changes in the uterine mucous membrane, and probably in many cases the primary change was tubercular. In many cases there was an indurated spot close to the uterine end of the tube, which was completely closed at that point.—The PRESIDENT considered the Society was much indebted to Dr. Fowler for bringing the subject so admirably forward, and for showing, what must be a surprise to many, that the disease was comparatively common.—Dr. ANGEL MONEY had met with one case of pyo-salpinx in a child seven years old; this was the only one out of 250 necropsies.—Dr. PLAYFAIR desired to express his high appreciation of Dr. Fowler's paper. It was a revelation to him to find that pyo-salpinx occurred with the frequency shown by Dr. Fowler's observations. Possibly the fact that so large a number of cases of cancer were treated in the Middlesex Hospital might in part explain the frequency with which the disease had been met with. The *via media* between the practice at Birmingham, and of those who believed that the operation should never be performed, was the safe course. He had operated four times, with one death. The diagnosis was exceedingly difficult, but the subject was one of great practical importance.—Dr. C. H. F. ROUTH commented on the impartiality shown by Dr. Fowler in his paper. He advocated aspiration in place of oöphorectomy, which operation had this unfortunate result, that it unsexed the woman.—Dr. EWART, during the three years for which he had performed the necropsies at St. George's Hospital, had been struck by the frequency with which he had met with this condition.

Dr. EDIS thought that Dr. Fowler had done good service by calling attention to the subject. Pyo-salpinx was a severe and painful affection, which required to be thoroughly studied.—Dr. FOWLER said that, in five of his cases, cancer was present. He thought there was no question of unsexing, as the patients were certainly sterile.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, APRIL 17TH, 1884.

PERCY BOULTON, M.D., Vice-President, in the Chair.

Note on a Form of Diarrhœa in Children.—Dr. LEES, in his paper, called attention to a class of cases, not very uncommon in children, in which the main symptom was an irresistible impulse to defæcation experienced almost immediately after food had been taken. Colic-pain might or might not be present; but there was no sensation of weight at the epigastrium, heartburn, flatulence, or other symptom of dyspepsia. The motions were usually semi-solid, not often watery or slimy, and frequently contained undigested food. Usually, a motion was passed almost immediately after every meal, and perhaps once or twice more during the twenty-four hours. Dr. Lees pointed out that these symptoms were evidently due to a hyperperistalsis of the alimentary canal without increase of secretion, the two factors of ordinary diarrhœa being here dissociated. Such increase of peristalsis was probably due to irritation of the vagus nerve, which supplied the excitor fibres to the intestine, the splanchnics conveying the inhibitory fibres. The proximity of the nucleus of the vagus to that of the trigeminus in the medulla indicated the possibility that this increased excitability of the intestine might in part be due to dental irritation, the cases in question usually occurring during the period of the second dentition. Believing in the purely neurotic origin of the symptoms, Dr. Lees had treated several cases with bromide of potassium simply, without opium or any astringent, and had obtained immediate success, even in cases which had persisted for several months. The diarrhœa was usually arrested in a few days, and occasionally the children became so costive that the medicine had to be discontinued. Four cases were narrated, also a similar case occurring in an adult, in all of which speedy relief was given by bromide. In conclusion, it was remarked that individuals who suffered from these symptoms were often of a markedly neurotic temperament, timid, and easily frightened.—Dr. DAY enumerated the various forms of diarrhœa met with in children, most of which could be shown to depend upon some error in diet. Cases such as those described appeared to own a nervous origin, and were amenable to appropriate treatment.—Mr. MIVART had met with several instances of the condition described. In one case, occurring in a telegraph-boy, he had employed bromide of potassium with complete success.—Dr. ALDERSON recognised a neurotic form of diarrhœa in young children; and, bearing in mind the efficacy of bromide of potassium in arresting the convulsions of dentition, he thought this same agent might be found most useful in controlling the diarrhœa due to the same cause. Dr. Alderson mentioned that he had seen cases where mischief had been caused by prescribing prepared chalk and gum. Such a mixture, although stopping the diarrhœa, subsequently produced hard fæcal concretions and not unfrequently led to peritonitis. He would have liked to hear Dr. Lees' opinion as to the treatment of the dyspeptic diarrhœa of children, as well as of those forms caused by filth, atmospheric changes, and defective sanitary arrangements.—Dr. EWART referred to the beneficial effects of arsenic in cases of diarrhœa set up by the ingestion of food, and to the success which attends the administration of small doses of grey powder, in combination with aromatic powder of chalk, in the diarrhœa which often accompanies the first dentition.—Mr. CRIPPS LAWRENCE, speaking of the diarrhœa of children during the second dentition, called attention to the mental restlessness peculiar to that age, which, no less than the tender gums, contributed in rendering mastication imperfect. Could not the satisfactory results obtained by Dr. Lees be in a great measure explained by the soothing effect of the bromide, and by the less hurried meals?—In his reply, Dr. LEES alluded to the mode of action of mercury in infantile diarrhœa; it probably was of service chiefly as an antiputrefactive agent. Arsenic had been stated by Dr. Clifford Allbutt to be contraindicated in neurotic subjects. The kind of diarrhœa described claimed to be looked upon as a special variety, inasmuch as it was essentially independent of diet.

Acne Rosacea.—A paper was read on this subject by Dr. T. ROBINSON. Like lupus erythematosus, rodent ulcer, sycosis and other lupoid processes, acne rosacea was almost universally limited to the face. In rare cases the disease appeared on the scalp of bald subjects, and it had been observed by the author to occur over the sternum. Acne rosacea was always associated with an irritable state of the mucous membrane, especially of the stomach. It was always heralded by fugitive flushings of the face, especially occurring after food, but increased also by other causes, such as wind, exposure to sun, or soap. These flushings led to permanent dilatation of capillaries, followed by stasis, formation of papules, and all the inflammatory states peculiar to the malady. The inflammatory action might or might not involve the sebaceous follicles. The malady had a close relationship with what was known as relapsing erysipelas of the face, and with the vesicular and non-vesicular erythema which attacked the same situations, and obeyed the same laws. Lupus erythematosus was also akin to acne rosacea; it was not possible, by any outward manifestations, to distinguish one disease from the other in their early stages. Acne rosacea did not occur before the age of puberty; it was almost equally distributed in the two sexes, until the climacteric period of life, when it was seen much more frequently in the female, and was due in these cases to physiological activity of the hair-follicles, in the chin and upper lip especially, as was seen in the growth of hair in these situations at the said epoch of life. There were skins which could not develop acne rosacea; the latter was commonly only an expression of a local tendency in a general dartrous diathesis.—Dr. **Alderson** related a case of severe acne rosacea in a lady, aged 16, which had for a long time baffled treatment. When first seen by Dr. Alderson, the appearance was almost that of semi-confluent small-pox in its pustular stage. A mixture containing compound decoction of aloes with soda and Fowler's solution was prescribed, also a drachm of compound liquorice-powder (G. P.) every night. The face was painted with a solution of nitrate of silver in nitric ether (1 drachm to 1 ounce), and a poultice subsequently applied. Severe pain was set up, and after the application of a soothing lotion, containing zinc-oxide, bismuth, and liquor plumbi, several of the pustules were lanced, and abundant pus was let out. The caustic solution was applied repeatedly, at intervals, and in the course of a month the patient was almost well. Dr. Alderson was at that time attending her father for a severe attack of acute eczema, associated with gout and with syphilitic psoriasis of the hands and fingers.—Mr. **Drew** gave an instance of the value of scarification in a case of hypertrophy of the nose, associated with acne rosacea.—Dr. **Lees** referred to the frequency with which acne rosacea was found in those who were strictly temperate.—In reply, Dr. **Robinson** expressed an opinion that the case related by Dr. Alderson was one of acne indurata, rather than of acne rosacea. Scarification could hardly be of use in cases of true elephantiasis, but where acne rosacea was superadded to pre-existing acne of youth, this measure, as well as division of the enlarged vessels, might be tried with advantage.

CLINICAL SOCIETY OF LONDON.

Friday, April 25th, 1884.

Sir Andrew Clark, Bart., M.D., LL.D., F.R.C.P., President, in the Chair.

Extensive Thrombosis following Fracture of both Bones of the Forearm.—Mr. **Arbuthnot Lane** read an account of this case. On November 9th of last year, the patient fell heavily on her left side down some steps, breaking both bones of the forearm, the ulna at its centre, and the radius at the junction of the middle with the lower third. There was much displacement of the radial fragments. The shoulder and arm were also much bruised. The swelling subsided within a few days, and the arm progressed very favourably till November 29th, when subinflammatory œdema of the forearm set in and extended into the upper arm. It was accompanied with much pain and tenderness, especially along the front of the forearm and course of the brachial vessels. It almost completely subsided, only to reappear more extensively on December 21st, accompanied by still greater pain. It again subsided, and again returned on January 5th. This time it extended up to the shoulder. She had now great pain in the neck and above and below the clavicle. By January 15th, the left side of the chest, neck, and face were much swollen, and were extremely painful. There was also severe headache in the left side of the head. She was very prostrate. Dr. Carrington, who saw the case with him at this time, also felt no doubt that the thrombosis had extended along the subclavian to the innominate and internal jugular veins, and a rapidly fatal termination was feared. However, the swelling slowly subsided from the left side of the face, then from the neck, and then from the side and upper arm, and by February 6th it was limited to the forearm and lower third of the upper arm. On February 9th she had a recurrence of the swelling, which extended to the side and neck, with pain and tenderness. This subsided, so that she was able to get about, and commence to use her hand and arm, which were progressing very favourably. The radius had, however, not united by bone. On April 1st, without any apparent cause, a rapid and complete recurrence of the swelling took place, not, however, being accompanied by the same very great pain, nor with such severe headache. The left side of the face was much swollen, as were her neck and side. This swelling of the face and neck subsided, leaving by April 10th the left side and back of the chest about two inches larger than the right, and the left arm a good deal swollen, so much so that she could not use it. There was a firm resistance along the left internal jugular vein. She was continuing to improve steadily.—Mr. **Holmes** said Mr. Callender had demonstrated that the blocking of large veins might prevent the union of fractured bones. He inquired if union was at length obtained in Mr. Lane's case.—Mr. **Lane** replied that it had not been attained, and he thought most likely it never would occur.

Gluteal Aneurysm.—Mr. G. R. **Turner** narrated this case. Samuel P., aged 51, coachman, was admitted into the Seamen's Hospital, Greenwich, on September 17th, 1883. He had been previously under the care of Mr. Roper of Lewisham, from whom the following history was obtained. On September 5th, the patient was thrown out of a pony-carriage, and, when seen by Mr. Roper, was found to have a scalp-wound exposing bone on the right side of the head, and a contusion of the back, right hip, and buttock. He did well till September 14th, when, without leave, he got up. On getting back into bed, he felt something snap in the right buttock. Immediate swelling came on, and, when Mr. Roper saw him, this swelling had most distinct pulsation. Ice was applied locally, and in two days the pulsation ceased and the tumour became hard and painful. On his admission into the Seamen's Hospital, the integuments over the swelling were inflamed, and there were marks of fading bruising extending over the buttock up to the scapula. No pulsation or thrill could be felt in the tumour, which measured about eight inches by six. The man had been a hard drinker, probably had had syphilis, and both radial and temporal arteries were atheromatous. There was some slight fever on his admission. This subsided after a few days' rest, and the condition of the integuments became less inflamed. The tumour, however, became larger, and fluctuation marked. At one place, the skin, on September 30th, was prominent and thinned, the superficial inflammation returned, and the temperature rose again. On October 9th, it was evident a portion of the skin had lost its vitality, and that the tumour was on the point of bursting. Exploratory puncture with a fine trocar showed that the superficial part of the swelling was solid, and gave rise to a flow of bright arterial blood from the deeper part with no relief to the tension. On October 10th, the patient was put under ether, the sac of the aneurysm laid open from end to end, and more than forty-two ounces of disintegrating blood-clot turned out. An oval aperture, about the size of a split pea, was found in the gluteal artery just as it left the pelvis. A carbolised silk ligature was placed on each side of this, and tied. The vessels were diseased. During the operation, the rectal lever was used, and but very little blood, except that in the sac of the aneurysm, was lost. Previous examination by the rectum showed the swelling was extrapelvic. The gluteus medius, minimus, and the external rotators of the thigh were exposed at the bottom of the sac. The gluteus maximus was completely destroyed. The wound was plugged with a carbolised sponge, and dressed with carbolic gauze. The man did well for eight days, when tetanus attacked him, and he died exhausted on the eleventh day. By that time the wound was granulating healthily; all the sloughs had separated, and all ligatures had come away. No injury to the gluteal nerve could be detected. At the operation the vessel was completely isolated, and seen perfectly before ligature. No *post mortem* examination could be obtained. The diagnosis in this case presented no difficulty, although, but for the history, the swelling at one time might have been mistaken for an abscess. It bore no resemblance to tumour of bone. At first it seemed possible that a natural cure would result, and it was not until the tumour was on the point of bursting that operation was undertaken. As the danger of secondary hæmorrhage was so very great, laying open the sac was delayed as long as possible. The rectal lever proved most efficient, and should be superior to an abdominal tourniquet in such cases. Since Mr. Holmes's lectures in 1874, two cases of gluteal aneurysm had been recorded, one by Mr. Hussey of Oxford, in vol. xiii of *St. Bartholomew's Hospital Reports*, in which death occurred from secondary hæmorrhage on the sixteenth day after laying open the sac; and another by Dr. Sands of New York, in the *American Journal of Medical Science*, April, 1881. Examination by the rectum in the latter case showed the sac to extend into the pelvis, and the internal iliac artery to be diseased. Pressure was made by the hand in the rectum on the common iliac vessels, on two occasions, for 1½ and 3½ hours, and caused on each occasion some clotting of blood in the sac. Eventually, however, the aneurysm resumed its former condition, and in spite of instrumental pressure, the patient was discharged in the same condition as on his admission.—Mr. **Pick** considered the rectal lever a most useful instrument in this operation. He had seen Mr. Turner's operation, and was sure the gluteal nerve had not been included with the artery in the ligature. He would have preferred division of the vessel, and the ligaturing of each of the cut ends. In the case of a child whose temporal artery had been punctured, he had thus divided the vessel and tied the ends, thereby arresting the hæmorrhages, which had been frequent.—Mr. T. **Holmes** said that gluteal aneurysm was very rare. He had not seen a case; and, of the cases he had collected, the majority were usually traumatic blood-tumours surrounded by a sac. Operation afforded the only chance of recovery in Mr. Turner's case; and its success depended on many concomitant circumstances. Division of the artery would have been of very doubtful advantage, as it would not have afforded protection against secondary hæmorrhage. If the temporal artery were partially divided, as in bleeding, the vessel was cut quite through as soon as sufficient blood had been drawn, and the hæmorrhage at once ceased. The position of the wound in the artery, that is, whether intra- or extra-pelvic, might be ascertained by exploration with the whole hand in the rectum. If intrapelvic, then ligature of the common or internal iliac vessel would be required. The rectal lever afforded the best means for controlling such hæmorrhages, which Bell's account of the operation of opening a gluteal tumour showed to have been excessive. The gluteal nerve had evidently been much irritated, thereby conducing to the fatal tetanus. Many reputed gluteal aneurysms were not due to disease of the gluteal vessel, but to that of the pudic artery, or of branches of the gluteal. The restraint of the hæmorrhage in all these instances was very important. Lister's tourniquet was apt to slip, and necessitated so large amount of pressure as often to cause serious symptoms.—Mr. H. **MORRIS** thought any of the nerves, including the sciatic, which had been stretched or otherwise damaged, might have had to do with the tetanus. There seemed to be general hesitation to interfere by operation in such cases.—Mr. **TURNER** thought possibly it might have been advisable to divide the gluteal artery. When a wound or stab caused gluteal aneurysm, immediate opening of the tumour was desirable. Operation had been deferred in his case, because when first the man came to hospital spontaneous cure seemed to be in progress; and subsequently, when the aneurysm was extending, it was considered advisable to permit the feverishness to abate first.

Epithelioma of the Tongue Involving the Floor of the Mouth, Left Tonsil and Soft Palate: Removal by the Buccal Operation.—Mr. F. J. **GANT** gave particulars of this case, in which the principal points of importance were, the unusual extent of the disease for which the operation was performed; and that the method by buccal incision offered the only, or the readiest, way of removing the tongue and adjoining parts involved, in order to extirpate the whole of the disease, under these exceptional circumstances. The question was also raised as to the desirability of reaching the tongue through the cheek in all cases. Having related the history of the case, the operation as performed with the chain-écraseur was fully described. The above propositions were then considered.—Mr. **JESSETT** inquired whether Mr. Gant usually used the écraseur rather than scissors in these cases. He himself thought that the operation by Whitehead's method gave sufficient access to the tongue, without the addition of the extensive wound of the cheek, which the buccal method entailed, whilst that could be afterwards made if found to be requisite. After the use of scissors there was a less tendency to sloughing, whilst the hæmorrhage that might ensue could be easily stopped by seizure and ligature of the lingual artery.—The **PRESIDENT** asked if Mr. Gant considered the disease in any way due to the decayed molar tooth mentioned in his paper.—Mr. **GANT** had only mentioned the tooth in consequence of its contiguity with the growth; and because the patient had considered the disease of the tongue due to it. As regarded Mr. Jessett's remarks, he might say there were four methods of operating in such cases. Whitehead's modification of Paget's operation was unnecessary, as it possessed no advantage over the latter. By the oral operation, and by Nunneley's method, far-reaching disease, such as that of the tonsil and soft palate, could not be reached, and excessive hæmorrhage proceeding from arteries lying out of reach could only with difficulty be controlled; while Regnoli's method entailed less risk of bleeding, but would not allow excision of the whole tongue if found requisite. Syme's method was obsolete, and added the unnecessary complication of a compound fracture of the lower jaw. None of these objections, he thought, were attached to the buccal operation.

Dislocation of the Elbow Backwards, with Fracture of the Coronoid Process.—Mr. H. A. **LEDIARD**, of Carlisle, contributed a paper with this title, of which the following is an abstract; the paper was read by Mr. R. J. **GODLEE**. A young fisherman, aged 28, fell while wrestling, his hands touching the ground in the prone position with the arm extended. He heard a distinct snap. After undergoing a course of unsuccessful manipulation by a bone-setter, he was admitted into the Cumberland Infirmary with displacement of both bones of the forearm backwards, causing almost complete inability to produce either flexion, pronation, or supination. Concomitant fracture of the coronoid process being diagnosed, excision of the joint was performed. The patient was well in a month, the movements of the new joint progressing satisfactorily. The specimen, which was exhibited, showed that a considerable piece had been broken off the coronoid process, the fractured surface having eroded and polished the posterior surface of the trochlea. The head of the radius lay behind the capitellum, the sigmoid cavity in its centre being filled up with a semi-fibrous mass, which would have formed an insuperable obstacle to the reduction of the dislocation. A small chip of bone was found adherent to the capitellar surface of the humerus, possibly a part of the fractured process. The opinions of most authors agreed in regarding this injury as extremely rare; in two cases, however, in which dislocation of the radius and ulna recurred after reduction, Mr. Lediard had been able to diagnose fracture of the coronoid process, in addition to the displacement.—Mr. **GODLEE** thought it doubtful if the bone called the coronoid was really it.—Mr. **HOLMES** remarked that surgeons varied in opinion respecting the frequency of backward dislocation of the elbow with fracture of the coronoid process. In St. George's Hospital Museum were specimens obtained from a boy who fell through a long distance, and caused this accident simultaneously at each elbow. In another case, that of a man who had dislocation of the radius and ulna, upon the limb being flexed the dislocation could be easily reduced, but would not so remain. Crepitus was present, and the coronoid process was doubtless also fractured. He agreed with Dr. Lediard's explanation of the case.—Mr. **GANT** thought the injury was rare, and that the case was suitable for excision, as no apparatus seemed capable of maintaining reduction.—Mr. H. **MORRIS** remarked that if the brachialis anticus muscle drew up a broken coronoid process, there would be a hard lump in the upper arm; and the fracture must have occurred low down, as the muscle was inserted at the extreme base of the process. Such accidents were perhaps rarely diagnosed, as their detection was difficult. He had himself seen only one case of the kind.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, APRIL 2ND, 1884.

D. J. LEECH, M.D., President, in the Chair.

Contraction of the Palmar Fascia.—Mr. **HARDIE** introduced a man, aged 56, a slater by occupation, who had suffered from this affection for five years. It involved, in a very advanced degree, the ring and adjoining fingers of both hands. Six weeks previously, Mr. Hardie had operated on the left hand, and drew attention specially to his manner of operating. He believed that the ill success which generally attended operations for this deformity was largely due to a non-recognition of the fact that the skin became intimately attached to the fascia, and that both of those structures required to be liberated. He had, therefore, thoroughly dissected up the skin from the fascia. This was accomplished by making three longitudinal incisions from the middle of the palm on to the first phalanx of the fingers involved. Three extremely tense processes of fasciæ were thus exposed, and these were incised transversely at two or three points. By this means, all three fingers could be immediately extended very satisfactorily. The edges of the cutaneous incisions were then brought together with interrupted sutures, and a pad bandaged on. The operation was done antiseptically, and primary union took place. Splints had been used since. The man could flex and extend his fingers fairly well, though Mr. Hardie believed that a better result might have been obtained had passive motion been practised earlier. He proposed to repeat the operation on the other hand, as well as on another patient who was also shown.

Malformation of the Pylorus.—Dr. **NEALE** showed the stomach of a child who died four days after birth. The stomach had never communicated with the duodenum, but, at its pyloric end, it terminated in a dilatation as large as a walnut, opening freely into the main cavity. This end hung loosely in the abdomen. The duodenum began in a smooth blind extremity, also hanging loosely in the abdomen, and partially overlapping the right end of the stomach, but in no way connected with it by fibrous bands or otherwise. The intestines were thinned, but perfect. Evacuation of meconium occurred thrice during life; urine was passed once. The distinguishing clinical feature was that vomiting constantly occurred within a few minutes of taking food. All the other children in the same family were living, and well formed.

[illegible] of Bladder.—Dr. [illegible] related the case of an elderly man who came under his treatment on [illegible], 1883, for dysuria, especially in voiding the last drops. The urine was slightly turbid, but acid, and contained a few blood [illegible] [illegible]men, and some shreddy matter, composed chiefly of large round cells crowded with nuclei. The patient [illegible] and took full doses of benzoate of soda with [illegible], and [illegible] suppositories. After a while, he [illegible] on pressure in the right groin, but [illegible] the [illegible]. Dr. [illegible] by the [illegible] the patient [illegible] the pain [illegible]. The [illegible] lasted about a week [illegible] as well as [illegible] this; afterwards, he took [illegible] all his trouble suddenly vanished. [illegible] was, that he

suffered from a small polypus which grew at the neck of the bladder, and trailed into the urethra, causing strangury. The sound had apparently not only pushed it out of the urethra, but had altogether severed it from its attachment to the bladder.

Nævus of Lip.—Dr. CULLINGWORTH showed a girl aged 7, on whom he had operated two months previously for an extensive subcutaneous nævus occupying the whole of the upper lip. Treatment by the insertion of heated needles had twice been tried ineffectually three years previously. It was thought desirable, now that recurring attacks of hæmorrhage and the increasing size of the growth rendered further interference imperative, to excise the growth. The lip was accordingly everted, and the nævus dissected out from behind; a strip of mucous membrane, which was very thin and intimately adherent, being removed from the posterior surface of the lip along with the growth. The edges of the wound, which were parallel with the lower edge of the lip, were brought together by interrupted sutures. Bleeding was easily controlled by compressing the arteries as in the operation for harelip; and, as the skin was not wounded during the dissection, the lip presented very little disfigurement. Dr. Cullingworth said he had brought the case before the Society to show some of the advantages of this, the most surgical of the various methods of treating nævi, and the possibility of adopting it with success in a situation where it was not generally thought to be applicable.

Pneumonia.—Dr. DRESCHFELD read a paper on an unusual form of Pneumonia recently observed in the district.

MICROSCOPICAL SECTION.

H. ASHBY, M.D., President, in the Chair.

Micrococci in Scarlatinal Kidneys.—The PRESIDENT showed sections of kidneys, from cases of scarlet-fever, in which death occurred at the end of the second week. Emboli, laden with micrococci, were seen in the capillaries of the glomeruli and intertubular plexus.

Congenital Biliary Cirrhosis.—The PRESIDENT also showed the liver of a child, who died when four months of age, and who had been jaundiced from birth. The hepatic ducts had apparently never been developed; there was a small gall-bladder and cystic duct. The liver was dark green and tough; sections showed excessive fibroid tissue, isolating the lobules, and numerous capillary biliary ducts.

Obstructive Suppression of Urine.—Dr. MAGUIRE showed specimens from two cases of obstructive suppression of urine. In one of these, obstruction seemed primarily due to congenital smallness of the bladder. One kidney was in a state of caseous degeneration, following strumous inflammation, and its ureter was completely blocked with thick caseous material. The opposite kidney was considerably hypertrophied. Its ureter was constricted at its termination, and as it entered the bladder, it was surrounded by a constricting ring of firm fibrous tissue. Complete obstruction in this case was ascribed to swelling of the vesical mucous membrane from intercurrent cystitis. In the second case, obstruction of the ureters resulted from cancerous infiltration of the pelvic tissue, secondary to cancer of the uterus. In each case, sections of the kidney showed increase of interstitial tissue, and also proliferation of the epithelium of the convoluted tubes, as evidenced by the excessive number of nuclei.—Dr. MAGUIRE suggested that the latter might be a preliminary stage of atrophy similar to the proliferation of muscle-nuclei preceding atrophy, or to the multiplication of nuclei in liver-cells during atrophy, as found in the central zone in nutmeg-liver.

Micrococci of Pneumonia.—Dr. MAGUIRE also showed specimens of the micrococcus of pneumonia in sputum, and in sections of lung-tissue. The specimens, which were stained by Gram's method, showed the capsule of the micrococcus, and also the grouping of the micrococci, mainly into pairs, but also in chains made up of several pairs.

Epithelial Growth in the Anterior Chamber.—Dr. A. H. GRIFFITH showed sections of a small growth removed from the anterior chamber of the eye of a patient who had, about twelve months previously, sustained a penetrating wound of the cornea. The growth was attached to the iris, and was seen to be composed of epithelial tissue, with *débris* in which cholesterine-scales were readily distinguished. Dr. Griffith believed the growth had originated from the bulb of an eyelash, which had probably been carried into the anterior chamber at the time when the cornea was wounded, and which was easily seen prior to operation.

Congenital Scrofulous Testicle with Tubercle-Bacilli.—Dr. DRESCHFELD exhibited sections from a testicle which, to the naked eye, presented the characteristic appearance of scrofulous changes. Microscopically, the caseous portions consisted of detritus surrounded by an embryonic tissue in which giant-cells occurred. Sections stained by Ehrlich's method showed, in the embryonic tissue, the presence of numerous tubercle-bacilli. The testicle had been sent to Dr. Dreschfeld by Mr. Monks, jun., of Wigan. A tumour of the testicle had been noticed at birth; its removal was proposed, but this was objected to by the parents; the child died of general marasmus at the age of six months. The removal of the testicle was permitted by the patient's friends, but no further examination of the body was allowed.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, APRIL 4TH, 1884.

W. N. PRICE, M.R.C.S., President, in the Chair.

Specimens.—Mr. HARTLEY showed (1) a case of Primary Syphilitic Sore of the Left Lower Eyelid, with Infection of Glands beneath the Angle of the Jaw; (2) a case of Symmetrical Persistence of a large portion of the Pupillary Membrane in both Eyes. Details of these cases will be published.

Paralysis of Cranial Nerves.—Dr. EDDISON showed a patient with paralysis of the muscles supplied by the third, fourth, fifth, and sixth nerves, and with almost complete anæsthesia of the parts supplied by the fifth, all on the right side. There was no paralysis of the muscles supplied by the seventh nerve. Taste was impaired on the right side, but the lingual muscles were unaffected. Dr. Eddison described various other symptoms, and remarked on the difficulty of deciding as to the most probable cause. Syphilis was referred to as a possible cause, but there was no certain history of an attack.—Mr. HEY, Mr. W. H. BROWN, Dr. CHURTON, and Dr. BARRS spoke.—Dr. EDDISON promised to bring the case forward again at a future meeting.

Determination of Albumen in Urine.—Dr. OLIVER demonstrated a ready method for the quantitative determination of albumen in urine. The proceeding consisted in comparing the opacity produced by a test-paper in a definite measure of the albuminous urine, with a standard of opacity which represented a known per cent. of albumen; and in adding water, when it exceeded the standard, until the two were seen to be exactly equal. The standard opacity (representing 0.1 per cent. of pure serum-albumen) was preserved in a permanent form by precipitating chemically pure alum by means of ammonia, the opaque fluid being sealed up for use in a short flat tube. The estimations were made in a flat graduated test-tube of a determined diameter, three-eighths of an inch. A definite quantity of the urine (20 or 40 minims, according as the urine was strongly or only moderately albuminous) was poured in, and the albumen was precipitated by either a ferrocyanic or a mercuric test-paper. The opacity almost at once produced was compared with that of the standard by placing immediately behind the tubes printed lines; when it overstepped it, the urine must be diluted to the required degree. The number of times the volume of the urine had been increased by dilution represented so many decimals per cent. of albumen: for example, 20 minims of urine requiring to be diluted to 180 minims contained .9 per cent. Dr. Oliver showed, on taking the twenty-four hours' urine, how readily by this method the total amount of albumen daily discharged could be expressed in grains; it was only necessary to multiply the percentage by 4.36 (or roughly 4½), and the number of ounces of urine: for example, .6 per cent. × 4.36 = 2.6 gr. to the ounce, × 50 oz. = 130 grs., total loss of albumen in twenty-four hours. In this way, he believed that accurate data could be provided without loss of time for comparing the effects of treatment on the amount of albumen eliminated; and he suggested that quantitative analysis of albumen might become useful in diagnosing the forms of renal disease.—Dr. S. C. SMITH remarked that the mercuric iodide papers would not always detect albumen in urine, even when there was a large quantity of albumen present.—Dr. OLIVER, in replying, explained that the mercuric iodide was so rapid a reagent that, when the quantity of albumen was great, it coagulated in the substance of the paper; and there certainly was a possibility of error from this cause with the reagent.

Early Maternity.—Dr. DOBSON related a case of early maternity. A girl who began to menstruate at 11 years of age was delivered by forceps of a male child in February last, being at that date 13½ years of age. She had therefore become pregnant at the age of 12¾ years.

Herniotomy with Unusual Sequelæ.—Mr. H. E. SPENCER related the case of a very stout lady, aged 68, who had suffered from unreduced oblique inguinal hernia for many years. Strangulation had been manifest for thirty-six hours when Mr. Spencer performed herniotomy, opening the sac, and ligaturing and removing a bunch of omentum of the size of a Jargonelle pear. Constant vomiting and suppression of urine followed, lasting seventy-two hours, without symptoms of uræmia or albuminuria. The total quantity of urine passed in this time was under two ounces. The bowels had acted on the third day. After this, all went well until the fifth evening, when the pulse rose to 120, and slight mental disturbance was observed. On the seventh, the patient was completely comatose, with tightly contracted pupils. She died early the next morning. The temperature was subnormal throughout. *Post mortem*, some early peritonitis was found, and the basilar artery was found to be plugged with atheromatous matter. The kidneys were healthy. The points for discussion were the associated vomiting and suppression of urine, which the author was inclined to attribute to the omental ligature; and the peculiar brain-symptoms, which seemed to be the result of basilar thrombosis.

WOOLWICH MILITARY MEDICAL SOCIETY.

TUESDAY, APRIL 15TH, 1884.

Sir JAMES HANBURY, K.C.B., President, in the Chair.

Myxœdema.—Surgeon MILLAR brought forward a case.

Recently introduced Methods of Testing in Glycosuria.—Dr. THEODORE MAXWELL read a paper on certain new methods which he considered real additions to the practitioner's resources, although the older methods were as valuable as ever. He gave a demonstration of Fehling's method and Pavy's improvement upon this, and exhibited the prepared pellets for Fehling's test and the sealed tubes of solution introduced by Dr. Pavy. He then exhibited the picric acid test of Dr. Johnson and the method of comparing the colour produced with the standard acetate of iron solution, pointing out that it must be remembered that normal urine gave a decided reaction with picric acid. The indigo-carmine test-papers of Dr. Oliver were also shown, which were, however, only useful for a very rough estimate of quantity. In reply to a question from the PRESIDENT, he stated that for rough work he generally used the picric acid test, as it served first for albumen, and, with the addition of potash and heat, for sugar; but that, if any doubt arose as to the coloration being deeper than that with normal urine, he used Moore's or Fehling's test; for quantitative work, he employed Fehling's, Pavy's, and the fermentation-test, the last taking twenty-four hours, but being simple and sufficiently accurate.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

FRIDAY, MARCH 28TH.

A. H. CORLEY, M.D., President, in the Chair.

Recent Colles' Fracture.—Dr. BENNETT showed two specimens. One was an example of fracture without comminution of the lower fragment; the other of comminution of the lower fragment, the result of impaction of the upper into the lower. Having referred to his paper read before the British Medical Association in Cork, 1879, the author showed the agreement of these specimens with those exhibited by him at that time. He dwelt particularly on the simple fracture, as proving that, even under the condition of extreme violence, such form of fracture was possible; for instance, where the patient had fallen from the topsail-yard of a vessel, at sea, to the deck. The author argued that, as he had already shown fractures without comminution of the lower fragment, with reciprocal impaction of the fragments, and, lastly, fragments with complete shattering of the lower fragment, all were proved, by *post mortem* examinations, to be possible.—The PRESIDENT had seen many of Colles' fractures. He thought that *post mortem* specimens of this kind of fracture were not so valuable as might at first sight appear. The usual Colles' fracture resulted from a much less amount of violence than must have occurred in cases which ended fatally. The former generally resulted from falls on the hands, and it was impossible to say that they were typified by such a case as Dr. Bennett had described, and which was attended with comminution of the lower fragment. The Colles' fractures most commonly met with were transverse and frequently impacted.—Dr. CROLY had had opportunities of making some dissections, and one of them attracted so much attention at the Surgical Society that it was referred for examination to a committee, who reported that, in their opinion, the fracture was caused by penetration. The late Mr. Abraham Colles never made *post mortem* examinations of any cases of his fracture, and the description he had given of it had not been improved on by those who had had opportunities of making *post mortem* examinations. The only thing learnt from recent investigations was that there might be fracture with or without penetration; fractures comminuted and also in different directions. Dr. R. W. Smith drew attention more than Professor Colles did to the fractures that occurred close to the wrist-joint, and experience proved that the characteristic displacement of Pott that had penetration was not often seen. Any cases he himself had had were impacted fractures, and presented characteristic displacement, but with a total absence of crepitus.—The PRESIDENT remarked that Dr. Gordon, of Belfast, minimised the abduction of the hand, and declared that the amount of injury done to the ulnar extremity, and to the external lateral ligament, was not much. Dr. Bennett's case, and also that referred to by Mr. Croly, showed that that view was erroneous. The styloid process was torn away, showing that the amount of injury to the wrist was great.—Dr. BENNETT, in reply, observed that conclusions could not be drawn, at least without qualifications, either from ordinarily obtained specimens, or from dissections in which there had been great violence. The specimen he had shown proved that even when the violence was greatest it was possible to have a Colles' fracture without impaction, and with the lower fragment perfectly unbroken. He had shown that in ordinary injuries produced by falls in the street, etc., comminution occurred in two cases out of every five. If his argument were right, and he saw no reason to doubt the validity of it, comminution of the lower fragment was the result of impaction. Dr. Croly's specimen proved the existence of the impaction which Professor Smith had denied. In nearly all the specimens preserved the radius only was kept, and in consequence of the absence of the ulna, he had no statistical information to offer as to the number in which the styloid process of the ulna had been torn off. Nevertheless that occurrence was common, and Malgaigne had figured it in his plates, and represented detachments of the ulnar styloid as a typical part of the injury. He himself had many specimens in which both ulna and radius were preserved.

Mitral Obstruction with Complications.—Dr. QUINLAN brought forward a case of mitral obstruction, with vegetation in the passage leading to the aortic valves, and cardiac hypertrophy. He said it was taken from the body of a girl, aged 20, who had a history of rheumatic fever, with apparent endocarditis, but without any record of treatment for the latter. During life, she exhibited general serous engorgement of the body, congestion and œdema of the lungs, with dyspnœa, and constant attacks of cardiac asthma. There was a presystolic murmur at the apex of the heart, and at the base there was also a slight systolic murmur. The second sound was perfect, and there was no visible pulsation. The pulse was thready and weak. There was a great increase in the area of cardiac dulness, and a powerful apex-impulse. These symptoms caused a diagnosis of mitral narrowing, with some vegetation in the passage leading to the aortic valves, along with hypertrophy of the heart to about double the natural size. There was great œdema, particularly in the right side, a circumstance which was attributed simply to dextral decubitus. During the last fortnight of life, the large branches of the vena cava swelled enormously, evidently owing to the formation of a fibrinous clot in the right auriculo-ventricular opening; and, during the last few days, there was great œdema of the lungs, and death was very lingering, a circumstance which was attributed to the formation of a clot in the mitral orifice. The *post mortem* examination showed that the heart was much hypertrophied, and weighing fourteen ounces. The mitral orifice admitted one finger-tip only, and the valves were studded with large hardened vegetations. There were similar vegetations in the passage leading to the aortic opening, but these valves were competent, as shown by the water-test. Both auricular ventricular openings were occupied by coagula, that in the right being white, fibrinous, and very perfect, and that in the left sanguineous, with some white fibrine. There was also slight pericardial effusion.

Tubercular Disease of the Thumb.—Dr. BENNETT showed a specimen of tubercular disease of the thumb, affecting half the ungual phalanx of the thumb of an old woman which he removed last summer. There was an ulcer beneath the thumb-nail. She had no glandular disease elsewhere or trace of trouble in the axilla or any part of the arm. The ulcer had lasted for five or six years. The best attempt at diagnosis he could make was that it was the ulcer of cicatrices of Hawkins and Marjolin. He believed that it originated with some form of suppuration, and that it then progressed and finally resisted all treatment. It was warty, excavated, and extremely sensitive at the edges, and when a probe was passed it could be felt that the bone was exposed, though not [illegible]. [illegible] carious bone. Other treatment having failed, and the pain being great, he amputated the extremity of the thumb, and the case had [illegible] done well.—Dr. [illegible] said the reason why the specimen was [illegible] of the thumb was for want of a better name. In the present specimen, he had not looked for a micro-organism, but the characters of the growth as [illegible] by an ordinary examination were those of tubercle, with [illegible]. In the present case some of the small cells were [illegible], but there was no evidence of caseation, and that was the point in which the [illegible] differed from ordinary tubercle; but the growths themselves had quite the appearance of recent tubercles.—Dr. BENNETT said that, although he had not at first recognised the character of the ulcer, he concluded that amputation was the best course. This, however, was the first example of the disease that he had seen. Tubercular and scrofulous diseases affected the bones, both of old and young, and were liable to be mistaken for malignant diseases, but a superficial tuberculosis existing on a surface for five or six years, and causing absorption of the bone by its pressure, was quite new to him.

Mammary Tumour.—Dr. Bennett read for Dr. H. Macnaughton Jones, a communication on sectional and microscopic drawings of a mammary tumour removed from a patient aged 40. The tumour had been quiescent for some years. Of late it commenced to grow rapidly, and there was occasional pain. The general health was otherwise good. The tumour was hard and lobulated. There was slight retraction of the nipple. One or two axillary glands were enlarged. The entire breast, with the affected axillary glands, was removed. The diagnosis was uncertain before operation as to the nature of the tumour. The sections, well shown in the drawing, appeared rather to confirm the view that the tumour was of an adeno-sarcomatous nature, and not, as was thought, scirrhus. The cystic type was well seen. The complex character of the tumour rendered its histological differentiation difficult, save to a very experienced histologist. The cells filling the tubercles and saccules were very small and were not heterologous. All preserved the regular circular outline. The termination of a duct crowded with cells was well seen in drawing No. 1. In parts the tumour had the appearance of a fasiculated sarcoma or fibroma. The tumour was removed last August antiseptically. The wound healed without the formation of pus, and the patient was going on well. The painless nature of the growth and the very slow progress were against the supposition of carcinoma, but the microscopical appearances when the tumour was cut into were in favour of scirrhus. The sections were made by Mr. George Walton.—The specimens exhibited were decided by several members of the Academy to be examples of scirrhous carcinoma.

SURGICAL SECTION.

W. J. Wheeler, F.R.C.S.I., President, in the Chair.

Abdominal Tumour.—Mr. Barton read a paper on a remarkable case of abdominal tumour. T. A., aged 25, an engine-fitter, was admitted into the Adelaide Hospital on November 27th last, suffering from a constant pain in the abdomen, and painful and constant micturition. A tumour was found in the left inguinal region; it was hard, nodulated, defined closely to the left side, but somewhat undefined towards the right mesial line. The sigmoid flexure could be traced to the tumour, which seemed to be attached to it. A history of three years' suffering was given, during which the rigors of intestinal irritation and obstruction, and bladder-irritation, gradually but steadily increased in severity. On December 17th, Mr. Barton made an incision, about three inches long, in the linea alba, just above the pubes. Through this he quickly obtained room to explore the pelvis, and ascertained that the tumour had no anterior attachment to the bone. The peritoneum was then opened, and the tumour was found to surround and grow from the sigmoid flexure of the colon. The tumour was partly excised, and the remaining portion firmly ligatured, the ligature being brought out of the wound. The patient recovered, the artificial anus being fully established on the fifth day. The tumour sloughed out. One month after the operation, the patient was able to be up in an arm-chair, and expressed himself much better than before the operation, on account of the relief from the irritation of the bladder, and his complete restoration to appetite and sound sleep. Now, three months after operation, there was no sign of a return of the disease, which was carcinoma or alveolar sarcoma.—Dr. Scott, who made sections of the tumour, said it was composed of epithelial-like cells, had a carcinomatous appearance, and, in that view, would be a secondary growth, but no primary growth was discovered. He regarded it as an alveolar sarcoma, in which the cells were of an epithelial character.—Dr. Henry Kennedy observed that statistics showed the sigmoid flexure of the colon to be the most common part affected.—Mr. W. Thornley Stoker would make the incision, not in the linea alba, but in the left semilunar line.—Mr. Barton preferred making the incision in the linea alba, as giving least trouble, and as the lower part, when he got down to the pubes, led him into the areolar tissue, for which he aimed.

Excision of the Tongue for Epithelioma.—Mr. Kendal Franks read a paper on a case of excision of the entire tongue, the left tonsil, and part of the velum palati for epithelioma. In the operation, which he performed in January last, he divided the cheek from the left angle of the mouth to the anterior border of the masseter muscle, to obtain room. The attachments of the tongue to the floor of the mouth and to the lower jaw, were divided by means of a galvano-cautery loop, without hæmorrhage. A suprahyoid puncture was then made into the floor of the mouth, and a galvano-cautery loop introduced, though it was made to encircle the organ as far back as possible, so as to divide the tongue at its base. No hæmorrhage followed this division. The left tonsil, anterior pillars of the fauces, and the greater portion of the left half of the palate, were removed with Paquelin's thermo-cautery. A little bleeding from a palatal twig had to be arrested. On February 19th a hard and diseased gland was removed from behind the angle of the jaw, and had to be dissected off the internal jugular vein for about one inch and a half. This wound was quite healed in a few days. The mouth healed rapidly, except for a small piece far back on the left side of the epiglottis, extending forwards to the level of the tonsil, which progressed slowly, and is not yet cicatrised. The pain which, before operation, was intense, has disappeared, and the patient, though weak and disinclined to leave his bed, is quite comfortable. The electrical apparatus employed consisted of three storage-batteries devised by Mr. Prescott of Dublin.—Dr. Ashe's experience led him to approve of the thermo-cautery scissors as the most satisfactory instrument for removing the tongue in the easiest manner, and without hæmorrhage.—Dr. Warren approved of Mr. Franks' mode of operation. It was perfectly bloodless, and the tissues were cut through instantaneously.——The President held that, where the disease was extensive, and even where it was certain to return, the best course was operation. All the patients on whom he operated were placed in the recumbent position, and under the influence of an anæsthetic. The adoption of M'Ewen's tracheal tubes obviated the danger of hæmorrhage, and allowed the administration of an anæsthetic. He always used the thermo-cautery scissors, as the cold or unheated blade passing beneath the part to be severed, helped to lift and support it towards the heated blade. In some of his operations, he had secondary hæmorrhage, which was prevented since adopting the plan of not having the scissors quite so hot as before the transverse cutting. He never passed a ligature through the tongue, but seized it with a forceps invented for the purpose by Charrière. He usually slit the cheek, a procedure which he accredited to Mr. Colles.—Mr. Thomson preferred the hot knife or the wire to either the ligature or the ordinary écraseur. With the hot knife, should any portion of tissue remain infiltrated with disease, there was the ability to go further with the operation at once, which was not so with the écraseur.—Mr. Stokes said that, in a record of twelve cases where the écraseur was used, there was not a single instance of secondary hæmorrhage, and deaths were much rarer after the écraseur than any of the cutting operations or by the cautery. The absence of moaning and groaning during the operation was remarkable. Sir James Paget had drawn particular attention to the operation as practical and painless, sensibility being destroyed by pressure on the tongue. Statistics proved it to be safer than any other, and that after it secondary hæmorrhage was extremely rare. Division of the cheek was recommended long before Mr. Colles was known as a distinguished surgeon. An important aid was a traction-ligature of strong silk through the base of the tongue, to draw it forward, and ligature the bleeding vessel if secondary hæmorrhage ensued.—Mr. W. Thornley Stoker condemned the use of either the ligature or the écraseur. The small proportion of fatal results after the écraseur was due to the fact that, of late years, its use was confined to cases which would have had a favourable termination whatever means were adopted.—Mr. Ormsby had never used anything but the wire écraseur for the removal of the tongue. He concurred with Mr. Stokes that removal by the écraseur was not so painful as was supposed by those who had not performed the operation, and was less likely to be followed by secondary hæmorrhage than the process advocated by Mr. Franks.—Mr. Franks, in reply, contended that the instrument which would work most quickly was the great desideratum.

Carbolic Treatment.—Dr. Cahill, in a paper on carbolic treatment, said that antisepticism was superfluous, as fermentation never occurred in the vital fluids, blood, pus, serum and lymph, until they died, and when once dead they should be removed. He traced an analogy between blood and pus, in that both died in the largest containing vessels first, and that dead substance introduced into either surrounded itself with a zone of dead material; for instance, dead bone in pus. He attempted to prove that air was a foreign body, by quoting the phenomena of canalisation, and in other ways. He deprecated the system of classing a large number of drugs under the heading "antiseptics," and thought each substance should be regarded on its own merits, alleging that, although antisepticism was useless, the carbolic treatment was highly valuable in wounds and sores of a strongly inflammatory tendency, as devitalising or suspending vital processes in the tissue-elements. In support of this view, he instanced the effects of the spray on the hands of operators. Carbolism in preventing suppuration round sloughs (as adduced by Mr. Cheyne) was partly due to the same principle, and partly to that property of carbolic acid by which it promotes the absorbent powers of granulation-tissue.—Mr. **THOMPSON** pointed out that Lister was by no means confined to the use of carbolic acid in his treatment, but used perchloride of mercury, eucalyptus, thymol, etc. He dissented from Dr. Cahill's conclusions, and said that Lister's system had the effect of reducing the death-rate and practically wiping out in surgical practice pyæmia and septicæmia.—Mr. W. **THORNLEY STOKER** thought Dr. Cahill's point was to give a new explanation of the way in which the effects ascribed to Lister were produced.—Dr. **CAHILL** said he did not attack carbolic acid but Listerism, carbolic acid being, in proper cases, a very valuable drug. He quarrelled with Lister for using it indiscriminately in all cases, and thought Lister had done a great deal of harm by introducing antiseptic surgery. No doubt Lister used thymol, eucalyptus, etc., but he had gone back to carbolic acid, as mentioned in Cheyne's *Surgery*, which, according to Lister himself, was the best source of information as to his system.

REVIEWS AND NOTICES.

MEDICAL ANNALS OF BALTIMORE FROM 1708 TO 1880, INCLUDING EVENTS, MEN, AND LITERATURE. By JOHN R. QUINLAN, M.D. Baltimore: Isaac Friedenwald. 1884.

BALTIMORE, though one of the older cities of the United States of America, is a hundred years younger than Boston, which again is younger than New York; still it is far older than the majority of the cities, and has played a not unimportant part in the development of the great nation of the New World. In the autumn of 1880, the sesquicentennial anniversary of the founding of Baltimore was celebrated. By this, we are to understand that the city was founded in 1730. It then contained 43 people, of whom two were physicians. What the population of Baltimore at the present time is, we do not find anywhere stated in this volume, but we hope that the proportion of physicians has now changed. The Medical and Chirurgical Faculty of the State of Maryland, assembled in Baltimore to celebrate the sesquicentennial anniversary, determined to establish a lasting memorial of the lives and labours of the physicians and surgeons of Baltimore during this century and a half, by publishing the volume now before us. It is a kind of chronological directory, and contains, in its earlier pages, much curious and some valuable information. In the latter category, we would especially refer to the record of epidemics, and of the steps taken to limit their extent; and to the introduction, first, of inoculation, and subsequently (1800) of vaccination; in the former category, we may quote the curious advertisement of Mrs. Reitman (1790), who, "having duly qualified as a midwife......hopes, in so prolific a town as Baltimore, to get patronage," and also the heroic treatment of one physician who, during an epidemic of yellow fever, treated a patient by bleeding him to 130 ounces, administering 356 grains of mercury internally, and rubbing in twelve ounces of mercurial ointment externally. Happily, there was found another physician to recommend the free use of tonics, with but little mercury, and no venesection. Quarantine was very vigorously enforced, both by and against Baltimore, during various epidemics of yellow fever; and, in 1792, we find a traveller from Philadelphia expressing his indignation because he was stopped on his road to Baltimore, and offered a piece of toasted cheese on the end of a pitchfork by the quarantine-guard. The fever, however, appears to have spread far and wide in spite of the quarantine. The Maryland Medical College, the fourth institution of the kind in the United States, was established in Baltimore at the close of 1807; and, in the same year, the mob tore down an anatomical hall, built by Dr. Davidge, the first professor, and destroyed his anatomical preparations. There are not wanting, also, other incidental statements which seem to show that the students of anatomy were not less unpopular with the mob in those days than the students of physiology are with a certain noisy section of the public at the present day. Baltimore claims, also, to have established the first college of dentistry in the world (1839), and to have been among the first to establish a medical college for women.

Dr. QUINLAN must have devoted great time and pains to the preparation of this volume, and has succeeded in leaving on the mind of his readers a strong impression of the high standing of the profession in Baltimore.

THE Bath Town Council have increased the salary of Dr. A. B. Brabazon, Medical Officer of Health, from £125 to £150 per annum, and have appointed him medical officer to the Infirmary for Infectious and Contagious Diseases, at £15 per annum.

CLINICAL LECTURES ON IMPORTANT SYMPTOMS. ON GIDDINESS. By THOMAS GRAINGER STEWART, M.D., F.R.S.E. Edinburgh: Bell and Bradfate. 1884.

THIS is the first of a series of lectures which Dr. GRAINGER STEWART intends to publish, taking as the topic of each lecture, or, as in this pamphlet, set of lectures, some one important symptom. The present three lectures deal in a very clear readable style with the symptom of giddiness, which is studied from the standpoint of the clinical physician, whose chief anxiety is as to the cause and cure of the condition. The numerous conditions with which giddiness may be allied are passed in review one by one, and the chaos reduced to something like order. The first lecture contains an excellent account of the functions of the semicircular canals, and of the part played by them in equilibration. It is pointed out that, under normal conditions, the information derived from sight, from touch, from the muscular sense, and from the labyrinth, all correspond. When they do not, giddiness results; so that giddiness from peripheral causes is due to "contradictoriness of sensory impressions." Giddiness due to disease of the internal, middle, and external ear respectively is illustrated by several interesting cases; but, with regard to central causes of giddiness, the author has to content himself with little more than an enumeration of the various intracranial lesions which have been found in cases where giddiness had been a pronounced symptom. In cerebellar disease alone is the symptom sufficiently constant to permit anything more than a conjectural connection between the site of the lesion and the production of giddiness. In other instances, the only explanation would seem to be found either in some local pressure or in a general increase of intracranial tension, such as Dr. Grainger Stewart invokes to explain the giddiness of cerebral congestion. May we, in all humility, suggest that it may possibly be due to an "auditory neuritis", analogous to the "optic neuritis" which accompanies, but not constantly, intracranial growths?

Dr. Grainger Stewart has something to say about agoraphobia—a very real, and, in a mild form, not very uncommon trouble. Generally it is put down to nervousness, or nervous debility; or, if we be anxious to appear scientific, to neurasthenia—a word which seems to have hit the public fancy, and to be in danger of coming into general use. If it occur in a woman, it is, of course, labelled with the opprobrious epithet "hysterical." The essential feature is that the patient, though quite able to walk in a narrow lane, experiences a peculiar uneasiness on attempting to cross an open space, such as a market-place or unplanted square. If he be accompanied by a friend, or able to follow a vehicle, the uneasiness ceases, or is reduced to a minimum, and does not seriously interfere with comfort. Dr. Grainger Stewart believes that the peculiar uneasiness is closely allied to giddiness, and finds an explanation of the condition "in the supposition that these patients, with the nervous system morbidly sensitive, have, from some peculiarity, acquired the habit of guiding themselves in their equilibration by reference to nearly vertical lines; and that, when these vertical lines are wanting, they feel as others do when standing on the edge of a cliff." Upon this, it may be remarked that nobody can walk across a large open space in a straight line if the eyes be kept on the ground, or closed; and that, even in a lane or street, most people "edge off" to one side or the other—a peculiarity so marked in some, that it becomes unpleasant for that reason to walk in their company, as they tend to drive their companion either against the railings of the houses or off the pavement. In walking in a street, we are continually guiding ourselves by the horizontal lines of the pavement or houses, even though our eyes be fixed on a newspaper, or our mind abstracted from all surrounding circumstances. In passing from a street into a wide open place, we have at once to abandon the horizontal guidance, and steer by the vertical lines of the houses on the opposite side. It is the absence of horizontal lines, the absence of visual impressions received from both sides, which would seem, on this view, to be the determining cause of the peculiar uneasiness of agoraphobia, the sufferers from which may be supposed to rely to an unusual degree upon these lateral impressions. We would commend these considerations to Dr. Grainger Stewart, who will, we hope, return to this very interesting and curious subject at some future time.

We may say, in conclusion, that these lectures on giddiness would be exceedingly useful reading for any student preparing for one of the higher examinations in medicine, as the subject is treated in a more complete way than in any text-book with which we are acquainted, and as, after reading of giddiness as a symptom of so many and such diverse diseases, a review of the subject from a different point would greatly assist in fixing the facts in the memory.

NOTES ON BOOKS.

Suggestions for a Plan of Taking Notes of Medical Cases. Arranged by GEORGE F. DUFFEY, M.D. Dublin. Dublin: Fannin and Co.; London: Baillière, Tindall and Cox. 1884.—Dr. George Duffey has been led by his experience as a teacher, to draw up a card of "suggestions" for the use of students at the bedside. When first called upon to "take the notes of a case," a student is rather apt to lose his head, and to cut a very poor figure, owing to a want of system in making his examination. Dr. Duffey's card will supply the necessary outline, by directing his attention to each organ and system, in regular order; nothing is overlooked, and everything is put in its proper place in the report of a case made on the pattern of this card; and if its use could be made general it would result not only in advantage to the student, but in a great increase in the value of his notes when reference has subsequently to be made to them.

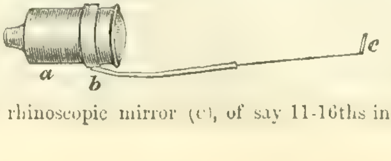
Clinical Notes on Cancer, its Etiology and Treatment. By HERBERT L. SNOW, M.D. Lond., etc., Surgeon to the Cancer Hospital, Brompton. London: J. and A. Churchill. 1883.—It is not possible to speak in terms of praise of this little book. The author lays claim to unusual opportunities for observing cancer, but he does not pretend to present to us more than "the impression received through constant familiarity" with ordinary cases of cancer. It is not well to put any trust, or to found any theories, on impressions. Dr. Snow is not blind to this danger, but it is a matter for regret that the material which he has had at his disposal has not been more thoroughly sifted and utilised. With regard to the etiology of cancer, the author has, in sum, two things to say; first, that the doctrine of heredity, held and defended by Sir James Paget, is a fallacy; and second, that the most potent cause of hard carcinoma is mental or nervous disturbance; this latter theory is expounded in a chapter entitled "The Neurotic Origin of Alveolar Carcinoma." That mental depression is a pre-existing condition often found in the history of patients suffering from carcinoma, and that it is probably one of the conditions which favour its development, is, we had supposed, pretty generally recognised; but Dr. Snow contends that a far higher importance should be attached to this element in the chain of causation, and seeks to explain, on this ground, the fact that women suffer from cancer in much larger numbers than men. Here accurate statistics would be of great value; a few are supplied, but the author does not discuss them with any thoroughness, and, indeed, apparently fails to understand their true significance. The pages devoted to the subject of treatment contain nothing novel, or calling for remark.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

ANTERIOR RHINOSCOPY, WITH TRANSMITTED LIGHT.

By E. CRESSWELL BABER, M.B. LOND.,
Surgeon to the Brighton and Sussex Throat and Ear Dispensary.

IN a recent number of the *Monatsschrift für Ohrenheilkunde* (vol. xviii, No. 1, January 1884), Dr. Voltolini brings forward the subject of examination of the nasal cavities, through the anterior nares, by means of light thrown upwards into the naso-pharynx with a rhinoscopic mirror. He there expressly states that, in carrying out this method of examination, the presence of a skilled assistant is required, in addition to the observer; in order that, whilst one holds the rhinoscopic mirror in position in the pharynx and concentrates a strong light upon it, the other may inspect the nasal cavities from the front. By simply attaching the rhinoscopic mirror to Trouvé's electric lamp, in the manner shown in the accompanying figure, I have found that this method can be easily carried out without the help of an assistant.



An ordinary rhinoscopic mirror (C), of say 11-16ths inch diameter, is fitted into a metallic tube, which is attached to the lamp (A) by means of a spring collar (B). The metallic tube is bent (rather more than is shown in the figure) until the mirror occupies the centre of the beam of light projected from the lamp. The distance of the mirror from the lamp can be regulated at will—a suitable distance from B to C being, I find, five or six inches. It is most convenient to rotate the lamp, so that its platinum loops (which are not drawn in the woodcut) point to one side. The headpiece, which is likewise not represented in the figure, is left attached to the lamp, and serves as a handle to hold it by. The examination may be conducted as follows. A conical vulcanite nasal speculum (somewhat like an oversized ear-speculum), having been inserted into one nostril, the patient is directed to open his mouth widely, and hold down his tongue with an angular depression. Taking the lighted lamp in his right hand, the observer then inserts the previously warmed mirror in the usual position for posterior rhinoscopy. The speculum in the anterior nares is next grasped by the thumb and forefinger of the left hand; and, by either tilting the patient's head downwards a little, or by raising himself slightly, the observer is able to inspect the nostril by transmitted light, and can, if necessary, transfer the speculum to the opposite nostril with his left hand. This method is much simpler in execution than would appear from this detailed description. Further experience will have to decide, however, as to its practical value. This much I may say, at present: that it is possible to recognise light thus transmitted forwards from the naso-pharyngeal cavity, when no view whatever of the naso-pharynx can be obtained in the usual way through the nostril—not even with reflected sunlight. With a wide nostril and unobstructed naso-pharynx, the parts can, of course, be seen with much greater clearness.

MELLIN'S FOOD FOR INFANTS AND INVALIDS.

A RECENT analysis by Mr. G. W. Wigner, the President of the Society of Public Analysts, throws considerable light, not only on the composition, but on the physiological action of this popular preparation. It appears that it contains nearly 87 per cent. of dextrose, dextrine, maltose, etc., soluble in cold water. It is not, as Mr. Wigner points out, a mere starch or sugar food, but a soluble preparation, containing those nitrogenous and phosphatic principles which contribute largely to the growth of bone and tissue in young children. Being thoroughly malted, it is not only readily digestible itself, but actually assists in the digestion of milk and other foods with which it is mixed. It must, of necessity, be of great value in the case of feeble infants who cannot digest ordinary starchy foods. Mr. Wigner's analysis has evidently been performed with great care, and is of much interest.

MESSRS. ESSINGER AND NEUBURGER'S "WOOD-WOOL."

A SAMPLE of "wood-wool," prepared by Messrs. Essinger and Neuburger, has been brought under our notice. The material seems to have been chiefly used for making up into "sanitary towels" for ladies, but the sample we have seen and tried is of the wool itself, in the form of a short-stapled woody fibre. It is, in many respects, suitable as a surgical dressing material; so far as our experience goes of its power of taking up discharges, it seems to be more absorbent than the common absorbent cotton-wool, so that liquids which are brought into contact with it appear to be soaked up in a very cleanly fashion. Covered with a thin gauze, it should make up into very useful dry absorbent pads for wounds which are to be dressed after Professor Gamgee's plan; and inasmuch as the wool can be readily impregnated with terebene, carbolic acid, or other antiseptic substances, it may prove very useful in the treatment of wounds with foul discharges. A few years ago, the late Surgeon-Major Porter advocated very strongly the use of muslin bags filled with fresh red pine-sawdust as absorbent and deodorising applications to wounds; it appears to us that a similar but more satisfactory use might be made of this "wood-wool" in the same direction.

NASAL INHALERS.

SIR,—I trust you will allow me, in fairness, to make a few observations on a "nasal respirator" described by "John Martin" in your number of February 9th.

On December 29th preceding, the *Lancet* published some remarks by me on "a new nose-inhaler," with an illustration of it, made at my suggestion by Messrs. Wright and Co. The makers protected their rights by duly registering the name and design, and, in the *Lancet* of January 5th, advertised the contrivance as "Dr. Moore's registered nasal inhaler or respirator."

Dr. Martin's description of his "invention" is almost identical with that of mine published six weeks previously, and he designates it by a name already applied to mine. Both have the same mechanical arrangement in essential details, and both are designed to serve the same purpose. I think, therefore, that no impartial person can doubt as to whom the priority belongs.—I am your obedient servant,
GEO. MOORE, M.D.
Hertford Street, May Fair.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 3rd, 1884.

CREMATION IN PARLIAMENT.

THE debate on Dr. Cameron's Cremation Bill on Wednesday developed an unexpected strength of parliamentary opinion in favour of a practice which had hitherto been regarded with insufficient attention, and had found but few though earnest supporters. A division which showed 76 in favour of a Bill introduced by a private member, and in the face of the avowed opposition of the present Home Secretary, as well as of his predecessor, says much for the conviction in the minds of practical men that at least the present modes of the disposal of the dead are open to considerable reform; and that the practice of cremation offers a means of escape from the defilement of soil and water, which deserves serious regard. At any rate, it is evident that a considerable body of legislators, for the most part neither scientifically minded nor sanitarily informed, are sufficiently satisfied of the importance of dealing with this question in an affirmative sense to be prepared to recommend that the practice, which is not forbidden, as we have recently learned, by any law of the country, should be adequately regulated, and that precautions should be taken for insuring a due regard to the interests of the living, and providing against any avenues of escape which the practice of cremation might afford to the poisoner. This last difficulty is, indeed, probably that which weighs most in the minds of all who have carefully considered the question, and it is a pity Sir William Harcourt did not more directly address himself to what is, after all, the only serious objection that can be raised to the practice. No one will grudge Sir William Harcourt his somewhat hasty antiquarian excursus, made a little at random, and capable of easy demolition; nor were the harmless jokes with which he favoured the philosophers at all calculated to hurt their feelings, or seriously to affect the prospects of the question. That lawyers and politicians regard scientific facts with a mixture of amused admiration, reluctant assent, and doubtful approval, is a symptom of nineteenth century indifferentism to which we are all well accustomed, and which may be part of the necessary order of modern progress. Too ready an assent to doctrines based upon theoretical data, and not confronted with the work-a-day details of ordinary practice, is not to be desired. A very thoughtful investigation of such figures and facts as those submitted by Dr. Cameron, Dr. Farquharson, and Sir Lyon Playfair, is more than busy statesmen of the average earnestness are willing to give to anything which does not immediately affect the prospects of their party or the safety of their seats. We must, therefore, perhaps expect that a proposition such as Dr. Cameron made should be received with the gentle jests with which Sir William Harcourt opposed it. On the other hand, there is good reason that the advocates of cremation should be well satisfied with a debate in which the logic and the reason were admittedly all on one side, and in which the only objections raised were those of an alleged sentiment and an avowed waiting for the "rush" of public opinion. "Waiting for a rush" is the habitual policy of feeble statesmanship.

It has been recorded now in Parliament, as in the Courts, that there is no legal objection to the practice. It has been admitted that there exists, however, no proper regulation of such practice, and that without it it might well become dangerous to the public safety. It is difficult to conceive more cogent reasons for a more thorough investigation of the conditions under which it should be practised, and for a serious treatment of the question as one of administration. A rush for cremation is perhaps as little to be desired as to be expected. The method of disposal of the dead is essentially a question for the living. The allegation that there is a strong public sentiment against it is, of course, one which applies only with evident qualifications, since a considerable declaration of opinion exists in its favour. If carried out, it should certainly be carried out with due precautions, such as those which Dr. Cameron's Bill indicates, for a careful verification in every case of the cause of death, by means much more searching, much more complete, much more accurately and uniformly applied, than those which at present exist in respect to burial.

The corporation of the City of London, recognising the administrative difficulties and the sanitary danger surrounding the present mode of disposal by interment of the dead from among an ever growing population, are turning seriously to the consideration of cremation as a way out of the difficulty. It is announced that there is no legal obstacle to the practice of cremation, and the society which has provided a crematorium at Woking, and which has hitherto stayed its hand in the hope that the Government might see fit seriously to provide proper legal regulations for the subject, have avowed their intention of pursuing the declared objects of the society under every safeguard which scientific ingenuity can suggest, in the absence of other administrative guidance.

Dr. Cameron may be congratulated on having exposed in a very clear, comprehensive, and impressive manner, the existing anomalies and defects of our burial laws; and Sir Lyon Playfair very conclusively demonstrated to the House of Commons that the question of oxidation by fire, or slower oxidation in the earth, is one of pure reason, and which requires no very abstruse knowledge in order to determine its applications to the modern conditions of society. It was known beforehand that the Government would not favour the second reading of the Bill, and, with such opposition, its passing was, of course, out of the question. Sufficient progress has been made, however, to bring the subject within the range of practical politics; and it is probable that, in the course of a time now near at hand, more will be heard on this subject, and that it will rapidly ripen for definite solution.

A very interesting pamphlet by Sir Henry Thompson and Sir T. Spencer Wells, setting forth the arguments in favour of cremation, together with the recent charge delivered by Sir James Stephen at Cardiff, has just been issued by Messrs. Smith, Elder, and Co.; and we recommend those of our readers who desire to study the question from their point of view, carefully to peruse this interesting document.

THE MEDICAL DEPARTMENT OF HER MAJESTY'S PRISONS.

IN a leading article in the JOURNAL of January 26th, we published an extract from a letter of the Home Secretary to the Chairman of the Prisons Commissioners, in which he acknowledges the very satisfactory results of the efforts of the prison medical officers, and the singularly low death-rate in the prisons under their charge. That letter referred exclusively to English prisons. We now proceed to give some information with regard to the results obtained by the medical department of Her Majesty's Prisons in Ireland, which will show that, although no satisfaction has ever been expressed with regard to the work done by the prison-surgeons, their efforts have been attended with equally good results.

The Irish prisons were taken over by the Irish Government on April 1st, 1878. We have not access to the first report of the General Prisons Board; but from that for the year from March 31st, 1879, to April 1st, 1880, we find that 44,653 prisoners were committed during the year to local prisons. Of these, 3,174 were treated in hospital, and

33,788 out of hospital, making a total of 36,982 under medical treatment during the year. The deaths in all the local prisons were, 23 from disease, and 2 executed, or a percentage of .051 on the entire number of committals, and of .062 on the number of sick treated.

From the last report of the General Prisons Board for the year 1882-83, we find that the total committals numbered 35,434. The number treated in hospital was 1,900; out of hospital, 28,842; total, 30,742; while the deaths numbered 7 from natural causes, and 11 executed; making a percentage of .019 for the total number of commitments, and .022 for the number under treatment.

A return of the proportion of deaths in the convict prisons is given in these reports, but is entirely unreliable, as the percentage, although apparently that on the entire prison-population, is in reality only on that of those prisons in which deaths occurred. Thus, for the year 1879-80, the total number of convicts is given as 1,064, and of deaths 9; and the percentage 2.73, which is obviously inaccurate. The real percentage is 0.84.

In the year 1882-83, the total number of convicts is given as 1141.53; deaths 8; percentage 3.434. We do not understand how a decimal part of a convict could have been imprisoned, and presume that there must be some mistake in the figures, more especially as the returns from 1875 show that such a phenomenon did not occur before; but here again the percentage of deaths to the prison-population is erroneous, and has partly arisen from the omission in the total of Lusk Prison, in which no deaths occurred, or a mistake in the percentage of Mountjoy male prison, which is put down at .42, the actual percentage being .172. The correct percentage of deaths to the entire convict population was .701.

Thus, in local prisons, the death-rate in the year 1879-80 was .51 per 1,000; in 1882-83, .19 per 1,000. In convict prisons, in 1879-80, the death-rate was 8.4 per 1,000; in 1882-83, 7.91 per 1,000. If the death-rate per 1,000 in local prisons be taken with reference to the sick alone, we find it to be: in 1879-80, .62; and in 1882-83, only .22; and, considering the condition in which a large number of prisoners are admitted, and that as a class they are broken down by disease and debauchery, and weakened by privation and exposure, this exceedingly low death-rate reflects credit, not only on the skill of the medical officers, but on the sanitary condition into which they have brought their prisons. But, so far from commendation or praise being bestowed, we find that dissatisfaction with their position and treatment by the authorities is expressed by our Irish brethren.

The offensive order with regard to *post mortem* examinations has recently been issued to the governors of prisons. In England, a practical acknowledgment of good work done, has been made in the shape of an increase of salary. In Ireland, on the contrary, where the salaries are much smaller, the medical officers' exertions have only been rewarded by a very large increase of work, and not too courteous treatment. The arrangements for the treatment of the sick, and nursing patients in hospital, are unsatisfactory, and an endeavour to prevent the ordering of extra diet, in accordance with the medical officers' discretion, has been made by a peremptory order, that every prisoner put on extras must be entered as sick, and visited daily. Thus, by the recent regulations, a pregnant woman, an old man, or young person, for whom the class-diet may not be sufficient or suitable, must be reported as sick, and seen every day.

The medical officers have had an opportunity of bringing before the Royal Commission on Prison Discipline their grievances; and we trust that the Commission will report in decided terms on a condition of affairs which presses hardly on a body of professional men who have, as testified by facts in the Prison Boards reports, ably discharged their duties, and the continuation of which cannot but prove a hindrance to the efficiency of the whole prison-service.

It is the opinion of the surgeons, in which we entirely concur, that the best way to bring into harmony the Board and medical staff, would be the appointment of a medical member of the Board, and a medical inspector. These officers are at present all laymen and, as such, perfectly incapable of deciding medical matters. In the English prison-service, it has been found advisable to appoint a medical inspector. But more than this is needed. An inspector can only report to the Board. It is essential, considering how closely interwoven are the duties of the medical officer with the whole prison-service, that there should be a medical member of the Board.

In the Army and Navy Medical Services, the departments are presided over by medical men; and as the salaries of a medical member and medical inspector would be the same as those paid to laymen, we trust that, as vacancies occur, the Government will adopt a suggestion which, while it does not increase the expense, would do much to promote the welfare and efficiency of the service, and that such appointments will be made from the ranks of the prison-surgeons, who, as matters now stand, have no promotion to look forward to, and no incentive to take any interest in the service.

CHLOROFORM NARCOSIS DURING SLEEP.

An article on this subject, contributed to the *New York Medical Record* (vol. xxiii, p. 457) by Dr. Girdner of that city, has excited considerable discussion among our professional brethren in America.

Dr. Girdner says that the impression is very general, both among the profession and the laity, that, if chloroform be inhaled by a person asleep, that person may pass from a natural sleep to a chloroform-narcosis without returning to consciousness. In order to test the accuracy of this statement, Dr. Girdner proceeded to a hospital one night at 12 o'clock, whilst a terrific snowstorm was raging, and proceeded to administer the drug to some of the sleeping patients.

He did so in this way. Chloroform was poured on a folded towel and held eight inches from the face; and then it was slowly and carefully brought nearer. Two children and three young men were thus treated, with the result that each awoke and resisted before the proceeding had lasted longer than about three minutes.

Hence Dr. Girdner concludes that these experiments must be taken as *primâ facie* evidence towards the establishment of the fact, that it is impossible to transfer an individual from a natural to a chloroform sleep without an interval of perfect consciousness, during which he would be able to appreciate his situation; and, if force were used to carry on the anæsthesia to unconsciousness, he would still be able on awakening to call to mind the person who used the drug.

The testimony of medical experts to the contrary, Dr. Girdner is at present unwilling to accept; because the evidence on which they base their opinion is anything but conclusive. He thinks, however, that there are some who will see sufficient evidence in these five experiments of his to satisfy their minds that every experiment of this kind, made for whatever purpose, will have a like termination. We confess to a somewhat sceptical feeling on this point.

In order that an anæsthetic agent may produce its physiological effects when administered in the usual way, two conditions are requisite, viz., free respiration, so that the vapour may be inhaled and brought into contact with the pulmonary mucous membrane; and free circulation, so that it may be taken up and distributed by the minute capillary blood-vessels of the part. In normal sleep respiration is retarded, and the circulation is slower than at other times. Hence it may be inferred, *cæteris paribus*, that it will take longer to narcotise a sleeping patient than one who is awake; just as, for the same reason, it takes longer to narcotise a grown up person than a young child. But we are not aware of any other factors in the physiological condition pertaining to sleep, that would lead us to expect any difference, as regards susceptibility to the influence of narcotic vapours, between a sleeping person and one who is awake.

Thus there is strong presumptive evidence against the position which Dr. Girdner has taken up. Were it otherwise, however, there is nothing in Dr. Girdner's rather meagre observations that would warrant us in arriving at his conclusions. The induction of chloroform-narcosis by the method he employed and under similar circumstances, would occupy at least a quarter of an hour; hence it appears to us highly improbable, judging from the very short time which elapsed before the subjects of his experiments awoke, that the drug could have produced on them any appreciable effect whatever. The night being stormy and their rest disturbed, they were probably awakened by the movements of the administrators or even the smell of the vapour. In short, Dr. Girdner's experiments were performed under such adverse conditions that results other than those obtained would have been extraordinary. There are many conditions which influence the profundity of sleep, such as age, idiosyncrasy, and the time of night. Infants, children, and young persons sleep longer and more deeply than those who are older. Some persons are naturally "light" and others "heavy" sleepers. The deepest sleep is that of the early morning. Had Dr. Girdner conducted his experiments in accordance with these suggestions, he would probably have met with very different results Several highly competent observers have recently done so, with the result that in many cases the patients passed under the influence of the drug without any previous awakening. Of twenty-nine experiments made by Dr. Dolbeau (*Annales d'Hygiène* 1876), at the request of the Medico-Legal Society of Paris, on persons of both sexes and of various ages, ten were completely successful. Hence we may conclude that, though it is difficult to induce chloroform-narcosis during sleep, yet such a proceeding is perfectly possible.

The subject is to a large extent new; and it has important bearings, especially from the medico-legal point of view. Although we have had occasion to differ from Dr. Girdner, it must be admitted that we are indebted to him for bringing this interesting question so prominently before the profession. There is a singular lack of information on this subject in the standard works of reference; it would be interesting to know the experience of our readers, for the subject cannot be satisfactorily disposed of without further investigation.

THE CHOLERA CASES ON THE "CROCODILE."

WE have received, from various authentic and official sources, details of a precise character concerning the six cases of cholera which occurred on board H.M.S. *Crocodile*, whose passage through the Suez Canal caused some excitement among Egyptian and Continental writers, and which this week received pratique, and was allowed to land her passengers at Southampton. It is important, in order to understand and to explain the action of the English health-officers, that the dates should be accurately put on record. We are informed that the *Crocodile* cleared from Bombay on April 3rd, with 1,558 persons on board. Her passengers chiefly consisted of time-expired men and invalids, with a contingent of over 200 women and children. When the *Crocodile* arrived at Spithead on the 29th ult., she was flying the yellow flag, but reported that there had been no case of cholera on board since the 20th ult. The Port Medical Officer, Dr. Walter Sykes, informs us that he ascertained that the first case of cholera occurred three days after leaving Bombay. Four deaths took place on board from this disease. There had been six cases of cholera, and several cases of "choleraic diarrhœa." The last death occurred on April 24th, during the reactionary fever following the choleraic attack. There were two convalescents on board on arrival at Spithead, who were removed by order of the Medical Officer of the Port to the isolation-department of the Garrison Station Hospital. All infected articles have been destroyed, and the ship disinfected.

Our letters and telegrams from Alexandria, Port Said, and Gibraltar, are in accordance with these official details, although there is some natural error and confusion, as has been apparent in the public telegrams which have appeared. The death which occurred in the Suez Canal, and which caused some excitement, was, we find from a telegram of the Agent of the Sanitary Board of Alexandria, due to simple inflammatory disease of the liver, and was not, as has been erroneously reported, a case in any way attributable to cholera.

In relying upon medical inspection and isolation of infected cases, and in allowing the rest of the passengers to land, the British sanitary authorities have shown that they have the courage of their opinions. It has been the fashion lately of Continental writers, especially in a portion of the political press, to treat quarantine as though it were a political, and not a scientific, question. We have seen, with regret, that this spirit has infected some medical writers. We in England are not accustomed to subordinate our medical and scientific opinions to any other considerations, and we have not thought it accordant with the dignity of British medicine to notice the somewhat repulsive imputation that the opinions of British sanitarians, adverse to the utility of quarantine, were manufactured for foreign consumption. British hygiene holds its place incontestably in the van of science. The death-rates of our great cities, and of our Indian possessions—reduced from decade to decade, to a point which no foreign nation has yet been able to approach—afford incontestable evidence on this point. That the utmost care and rigid exactness are a *sine quâ non* in dealing with such cases as this of the *Crocodile*, is self evident. If this has been exercised, there need be little fear of the result. Above all, it must be remembered that the propagation of cholera is a question of soil, as well as of germ-poison, and that the nearer we approach to purity of air, water, and soil, the less we need fear any importation of cholera.

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THE Earl of Dalhousie, K.T., has consented to preside at the biennial dinner on behalf of the Samaritan Free Hospital for Women and Children, to be held at Willis's Rooms on Tuesday, May 20th.

THE dinner in aid of the funds of St. Mary's Hospital will take place on Wednesday, May 7th, under the presidency of Lord Carlingford.

DR. OCTAVIUS STURGES has been promoted to the senior staff of the Hospital for Sick Children, Great Ormond Street, to fill the vacancy occasioned by the retirement of Dr. Dickinson.

THE late Mr. Wm. King, well known in art circles, has by his will left £100,000 to St. George's Hospital, London.

THE Metropolitan Public Garden, Boulevard, and Playground Association announce the opening, on May 5th, of a public playground for children on the site of old Horsemonger Lane Gaol, by Mrs. Gladstone.

THE twenty-second festival of the Royal Medical Benevolent College, Epsom, will be held at the Langham Hotel, Portland Place, on Wednesday, May 7th, when Sir Joseph Lister, Bart., F.R.S., will take the chair. Dinner will be served at half-past six.

THE opening of the new wing of St. Mary's Hospital, Paddington, by her Royal Highness Princess Louise, Marchioness of Lorne, which was fixed to take place on the 6th inst., has been postponed until the beginning of July, in consequence of the death of the Duke of Albany.

A SPECIAL meeting of the constituents of the Metropolitan Hospital Sunday Fund will be held in the Egyptian Hall of the Mansion House on Monday, May 5th, at 12 o'clock, under the presidency of the Right

Honourable the Lord Mayor, to consider the working, and, if necessary, the abrogation, of Law VII, which reads as follows: "VII. No institution, to the benefits of which admission can only be gained by election from the general body of subscribers, shall be eligible for grants from the Fund."

A CONVERSAZIONE will be held by the Medical Society of London, at the Society's house in Chandos Street, Cavendish Square, on Monday next, May 5th. Dr. C. Theodore Williams, who, we are glad to say, has recovered from his recent severe illness and returned to London, will deliver the annual oration at 8.30 P.M.

MR. S. F. LANGHAM received, on Saturday last, a communication from the Chancellor of the Duchy of Lancaster, informing him that he had been appointed Coroner for the Duchy, in the place of the late Mr. W. J. Payne, whose deputy he had formerly been. The Duchy comprises the districts of Edmonton, Enfield, and Southgate in Middlesex; the Liberty of the Savoy, in Westminster; and the parish of Clapham, in Surrey.

DEATH FROM AN INJECTION OF CARBOLIC ACID.

AT the Calcutta Criminal Sessions in April, Dr. Upendra Krishna Dutt was found guilty of causing death by a rash and negligent act, and was fined 500 rupees. The convicted person, who was a young native medical practitioner, administered an enema of carbolic acid to the child of his cousin for the cure of dysentery or worms. Two hundred drops of Calvert's No. 2 carbolic acid were injected; and there could be no doubt that, whatever was the nature of the child's illness, the carbolic enema had caused the death, which occurred in a few hours. There was collapse almost immediately after the injection of the acid, which was dissolved in water.

AUSTRIAN RED CROSS SOCIETY.

THE yearly meeting of the Austrian Red Cross Society took place on April 27th, in the grounds of the Exhibition-building in the Prater. In the presence of the Emperor, several of the Archdukes, and a number of officers, including the Minister of War, a mimic battle was fought. The Red Cross men bound up the imaginary wounds of the fallen, and then carried their patients to the wagons. His Imperial Majesty expressed his high satisfaction with the proceedings.

HOSPITAL SATURDAY FUND.

A COUNCIL meeting of the board of delegates of the above fund was held on Saturday afternoon at the offices in Mitre Court, Fleet Street, Mr. M'Gregor presiding, at which it was announced that a conference would be held, to consider the best means of working the fund more efficiently, on May 20th, at which Mr. Samuel Morley, M.P., would preside. Mr. Allom moved the following resolution, which was carried by a large majority: "That, in the opinion of this board, it is desirable to take fit and proper steps, according to the rule, to withdraw the words 'non-political,' as applied to working men's clubs, from the regulations of the constitution of the Hospital Saturday Fund."

CHOLERA.

IN connection with the occurrence of cholera in a troopship, it may be useful to note that the Local Government Board have recently issued an order amending section 6 of their general order of July last, prescribing regulations for the management of vessels arriving with cholera-patients on board, and for preventing the spread of the disease. The amendment, which only affects the port sanitary authorities of Milford, Plymouth, Portsmouth, Rochester, and Weymouth, requires that the place of mooring of an infected vessel shall be fixed with the approval of the Queen's harbour-master, instead of with the approval of the chief officer of Customs, as designated in the order of July last. The alteration has been required in consequence of the ports of Pembroke, Plymouth, Portsmouth, Chatham, Sheerness, and Portland being dockyard-ports within the meaning of the Dockyard Ports Regulation Act, 1865, for each of which a Queen's harbour-master has been appointed.

MR. ARNOLD ROYLE, C.B.

IN recognition of the long and faithful services of Mr. Arnold Royle, as personal medical attendant on H.R.H. the late Prince Leopold, Duke of Albany, the Queen has conferred upon him the Companionship of the Most Honourable order of the Bath. It will be remembered that immediately after the sad news was received in this country, the Queen, in a few gracious words, expressed her confidence that Mr. Royle had done all that personal devotion or medical skill could dictate; and it will be a source of gratification, not only to Mr. Royle, but to the Army Medical Department and to the profession at large, that the generous words first uttered, in a moment of sore trial, have been confirmed by this more deliberate and official recognition.

DR. ANDREW WHYTE BARCLAY.

WE regret to have to announce the sudden death of Dr. Andrew Whyte Barclay, until recently Senior Physician to St. George's Hospital. Dr. Barclay attended the meeting at the College of Physicians on April 24th, apparently in his usual health. He was not well on Friday, complaining of abdominal pain, which he set down to dyspepsia. His indisposition continuing, Dr. Drage of Hatfield attended on the following day, and, being somewhat alarmed at the condition in which he found Dr. Barclay, determined to spend the night with him. Dr. Barclay complained of great restlessness, rose from bed to change his position, and immediately expired. On becoming Consulting Physician to St. George's Hospital, about two years ago, Dr. Barclay relinquished practice and retired to the country.

CYSTS IN BONE-TISSUE.

PROFESSOR BILLROTH has never observed cysts in the cortical layer or compact tissue of bone, but always in the spongy tissue. According to Professor Billroth, the development of these cysts observes two processes which are sometimes combined. The bony and medullary tissue may undergo degeneration and break down, whether it be the spongy tissue or sarcomatous or enchondromatous tissue that is degenerated; or, as is easily conceived, a cyst can form by expansion of the bone-tissue provoked by an accumulation of fluid which, submitted to the influence of considerable pressure, exudes, and pushes, from inwards, outwards the different osseous layers. The development of the articular cavities, of the antrum of Highmore, and of the frontal sinuses, may be considered as a typical example of the early formation of cystic cavities in bone-tissue. Articular cavities are formed by the breaking down of a pre-existing dense cartilaginous tissue. Cysts are often thus developed in osteo-sarcoma present in the medullary canal. Professor Billroth regards dental cysts of the superior maxillary, formerly described as dropsy of the antrum of Highmore, as the prototype of tumours of this kind. Formerly Billroth believed these cysts to be formed by the breaking down of a sarcomatous tissue. At the present time he believes they develop in the spongy tissue above the roots of the teeth; the areolæ are distended by the fluid, and eventually merge together. An abundance of fluid is secreted in the medullary lacunæ of the inner surface of the bone, and exercises so strong a pressure that the superficial layers of bone-tissue are pressed outwards. Hydatid bone-cysts prove that bone-tissue becomes distended when submitted to the influence of an expanding fluid. It is also probable that the cysts which are formed by the breaking down of pre-existent tissue, are completed by their walls becoming distended, an exudation of fluid taking place.

CYSTS OF THE FEMALE URETHRA.

THE presence of a small cyst, projecting from the anterior wall of the vagina, and lying immediately behind the urethra, has often been detected in patients complaining of symptoms attributed by themselves to uterine displacements. In the last number of the JOURNAL reference was made (p. 827) to the researches of Dr. Max Schüller, who differs in opinion from Skene, and Dr. Kocks, of Bonn, believing that a pair of ducts situated one on each side of the female urethra and opening at the posterior border of the meatus, close to each other, are purely gland-ducts, and not relics of the Wolffian ducts. Dr. Kocks, however, in the *Archiv für Gynækologie*, describes these same ducts, and the occasional discharge which issues from them; he brings forward very good reasons for believing that the canals are the termination of Gaertner's ducts, the excretory canals of the Wolffian body which is reduced in the adult female to the parovarium. When the orifice of one of these canals becomes closed, the canal itself might readily become cystic, many cysts that are common in other parts of the body being formed in this manner. The evidence of the Wolffian origin of these canals is not very strongly supported by teratological evidence; for though in many mammals the ducts of Gaertner open normally close to the urethra, only two cases of persistence of the ducts appear to have been seen in the human female. In one case two canals passed from the ovary downwards, opening close to the clitoris. This would support Dr. Kocks' opinion, but the case was reported by Realdus Columbus in 1559, though his absence of bias, due to ignorance of a theory unknown in his day, makes his description from certain points of view more trustworthy. In the second case, where the uterus was bicornute, a single canal ran downwards in the outer wall of the right cornu, passed down to the lower end of the incomplete vaginal septum, and then turned up, opening close to the os uteri. Professor Morison Watson has described these cases in the *Journal of Anatomy and Physiology*, vol xiv. More researches are required before it can be made certain that the canals discovered by Dr. Kocks are constant.

MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

IT was reported, at a meeting of the Medical Sickness, Annuity, and Life Assurance Society, held on Wednesday, April 30th, that the fund had already reached a position at which the number of members entered ensured the solidity of the Society; and that there was an adequate margin, according to the actuarial allowance, for the working expenses, which had hitherto been kept down to an unusually low point, and that this would continue to be so. Arrangements were at the same time made for bringing the objects of the Society under the notice of the presidents and secretaries of Branches, with a request that they would submit them to the notice of members at forthcoming Branch meetings; and communications were received from Mr. Brierley (Manchester), and Mr. Ravenhill (Birmingham), announcing the intention of taking early steps, as requested, to form local committees in those two great towns from existing members and others. It was resolved also that all members joining before the end of May should rank as foundation members, and be entitled to the accruing advantages in respect to the date at which they would be free to receive the benefits of assurance. The whole of the preliminary expenses up to date were provided for and written off, leaving the Management Fund untouched.

INTERNAL CHARBON.

A FATAL case of anthrax, without external lesion, of internal charbon, as it is sometimes called, occurred recently in Guy's Hospital. The patient was a dock labourer, who, like the patient mentioned as under treatment at St. Bartholomew's Hospital last week, had been handling a parcel of hides consigned from China. He was only engaged in the work one day, and appeared to have complained of feeling ill on the same evening. He was admitted to Guy's Hospital on the fourth day, and the symptoms resembled those of tetanus, or of acute meningitis, to some degree. He was at first delirious, and had tetanic spasms, but subsequently became comatose, and died the same evening. The *post mortem* examination revealed sloughing charbon of the stomach, duodenum, and other parts of the small intestines, cerebral and spinal hæmorrhage, and hæmorrhage also into the skin and subcutaneous tissue. The case is the first of the kind which has occurred, in recent times at least, at Guy's Hospital, where most of the cases of charbon have presented an external lesion.

SMALL-POX IN LONDON.

THE Registrar-General reports that the fatal cases of small-pox, which had been 8 and 11 in the two previous weeks, were 12 last week, and 17 below the corrected weekly average. Eight of these fatal cases were recorded in the Metropolitan Asylum Hospitals at Homerton and Stockwell, 1 in the Highgate Small-pox Hospital, and 3 in private dwelling-houses. After distributing the hospital cases, 3 belonged to Bethnal Green, 2 to Hackney, and 1 each to seven other sanitary districts. The 3 fatal cases in private dwelling-houses occurred at Chatsworth Road (Hackney), Roman Road (Bethnal Green), and Stanton street (Camberwell). The number of small-pox patients in the Metropolitan Asylum Hospitals and Hospital Ships, which had risen from 148 to 405 in the five previous weeks, further rose to 450 on Saturday last; 119 new cases were admitted to these hospitals during last week, against 92 and 61 in the two preceding weeks. The Highgate Small-pox Hospital contained 15 patients on Saturday last, two new cases having been admitted during the week. There were also 4 fatal cases in the outer ring of the metropolis.

SMALL-POX A CENTURY AGO.

AT the last meeting of the Cambridge Medical Society, Dr. Paget, the Regius Professor of Physic in the University, thought the members of the Society would like to see an old report, which had come into his possession. It had been very carefully and scientifically drawn up, and represented the sanitary condition of the city of Chester in the year 1774. The author, he believed, was Dr. Haygarth, a physician of repute. The report consisted of some general observations on the situation of the city, its surroundings, and the soil; and eight tables of statistics, in which the population, diseases, and mortality are tabulated, proving the town to be "healthy in such an uncommon degree as will astonish those who are best acquainted with the general state of mortality in large towns." The point of chief interest to which Dr. Paget wished to draw attention was that relating to small-pox. It appeared from the tables that the population of Chester numbered 14,713. In 1774 the total number of deaths was 546; of these, the deaths from small-pox was 202; 195 occurring in the latter half of the year, and 130 of these in the last three months of the year. The total number of persons attacked was 1,385. Of those attacked, one died out of 6⅞. It was an epidemic, but not an exceptionally virulent one. Dr. Haygarth ascertained that in January, 1775, there were in Chester 1,060 persons who had never had small-pox, *i.e.*, 1 out of 14 of the population. Therefore he calculated that (taking Chester as an average case) one-eight part of mankind, at that time, died of small-pox, a fair calculation based on the death-rate of those attacked. The average annual death-rate from small-pox at Chester he estimated at that time to be 49. An equivalent death-rate at Cambridge at the present time would be about 125 (estimated in a population of 35,000). Dr. Paget remarked that in the last fifty years the average number of deaths from small-pox in Cambridge had not, he believed, exceeded one a year. If, now-a-days, one death or a few cases of small-pox occurred in Cambridge in a year there would be a great outcry, and much excitement created. He thought that no stronger evidence could be brought to bear in favour of vaccination, than the examination of this report of a time before vaccination was practised; and he alluded in strong terms to those fanatics and ignorant persons, some of them members of Parliament, who were agitating against and decrying the practice of vaccination, which had proved to be one of the greatest blessings ever bestowed on mankind by medical science. If Cambridge in 1884 were to be visited with an epidemic similar to that of Chester in 1774, the number of cases of small-pox would be 3,924; the number of deaths from small-pox in the last half-year would be 463; the number of deaths from the same disease would be about 215 in the October term alone. That there is no probability of so ghastly a calamity is due to vaccination. In the remarks that followed, Dr. Anningson mentioned that in the course of the last nine years there had been altogether only three deaths from small-pox in Cambridge.

THE "TIP-CAT" NUISANCE.

It is one of the unfortunate consequences of our long continued neglect, as a community, to provide open spaces, that the children of the poorer classes have often no other place than the streets in which to play. No person with a keen sense of justice can complain if he find himself occasionally inconvenienced by a top, or a hoop, or a skipping-rope, or if he be compelled to step off the pavement to avoid disturbing some eager knot of boys whose game of marbles has reached the most exciting climax. But the case is altogether different with regard to "tip-cat," an evil and dangerous game played with a stick, and a "cat," generally a piece of firewood pointed at each end; the cat is "tipped" at one pointed end, rebounds, and is then violently struck by the player with his stick; the game, apparently, consists in sending the "cat" as far as possible, the direction being a matter of no consequence. Now, a number of persons lose their sight every year owing to this game, as the pointed "cat" is capable of inflicting severe injuries on the delicate structures of the eye, or even of rupturing its coats, when violently struck by some lusty school-boy. An inquiry at any of the hospitals for diseases of the eye would confirm this assertion. The police ought to be instructed to suppress this dangerous nuisance, as they could easily do. There seems to be a sort of seasonal succession about these street-games; cricket, after flourishing through the autumn, gives way to hoops and marbles; the new year marks the beginning of the season for tops; while, a little later, "tip-cat" comes with the east wind to add a new horror to a London spring.

PERSISTENCE OF FLORAL FORMS.

Dr. G. Schweinfurth, in examining the floral wreath on the mummy of the Princess Ugi-Khouni, of the twenty-first Egyptian dynasty, discovered, says *Nature*, at Deriel-Behan, found the folded leaves of a willow (*Salix Safsof*), perfect flowers of the corn-poppy, flower-heads of *Centaurea depressa*, and of *Picris coronopifolia*. The flowers of the corn-poppy appear to have been gathered in an unopened condition to prevent the petals from falling, and were in such good condition that Dr. Schweinfurth remarks that such perfect and well preserved specimens of this fragile flower are rarely to be met with in herbaria. It is worthy of note, too, that the character of this variety of the poppy (*Papaver rhœas*, var., *genuina*), although gathered more than 3,000 years ago, are identical with those of the same variety known to-day. With respect to *Picris coronopifolia*, the author remarks that not a single peculiarity is apparent by which it might be distinguished from the recent small form, with low-spreading branches, now common on the outskirts of the desert. From the occurrence of this flower in the wreaths, it is possible to conjecture that the burial of the princess took place in March or April, since there would have been considerable difficulty in obtaining the flowers after the latter month. It has also been determined, by the capsules of the linseed-plant found in a Theban tomb of the twelfth dynasty (2200 to 2400 B.C.) that the flax used by the ancient Egyptians was derived from *Linum humile* Mill, and that the mustard-oil used by them was derived from one of two varieties of sinapis, both of which are still common in Egypt.

COMPULSORY NOTIFICATION OF DISEASES: THE BRIGHTON IMPROVEMENT BILL.

We called the attention of the profession in Brighton and other towns in February (British Medical Journal, page 381), to the importance of local action on their part in reference to the consideration of the method in which it is proposed to carry out compulsory notification of infectious disease in the sanitary clauses of the Brighton and other Improvement Bills. The advisability of providing an adequate system of notifying to the health-authority the occurrence of cases of spreading and zymotic illness, with a view to insuring the limitation of such disease by means of adequate precautions of isolation and disinfection, has been affirmed repeatedly, and the principle has been practically accepted by a pretty universal consensus of opinion, lay and professional. What is needed, however, is that this whole subject should be investigated by a competent authority, such as a Select Committee of the House of Commons, and that some general conclusion should be arrived at, after the hearing of evidence on all sides, which should be applicable generally to the towns and rural districts of Great Britain. Meantime a promise was obtained by the Parliamentary Bills Committee from Sir Charles Dilke, the head of the Local Government Board, that should any Improvement Bill contain clauses on this subject of the notification of diseases or other sanitary matters, proposing to impose obligations or penalties upon medical men, or otherwise affecting their public or private duties, the medical profession in the locality should have an opportunity of representing their views. This pledge has been more than once referred to in our columns, and the medical men of localities concerned have been reminded of its importance, and of the necessity for spontaneous action on their part in order to make known their views, and to obtain from the President of the Local Government Board the fulfilment of this pledge. It will be seen from a report of a meeting of medical men in Brighton, that such a contingency has arisen there, and that the profession are in conflict on this subject with the somewhat changeable resolutions and opinions of a majority of the local authorities as well as with the views of the medical officer of health. We have before adverted to the subject; but we are not aware that any sort of communication regarding it has been made by the medical men of Brighton, or by any persons representing them, to the Local Government Board. Bills have been introduced for Ireland and Scotland, in which such great principles were embodied in clauses generally; and had these Bills been referred to a Select Committee, the whole matter might by this time have been threshed out. What is very objectionable is, that the system of private Bill legislation should be abused by the introduction into measures of this kind provisions going beyond the common law, and imposing duties and disabilities upon particular bodies of men. The evils of this system of private Bill legislation were brought more than once under the notice of the Government by the Parliamentary Bills Committee of the Association, and by other Parliamentary bodies, notably the Vigilance Association, with which for once we find ourselves in accord—a rare satisfaction. Some improvements have been made, but there still remains a great abuse; and it is much to be regretted that more favourable consideration was not given to Mr. Sellar's motion on this subject this year in the House of Commons. The Parliamentary Bills Committee have taken steps to avail themselves of the engagement entered into by Sir Charles Dilke in July 1882, which we especially brought to their notice in an article in February. It is very essential that medical men should, in such cases, avail themselves of the official resource of Parliamentary action thus opened up. Meantime, however, communications have been addressed, on behalf of the Parliamentary Bills Committee, calling the attention of the Board to the subject. But what has been done, we may ask, by the Brighton profession to avail themselves of the concession obtained by the Parliamentary Bills Committee?

SCOTLAND.

ROYAL MATERNITY HOSPITAL, EDINBURGH.

We understand that the managers of the Royal Maternity and Simpson Memorial Hospital, Edinburgh, have determined to increase the staff by the addition of two extra-physicians, and that already there are three candidates in the field, Drs. Berry Hart, Barbour, and Young.

ROYAL INFIRMARY, EDINBURGH.

FOLLOWING out the line of action which they recently adopted, the managers of the Edinburgh Royal Infirmary have appointed another specialist to the staff of the Infirmary. On this occasion, Dr. Wallace Jamieson was appointed Physician for Diseases of the Skin.

UNIVERSITY OF ABERDEEN.

THE preliminary examination for medical students took place last week, and the summer session began on April 28th. All the classes are well attended. It was originally intended that the class of medical jurisprudence should meet this summer. To meet the convenience of a number of students, it will not be held this summer, but will meet in winter, it being understood that this is the last occasion on which this class will meet in winter.

ROYAL HOSPITAL FOR SICK CHILDREN.

THE directors of the Edinburgh Royal Hospital for Sick Children have elected Professor T. Grainger Stewart to be one of the consulting physicians for the hospital; and, at the same meeting, appointed Mr. J. Tause Nisbet, M.B. and C.M., resident physician, in place of Mr. W. J. Smith, M.B. and C.M., whose term of office has expired.

INFECTIOUS DISEASES IN EDINBURGH.

THE infectious diseases at present treated in Edinburgh institutions consist of twelve cases of typhus, treated in the City Hospital; eight cases of typhus, ten of typhoid, twenty-five of scarlatina, and eleven of erysipelas, treated in the Old Royal Infirmary; and seven cases of typhoid, fourteen of scarlatina, and one of diphtheria, treated in the Sick Children's Hospital.

GLASGOW BOARD OF LUNACY.

AT the last meeting of this Board, there was presented the report of the committee which was appointed to prepare a scheme for the erection of the proposed new asylum at Hartwood. Consideration of the report was deferred until the next meeting of the Board, but it recommends that a series of blocks of buildings be erected, capable of accommodating from 800 to 1,000 patients, as also farm-buildings and workshops for the employment of a certain number of the inmates.

SCOTCH FISHERY BOARD SCIENTIFIC INVESTIGATION.

WE recently drew attention to the very interesting series of observations being carried on by the Fishery Board of Scotland on the west coast, as to the spawning and growth of the herring, and the nature of the spawning ground. Considerable success has so far attended the investigations, which is in no small measure due to the care bestowed on them by Professor Cossar Ewart; and we regret to see it reported that, for want of funds, the work has come to a standstill, and cannot be further prosecuted. It is to be hoped that the Treasury will see their way to grant additional funds; for, while we cannot as yet say definitely what practical results may arise from Professor Cossar Ewart's discoveries, already there has been learnt this one fact, that the herring may be deprived of its eggs, and that these may be artificially fecundated by the milt of the male fish. Such knowledge as this could not but prove of great service, were it deemed advisable to re-stock some of the spawning grounds that have of late years become deserted, but which were once remarkable for their abundant supplies of fish.

METEOROLOGICAL CONDITIONS DURING MARCH.

THE meteorological conditions which existed in Scotland during March were of a very favourable character; the mean temperature having been high, the amount of rain good, not too much wind, with fair barometric range and humidity, and the direction of the wind mostly from southward. The details of the observations for March show that the mean barometric pressure was less by 0.026 inch, and its monthly range less by 0.179 inch; the mean temperature greater by 1.3°, and its mean daily range equal to the average; the mean humidity less by 1; the rain in number of days greater by 1, and in depth in inches greater by 0.02 inch; and the wind-pressure less by 0.02 lbs. than the average for the same month during the preceding 27 years. The highest mean temperature, 43.1°, was recorded at Leith; and the lowest, 39.9°, at Perth. The greatest depth of rainfall, 4.17 inches, with 21 days of falling, was at Greenock, and the least, 1.50 inches, with 14 days of falling, was at Leith. The least humidity of the air, 79, was recorded at Greenock; and the greatest, 87, was recorded at Perth.

THE PREVENTION OF INTEMPERANCE.

CONSIDERABLE difference of opinion prevails as to the form of legislative interference that should be undertaken by the State for the prevention of intemperance in our large cities and among the working classes; but we are sure that all will be agreed in approving the action of the directors of the Glasgow Abstainers' Union, who hold the view that much good may be done in this way, by increasing in every possible manner the attractions and comforts of the homes of working men, especially in the cooking and preparation of the household meals. Accordingly, the directors instituted, three years ago, annual exhibitions and competitions in household cookery, in which substantial prizes were offered for the best prepared dishes in ordinary use in the families of working men; and we are glad to see that this year's competition has been very successful, and has brought out a large body of competitors from the very classes it was intended to benefit.

THE GENERAL COUNCIL OF THE UNIVERSITY OF GLASGOW.

THE half-yearly meeting of this Council was held on April 23rd, in the Bute Hall of the University. Reference was, of course, made to the recent death of the Chancellor, the Duke of Buccleuch, and a committee was appointed to prepare a minute recording the regret of the Council, and the loss the University had sustained. It was decided, after a good deal of discussion, to leave in the hands of a committee the consideration of any Bill that might be brought into Parliament dealing with the Scotch universities, the committee being also entrusted with powers to take action in accordance with the previously expressed resolutions of the Council. The chief debate of the meeting was on a motion brought forward by Dr. M'Vail, to the effect that the system of extramural teaching, which exists at present in the medical faculty, should be recognised by the University in the other faculties for graduation in arts and science; but the proposal was negatived by a large majority. At the same time, some very important facts were brought out in the course of the discussion, and there seemed a very general feeling that in some departments the teaching staff of the University required increasing.

BEQUESTS TO MEDICAL CHARITIES IN SCOTLAND.

THE late Mr. George Murray, C.A., has left, subject to a life-rent by his sister, Miss Murray, the following legacies to medical charitable institutions in Edinburgh. Royal Infirmary, £1,000; Sick Children's Hospital, £1,000. The late Mrs. Tasker, widow of the late Rev. William Tasker, has bequeathed to the Royal Infirmary, Edinburgh, £500; to the Perth Infirmary, £500. By the will of the late Mr. David Brown, Glasgow, the following medical charities have benefitted Glasgow Royal Infirmary, £500; Western Infirmary, £500; Sick Children's Hospital, £500; the Eye Infirmary and Maternity Hospital, £100 each; the Lenzie Convalescent Home and Dunoon Seaside Home, £100 each; the Kirkintilloch Home for Incurables and the Colquhoun Bequest for Incurables, also £100 each; and by the will of the late

Miss Hunter of Hunterston, among numerous bequests to other charities, Glasgow Infirmary benefits to the extent of £100.

THE SUMMER SESSION, EDINBURGH.

ON Thursday, the summer session commenced in the University and Extramural Medical School, Edinburgh, in most of the classes. There is nothing particularly noticeable in connection with it. As a new lecturer, Dr. G. A. Gibson commences a course in Materia Medica. Examinations are going on in the Colleges, and on Friday the final examination in the University began with the Clinical Medicine examinations; and on Saturday the Clinical Surgery examinations commence. Over 220 candidates have entered their names for the final. The written and oral divisions of the examination are held in the latter part of June.

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IRELAND.

THE death of Dr. James Ledlie Riggs, of Armagh, at the age of 69, after a short illness, is reported. The deceased held the post of medical officer to Armagh Workhouse for the past thirty-seven years, having been appointed in 1847.

BALLYMENA COTTAGE-HOSPITAL.

AN hospital will shortly be erected on the site recently given by Lord Waveney, as a sum of only £200 is required in order to complete the work. The funds in hand for the purpose amount to £875, of which £375 has been subscribed by members of the committee, and the remainder, it is expected, will be obtainable at no distant date.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE annual election from among the Fellows of the College of examiners to examine candidates for Fellowship and Letters Testimonial, and also for the diploma of Midwifery, as well as of examiners to examine students as to their proficiency in general education, will take place on Tuesday, May 6th.

HEALTH OF IRELAND: MARCH QUARTER.

THE births numbered 29,964, or 24.2 per 1,000, and the deaths 24,149, or 19.5. The birth-rate was 1.7 under the average, and the death-rate 3.2 under the average for the past five years. The deaths from the principal zymotic diseases amounted to 1,860, being 96 under the number for the previous three months, and 333 under the number for the corresponding quarter last year. Measles caused 201 deaths against 142; scarlet fever, 313 against 599; typhus fever, 172 against 182; whooping-cough, 507, or 89 over the number for the December quarter. To diphtheria 83 deaths were ascribed, or an increase of 24; typhoid fever, 174; diarrhœa, 320, or a decrease of 119; and hydrophobia, 3. There were 551 inquests reported during the quarter, a number equal to 1 in every 44 of the total deaths registered.

HOSPITAL SATURDAY FUND.—The complete report of this fund for 1883, just issued, shows the total collection to have been £9,407 16s. 7¼d., of which collecting sheets produced £6,760 19s. 7¾d., an increase of £525 9s. 6¼d. over the preceding year's amount.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—The next quarterly meeting will be held at Bethlem Hospital, St. George's Road, S., on Tuesday, May 6th, at 4 P.M. Papers will be read by Dr. Hayes Newington, on "Unverified Prognosis;" and by Dr. Bonville Fox, on "Exaltation in Chronic Alcoholism." Dr. Mercier will move resolutions in relation to the transference of lunatics of foreign nationality to their own countries.

SCIENTIFIC GENEROSITY.—Mr. Andrew Carnegie, a wealthy ironmaster in the United States, but a native of Scotland, and the author of the well known *American Four-in-Hand in England*, has given 50,000 dollars to the Bellevue Hospital Medical School, to encourage medical discovery, especially in connection with the germ-theory, with a view to the prevention of disease. This is indeed, an instance of enlightened generosity

THE ANNUAL MEETING OF THE GERMAN MEDICAL CONGRESS AT BERLIN.

[FROM OUR SPECIAL CORRESPONDENT.]

BERLIN, APRIL 26TH.

THE third annual meeting of the German Medical Congress, which latter is quite distinct from the much older Association of German Naturalists and Physicians, took place during the first four days of this week, in this city, under the presidency of Professor Von Frerichs. The habitual meeting-place of this congress is Wiesbaden, as being more easily accessible from all parts than Berlin, and also as offering fewer extraneous attractions to members than the capital of the German Empire. On this occasion, however, the time of the meeting coincided with the celebration of the twenty-five years' jubilee of Professor von Frerichs, as teacher of clinical medicine at this university; and it was therefore resolved, as a mark of esteem to one of the most popular and widely known German professors, to change the venue to Berlin. Although a small city, like Wiesbaden, is on the whole better suited for concentrating the work as well as the leisure of the members within a limited area, and therefore to conduce to a more intimate and sustained exchange of opinions amongst them, yet it cannot be denied that greater brilliancy attaches to such assemblies in the metropolis of this empire. The interest which Prince Bismarck (whose health is excellent) took in the proceedings of the Congress, was shown by the presence of his immediate representative, Secretary of State Von Boetticher, at some of the meetings and social gatherings connected with the proceedings.

The Congress was opened on Monday, the 21st instant, in the large hall of the Architects' House, in the Wilhelmstrasse, which was crowded in every part. Amongst those present, we noticed Professors von Frerichs, Leyden, and Westphal (Berlin); Professor Nothnagel (Vienna); Professor Von Ziemssen (Munich); Professor Goltz (Strassburg; Professors Heubner and Flechsig (Leipzig); Professor Thierfelder (Rostock); Professor Fritsch (Breslau); Professor Rosenstein (Leyden); Professor Bäumler (Frisburg); Professor Liebermeister (Tübingen); Professor Von Gerhardt (Würzburg); Drs. Althaus and Hermann Weber (London); and many others.

After a short welcome from Professor von Frerichs, Professor Jürgensen (Tübingen) opened a discussion on Genuine Pneumonia, which he characterised as an acute infectious disease, analogous to typhoid and other specific fevers, and produced by a special parasite, the micrococcus pneumoniæ, which had been first described by Friedlaender, and the development of which was promoted by dry air and easterly winds, and unsanitary dwellings. The inflammation of pulmonary tissue was only one of the localisations of the morbid process, and did not constitute its essence; localisations were also found in various other organs, more especially the spleen and the pericardium; and sometimes the pulmonary inflammation constituted the least important part of the disease. It was an error to suppose that pneumonia was habitually produced by catching cold; and it was a peculiarity of the micrococcus to be most easily developed in persons of certain ages—viz., up to fourteen and after forty-five. Dr. Fraenkel (Berlin) followed with most interesting demonstrations of this micrococcus, which he had taken from patients suffering from pneumonia, and afterwards cultivated in infusions of meat-gelatine. His researches had led to somewhat different results from those obtained by Friedlaender. The latter had characterised the micrococcus (1) by its tendency to surface-growth, or so-called "nail-culture"; (2) by its possessing a peculiar gelatine capsule, which was rendered easily visible by using a solution of gentian-violet in aniline-water; and (3) by its sparing rabbits, but infecting mice and guinea-pigs. Dr. Fraenkel, on the other hand, had failed to notice surface-growth (or "nail-culture") in two sets of micrococci obtained from two several cases of pneumonia, while in a third case "nail-culture" was temporarily observed, but disappeared in the second generation of the parasite. It could not, therefore, be looked upon as a constant quality of the micrococcus. Fraenkel succeeded, with "cultures" of his first case, in inoculating rabbits, which died within twenty-four to forty-eight hours with symptoms of severe systemic infection, double pleurisy and foci of inflammation in the lungs. With two other "cultures," he failed to impress rabbits, so that he was inclined to think that there were varieties of the micrococcus, which possessed different degrees of virulence. Finally, the capsule, which Friedlaender believed to be characteristic of this special micrococcus, might also be found in other forms of bacteria, more particularly in the microbe of the sputum septicæmiæ, which Fraenkel has cultivated in rabbits.

In the subsequent discussion, most speakers contended that, although there undoubtedly was a form of specific parasitic pneumonia, yet the influence of catching cold in the production of inflammation of the lungs could not be denied, and that it was impossible to attribute these latter forms of the disease to the sudden evolution of micrococci.

On Tuesday, Professor Leyden opened a discussion on Poliomyelitis and Neuritis, and gave a very lucid survey of the history of our knowledge on infantile paralysis, progressive muscular atrophy, and acute multiple neuritis. The latter, which was first described by Eisenlohr and Lichtheim, of Berne, had nearly the same symptoms as poliomyelitis, inasmuch as paralysis supervened acutely, either in two or in all four extremities; it differed, however, by the palsy being more pronounced in the more peripheral than in the more central parts, and by there being more pain. This form of neuritis came on after exposure to cold, and in connection with rheumatic fever, diphtheria, typhoid fever, and alcoholism. In the acute stage, salicylate of soda was useful; later on, electricity, massage, gymnastics, and certain mineral springs, proved beneficial. Professor Schultze of Heidelberg followed with a description of the anatomical features of progressive muscular atrophy, referring to the views of Friedreich, who looked upon that disease as a primary myositis and neuritis, without actual changes in the anterior grey matter of the spinal cord. This latter circumstance the speaker explained by the imperfect methods of examination prevalent at the time, as he had subsequently examined Friedreich's preparations, and discovered disintegration of the large ganglionic cells of the anterior cornua. Dr. Althaus of London then drew attention to two different forms of infantile paralysis, one of which came on with severe constitutional disturbance, great elevation of temperature, and convulsive seizures, after which paralysis of one or several extremities was discovered, this being true acute poliomyelitis, while in another form the clinical features were simply those of an acutely supervening palsy, and were based on a different pathological process. In all cases of acute atrophic spinal paralysis of adults which he had observed, without exception, exposure to severe cold, combined with excessive physical exertion, had been the cause; and in many cases of poliomyelitis in children he had seen the same. As pathological processes differed, so the electrical reactions were different, and it was a mistake to suppose that we should in all such cases find the phenomena described by Erb as appertaining to degeneration of muscular tissue. Concerning the diagnosis between poliomyelitis and acute neuritis, he laid stress on the circumstance that in the former the symptoms were exceedingly sudden and tumultuous, while in the latter they were protracted over weeks. In the treatment of the acute form of these diseases, he had seen the greatest benefit arising from the application of large blisters.

On Wednesday, the 23rd, Professor Leube of Erlangen opened a discussion on Nervous Dyspepsia, where severe symptoms of indigestion, accompanied with great mental depression, are observed without the mucous membrane of the stomach being in any way affected. The cause of the disturbance was to be sought more in the quantity than in the quality of the food taken, in undue excitability of the nervous centres and the peripheral nerves, in hysteria, a general nervous state, and more especially in the abuse of tobacco. In a hundred cases, there were seventy-nine males and only twenty-one females. The prognosis was rather unfavourable, as very few patients entirely recovered. An accurate diagnosis could only be made with the aid of the stomach-pump. Where, seven hours after the last meal, undigested particles of food were discovered in the contents of the stomach, gastric catarrh or other morbid changes were present; but where the stomach proved to be quite empty, and yet severe symptoms of dyspepsia existed, the latter was of a nervous character. Professor Ewald (Berlin) said that, apart from gastric digestion, intestinal digestion was likewise impaired in such cases. He believed the affection to be due to changes in the pneumogastric and sympathetic system of nerves, and thought that it should be called neurasthenia dyspeptica. The inherited neurotic constitution, anxiety, excessive mental work, were frequently the cause; and remedies acting on the nervous system, such as bromide of potassium, change of air and scene, sea-baths, rational hydrotherapeutics, rest, etc., were more successful than a very strict regulation of diet, and medicines influencing the stomach and liver.

In the afternoon of the same day, Professor Goltz (Strassburg) gave to a crowded audience, amongst whom was the Minister for Public Instruction, an interesting survey of his most recent researches on Experimental Cerebral Physiology, and introduced to the meeting a dog in whom the anterior lobes of the brain had been removed. This dog was neither paralysed nor anæsthetic, but was clumsy in its movements, awkward in endeavouring to seize food which was presented to it, and showed exaggeration of certain reflexes. At the same time, the character of the animal was changed; it had become ferocious, fond of biting, and resented the least interference. Avarice, that most powerful of canine passions, was marked. On the contrary, removal of the occipital lobes in dogs improves their temper. They become tame and pleasant, when, before the operation, they had shown a very different character. Such dogs became slow in their movements, and pensive; their sensorial impressions were feeble, but they did not become blind. Dr. Günther (Berlin) then gave a summary of 59 cases of cortical lesions in which *post mortem* examinations had been made, the results of which coincided with those obtained by Charcot, showing the central convolutions surrounding the fissure of Rolando to be motor, and the other portions of the cortex to be non-motor.

On Thursday, the 26th, Professor Goltz demonstrated the brain of the dog which had been introduced to the meeting the day before. Professor Rossbach (Jena) then gave an account of the plan he had, at the instigation of last year's congress, elaborated for instituting a Committee for the Treatment of Infectious Diseases. This Committee was to consist of all the German professors of medicine, chief physicians to large hospitals, and pharmacologists, and was to elect from amongst themselves a directing Committee of Council. The latter should institute local committees and stations in all parts of Germany where there were hospitals; and in these the remedies suggested by the Committee of Council should be systematically used, and their effects noted, in such diseases as typhoid fever, phthisis, pneumonia, erysipelas, dysentery, measles, scarlet fever, diphtheria, small-pox, infantile cholera, whooping-cough; while in the surgical and gynæcological wards the septic and puerperal diseases should be similarly treated. Every station should annually receive instructions from the Committee of Council concerning the treatment of certain infectious diseases by certain remedies during the ensuing year. Cards like those suggested by the Collective Investigation Committee should be filled up with the results of the clinical and therapeutical observations at all stations, and sent in to the Committee of Council for registration. Infectious diseases had, from time immemorial, destroyed immense numbers of people, without having been combatted by collective efforts; and it was now, for the first time, proposed to make a common front against this greatest enemy of mankind. The proposal of Professor Rossbach was accepted.

A considerable number of interesting papers were read, in addition to the more general proceedings which have been mentioned; but space forbids us to give them more than a passing notice. Amongst the latter, there was one by Riegel (Giessen) on the physiological and therapeutical effects of caffeine on the heart's action and in heart-diseases. Caffeine was said to possess all the best effects of digitalis, without any of its drawbacks. It was easily taken by the feeblest persons, and had no cumulative action. Dr. Löffler (Berlin) related experiments on the micrococcus and bacillus of diphtheria, which have, however ingenious, as yet not led to any positive results by inoculation in animals. Dr. Zulzer (Berlin) then gave an account of the specific gravity of the human body, as investigated by him in different persons; the maximum being 980, and the minimum 924, when the density of water was taken as 1,000. Dr. Hermann Weber (London) spoke on school-hygiene in England, and directed attention to the great advantages of limited hours of mental work, and of regular time devoted to more or less compulsory active games and bodily exercises in the public schools, which had an influence not only on the physical health, but also on the development of character. In girls' schools, on the other hand, sufficient time was not given to judicious physical exercise. He gave a sketch of the provisions of the Public Health Act of 1875, and the code of regulations of the Educational Department of 1884; and advocated strongly the appointment of medical inspectors of schools, who would, in conjunction with the managers, attend to a judicious combination of school-work and physical exercise, and likewise check the spreading of epidemic disease.

Great facilities were afforded to the members of the congress with regard to visiting the most important scientific institutions and hospitals of the capital and its neighbourhood. Professor Leyden gave a magnificent entertainment to about two hundred members on Monday evening; Professor von Frerichs another similar one on Tuesday night; while on Wednesday the "congress-dinner" was held at the Hotel Kaiserhof, and was attended by several Secretaries and Under-Secretaries of State and other eminent persons, whose oratorical powers were put into requisition at a much earlier period of the banquet than is customary in England. On Thursday, Professor Westphal gave a neurological dinner to a more limited circle; and on Friday the visitors dispersed in all directions, to meet again next year at Wiesbaden.

LORD LEIGH has been reappointed President of the Birmingham and Midland Counties Ear and Throat Hospital for the ensuing year.

THE GERMAN SURGICAL CONGRESS.

The thirteenth Congress of the German Surgical Society was held in Berlin on April 16th, 17th, 18th, and 19th.

At the first meeting, which was held in the University Hall on April 16th, Baron von Langenbeck was again chosen President. The first paper read was one by Dr. Nielsen of Rostock, on the question "How can the clinical conceptions of sepsis, septicæmia, and pyæmia be adapted to recent pathological researches?" The next was a paper by Professor König of Göttingen, who discussed the question whether resection of joints for tuberculous arthritis was in danger of being followed by general tuberculosis. Dr. Cramer of Wiesbaden spoke on a case of ferment-poisoning caused by a blood-cyst; and Professor Küster of Berlin related the result of his experience in the use of deep catgut sutures in plastic operations. Dr. J. Wolf of Berlin spoke of the law of transformation of the internal structure of bones in cases of pathological change of their external form, and on the importance thereof in regard to fractures, rickets, etc.; illustrating his remarks by some interesting preparations.

On the 17th, a number of interesting demonstrations were given in Professor von Bergmann's operation-theatre by Drs. Bidder of Berlin, Wagner of Konigshütte, Küster and Grawitz of Berlin, Credè, junior, of Dresden, and von Hacker of Vienna. Afterwards, the members assembled in the University Hall, where papers were read by Dr. Zabludowsky of Berlin, on the physiological action of "massage;" by Dr. von Lesser of Leipsic, on the first dressing in the battle-field; and by Professor Schüller of Berlin, on the discovery of bacteria in so-called metastatic inflammation of joints.

The proceedings on April 18th commenced with a series of demonstrations in the University clinic; namely, by Dr. P. Albrecht of Brussels, on the morphological signification of clefts of the jaws, lips, and face; by Dr. von Neuber of Kiel, on a new method of resection of the hip and knee joints; by Dr. J. Wolf of Berlin, on a new and successful plan of treating club-foot without operation, by the method of application of strips of adhesive plaster; and by Dr. Sonnenberg of Berlin, who showed a case of defective formation of the urinary bladder. At the subsequent meeting in the University Hall, it was decided to nominate twelve honorary members. Papers were read by Dr. Baumgärtner of Baden-Baden on cachexia strumipriva; by Dr. Bruns of Tübingen on corrosive sublimate and wood-fibre as a dressing; and by Dr. Mikulicz of Cracow on modifications of the antiseptic treatment of wounds.

The last day was principally devoted to demonstrations, and all the meetings took place in the hospital. In the morning, the members were conducted through the clinical wards by Professor von Bergmann; and afterwards visited the Augusta Hospital, under the guidance of Dr. Küster, and the Friedrichsheim Infirmary under that of Dr. Hahn. A demonstration by Dr. Volkmann, of Halle, of a boy whose knee had been excised, was followed by an adjourned discussion on Dr. Wolf's treatment of club-foot. Dr. Leisrink of Hamburg described the use of turf-moss as a dressing for wounds; and Dr. Partsch of Breslau spoke of the results of Ogston's operation for genu valgum. Patients in whom partial excision of the larynx had been performed on account of cancer of the air-passages were shown by Drs. Hahn and Küster of Berlin, and Schede of Hamburg. Among other interesting communications, was one of Dr. Bergmann on a case of cure of aneurysm of the subclavian artery by methodical pressure; after which, Drs. Volkmann and von Langenbeck described their experiments on the treatment of wounds of large arteries. This was followed by papers by Dr. Madelung of Rostock on the operative treatment of varix, on a modification of colotomy, and on rhinoplasty; by Drs. Czerny of Heidelberg, Israel of Berlin, and Rydygier of Culm, on resection of the stomach; by Dr. von Winiwarter of Liège on a case of defect in the roof of the skull; and by Dr. Schede of Hamburg on a new apparatus for the treatment of ankylosis of the knee-joint. The proceedings concluded with an address from the president, during the delivery of which the members all stood, as a mark of respect for his unwearied energy in the affairs of the Society.

Dwellings of the Poor.—The various local committees formed by the Mansion House Council on the Dwellings of the Poor are now actively at work, and at the last meeting of the Central Committee upwards of 250 new cases were reported as having been dealt with during the past fortnight. Cardinal Manning has become a vice-president, and at the invitation of the Council of the International Health Exhibition three conferences for the discussion of practical measures in connection with the housing of the poor are being arranged for July next. Additional help is required to enable the work of the Council to be vigorously, effectively, and promptly carried on.

THE TERCENTENARY OF EDINBURGH UNIVERSITY.

At the students' reception of the University guests, which was, perhaps, the crowning event of the festival-week, the following speeches were delivered, which, from want of space, were omitted from our report of that reception, at page 830 of the last number of the Journal.

Professor Virchow, of Berlin, who met with an enthusiastic reception, said—I should have wished to speak to you in your own language, but as I only received the invitation to this meeting on arriving in London, it was impossible for me to prepare a good address; therefore, I beg to be excused if I make a modest German speech. Dr. Virchow then proceeded with his speech in German, of which the following is a translation.—In considering what to say that might be of interest to a group of students, I remembered that I would be speaking in this hall, not only to Scotland, but to England, Ireland, the Colonies, and the whole English-speaking world. I knew that great subjects were discussed in your university, in the wide range of which the teachings of this school were largely in accordance with my own. Among the matters which have a common interest for us, I am in such cordial sympathy with you that there is only one topic on which there may seem to have been some disturbance in the happy relation which subsists between us. On that matter, therefore, you will allow me now to speak to you. I refer to the position which I am supposed to have taken up towards the teachings of Darwin. The opinions which I have expressed have, in some English publications, been much misunderstood. I never was hostile to Darwin, and never have said that Darwinism was a scientific impossibility. But at that time, when I pronounced my opinion on Darwinism at the Association of German Naturalists, at Munich, I was convinced, and still am, that the development which it had taken in Germany was extreme and arbitrary. Allow me to state to you the reasons on which I founded my opinion. First, Darwinism was interpreted in Germany as including the question of the first origin in life, not merely its manner of propagation. Whoever investigates the subject of development comes upon the question of the creation of life. This was not a new question. It is the old *generatio equivoca*, or *epigenesis*. Does life arise from a peculiar arrangement of inorganic atoms under certain conditions? We can imagine oxygen, hydrogen, carbon, and nitrogen coming together to form albumen, and that out of the albumen there was produced a living cell. All this is possible; but the highest possibility is only a speculation, and cannot be admitted as the basis of a doctrine. In science it is not hypotheses that decide, but facts; we arrive at truth only by investigation and experiment. I need not say that this demand of science for proof, instead of speculation, was long ago made in England. Ever since the time of Bacon it has had a home amongst you. We may concede that *generatio equivoca* is a logical possibility. But it is important for you students always to bear in mind the great distinctions between the construction of logical possibilities, and their application in practical life. If you try to shape your conduct simply according to logical possibilities, you will often find yourself coming into violent conflict with the stern facts of existence. Let me give you an illustration. In recent times the fact of the presence of minute organisms giving rise to important processes has been recognised, not only in medicine, but in connection with agriculture, and various industries. It was of the utmost importance to determine whether these organisms were originated *de novo* in the decomposing bodies, or were produced by similar pre-existing organisms, and introduced from without. A century ago it was possible to admit the spontaneous generation of micro-organisms. But here sits M. Pasteur, the man who has demonstrated, by means of direct experiment, that, in spite of all logical possibility, all known micro-organisms found in decaying matter are derived from similar ancestors. No man would now be justified in practical life in acting on the possibility of a *generatio equivoca* of micro-organisms. A physician who finds himself in presence of infectious disease among his patients, or an agriculturist whose crops are blighted, or a man engaged in the production of alcohol or sugar by fermentation, must set himself to discover what brings about the changes with which he has to deal; he must see that organisms are there which have been imported from without, and must then inquire whence they have been derived. The physician who has to combat an epidemic dare not act as if the germ were spontaneously produced in any patient. Such is the difference between logical possibilities and the practical work of daily life. Every teacher of science must lead his students to suppose that each living being that he meets must have had a father and mother, or, at least, one or other of them; and every scientific conclusion maintains that one generation is legitimately descended from another precisely similar. That was one consideration that led me to warn my fellow-countrymen against developing a system out of logical possibilities. At the very time when we were getting free from the chains of former dogma, we seemed to be in danger of forging new ones for ourselves. The second question concerning Darwinism had regard to the descent of man, whether from apes, or other vertebrate animals. Was there anywhere a pro-anthropos? In regard to this question, I thought that the existence of such a precursor of man was a logical possibility, perhaps a probability. Only I found, to begin with, that it was a purely speculative question; not one raised by any observed phenomenon. No pro-anthropos had ever been discovered; not even a fragment of him. I had myself long been specially occupied in making prehistoric investigation to get near the primitive man. When I began these studies, twenty years ago, there was a general disposition to arrive at this discovery. Everybody who found a skull in a cave, or a bone in the fissure of a rock, thought he had got a bit of him. I wish you specially to notice that the smaller the fragment or skull, the easier it was to make out to be the skull of the pro-anthropos. It was never thought of where an entire skull was in hand. When the upper part of the cranium alone—the calvarium without the face and the base, as in the case of the Neanderthal skull—was discovered, it was easy, by changing its horizontal position, by elevating either the anterior or posterior part, to give the impression that it had belonged either to a being of a superior or of an inferior race. You can make the experiment with any calvaria. If you make a series of diagrams of skulls, placing them over each other, you may make them appear similar or dissimilar, according as you choose one or another fixed point for bringing them into relation. I should like to impress upon you that every discovery of that kind should be received with caution and scrutiny. In my judgment, no skull hitherto discovered can be regarded as that of a predecessor of man. In the course of the last fifteen years, we have had opportunity to examine skulls of all the various races of mankind—even of the most savage tribes—and among them all no group has been observed differing in its essential characters from the general human type. Hence I must say that an anthropological teacher has not occasion to speak of a pro-anthropos except as a matter of speculation. But speculation in general is unprofitable. As Goethe says:

> "Ein Kerl der speculirt
> Ist wie ein Thier auf oeder Heide,
> Vom boesen Geist umhergeführt."

["A speculating fellow is like a beast on a barren heath led about by the Evil Spirit."]

The day before I gave the address in Munich to which I have referred, Haeckel had gone so far as to propose to introduce into our schools a new system of religious instruction, based upon the doctrine of the *Descent of Man;* and I still think it necessary to guard against the danger of constructing systems of doctrine out of possibilities, and making these the basis of general education. Lastly, I have to refer to the geological aspect of the question. This is the most important aspect of it as treated by Darwin himself; and here we must recognise that the most important advance has been made in consequence of his ideas in our understanding of the progressive development of organs in the different classes of animals. From the earliest period, the organisation of man has been regarded, and can only be regarded, as an animal organisation; and, therefore, from a zoological point of view, the body of a man must be regarded as belonging to the animal kingdom. That I do not wish to deny. This day ten years ago, Liebig died. I recall his memory at this moment to repeat one of his memorable sayings, "Natural science is modest." He meant that science should be confined within the limits of observation. Every man who goes beyond that sphere becomes a transcendentalist, and transcendentalism has always been dangerous to science.

Professor HELMHOLTZ, of Berlin, who was cordially greeted, and who received a loud cheer on beginning to speak in English, said: I shall be very short, and because I have the intention to be very short, I shall speak in English. I would not venture to make before you a long English speech, because my English is not quite of a refined type. Now, I am an old man, and I have had a love all my life for science, and I have had a good deal of experience how science develops, and how scientific people develop. Therefore I think that the best I can give you in the short time at my disposal is, that I should indicate to you some of my experiences and information relating to this point. What I have to say is not new in principle. It is very old. It was Socrates who first said that the principal thing that a wise man had to do was to know what he knew and what he did not know. This is true at this moment. When I was young, I wished to study physical science, but at that time physical science did not give a livelihood as it does now. Our young physicists can find employment in our universities. The study of natural philosophy in all its branches is everywhere kept up by numerous students, who can find employment in the telegraph-offices. At that time, these did not exist. My father was not a rich man. He told me that, if I was to study physics, there were only two ways, either to become a teacher of mathematics in one of our higher schools, or to study medicine. I preferred medicine. It was not my inclination, but I went. Now, at that time medicine was rather old. It was an old science, derived from Hippocrates; and much of that which had been established by Hippocrates in his writings, facts as well as theories, had gone on to that time, now about fifty years ago. Medicine at that time was full of what I might call false rationalism; that is to say, the people believed that, if they could get any kind of theory which seemed to explain the facts, that kind of theoretical knowledge was something better than a poor knowledge of facts, and that we are mostly inclined to derive consequences from their theories even against the facts. Now, I must say it was not of my own will that I entered on the study of medicine; but it has greatly helped me in my future proceedings. I saw what was needed, that there was a difference between practical men and theoretical scientists; because, you see, a theoretical scientist, when he cannot solve a problem, lets it alone. Very soon he is completely quiescent about it. "This is a point, he says, which cannot be answered at present." But an engineer or a medical man is in another position. Now, I was a medical man, and it came to be hard upon me to stay at the deathbed of one of my patients, and ask myself if all was right, if everybody had done what was his due. And I could not always answer that all was right. Of course, no single medical man can be held answerable for what the whole assemblage of medical men have not yet found out. A single individual has neither the force nor the time to do it all by himself; but a single individual ought to do his part in this way. And I found that I could not answer myself these questions in the manner I would have liked to have answered them; and therefore I thought that the first duty was to go and study the theory of life, and the processes going on in the living body. I became a physiologist. At that time, there were many young medical men in the same position, and we began to doubt and to speak out our doubts, and to see how we could attain to better knowledge; and in this we were not alone in Germany; the same thing occurred through all Europe, and medicine has developed in the most remarkable way. During I may say the last fifty years, it has made more real progress than perhaps during the 2,000 years before that. And the cause has been that medical men began to look to the facts, actually and humbly acquiescing in the facts, and learning to criticise all theories in the severest way, to study nothing but the facts, and to seek truth only on this foundation of facts. I am one who has lived through this great development. I was rather impartial, because I ceased to be a medical practitioner. I saw it like a spectator, as I myself was not a party. Therefore, it was more striking to myself. I had still so much of medical and physiological knowledge as I wanted to have for judging of the facts; but I fear that the young medical men who now enter the study of medicine have no idea of the state in which it was at that time. But it is not medicine alone in which this kind of false rationalism has done much harm. I see the same thing in many of our political theories and in other sciences, and what I wish to say to you is, to warn you to avoid this kind of false rationalism, and to be true to the facts.

M. PASTEUR, who spoke in French, said: You have asked me to come among you, and to address to you some words. Your invitation has rendered me very proud. I have translated the expression of your desire as implying that I have been able to contribute to the progress of science. You have, moreover, overwhelmed me with joy, because I have always loved youth. As far back as I can recollect, I do not believe that I have ever approached a student without saying to him: "Work and persevere." Work amuses, and it alone profits the man, the citizen, and the native land. I have yet a stronger reason for holding to you this language. The common soul, if I may so speak, of an assembly of young men is formed entirely of the most generous sentiments, because it is still nearer to the divine spark which animates every man on his entry into the world. The proof of this affirmation you have just given me. In coming, you applauded [illegible] men who bear the name of de Lesseps, Helmholtz, and Virchow. I felt moved even to the bottom of my soul. Your language has borrowed from ours that fine word enthusiasm—the Greeks had bequeathed it to us, [illegible] a God within. It is under the [illegible] of a sentiment almost divine that just now you have greeted these great men. One of our writers, who has best made known in France [illegible] the philosophy of Kant and of Dugald Stewart, [illegible] truth in [illegible] "Whatever [illegible] your career, [illegible] and [illegible] the worship of great men and of great things [illegible] You have the [illegible] ample of such under your eyes. Shall not this Centenary remain as one of the most glorious recollections of Scotland? Great men! In what country, in truth, is their memory more honoured than in your native land? But if work ought to be the foundation of your life, if the worship of great men and all great things ought to associate itself with all your thoughts, that still does not suffice. Strive to carry into all you undertake the spirit of scientific method founded upon the immortal works of the Galileos, the Descartes, and the Newtons. You, above all, students in medicine of the celebrated University of Edinburgh, who, taught by eminent masters, have a right to cherish the highest scientific ambitions, inspire yourselves with the experimental method. It is to those principles that Scotland owes the Brewsters, the Thomsons, and the Listers.

A WORKHOUSE INFIRMARY WITH CIRCULAR WARDS.

THE circular system of hospital-wards seems to be rapidly gaining favour in this country. It is not yet six years since Professor John Marshall, F.R.S., originated the idea in a paper read before the National Association for the Promotion of Social Science. We say originated the idea; for, although the plans for the Antwerp Hospital were then already in hand, the scheme was, we believe, quite unknown in this country. In this short time, three hospitals with circular wards have been taken in hand in this country. The Miller Memorial Hospital at Greenwich was the first; next came the new hospital at Burnley, referred to in the BRITISH MEDICAL JOURNAL, February 16th, p. 335; and now we have to record that the guardians of the parish of St. John, Hampstead, finding it necessary to enlarge the workhouse infirmary, have determined to erect a circular pavilion of three stories, to hold seventy-two beds. The plans have been drawn by Mr. Charles Bell; and the estimated total cost, which, including corridors, kitchen-block, warming, and ventilating, is £10,400, will compare favourably with the cost of some recent new metropolitan infirmaries.

The internal diameter of each ward will be 50 feet, and the internal circumference, therefore, 50 × 3.146, or 157.3 feet. From this we may deduct 7.3 feet for the two doorways, and this will leave 150 feet as the available wall-space. As there are to be twenty-four beds in each ward, this is equivalent to an allowance of 6 feet 3 inches to each bed. In the next place, with regard to the area: the area of a circle 50 feet in diameter is equal to 50 × 50 × .7854 = 1963.5 square feet. In the centre of the ward, however, is a shaft necessary for the construction of the building, but serving also as a means of ventilation. The diameter of this central shaft is about 8 feet; and the area occupied by it, 8 × 8 × .7854, or as nearly as possible 50.25 feet, must be deducted from the total area. The available area of the ward is, therefore, 1963.5 – 50.25, or 1913.25 square feet; this is equal to an area of 79.71 square feet to each bed. If the ward be taken to be 12 feet high (the specified height of two of the wards), then the cubic space for each patient will be 956.52 cubic feet.

We may compare this circular ward with an oblong ward in which the same allowance of wall-space is made to each bed. There would be twelve beds on each side, and the length of the ward would be 12 × 6.25 = 75 feet. The ordinary width of such a ward may be taken to be 24 feet; and the area of the ward would, therefore, be 75 × 24 = 1800 square feet; and the floor-space for each bed would be 75 feet, and the cubic space would be 75 × 12 = 900 cubic feet. From this it seems that the circular ward provides a larger area and a greater cubic space to each bed than the oblong.

This particular building at Hampstead brings out very well one of the chief advantages of the circular system of wards; that is to say, its peculiar suitability when the area available is limited. It is the most compact system upon which a hospital can advantageously be built. In this instance the area was limited, of an awkward shape, and still more awkward levels. If any one will take the plan of the Hampstead Workhouse Infirmary Extension, and plot out an oblong ward having the same area as the circular one there drawn, he will be able to see how far more clumsy the oblong ward is, how much more it interferes with the passage of air and light to other parts of the building, and how very much less space is practically left to be utilised as a garden, or for other spaces.

It was, we understand, considerations of this kind which led to the adoption of the circular plan in this instance. It can hardly be questioned but that the ventilation of this ward will be more efficient than that of a long ward of similar dimensions, or of any other form of ward having the same cubic contents. The central shaft will have an internal diameter of five feet, and will be divided by sheet iron into four divisions, one for the extraction of vitiated air from each of the three wards, and the fourth (one half of the whole area of the shaft) forms an upcast to discharge the whole to the outer air. The air from the wards will be exhausted by a furnace, with coil of hot-water pipes, through openings in the shaft to the bottom of it, and the air thence dispersed by the upcast. The fresh air is to be supplied from gratings under the sills of the ward-windows, and passed over a coil of pipes placed in each of the window-backs, the heated air being liberated up the sill-level through a grating. It is believed that, by this system, a constant stream of pure air will be supplied at the rate of 2,200 feet per hour per patient. This central shaft diminishes the area of the ward, and by so much is a disadvantage; but this will probably be more than compensated for by more equable ventilation. With a central extraction in a circular ward, there can be no stagnation of air in any part. Indeed, the advantages of central extraction are so manifest, that in some oblong wards the fireplaces and extraction-flues are placed in the centre of the ward, midway in the length and breadth. In an oblong ward, such an erection in the middle of the ward has an ungainly and obstructive appearance; but, in a circular ward, we imagine it would be in harmony with the general architectural features.

In comparing the oblong and circular ward of equal areas, it is always necessary to remember that central extraction presents also a decided advantage over other methods, both for warming and lighting. The circular ward may be unduly depreciated if compared with an oblong ward, where floor-space is the only element considered. We have to consider not only area and wall-space (it has been shown that, with equal wall-space, the circular affords the greatest area, while it necessarily follows that, with equal areas, the oblong affords the greatest wall-space), but also the freedom of frontage, and of access of light and air, and the facility with which a ward may be ventilated and warmed.

In one respect the plan before us is open to unfavourable criticism. The circular ward is connected with the main building not by a cross-ventilated and isolated corridor for each story, but by a square building of considerable size, containing small wards for two beds each on each floor at the entrance to the large ward, with water-closets, nurses' store and dust-shoot adjoining, and on the opposite side of the passage a ward-scullery and staircase. The advantages of complete isolation of each story have thus been sacrificed, without, as it would appear, any sufficient reason; this is the more strange, as the water-closets and lavatories for the circular ward will all be contained in a projecting block from the ward, with disconnecting passage, having a through ventilation. Each floor has a bath-room, water-closet, urinal, and broom-closet. From the short passage, access will be had from each ward to a wide balcony, forming a pleasant promenade for patients on the south side.

The works are in active progress, and it is hoped that the new building may be ready before the end of this year.

THE SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.

THIS Society was inaugurated with an elaborate luncheon, given in the rooms of the Medical Society of London on Friday, April 25th. The President, Dr. NORMAN KERR, occupied the chair, and there were present about 160 ladies and gentlemen, of whom more than half were medical men. Apologies for non-attendance were received from the Archbishop of Canterbury, Cardinal Manning, Lord Wolseley, Mr. S. Morley, M.P., the American Minister, and several other gentlemen. Amongst those who attended were: Lord Shaftesbury, Lord and Lady Claude Hamilton, Sir Lyon Playfair, M.P., Sir Spencer Wells, Bart., Sir Edwin Saunders, Dr. Cameron, M.P., Dr. Farquharson, M.P., Dr. Dudfield, Dr. C. J. Hare, Dr. W. B. Carpenter, the Rev. Canon Boyd Carpenter, the Rev. Canon Ellison, and Dr. Alfred Carpenter.

After luncheon, at which various non-fermented wines and other non-alcoholic beverages were supplied, a series of toasts were given. After the usual loyal toasts, Sir SPENCER WELLS proposed "The Houses of Parliament."

The Earl of SHAFTESBURY, with whose name the House of Lords had been coupled, said the House of Lords would be ready, when called upon to do so, to give those larger powers for the treatment of habitual drunkards which were so greatly needed. The movement for the cure of the intemperate had not yet sunk much into the hearts of the people. But people would come to see that this was a great remedial movement, and went much further than the mere cure of inebriety. He (the noble earl) had had some experience with inebriates. Only the other day he had had a conversation with some women, and he asked them if they found any great difficulty in giving up indulgence in strong drink. They said they found little or no difficulty. On the other hand, he was afraid that a relapse led to very serious consequences. As one who had been on the Commission for Lunacy for fifty years, he hoped and believed that this society would be led to study this question in its widest aspect. Let them get into the scientific causes of inebriety, and then some successful efforts might be made to stop it at its beginning. He thought that when full inquiry was made it would be found that the horrible localities in which people lived, the pestilential air which many of them breathed, and all the accursed circumstances of filth and misery which surrounded them, drove them often into courses which led to insanity. The Commission to improve the dwellings of the people and the sanitation of their surroundings would go hand in hand with this great movement, until he hoped that inebriety, instead of being a prevalent crime, would be the exception in this happy land.

Sir Lyon Playfair, M.P., in responding for the House of Commons, said he had the gratification of serving on the Dalrymple Committee, which led to the Habitual Drunkards Act as it now existed. That committee overcame a great deal of hostility with regard to houses for the cure of inebriates, and produced a profound impression in the country as to the danger which arose from the neglect of the drunkard and the disbelief in the possibility of his cure. He was glad to welcome into existence the present society, the labours of which would tend to bring about a much needed improvement in the Act now on the statute-book.

Dr. Farquharson, M.P., proposed "The Health of the Clergy of all Denominations."

The Rev. Canon Barker, M.A., in responding, expressed a hope that the day would come when all the clergy would be teetotallers.

The Rev. Donald Fraser also responded, and said "the clergy of all denominations" recognised fully that the drink-evil was impeding their work in all directions. The whole subject suggested most disastrous conditions of human life, and some of the most terrible calamities in families with which he had ever had to deal. He could not think or speak of it without a sense of pain; but there was an element of satisfaction in this—that they were forming a society "for the study and cure of inebriety." He understood that the object—a most practical one—was to study the beginning of the disease as well as its cure; and, that being so, he would give it all the support he could.

Dr. Danford Thomas proposed "Success to the Dalrymple Home." The home was opened in October last, and had ever since been filled with patients of the upper classes. Such homes were an absolute necessity.

Dr. Cameron, in responding, said that he had no doubt that before long they would be able to publish for the home such successful results that Parliament would strengthen the legislation now existing.

The President proposed the toast of "The Society for the Study and Cure of Inebriety." He said that great interest had been taken in its formation by all classes of persons. Dr. Eastwood, Mr. Howse, Dr. T. Trevor, and Mr. L. Browne had all promised to read papers. Though the Society had not been established two months, there were already sixty-seven medical members, embracing gentlemen from the most distant parts of the kingdom. The Society by no means depreciated the efforts of moral and religious reformers in coping with this evil; but the members felt that, in order to assist their efforts, it was necessary to know the physical causes; and, once knowing the physical causes, they would be in a better position to grapple with the evil. The Society was the friend of every temperance movement, and the enemy of none.

Dr. Alfred Carpenter proposed a toast with reference to the work that had been performed in America for the benefit of inebriety. The literature upon the subject which had been published in the United States was far more than that which was published here. There was something else to be done besides the cure of inebriety, and that was its prevention. The outcome of that feeling was the present society.

The Rev. G. K. Vibbert, of Boston, U.S.A., in responding, spoke at some length of the satisfactory results which had attended the treatment of inebriates in the United States, and said that such work really meant "new homes for drunkards."

Dr. Drysdale proposed "Literature, Art, and Science."

Dr. W. B. Carpenter, who responded, said that all his life he had given close attention to this subject, and had studied it as a matter of science. He thought that this habit of excessive drinking, particularly in the upper class, must be regarded as inducing a physical condition properly called "disease." He recognised, as Lord Shaftesbury had said, all the bad effects of impure air and unwholesome homes, but in the higher class those conditions were wanting. Hence he recognised a state of constitution in individuals, in many instances the result of heredity, producing a physical craving for alcohol which must be regarded as disease. When they came to heredity, they must recognise transmission by material means; the germ must have been inherited in some physical way. There were cases in which, to drown care or sorrow, persons had taken to drink, and then the habit had fastened upon them. He was satisfied that the disease could only be cured by healthy physical and moral influences, as well as by lengthened abstinence—abstinence long enough to recreate, as it were, the nervous system. For this, from nine to eighteen months of abstinence, according to age, would be required.

Dr. Stanley Haines, of Malvern, proposed "The Medical Societies."

Dr. C. J. Hare responded, and said that many years ago he was thought very unorthodox when he expressed the opinion that a time would come when alcohol would not be used in typhoid fever. At that time his colleagues were using it right and left, but he had lived to see the verification of his own prediction. He was quite sure that the change had been for the benefit of the patients. No one could look at current medical thought or literature without being aware of the great change that had come over the profession in regard to the administration of alcohol, and in that change he rejoiced. The Medical Society of London was a hundred and ten years of age, and the oldest body of the kind. As such it had great pleasure in opening its doors to the newest of its successors.

Dr. C. R. Francis proposed "The Temperance Organisations."

The Rev. Canon Ellison, Chairman of the Church of England Temperance Society, in responding, dwelt upon the importance of preventive as well as rescue work. Many causes led to drink, and when these were known and analysed the information would be of immense service to the temperance cause.

Surgeon-Major Poole proposed "The Visitors," which was responded to by Lord Claude Hamilton, who concluded by submitting "The Health of the Chairman," whose services to the cause of temperance he extolled, amidst the sympathetic applause of the meeting. —The President responded briefly, and the luncheon-party then broke up.

A little later, to a large audience, Dr. Norman Kerr, in his capacity of President of the Society for the Study and Cure of Inebriety, read his inaugural address, of which a short notice appeared in the British Medical Journal of last week. The lecture has been published as a pamphlet by Mr. Lewis, 136, Gower Street. At the close of his address, Dr. Kerr received the warmest thanks of the meeting in a motion moved by Dr. Hart Vinen, and seconded by Dr. C. J. Hare.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

A meeting of Members of the Royal College of Surgeons was held on Wednesday, April 30th, at the temporary offices, 3, New Inn, W.C., when the following resolutions were passed:

1. That we form ourselves into a body, to be called "The Association of Members of the Royal College of Surgeons," for the express purpose of obtaining certain rights and privileges in reference to the management of the College of Surgeons, which we do not at present possess.

2. That the above resolution be communicated to members residing in the chief towns of England and Wales, who shall be requested to act as local secretaries, and to enrol the names of members residing in their respective towns; and, further, that the local secretaries be asked to forward suggestions to be considered at the next meeting of the committee, on Wednesday, May 14th.

3. That a report of this meeting be sent to the medical newspapers.

A proposal of Dr. Hickman (who was unavoidably absent) was mentioned by Mr. Forrest, to the effect that it was desirable that a joint association should be formed of members of the Royal College of Surgeons and licentiates of the Royal College of Physicians. Dr. Dowse observed that the former stood in an entirely different position from the latter, inasmuch as they formed a portion of the body-corporate, whereas the licentiates of the Royal College of Physicians merely possessed a licence to practise, and were not members of the College. Dr. Warwick C. Steele thought that vigorous measures should be taken to suppress unprofessional conduct, such as advertising. He had sent advertisements he had received to the College of Physicians, the College of Surgeons, and the Society of Apothecaries, but one and all said they could do nothing. Dr. Foster MacGeagh said that, in conversation with him, the Fellows had admitted that their exclusive position was a matter of luck, and they could give no reason why members should have no privileges. Mr. M. G. [illegible] was of opinion that the Association should be based upon broad principles, and that their course of action should not be at first too closely defined, pending suggestions to be received from the general body of members.

The following were appointed on the Committee: Mr. M. G. Biggs, Dr. Robert Collum, Dr. T. Stretch Dowse, Mr. A. S. Faulkner, Dr. William Hickman, Mr. J. Brindley James, Dr. Foster MacGeagh, Mr. F. St. George Mivart, Mr. James Newham, Mr. Edward Semple, Mr. Warwick C. Steele.

At the suggestion of Dr. Collum, it was determined to call the attention of members to the fact that the whole management of the College is in the hands of the 1,166 Fellows, the 16,258 Members being absolutely precluded from expressing their views, except through the medium of the public press.

Mr. James Rocheid Forrest was elected Honorary Secretary to the Association.

REMARKS AND SUGGESTIONS ON THE MEDICAL ACT AMENDMENT BILL.

[The subjoined is a copy of some remarks made at a recent meeting of the Lancashire and Cheshire Branch, by Mr. John Brown of Bacup. We have appended some comments on Mr. Brown's observations.]

In the BRITISH MEDICAL JOURNAL for March 29th, there appeared a copy of the Medical Act Amendment Bill. By carefully comparing it with the Bill brought before Parliament last year, it will be observed that there are several important alterations and amendments which deserve our hearty approval. Some of these we are in a great measure indebted for to the Medical Reform Committee. This Bill, therefore, is more in harmony with the wishes of the medical profession, and so far deserves to have the hearty support of the British Medical Association. There is one omission in this Bill which is a gross act of injustice. I refer to the omission of a representative on the Medical Board for the Worshipful Apothecaries' Society of London. In last year's Bill, this Society had one representative; and no reason based on justice has been given for depriving it of its representative, except the "policy of expediency" of Lord Salisbury, his lordship giving the following as a plausible excuse: "That the Apothecaries' Society was not an educational body of a very high order." There are other corporations to whom Lord Salisbury might have applied the same expression with equal force and truthfulness. Mr. Mundella, when referring last year to this act of injustice, said: "That the Government were anxious to do justice to those who had done good service in the past." We may expect that justice will yet be done to this Society. As an association, we ought not to petition for this Bill without uttering our protest, especially as a considerable proportion of the members of the British Medical Association hold the L.S.A. diploma.

The main principles of the Bill are what the British Medical Association have for many years demanded, namely, "direct representation." The conjoint examination—there will be the one portal for all candidates for the medical profession in the three kingdoms. It will strike at the root of "half-diplomas," which is an injustice to the public, and has a tendency to flood the country with imperfectly educated men. The present system cannot but be prejudicial to the highest interests of the medical profession. The British Medical Association is pledged to support the Government on the main points of the Bill; there are, however, some clauses and subclauses which, at almost the risk of wrecking the Bill, we must have altered. In going over the Bill, the following are the more important clauses needing amending, omitting, etc.

Clause 5. "On and after the said appointed day, a registered medical practitioner shall be exempt, if he so desire, from serving on all juries," etc.

Suggestion 1.—Omit "if he so desire," or substitute "unless he desire otherwise."

Clause 29, Subclause 2. "The medical registrar may erase the name of a person who has ceased to practise," etc. The effect of this erasure would be most annoying, because, under Clause 5, this medical man not being registered would not be exempt from serving on all juries, etc.

Suggestion 2.—That medical men who have ceased to practise and have not been erased through Clause 30 shall have all the benefits of Clause 5.

Clause 9, Subclause 2. The Medical Board for England will have sixteen members, eight to be elected by the universities and eight by the corporations.

Suggestion 3.—That the Society of Apothecaries of London be empowered to elect one representative on the Medical Board for England.

The Medical Boards for the three divisions of the kingdom will have enormous power, and will regulate the final examinations, appoint the examiners, regulate the course of medical education, visit the medical schools and the examinations of the various licensing bodies, may take steps to deprive medical schools of the privilege of being recognised as a medical school, and may also do the same with any of the examining bodies. The functions of the Medical Board are such that we may compare it to the House of Commons, where all the real work of legislation is carried on; and the Medical Council to the House of Lords, a most august body, whose chief office will be to approve or disapprove of the proceedings of the Lower House, *i.e.*, the Medical Boards.

Suggestion 4.—That the direct representatives of the medical profession shall be *ex officio* members of the Medical Board for that division of the kingdom which each represents, or that they shall be elected to the Medical Board instead of the Council. The reason for this suggestion is, that we want our direct representatives to take an active part in the highest interests of the medical profession, which will be carried on by the Medical Boards.

Suggestion 5.—That the direct representatives must be registered medical practitioners.

Clause 10, Subclause 3. There is expressed the principle of having "equality of standard in each final examination, and an equal capacity for testing proficiency. These are most essential points. But this is most unlikely to be the case if each Medical Board appoint its own Court of Examiners.

Suggestion 6.—That the examiners appointed by each Medical Board combine and form one Board of Examiners, who shall hold examinations at such times and places as the Medical Board shall determine. If this principle be not adopted, there will be frequent complaints of inequality of examinations in the three divisions of the kingdom. In Scotland, the Board of Examiners would, in all probability, be examining their own students in a far larger proportion than either of the other two Boards of Examiners, which would be a fertile source of irritation and complaint. If three separate Boards of Examiners be appointed, then we would suggest that each board shall elect a certain proportion to act with the other boards.

Suggestion 7.—That the final examination of no university or corporation shall be accepted in lieu of the final examination of the Medical Council. This suggestion ought to be jealously guarded, because certain parties wish the final examinations of one or more universities to be accepted.

Clause 13, Subclause 1. The Medical Council will consist of eighteen persons, of whom four will be elected by the medical profession. Whenever the election of direct representatives takes place, it is desirable that this Association should select men not associated with any university or corporation as examiners or teachers, but preferably popular general practitioners of considerable experience, who will know what the profession needs.

Clause 27, Subclause 1. "If any person, whether a registered medical practitioner or not, takes or uses a title which he is not entitled to take or use, he shall, on summary conviction, be liable to a penalty not exceeding £20."

Suggestion 8.—Omit "whether a registered medical practitioner or not." If this vexatious clause be not altered, it will open a wide door for litigation. At present, the title of "Doctor" is used by many who do not hold the M.D. degree; and by many L.R.C.P.s the title is used, and no one has ever proved that a person holding such a diploma has not a right to use the title. Who is to decide the legality of the title? It is only a few weeks ago that the editors of three London medical journals had the following query under their consideration: "Is a licentiate of the Royal College of Physicians entitled to use the title of *surgeon?*" Two editors replied in the affirmative, which is undoubtedly correct; but the BRITISH MEDICAL JOURNAL replied as follows: "Although the examination of the L.R.C.P.Lond. includes surgery, it is questionable whether the licence gives the right to the title of 'surgeon.' It does not give the right to the title of 'Doctor.'" On equally good authority, both titles are affirmed as legal; but it is very rare that those holding the above degree ever take or use the title of "Doctor," though, as a matter of courtesy, they expect it. We ought not to enforce pains and penalties on duly registered medical practitioners, except those included under Clause 30, which we cordially approve of. We have recently seen how very costly and ruinous has been the prosecution taken up by the Public Prosecutor against Messrs. Bower and Keates, although our *confrères* were successful. By the prompt action of the College of Physicians of London, and the hearty and liberal support of the medical profession, these gentlemen have been relieved of the costs of the trial; but no compensation for loss of practice, etc., can be obtained. To be forewarned is to be forearmed. Let us, if possible, have this subclause altered.

Clause 27 is entitled "Penalty on misuser of titles."

Suggestion 9.—"Penalty on unqualified practitioners," to be substituted. The penal clauses of the Apothecaries' Act, 1815, ought to be incorporated. The efficiency of this Act is beyond question. During the past eight years, the Medical Defence Association and the Medical Alliance have enforced it with remarkable success. There is no Act which can be used so effectively for the suppression of unqualified practice. Under the third schedule this Act is to be repealed, which will be a most serious mistake. There are members of the Association who would rather retain that Act than allow this Bill to pass. Mr. R. H. S. Carpenter has called the Medical Act Amendment Bill the "Quacks' Emancipation Bill." The South Wales and Monmouthshire Branch, at a general meeting last year, said that the Bill is weak in its penal clauses, and that it should be made penal for any one but a registered practitioner to practise for gain. Dr. McNaught of Newchurch says "that, under the Apothecaries' Act of 1815, prosecution of quacks was a possibility of which we are now deprived, so that we shall be in a worse position under the new Bill than before." There are other very suggestive points in his letter well worthy of consideration, *vide* BRITISH MEDICAL JOURNAL, June 23rd, 1883. The Metropolitan Counties Branch last year said "that the penal clauses ought to be more stringent, so as to prohibit unregistered persons not only from using medical titles, but from practising for gain." Mr. Nelson Hardy says "that the Bill proposed to throw open the practice of the profession to druggists and quacks so long as they did not assume medical titles." These are a few extracts from the pages of the JOURNAL. Mr. Mundella told a deputation of herbalists last year "that the Bill enacted the existing law, and that they would not be prosecuted so long as they called themselves medical botanists, etc." If the new Bill enacted the existing law, *i.e.*, the penal clauses of the Apothecaries' Act, 1815, we should be satisfied. We would urge the Reform Committee to bring this statement to his memory. The danger to the public will arise not so much from herbalists and botanists practising, as that it will present a great temptation to chemists and druggists, to engage in prescribing to a far larger extent than at present. The Act of 1815 is a most wholesome deterrent. A still worse danger will be that it will encourage unqualified assistants, dispensers, and unsuccessful medical students to practise and visit, to the danger of the public generally, and to the interests of duly qualified medical men. It is calculated that there are from five to eight thousand persons of this class, many of whom are eagerly waiting for the Act to become law. Besides these, we may expect a large influx.

Medical Title. Suggestion 10.—That every person passing the conjoint examining board have the right to the following title, Licentiate of the Royal Medical Council, or the initial letters, L.R.M.C.Eng., Scotland, or Ireland, as the case may be. That it shall not be illegal for him to use the following—physician or doctor, surgeon or accoucheur. By having the word "royal" it will add dignity to the diploma, and will be more in consonance with the various licensing bodies.

These are chief points of interest. The Bill is calculated to raise the profession socially, and improve the educational and professional status of the profession. The great weakness of the Bill are the penal clauses. I have not yet met with a medical man who approves of them. If the Government will enact the old penal clause as contained in the Act of 1815 (and which Mr. Mundella admits the Bill does, but which, we find, is conspicuous by its omission), then we can promise the Government success to its well considered measure.

*** All the points discussed in the above communication have been already submitted to our readers; they are extracted from our own pages; still, that there may be no colour for any charge of suppression of argument, we have given it insertion. Our readers must, however, bear in mind that it is impossible to find space for all the letters we may receive.

The writer allows that the Medical Bill now before Parliament is, thanks in a great degree to the Medical Reform Committee, an improvement on that of last year, and that "the main principles of the Bill are what the British Medical Association have for many years demanded, namely, direct representation and the conjoint examination, which will strike at the root of half-diplomas." It will, therefore, do away with the temptation to make pass-examinations unequal. It might also be added that it precludes the recovery in courts of law of all charges for visits, attendance, or medicines, by unqualified persons, and greatly strengthens the penal clauses against the illegal assumption of titles.

These were the only points, the three great points of medical reform, which the Medical Reform Committee was instructed to demand, and the Medical Bill of the Government embodies them all.

The writer of the above letter overrates the authority of the proposed divisional boards. The Medical Council is not only granted increased power, but is distinctly constituted the supreme controlling authority, and an amendment will be moved that it must, instead of it may, visit the examinations of the conjoint boards.

In Suggestion 4, it is recommended that the direct representatives should be elected to the divisional board, instead of to the Council. Certainly the Medical Reform Committee would act in distinct contravention of their instructions were they to advocate such a proceeding, for the claim of the Association has always been to have direct representatives of the profession in the General Medical Council, where their number will constitute them a real power. In the divisional boards, they could only exercise a comparatively feeble influence, for in the Scottish board there would be only one direct representative in a board of 14; in the case of Ireland, one in 15.

What opposition will be made to placing the direct representatives on the divisional boards on the ground that, in such case, they will have to sit in judgment on work in which they have themselves taken part, remains to be proved; for an amendment to place the direct representatives on the divisional boards will certainly be moved when the Bill gets into Committee.

We have given insertion to this communication, notwithstanding that we are well aware that the Medical Reform Committee have carefully gone through all the Bill line by line, have given careful consideration to all suggestions submitted to them, and have distinctly reserved the right to move such amendments as may appear desirable when the Bill has passed the second reading. They have had repeated communications with the Government. They have been all the more favourably received because they have evinced no hostility to the Bill. They know positively that the Government do not intend by the Bill to weaken any existing powers in the prosecution of illegal practitioners, nor to give increased facilities to practice by "quacks."

The Medical Reform Committee have been informed by the legal adviser of the Association that the Bill does not do so. An opportunity will be given for rectifying any mistake that may have been made in this respect.

As in a lady's postscript, the pith of the above communication is contained in the last paragraph, where it is stated: "That the Bill is calculated to raise the profession socially, improve the educational and professional status of the profession. The great weakness of the Bill are the penal clauses." The Government and the legal adviser of the Association maintain that the penal clauses against illegal practice are not weakened, and that the penal clauses against the illegal assumption of medical titles are strengthened. Who is right? We believe we are judicious in reposing confidence in the legal men.

In order to enact all the suggestions contained in this and in other letters, they must either be embodied in a distinct Bill, or else they must be moved as amendments when the present Bill of the Government has passed the second reading, and gets into Committee.

No sane man could propose the former course. To do so, would only be to invite ridicule and encounter defeat. This course being abandoned, the only remaining alternative is to promote the second reading of the Bill, and so gain the opportunity for amending it in Committee. To this end, and also to defeat the efforts of adverse corporations, petitions should be presented in favour of the Bill.

THE COLLECTIVE INVESTIGATION RECORD.

THE Collective Investigation Committee of the British Medical Association propose to publish a second number of the *Collective Investigation Record* early in July next. A form of application will shortly be issued in the JOURNAL, when all applications for copies should be at once made.

SUBSOIL DRAINAGE BY THE EUCALYPTUS GLOBULUS.—A curious instance of the power of the eucalyptus globulus to drain wide areas, and of the distance to which its roots will penetrate, is afforded by a story which comes from Alameda County. The owner of Bay Island Farm recently found a curious root-formation [illegible] in the bottom of his well, about 16 feet below the surface. The trees to which the roots belonged stood 50 feet from the well. Two shoots pierced through the brick wall of the well, and [illegible] of fibres, formed a basin that completely covered [illegible] of the well. Most of these fibres were no larger than threads, and were so woven and intertwisted as to form a mat as [illegible] and strong as though regularly woven in a loom. The mat when first taken out of the well was water-soaked and covered with mud, and [illegible] than a man could lift, but when dry, it was [illegible] as wool, and weighed only a few ounces.

ASSOCIATION INTELLIGENCE.

THE LATE DUKE OF ALBANY.

THE following acknowledgment of the address of condolence on the death of His Royal Highness the Duke of Albany to Her Majesty the Queen, written on behalf of the Association by the President of Council, has been received from the Home Office.

"Whitehall, April 28th, 1884.

"Sir,—I have had the honour to lay before the Queen the loyal and dutiful Address of the British Medical Association on the occasion of the death of His Royal Highness Prince Leopold, the Duke of Albany, K.G. And I have the satisfaction to inform you that Her Majesty was pleased to receive the Address very graciously.—I am, sir, your obedient servant, W. V. HARCOURT.

"The General Secretary, British Medical Association,
161A, Strand, London, W.C."

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

- I. Acute Pneumonia.
- II. Chorea.
- III. Acute Rheumatism.
- IV. Diphtheria, clinical.
- IV*a*. Diphtheria, sanitary.
- V. Syphilis, acquired.
- V*a*. ,, inherited.

NOTE.—The further 150 cases of pneumonia asked for by the Committee have now been received, and will be included in the forthcoming issue of the *Record* in July. The Committee hope that cases will still be communicated, as opportunity may occur, with a view to a further report upon the subject in the future.

Inquiries will almost immediately be issued upon the habits of aged persons who may have attained or passed the age of 80 years, and upon the occurrence of Albuminuria in apparently healthy persons.

Applications should be addressed to
The Secretary of the Collective Investigation Committee,
April, 1884. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT. The next meeting will be held at the Greyhound Hotel, Croydon, on Thursday, May 8th, at 4 P.M.; Henry G. Thompson, M.D., of Croydon, in the chair. Dinner will be served at 6 P.M., precisely; charge 7s., exclusive of wine. The following communications, etc., have been promised. The Chairman: Some Clinical Cases. Mr. Arthur Durham: A Case of Nephro-lithotomy, with Remarks. Dr. Urban Pritchard: Chronic Suppuration of the Tympanum. Dr. F. A. Mahomed: The Prognosis and Treatment of Bright's Disease. Dr. P. Horrocks: Some points in connection with Menstruation and Amenorrhœa. Mr. H. G. Plimmer will exhibit specimens of Bacilli. All members of the South-Eastern Branch are entitled to attend this meeting, and to introduce professional friends.—J. HERBERT STOWERS, M.D., Honorary Secretary, 23, Finsbury Circus, E.C.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The annual meeting of this District will be held at the Kent and Canterbury Hospital, on Thursday, May 8th, at 3 P.M.; Dr. Robinson of Dover in the chair. *Agenda:* Collective Investigation Committee, 2.45 P.M. Annual Business, 3 P.M. Dr. White will exhibit a living specimen of Myxœdema. Dr. Robinson: Outbreak of Epidemic Sore-throat following use of Milk from Cows suffering from Aphthous Fever. Dr. Joyce: 1. The Communicability of Disease from Animals to Man. 2. Whether the recognised Infectious Diseases be ever simulated by Non-infectious Forms. The dinner will take place at the Fountain Hotel at 5 P.M. Members desirous of introducing patients, exhibiting pathological specimens, or making communications at the meeting, are requested to give notice at once to T. WHITEHEAD REID, Honorary Secretary, 34, St. George's Place, Canterbury.—April 23rd, 1884.

EAST ANGLIAN BRANCH.—The annual meeting of this Branch will be held at Colchester (by the kind permission of the owner, J. Round, Esq., M.P.), in the ancient Castle, on Thursday, May 15th; John Lowe, M.D., President; Mr. Robert Francis Symmons, Surgeon of the Essex and Colchester Hospital, President-elect. Gentlemen desiring to read papers, or to bring any subject before the meeting, are requested to give immediate notice to either of the Honorary Secretaries.—W. A. ELLISTON, M.D., Ipswich, M. BEVERLEY, M.D., Norwich, Honorary Secretaries.

SOUTH-WESTERN BRANCH.—The annual meeting of this Branch will be held at Exeter, on Wednesday, May 21st. The President-elect, Dr. Lewis Shapter, kindly invites all members to lunch at his house in the Barnfield, from 12 to 1.30 P.M. The order of business will be as follows: 1.15 P.M., Meeting of Council at the Devon and Exeter Hospital; 1.30 P.M., General Meeting at the Devon and Exeter Hospital. The annual dinner will take place at Pople's New London Hotel, at 6 P.M. The Exhibition of the Devon County Agricultural Association opens on May 21st, so opportunity of visiting the show will be afforded to members attending the meeting. Members intending to read papers, or make communications at the meeting, are requested to give notice to S. REES PHILIPPS, M.D., Honorary Secretary, Wonford House, Exeter.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held in the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 29th, at 3 P.M.—VINCENT JACKSON, General Secretary, Wolverhampton. —April 30th, 1884.

EAST YORK AND NORTH LINCOLN BRANCH.—The annual meeting will be held at the Infirmary, Hull, on Wednesday, May 28th, 1884, at 1.30 P.M. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the Secretary not later than May 16th.—E. P. HARDEY, Honorary Secretary, 17, Brunswick Terrace, Spring Bank, Hull.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—A meeting of the members of the above district will be held at the Castle Hotel, Wellington Square, Hastings, on Tuesday, May 27th, at 3.30 P.M. Dinner at 5.30 P.M.; charge 6s., exclusive of wine. Mr. Kaye Smith of St. Leonard's will take the chair. Communications with respect to the reading of papers or cases, or the exhibition of morbid specimens, should be addressed to the Honorary Secretary, T. JENNER VERRALL, 95, Western Road, Brighton.—April 29th, 1884.

STAFFORDSHIRE BRANCH: GENERAL MEETING.

THE second meeting of this session was held at the Railway Hotel, Stafford, on Thursday, February 28th, 1884. Dr. E. T. TYLECOTE, President-elect, took the chair, in the unavoidable absence of Dr. Orton, and there were present twenty-three members.

The Medical Sickness, Annuity, and Life-Assurance Society.—The SECRETARY explained the objects of the Society, pointing out its special benefits, and expressed a hope that as many of the members as were eligible would join it.

Collective Investigation Committee.—The SECRETARY showed the Life-History Album recently distributed by the above Committee. A circular explaining and detailing all its features had been, previously to the meeting, sent to each member.

Specimens.—The following specimens were shown.

1. Dr. BADDELEY showed a man, aged 68, with a large Tumour of the Left Gluteal Region. It had existed for upwards of twenty years, and was about the size of a small orange. It had never caused any inconvenience, and he had enjoyed good health until about three months ago, when he began to lose flesh rapidly, to be sleepless and disinclined for food, and noticed the tumour to be growing. No organic disease was discoverable. The tumour was now as large as a small melon; it was painless, soft, and semifluctuating, movable over the deep structures, and not attached to the skin. The man was very cachectic. The tumour was thought to be one of a fatty nature, taking on malignant action. No immediate operation was recommended.

2. Dr. W. LOWE exhibited a Kidney, in the pelvis and calyces of which were several calculi (uric acid). A large one of irregular shape, and roughened surface, was imbedded in the mouth of the ureter. The others, smaller and smooth on the surface, lay loose in the pelvis of the kidney.

3. Mr. FOLKER showed a large Uterine Polypus successfully removed by the *ecraseur*. A woman, aged 34, was admitted into the North Staffordshire Infirmary, suffering from incontinence of urine due to retention. The symptoms commenced last June. She noticed a lump in the vagina shortly after the symptoms commenced. The catamenia were fairly regular, but scanty. She had been able to get about, and to do her work.

4. Mr. FOLKER showed a Tumour removed from the back of the

hand of a man, aged 61. Thirty years ago, he dropped a brick on the back of his hand. Shortly afterwards, he noticed a small lump, of the size of a pea, which enlarged gradually until the present time. Fourteen years ago, it commenced to ulcerate, and had bled very much during the last two or three years. There had been very little pain, and the man had not lost flesh.

5. Mr. **Spanton** showed a large Lipo-fibromatous Tumour, removed from the back of the neck of a man, aged 64. It was of many years' growth, and consisted chiefly of dense hypertrophied subcutaneous tissue. Operation was followed by recovery.

6. Mr. **Spanton** showed a Chronic Mammary Tumour of the Left Breast, undergoing cystic degeneration, of about eight years' growth, successfully removed from a single lady, aged 52. The specimen was shown on account of the naked eye likeness to a malignant growth.

7. Mr. **Spanton** also showed the Right Ovary and Fallopian Tube, removed by abdominal section from a single patient, aged 17. In the tube and ovary were hard nodules of tubercle, of which microscopic specimens were exhibited, clearly indicating its tubercular character. The patient had suffered for many months, not only from ovarian distress, but latterly from most intractable cystitis. The operation was performed on December 5th, 1883, and on January 1st, 1884, she was present and took an active part at the nurses' dance at the North Staffordshire Infirmary. At the time of report she was perfectly well.

8. Mr. **Spanton** also showed an Ovary and Fallopian Tube, with Hæmatosalpinx, removed by abdominal section, from a married woman, aged 34, on February 6th, 1884. She had suffered a long time from it, and had been under treatment without relief. The Fallopian tube was distended three months before to the size of a large egg, and Mr. Spanton had aspirated it through the vagina, drawing off about two ounces of sanguineous fluid, but it soon afterwards began to refill, and rendered her unable to go about. She made a complete recovery.

9. Mr. **Vincent Jackson** showed a very elongated and prolapsed Cervix Uteri, removed by the scissors from a young woman aged 17. A drawing of the deformity, and a diagram showing the steps of the operation, were exhibited. Both were prepared by Mr. Batterham, House-Surgeon of the Wolverhampton Hospital.

10. Mr. **Vincent Jackson** showed a drawing of a recent operation-case of Sarcoma of the Female Breast.

Papers.—The following were read.

1. Dr. C. E. Baddeley : Some Notes of a Family of Bleeders.
2. Mr. F. Marsh : Thermo-tracheotomy.

METROPOLITAN COUNTIES BRANCH : EAST LONDON AND SOUTH ESSEX DISTRICT.

A meeting of the above District was held on April 17th, at the Town Hall, Hackney; Mr. F. E. **Cockell**, jun., in the chair.

Annual Meeting.—It was arranged that the annual meeting and dinner should be held on May 29th, at the Forest Hotel, Chingford.

The Secretary.—Mr. **Wallace** announced his intention to resign the honorary secretaryship, which post would have to be filled up at the annual meeting.

Scurvy in Children.—Dr. **Thomas Barlow** gave an address on Scurvy in Children.

VICTORIAN BRANCH.

A meeting of this Branch was held at the hall of the Royal Society, Melbourne, on February 13th.

Vaccination with Calf Lymph.—A resolution was passed intimating satisfaction at the Government having definitely recognised the advisability of employing legally qualified medical practitioners to carry on the system of vaccinating with calf-lymph.

Medical Legislation.—The Council of the Branch was authorised to bring under the attention of the Government the necessity for the introduction of an amended Medical Act.

Professor Owen.—The draft of an address to Professor Owen, for presentation on the 80th anniversary of his birthday, was read by the honorary secretary, Dr. **Neild**, who was instructed to communicate with the secretaries of the other Branches with the view of combination in the matter.

Cases.—Dr. **Pinnock** (Ballarat) read reports of two cases.

The first was one of erythema, of unusual character, in a woman aged 60. The symptoms somewhat resembled those of erythema nodosum, but the red swollen patches were limited to the prominences of the joints; there were ringing in the ears, deafness, and gastric irritation. There was no history of syphilis or other blood-poisoning. The symptoms gradually subsided in a fortnight.

The other case was that of a man thrown from a cart on the front of the shoulder, and suffering apparently fracture of the surgical neck of the scapula. There were lengthening of the arm, eversion of the elbow, displacement of the head of the humerus into the axilla, and crepitation. The shape of the shoulder could be easily restored, but the displacement immediately recurred. The coracoid process followed the movement of the arm. There was complete recovery, with normal motion.

MEDICO-LEGAL AND MEDICO-ETHICAL.

THE LISTOWEL UNION WORKHOUSE AND MR. DILLON.

On April 17th, the case of Dillon *v.* the Local Government Board was tried in the Queen's Bench Division of the High Court of Justice in Ireland.

Mr. O'Riordan, Q.C., applied for a writ of certiorari to bring up to be quashed a sealed order of the Local Government Board, removing Dr. Dillon from the office of medical officer of Listowel Union Workhouse. The facts were disclosed in Mr. Dillon's affidavit. In September last Dr. Fitzmaurice, who filled the post, informed Dr. Dillon that he was in embarrassed circumstances, and intended to resign. Dr. Dillon gave him £75, and on September 13th he sent in his resignation. Advertisements for his successor were published, and on October 4th the board of guardians elected Dr. Dillon by a majority of 22 against 8. But the Local Government Board, put in motion by the vice-chairman (Mr. John Stacke), who supported the candidature of Dr. Clancy, objected to Dr. Dillon filling the dual offices of dispensary medical officer and also workhouse medical officer, especially as the workhouse was not within his district, and he resided fourteen miles distant. A new election was held, and Dr. Dillon was again elected by 22 to 9. The next objection raised was the payment of the money to Dr. Fitzmaurice. On February 21st, Dr. Dillon was elected for the third time by a majority of 19 to 8. Thereupon the Local Government Board dismissed him under a sealed order. Counsel submitted that they had acted summarily and in excess of their powers, Dr. Dillon being duly qualified, and not intending to purchase the office.

Mr. Monahan, Q.C., on behalf of the Local Government Board, contended that the power of dismissing an officer was discretionary, and also that there could not be a clearer case for exercising the discretion than where an office had been purchased. Such an act was an offence at common law, and it would be a serious thing were it to go forth that the board of guardians, despite remonstrance, could defy the Local Government Board.

Mr. Justice Lawson, in delivering judgment, said the Local Government Board, under the 33rd section of the Poor Law Act, had power to remove any officer at their discretion for unfitness, incompetency, or neglect of duty. In the exercise of their discretion they had declared Dr. Dillon unfit; and suppose they gave no reason whatever for it, he did not see what power the court had to review what they had done. But the reason was disclosed by Dr. Dillon, who had candidly stated that he gave Dr. Fitzmaurice a sum of money, which led to his resignation. He had no hesitation in saying that giving a man a sum of money to procure his resignation was an offence at common law. In the face of such a thing, any public department ought to declare that Dr. Dillon was unfit to hold office; and, if that were not done, those offices might be put up to public competition. The Local Government Board, in the exercise of their discretion, had taken an effectual mode of preventing it by declaring Dr. Dillon unfit for the office. He considered that they had rightly exercised their discretion. At the same time he believed that neither Dr. Dillon nor Dr. Fitzmaurice knew exactly the legal consequences of what they did. The application should, therefore, be refused.

MEDICAL ETIQUETTE.

Sir,—I read with considerable surprise your judgment in the case of a disputed point of etiquette, referred to you by a "Member B.M.A." [illegible] with every feeling of respect, to submit my own [illegible] just, although I regret to say they happen to differ [illegible] your own. I am of opinion that:

1. A had a perfect right to object to B attending [illegible] questionable whether it was [illegible] to write to B. [illegible] otherwise.

2. The evidence on this point is not clear. [illegible] the fact that A [illegible] was [illegible] to accept the position, but other [illegible] he was in attendance.

3. B was not justified in attending [illegible] possessed with that idea [illegible] at least.

When a man accepts the position of a [illegible] I maintain that he should accept it knowing well [illegible] nature. First, he has to safeguard the interests of the patient, and, secondly, he should safeguard the interests of the practitioner who has done him the compliment to call him in, or at least to accept him as a consultant. The interests of the patient may readily be provided for if the practitioner is satisfied that his consultant is in every respect above-board, as he could not hesitate to renew the consultation again and again, or to communicate with him by letter if the circumstances demanded it. He would look upon the consultant as a friendly co-operator, not a rival.

It must be apparent to anyone that a consultant occupies a very delicate position; and particularly so if he happen to practise in the same locality as that in which the consultation takes place. He is, rightly or wrongly, looked up to by the patient or her friends as one possessing a knowledge of the case over and above that of the ordinary attendant, and he may, if so disposed, employ that position to the injury of the medical man who has consented to meet him—nothing easier. If your dictum hold good, it is open for any consultant to make unfair use of his position. Men are not all [illegible] (I know it), and a nod, a shrug of the shoulders, or a piteous inquiry as to the fate of the patient subsequently, might suffice, if cunningly performed, to upset the existing relationship between patient and doctor. Surely, then, the aim of the consultant should be pure; but how can it be if, as you say, the consultant has a right to possess himself of that patient. If a man cannot meet a brother practitioner with a clean breast, he should not place himself in the character of a consultant; he should eschew such a position.

The principle I advocate is a broad one; it is one that should be thoroughly understood, as it underlies the very bases of the terms on which medical men meet. Patients have a perfect right to change their medical attendant; but members of the profession should, above all things, respect the position which they occupy in relation to their fellow-practitioners. I am, yours obediently,

J. T., Member B.M.A.

⁂ In reply to "J. T.'s" adverse criticism on our judgment in the case of a "Member B.M.A.," which appeared in the JOURNAL of April 12th, we deem it well to remark that, if B. were a "consultant," *pur et simple*, or had lately been in consultative attendance with A. upon the case; or, moreover, if A. himself had been recently attending the lady for the same illness, B.'s line of conduct would, in our opinion, have been flagrantly unjust to him, and professionally indefensible.

But what are the facts of the case, as fairly deducible from A.'s own brief statement? We read them thus: That, about two years ago, the lady met with an accident, for which she was attended by A. in consultation with B., and "recovered." She has since, however, been in indifferent health, and, we assume, has more or less frequently sought the advice of the "family doctor," A. Very lately, she became "ill," and, for some reason or other, the husband (A. not then being in professional attendance) decides on seeking other advice, and frankly communicates his intention to A., who, judging from the tenour of his letter, appears to have quietly acquiesced in the arrangement. Nevertheless, we find that he privately communicates with B., and, on the plea that the latter had met him in consultation on the case of the lady two years previously, covertly, as we regret to think, seeks to defeat the husband's notified wish and intention, whose perfect right to change her medical adviser is indisputable. If he had called in any other practitioner than B., no reasonable objection could, we apprehend, have possibly been raised.

The question then arises as to whether B. (an infirmary surgeon in general practice), under the exceptional circumstances, and after the lapse of two years since he had attended the lady in consultation with A., was justified, on the accession of a distinct illness, in taking charge of the case. After a careful critical examination of the several points involved, and of the question not unlikely to arise therefrom (as the sequel proves), we came to the conclusion that he was justified; and, having the courage of our opinion, publicly recorded it.

Lest, however, the decision—exceptional as it is—should lead to an erroneous view of the prescriptive duties of consultants in relation to general practitioners and their patients, we beg to refer our readers to the definite and stringent rules laid down for their guidance in the *Code of Medical Ethics*, published by Messrs. Churchill, and with which we are in entire accord.

PUBLIC APPOINTMENTS AND MEDICAL ETIQUETTE.

SIR,—I beg to inform you that I have been again re-elected medical officer, public vaccinator, and medical officer of health for the Kentchurch district of the Dore Union, which office I have held for the last four years to the entire satisfaction of the guardians.

I should not have troubled you with the information but for the ungentlemanly conduct of a brother chip, who opposed me upon the occasion. He resides four miles from here, and is medical officer for another union, and yet would poach upon my preserves. He is young, and is evidently ignorant of the etiquette which ought to be observed in our relations towards each other. I shall be glad if you will kindly publish these few facts, in order that I may obtain (together with your numerous readers) an expression of opinion concerning the relationship that should exist amongst the members of the medical profession who are desirous of upholding its dignity.—I remain, yours truly,

Ewias Harold, near Hereford, April 14th, 1884. JOHN POWELL.

⁂ Editorial comment on the above communication is, in our opinion, unnecessary, inasmuch as the object of the writer will, we believe, be fully attained by the simple publication of his note of arraignment, and which can scarcely fail to effect a healthy restraining influence on the future conduct of the practitioner therein alluded to.

TINNED MEATS.—The *Sanitary Engineer* of New York states that a Bill has been introduced into the New York Assembly in order to make it compulsory that the date on which they are put up shall be stamped on all "canned goods," and to prevent the sale of goods more than a year old.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

Ambulance-Drill for the Army.—Mr. GOURLEY asked whether the Secretary of State for War would consider whether the officers and men in each regiment in the army might be systematically instructed in ambulance-drill and how to treat sick and wounded in the absence of medical assistance.—Sir A. HAYTER: In consequence of the continued indisposition of the Secretary of State for War, perhaps I may be allowed to state for him that a General Order is about to be issued, which will, to a great extent, carry out the suggestions contained in the hon. member's question.

Wednesday, April 30th.

The Disposal of the Dead (Regulations) Bill.—Dr. CAMERON, in moving the second reading of the Disposal of the Dead (Regulations) Bill, pointed out that the present system of burial entirely failed in providing security for the detection of crime. This was shown by the fact that no fewer than 20,194 deaths occurred in this country in one year in which persons had been buried without certificates. Under the present law, there was nothing to prevent cremation, and the Bill proposed that the Home Secretary should be empowered to license crematoria, that rules for cremation should be framed by the same authority, and that no cremation should be allowed without a certificate from the Registrar of deaths. To make these provisions would be to follow in the footsteps of every civilised nation.—Dr. FARQUHARSON, who supported the Bill, while looking at the question from a sanitary point of view, also considered that sentiment was on the side of those who advocated cremation. He produced a bottle containing the ashes of part of a cremated cow, and concluded his observations by asserting that cremation was quick, cheap, clean, and harmless.—Sir W. HARCOURT admitted that the Burial Laws were defective and unsatisfactory; but all the clauses of this Bill relative to certificates, examination, and precautions against poisoning were utterly inadequate and improper. No doubt the law did not prevent cremation, neither did it forbid cannibalism as a mode of disposing of dead bodies; but if the law were silent, it was because the common sentiment had made it unnecessary to have any provision on the subject. From the earliest period, he maintained, the feeling of mankind had been against this mode of disposing of the bodies of the dead. The Greeks did not practise it; the Romans only during the time of the Republic; and, in the whole Christian era, it had not been resorted to in more than two or three centuries. It had been rejected by the sense of all civilised communities, not so much from religious prejudice as from a feeling common to all humanity. There was no evidence of any consensus of modern opinion in favour of it, and, as Home Secretary, he objected to having the duties created under the Bill thrown on to him.—Sir L. PLAYFAIR, on the other hand, supported the Bill, which, he pointed out, was only permissive, and simply desired to allow people to return to ancient practice. He dissented from the Home Secretary's representation of the views and practices of the ancients, and maintained that it was no longer an affair of religion, but solely of sentiment and convenience. On the scientific aspect of the question, he pointed out that the law of nature resolved the bodies of the dead into certain solids and gases, and it was a mere question whether this should be done instantly by cremation, or by the long process of decay in the earth, which fouled the air, soil, and water.—Sir G. CAMPBELL, although admitting that there were objections to the system as practised in India, supported the Bill.—Sir R. CROSS expressed his entire concurrence in the views of the Home Secretary. He thought that great danger would ensue, and that the detection of crime would be seriously affected if cremation was generally adopted. Scientific principles, he contended, were beyond the scope of practical politics. The sentiment of the people was against the measure, and for that reason he opposed it.—Mr. LABOUCHERE considered that the opponents of the measure were running against the laws of science, the laws of nature, and the laws of the country. It was a question for the living, and not for the dead.—Mr. C. KENNARD opposed the Bill, and mentioned a case within his own knowledge in which cremation would have prevented the detection of crime.—Mr. ROGERS supported the Bill, and entirely coincided in the medical and scientific doctrines which had been urged in its support.—Mr. Warton, Mr. Tomlinson, Mr. Findlater, and Colonel King-Harman having spoken, the House divided, when the motion for the second reading was negatived by 149 votes to 79.

SPECIAL CORRESPONDENCE.

ROME.

[FROM OUR OWN CORRESPONDENT.]

Rome and its Sanitary State.

At no time has the sanitary reputation of Rome been good, but the persistent attempts which had been made, after the entry of the Italians in 1870, to depict it in the blackest of colours, induced me, rather more than two years ago, to publish some articles in the *London Sanitary Record*, showing what its death-rate was, pointing out the prevailing diseases, and demonstrating the influence of its climate and of the local hygienic conditions on the health of English and American visitors. I have quite recently returned to this subject, and in a series of letters printed in the *Italian Times*, an enterprising English newspaper appearing in Rome, I have supplemented the information given in the articles referred to, and brought the subject of the sanitary state of Rome to the notice of English-speaking travellers to Italy. It may interest the readers of the BRITISH MEDICAL JOURNAL to learn that the result of this fresh inquiry has clearly proved that there has been for some years past a steady improvement in the health-conditions existing here, as the death-rate in 1882 and 1883 has fallen to 26.6 per 1,000 from 32.1 per 1,000, which was the mean of the mortality for the quinquennium 1875-79, as shown in the figures previously published in the *Sanitary Record*. It is impossible to enter here into the reasons for this diminution in the death-rate. The main point is, that there is a gratifying improvement; and, though the mortality in Rome is still materially higher than in most of the large English towns, it is certainly lower, on the other hand, than in many of the Continental capitals, or than in the other Italian cities, such as Florence, Milan, Naples, Palermo, Turin, and Venice, which are much frequented by the travelling public. We cannot hope at present to see the death-rate fall to the comparatively low level of many English cities, where the laws of sanitary science have been better understood and longer enforced, even if we failed to take into account the position of Rome and the fact that its climate for nearly half the year may be considered subtropical; less marked variations of temperature than occur here being, of course, more favourable to health and longevity. Besides, Rome is, at present, in a transition state. The rapid increase of its population, which began with the entry of the Italians in 1870, still continues; and the efforts to house the additional 70,000 to 80,000 people have involved the building of new quarters, the constructing of streets, the laying down of drains, the opening up of communications between old and new Rome, and the disappearance of many of the vineyards and orchards which used to cover the Esquiline, Quirinal, and Cœlian hills. There is no immediate prospect that this transition state will soon come to an end, as the projects which the municipality, in conjunction with the Government, intend to execute are so gigantic, that they imply changes extending over many years. The experience of quieter times, and the improvement in health-conditions resulting from the changes going on, will probably show that the death-rate of Rome may be materially lower than it now is, though whether it can ever reach the present fairly good ratio of such a city as London must, in the meantime, remain a moot point.

To visitors to Rome, however, the general death-rate of the city is of less importance than the causes of that death-rate. The prevailing impression among them undoubtedly is that the majority of Romans die from fevers. No two words are more frequently on the lips of visitors to Rome, none convey more vividly to them the dangers they believe they are exposed to here, than "Roman fever." After all I have written on this subject, it would be absurd again to point out to members of our profession [illegible] such a fixed idea [illegible] how grossly exaggerated are the reports which attribute almost every illness originating or supposed to have originated here, from a cold to the severest typhoid fever, to a specific cause existing in Rome and nowhere else, and [illegible] with a name which has done [illegible] injury to the Italian capital. The belief that there is such a specific disease as Roman fever has been eagerly seized on and carefully utilised by all whose interests necessitate their decrying the place. Before Rome became the capital of Italy, it was even a political question, and [illegible] doubted the expediency of the transference [illegible] ground that the sacrifice of human life would be too great. [illegible] long since vanished [illegible] question. No [illegible] deputy, has died at Rome, in the discharge of his duty to the nation, of any disease which he might not [illegible] elsewhere. But visitors to Italy are still under the spell of the delusion, and, much as I have been anxious to convey to them, too, what is the truth, I cannot say that I as yet notice any diminution in the exaggerated fears which prevail among the majority, at any rate, of English-speaking travellers who come here. This perhaps is not so wonderful, as, when I think over all the abuse of Rome and its climate I have myself listened to in the last twelve years, when I note the eagerness with which even the leaders of our own profession insist on ascribing an illness to Rome simply because the victims have visited it as well as other places in their tours, when I mark the horror of its detestable climate which inspires the powerful invectives of those who have really been ill here, my surprise is not that people should visit it in fear and trembling; it is that they should have the courage to come at all. Rome's evil reputation does not date from yesterday, and nothing but the most enlightened sanitary measures can do much to remove the prejudices which are only very partially justified even in its present state. The building-operations, which have changed the outward aspect of the city, the rapid growth of its population, and the concomitant increase in house-rent and in the price of the necessaries of life, are not circumstances which can lead us to expect any very marked increase in healthiness for some years to come. The steady improvement of late years in this respect is, therefore, all the more encouraging to the well-wishers of the capital.

It is quite unnecessary to enter into any minute analysis of the figures, but a few data will show that there is as marked a diminution in the mortality from the zymotic diseases, which are most important to visitors to this city, as in the general death-rate.

From malarial fevers there died in the year 1877, 326; 1878, 294; 1879, 481; 1882, 298; 1883, 355.

Bearing in mind the increase of the population since 1877, these figures are fairly satisfactory, especially as there is very little doubt that many obscure affections ending fatally are entered under the heading "malarial fever," without their really being in any way due to that cause. As there have been no deaths from this cause during the season among the English or Americans whose names have been registered at the Protestant cemetery, since October 1st, 1876, the date when the keeper of the cemetery began to enter the causes of deaths taken from the medical certificates, up to the present time, it is evident that the visitors have little or nothing to fear from any malarial element in the climate in winter and spring. In the spring of 1879 a well known Englishman died at Albano from what was then said to be perniciosa, but the attending physician did not so enter it in his certificate; and my thirteen years' experience of practice in Rome, during the winter and spring months, has dispelled any fears I ever entertained that deaths could occur from this cause among properly housed and well nourished visitors to Rome. Indeed, only one death from any malarial affection has been certified amongst the English and American Protestants in all these years, and that was on July 6th, 1882, in the person of American gentleman, aged 70, who was certified to have died from pernicosa algida, by an Italian practitioner. All consideration of malarial diseases among visitors will consequently be seen to be superfluous.

Of late years, however, the idea has become more prevalent that the type of fever to which visitors are liable is enteric or typhoid. The figures showing the mortality from all forms of continued fever (typhoid and typhus combined) since the beginning of 1871, do not point to any epidemic prevalence of that disease, among the population at least.

The number of such deaths in 1875 was [illegible]; 1876, 182; 1877, 159; 1878, 170; 1879, 136; 1882, 123; 1883, 132; and though the exact numbers for 1880 and 1881, are not in my possession, they are known to be intermediate between those of 1875 and 1883. This number of deaths gives a typhoid-mortality for the last three years of nearly 0.45 per 1,000 of the population, whereas all the other Italian cities much frequented by visitors showed a much higher proportionate mortality. From the official returns of the Minister of Agriculture and Commerce it appears that, in the years 1881 and 1882, the typhoid-mortality in Venice was 0.66 per 1,000 living; Naples, 0.78; Florence, 0.88; Milan, 1.04; Turin, 1.05; Palermo, 1.41.

The figures for 1883 are not yet published. Rome, therefore, does not suffer to the same extent from typhoid fever, and I am inclined to attribute its relative immunity to the abundance and purity of its splendid water-supply. At least there is no other condition known to me which can account for the difference.

[illegible] the beginning of the season 1876 up to the present time. This certainly [illegible] the visitors in question; and, though I think it best to abstain from hazarding even a suggestion as to the exact number of such visitors to Rome every season, that number must be considerable, as the municipality calculate, from the data in their possession, that there are at least 40,000 visitors of all nationalities in the principal hotels and pensions alone each year. But, though three typhoid deaths *per annum* is not an exaggerated mortality, it still implies that there are a good many cases each season. The type of the disease is a mild one as a rule, the patients are generally in fair circumstances, and can afford to pay for good attendance and nursing, so that the death-rate from such attacks is a low one. On looking more particularly into the certificates, it is found that the deaths have usually been in hotels, in which, it is certain, most of the cases are treated. It does not follow that all the cases have originated in these hotels, or are even all due to Rome. On account of its special attractions, the visitor usually stays much longer in the capital than in the other cities, so that an undue number of the cases will break out there; but, of course, it must be remembered that, though many cases are undoubtedly imported, yet many, too, who first feel ill here, at once take to flight, and only develop the severe symptoms elsewhere. This is undoubtedly the explanation of much of the horror of Rome and its fevers which exists in England, where obituary notices in the newspapers often contain the addendum that the person died from typhoid fever contracted in Rome. Nothing, indeed, could be better calculated to aggravate all the symptoms of a typhoid fever than the exhaustion produced by a long and hurried railway-journey. It is a practice which cannot be too much deplored, and many deaths are due to it alone. Physicians who recollect what the incubation-period of enteric fever is, should not be misled by the statements of the patients, but should calmly inquire into all the circumstances before coming to any conclusion as to the probable place of origin. My experience is certainly in favour of the view that, considering the length of stay in Rome, no undue proportion of the typhoid fever-cases occurring among visitors to Italy in the winter originates in this city, and the comparatively low typhoid-mortality among the population is greatly in favour of such an opinion.

The causes which give rise to these cases are the same in Rome as elsewhere: imperfect sanitary arrangements, want of ventilation of sewers and house-drains, inefficient disconnection of the street-sewers from the house-drains, and the want of good closet-basins and of thorough flushing of soil-pipes, drains, and sewers. These have been too often dwelt on to require further mention; but Rome, it should always be remembered, escapes the great danger of an impure water-supply, which is so serious a drawback in almost all the other cities of Italy. One reason why more English and Americans are attacked in visiting the Continent is that they live under better hygienic conditions at home than prevail abroad, and thus the Germans, the French, and the Russians, who are acclimatised to the conditions arising from the want of sanitation, are less liable to be affected by a contaminated water or air when travelling in Italy.

There are only one or two other zymotic diseases whose prevalence might prove of great moment to visitors. Diphtheria is perhaps the most important of these, and the mortality from it in the last two years shows also a marked improvement since the quinquennium 1875-79, for which the figures were published in the *Sanitary Record*. Small-pox, too, is at present in abeyance, the number of deaths from it in 1882 and 1883 having been 24, while those from scarlet fever were 69 in the same period. Measles, indeed, is the only zymotic disease showing what may be regarded as an epidemic prevalence during the last two years, the number of deaths from it in 1882 having been 258, and in 1883 236. Such figures show that the mortality from preventable diseases in Rome is diminishing in quite as satisfactory a ratio as the general death-rate.

CORRESPONDENCE.

ATMOSPHERIC DISINFECTION.

SIR,—In your issue of April 12th, there is an article by Dr. Robert Lee upon the subject of atmospheric disinfection, the main point in which article relates to the importance of volatilising, into the atmosphere of an apartment requiring disinfection, the disinfectant itself, and not the products of its decomposition by heat.

Will you permit me to call your attention to a matter which is not noticed by Dr. Robert Lee—viz., that the Disinfecting Fumigator, which I have designed for the "Sanitas" Company, well fulfils this necessity?

In the case of our appliance, it is merely necessary to boil water in a suitable vessel, either by means of a gas-flame or otherwise, placing upon the surface of the water a quantity of "sanitas" oil, the vapour of which is generated in mixture with the aqueous vapour, and thus comes into contact with every material object in the apartment requiring to be disinfected.

"Sanitas" oil boils at a temperature very much higher than that of the boiling-point of water; notwithstanding this, it admits of ready volatilisation when treated in the way described; and the vapour so generated is that of the undecomposed oil; so that it is thoroughly competent to act both as an antiseptic and an oxidising agent.

In brief, I claim for the appliance that it enables an operator to carry out atmospheric disinfection in an absolutely perfect manner.

In the antiseptic treatment of throat and lung complaints, the "sanitas" fumigator is very useful, and a night-light may be employed to slowly generate the vapour of the oil, instead of using a gas-flame or a fire. Operating in this way, the fumigator may be kept going day and night constantly.

I trust the importance of this subject will plead with you as my excuse for asking the publication of this letter.—Yours faithfully,

April 21st, 1884. C. T. KINGZETT.

MIRYACHIT OR LATA.

SIR,—In your issue of April 19th, p. 758, you publish a very interesting description of the above disease by Dr. William Hammond, as seen in Russia. In Java, there are many natives similarly affected, and they are called "lata." These individuals are unable to resist the imitation of any sudden sound or movement made by their neighbours. Let any attitude be assumed, however grotesque, and they must pose the same. Should they be carrying anything, however precious, and carefully, down it *must* go, if they see anyone dropping an article. The best loved child or the choicest ware must fall under such circumstances. This irresistible propensity to imitate is often taken advantage of by practical jokers. They will rush upon you, to fold you, apparently, in a warm embrace, and suddenly you find yourself in a double embrace. On one occasion, I wished to extract a tooth from a young woman the subject of "lata;" but no coaxing could avail to induce her to open her mouth. At last, I took a chair, and she did likewise. I moved it gradually towards her in front, and she as gradually approached me. I then yawned very widely; she followed suit. I then shut my eyes very tight, which act she strictly imitated. Quickly jumping up, I clapped on the forceps, and had the tooth out before she had time to resist further. Some years subsequently, she came to England with her mistress, and nearly fell a victim to a practical joke. While waiting at table, her young mistress wished to exhibit her peculiarities to some friends; so, catching her eye, she suddenly reached across the table, seized a very large French plum, and pretended to swallow it. The woman instantly made a dash at the dish, thrust a plum in her mouth, and, after much choking and semi-asphyxia, succeeded in swallowing it; but the situation was such, that her mistress did not repeat the experiment.—Obediently yours,

RICHARD NEALE.

Boundary Road, South Hampstead, April 22nd, 1884.

THE GILBERT SCOTT INQUISITION.

SIR,—Will you permit me to make some short remarks on two points contained in your leading article in the JOURNAL of April 19th on the subject of the Scott inquisition, the fairness of which article, I may say, shines out conspicuously.

To the evidence as to the greater proportion of cures effected at Bethlem compared with other asylums, should be added the fact that *primâ facie* prospect of cure is an essential point in the admission of the great majority of cases—epileptics, general paralytics, and dements being, I believe, refused admission as a rule. The figures that you quote, showing the difference in proportions as to home or asylum treatment between Chancery and certificated patients, can hardly be used in the comparison that you institute, for the following reasons. The class of Chancery patients is, so to speak, a finite one, chiefly springing from the certificated patients, and largely created by the difficulty of dealing with the lunatics' property otherwise than through the Court; and many of them would have escaped all legal interference, whether by certificate or inquisition, had it not been for this difficulty. Moreover, it is essentially a collection of more or less chronic cases. On the other hand, the class of certificated patients is by no means a finite one. To make the comparison a just one, it is necessary to take into account an unascertainable, but very large, number of cases of insanity treated at home that have never come under legal supervision and enumeration, many of whom would not have thus escaped had there been with them the monetary difficulty above referred to. In addition, this class contains a very large proportion of acute cases, the detention of whom, if only for purposes of cure, is obviously necessary, and to these cases the body of Chancery patients offers but an insignificant analogue.—I am, sir, your obedient servant, ALIENIST.

April 20th, 1884.

THE RECENT DISCUSSION ON PELVIC SURGERY AT THE HARVEIAN SOCIETY.

SIR,—It is quite immaterial whether the proof was circulated by Dr. Ewart or not. It was circulated, and when the report was published the insertion was found. Mr. Thornton makes no attempt to show that he made the statement at the discussion; no one else could have invented it; and upon him rests the responsibility of its insertion.

I too have been in communication with Dr. Ewart, and I find that Mr. Thornton's letter completely begs the question. What he desires to show is that a manuscript report written by Dr. Ewart, and not a newspaper "proof," was circulated. If this is granted, it makes the matter no better for Mr. Thornton. He altered the report, and inserted a statement as having been made at the discussion which he did not make, and for this he alone is responsible.—I am, etc.,

LAWSON TAIT.

7, The Crescent, Birmingham, April 30th, 1884.

OPIUM AS AN AID TO SURGERY.

SIR,—After reading Mr. Pollock's interesting paper on the use of opium in the JOURNAL of April 26th, it struck me that a collection of statistics and effects from its continual use would be a great boon to the profession generally.

In a village in Nottinghamshire, where I had temporary charge of a practice some years ago, a large proportion of the old inhabitants were accustomed to take opium daily, chiefly in the solid form, apparently with impunity; and, at the present time, I have a pauper-patient, who attained her hundredth year in January last, who has taken nine drachms of laudanum per fortnight regularly for the last twenty-five years. She is in perfect possession of all her faculties, and has a good appetite, with healthy secretions. I once saw a robust farmer, very energetic and an ardent sportsman, take at a draught half a tumbler of laudanum, without any apparent ill effect then or afterwards.—I am, sir, yours truly, J. D. PHILLIPS,

Hoxne, April 26th, 1884. Medical Officer to Hoxne District.

MEDICAL MEN AND LIFE-ASSURANCE.

SIR,—I have read with great interest the correspondence that has taken place on this subject; and as a large medical practitioner of some years' standing, and of considerable experience in life-assurance, I thoroughly agree with the opinions expressed by your correspondents; and as a practical outcome of this correspondence, I would suggest that steps be taken to place these facts before the various boards of directors connected with all our life-assurance societies. I have no hesitation in giving it as my decided opinion that, in a large percentage of cases, life-assurance offices fail to obtain from their medical referees what they pay them for (and really, we must admit, on the whole, pay liberally for), namely, a good and unprejudiced opinion on the cases entrusted to them for examination. I am, however, by no means prepared to lay the blame of this gross evil entirely at the doors of the agents, for there are doctors and doctors. There are honest upright gentlemen in our profession, and let us hope they will always represent the majority in our ranks; but there are also a lower class of men who will resort to tactics to obtain those cases quite beneath the dignity of gentlemen, to say nothing of the generally accepted ideas of honesty. A little "palm-oil" will work wonders with an agent, who, living as he does entirely on commission, gets in time to accept it as a matter of course whenever or wherever he can obtain it, and in time he gets so alive to his own interests, and so dead to those of the office he represents, that he takes his cases to the medical man, who will assist him at all risks to get his commission by passing cases that, if the facts of these cases were fairly stated, would lead to their rejection. In case of an unexpected loss through an early death, the agent is corresponded with, who, of course, speaks well of the "bridge that has carried him over." Directors surely ought to know of these facts, for positive facts they undoubtedly are; and it is indeed high time they had their eyes opened to this great injustice which is so terribly detrimental to their interests.—I am, sir, yours truly,

A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

EXAMINATIONS FOR THE DEGREE OF M.B.—Candidates are informed that examinations for the degree of Bachelor of Medicine will commence in the Medical Department of the Museum as follows: the Second (or Final) Examination, Monday, June 9th, at 10 A.M.; the First (or Scientific) Examination, Friday, June 20th, at 10 A.M. Candidates for either of these examinations are requested to send in their names, on or before May 17th, to the Regius Professor of Medicine, Medical Department, Museum. Candidates for the Scientific Examination are to state whether they have passed the Preliminary Honour Examination in the School of Natural Science; whether they desire to present themselves for Physics and Chemistry only at this examination, or for all the subjects thereof.

OBITUARY.

ALEXANDER BAIRD, M.D.

WE regret to have to record the death, on March 30th, of Dr. Alexander Baird, at his residence at Almondbank, near Perth, at the early age of 30, after an illness of three years and a half, from myelitis with paraplegia. Dr. Baird, who was the fourth son of Captain Baird, of Cairngarrock, Wigtonshire, commenced his professional education at the Andersonian University, Glasgow. In 1875, he entered the University of Aberdeen, where he took the degrees of M.B. and C.M., and that of M.D. in 1878. Dr. Baird commenced practice at Methven, near Perth, eventually removing to Perth in succession to Dr. Roy, where he secured an extensive practice. He was a man of much energy and power of observation, and took a deep interest in all matters relating to the profession. He resuscitated the Perthshire Medical Association, of which he was for some time secretary. Dr. Baird was a member of the Obstetrical Society of Edinburgh, and a frequent contributor to the various medical journals. He leaves a widow and two children.

R. F. FREEBORN, F.R.C.P.Ed., M.R.C.S.Eng.

ALL Oxford residents, past and present, will have heard with great regret of the death of Mr. Richard Fernandez Freeborn, who expired on Sunday last at the age of 60. He commenced his medical education at St. George's Hospital, and was one of the oldest established and most popular medical men in Oxford. His practice lay chiefly among the senior members of the university and their families, and among the inhabitants of the country round Oxford; and in their houses he was always regarded as a trusted adviser and friend. Though his death was not unexpected—for his health had been failing for some years—it will be none the less difficult to supply his place, and both in the University and in the city his loss will be greatly felt.

OCTAVIUS ADOLPHUS FIELD, F.R.C.S.

THE death of this well known and much respected practitioner took place at the residence of his son-in-law at Southall, on Monday, April 21st, from cardiac disease, the result of long standing gout. For the last eight years, during which he had entirely retired from practice, Mr. Field's health has been indifferent; he has suffered at times from severe attacks of angina.

Mr. Field was the eighth son of Mr. S. Field, a Kentish squire. He was educated for medicine at the London Hospital, and obtained the membership of the College of Surgeons in 1836. In the following year he took the licence of the Apothecaries' Company, and soon afterwards began practice in Bayswater, in partnership with Messrs. Innis and Phillips. Some years later, after the termination of the partnership, he practised alone, first in Stanhope Terrace, and subsequently in Sussex Gardens.

Mr. Field was a highly successful practitioner, a kind-hearted and genial friend; and his loss is now mourned by a large circle of patients and others, as well as by his widow, two sons, and three daughters. The eldest son is the Dean of St. Mary's Hospital Medical School, and aural surgeon to the hospital.

DR. [illegible] WYNTER, late Medical Officer of Wandsworth Prison, has obtained a superannuation-allowance of £127 10s. *per annum*.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

NOTIFICATION OF INFECTIOUS DISEASES.

THE SANITARY CLAUSES OF THE BRIGHTON IMPROVEMENT BILL.

THE Brighton General Purposes Committee, in a special report as to Part 8 of the Brighton Improvement Bill, state that application having been made to them to receive a deputation of medical practitioners, heads of educational establishments, and others, on the subject of the clauses of the Brighton Improvement Bill, providing for the notification of infectious diseases, they appointed the 1st of April for the interview; and accordingly, on that day, a deputation met the Committee at the Town Hall. The deputation, accompanied by Mr. Hugh J. Verrall, objected to Clause 52 of the Bill, which requires medical men, under a penalty, to notify to the Medical Officer of Health, cases of infectious disease occurring in their practice, and to Subclauses C, D, and E of Clause 54, which provide for the closing, in certain cases, of day-schools and shops where food and clothing are sold. They expressed an opinion that the information would be made public, and visitors be deterred from coming to Brighton; that if the notification were enacted, it would lead to concealment of disease; that a practically irresponsible power would be placed in the hands of the Medical Officer of Health; and that power would be given for the removal of persons to the Borough Hospital contrary to the wish of the head of the family and of the medical man in attendance. After the deputation had withdrawn the General Purposes Committee resolved: "That the Sanitary Committee be informed that this Committee, after hearing the statements made by the deputation, are of opinion that it is not desirable the provisions of the Brighton Improvement Bill relating to infectious diseases should be persevered with; and that the Sanitary Committee be requested to withdraw Clauses 51, 52, and 62, in addition to Subsections C, D, and E of Clause 54."

The Sanitary Committee present a very lengthened report upon the matter, stating that they are unable to agree with the suggestion of the General Purposes Committee, for reasons which they give. In reference to the question of removal of persons, they infer that it will be only of such persons as those "who are without proper lodging or accommodation;" and, with regard to notification of cases, and of the importance of registration, add "There will be no publicity attaching to such registration, but proper precautions against the spreading of the disease will be taken, if necessary, by the closing of the establishment where such disease is raging." They recommend the withdrawal of Subclauses C, D, and E of Clause 54; and, with regard to the question of notification, which they consider "one of the most important and beneficial provisions in the whole Bill," the Sanitary Committee recommend that Clause 52 should be retained, but so amended as to require the notification to be sent to the town clerk instead of to the medical officer of health. They also recommend that Clauses 51, 55, and 62 should be struck out of the Bill, but that the other clauses relating to infectious diseases should stand. The General Purposes Committee, on consideration of the report of the Sanitary Committee, and of the reasons therein set out, express their concurrence in the conclusions arrived at.

An important and a very influentially attended meeting was held on Wednesday afternoon in the Music Room of the Pavilion, relative to the sanitary clauses in Part VIII of the Brighton Improvement Bill. The room was filled with members of the medical profession, proprietors of schools, and heads of other large establishments in the town, who had taken a deep interest in the opposition to the clauses relating to compulsory notification of infectious diseases, on the ground that their enforcement would be highly detrimental to the prosperity of the borough.—Mr. Marriage Wallis was called to the chair, and explained that the meeting had been rendered necessary by the fact that the Sanitary Committee were to present to the Town Council a report which was in direct opposition to a resolution arrived at by the General Purposes Committee, who, after receiving a deputation of some of the gentlemen present, had recommended that the obnoxious clauses should be abandoned. Mr. E. J. Furner moved: "That, in the opinion of this meeting, the clauses in the Brighton Improvement Bill relating to the compulsory notification of infectious diseases are highly objectionable, inasmuch as their operation would be very detrimental to the prosperity of the town as a health-resort." Dr. Taaffe, medical officer of health, who was frequently interrupted during the delivery of his speech, supported the clauses of the Bill providing for compulsory notification, quoting the opinion of the medical officer of health for Leicester (where the system has been in operation for four years) in support of his arguments, and reading a letter from Mr. Innes, of Rosehill Terrace, who, as a medical man, also favoured these provisions of the Bill. Mr. Shapland, Mr. G. Worsley, Mr. R. H. Penney, and Mr. H. Verrall, having stated their opinions, the resolution was put to the vote and carried, only two voting against. On the motion of Mr. G. Tatham, seconded by Mr. Malden, a resolution asking the Council to withdraw the clauses in question was passed, and the meeting terminated.

COLCHESTER AND THE CONTAGIOUS DISEASES ACTS.

AT the Easter Quarter Session for the Borough of Colchester, before the Recorder, Mr. F. A. Philbrick, Q.C., the grand jury, at the conclusion of their labours, made the following presentment to the court.

"The grand jury would call attention to the increased immorality in the town since the modification of the Contagious Diseases Acts has come into force."

The Recorder said he had listened to this presentment, and he regretted extremely the necessity the grand jury had felt in making it. He was sorry to say that he had information from the Mayor of the borough which rendered their presentment no matter of surprise to him. In that court, and with a grand jury charged with the duty of "presenting" that which was against the common weal in the district over which they had jurisdiction, they rightly and properly took into account matters such as this one referred to in the presentment. He was extremely sorry to hear that, since the legislation to which the grand jury had referred had been allowed to become optional instead of being compulsory, the number of cases suffering in the military hospitals in Colchester had increased three-fold; and that the state of the town, despite all the efforts that could be made by those whose duty it was to preserve public order, was far different from what it was when the Acts referred to were in their full force. This was not the place in which to discuss politics, even though they might be social politics; but the facts and grave evils which had resulted from the alteration in the law, or rather from the alteration in the mode of enforcement of the law, called for the attention of everyone; and they could not in this community, which had become orderly, and in which, probably by the operation of these Acts, the unhappy consequences the grand jury had referred to had been reduced to a minimum—they could not but view with alarm the terrible increase he had referred to; and the sad consequence in the increase of prostitution and disorderly habits, which the check of these Acts gave to that portion of the community, was now being put an end to by the alteration in the administration of the law. He could only say that he, for one, having heard, and having made it his business necessarily to inquire into what had taken place in regard to the alteration of the law, most thoroughly and heartily agreed with the grand jury—he regretted to say so—in their presentment; and he would take care that their presentment was forwarded to the proper quarter, where he hoped it would receive the attention it deserved as coming from those who, having lived in a town where these Acts had been enforced, were much better qualified to express an opinion upon the matter than any number of people who judge these matters, however sincerely, from mere theory, and not from actual experience.

We learn also that the magistrates of Maidstone have unanimously expressed their opinion that the compulsory inspection should be re-enforced.

No women from Maidstone, Deal, Winchester, or Windsor, have been admitted into any of the certified hospitals for the last nine months. The Government Hospital at Shorncliffe has been closed; and only three women from Dover have been admitted into the certified hospital at Chatham.

THE EPIDEMIC OF SORE-THROAT AT DOVER.

SIR,—I should not have trespassed on your space with any further correspondence on this subject, but that Dr. Robinson, in his letter of April 19th, states that "Dr Parsons, therefore, argues from a set of cases totally distinct from those to which I refer." Allow me to say that this is not so, and that my letter of April 12th referred to a succession of cases "both before and after, *as well as during*, the special outbreak referred to by Dr. Robinson." The words in italics I have now added, to avoid any doubt of my meaning. My object in referring specially to cases "before and after" the outbreak was to show that they did not differ from those which I saw during the special period selected by Dr. Robinson for his report; but I did not imagine that it would thence be inferred that my cases suddenly ceased for this interval. I do not know that I could more accurately or more truthfully describe the cases which I actually saw during the epidemic than I did in my previous letter, and I have no manner of doubt of their nature.

Curiously enough, it has just come to my knowledge that on February 2nd, 6th, 8th, and 9th, my own household—rather a large one—was supplied with milk by the milkman implicated in Dr. Robinson's report; but nobody was any the worse for it. We had no sore throats.

It is much to be regretted that Dr. Robinson did not himself analyse the milk and submit it to microscopic examination, and give the profession the benefit of his researches. No one will acknowledge more readily than Dr. Robinson the importance of scientific as well as circumstantial evidence in cases of this kind; and, where the former is wanting, the latter is of comparatively little value in establishing the truth of any theory.—Yours faithfully,

Dover, April 22nd, 1884. CHARLES PARSONS, M.D.

NOTIFICATION OF INFECTIOUS DISEASES.

SOME complaints having been made with regard to the action of some of the sanitary inspectors of the Manchester Corporation in the removal of infectious cases to hospital, the Manchester Medico-Ethical Association appointed a deputation to confer with the Health Committee on the subject. The deputation met the Health Committee on April 7th; and, after some friendly discussion, it was agreed that the following suggestion of the deputation should be adopted; viz., "That, in future, no case of infectious disease should be removed to hospital unless such removal be certified as advisable by the practitioner in attendance."

HEALTH OF ENGLISH TOWNS.—During the week ending the 26th ultimo, 6,288 births and 3,751 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons. The annual rate of mortality per 1,000 persons living in these towns, which in the two preceding weeks had been 20.4 and 20.5, rose again to 22.3 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow:—Norwich, 15.0; Derby, 16.1; Bristol, 16.5; Halifax, 17.7; Hull, 18.1; Leicester, 18.1; Brighton, 18.9; Birkenhead, 18.9; Newcastle-upon-Tyne, 19.3; Huddersfield, 20.0; Cardiff, 20.1; Salford, 20.9; London, 21.6; Nottingham, 21.6; Bradford, 21.7; Portsmouth, 22.0; Sunderland, 22.0; Plymouth, 22.1; Preston, 22.5; Sheffield, 23.6; Preston, 24.1; Birmingham, 24.3; Wolverhampton, 25.3; Oldham, 25.9; Manchester, 27.1; Blackburn, 27.4; Liverpool, 28.1; and Leeds, 28.4. The average death-rate last week in the twenty-seven provincial towns was 23.0, and therefore exceeded by 1.4 the rate recorded in London. The 3,751 deaths registered last week in the twenty-eight towns included 576 which were referred to the principal zymotic diseases, against 522 and 554 in the two preceding weeks; of these, 193 resulted from measles, 189 from whooping-cough, 76 from scarlet fever, 40 from "fever" (principally enteric), 30 from diarrhœal diseases, 27 from diphtheria, and 21 from small-pox. These 576 deaths were equal to 15.4 per cent. of the total deaths, and to an annual rate of 3.4 per 1,000. This zymotic rate was equal to 3.9 in London, and was equal to 3.1 per 1,000 in the twenty-seven provincial towns, among which it ranged from 0.0 in Halifax, and 0.7 in Plymouth and in Bristol, to 5.9 in Portsmouth and in Leeds, and 7.3 in Wolverhampton. The fatal cases of measles, which had been 142 and 159 in the two preceding weeks, further rose to 193, and showed the highest proportional fatality in Liverpool and Huddersfield. The 189 deaths referred to whooping-cough corresponded with the number in the previous week, and showed the highest rates of mortality in Leeds, Portsmouth, and Wolverhampton. The fatal cases of scarlet fever showed a decline of 12 from the number in the preceding week, and showed the highest fatality in Cardiff and Sheffield. The 40 deaths referred to "fever" corresponded with the number in the previous week. Of the 27 fatal cases of diphtheria in these towns, 17 occurred in London, 3 in Leeds, and 2 in Portsmouth. The deaths from small-pox, which had been 23 and 17 in the two preceding weeks, rose again to 21, of which 12 were recorded in London, 3 in Sheffield, 2 in Liverpool, and 1 each in Birmingham, Manchester, Sunderland, and Newcastle-upon-Tyne. The deaths from diseases of the respiratory organs in London, which had been 285 and 318 in the two previous weeks, further rose to 327; they were 61 below the corrected average, and equal to an annual rate of 4.2 per 1,000. The causes of 102, or 2.7 per cent., of the 3,751 deaths registered last week in the twenty-eight towns were not certified, either by medical practitioners or by coroners. The proportion of uncertified deaths did not exceed 1.6 per cent. in London, while it showed a considerable excess in Halifax, Oldham, Bradford, and Sheffield.

HEALTH OF SCOTCH TOWNS.—In eight of the principal Scotch towns, having an estimated aggregate population of 1,254,607 persons, 960 births and 584 deaths were registered during the week ending the 26th ultimo. The annual rate of mortality, which in the two preceding weeks had been 25.2 and 23.3, rose again last week to 24.2, and exceeded by 1.9 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns the death-rate ranged from 15.9 and 16.5 in Dundee and Greenock, to 26.7 in Paisley, and 29.1 in Glasgow. The 584 deaths registered last week in these towns included 31 which resulted from whooping-cough, 18 from diarrhœal diseases, 12 from diphtheria, 11 from "fever," 10 from measles, 8 from scarlet fever, and 1 from small-pox; in all, 91 deaths were referred to the principal zymotic diseases, equal to nearly 16 per cent. of the total deaths, and to a rate of 3.8 per 1,000, which slightly exceeded the average zymotic rate recorded last week in the twenty-eight English towns. In the Scotch towns, the zymotic rates ranged from 0.7 and 1.4 in Greenock and Dundee, to 4.8 in Glasgow and 5.3 in Paisley. The 31 fatal cases of whooping-cough exceeded by 2 the number in the preceding week, and included 19 in Glasgow and 7 in Edinburgh. The 18 deaths from diarrhœal diseases considerably exceeded the average for the season; 11 occurred in Glasgow. The fatal cases of diphtheria, which had been 10 and 16 in the two previous weeks, declined again to 12, of which 3 were returned in Aberdeen, 2 in Glasgow, and 2 in Edinburgh. The 10 deaths from measles showed a further decline from recent weekly numbers, and included 5 in Glasgow, and 3 in Paisley. Of the 8 fatal cases of scarlet fever, 5 occurred in Glasgow, where the death from small-pox was also recorded. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 4.8 per 1,000, which somewhat exceeded the rate last week for the same diseases in London. As many as 80, or nearly 14 per cent., of the 584 deaths registered last week in these towns, were uncertified.

HEALTH OF IRISH TOWNS. In the week ending April 19th, the number of deaths in the sixteen principal urban sanitary districts of Ireland was 455. The average annual death-rate was 27.6 per 1,000 of the population, the respective rates for the several districts being as follow: Sligo, 14.4; Lisburn, 14.5; Lurgan, 15.4; Armagh, 15.5; Kilkenny, 16.9; Newry, 17.6; Limerick, 20.2; Cork, 24.0; Londonderry, 26.7; Galway, 26.9; Dublin, 27.9; Belfast, 28.1; Wexford, 34.2; Drogheda, 38.1; Dundalk, 43.6; Waterford, 62.5. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.9 per 1,000, the rates varying from 0.0 in Limerick, Galway, Newry, Kilkenny, Wexford, Sligo, and Armagh, to 20.8 in Waterford; the 27 deaths from all causes registered in the last named district comprising 5 from scarlatina, 1 from typhus, 1 enteric fever, and 2 from diarrhœa. Among the 117 deaths from all causes registered in Belfast, were 4 from scarlatina, 2 from whooping-cough, 2 from diphtheria, and 2 from diarrhœa. The 37 deaths in Cork comprised one from each of the following diseases—typhus, whooping-cough, enteric fever, and diarrhœa; among the 9 deaths in Drogheda were 2 from whooping-cough; and the 10 deaths in Dundalk comprised 1 from scarlatina, and 1 from whooping-cough. In the Dublin Registration District, the deaths registered during the week amounted to 193—84 males and 109 females. Twenty-two deaths from zymotic diseases were registered, being 8 over the number for the preceding week, but 7 under the average for the sixteenth week of the last ten years; they comprised 6 from scarlet fever, 4 from typhus, 1 from whooping-cough, 2 from diphtheria, 2 from simple continued and ill-defined fever, 2 from enteric fever, 1 from erysipelas, etc. Forty-six deaths from diseases of the respiratory system were registered, being equal to the average for the corresponding week of the last ten years, and 8 over the number for the week ending April 12th; they comprised 31 from bronchitis, and 11 from pneumonia. The deaths of 14 children including 7 infants [illegible] old were ascribed to convulsions. Three deaths were caused by apoplexy, 14 by other diseases of the brain and nervous system exclusive of convulsions, and 14 by diseases of the [illegible]. Phthisis or pulmonary consumption caused 21 deaths [illegible]. Four accidental deaths were registered. In one instance, the cause of death was "uncertified," and in 24 other cases [illegible] "no medical attendant." Fifty-two of the persons whose deaths were registered during the week were under 5 years of age, [illegible] under 1 year, of whom 19 were under 1 month old, and [illegible] were aged 60 years and upwards, including [illegible] persons aged [illegible] years and upwards, of whom 11 were octogenarians, and 2 (women) were stated to have been aged 90 and 92 years respectively. In the week ending April 26th, the number of deaths registered in the sixteen districts was 449, the rate per 1,000 being 27.2. The respective rates for the several districts were as follow, ranging in order from the lowest to the highest: Sligo, 9.6; Lurgan, 10.3; Armagh, 20.7; Kilkenny, 21.1; Wexford, 21.4; Dundalk, 21.8; Belfast, 24.2; Londonderry, 25.0; Dublin, 28.0; Newry, 28.1; Limerick, 29.7; Cork, 31.2; Galway, 33.6; Waterford, 34.7; Drogheda, 42.3; Lisburn, 43.5. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.3 per 1,000, the rates varying from 0.0 in Galway, Newry, Kilkenny, Drogheda, Wexford, Sligo, Lisburn, and Lurgan, to 8.7 in Dundalk; the 5 deaths from all causes registered in the last named district comprised 2 from whooping-cough. Among the 101 deaths from all causes registered in Belfast, were 1 from scarlatina, 2 from typhus, 3 from whooping-cough, 2 from diphtheria, 1 from simple continued fever, 3 from enteric fever, and 1 from diarrhœa. The 15 deaths registered in Waterford comprised 2 from whooping-cough. In the Dublin Registration District, the deaths amounted to 194. Twenty-one deaths from zymotic diseases were registered, being 8 under the average for the corresponding week of the last ten years, and 1 under the number for the week ended April 19th; they consisted of 9 from scarlet fever (scarlatina), 2 from typhus, 1 from ill defined fever, 3 from enteric fever, 3 from cerebro-spinal fever, 1 from diarrhœa, and 2 from erysipelas. Thirty-six deaths from diseases of the respiratory system were registered; they comprised 24 from bronchitis, 5 from pneumonia, and 4 from croup. The deaths of 18 children (including 12 infants under 1 year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 12 by other diseases of the brain and nervous system (exclusive of convulsions), and 12 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 37 deaths, mesenteric disease 4, and cancer 2. Five accidental deaths were registered. In one instance, the cause of death was "uncertified," and in 38 other cases there was "no medical attendant." Sixty of the persons whose deaths were registered during the week were under 5 years of age (33 being infants under 1 year, of whom 13 were under 1 month old), and 36 were aged 60 years and upwards, including 18 persons aged 70 and upwards, of whom 4 were octogenarians, and 1 (a woman) was stated to have been aged 92 years.

HEALTH OF FOREIGN CITIES.—It appears from statistics published in the Registrar-General's return for the week ending April 19th, that the death-rate recently averaged 39.6 per 1,000 in the three principal Indian cities; it was equal to 25.5 in Bombay, 26.7 in Calcutta, and 76.9 in Madras. Small-pox caused 202 deaths in Madras (a slight decline from the number in the previous week), 8 in Calcutta, and 7 in Bombay; 33 fatal cases of cholera were recorded in Calcutta, 32 in Madras, and 7 in Bombay. According to the most recent weekly returns, the average annual death-rate in twenty-one of the largest European cities was 29.5, and was no less than 7.0 above the mean rate in the twenty-eight large English towns. The death-rate in St. Petersburg was 42.0, and still higher than in the previous week; the 747 deaths included 52 from measles, 32 from "fever," and 19 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate did not average more than 18.9, the highest rate being 20.1 in Stockholm; the 91 deaths in Copenhagen included 2 from typhoid fever. The death-rate in Paris was equal to 28.3; and, although rather lower than in the previous week, exceeded the London rate by 6.9; the deaths in Paris included 61 from diphtheria and croup, 42 from measles, and 36 from typhoid fever. In Brussels, the rate was 24.3, and the deaths included 16 from small-pox (a considerable increase from recent weekly numbers) and 5 from typhoid fever. The 52 deaths in Geneva (equal to a rate of 38.3) included 14 from "fever," showing an increase upon the number in the previous week. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 27.1, the rate ranging from 22.6 in the Hague to 29.8 in Rotterdam; the 190 deaths in Amsterdam included 17 from diphtheria and croup, and 6 from scarlet fever. The Registrar-General's table includes some German and Austrian cities, in which the death-rate averaged 28.9, and ranged from 24.0 and 25.8 in Berlin and Dresden, to 33.5 in Vienna and 39.7 in Prague. Small-pox caused 40 deaths in Prague (9 fewer than in the previous week), and 4 in Vienna; diphtheria showed the largest proportional fatality in Berlin and Hamburg. In three of the principal Italian cities, the mean death-rate was 32.6, the rate being 22.7 in Venice, 33.5 in Turin, and 36.4 in Rome; measles caused 18 deaths in Turin and 12 in Rome, small-pox 5 in Turin, and diphtheria 5 in Rome. The 107 deaths in Lisbon, including 2 from small-pox and 3 from "fever," gave a death-rate of 27.4. In four of the largest American cities, the rate averaged 23.7, and was equal to 20.3 in Baltimore, 20.4 in Brooklyn, 23.2 in Philadelphia, and 26.3 in New York. Typhoid fever caused 15 deaths in Philadelphia and 5 in Baltimore; scarlet fever and diphtheria showed fatal prevalence in New York, Brooklyn, and Philadelphia.—The return for the week ending the 26th ultimo shows that the death-rate recently averaged 40.3 per 1,000 in the three principal Indian cities; it was 27.5 in Bombay, 33.8 in Calcutta, and 68.9 in Madras. Small-pox caused 192 deaths in Madras (showing a further slight decline from still higher numbers in previous weeks), 20 in Calcutta, and 4 in Bombay. The deaths from cholera were 51 in Calcutta and 15 in Madras. According to the most recently received weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty-one of the largest European cities averaged 29.9, and was no less than 7.6 above the mean rate during the week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 42.4, showing a further increase upon the rates in previous weeks; the 755 deaths included 51 from measles, 24 from "fever," and 16 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged only 24.1, and ranged from 16.8 in Christiania, to 26.6 in Copenhagen; scarlet fever caused 3 deaths in Christiania, and the 88 deaths in Stockholm included 3 from "fever," and 3 from diphtheria and croup. In Paris, the death-rate was 27.4 (against 21.6 in London during the week), showing a further decline from higher rates in recent weeks; the deaths included 53 from diphtheria and croup, 44 from measles, and 31 from typhoid fever. The 199 deaths in Brussels included 10 from small-pox (6 fewer than in the previous week), and were equal to a rate of 24.2. The rate in Geneva was 22.1, but, of the 30 deaths, 7 resulted from "fever," and 3 from diphtheria and croup. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the death-rate averaged 29.0, the highest rate being 29.8 in Rotterdam, where 10 of the 95 deaths resulted from measles; in Amsterdam, 15 more deaths were referred to diphtheria and croup. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 29.9, and ranged from 24.3 and 26.0 in Berlin and Dresden, to 34.0 in Munich and Breslau, and 43.1 in Prague. Small-pox caused 41 deaths in Prague, an increase of one upon the number in the previous week; diphtheria continues to show the largest proportional mortality in Berlin and Dresden. The death-rate was equal to 19.5 in Venice, and 38.7 in Turin; in the latter city, 9 fatal cases of small-pox, 8 of measles, and 5 of typhoid fever were recorded. The 124 deaths in Lisbon were equal to a rate of 31.8, and included 2 from small-pox, 3 from typhoid fever, and 3 from diphtheria. In four of the largest American cities, the recorded death-rate averaged only 22.4, and ranged from 18.1 in Brooklyn and Baltimore, to 25.4 in New York. Typhoid fever caused 14 deaths in Philadelphia, and 5 in Baltimore; diphtheria showed more or less fatal prevalence in each of these American cities.

INDIA AND THE COLONIES.

WEST INDIES.

MEDICAL LEGISLATION IN TOBAGO.—An important Act has recently been passed in Tobago providing for the gratuitous distribution of medical aid and medicines to handicraftsmen, menial and predial servants, boatmen and porters, when over sixty years, to their children when under eight years, and to all sick and destitute persons of whatever age or class. It also provides medical aid and medicines, on a moderate fixed scale of charges, to persons of the class above named, when over eight years and under sixty. Under the provisions of the Act, four medical men receive stipends of £200 a year for their services. It is almost an obligation on the Government to subsidise medical men in the colony, in which their are no wealthy residents, and but few persons of even moderate means. There would, otherwise, be no inducement for medical men to come and settle in the colony, and the inhabitants, unless this were done, would be without the opportunity of obtaining medical care, even in the time of serious illness or of epidemics. It may also be noted with satisfaction that other ordinances of a medical and sanitary character have recently become law in the colony. One Act provides for the supply of public vaccination, and another establishes a more complete and efficient system for the registration of births, marriages, and deaths, prohibiting, amongst other things, the interment of the dead except in public cemeteries, or in licensed burial grounds.

IT is stated that on recovery from his late illness, his Highness the Nizam caused the sum of Halle Sicca Rupees 31,000, and jewellery valued at about Rupees 10,000, to be sent to Dr. Beaumont, the residency surgeon, on account of professional attendance, during a period of fourteen days.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—Admitted Members. April 24th 1884.

Court, John Arnold, M.B. Cambridge, Ladbroke Grove Road, W.
Murray, Hubert Montague, M.B. London, Canonbury, N.
Pringle, John James, M.B. Edinburgh, 35, Bruton Street, W.
Robertson, [illegible], M.D. California, 48, Tavistock Square, W.C.
Squire, John Edward, M.D. London, 6, Orchard Street, W.
White, [illegible], M.B. London, Kent Lunatic Asylum.

Admitted Licentiates.

Alsop, [illegible], 7, Upper Chadwell Street, E.C.
Andrews, Alexander Gordon, 44A, Coleshill Street, S.W.
Bean, Charles Edward, Guy's Hospital, S.E.
Biggs, Charles Edward Forbes, 17, Beauclerc Road, W.
Brodie, Charles Gordon, 12, South Crescent, W.C.
Butler, Gilbert Edward, Westminster Hospital, S.W.
Carnelley, Matthew, Guy's Hospital, S.E.
Carroll, Edward Richard William Charles, Cancer Hospital, S.W.
[illegible], Louis Bennett, Millbrook House, Harrington Square, N.W.
Clark, Arthur William, Guy's Hospital, S.E.
Clarke, John [illegible], Infirmary, Manchester.
Coe, Henry Clark, M.D. Harvard, Detroit, United States.
Colman, Henry, Cumberland House, Kew.
[illegible], Augustus Henry, [illegible], Dunmore Road, N.W.
Davies, [illegible] Arthur, [illegible].
Dodd, Arthur Herbert, 2, Petherton Road, N.
[illegible], W[illegible] Augustus, Walsall.
Griggs, William Alfred, 11, Tressillian Crescent, S.E.
Hayes, James, Leigh, Lancashire.
Hoar, Charles Desambler, 4, Campden Hill Gardens, W.
Jones, David Llewellyn, Charing Cross Hospital, W.C.
[illegible], 12, Clapham Road, S.E.
Lilly, Alfred Thomas Irvine, 2, Milner Street, S.W.
London, John Edward, Berbice, British Guiana.
Lyon, Thomas Glover, 85, Asylum Road, S.E.
McDouall, Herbert Crichton, 11, Philip Road, S.E.
Maude, Arthur, 5, Bishopwood Road, N.
Milligan, Robert Arthur, 174, Coldharbour Lane, S.E.
Milnes, John George, 67c, Upper Tulse Hill, S.W.
Murray, Robert William, Guy's Hospital, S.E.
Mutis, Aurelio, M.D. Columbia, 90, Charlotte Street.
Plant, Charles, Sandbach.
Pring, Arthur, [illegible], S.W.
Rands, St. John Outlaw, 22, Merrick Square, S.E.
Rushworth, Frank, Walton-on-Thames.
Sawers, Frederick Hayes, M.B. Toronto, Ontario, Canada.
Stace, Arthur Frank, Middlesex Hospital, W.
Street, Charles Tidbury, Bethlem Hospital, S.E.
Sturges, Frank, Beckenham.
Tireman, Arthur Lumley, Guy's Hospital, S.E.
Topham, Albert Stocks, Guy's Hospital, S.E.
Torres, Julio Zenon, M.D. Columbia, 90, Charlotte Street, W.
Tyrrell, Walter Guy Beauchamp, Great Malvern.
Wilson, Edward, 2, Cromartie Road, N.
Wright, Holland Hodgson, 3, Park Road Villas, S.E.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 21st ultimo, and, when eligible, will be admitted to the pass examination.

Messrs. J. F. Bateson, M.B.Edin., Wavertree; W. H. Owen, L.K.Q.C.P.I., Liverpool; H. H. Marsden, L.K.Q.C.P.I., Birkenhead, students of the Liverpool School of Medicine; H. D. James, L.S.A., Babbicombe, Devon; and H. C. Dent, L.S.A., Woolwich, of King's College; W. H. Starr, L.S.A., West Kensington Park, and O. P. Brown, L.S.A., Percy Circus, W.C., of St. Bartholomew's Hospital; J. C. Evers, L.S.A., Stourbridge, and T. Birt, L.S.A., Stourbridge, of the Birmingham School; C. G. Satchell, L.S.A., Tunbridge Wells, of University College; W. F. Miller, M.B.Melb., Melbourne, of the Melbourne University; A. Fuller, M.B.Ed., Cape Town, of the Edinburgh School; R. Hardie, M.B.Durham, Newcastle, of the Newcastle School; R. H. Hunter, M.B.Glasg., Glasgow, of the Glasgow School; S. A. [illegible], L.R.C.P.Lond., [illegible], of Guy's Hospital; A. G. Andrews, L.R.C.P.Lond., Coleshill Street, S.W., of St. George's Hospital; and S. Plowman, L.S.A., of Thomas's Hospital.

Five gentlemen were approved in Surgery, and, when qualified in Medicine, will be admitted Members of the College. Four candidates were referred for three months, two for six months, and one for nine months.

The following gentlemen passed on the 22nd ultimo.

Messrs. [illegible] W. [illegible], L.R.C.P.Ed., Liverpool, and E. G. G. [illegible], L.R.C.P.Ed., Bootle, of the Liverpool School of Medicine; J. H. Harris, [illegible], L.S.A., Burton-on-Trent, of St. Bartholomew's Hospital; H. C. Coe, M.D.Harvard, Detroit, of the Harvard University; A. B. Gemmel, L.R.C.P.Ed., Glasgow, of the University of Glasgow; A. Hepworth, M.B.Durham, Newcastle-on-Tyne, of the Newcastle School of Medicine; W. G. Anglin, M.D.Kingston, Kingston, Ontario, of the Kingston School of Medicine; G. Thomas, L.R.C.P.Ed., Manchester, of the Manchester School of Medicine; G. F. Hae, L.R.C.P.Ed., [illegible] Road, W., of St. Mary's Hospital; E. A. Fall, L.R.C.P.Ed., Kensington Gardens Square, of University College; and A. T. J. Lilly, L.R.C.P.Lond., [illegible], of St. George's Hospital.

Six gentlemen were approved in Surgery, and, when qualified in Medicine, will be admitted Members of the College. Five candidates were referred for three months, and seven for six months.

The following gentlemen passed on the 23rd ultimo.

E. G. F. Morris, Bromyard, student of the Leeds School; L. Jones-Bateman, B.A.Cantab., Birmingham, of the University of Cambridge; W. O. Shaw, Basingstoke, G. L. Barritt, L.R.C.P.Lond., Todmorden, and J. H. Gough, Manchester, of the Manchester School of Medicine; H. L. Pearson, Rockferry, of the Liverpool School of Medicine; H. H. Tomkins, Bristol, of the Bristol School of Medicine; F. W. Gordon, Dublin, of the Dublin School; G. L. Wells, Leeds, and E. C. Pettifer, Stoke Newington Green, of St. Bartholomew's Hospital; D. Thomas, Aberffraw, of the London Hospital; W. R. Edwards, Caerleon, of the Newcastle School of Medicine; G. E. C. Anderson, Cape Colony, and W. L. Braddon, Upton-on-Severn, of Guy's Hospital; G. W. H. French, Hornsey, of St. Mary's Hospital.

Five candidates who passed in Surgery at previous meetings of the Court, having subsequently obtained medical qualifications, were admitted Members.

Messrs. J. T. Tupholme, L.R.C.P.Ed., South Kensington, of St. Bartholomew's Hospital; A. de Winton, L.R.C.P.Ed., Gloucester, and G. F. Hugill, L.S.A., Chislehurst, of Guy's Hospital; T. F. Forster, L.S.A., Brampton, of King's College; J. R. L. Dixon, L.R.C.P.Ed., Liverpool, of the Liverpool School of Medicine.

Four candidates passed the examination in Surgery; one candidate was referred for three months, and four for six months.

The following gentlemen passed on the 24th ultimo.

Messrs. A. E. Garrod, Harley Street; G. A. E. Murray, Cape of Good Hope; H. W. Chambers, Lowestoft; F. C. W. Jones, Earlsdale, Pontisford; J. L. Wright, L.R.C.P.Ed., Cape of Good Hope; J. Reeks, L.S.A., Andover; T. Jones, L.S.A., Hackney Road; R. H. Peck, M.A.Oxon., Penge Lane, S.E.; H. B. Woolbert, Willesden; J. E. Blomfield, Taunton; E. B. Parfitt, Notting Hill; A. J. Turner, Hampstead; E. L. Brockliss, B.A.Oxon., L.R.C.P.Ed., Banbury; H. Lamb, Preston; W. H. Bowes, Herne Bay; R. E. Molesworth, Kenwith, North Devon; J. T. Williams, Warwick Street, S.W.; A. W. Comber, Menbury, Chard; P. S. Hutchinson, Cavendish Square; and J. Jenkins, L.S.A., Bristol.

Six gentlemen passed in Surgery, and, when qualified in Medicine, will be admitted Members of the College; three candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months, and one for three months.

The following gentlemen passed on the 25th ultimo.

Messrs. W. C. Fenwick, L.R.C.P.Ed., Llangollen; J. G. Milnes, L.R.C.P.Lond., Upper Tulse Hill; G. H. De'Ath, Buckingham; F. B. Jacobson, Sleaford; G. Kirkhouse, L.S.A., Pontardawe; M. Thompson, Workington, Cumberland; H. C. McDonall, L.R.C.P.Lond., Blackheath; O. Johnson, L.S.A., Sierra Leone; W. D. Anderson, Ballachulish, N.B.; H. A. Kent, Salisbury; W. G. B. Tyrrell, L.R.C.P.Lond., Great Malvern; C. J. Wilkinson, L.S.A., Coatham, Yorkshire; F. Morton, Bristol; C. Slater, Notting Hill; and C. Plant, L.R.C.P.Lond., Sandbach, Cheshire.

Four gentlemen passed in Surgery, and, when qualified in Medicine, will be admitted Members of the College; four candidates were referred to their professional studies for three months, five for six months, and one for nine months.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 24th, 1884.

Allen, Charles, 36, Bedford Square, W.
Barber, Halford Vaughan, 108, Sandmere Road, S.W.
Carrington, George Hedwig, Albert Street, Eccles, Manchester.
Fisher, Thomas Hammond, Manchester Road, Southport, Lancashire.
Grenfell, Henry Osborne, Calstock, Cornwall.
Reily, Alexander Yates, 34, Great Western Road, W.
Roberts, John Saunders Hughes, Picton Place, Swansea.
Soutter, James, 3, Tremayne Terrace, Aulaby Road, Hull.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.—Vacancy on the Honorary Acting Staff of the Out-patients. Applications to H. C. Fulford, 35, Augustus Road, Edgbaston, Birmingham, by May 10th.

BRAINTREE UNION.—Medical Officer and Public Vaccinator. Salary, [illegible] per annum. Applications by May 9th.

CHELTENHAM GENERAL HOSPITAL.—Junior House-Surgeon. Salary, 20l. per annum. Applications to the Honorary Secretary, by May 3rd.

CHESHIRE COUNTY ASYLUM, Parkside, Macclesfield.—Medical Superintendent. Salary, 500l. per annum. Applications by May 3rd.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, 100l. per annum. Applications by June 11th.

FOLKESTONE FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Medical Officer. Salary, [illegible] per annum. Applications to [illegible], Dover Road, Folkestone, by May 17th.

GROSVENOR HOSPITAL FOR WOMEN AND CHILDREN, Vincent Square, Westminster, S.W.—Physician. Applications by May 7th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistants. Applications by May 3rd.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Assistant Physician. Applications by May [illegible].

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square.—Resident Medical Officer. Salary, 50l. per annum, after [illegible] years' service, 100l. Applications by May [illegible].

HOSPITAL FOR SICK CHILDREN, 49, Great Ormond Street. Assistant-Physician. Applications by May 14th.

MACCLESFIELD GENERAL INFIRMARY.—Junior House-Surgeon. Salary, 70l. per annum. Applications to the Chairman, House Committee, by May 3rd.

MORPETH DISPENSARY.—Resident Medical Officer. Salary, 100l. per annum. Applications by May 5th.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street.—Anæsthetist. Applications by May 16th.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Surgeon to the Out-patients. Applications by May 12th.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Resident House-Surgeon. Salary, £52 10s. per annum. Applications by May 12th.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. Conservator to the Museum of the College. Applications by May 3rd.

SALOP INFIRMARY, Shrewsbury.—House-Surgeon. Salary, 100l. per annum. Applications by May 15th.

SOUTH DUBLIN UNION, DONNYBROOK DISPENSARY. Apothecary, or Pharmaceutical Chemist. Salary, 60l. per annum. Election, May 6th.

SOUTH METROPOLITAN SCHOOL DISTRICT.—Resident Medical Officers. Salary, 150l. per annum. Applications by May 5th.

WESTERN GENERAL DISPENSARY.—Honorary Physician. Applications by May 9th.

WEST NORFOLK AND LYNN HOSPITAL. House-Surgeon and Secretary. Salary, 100l. per annum. Applications by May 9th.

WORCESTER GENERAL INFIRMARY.—House-Surgeon. Salary, 100l. per annum. Applications by May 10th.

MEDICAL APPOINTMENTS.

Clegg, Walter T., M.R.C.S., L.R.C.P.Lond., appointed Assistant-Surgeon to the Liverpool Hospital for Cancer and Skin-Diseases.

Inglis, Arthur Stephen, M.B., C.M., appointed Resident House-Surgeon to the Royal Infirmary, Aberdeen.

Jackson, Henry, M.R.C.S.Eng., L.S.A.Lond., appointed Medical Officer of Health for the Borough of Barnstaple, *vice* A. Ferrie, M.D., deceased.

Jefferis, Walter R. S., M.D., C.M., etc., appointed Medical Officer and Public Vaccinator to the Garrigill District of the Alston Union, and Surgeon to the Nenthead Lead and Zinc Mines.

Malcolm, John D., M.B., C.M., appointed Surgeon to the Out-Patient Department, Samaritan Free Hospital, *vice* Skene Keith, M.B., C.M., resigned.

Maurice, William James, B.A.Oxon., M.R.C.S., F.R.C.P.Lond., appointed Assistant-Surgeon to the Royal Berks Hospital, *vice* H. G. Armstrong.

Paterson, W. B., M.R.C.S., L.D.S., appointed Medical Tutor to the Dental Hospital of London, Leicester Square, W.C.

Taylor, Rogers W. G., B.A., M.B., M.Ch., appointed Medical Officer of Health and Public Vaccinator to the Fransham District of the Mitford and Launditch Union, Norfolk, *vice* S. H. Wheatcroft, M.R.C.S.Eng., resigned.

Veale, Henry, M.D., appointed Physician to the Essex and Colchester General Hospital, *vice* A. Wallace, M.D., resigned.

Weiss, Hubert Foveaux, F.R.C.S.Eng., elected Assistant-Surgeon to the West London Hospital, *vice* William Bruce Clarke, F.R.C.S.Eng.

Wilson, Alexander, M.R.C.S., L.R.C.P., appointed Junior Resident Medical Office to the General Hospital for Sick Children, Pendlebury, Manchester, *vice* F. W. Mayo, M.R.C.S., L.R.C.P., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

Edwardes.—On April 24th, at 17, Orchard Street, Portman Square, the wife of E. J. Edwardes, M.D.Lond., of a son.

Hewlett.—On April 26th, the wife of John C. Hewlett of Elmhurst, Beckenham, Kent, and Charlotte Street, London, E.C., of a daughter.

Martin.—On April 9th, at Ramleh, Alexandria, Egypt, the wife of Surgeon John Martin, Army Medical Department, of a daughter.

Stewart.—On the 25th ult., at Welbeck Terrace, Nottingham, the wife of Donald Stewart, M.D., of a daughter.

MARRIAGES.

Edwards—Bellis.—On April 17th, at the English Wesleyan Chapel, Mold, by the Rev. Roger Edwards (father of the bridegroom), assisted by the Rev. S. Brown, David Edwards, M.R.C.S., L.R.C.P., to Emily, only daughter of Mr. George Bellis, Brynderwen, both of Mold.

Hoets—Grace.—On February 15th, at Sydney, by the Rev. R. Steel, D.D., Alton Kingsley Hoets, M.R.C.S.Eng., of Yass, New South Wales, son of J. W. Van Rees Hoets of Adelaide Road, London, late of Cape Colony, to Ellen, elder daughter of the late William Grace of Mogador, Morocco.

Peddie—Murphy.—On April 24th, at St. Michael's, Bowness-on-Solway, Burgh-by-Sands, Cumberland, by the Rev. Samuel Medlicott, M.A., Henry Anderson Peddie, M.B., C.M., 2, Palmerston Place, Edinburgh, to Maria, youngest daughter of William Ponsonby Murphy, L.R.C.S.Ireland.

DEATHS.

Cassells.—At 9, Eildon Villas, Mount Florida, Glasgow, on 15th April, James Patterson Cassells, M.D., Aural Surgeon, late of 2, Newton Terrace, aged 48 years.

Moore.—On April 27th, at 7, Museum Street, Ipswich, Harry Gage Moore, M.D., aged 42. No cards.

Willett.—On April 23rd, at Ventnor, Isle of Wight, Frederick Stovin Dealtry Willett, the dearly loved elder son of Dr. E. Sparshall Willett, of Wyke House, Isleworth, aged 30.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY ......St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ... St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

Charing Cross.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

Guy's.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

King's College.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

London.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

Middlesex.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

St. Bartholomew's.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

St. George's.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

St. Mary's.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

St. Thomas's.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

University College.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

Westminster.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F.,3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. C. Theodore Williams: The Relation of the Medical Profession to other Professions. General Meeting and *Conversazione.*—Odontological Society of Great Britain, 8 P.M. Casual communications by Messrs. Storer Bennett, E. G. Betts, and J. H. Mummery. Mr. E. G. Betts: Observations on the Teeth of Certain Rodents.

TUESDAY.—Pathological Society of London, 8.30 P.M. Dr. West: Three Cases of Mediastinal Tumours. Mr. Treves: A Case of Supposed Actinomycosis. Dr. Burney Yeo: Cast from the Trachea. Dr. Charlewood Turner: Lardaceous (?) Syphilitic Suprarenal Capsule. Mr. Sydney Jones: 1. Multiple Exostoses, Exostosis and Loose Cartilage from the Knee-joint (card); 2. Stomach after Excision of Cancer of Pylorus (card). Dr. Percy Kidd: 1. Myo-fibroma of Stomach; 2. Tuberculous Ulceration of Pharynx (card); 3. Polypoid Tumour of the Left Ventricle (card). Mr. Lockwood: Cartilage containing Tumour of the Scalp. Dr. Silcock: Malignant Lymphoma of the Abdomen. Dr. Carrington: Misplaced Kidneys (card). Dr. Hale White: 1. Atrophied Bones of the Arm after Posthemiplegic Rigidity (card); 2. Intestinal Obstruction from Old Pelvic Adhesion (card); 3. Thoracic Aneurysm in a Woman (card). Dr. Turner: Pistol-shot Fracture of Cranium (card). Dr. Hobson: Malignant Disease of Cæcum (card). Mr. Sutton: Diseases of the Ductless Glands in Wild Animals (card). Mr. Swinford Edwards: A Cyst on the Ulnar Nerve (card). Mr. Lane: Specimen of Ununited Fracture (card). Mr. Horsley for Mr. Heath: Recurrent Myxœdematous Tumour (card). Mr. Knowsley Thornton: Cystic Tumour of Spleen (Recent). Dr. Goodhart: Tumour of the Pituitary Body of an Anubis (card). Dr. Sainsbury: Tubercle of Brain (card). Mr. Alban Doran: Broad Ligament-cyst developed above the Fallopian Tube (card).

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be shown by Dr. Cleveland, Dr. Matthews Duncan, Dr. John Williams, Mr. Alban Doran, and others. Dr. Arthur Mitchell: Strong Mental Emotion affecting Pregnant Women as a Cause of Idiocy in the Offspring. Dr. Matheson: Extra-uterine Gestation; Delivery of Living Child *per Vaginam*; Removal of Placenta; Recovery. Epidemiological Society of London, 8 P.M. Dr. Joseph Ewart: The Colonisation of the Sub-Himalayahs and Neilgherries, with Remarks on the Management of European Children in India. A Council Meeting will be held at 7.30 P.M.

THURSDAY.—Ophthalmological Society of the United Kingdom, 8.30 P.M. Living Specimens at 8 P.M. Dr. Stephen Mackenzie: A Case of Extreme Tortuosity of the Retinal Vessels. Mr. Nettleship: 1. Peculiar Changes in the Choroid after Papillitis; 2. A Case of Central Choroiditis. Mr. Adams Frost: 1. Ossification of Choroid causing repeated Attacks of Sympathetic Irritation; 2. Recent Injury with Detachment of Retina and Choroid; 3. Detachment of Retina and Organised Blood-clot after an Old Injury. *Communications, etc.*—Dr. C. E. Fitzgerald: 1. An Instrument for showing the Action of Accommodation; 2. On Acute Spasm of the Accommodation. Messrs. Gunn and Anderson: A Case of Nerve Disease with Ocular Symptoms, including alleged Monocular Diplopia. Mr. Higgens: Remarks on Extraction of Cataract. Mr. A. S. Morton: Case of Hæmorrhage at Region of Macula. Mr. Nettleship: 1. Cases of Recovery from Amaurosis in Infants; 2. Cases of Retro-ocular Neuritis. Mr. Adams Frost: Ciliary Staphyloma following Irido-choroiditis; 2. Sympathetic Ophthalmitis subsequent to Excision.

FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Clutton: A Case of Intestinal Obstruction caused by a Diverticulum successfully Treated. Mr. Christopher Heath: Cases illustrating the Treatment of Fracture of the Patella. Dr. Whipham: Case of Hydrocephalus of Old Standing; Insanity; Death. Mr. Wm. Anderson: Case of Pyelolithotomy. Mr. Charters J. Symonds will show a Case of Rupture of Brachial Plexus.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE CONTAGIOUS DISEASES ACTS.

SIR,—In your article headed the Contagious Diseases Acts, [illegible] a very serious and misleading clerical error, which altogether alters the inference drawn from the figures cited. In paragraph 7, end of line 3, the figures are miscopied from the wrong column of the returns. The figures should be 177.99 instead of 258.8.

In justice you must admit that accuracy is eminently important in any article appearing in your valuable [illegible], wherever [illegible].

I fully agree with you that [illegible] distinction between [illegible] should be made, but [illegible] true syphilitic and pseudo-syphilitic sore. At a future period, if you will open [illegible] Acts. [illegible]

[illegible], M.D.

[illegible]

SIR,—[illegible] process of oiling before tanning.

[illegible]

[illegible]

[illegible]

SIR,—[illegible]

[illegible]

WHEATLEY MEMORIAL FUND.

SIR,—Will you kindly insert in your columns a second list of subscriptions received since the last announcement? In doing so, will you also allow me again to call the attention of the Fellows of the Royal Medical and Chirurgical Society to this Fund, lest the circular issued by the committee of the fund may have not reached several who are desirous of contributing to the Wheatley memorial. Mr. John Cooper Foster, 29, Upper Grosvenor Street, W., is the treasurer, and cheques may be sent to him, or direct to the "Wheatley Memorial Fund," Union Bank of London, Argyll Place, Regent Street, London, W.—I am, dear Sir, etc.,

BERKELEY HILL, Honorary Secretary.

5[illegible], Berners Street, W., April 29th, 1884.

Amount already announced .. .. .. £[illegible]

Omitted from the Previous List.

	£	s.	d.		£	s.	d.
Dr. Begley	5	5	0	Mr. W. H. Fr[illegible]	2	2	0
Dr. Habershon	5	5	0				

Received since the last Announcement.

	£	s.	d.		£	s.	d.
The Pathological Society ..	50	0	0	Mintern Brothers	[illegible]	2	0
The Obstetrical Society ..	25	0	0	Mr. Edward N[illegible] ..	2	2	0
Mr. James Dixon	10	10	0	Mr. Robert W. P[illegible] ..	2	2	0
Mr. Lawson Tait	10	10	0	Dr. Charles D. Phillips ..	2	2	0
Mr. A. E. Durham	5	5	0	Mr. T. Sympson [illegible]	2	2	0
Sir William Gull, Bart. ..	5	5	0	Dr. Reginald Thompson ..	2	2	0
Dr. John Harley	5	5	0	Mr. F. Vacher (Birkenhead)	2	2	0
Dr. Pavy	5	5	0	Mr. G. Wallis (Cambridge)	2	2	0
Dr. Quain	5	5	0	Mr. Joseph Zaehnsdorf ..	2	2	0
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Dr. Eustace Smith	5	5	0	Mr. Hamilton Cartwright ..	1	1	0
Dr. W. J. Smith (Weymouth)	5	5	0	Professor Char[illegible]	1	1	0
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Sir Spencer Wells, Bart. ..	5	5	0	Mr. Andrew Clark	1	1	0
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Dr. C. J. B. Williams ..	5	5	0	Dr. Gairdner (Glasgow) ..	1	1	0
Mr. Marcus Beck	3	[illegible]	0	Mr. Warrington Haward ..	[illegible]	1	0
Dr. Brodie	3	3	0	Mr. H. G. Howse	1	1	0
Dr. Church	3	3	0	Dr. Humby	1	1	0
Mr. Septimus W. Sibley ..	3	3	0	Mr. Howard Marsh	1	1	0
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Dr. Buzzard	2	2	0	Dr. Aitken	1	0	0
Dr. Cheadle	2	2	0	Professor Esmarch	1	0	0
Mr. G. Cowell	2	2	0	Dr. Hannover (Copenhagen)	1	0	0
Mr. Frederick J. Gant ..	2	2	0	Mr. J. B. Scriv[illegible]	0	10	0
Dr. Gee	2	2	0	Dr. John Cand[illegible]	0	5	0
Mr. Rickman Godlee ..	2	2	0				
				Total	[illegible]	11	0

AN APPEAL.

THE following additional sums have been received on behalf of [illegible] the late Dr. Wilson of Yoxford.

	£	s.	d.		£	s.	d.
T. Smith, Esq.	5	0	0	Anonymous	1	0	0
G. Kincaid Pitcairn, M.D. (Littleborough) ..	2	2	0	E. H. [illegible], M.[illegible] ..	0	10	0
A. S. Bostock, Esq. (Chichester)	1	1	0	H. S[illegible], Esq. (Saffron Walden)	[illegible]	[illegible]	0
M. E. Lin[illegible], Esq. (Saxmundham)	1	1	0	J. R. L.	0	10	0
				R. A. O.	0	[illegible]	0
				An East Anglian	0	1	0

AN OLD MEMBER will find all the information which he [illegible] the BRITISH MEDICAL JOURNAL, published [illegible] Saturday in September.

THE FEMALE MEDICAL SCHOOL OF ST. PETERSBURG.

The Russian Government, writes "Stepniak" in the *Times*, fears even young women, and hence the abolition of the Female Medical School of St. Petersburg. The school, founded in 1872, had proved eminently useful. In Russia the supply of medical men is utterly inadequate for the needs of the population. [illegible] their services bring the best return. With rare exceptions, the rural districts are left a prey to blood-letters, bone-setters, quacks, and sorcerers. Women, on the other hand, [illegible] The Female School of Medicine was [illegible]

CHANGE OF COLOUR [illegible]

[illegible]

W. H. D.

SIR,—Allow me to [illegible] W. H. A[illegible] and C[illegible]. I am, yours, etc.

M.R.C.S.

PROPOSED ANNUAL METROPOLITAN MEETING OF THE BRITISH MEDICAL ASSOCIATION.

SIR,—I am highly gratified to see that the proposal for an annual meeting of the British Medical Association, to be held regularly in the metropolis, has been brought before the Council of the Association, on the occasion of their last meeting of April 17th, by Surgeon-Major Evatt. Albeit unacquainted with his letter's exact contents (not yet given to publicity), I am able, nevertheless, to readily divine its more salient points, having enjoyed the advantage of a personal conversation on the subject with that gentleman a short time since, when I intimated my warm approval of the same, and also my resolution of cordially supporting his application when made. It may be fairly pleaded that such an arrangement cannot be too prematurely adopted, and I trust that its obvious advantages will be patent to all members of the Association. Its promoters strongly deprecate any wish to abolish the annual movable meeting as now held, but the adoption of an annual London meeting need not in the least militate against the latter, while the regularity of such a meeting at a fixed *locale* in London, the great centre of the scientific as well as of the political world, will be fraught with unspeakable advantages to the eleven thousand members of the British Medical Association.

To sum up as briefly as possible the benefits and practicability of the proposed scheme, there are numerous buildings in London, especially on its Surrey side, which, for a comparatively moderate outlay, insignificant for the Association, already one of the wealthiest medical bodies in the world, could be acquired and readily converted to the following requirements. A hall for the annual and other meetings of the Association, and dependencies which, properly utilised, might answer the purposes of that, so urgently needed, desideratum, a club of an exclusively medical character. It may be noted under this head that many an abortive scheme for supplying the medical profession with a club, as exclusive, in a professional sense, as those devoted to the army, etc., has been mooted; none have succeeded. Supported by the countenance of so powerful a medical corporation as the British Medical Association, a club exclusively reserved to medical members would become an accomplished fact and permanent institution. A powerful case in illustration of this assertion is found in the Medical Sickness, Annuity, and Life-Assurance Society, which has not only become a living organisation, but is gradually and rapidly progressing in development under the all powerful auspices of the same Association. That objections of a practical nature may be raised against the feasibility of the project is natural, but they will speedily vanish on inspection. A judicious selection of site and building can obviate much needless expenditure, especially if due precautions be taken against flights of architectural fancy, should fresh building be needed, by the adoption of a chaste and simple style befitting an erection devoted to Æsculapius.

Permit me also to offer a further suggestion. A short time since I wrote a paper, not yet published, demonstrating the advantages of an institution begotten by our trans-Atlantic kindred, the Polyclinic or Post-Graduate Medical College, as established in New York and other American cities. Might not the building devoted to the purposes now so warmly advocated be also utilised by extension to facilitate the contemporaneous establishment of a British Polyclinic, an institution which, it may be confidently asserted, will be enthusiastically hailed on its inauguration (and we are happy to add it is actually in embryo) by thousands, certain as it is of taking definitive root and prominent place among the medical educational bodies of the realm, if backed up by the British Medical Association with its eleven thousand active members?

In the interest of our noble calling and its numerous members, I shall esteem myself deeply favoured if you will kindly find room for insertion for my letter in your valuable columns, and beg to remain, sir, your obedient servant,

47, Jamaica Road, S.E. J. BRINDLEY JAMES.

SOCIAL PURITY.

DR. GEO. K. POOLE, Warden of the Norwood White Cross League, Upper Norwood, writes: "In reply to "Hirudo," the best pamphlet I know is Ellice Hopkins's *White Cross Army*, published by Hatchards, Piccadilly, price 2d., or 8s. 4d. a hundred. It touches very fully on the movement for social purity among men. The Bishop of Bedford's speech at Exeter Hall, printed by the Social Purity Alliance, is also excellent. I should be happy to assist "Hirudo" in forming a white cross legion in his parish if he would write to me."

ENGLISH WORK IN EGYPT.

MR. CHARLES COOK writes:—"Dr. Crookshank has been Director-General of the prisons of Egypt since the beginning of the year, and it is only fair to say he is doing all he can to cleanse and purify those dreadful places. It was no uncommon thing to find the water used for drinking purposes kept in the latrine, and a cesspool under the room where the prisoners slept. At Zagazig, in a prison 72 yards square, there were 72 men sleeping; and at Benha there had been an epidemic of typhoid fever. But this is not the worst. Over 1,400 prisoners we found in prisons who were untried, some having been there over five years, or, as the inclosed letter from Mr. Clifford Lloyd states, longer than that. On my return to Cairo, I wrote to the authorities, and to His Highness the Khedive, praying that the cases of these men might be seen into at once, or else that they be discharged, as Dr. Crookshank had informed me that most of them had served the maximum term of their imprisonment if they had been tried and found guilty, but, as he declared, 'very many of them have been falsely accused.' In many cases, no witnesses could be found, and all documentary evidence against others had been lost; yet were these poor creatures kept in chains, with no books to read, and no work to do. I am glad to say that, three days after our petition was sent in, 120 were released, and this was to continue till all were set at liberty."

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BOOKS, ETC., RECEIVED.

Cremation; The Treatment of the Body after Death. By Sir H. Thompson. Third Edition. Together with paper, entitled, Cremation or Burial, by Sir T. Spencer Wells; and the Charge of Sir James Stephens. London: Smith, Elder, and Co. 1884.

In the Watches of Night: Poems. By Mrs. Horace Dobell. London: Remington and Co. 1884.

An Index of Surgery. By C. B. Keetley, F.R.C.S. Second Edition. London: Smith, Elder, and Co. 1884.

The Cinchona Barks Pharmacognostically Considered. By Friedrich A. Fluckiger, Ph.D. Translated from the original text, with some additional notes, by F. B. Power, Ph.D. London: J. and A. Churchill. 1884.

A Medical Guide to Health-Resorts of Northern England. By R. Ellis, F.R.C.S. London: W. Scott. Newcastle-on-Tyne: W. E. Franklin. 1884.

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TWO LECTURES
ON
SCLEROSIS OF THE SPINAL CORD.

By JULIUS ALTHAUS, M.D., M.R.C.P.,
Senior Physician to the Hospital for Epilepsy and Paralysis, Regent's Park.

LECTURE I.

EVOLUTION OF STRANDS; MORBID ANATOMY; PATHOGENESIS.

ALTHOUGH the term sclerosis, or induration, is now-a-days indiscriminately applied to a variety of diseases of the spinal cord, both primary and secondary, it should be understood that we do not always find a very pronounced hardening of the affected parts. In some few instances, indeed, where the disease is comparatively fresh, the affected structures may even appear softened; yet where the morbid process has been going on for a considerable time (and such cases constitute the immense majority of those which are submitted to our inspection) the parts are decidedly tougher and harder than the normal ones, and may therefore be properly called sclerosed.

By sclerosis of the spinal cord we mean an irritant morbid process which invades certain well-defined, and evolutionally, anatomically, and physiologically distinct areas or systems of that organ; and which leads, in course of time, to disintegration and wasting of the nerve-tubes, often to destruction of the axis-cylinders, and always to overgrowth of intertubular connective tissue. The best known of these affections is one with which we have long been familiar as tabes dorsalis, more recent synonyms being progressive locomotor ataxy (Duchenne), posterior leuco-myelitis (Vulpian), and scelerosis of the posterior columns (Erb). The name locomotor ataxy does not appear to be happily chosen, as the ataxy of gait which constitutes the most prominent symptom of the fully developed malady is in many cases absent for a number of years; while the terms proposed by Vulpian and Erb refer only to the pathological anatomy of the disease. The old Hippocratic term "tabes," therefore appears to be the best, and is now again gradually displacing the others; while the adjective "spinalis" might be advantageously substituted for "dorsalis," which latter appears to refer to one portion of the spinal cord only.

An analogous affection of the lateral columns of the spinal cord has only recently been introduced into our system of nosology by Erb, who has called it spastic spinal paralysis, while Charcot has subsequently termed it spasmodic tabes dorsalis. Synonyms are primary lateral sclerosis (Berger), and sclerosis of the pyramidal strands (Dreschfeld). The existence of this affection as a separate pathological entity, however, is still very doubtful, for there is as yet not a single case on record in which primary sclerosis existed in the lateral columns of the cord without being complicated with disease of other important portions of that organ; and there is every reason to believe that the affection which is now generally designated as lateral sclerosis, will eventually have to be split up into a number of different maladies which, although having some points in common, yet diverge most widely in others. This point will be fully discussed later on.

No doubt exists about the occurrence of a combined affection of the white lateral columns and the grey anterior cornua, which was first distinguished by Charcot, and termed by him amyotrophic lateral sclerosis; the chief symptoms being motor paresis, and muscular rigidity followed by atrophy of the muscular fibre.

Another primary affection of this kind is multiple, insular, or disseminated sclerosis, which is also called sclerosis in patches, or cerebro-spinal sclerosis, and which invades chiefly the antero-lateral columns of the cord, but likewise the medulla oblongata, pons Varolii, the central white substance of the cerebellum and of the cerebral hemispheres. In this disease the morbid process is, as a rule, not so severe as in tabes; for while in the latter the nerve-tube eventually perishes altogether, that important portion of it which is known as the axis-cylinder appears to be habitually spared in insular sclerosis.

All forms of primary sclerosis are symmetrical, either from the beginning, or at least in the later stages of the disease.

Secondary sclerosis, on the other hand, is mostly unilateral, and appears as the consequence of some other primary disease, such as hæmorrhage into the brain, softening of the cerebral substance from embolism or thrombosis of blood-vessels, or of hæmorrhage into the substance of the cord, and acute myelitis. When it occurs after destructive lesions of the motor area of the brain, it affects only that portion of the cord which corresponds physiologically to the diseased hemisphere, that is, the crossed pyramidal column.

Clinical observation, as well as morbid anatomy, seem to point to the conclusion that all these several diseases are closely allied, and that the differences in the symptoms which they present during life, are in the closest possible connection with the different physiological functions of the several portions of the cord which may be affected. It is a fact which stands out more clearly as our knowledge advances, that fibres which have certain functions in common are liable to become diseased together, at exceedingly different levels of the cord, while others in their immediate neighbourhood which have different functions are spared. Moreover, such fibres are liable to be affected symmetrically in the two lateral halves of the organ, the degree of the morbid change being often exactly parallel in both sides. The differences in the physiological function are naturally correlated to evolutional, anatomical, and possibly also to chemical differences in the several parts. Indeed, the cord consists, like the brain, of a number of different areas or systems, each of which, although histologically identical with others, yet follows a special type of evolution in the fœtus, has different connections with more peripheral and more central parts; may possibly be chemically quite distinct from its surroundings; and lastly, possesses peculiar pathological predispositions or proclivities, which are not shared by contiguous parts, however closely connected with it in anatomical position, and however similar in histological elements.

An apt illustration of these peculiarities is afforded by the manner in which different poisons act on different portions of the cord. Bread contaminated with ergot of rye will, when habitually taken for some time, cause well marked disease of the posterior columns; while bread containing an admixture of the Lathyrus cicera, which is eaten by the lower classes in certain parts of Italy, will lead to equally striking symptoms of disease of the lateral columns. Strychnia again has a special effect in exalting the excitability of the grey centre of the cord, and bromide of potassium in diminishing it. Finally, lead will, when absorbed for some time consecutively, cause granular disintegration of the large ganglionic cells of the grey anterior cornua, and thus lead to a peculiar form of muscular atrophy.

In order, therefore, to render the more minute pathology of the diseases under consideration thoroughly intelligible, it will be necessary for me to enter first into some explanation of the manner in which the highly complex structure of the spinal cord is built up and arranged. Histology and experimental physiology have done very little for the elucidation of this subject, while the study of evolution on the one hand, and of the finer pathological anatomy of the degenerations to which the organ is liable on the other hand, have been of the greatest service for unravelling the intimate structure of the cord. Either of these methods of inquiry may be used to control the results given by the other, thus affording a greater degree of reliability than each one singly could do.

With regard to evolution, Flechsig has shown that the central nerve-tube is at first laid down simply as a naked axis-cylinder, and that this latter is only subsequently furnished with a sheath of myeline. The latter is, therefore, a secondary formation, and is, in the several portions of the cord, developed at totally different periods of fœtal life, just as well as the axis-cylinder itself. This mode of evolution follows a definite law with regard to the period of embryonic existence when it takes place; and it may thus be understood why tracts of fibres, which are, anatomically speaking, at a considerable distance from each other, are far more nearly allied than others which may be much nearer neighbours.

The succession in which the evolution of the different parts of the cord takes place is as follows:

1. The fundamental strands of the anterior columns (A C, Fig. 1).
2. The postero-external or Burdach's columns (B, Fig. 1).
3. The anterior mixed zone of the lateral columns (A L C, Fig. 1).

These three strands become developed at the earliest period of fœtal life; the naked axis-cylinders being laid down at the end of the fourth week, while the myeline sheaths are fully formed at the end of the fifth month.

4. The lateral terminal layer of grey matter. No definite views have as yet been advanced concerning the period of evolution of this portion of the cord.

5. The postero-internal or Goll's columns ([illegible]) are laid down at the end of the second month, and the formation of their myeline sheaths appear to be finished at the end of the sixth month, giving again a period of four months for the entire process.

6. The direct cerebellar strands ([illegible], Fig. 2), which establish a connection between the grey matter of the cord and cerebellar centres, are

first observed at the commencement of the third month, and finished at the beginning of the seventh.

7. The crossed pyramidal strands (CP) are the latest of all, being laid down about the middle of the fifth month, while their myeline sheath is finished at the end of the ninth. They establish a connection between the grey matter of the cord, on the one hand, and the central ganglia and convolutions of the hemispheres, on the other hand.

From the foregoing description, it appears that the different conducting paths in the spinal cord are laid down and formed in an absolutely systematic manner; and that, at the same period of fœtal life, only one, or several allied systems are formed. Those which are most important for the life of the fœtus, and which are reflectory in nature, are early developed, their faculty of incessant function being an indispensable condition for viability altogether. On the other hand, those strands which place the spinal cord under the influence of the psychomotor centres, or the will, become evolved at a later period. These latter are more abundantly developed in man than in the lower animals, and do not become formed at all in congenital absence of the brain.

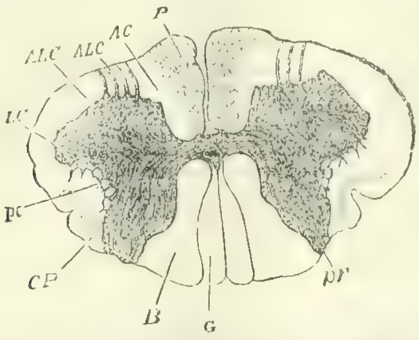

FIG. 1.—Section of the spinal cord from the region of the fifth cervical nerve, from a fœtus 12 centimètres long (after Flechsig). P = anterior pyramidal column; AC = fundamental tracts of the anterior columns; ALC = anterior mixed lateral column; PC processus reticulares; CP = crossed pyramidal columns; B = Burdach's columns; G = Goll's columns.

Anomalies of evolution have unquestionably an influence in the causation of diseases which occur later in life, and may eventually be found to be the chief material base of what is now called the "neurotic constitution." Congenital fissures or cavities may become the starting-point of glioma, glio-sarcoma, and chronic interstitial degeneration. Anomalies in the distribution of the white and grey matter are not rarely met with in persons who have died of certain diseases of the nervous system, such as general paralysis of the insane. Kahler and Pick found, in a person who had died of tabes, abnormal smallness and irregular shape of the central grey matter, and extreme smallness of the posterior columns, which was not wholly due to atrophy. As there are "born poets" and "born criminals," so there are born sclerosers. The gradual formation of the myeline sheath of the central nerve-tube may, in some cases, be carried out in a deficient manner; and such a condition may, later on, lead to actual disease of imperfectly formed or protected parts. Where undue claims are made upon a small or badly built medulla oblongata or spinal cord, there will be greater tendency to the occurrence of asthma, diabetes, tabes, and paralysis, than there would be in cases where these organs have been more perfectly developed.

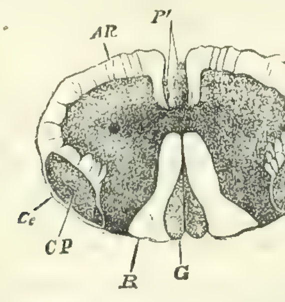

FIG. 2.—Section of the spinal cord from the middle portion of the cervical enlargement, of a fœtus 35 centimètres long (after Flechsig). P¹ = anterior pyramidal strand; AR = anterior roots; C = direct cerebellar columns; CP = crossed pyramidal columns; B = Burdach's columns; C = Goll's columns. Magnifying power, 6.4 lin.

In tabes spinalis, more or less striking morbid changes are discovered after death, not only in the posterior columns, but also in the spinal pia mater; the posterior nerve-roots; some parts of the central grey matter, more especially Clarke's vesicular columns; the direct cerebellar strand of the lateral column; the sympathetic system of nerves; almost all cranial nerves; and the terminations of the spinal nerves in the skin, the joints, and the muscles. The question therefore arises, which of these numerous alterations is the primary and essential one, and what is the exact pathological nature of the change?

Posterior spinal lepto-meningitis is an habitual concomitant of tabes, and Arndt, Waldmann, and others consider it the primary event, and the actual cause of the wasting of the posterior columns, this being, according to them, a secondary degeneration. This opinion, however, is contradicted by several well observed cases of tabes in its initial stage, in which no meningitis existed (Strümpell, Tuczek). As tabes has in general no tendency to shorten life, cases in the first stage of the disease come only rarely on the *post mortem* table, and then mostly in consequence of complications, such as typhoid fever, etc. It may now be looked upon as settled, that meningitis is not the primary event, but only occurs in the later stages, when there are not simply slight changes in the structure of the central nerve-tubes, but when gross alterations in the size and consistency of the posterior columns have already become perceptible to the naked eye. The thickening seen in the pia mater is most likely owing to mechanical conditions, as it helps to fill up the vacuum which is produced by the shrinking of the posterior columns. The statement that the peculiar lightning-pains of tabes are caused by inflammation of the pia mater is certainly wrong, as these have been observed in certain cases where, eventually, no alteration of the membrane was discovered.

Another view which has been put forward is, that atrophy of the posterior nerve-roots is the initial lesion in tabes, and that the disease creeps from them upwards into the substance of the cord itself, like an ascending neuritis. It is quite true that, at a somewhat advanced stage of the malady, the posterior roots are habitually found wasted; but the roots never suffer to the exclusion of the columns; and, in early cases, the roots have been found healthy when there was already unmistakable disease in the columns. This latter fact deals the death-blow to the posterior root-theory.

Déjerine, to whom we owe some useful observations on the atrophy of peripheral nerves which is seen sometimes to accompany tabes, has recently started the extraordinary notion that tabes is really a peripheral affection, and should be called nervo-tabes péripherique. This he concludes from two cases in which he found signs of old neuritis, while the posterior columns were healthy. This simply shows that the cases were not such of tabes, but of neuritis. Yet, such is the feverish desire for novelty nowadays, that Déjerine's most immature idea has already been hailed in the medical journals as a wonderful discovery, and one likely to lead to a system of treatment widely different from that based on the supposed lesion of the cord.

Another original theory is that recently brought forward by Page, who sees the starting-point of this formidable malady in a corn! Here we seem to have arrived at the infinitely little in order to account for a great deal. The prevention of tabes would, according to this theory, rest with the chiropodists. According to Page, the disease may begin with the painful pressure of corns, and the protracted sensory disturbance may give rise to ultimate structural change, first in the peripheral nerves, and then travelling upwards to the cord. It appears to us that the discomfort which the majority of Europeans habitually experience from corns is bad enough, without crediting these little pests with such wickedness as eventually to conduce to tabes. That corns, especially in certain positions, may be often the beginning of considerable trophic changes in a limb, seems probable enough. But, in the case which forms the basis of Page's theory, an important link is wanting, inasmuch as it has not been shown that the patient was free from spinal disease at the time when the corn commenced to give trouble. The sequence of events is much more likely to be as follows: tabes, from whatever cause, is the primary change; this induces liability to peripheral nerve-disturbance, so that certain exciting causes, such as long-continued pressure, violence, or injury, are more likely to lead to mischief than in healthy persons, whose nerve-power is not defective. In this respect, the recent observations of Pitres and Vaillard are highly suggestive, as it has been shown that there is tendency to peripheral neuritis, not only in tabic subjects, but also after cerebral hæmorrhage, small-pox, alcoholism, and other distempers giving rise to a state of low vitality.

It cannot be a matter of surprise that that universal scapegoat, the sympathetic system of nerves, should have been accused of being at the bottom of the complaint. Most of the older observations on disease of the sympathetic ganglia and fibres in tabes must be received with a considerable degree of caution; but the recent researches of Raymond and Arthaud, which were made in Vulpian's laboratory, render it evident that, at least occasionally, atrophy of the ganglionic cells and fatty degeneration of the nuclei of Remak's fibres, together with corresponding changes in the blood-vessels and connective tissue, do occur. But to conclude from this that the sympathetic is primarily affected, and that all other alterations spring from that source, constitutes a *salto mortale* which we at least consider it somewhat too hazardous to undertake. We will not here allude to the fact that the more intimate structure of the sympathetic is by no means invariable in health, but that great variations occur habitually in the size and pigmentation of the ganglionic cells, and in the proportion of nerve-tubes furnished with a medullary sheath, and Remak's fibres. Suffice it to say that, even supposing that there were a constant change in the sympathetic, it would even then be impossible to explain why this should lead, as a rule, only to affection of the posterior, and not also of the antero-lateral columns, and other portions of the spinal cord.

When Duchenne was under the impression that he had discovered a new disease, "locomotor ataxy," he considered the cerebellum to be the most probable seat of the malady; and more recently Neftel, of New York, has asserted that tabes is really an affection of the brain. But what does pathology teach us? We know that the morbid change in tabes affects the cord from top to bottom, but that, in the vast majority of cases, it stops short in the medulla oblongata. Indeed, changes in the cortex and in other portions of the brain, have only been found where towards the end tabes had become complicated with epilepsy, general paralysis of the insane, and similar conditions. It is true that we meet occasionally, in the initial stage of tabes, with such symptoms as aphasia, apoplexy, hemiplegia, mental derangement, etc.; but all such symptoms are fleeting and evanescent, and can be differently explained. The theory of the cerebral origin of the disease, therefore, seems to rest only on certain somewhat imperfectly understood clinical observations, while the pathological evidence of innumerable well observed cases is directly antagonistic to it.

The process of exclusion, as well as of direct observation, teaches us that tabes is primarily a disease of the spinal cord, and more especially of its posterior columns.

What portion of the posterior columns is first affected? In cases of long standing, their entire transverse section, including both Burdach's and Goll's strands, is sclerosed, while in the earlier stages of the disease the process appears to be more strictly localised in certain areas. Pierret, who was the first to examine this point more minutely, concluded from his observations that the disease commenced with two symmetrical islands of degeneration in the posterior root-zones, or Burdach's columns, and that Goll's strands only became subsequently and secondarily affected.

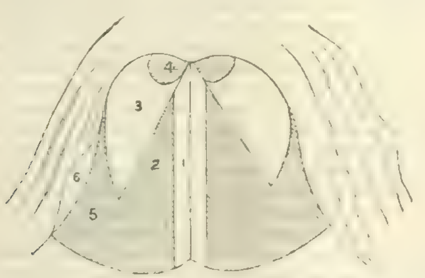

Fig. 2. Schematic diagram of the different areas of degeneration in the posterior columns (after Strumpell). 1. Small portion of diseased tissue at either side of the posterior commissure. 2. Bulk of Goll's columns. 3. Lateral area of Burdach's columns. 4. Small round field near apex of Goll's columns. 5. Postero-external fold. 6. Small strand at inner side of posterior roots.

This view was endorsed by Charcot and Vulpian, and was for some time unreservedly accepted by the profession; but more recent researches by German anatomists, more especially by Strümpell of Leipzig, have shown that such is not by any means invariably the case, but that, at least in a certain number of instances, the most internal portion of Goll's columns becomes sclerosed in the very commencement of the disease, while the postero-external field of Burdach's columns remains normal for a long time. Strümpell's researches appear to us to constitute a decided step in advance in our knowledge of the finer anatomy of the disease, and show us how much still remains to be done in this department. Want of time prevents us from entering fully into this matter, as we have yet to discuss the important question, in which tissue the malady actually begins. Is the fault primarily located in the blood-vessels, in the intertubular connective tissue, or in the nerve-tubes themselves?

Ordoñez, who has described a lesion of the arterioles of the posterior columns, has broached the view that certain changes in the coats of these vessels must interfere with the exchange of nutritive material between them and the tissues, and thus lead to atrophy and sclerosis of the nervous structures. This is, however, controverted by the circumstance that the vascular lesions are variable, and may be absent, while the changes in the nerve-tubes are constant. Moreover, the phenomena of Wallerian degeneration show that alterations in the blood-vessels are rather the consequence than the cause of the changes which take place in the nervous structures.

Interstitial degeneration of the neuroglia is believed by Adamkiewicz and some other observers, to be the essential lesion of tabes; but if we were to accept this theory, we should find it impossible to understand why a disease which primarily affected the neuroglia, should be so strictly localised in certain systems of the cord as tabes is known to be, while the anatomical distribution of the connective tissue is exactly the same in all the different strands of the cord.

It cannot then be doubted any longer that the primary change which occurs in tabes, takes place in the central nerve-tube, and more especially in that most important constituent of it, the axis-cylinder. Irritation of this structure gives rise to those singular attacks of lightning-pains, which form the most striking symptoms of the first stage of the disease. Repeated attacks of irritation lead to imperfect nutrition, and finally to atrophy. The dead axis-cylinder then acts as a foreign body, and causes further irritation in the neighbourhood. The nuclei of the nerve-fibres swell and multiply; the protoplasma surrounding the nuclei begins to proliferate; the myeline sheath becomes segmented, and ultimately reduced to small drops and granulations; and the intertubular connective tissue and the blood-vessels now begin to participate in the disease, which is thus shown to be one of parenchymatous degeneration or atrophy, rather than one of inflammation or interstitial degeneration.

An affection analogous to tabes, but affecting the lateral instead of the posterior columns, has been described as spastic spinal paralysis, or spasmodic tabes dorsalis, or primary lateral sclerosis, and has, during the last few years, excited a good deal of discussion. I am bound to say that it has as yet eluded the grasp of the pathologist.[1] Dr. Ross, of Manchester, in the second edition of his *Treatise on Diseases of the Nervous System*, credits his colleagues, Professors Morgan and Dreschfeld of that city, with the honour of having been the first to prove by dissection the connection of the symptoms of spastic paralysis with lateral sclerosis, in a primary and uncomplicated case of the disease. The account, however, which is given by those observers in the *Transactions of the International Medical Congress*, and more particularly in the *Journal of Anatomy*, shows quite clearly that their case was one of the amyotrophic variety of the disease, inasmuch as the giant-cells of the grey anterior cornua were likewise affected, there being simple atrophy, pigmentary atrophy, and occasionally complete absence of whole groups of these cells. All the other cases which have, until now, been recorded, are equally unsatisfactory, for one reason or another.

Leyden has long ago expressed his disbelief in Erb's spastic paralysis as a distinct disease, and has, in cases which showed the symptoms described by Erb during life, generally found myelitis of the dorsal portion of the cord after death.

Apart, however, from this, the phenomena of spastic paralysis may be owing, more particularly in children, to disease or deficiency in the motor area of the cortex (porencephaly), and it is, in such cases, sometimes not easy to decide whether the case is one of spinal or cerebral disease. Finally, there may be all the symptoms of spastic paralysis present in young girls, and lead to the diagnosis of lateral sclerosis, when sudden or gradual recovery, with or without treatment, shows the case to have been of a functional, or, as is then generally said, of a hysterical character.

There appears to be, therefore, no primary symmetrical sclerosis of the lateral columns of the spinal cord, analogous to the posterior sclerosis of tabes. Nevertheless, we shall be justified for the present in retaining the clinical expression, spastic paralysis, and in keeping in mind its frequent, if not invariable, connection with either structural disease or functional irritation of the lateral columns. An exclusive affection of these latter may possibly exist during some period of the malady, but will rarely be discovered *post mortem*, which corresponds clinically with the fact that the symptoms of motor irritation and paralysis are, in the later stages of the disease, almost invariably complicated with sensory and trophic disturbances, such as anæsthesia, paralysis of the bladder, bed-sores, muscular atrophy, etc.

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[1] Since this lecture was delivered, an uncomplicated case of this disease has been described by Minkowski.

REMARKS

ON A

CASE OF PHLEGMONOUS GASTRITIS.[1]

By THOMAS WHIPHAM, M.B.,
Physician to and Lecturer on Pathology at St. George's Hospital.

Martha M., aged 49, was admitted into St. George's Hospital under my care on July 4th, 1883. It appeared from the history that she had been for several years subject to bilious attacks, in which severe vomiting with occasional diarrhœa were prominent symptoms. She had lost all her teeth, and was accustomed to drink large quantities of warm liquids. The diarrhœa had been very troublesome since the beginning of 1883; and on April 24th of that year she was an in-patient under Dr. Wadham, in a state of great prostration, after prolonged diarrhœa. There was on this occasion no vomiting. With rest and light diet (fish, etc.), the symptoms improved, and she was discharged relieved in a fortnight.

About a month after she had left the hospital, the diarrhœa returned; and on July 1st an old femoral hernia came down, causing her much abdominal pain, more especially in the epigastrium. When in the recumbent position, the hernia disappeared; but this was at first followed by profuse and continuous vomiting, at first of dark matter, then of thin bilious fluid. The bowels were freely open.

She was admitted into hospital at the request of Mr. Chippendale, of Upper Phillimore Gardens, who had been called in to attend her. At first, she was placed in a surgical ward, as it was supposed that the symptoms might depend upon the hernia. No rupture being discovered, she was at once transferred to me.

The patient was badly nourished and slightly jaundiced. She had lost all her teeth. She complained of abdominal pain, referred chiefly to the epigastrium. No tumour was detected. The abdominal walls were flaccid. The vomiting was almost continuous; the vomited matter was small in quantity, fluid, opaque, green, and strongly acid.

Small doses of acetate of morphia with sulphate of atropia were given to relieve the pain; while at the same time, with a view of maintaining the patient's strength, nutrient enemata containing brandy were administered. The injections were retained fairly well; but the vomiting did not entirely cease, nor did the character of the vomited matter alter.

On July 6th, the patient sank into a comatose state; the temperature gradually rose from normal to 104° Fahr., with the symptoms of peritonitis; and she died soon after midnight.

Necropsy, twelve hours after death. *General Appearances.* Height, 5 feet; black hair; no teeth: jaw atrophied. *Lungs.* Posterior portions of both congested. *Heart.* Weight, 12 oz. The mitral valve was thickened and contracted; only one finger could be passed between its flaps. The remaining valves and orifices were natural. *Abdomen.* The peritoneal cavity contained a small quantity of purulent fluid. *Stomach.* The contents were thin greenish yellow fluid. The mucous surface at the cardiac third of the organ was very red, felt thick, and infiltrated with fluid. On transverse section, it was a quarter of an inch thick. The remaining two-thirds of the stomach, so far as the inner surface was concerned, presented no abnormal appearance; but, on transverse section, the pyloric end was found infiltrated with a purulent effusion between the muscular and mucous coats. On the posterior surface of the organ, below the lesser curvature, there was an area about one inch wide by three inches long, which was of a distinctly yellow colour; and, at this place, section showed an abundance of purulent fluid between the muscular and serous coats. The remainder of the alimentary canal was natural. *Liver.* Weighed 3 lbs. 12 oz.; its surface was smooth. The tissue was pale and fatty. *Spleen.* Healthy; weight, 7 oz. *Kidneys.* Weighed 8 oz. The capsules were adherent; the surfaces were granular; the cortical parts diminished, and mottled slightly with dark coloured spots. Microscopic examination confirmed the naked-eye appearances of the walls of the stomach. There was an extensive infiltration of the submucous tissue, chiefly by pus-cells. The pus was most abundant around the secreting glands, the cells of which were somewhat swollen, and their contents opaque and granular. At that part of the posterior surface of the organ where the yellow discoloration of the external surface was found, as described above, all the coats of the stomach were infiltrated with pus.

After the patient's death, the friends brought out a box labelled "podophyllin pills." They stated that she had taken one or two of them on the night before admission; but they were unable to say whether or not she was in the habit of taking them.

Remarks.—Cases of acute inflammation of the walls of the stomach have received but little attention in the ordinary English text-books. In foreign works, however, more attention has been paid to this affection. Raynaud, in the *Bulletins de la Société Anatomique*, 1860; and Leube, in Ziemssen's *Cyclopædia*, vol. vii, devotes a considerable space to the disease—gastritis phlegmonosa. According to the latter, it occurs in two forms: 1. circumscribed suppuration; 2. diffuse purulent infiltration of the parietes, extending around and between the gastric glands. In the circumscribed form, the mucous as well as the serous layers are usually intact, or at most only erythematous. "The abscesses of the stomach are sometimes single, at other times multiple." "Cases of diffuse purulent infiltration of the parietes have been observed less frequently, and less exactly." In this latter, the condition of the mucous layer varies greatly in the different cases examined; it is sometimes unchanged, at other times infiltrated with pus or serum. Occasionally the muscular layer may be destroyed by the purulent infiltration.

The serous layer may be also unaffected, according to the seat and extent of the phlegmonous inflammation. In other cases, it may take on inflammation, accompanied by the accumulation of dirty grey thick masses of exudation upon the surface of the stomach. In these cases, the subserous layer may be infiltrated with serum or pus.

Of thirty-one cases collected by Leube, twenty-six occurred in males and five in females (Ziemssen's *Cyclopæd.*, vol. vii, p. 157.) Bamberger (*Handbuch der Speciel. Pathol. und Therapie: Krankheiten des Chylopöetisch. Syst.*) devotes but a single short paragraph to this affection of the stomach; his description of the morbid appearances agrees with that of Leube.

Etiology.—It appears, from the records of the cases which have been observed, that the cause is unknown. According to Leube: "In a number of cases, the origin of the affection has been attributed to excessive indulgence in alcohol; in a few, to some wound occurring in the region of the stomach; in others, again, to some error of diet." An obvious objection occurs at once to such explanations of the cause of phlegmonous gastritis—viz., that in countries such as England, to say nothing of other nations, where drinking is carried on to so great excess, and in which errors in diet are an equally prevalent fault, instances of this disease are of rare occurrence. I purposely omit those cases in which inflammation of the walls of the stomach has followed acute diseases, such as typhoid fever, puerperal fever, etc. It is within the knowledge of all medical practitioners that, in many persons, certain articles of diet exercise a deleterious effect—*e.g.*, in some, lobster or other shell-fish invariably produce an attack of urticaria. In my own experience, a few strawberries always have this effect in a boy about ten years of age. Podophyllin is differently tolerated by different individuals. In some, its action is most beneficial; in others, it has the reverse effect. In a patient of my own, a quarter of a grain is sufficient to render her so irritable that, as she expressed it on one occasion on which I prescribed it, she was "unable to sit still all day;" while the idiosyncrasy which renders many persons intolerant even of a few grains of potassium iodide, is too well recognised to require comment.

It may be that, in certain persons, an attack of phlegmonous gastritis may result from the ingestion of articles of diet usually considered wholesome, or from the administration of drugs in ordinary use; hitherto, however, its occurrence under any circumstances is a rare event.

We have no evidence that the patient whose case forms the subject of the present communication had ever taken podophyllin before, and with such deficient information no conclusion can be drawn in this case, one way or the other.

Leube states that, "as regards age, those who died of gastritis phlegmonosa were, almost without exception, in middle life." The age (49) of the patient in the present instance is a case in point.

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[1] Read before the Medical Society of London.

Symptomatology.—To quote Leube again, the cases have been too seldom observed to enable an accurate description of the disease to be given, and in this he is in accordance with Raynaud.

Bamberger (*loc. cit.*) states that a diagnosis of the disease is, from want of observation, impossible, the main difficulty in diagnosis lying in the fact that the symptoms of the original malady are always masked by the concomitant peritonitis.

It would appear that the duration of the disease may vary from three to eighteen days, the average being nine days (Leube). The leading symptoms in the cases recorded are that, after symptoms of gastro-intestinal derangement have existed for some days, the patient is attacked with severe abdominal pain, chiefly in the region of the stomach, high fever, diarrhœa, and finally irregularity of the pulse, delirium, great prostration, and death. The rapid course of the inflammation of the stomach and to the peritonitis to which it gives rise is such as to render all treatment futile.

Of the recorded cases, I have selected one or two in which the notes are given in some detail; subjoined is an epitome of them.

1. Dittrich's case (abridged from Ziemssen's *Cyclopædia*, vol. vii, p. 160). A tanner, entirely convalescent for a fortnight from pleurisy, felt quite well on October 20th, 1866, dined with good appetite, and spent the day at work as usual. On returning home on the same evening, he experienced severe chills, alternating with fever, and accompanied by pain in the region of the stomach, heart, and left thorax, so that he could not sleep that night. Next morning, there was repeated vomiting of bilious matter, while the former symptoms continued. In the evening, the patient had the aspect of a person seriously ill, with increased temperature, rapid pulse (112). The abdomen was neither distended nor painful; he complained of nausea and eructation; there was occasional vomiting. One-twelfth of a grain of morphia was ordered to be taken four times during the night. The vomiting ceased next day; but, on October 24th, the patient was much worse in every way, *i.e.*, higher temperature, flushed face, occasional delirium, rapid and soft pulse, short and laborious respiration. Early on the following morning, collapse supervened, and, in spite of stimulants, the case terminated fatally on the morning of the 25th. At the necropsy, sero-purulent inflammation of the submucous layer of the stomach was found, also peritonitis and pleurisy; the two last being probably due to extension of the inflammation of the stomach.

2. Glaix (*Berliner Klinische Wochenschrift*, 1879, No. 16, 565-8, epitome in *London Medical Record*, 1879, p. 303) records a case of a workman, aged 52, with rigors and violent sickness, which lasted twenty-four hours. The man was of intemperate habits. When first seen by Glaix, the patient's abdomen was flat and hard, and very tender to pressure in the ventricular and ileo-cæcal regions; the spleen and liver were much enlarged; he had lost much flesh. The temperature was 104.5°; pulse, 136; respirations, 36. The treatment consisted of quinine internally, ice to the head, and galvanism applied to the neck once in two hours. On the following morning, the man was very restless; his extremities were cold, and cyanotic. Pulse soft, 130; temperature, 102°; respirations, 24; urine very scanty. The bowels acted several times spontaneously. A hypodermic injection of Fowler's solution and pure alcohol was made, after which the pulse rose; but he became again collapsed, and died next morning.

At the *post mortem* examination, the peritoneal cavity contained muddy stringy fluid mixed with shreds of mucous membrane. The blood-vessels of the peritoneum were much injected; the liver was enlarged and fatty; the spleen was of three or four times its natural size. The stomach was enlarged, and contained a few ounces of yellowish stringy fluid; its walls were abnormally thick and soft, and fluctuating to the touch. On section of them, a whitish stringy liquid mixed with pus trickled from the submucous cellular tissue. The walls of the stomach were infiltrated with this fluid; the mucous membrane was pale, save in some places, where it was hyperæmic and ecchymosed. The case was considered to be one of idiopathic phlegmonous gastritis and general peritonitis. Glaix states that he has observed a second case of this disease, which, however, was not verified by *post mortem* examination, as the patient recovered. The etiology of this case was clear, the patient having been imprudent in eating. This was followed at once by symptoms of inflammation of the stomach. Pus was vomited, whereupon the temperature sank, facts which lead to the supposition that a submucous abscess had burst.

3. In the *Bulletins de la Société Anatomique de Paris*, 1861, p. 66, M. Raynaud has an article on this subject, and gives the following cases, the first recorded by Cornil.

A man, 40 years of age, of strong constitution, but addicted to drink, was admitted into the Charité Hospital on May 29th, 1860. He had suffered no external injury; he had been ailing for three months but had only given up work for fifteen days. On admission, he was delirious; convulsive movements of the body existed; his face was pale, without expression; his lips were red, his tongue dry; his pupils dilated and inactive. Vomiting, which had been a prominent symptom for two days previously, had given place to profuse diarrhœa. The pulse was very small and irregular; respiration slow; the belly, distended and hard, did not appear tender. The patient died on the day of his admission, without treatment.

The *post mortem* examination revealed extensive peritonitis. The stomach was adherent to the omentum, its walls were softened and thickened with an infiltration of plastic exudation and pus.

In this case, the mucous membrane was slightly injected, but not softened; the submucous tissue was much increased in thickness, and infiltrated with colourless fluid and pus-cells. In short, the submucous tissue was in a condition similar to that of the subcutaneous areolar tissue in diffuse phlegmonous erysipelas.

This case during life appears to have been mistaken for meningitis.

The second case was that of a carter, aged 44. The patient was of a bilious temperament, strong constitution, but enfeebled by hard work and insufficient food. He had spat blood several times, ten years ago, and again a month or six weeks previously to his admission into hospital. He was short of breath, had cough, and sweated occasionally at night, but presented few physical signs of pulmonary disease. The pulse was very slow. Fifteen days later he was attacked with diarrhœa, accompanied by tenesmus and bloody stools. The left iliac fossa was tender to pressure; there was nausea, but no vomiting; the tongued was red and glazed. The diarrhœa had ceased on admission, and for several days the bowels did not act. He was kept on light diet, was free from abdominal pain, and was allowed to walk in the garden. He was, in fact, considered to have recovered, and, on the seventh day after his admission, it was proposed to discharge him. However, he then complained of a feeling of uneasiness, loss of appetite, and nausea. Vomiting then set in with abdominal pain, and, on the ninth day after admission, the belly was tender and somewhat distended, his pulse small, 120. Leeches and fomentations were applied to the belly. These symptoms having become more urgent, leeches were again applied to the abdomen, and, on the twelfth day following his admission, diarrhœa set in, the stools being bloody. Ice was applied externally, and opium was administered by the mouth. Next day the patient became delirious, with a dry tongue and weak pulse. The patient gradually became weaker, the abdomen more distended, and he died on May 29th, having been admitted on May 15th, 1860.

At the necropsy, extensive peritonitis was found. The walls of the stomach were thickened; the mucous membrane was thickened but not softened. Towards the larger curvature was a bright red patch, apparently the result of inflammation. Pus was found between the mucous and muscular coats, or between the latter and the peritoneal covering.

Raynaud's article, from which I have extracted the preceding cases, is the most complete of the earlier accounts of phlegmonous gastritis. In it he refers to records of such cases as far back as the year 1620, by Varandeus (*Tractatus de Morbis Ventriculi*), and again to a Dutch physician, named Henon (*De Morbis Ventriculi*, 1658), to Petri Borelli in 1656, and to the *Sepulchratum* of Bonetus. Most of the descriptions, however, furnished by these authors, and by writers of subsequent periods, are those of circumscribed abscess of the stomach, rather than of diffuse phlegmonous inflammation of its walls.

Dr. Habershon, in his *Pathological and Practical Observations on Diseases of the Alimentary Canal*, relates the case of a woman, aged 40, who was admitted into Guy's Hospital on May 2nd, 1847, who had for a fortnight suffered from pain in the loins, and subsequently in the stomach and chest. She suffered also from anorexia, incessant vomiting of black bitter fluid, and intense thirst. Death was preceded by coma.

At the necropsy, peritonitis was found. At the pyloric end of the great curvature was a hard mass measuring four inches and a half by three inches and a half. On the inner surface corresponding to this mass was an irregularly shaped patch on the mucous membrane of a dark brown colour, of the size of a shilling. On section pus was found infiltrating the submucous tissue. The pus was not fluid.

Dr. Budd, in his work on the *Organic Diseases and Functional Disorders of the Stomach*, 1855, mentions a similar case.

In some of the recorded cases, ulceration of the mucous membrane has been noted; but this ulceration is considered by Raynaud to be the result rather than the cause of the disease. One may add to this that, if ulceration were the cause of such a virulent form of inflammation, we should, considering the frequency of gastric ulcer, expect to meet with phlegmonous gastritis [illegible] less rare occurrence.

In order to confine this paper within due bounds, I have omitted my remarks to simple purulent infiltration (if one may use such an expression) of the walls of the stomach, of which my case appears to be an instance, and have purposely omitted more than a casual reference to circumscribed abscess of that organ. As the two are, however, so intimately connected, I may, perhaps, conclude with Raynaud's summary at the end of his article referred to above.

1. The term gastritis should be restricted to the sense which custom has assigned to it, that is to say, inflammation of the mucous membrane, without any tendency to extension to the cellular tissue.

2. There are three distinct varieties of abscess of the walls of the stomach—intramucous abscess, circumscribed abscess of the submucous tissue, purulent infiltration more or less general.

3. The circumscribed abscess appears, in the majority of cases, as a chronic condition, and, perhaps, one of the pathogenic forms of gastric ulcer.

4. The purulent infiltration is an anatomical condition, liable to arise in many general diseases, characterised by a disposition of different organs to the production of pus.

NOTE ON ESBACH'S METHOD FOR ESTIMATING THE QUANTITY OF ALBUMEN IN URINE.

By HENRY VEALE, M.D.,
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Although much has recently been written in this country regarding the use of picric acid, it is rather surprising that no attention has hitherto been given to M. Esbach's method of employing it for the quantitative as well as for the qualitative determination of albumen in the urine.

This method, which dates from 1874, consists in measuring, in a graduated tube, the height of the deposit given by a measured quantity of albuminous urine, when treated with a solution containing picric acid and citric acid in the proportions respectively of 1 and 2 per cent.

The Test-Tube.—This is somewhat stouter than an ordinary test-tube. It is six inches long, and about nine-sixteenths of an inch in diameter. On its outer surface, it bears a scale of seven degrees, diminishing in size from below upwards, whereby the quantity of albumen represented by the deposit is intended to be read off in grammes per litre, *i.e.*, in parts per 1,000. Somewhat above this scale is a dotted line marked U. (urine), and at a certain distance above it another line marked R. (reagent).

The Test-Solution.—This is made by dissolving one part of picric acid and two parts of pure air-dried citric acid by the aid of heat, in about 80 or 90 parts of distilled water, adding subsequently enough water to make exactly 100 parts. If only the apothecaries' weights and measures be available, a solution of similar strength may be made by dissolving 35 grains of picric acid and 70 grains of citric acid in 8 fluid-ounces of distilled water.

Mode of Proceeding.—1. The urine should be filtered.

2. If not distinctly acid, it should be rendered so by the cautious addition of acetic acid, drop by drop, until it changes litmus-paper to a brick-red.

3. If the specific gravity exceed 1.010, the urine should be diluted by one or more volumes of water, so as to bring it below that figure.

4. If, after the first trial, the urine be found to contain more than 4 per 1,000 of albumen, it should be diluted so as to bring the deposit below the line 5 of the tube; and in either of these two cases, the indication given by the deposit must be doubled or trebled according to the degree of dilution.

5. With the urine thus prepared, fill the tube up to the line U. Add the reagent up to the line R. Close the tube with an India-rubber plug, and gently turn it up and down a dozen times, so as thoroughly to mix without frothing the contents.

6. Let the tube remain at rest in the upright position for twenty-four hours, and, at the end of that time, read on the scale the amount of the deposit.

Example.—A patient passes in 24 hours 1,000 cubic centimètres of urine, = 35¼ fluid ounces—of specific gravity 1024. A filtered portion of this is diluted with twice its bulk of water, and the deposit, after 24 hours, reaches to the line 3 of the tube. Then, this number multiplied by 3, on account of the dilution, indicates 9 grammes per litre (*i.e.*, 9 parts per 1,000), as the quantity of dry albumen contained in the specimen.

Of course, the same number divided by 10 will give the parts per 100, and, if this be multiplied by the factor 4.4 (strictly, 4.375), it will give, very nearly, the number of grains per fluid-ounce; thus, $.9 \times 4.4 = 3.96$.

If it be desired to use the test-solution merely to detect the presence of albumen, the following method will be found advantageous. Pour a little of the solution into a test-tube, add the urine, previously filtered, drop by drop, and if, at the point of contact of the two fluids, a haziness show itself immediately, the urine is certainly albuminous; but if the haziness be very slight, and not instantaneous, it may be due to a precipitation of uric acid. In this case, repeat the experiment, and warm the solution before adding the urine.

When I first became acquainted with M. Esbach's method in 1880, it seemed to me so handy and useful for clinical purposes, that I did not hesitate to introduce it into the clinical medical wards at Netley; but it was not until last autumn that I found leisure to compare it with the common method of precipitating the albumen of urine by heat and nitric acid, and to determine the value of the results in each case by comparing them with those given by the ponderal method. For the common method, I used a test-tube, having an internal diameter of 15 millimètres, $= \frac{9}{16}$ of an inch, with a cubic centimètre scale marked on its surface from below upwards. The quantity of urine used was always the same, viz., 12 cubic centimètres. The boiling and acidulation were conducted in the usual manner, and the coagulum was allowed to settle for twenty-four hours. Of course, the urine was filtered before it was tested.

The following table gives the results of the last ten consecutive analyses then made.

No.	Specific Gravity of the Urine.	Quantity of Albumen in parts per 1,000.		Height of the Deposit given by Heat and Nitric Acid.
		By Esbach's Method.	By the Ponderal Method.	
1	1023	3.0	3.8	3.00 c. c.
2	1022	4.2	3.9	3.25 ,,
3	1022	3.8	4.0	3.75 ,,
4	1022	3.9	4.0	3.25 ,,
5	1025	5.4	5.4	6.25 ,,
6	1026	4.8	4.8	2.75[1] ,,
7	1025	3.9	4.0	3.75 ,,
8	1022	4.2	4.1	3.50 ,,
9	1020	3.9	3.6	3.75 ,,
10	1020	3.5	3.0	3.50 ,,
Means . . .		4.06	4.06	3.675 c. c.

[1] Coagulum not all settled to the bottom.

From this it appears that Esbach's method affords results, which, if not always absolutely correct, are nevertheless accurate enough for all clinical purposes; and as such it is, I think, deserving of the attention of the medical profession in this country. It has the additional advantage of being so simple that it might be performed as a daily duty by any intelligent nurse, or even by the patient himself if in a state to make observations. It is certainly better adapted for cases in which the loss of albumen is large, as in nephritis and certain cardiac diseases, than for those in which the albuminuria is slight and transitory; but, in the latter, a daily quantitative estimation of the albumen discharged with the urine would very seldom be considered requisite.

It is also seen that, even with an ordinary test-tube, graduated in cubic centimètres, and with heat and nitric acid, the deposit from twelve cubic centimètres of urine enables one to form a fair approximation, directly, to the quantity of albumen contained in 100 parts, and thence, by an easy calculation, to the number of grains per fluid-ounce. In this case, the urine requires no preliminary acidulation, although, when its specific gravity exceeds 1020, dilution with one volume of water will generally give a better deposit, and therefore more accurate results. Moreover, the tests are those with which every one is familiar, and on which many medical practitioners continue to place the greatest amount of reliance.

I have only to add that albuminometers of the kind which I have described can be obtained at a very cheap rate from Messrs. Townson and Mercer, of 89, Bishopsgate Street Within, E.C.

Poisonous Papers.—It would appear that the coloured papers commonly used in kindergartens are not all of them free from poison, for an investigation by Dr. Henry Leffmann shows that, in some cases at least, the blue papers contain ultramarine; the yellow, lead-chromate; but the red a large amount of arsenic. When we remember that children, even children whose parents believe in the kindergarten system, are fond of sucking everything they come across, it would seem that there is a real danger in the use of these papers.

A CASE OF COMPOUND FRACTURE OF THE LEG, TREATED ON A NEW SPLINT.

By F. T. PAUL, F.R.C.S.,
Surgeon to the Royal Southern Hospital, Liverpool.

THE following case is reported in illustration of the use of a splint which I am now recommending for the treatment of compound fractures of the leg, and disease of the ankle-joint.

Hugh R., aged 15, a rivetter, was struck by a large iron plate on the outer side of his leg. When seen, the sharp end of the upper fragment of the tibia was protruding two inches out of a wound at the inner side of the leg, in the lower third. Ether was administered, and the wound enlarged, and thoroughly carbolised. The bones were accurately fitted together, and a stout wire passed round them, and tightly twisted. Then, the patient being still under the anæsthetic, the splint was applied in the following manner.

With a strip of lead the contour of the front and back of the sound limb is taken from a few inches above the knee, down the tibia, over the toes, heel, calf, and back to the thigh. A strip of stout hoop-iron (⅝ inch × ⅛ inch) covered with rubber tubing is then bent to lie easily over the outside of the lead pattern, following all its deviations accurately, so that it may fit without pressing unduly on any part (Fig. 2).

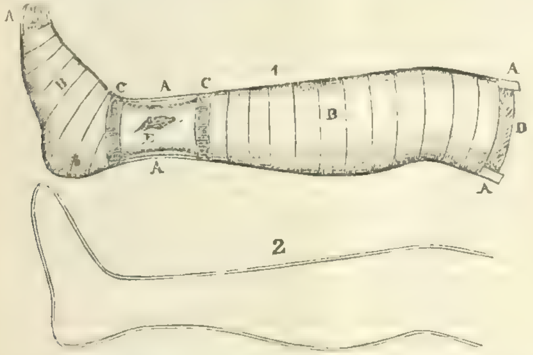

FIG. 1.—From a Photograph on the 5th day. (A) The splint. (B) The paraffin bandage. (C) The wax and carbolic oil finish. (D) The antiseptic gauze showing from under the stiff bandage. (E) The fractured limb.
FIG. 2. The splint of hoop-iron covered with rubber tubing.

When the splint is ready (it is of course prepared before the anæsthetic is given) and the bones have been wired, the whole limb is thoroughly carbolised, and the foot and leg well bandaged with antiseptic gauze, leaving a wide interruption at the site of the fracture. Over the gauze a layer of domette bandage, saturated with hot paraffin-wax, is placed, or a plaster-of-Paris bandage. As soon as the stiff bandage has set, the splint is put on, and more wax or plaster bandages are applied to retain it firmly in position. Lastly, cotton-wool is packed under the edges of the bandage at the interruption, and brushed over till saturated with Howse's mixture of bees' wax and carbolic oil, and the antiseptic dressing is completed (Fig. 1). A very little subsequent care in the dressings will prevent any discharge from getting between the leg and the splint.

The advantages of this mode of treatment are, that no deformity of the limb can possibly take place, as the bones are wired and permanently fixed under an anæsthetic; and that the repair is rapid, owing to the absence of movement necessary in the ordinary method of dressing compound fractures. The choice between paraffin and plaster-of-Paris bandages must depend upon the weight of the limb, and the fixation of the fragment. When the limb is small and the fragments are well fixed, paraffin is quite sufficiently rigid; but under the reverse conditions plaster-of-Paris should be used, at any rate for some part of the bandage. Paraffin is much the better material in every way, except for its want of sufficient rigidity in the warmth of the bed. In this particular case paraffin was used, and answered admirably. There was a good deal of oozing of blood through the night, but not a drop passed inside the splint. The case was dressed once a day for a week, and then every other day for a fortnight under the spray, when it was stopped, as the wound was healing well. On the eighteenth day the wire was untwisted, and the bones were quite firm. Granulations rapidly appeared in the bare bone at the bottom of the wound, and no necrosis occurred. The highest temperature attained was 100°, and that only on one occasion. On the seventh day the patient was dressed and taken to the Medical Institution in a cab, without the least pain or inconvenience, owing to the perfect support given by the splint; and now, six weeks after a severe compound fracture, he is up on the couch, with the wound almost closed, and the measurements of the leg in every respect normal.

In cases of disease of the ankle-joint with discharging wounds, the splint should be fixed with paraffin, or simply with strapping, leaving all the heel and instep open, and the leg well protected under the splint by a soft or paraffin bandage. If the heel suffer from pressure on the lower bar, the leg and foot should be attached first to the upper bar alone, and then by a bandage round both. The dressings should always be slipped between the heel and the lower bar, or discharge will collect there and decompose.

The splint may be obtained from Messrs. Krohne and Sesemann, in London, and from Mr. Critchley in Liverpool. For hospital use, for compound fracture, it is best ordered in lengths of 5 to 6 feet for adults, to be bent to pattern by the surgeon; but in private practice, and for disease of the ankle, the pattern can be traced on paper from the strip of lead, and the splint ordered about half an inch larger in all dimensions than the limb.

CASE OF SPASM OF THE MUSCLES OF THE FACE AND CATARACT DUE TO DENTAL IRRITATION.[1]

By HENRY SEWILL, M.R.C.S., L.D.S.

THE patient was a middle-aged lady, unmarried. She had suffered all her life from bad teeth and neuralgia. During late years the suffering had frequently been acute, and she had had a constant succession of alveolar abscesses, with great swelling of the face, especially on the right side. She had long been under the care of Dr. W. Hoffmeister, of Cowes, who had frequently urged her to have her teeth attended to, but without avail. The patient could not overcome her dread of dental operations. About two years and a half ago, during 1881, her right eye became painful at times, apparently from neuralgia. In January, 1882, contraction of the muscles of that side of the face took place, and had persisted ever since. In July of that year, drooping of the right eyelid came on suddenly, and she then discovered that she had lost the sight of her right eye. Dr. Hoffmeister, believing that her condition was due to the dental disease, and having again in vain urged her to have her teeth examined, sent her to Dr. Ferrier. In July, 1883, she went to Dr. Ferrier. He reported of the case as follows.

She was a very nervous middle-aged spinster, with facial spasm and apparent neuralgia on the right side of the face and head. She said she could not open her right eye; but, on examination, this was found to be not exactly true, as with effort she could do so. The closure of the eye was due to spasm of the orbicularis muscle, and was not ptosis. She would scarcely allow her head or face to be touched; but there was evidently great tenderness in the region of the right upper canine. The neighbouring teeth were much encrusted with tartar, and the gums looked red and swollen. The right lens was almost opaque. Believing that the cause of the neuralgia, the facial spasm, and the cataract was in the dental disease, Dr. Ferrier insisted that she should have the teeth set right or extracted. That the dental irritation was the cause of trophic disorder leading to cataract, Dr. Ferrier considered most probable, looking at all the circumstances of the case, and the fact that the symptoms were entirely unilateral.

The patient was at length induced to have her teeth examined, and came to me. I found, in the upper jaw, the stumps of some molars, and the bicuspids, canines, and incisors, except the left central and lateral incisor. In the place of these was a vulcanite frame, with artificial teeth, attached to the neighbours. This had not been removed for years, and, as well as the rest of the teeth, was covered with tartar. The upper teeth were all carious, and had been the centres of long standing inflammation. The right canine was broken down nearly to the gum. Considerable thickening and swelling extended upwards over the root; and pus could be pressed from the gum through small fistulous openings over the roots of all the teeth. The lower teeth, of which about ten remained in front, were hidden beneath an enormous mass of tartar, which extended fully half an inch over the floor of the mouth. The patient's confession that she had endured years of incessant pain and discomfort from her teeth through dread of dental operations, was amply borne out by examination. Nitrous oxide was administered on two occasions, and the upper teeth were extracted. The tartar was gradually removed from the lower teeth, and an upper set of artificial teeth was provided. Within two days of the extraction of the teeth, the facial spasm entirely disappeared. The patient's health rapidly improved, but no change took place in the damaged lens.

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[1] Read before the Odontological Society.

This is the first case of disease of the eyeball due to dental irritation with which I have met. I see cases of neuralgia in the neighbourhood of the eye very commonly, and cases of neuralgia of the eyeball less frequently, in which the cause is easily traceable to the teeth, the eye being perfectly healthy. The pain in some cases is attended with lacrymation; in a few with muscular twitchings of the face. The most frequent condition of the teeth giving rise to the neuralgia and other symptoms is caries, with exposure and chronic inflammation of the nerve. Patients are often unconscious of the condition of the teeth, the pain being distant and the teeth not aching. Touching the exposed nerve, or directing a stream of cold water on to the tooth, or into the cavity, will usually bring on a paroxysm of the distant pain and establish a diagnosis where doubt exists. Dental periostitis, exostosis, and necrosis, and also impacted lower wisdom-teeth, are less common causes of neuralgic pain.

From a paper lately read at the Odontological Society by Mr. Henry Power,[2] I learnt, with some surprise it must be confessed, that Mr. Power and numerous first-rate ophthalmic authorities, British and foreign, hold the opinion that dental lesions are very frequently the cause of serious diseases of the eye. Mr. Power lays it down as a maxim to be generally observed, that in all cases of threatening glaucoma, especially when this is associated with ciliary neurosis and obscure pains in the temples and maxillary orbital regions; in all cases of mydriasis, and probably of myosis, originating without apparent causes; in all cases of sudden paralysis of either of the orbital muscles, or of loss of sensation in the absence of cerebral symptoms; in all cases of phlyctenular disease of the conjunctiva; in all cases of ulcers of the cornea resisting ordinary treatment; in all cases of sudden failure of accommodation, especially in young children; and, finally, in cases of exophthalmia, the condition of the teeth should at least be examined, and, if faulty conditions present themselves, these should be at once rectified, and then one at least of the possible causes of each of these diseases will be removed. To this list must now be added cataract; for, although Mr. Power tells me he has not himself seen such an one, he accepts the case I have narrated as probably due to dental irritation.

Mr. Power gives many cases of his own and of other well known observers—Hermann Schmidt, Galezowski, and von Gräfe—in support of his opinions; and these opinions were corroborated by other ophthalmic surgeons in the discussion at the Odontological Society. Mr. Power points out the various ways in which diseased action about the teeth may reach the eye. These are (1) by inhibition; (2) by trophic or vaso-motor influence (under this heading Mr. Power would place my case); (3) by extension of neuritis; (4) by reflex irritation, or sympathy.

I must express no opinion upon these views; but I may repeat I have never, with the one exception, met with a case of eye-disease in which there seemed reason to suspect diseased teeth as a cause; that is, I have never had such a case referred to me as dental surgeon in hospital or in private practice.

I trust my case may be considered worthy of record and of discussion; and, in order to stimulate discussion, I have ventured to cite the recent *apropos* utterances of Mr. Henry Power.

TWO CASES OF EXCISION OF THE RECTUM.

By W. J. WALSHAM, F.R.C.S.,
Assistant-Surgeon, and Surgeon in Charge of the Orthopædic Department, St. Bartholomew's Hospital.

IN the BRITISH MEDICAL JOURNAL for April 28th, 1883, I published a case of successful removal of the rectum from carcinoma. Since then I have had two other cases under my care. In one, the growth was entirely removed, but the patient died on the fourth day after the operation. In the other, although I only partially succeeded in getting away the disease, the patient made an excellent recovery, and the distressing symptoms from which he had previously suffered were for the time completely relieved. As excision of the rectum is comparatively speaking a new operation, it would appear desirable that at present all cases, whether successful or unsuccessful, should be recorded. I, therefore, bring these under the notice of the profession.

CASE I. T. G., a man 54 years old, but looking older, came under my care at St. Bartholomew's Hospital, in the absence of Mr. Willett during the autumn vacation, suffering from malignant disease of the rectum. About eight months ago, he noticed an aching pain in the sacrum, chiefly while passing a motion. Seven weeks, and again a fortnight ago, he passed blood *per anum*, and consulted Mr. McDonald, who, discovering the nature of disease, sent him to Mr. Willett as a favourable case for operation. The patient, although he said he had always enjoyed good health, looked weak and feeble. The anus was patulous, but there was no other external sign of disease. On passing the finger, a growth was discovered about two inches from the anus situated posteriorily and to the right, having a strip of healthy mucous membrane in front and to the left side. The growth was circular in shape, with a depressed centre, raised and indurated edges, and ulcerated surface. It appeared freely movable, but the finger could not be passed beyond it. The urine was neutral in reaction, its specific gravity was 1015, and it contained neither sugar, albumen, nor blood. As the upper boundaries of the growth could not be well defined, it was determined to examine under an anæsthetic, and to act accordingly.

On September 15th, the patient having been etherised and placed in the lithotomy-position, it was found that the growth could be drawn down, and healthy bowel reached beyond it. A full sized catheter was passed into the bladder, and Denonvillier's posterior incision made from the anus to the tip of the coccyx, and another carried along the junction of the skin and mucous membrane round the right margin of the anus to a point a little beyond the middle line in front. The rectum was then rapidly freed by the finger, and a few touches of the knife from the surrounding structures posteriorily and laterally, and more carefully anteriorly from the urethra and prostate. The disease being confined to the right side and posterior part of the bowel, the usual incision round the left margin of the anus was not made, but a strip of mucous membrane on the left side was left by severing the bowel longitudinally on either side of the disease with scissors, cutting carefully, and tying any bleeding points as they appeared. The growth having been thus freed laterally, was dragged down with vulsellum forceps, and separated from the bowel above with scissors. The hæmorrhage was free but excessive, and most of the vessels were secured by ligature; but as one or two could not be tied, the deep part of the wound in which they lay was plugged with lint, and a pair of pressure forceps left on one of them. No dressings were applied. Considerable collapse followed the operation; an ounce of brandy was administered on his return to the ward, and, on recovering from the collapse, twenty minims of tincture of opium.

On the 16th, the patient had passed a fair night, but the opium had to be repeated twice on account of pain in the hypogastric region. The plug of lint and pressure forceps were removed, and the wound, which was very foul, was syringed out with carbolic lotion (1 to 100). There was still some slight pain in the hypogastrium, but the abdomen was not tender, and moved in respiration. Fifteen minims of tincture of opium were ordered to be given every three hours whilst the patient was awake, and the wound to be irrigated every two hours with Condy's lotion. Pulse in the morning, 84; in the evening, 100. Temperature 9 A.M., 100°; 3 P.M., 101.8°; 8 P.M., 100.2°.

September 17th. He passed a restless night. There was still tenderness over the hypogastrium, and the abdomen was very tense. Breathing was purely thoracic; temperature, 9 A.M., 99°; 6 P.M., 97.2°; 9 P.M., 99.6°; pulse, 96, weak.

September 18th. The wound was very foul and discoloured, although it was washed out every two hours. The abdomen was still tender and tense, and the breathing thoracic. The temperature rose during the day to 101.4°, and the pulse from 108 to 130. He became gradually weaker, and died on the morning of the 19th.

At the *post mortem* examination, contrary to what was expected, there was no peritonitis. The peritoneum had not been injured, the wound being fully half an inch from the apex of the recto-vesical pouch. This pouch, however, contained several ounces of blood-stained fluid, and there was some discoloration and injection of the vessels in the neighbourhood of the wound. The wound itself was sloughy and foul. The disease had been completely removed by the operation. Several of the viscera were in a state of fatty degeneration.

CASE II.—A. B., a gentleman, aged 47, consulted me on October 29th, 1883. He said that, with the exception of an attack of piles, he had always enjoyed good health until six months ago, when he first began to suffer from pain during defæcation. He had never passed blood, but had noticed that his motions were small. He had lost latterly more than a stone in weight, but was still a stout muscular man. On examination, a firm, smooth, somewhat oval-shaped lump was found projecting into the rectum on its posterior and left lateral aspect, and about one inch and a half from the anus. It felt fairly circumscribed, but somewhat adherent to the parts beneath; the mucous membrane covering it was not ulcerated. The patient, with the exception of his rectal disease, was reported to be sound. I advised excision of the rectum. On November 20th I again saw him, and took him to Sir James Paget, who agreed with me that it was a favourable case for operation. On November 26th, the patient having been put under gas and ether, and a catheter introduced into the bladder, a digital examination was made, and as the finger could be passed well beyond the growth, which appeared circumscribed, it was resolved to undertake the operation, notwithstanding that there was some well marked induration beneath the mucous membrane. Denonvilliers' posterior incision was first made; two lateral incisions at the junction of the mucous membrane and skin were then carried two-thirds of the distance around the anus. The bowel having been freed from the structures forming the ischio-rectal fossa on the left side, a curved needle was carried up the wound and passed into the bowel, and the thread brought out through the anus. By this means, the cord of the écraseur having been passed, the wall of the bowel was severed in a longitudinal direction. The same proceeding was repeated on the right side. The écraseur was now passed transversely above the disease, and the portion of rectum removed. It was now found that the growth had extended beyond the coats of the bowel, infiltrating the tissues of the left side. As much of this infiltrated tissue was removed as possible, and a stout whipcord placed on the remainder, in order that it might slough away.

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[2] "On the Relations between Dental Lesions and Diseases of the Eye," by Henry Power (*Trans. Odont. Soc.*, November, 1883).

The patient suffered from exceedingly little shock, and made an uninterrupted and excellent recovery. His temperature never rose above 101°. He had no pain, and, by the end of the first week, was up and on the sofa, and, by the end of the month, was taking carriage-exercise. The wound healed kindly, and, when examined (January 10th), the passage was found free, and full-sized motions were passed without pain; but some induration was felt under the mucous membrane; but the latter was smooth, and not ulcerated. A tube had been worn since a fortnight after the operation, and it was ordered to be continued for two or three hours daily. The patient had gained several pounds in weight; but, when last heard of, he was again beginning to lose flesh, and showed signs of a return of the disease.

Remarks.—Both of the above cases appeared very favourable ones for operation, as the growth in each was confined to the posterior wall of the rectum, and was fairly movable; and the patients, although one was rather feeble, had apparently no visceral trouble. The first case offers a good example of the value of making an examination under chloroform before pronouncing an opinion on the removability of the growth. On the ordinary examination, it appeared as if the finger could not be passed beyond the disease; but, with the patient under chloroform in the lithotomy-position, the difference the parts presented was striking. The growth could now be easily drawn down, and a good inch of healthy mucous membrane felt above it. Although there are other important points to be taken into account when considering the propriety of removing the lower end of the rectum, I question whether, if all patients with the disease were examined in this way, the operation of removal would not much more often be undertaken than at present.

Free drainage of the wound and early irrigation cannot be too strongly insisted upon. The first patient died apparently from septic absorption. It is to be feared that this, in some measure, may be attributed to the wound having been plugged with lint for the first twenty-four hours, for the purpose of arresting hæmorrhage from vessels in the deeper part which could not be tied. On removal of the lint, the wound was very foul; and, although it was subsequently irrigated every two hours, it never became thoroughly sweet. In the second case, as well as in a previous one under my care, no dressings were applied, and the parts were freely irrigated from the first. In a future case, I would on no account plug, but try to secure vessels which could not be tied by forcipressure.

The second patient unfortunately delayed having the operation performed for a full month after he was first seen, and there is no doubt that during this time the carcinoma had made considerable progress. Although the whole disease in this case was not removed, so much comfort was gained, that it seems a question whether the well established surgical principle of not interfering with a malignant growth, unless the whole can be extirpated, might not be departed from in the case of carcinoma of the rectum.

Transfixion of the Heart.—A case in which the heart was probably transfixed by a large steel shawl-pin, 3½ inches long, is reported in the *Edinburgh Medical Journal*. The patient was a lady, aged 56, with strong suicidal tendency. The symptoms were unconsciousness, widely dilated pupils, rolling of the head, paralysis of the left side, feeble radial pulse on both sides, and slight vomiting. Removal of the needle was followed by rapid recovery. No mention is made of any movement communicated by the heart to the needle, which was buried in the chest, for 2¾ inches, at the situation of the apex beat.

SURGICAL MEMORANDA.

PAINFUL AFFECTIONS OF THE RECTUM.

In one of Dr. Clifford Allbutt's Gulstonian lectures, he refers to a paper of my father's, upon painful affections of the rectum, and as bearing upon this question I desire to record the following case, which may prove of value to others, who meet with cases suffering from similar symptoms.

A gentleman, Mr. L., came to Harrogate on March 20th, to consult my father, on account of biliary derangement, constipation, and slight nervous irritability; he also complained of great pain at the anus, which shot up the rectum, and which he described as a biting burning pain. This pain was intense after each act of defæcation, and lasted a time varying from a few minutes to half-an-hour.

He had been operated on last Christmas for external hæmorrhoids; and on examination two hypertrophied folds of mucous membrane were visible, and adjoining these were two superficial fissures; I touched both the fissures with an ethereal solution of iodoform, and both healed up well.

On March 27th he still complained of pain, although not so severe, and his general health had much improved, under the course of sulphur-water and baths. On March 31st, the rectal pain still being severe, I made a thorough examination under chloroform; I found the bowel quite healthy, but there was a spasmodic stricture of the sphincter ani, to such an extent that it only admitted my forefinger with difficulty; this I at once broke up, by means of manual stretching, so that I could pass three fingers with ease.

The result of this slight operation was highly satisfactory, as he had no more pain of the biting burning character, even after a motion of full size.

On April 10th he consulted me about a slight pain at the anus, and, on examination, I found a small superficial submucous abscess. This I destroyed by means of my finger, and applied an ointment of iodoform and vaseline. He experienced no further pain or inconvenience after the act of defæcation, and left Harrogate three days later, altogether better and happier than he had been for months.

The good result of such a simple mode of proceeding in spasmodic stricture, as the stretching of the sphincter ani by manual force, is a point which deserves publicity. It would be well if the surgeon, whilst operating for hæmorrhoids, examined the condition of the sphincter ani at the same time, as very commonly some degree of spasm is the usual accompaniment of piles, and unless overcome at the time, renders a second operation absolutely necessary.

A. Scott Myrtle, M.B., C.M.

IMPERFORATE HYMEN OPENED WITHOUT ANTISEPTIC PRECAUTIONS.

In the Journal of May 3rd, a case is reported from the Bristol General Infirmary of imperforate hymen operated on with strict antiseptic precautions. Under the impression that it is not yet a sufficiently proven fact that these strict antiseptic precautions are the efficient causes of success, I have reported the following case, where no spray whatever was used, and where the discharge escaped with free access of air, and yet there was not a single bad symptom. It seems only possible to arrive at the real truth by a comparison of large numbers of cases treated by different methods.

E. S., aged 16, a servant, had never menstruated, although she was a well formed girl. She had, however, suffered from pain at distinct intervals, and, when she sent for me, her mother said she had been in severe pain all the previous night, and was then so bad that she was rolling on the bed, and that the womb had come down externally. On examination there was a distinct bluish projecting membrane with marked fluctuation; the only opening to be found was that of the urethra. A triangular piece was removed from the centre of the membrane, and there was an immediate rush of a considerable quantity of dark coloured discharge, with instant relief from the pain, which did not recur. When the discharge had ceased, the parts were covered with a piece of linen rag soaked in carbolic acid lotion 1 in 40, and this was ordered to be continued; but, as often happens in this class, the mother was somewhat careless, the rag was allowed to dry or to fall off, so that we may fairly say that there was a free access of non-carbolised air. She was kept in bed during the remainder of the day and the next, but there was no rise of temperature, and then she was allowed to get up and resume her work, which she did without any bad effects.

M. C. [illegible], 93, Northcote Road, S.W.

Medical Magistrate.—Dr. George Henry Evans, of Leigh, has been placed on the Commission of the Peace for Lancashire.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

MIDDLESEX HOSPITAL.

A CASE OF INFECTIVE (ULCERATIVE) ENDOCARDITIS.

(Under the care of Dr. CAYLEY.)

[FOR the report of the case and the microscopical appearances, we are indebted to Dr. HENEAGE GIBBES.]

JOHN O., aged 26, a footman, was admitted on February 29th, 1884. At the age of 17, he had had an attack of rheumatic fever, but otherwise had always enjoyed good health. He was quite well on February 24th. On February 25th, he went out driving insufficiently clothed, and came home shivering and feeling very cold. The next day, although feeling very unwell, he again went out driving, and waited for some time about the Victoria Station, and, in the evening, rode on the top of an omnibus without his great coat. When he got home, he was shivering, and looked very ill. He slept heavily during the night, and, in the morning, his mind was stated to have been wandering; he remained in bed all day, and vomited twice; the next day, February 28th, he was worse, and in the evening had profuse epistaxis. He was now seen by his medical attendant, who, on the following morning, recommended his removal to the hospital.

His state, on admission, was as follows. He was a well nourished, muscular young man, lying on his back in a state of prostration, with muscular twitchings; with a heavy expression of countenance, and in a dull obfuscated mental condition. The forehead was covered with perspiration, the eyes suffused, the lips dry and brown, the cheeks flushed: the tongue was red at the tip and edges; the dorsum was coated with a white fur, and the tip was ulcerated; there was a diffused, somewhat mottled, red blush over the skin of the trunk, and scattered over the trunk and extremities were numerous irregularly shaped spots of extravasation, many, but not all, distinctly raised; on the back of the metacarpo-phalangeal joint of the left forefinger was a pustule of the size of a split pea, with a red halo surrounding it. The tip of the right great toe was swollen and livid, and there were livid patches over the left olecranon; the colour of the patches of extravasation differed, some being darker than others. There was no cough nor sore-throat. Examination of the thorax showed well marked signs of cardiac hypertrophy, and there was a loud rough systolic apex-murmur; the pulmonary signs were normal. There was no distension or tenderness of the abdomen; the splenic dulness was increased, measuring 4½ inches vertically, but the viscus could not be felt on palpation. The urine was very albuminous, about one-half, and contained blood; it was acid, of specific gravity 1030, and of blood-red colour.

From the general symptoms of blood-poisoning, accompanied by multiple cutaneous embolisms, together with the signs of mitral disease, the case was regarded as one of ulcerative endocarditis.

He was ordered ten grains of quinine every four hours; six ounces of brandy daily; and to be sponged with cold water when the temperature exceeded 102°. He continued much in the same state during the rest of the day; the muscular twitchings kept recurring at irregular intervals; he lay in a torpid, dreamy condition, with wandering delirium, but roused up when spoken to.

On March 1st, he was more prostrate, and took no notice of anything. The elevators of the upper lip and alæ nasi, on the right side, had been in a state of constant twitching since the early morning. The pulse was 120. The breathing 56, and shallow. The lips and teeth were covered with sordes; the tongue dry, brown, and cracked; and the breath offensive. Four pustules had formed on the patch of livid skin over the left olecranon, and several fresh petechial extravasations had appeared. The bowels had not been opened since admission. The patient rapidly sank, and died at 3 P.M.

		Temperature.	Pulse.	Respiration.	
February 29th.	2 P.M.	104.2	124	36	Sponged.
,,		102.2	—	—	After sponging.
,,	6 P.M.	104	—	—	Sponged.
,,		102	—	—	After sponging.
,,	10 P.M.	104	112	40	Sponged.
,,		101	—	—	After sponging.
March 1st.	2 A.M.	101.8			
,,	6 A.M.	101.4			
,,	10 A.M.	102	120	56	
,,	2 P.M.	104.2	130	65	

The pulse subsequently ran up to 180.

The necropsy was made by Dr. J. Kingston Fowler forty-eight hours after death. The body was well nourished, cadaveric rigidity was passing off, and *post mortem* congestion was well marked. On the abdominal wall were several ecchymotic patches, which had been present during life; some of these patches were removed for microscopical examination. The parietal peritoneum presented nothing abnormal, but the intestines were marked by numerous dark pinkish hæmorrhagic patches, varying in size from a pea to a florin. On laying open the intestine, these patches, which extended from the duodenum to the cæcum, were seen to correspond with hæmorrhages of the same size in the mucous and muscular coats; the patches were of a dark red colour, but in the centre of each was a raised nodule, firm, but almost purulent. In some of these were a number of smaller yellow spots, the size of pins' heads, surrounding a large nodule. There was no trace of ulceration in any part of the bowel. The spleen was extremely soft, almost diffluent, and contained several large soft infarctions. The kidneys were large, the surfaces smooth, and mottled with innumerable yellow and claret coloured points, the site of minute infarctions. On section, a vast number of small caseous foci were seen scattered through every part of each kidney. The organs were swollen, and on the whole pale. In the pyramids, streaks of yellow marked the lines of some straight tubes, which were probably blocked. The liver was large and pale, and presented a number of small hæmorrhagic foci, principally in the left lobe. On section, some small lines of commencing suppuration were seen along the lines of the portal vessels. The bladder and rectum were not diseased. At the reflexion of the right pleura on to the pericardium, there was recent lymph with hæmorrhage. There were some pleural adhesions on both sides, and a few hæmorrhagic foci in the visceral layer of each pleura. The pericardium presented only some hæmorrhagic foci in the visceral pericardium. The right auricle contained a firm yellow clot, fibrinous, and moulded to the cavity. The right ventricle contained some similar clot. There were four cusps to the pulmonary artery, one very small. The semilunar valves were swollen and opaque; the thickening was especially marked at the free edges. The upper margin showed a few very small vegetations. The left ventricle was hypertrophied, its muscular walls firm and fibrous, and the endocardium rather thicker than normal. The left auricle was dilated; its posterior wall was roughened, and covered with small vegetations marking the line of the regurgitant stream of blood. The curtains of the mitral valve were thickened and opaque, and slightly contracted; a few of the chordæ tendineæ were swollen, and two were broken. There were no large masses of fibrin, and the amount of disease of the valves was much smaller than would have been expected from the wide extent of the infarctions. The aortic valves were slightly thickened, but competent. The aorta was atheromatous in a few small patches. The lungs were congested and œdematous. Each lung contained from three to four black wedge-shaped infarctions; these were all upon the surface, and some were surrounded by small foci of hæmorrhage.

The following report on the microscopical appearances was made by Dr. HENEAGE GIBBES.

Sections through the cardiac valves and endocardium showed thickening of old standing. On the surface of this, there was a homogeneous deposit projecting inwards in fine papillæ. This was covered with myriads of micrococci, which were also present throughout the deposit in masses. In some places, they had penetrated to some distance into the deeper tissue, and might be seen in what appeared to be lymph-spaces. The liver had undergone extensive fatty degeneration, and there was a small amount of increase in the interlobular tissue. A number of capillaries were blocked by masses of micrococci; but in the portions of tissue examined these had not set up any inflammatory action in the surrounding tissue. The intestines showed a good deal of *post mortem* change, and there were a large number of bacteria of various forms. No vessels blocked by micrococci were seen in the parts examined. In the deeper parts of the skin were accumulations of inflammatory cells, amongst which were masses of micrococci similar to those in the heart. Throughout the spleen there were a number of vessels blocked by micrococci. In some places, the vessel and its branches were filled for some distance. There was, however, little sign of any inflammatory action in the surrounding tissue. In the kidney, many capillaries were filled and distended by masses of micrococci. In several places, inflammatory action had been set up in small circumscribed areas, and the tissue had broken down. Amongst the *débris* were small groups of micrococci.

In addition to these micrococci in the blood-vessels, there were numbers of bacilli in the lymph-spaces of the different organs. They resembled the ordinary form of putrefactive bacteria. In the small veins of the deeper tissues of the heart were a number of small rod-shaped bacilli. In the kidney, there were also numbers of large bacilli resembling B. subtilis; these occurred in interstitial tissue, and in the urinary tubules. Those in the urinary tubules had a peculiar reaction in their behaviour to aniline dyes. If the section were stained in a dilute watery solution of methyl-blue, to which a slight trace of a neutral rosanilin salt was added, the bacilli picked out the rosanilin and stained red.

REMARKS BY DR. CAYLEY.—This case is a good example of a not uncommon form of ulcerative endocarditis; viz., where the disease supervenes in persons who are the subject of old standing valvular lesion. The relation of the micro-organisms to this disease is a question of much interest and importance. In this case, there was no reason to suspect any infection from without. The attack must, I think, be attributed to exposure to cold; this induced endocarditis, to which he was specially liable from having old mitral disease; and the inflammatory change in the valve probably produced a condition favourable for the development and growth of these organisms, which in their turn caused the multiple embolisms. In a large number of cases, the ulcerative endocarditis has supervened during an attack of rheumatic fever, where an infection from without would be extremely improbable; and it seems, on the whole, more reasonable to suppose that, under certain circumstances, the inflammatory changes produce conditions which favour the development of germs which are probably generally diffused, than to suppose that these every now and then succeed in obtaining entrance into the body from without, and so exciting the disease, just as the germs of putrefaction do not cause the death of the putrid body, but the changes due to the cessation of life afford the necessary conditions for their growth.

SUPPURATING MULTILOCULAR OVARIAN CYST, PRESSING UPON THE RECTUM, MISTAKEN FOR CANCER OF THE RECTUM: OVARIOTOMY: RECOVERY.

(Under the care of Mr. HENRY MORRIS.)

[From notes by Mr. LESLIE POWNE, Dresser.]

MARY S., a single woman, aged 43, was sent into the Cancer Ward of this hospital on November 30th, 1883, as a case of probable cancer of the rectum. She was a fairly well nourished, but very anæmic and sallow, woman, and had the appearance of suffering from some severe disease.

She said her health had always been good, and her menstrual periods regular up to three years ago, when the catamenia recurred at intervals of six weeks, and she began to have continued vomiting, with severe pain in the back and stomach. These symptoms lasted for one year; then the sickness ceased, and she had violent pains in the hypogastric region about every six weeks, and lasting for half an hour; the attacks always occurred during her menstrual period, the menstrual flow being much less than normal. These attacks continued up to the time of her admission, but they gradually became more severe and frequent. During the whole of her illness, she suffered from constipation, and, during the last year, she could only pass small lumps of fæces, with great straining, except by the aid of an enema.

On examination, it was found that her abdomen was distended, and thirty-one inches in girth. An area of dulness was marked out on the right side, which crossed the median line, and extended nearly up to the umbilicus. In this area, a circumscribed mass, ten inches in diameter, and feeling like a multilocular cyst, could be made out. In the median line, a prominence could be seen, which fluctuated, and was not diminished when the bladder was empty. On vaginal examination, it was found that the posterior wall was pushed down by a mass in the pelvis. A diagnosis of multilocular cyst of the right ovary was made.

On December 28th, at 9 A.M., she was put under the influence of an anæsthetic, and Mr. Morris made an incision into the abdomen, and exposed a compound cyst; on drawing the mass forwards, one of the cysts burst, and about half a pint of thick viscid, almost clear, fluid escaped. Subsequently, five others were tapped, or opened with the knife, from which thick purulent fluid escaped. The mass was then removed from the abdomen; a small adhesion to the intestine, and other very intimate adhesions to the fundus and back of the uterus, being separated. Then, having put a double ligature round the pedicle, Mr. Morris cut away the tumour, allowing the stump to fall back into the cavity of the abdomen. A few ligatures were put on bleeding vessels, and the actual cautery was applied to the raw surfaces of the fundus and back of the uterus, from which the adhesions had been detached. The abdominal toilet being completed, the incision was closed with deep and superficial sutures, the whole operation having been done under strict antiseptic precautions.

During the early morning of December 30th, the temperature went up to 101.6°; but there was no pain. When dressed in the afternoon, a little blood-stained discharge was noticed, and there was a little pus round the lower sutures. The lowest suture was taken out, and a probe passed in between the lips of the wound, but there was no more discharge. The temperature fell to 99.4° at 6 P.M.

On December 31st, the wound was again dressed; a little redness and tenderness could be detected just below the wound, but there was very little discharge. The next suture was taken out.

The temperature kept below 99° up to January 5th, when it went up to 100.6° for an hour or two. On January 3rd, all the sutures were taken out. There was still a little redness, and in the holes made by the two sutures previously taken out were little sloughs.

On January 6th, there was a little redness and œdema just below and on the right side of the lower end of the wound. The temperature remained normal up to January 8th, when it went up to 102° at 8 P.M. This was thought to be due to some aperient medicine, which was giving her great pain, as the redness and œdema seemed to be a shade less. The temperature kept between 98° and 100° up to January 13th; on January 11th, the swelling at the lower end of the cicatrix was found to have increased, and now extended towards Poupart's ligament, though there was no pain.

On January 14th, the temperature went up to 101°, and still there was no pain; but, when she was quietly sleeping, the nurse noticed a very offensive smell, and, on looking, found a free offensive discharge, which the house-surgeon ascertained to come from the lower part of the wound, and to be about six ounces in quantity.

After this the temperature remained normal,, and there was very little discharge from the abscess; she was strong enough to sit up nearly the whole day on February 6th. She left the hospital on February 25th.

On March 22nd, she came to see Mr. Morris, and said that all her previous bad symptoms were gone, and that she was in good health again, and able to do her work.

The tumour was about the size marked out on the abdomen, and was composed of eight or ten cysts, three being large, and the remainder small and very tense. Some of the large ones contained fluid which had pus mixed with it, and the small ones contained thick white fluid like very thick cream, which was seen, on microscopical examination, to consist of pus-cells. The cyst-walls were thick, but very soft, and easily broken away. The pedicle was formed of the broad ligament.

REMARKS.—It is worthy of note that, owing to the way the tumour was jammed down into the pelvis, all the patient's most marked symptoms had reference to the large intestine. It is also noteworthy that, though the cysts were supplementary, no constitutional indication thereof existed.

ST. GEORGE'S HOSPITAL.

CASE OF INCARCERATED UTERINE FIBROID.

(Under the care of Dr. F. H. CHAMPNEYS.)

[FOR the notes of this case we are indebted to Mr. H. ROXBURGH FULLER, M.B.Cantab., late Obstetric Assistant.]

MARY B., aged 37, a single woman, sewing-mistress in a Welsh village school, was admitted on July 24th, 1883. She stated that she had never been pregnant, and had had no serious illness, with the exception of the one mentioned below; the catamenia were regular and natural. She had nursed her mother, a heavy woman, through an illness lasting from September, 1882, to her death in May, 1883. One day in September, 1882, whilst lifting her mother, she felt "something give" in the lower abdomen; she was seized with pricking and shooting pain in the hypogastrium, and was unable to pass urine. She kept her bed a week, the use of the catheter being necessitated several times. In fourteen days, she was able to resume her daily duties.

In June, 1883, she had a similar but less severe attack, for which she could assign no cause. In the intervals between the attacks, she felt quite well, followed her usual avocations, and never noticed any lump in the belly.

On July 17th, she came to London on a visit. On July 24th, she was unable to pass urine, and came to the hospital in considerable pain and distress. The catheter showed that the bladder contained only a few ounces of urine. Abdominal examination revealed nothing abnormal. Vaginal examination showed that the hymen was intact and dilatable, the cervix uteri drawn forwards against the pubes, and the whole of the pelvic cavity filled by a round, smooth, slightly lobed, very hard, and fixed tumour. The tumour could be more plainly felt from the rectum, and could be slightly elevated on pressure; but, on attempting replacement, which necessitated the use of considerable force, crepitus was felt, and the attempt was abandoned. The uterine sound passed for 4½ inches, with its concavity backwards.

On July 26th, the rectum and bladder were emptied; and at

1.45 P.M. Barnes's hydrostatic bag (No. 3) was introduced into the rectum, and the patient placed in the knee-chest position. No attempt to distend the bag was made, but the nozzle was connected, by India-rubber tubing, with a column of water about 56 inches in height. At 4.30 P.M., the tumour was found to be distinctly lifted from its original site, and the bag partially distended. At 7.30 P.M., the patient could no longer maintain the knee-chest position, but lay in the ordinary obstetric position; she was restless and irritable, and a quarter of a grain of morphia was injected subcutaneously.

On July 27th, at 1.30 A.M., the tumour could still be reached with the finger. The bag was fully distended; the patient was sick, and again restless. The injection of morphia was repeated. At 4.30 A.M., the tumour could not be felt; the cervix was in the natural position; and a mass occupied the hypogastrium. The bag was emptied, and removed; a little sanious discharge followed, and afterwards much flatus.

On July 28th, Dr. Champneys, on making a rectal examination, found the cavity of the sacrum quite clear. The lower edge of the tumour could just be felt near the right sacro-iliac synchondrosis, and bimanual examination discovered a tumour in the hypogastrium, reaching to the level of the navel, of which the above was the lower border. The patient suffered at first from sickness, and considerable aching pain and soreness about the rectum, and was unable to pass urine or hold her motions; but, on August 1st, she passed urine naturally, and was regaining control over the rectum. By August 4th, this control was complete.

On August 7th, a slough was passed, which proved to be a cast of the mucous membrane of the rectum. Examination showed the sphincter lax, and the rectum slightly dilated; below the lower fold of Houston its surface felt rough, but above this smooth. The abdominal mass was found to have sunk, so that the upper border was two inches below the level of the navel, but there was not any tendency to reproduction of the incarceration. She was discharged on August 10th.

On August 24th, she was seen in the out-patient department for the last time. Rectal examination then discovered, one inch from the anus, a stricture easily admitting the finger; another stricture was felt about one inch higher up. There was no fæcal accumulation above this, and the mucous membrane felt quite smooth. The general health was good.

The patient wrote from Wales on February 7th, 1884, that she was in fair health, but suffered from "downward-drawing pain after exertion." She was "still compelled to take opening medicine, and to have the instruments (? bougies) passed occasionally."

REMARKS BY DR. CHAMPNEYS.—This case presents several points of interest. The first consists in the similarity of the history to that sometimes obtained in cases of retroversion of the gravid uterus. In this latter disease, the first symptom is always retention of urine, or its consequence, dribbling of urine; and in some cases the symptoms follow a jump or fall. In this latter variety, it is probable that the uterus, just too large for the brim of the pelvis, is forced below the promontory, which then imprisons it as a cog; the retroverted uterus again pressing against, or kinking the urethra and lower part of the bladder. In other cases, something prevents the evacuation of the bladder at the proper time, and the patient subsequently finds herself unable to empty it. In these cases, the full bladder probably still further retroverts the already retroverted uterus, and thus prevents its own evacuation, as in the first variety. In both varieties, evacuation of the bladder relieves the more urgent symptoms, and sometimes is sufficient to provide for the elevation of the uterus. In this place, it will be sufficient to say that the first attack probably illustrated the first variety, while the subsequent attacks may have been examples of the second.

With regard to the treatment adopted. The forcible elevation of a fibroid is not without risk; such tumours are often covered with enormous venous sinuses, as large as a finger; an adhesion over one of these might tear it open, and the bleeding would almost certainly prove fatal. Even in abdominal section, such bleedings can sometimes only be checked by the removal of the whole uterus. The great force which in this case was found necessary in applying taxis caused apprehension, and the gentler and continuous method of hydrostatic pressure was adopted. This has already been used, by means of gravitation, for the dilatation of the cervix uteri. The ordinary hydrostatic bags, introduced by Dr. Barnes, are rather stouter than necessary; and thinner, round balloons would prove better. The rectum was used, partly because leverage is better applied as far posteriorly as possibly, and partly because of the presence of the hymen. If the condition of the rectum gave much trouble in the future, a very simple nick of the cicatricial tissue would probably set matters permanently right.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 6TH, 1884.

J. WHITAKER HULKE, F.R.C.S., F.R.S., President, in the Chair.

Report of Morbid Growths Committee.—Mr. A. BOWLBY read the report of the Morbid Growths Committee on Dr. Norman Moore's case of enlarged ovaries in connection with cirrhosis of the liver. The committee was of opinion that the enlargement was rather of the nature of hypertrophy than cirrhosis.

Three Cases of Tumour of the Lung.—Dr. SAMUEL WEST exhibited these specimens, and gave the following account of the cases. 1. A youth, aged 18, whose thigh had been amputated for osteo-sarcoma some months previously, came under observation suffering from pain in the chest, dyspnœa, and palpitation. About fifty ounces of blood-stained fluid were removed from the left pleura by aspiration, At the necropsy several massive tumours were found in each lung, soft and spongy on the surface, but very hard within. They were of the same nature as the original tumour of the leg, that is to say, osteo-sarcoma. There were no secondary growths elsewhere, and the stump was healthy. 2. A man, aged 39, had been ill for a month, when he came under observation with what appeared to have been pneumonia. At the base of the right lung some effusion was found, but the removal of this did not bring much relief. At the necropsy, at the root of the right lung, surrounding the bronchi and vessels and compressing them, was found a mass of new growth extending into the lung-substance along the course of the large bronchi. Microscopically, the growth was found to be scirrhus. 3. A man, aged 62, had physical signs exactly resembling those of the last patient; the *post mortem* appearances were similar, except that the tumour was of small extent, sending processes only a very little way into the lung-substance. As in the other case there were œdema and inflammatory changes, which had gone on to the formation of a cavity. The tumour in this case was also scirrhus. These two last cases were instances of what were commonly called primary tumours of the lung. But this was, Dr. West thought, a mistake, for they originated in the lymphatic tissue at the root of the lung, and only affected this by direct extension. They were distinct both from tumours of the lung-substance, and from mediastinal tumours. The former were very rare as primary, but common as secondary growths. The first case was, in his opinion, one of secondary growth. The points in the last two cases were, that the disease was nearly always unilateral, starting from the root and radiating inwards along the branches of the bronchi. All the structures at the root were compressed by it, and the result was that there was collapse and œdema of the lung, with inflammatory changes, often followed by breaking down of the lung-substance, and the formation of cavities by a species of necrotic degeneration. These cavities were not, as was sometimes said, the result of the softening of cancerous nodules, and they contained only the products of lung-tissue. The diagnosis, both from ordinary phthisis, and from mediastinal tumour, was often very difficult.—The PRESIDENT observed that the growth, if it were connected with the lymphatic system, must have travelled against the direction of the lymph-current, and suggested that it might have extended in the connective tissue.—Dr. NORMAN MOORE thought that the disease in these cases was probably endothelioma arising in the pericardium. He thought that these growths recurred with considerable frequency in the lung, where the original tumour was situated in an extremity.—Dr. EWART had met with two such cases. He mentioned the case of a child, aged 10, in whom the whole of one lung became consolidated, secondary to a tumour of the lower limb.—Mr. BOWLBY said that he had examined the first case recorded by Dr. West. The primary tumour was a central growth of the thigh; the microscopical appearances were those of a fibro-sarcomatous growth. The recurrent tumour in the lung was, in his opinion, an endothelioma.—Dr. SAMUEL WEST, in reply, expressed his concurrence with this view of the nature of the growth.

Case of supposed Actinomycosis.—Mr. FREDERICK TREVES related the sequel of a case which he had shown to the Society as a probable case of actinomycosis (see BRITISH MEDICAL JOURNAL, January 12th, 1884, p. 61). The disease spread in this way: a small nodule appeared under the skin, to which the skin became adherent; then the enlarging nodule broke down, discharged through the skin, and was succeeded by an ulcer. With the exception of the earliest nodule, which attained a considerable size before discharging, this was the history of each nodule; and the nodules appeared to be inoculated the one from the other. Mr. Treves removed the growths by cutting and scraping; and in twenty-one days the majority of the wounds had healed, and the patient was in fairly good condition. A week later, a second operation was undertaken for fresh tumours in the axillary region; this was followed by severe secondary hæmorrhage, and the patient only survived one month longer. At the necropsy, secondary growths were found in the lung, liver, spleen, and kidneys; the growths had the appearance of small round yellow nodules. The material removed by operation had been carefully examined by Mr. Watson Cheyne, who had not been able to confirm the suggestion that the case was one of actinomycosis, for he had found no evidence of the presence of micro-organisms. The main bulk of the growths was made up of a structure like that of alveolar sarcoma. The secondary growths in the liver were very remarkable instances of alveolar sarcoma. In addition to the difficulty of diagnosis and the peculiar distribution of the growths, which so forcibly suggested an infective process, there were other points of interest about the case, if it it were an example of sarcoma, especially the early occurrence of suppuration and the very protracted period—about two years—during which the disease had been in progress. Mr. Treves concluded by suggesting that the case should be referred to the Morbid Growths Committee.—The **President** observed that, at the time the patient was shown to the Society, he had felt the difficulty of arriving at a diagnosis. He had himself been more inclined to regard it as an example of farcy, owing to the resemblance it bore to one which had been under his care.—Mr. **Watson Cheyne** said that he had removed portions of the growths, and had made an attempt to cultivate any organism present on serum slightly coagulated. The vessels had been kept in the incubator for long periods, without the development of any micro-organisms. He had inoculated two rabbits and a guinea-pig by injections into the peritoneal cavity, without result. When one rabbit was killed, after a fortnight, no change was noticed in the peritoneum, and the piece of tissue had disappeared. This excluded both farcy and tuberculosis, as well as actinomycosis.—Mr. **Treves** observed, in reply, that the course of the case appeared to have been too slow for even the most chronic form of farcy.

Cast from the Trachea.—Dr. **Burney Yeo** showed a cast from the trachea, obtained from a patient the subject of thoracic aneurysm, who, after suffering from hacking cough and dyspnœa, expectorated a tubular cast, bifurcated, dark in colour (apparently due to blood-pigment), and tough. The patient subsequently improved.

Lardaceous (Syphilitic?) Disease of Suprarenal Capsule. Dr. F. C. **Turner** showed microscopical preparations and drawings of diseased suprarenal capsules observed in a man, aged 34. There was also well marked lardaceous disease of the liver and kidney, and a definite history of syphilis. The enlargement of the suprarenal bodies was chiefly due to thickening of the inner portion, which formed a lobulated mass. The wall of the suprarenal vein was thickened; the central portion of the enlarged part of the organ was traversed by a tract of fibrous tissue, with large vascular canals. It consisted of long spindle-shaped nucleated fibres, in a finely granular matrix. The walls of the vessels were swollen and hyaloid. The disease seemed to be an instance of an infiltrating syphilitic growth of the suprarenal body. Very little, he believed, was known as to the syphilitic disease of the suprarenal bodies. In the cases collected by Dr. Greenhow, there was none parallel to this one. In Ziemssen's *Cyclopædia*, reference was made to the occurrence of gummatous growths in childhood, but no mention was made of such a process as was seen in this case. Dr. William Ewart had shown to the Society one case in which the suprarenal bodies were fibroid, calcareous, and lobulated, and approached the present case more nearly than most others. Dr. Turner showed a second specimen of enlarged suprarenal bodies, with great thickening of the cortical substance and fibroid overgrowth. In conclusion, he referred to the occurrence of muscular fibres in connection with the blood-vessels, both on the surface and in the substance of the organ, and conjectured that, both in the suprarenal bodies and in the kidneys (where they were found in a similar arrangement), they contributed to the regulation of the blood-supply.

Multiple Exostoses.—Mr. **Sydney Jones** showed a very fine set of specimens of exostoses of the shafts of the long bones, removed from the body of a man who had twice attempted to commit suicide, and died from injury inflicted on the vertebral column in the second attempt.

Fibro-myoma of the Stomach. Dr. **Percy Kidd** showed a specimen of fibro-myoma of the stomach. The tumour, which had given rise to no symptoms during life, was found in connection with the cardiac orifice of the stomach in a patient who died of abscess of the liver. The growth, which was tough, whitish, and of a somewhat reniform shape, seemed to spring from the submucous tissue of the stomach, and had no obvious connection with the muscular coat. It partially encircled the œsophageal opening without causing any stenosis. The stomach was elsewhere healthy. The microscopical character of the tumour was that of a fibro-myoma, the prevailing structure being myomatous. Such tumours were decidedly rare, were usually small, and were commonly situated towards the cardiac end of the stomach. The present specimen considerably exceeded in size the largest tumour of the same nature mentioned in Virchow's *Krankhafte Geschwülste.*—Dr. **Norman Moore** said that he had recently met with a case of tumour at the cardiac end of the stomach, which had led to perforation; the patient was only 11 years of age.—Dr. **Angel Money** had seen a similar case in a child only six years old.

Cartilage-containing Tumour of the Scalp.—Mr. C. B. **Lockwood** showed a tumour which he had removed from the scalp behind the ear. A section through the growth showed a number of rods of cartilaginous appearance, which however did not present distinctly cartilaginous features on microscopical examination.—Mr. **Bowlby** commented on the manner in which the cylinders had grown downwards after the fashion of epithelial cylinders. He had seen no cells in the sections which were certainly cartilage-cells. He thought from the presence of mucous tissue in certain parts, that the growth was most probably of a myxomatous nature.

Malignant Lymphoma.—Mr. A. Q. **Silcock** showed a large growth removed from the body of a child, aged 4 years, who died in St. Mary's Hospital after an illness of one month. The symptoms were chiefly those of intestinal obstruction. On examination after death, it was seen that the lower part of the jejunum and the upper part of the ileum were of a dead white colour, and much thickened. In one place, the tumour had ulcerated into the intestine, forming a large cavity, in which feculent matter must have tended to accumulate; there were secondary nodules in both kidneys, and in the mesentery, but not elsewhere. The diffuse infiltration of the intestines by the growth appeared to be due to its travelling along the line of least resistance, and not along the tracts with special lymphoid structure. Microscopically, it consisted of numbers of lymphoid cells set in a retiform stroma.

Cystic Tumour of Spleen.—A recent specimen of cystic tumour of the spleen, removed by abdominal section, was shown by Mr. **Knowsley Thornton**, who stated that the cyst-wall was so extremely thin, that during the operation cholesterine-crystals, contained in great quantities the fluid, could be distinctly seen; a number of small secondary cysts were present in the spleen, produced, probably, by plugging of vessels and consequent breaking down of the splenic tissue.

Card Specimens.—Dr. R. E. **Carrington**: Malposition of kidneys; arrested development of left side of uterus; absence of left ovary and Fallopian tube.—Mr. **Sydney Jones**: 1. Exostoses from internal condyle of femur, with loose cartilage in joint, in a boy aged 17; 2. Pylorus removed for cancer, with appearance of stomach after operation.—Dr. **Percy Kidd**: Small polypoid tumour of left ventricle; tubercular ulceration of pharynx.—Mr. **Knowsley Thornton**: Ball of hair from stomach.—Dr. F. C. **Turner**: Pistol-shot fracture of skull.—Mr. **Horsley**, for Mr. **Christopher Heath**: Myxo-fibroma of left parotid.—Mr. **Alban Doran**: Simple cyst of broad ligament developed above Fallopian tube.—Mr. **Swinford Edwards**: Cyst on deep branch of ulnar nerve.—Dr. **Hale White**: 1. Aneurysm of thoracic aorta in a woman; 2. Atrophied bones of right upper extremity from a case of old hemiplegic rigidity.—Dr. **Hobson**: Malignant disease of cæcum.—Mr. **Sutton**: Diseases of the ductless glands in wild animals.—Dr. **Goodhart**: Tumour of the pituitary body in an Anubis.—Dr. **Harrington Sainsbury**: Tubercle of brain.—Mr. **Arbuthnot Lane**: Several specimens of ununited fractures of rib; incomplete fracture of a rib; united fracture of the humerus with united fractures of condyles and trochlea; ununited fractures of transverse and spinous processes of dorsal vertebræ and of ribs.

MIDLAND MEDICAL SOCIETY.

Ordinary Meeting.

G. F. Bodington, M.D., in the Chair.

Case of Hæmorrhage from the External Auditory Meatus, treated by Ligature of the Common Carotid Artery.—Mr. **Bennett May** read notes of this case. The patient had recently had scarlatina. Profuse arterial hæmorrhage set in on the twenty-third day of the disease, and the third day from the appearance of suppuration within the meatus. The operation, which was followed by aphasia for three weeks, had been completely successful.

Sarcoma of Superior Maxilla: Excision.—Mr. **May** also showed a woman, aged 50, whose upper jaw he had excised eighteen months previously for a soft round-celled sarcoma expanding the cavity of the antrum. Mr. May considered that the case illustrated the well recognised immunity from recurrence which often attended the removal of these malignant tumours from this region, where the disease was sufficiently circumscribed to permit complete extirpation.

Tubal and Ovarian Disease.—Dr. Malins showed an enlarged ovary and dilated tube taken from a patient aged 28; married nine years; no family. From the same patient, the remnants of a dermoid cyst of the opposite side were removed; two drainage-tubes were used, and removed on the fifth day; the patient has since done well.

Round-celled Sarcoma of Femur.—Dr. Barling showed for Mr. Bartleet a stump of the femur with round-celled sarcoma, removed at the hip-joint from a man aged 20. The limb was amputated at the lower third of the femur nine months previously for sarcoma of the head of the fibula. After the amputation at the hip-joint, although little blood was lost, the patient suffered for some hours from profound shock, but is now practically well.

Epithelioma of Tongue.—Dr. Barling also showed a specimen of epithelioma of the tongue, removed from a man aged 56. There was a history of about five months' duration. The growth affected the left side of the tongue, and slightly the floor of the mouth. There were enlarged glands at the left angle of the jaw. The operation performed was as follows. A horseshoe-shaped incision was made along the lower border of the inferior maxilla, a median incision reaching from the symphysis to the hyoid bone by dissecting down a small flap on each side; each lingual artery was tied at the digastric angle. The tissues of the floor of the mouth were divided with scissors; then the base of the tongue was severed close to the hyoid bone, and a ligature passed through the epiglottis. The enlarged gland was also removed. Hardly any blood was lost, and the patient bore the operation well. A drainage-tube was fastened in the floor of the mouth, and opened into the neck in front of the hyoid bone. The after-treatment consisted in frequent syringing of the mouth with Condy's fluid, which ran out freely through the drain; and in the administration of nutriment, at first by enemata, afterwards by means of an India-rubber catheter passed through the nose. On the fourth day, the right knee and wrist became painful and swollen, and the patient died on the sixth day, with these joints much distended. There were no rigors, and but little fever, and there was no evidence of pneumonia. No necropsy was allowed.

MANCHESTER MEDICAL SOCIETY.

Wednesday, April 16th, 1884.

D. J. Leech, M.D., President, in the Chair.

Acute Transverse Myelitis.—Dr. Dixon Mann showed a patient convalescing from an attack of acute transverse myelitis. The patient was a boy, aged 15, bearing indications of inherited syphilis. He had suffered from spinal irritation for some time before the paralysis came on. Towards the end of December 1883, the patient was seized with severe pain in the lumbar region, and with darting pains and twitchings in the muscles of the legs. On January 16th, 1884, he ceased to be able to walk, and, two days later, both legs were completely paralysed, both as to motion and sensation. The muscles of the legs were rigid; superficial and deep reflexes were exaggerated; the electrical reactions were in excess. The bladder was paralysed, and there was an incipient bed-sore. Motor and sensory power—the latter at first considerably delayed—gradually returned, and, on March 27th, 1884, the patient could walk unaided.

Modification of Syme's Amputation.—Mr. Jones described a modification of Syme's amputation which he had practised in four cases with success. It consisted in leaving untouched the cartilage capping the lower extremity of the tibia. After disarticulation of the foot, the malleoli alone were removed. By adopting this mode of operating, the amount of exposed cancellous tissue was materially diminished, and so also were the risks of suppurative osteomyelitis. The anterior incision should be made slightly convex, with the convexity directed forwards; otherwise the operator might find some difficulty in approximating the edges without undue tension. The stumps were of a good shape, and readily bore pressure.

Glioma of Middle Peduncle and Pons Varolii.—Dr. Ross mentioned the case of a boy, aged 11, who had suffered from double optic neuritis, staggering gait, tendency to fall chiefly to the left, deafness of the left ear, paralysis of the left seventh and sixth nerves, and partial anæsthesia in the left half of the face. During life, a tubercular tumour was suspected to be situated in the left middle peduncle of the cerebellum, and encroaching on the left lateral half of the pons Varolii. At the necropsy, a glioma, about the size of a hen's egg, was found in this situation,

Tubercle of Brain and Spinal Cord.—Dr. Ross also mentioned the case of a woman, aged 25, who had suffered from paralysis of the left third nerve and of the left hand. The case presented difficulties of diagnosis, from the facts that the left leg had been amputated immediately below the knee, and that the right knee and elbow were ankylosed. At first sight, the case appeared to be one of direct cerebral paralysis, instead of a crossed one, as might have been expected. A more careful examination, however, showed that the small muscles of the hand, the flexors of the fingers and wrist, and, to a less extent, the extensors of the fingers and wrist, were atrophied as well as paralysed, and that the affected muscles presented a "partial reaction of degeneration." A further investigation likewise showed that there was partial anæsthesia of the front and back of the inner half of the hand, and two and a half fingers, and of the inner aspect of the forearm; to a less extent of the inner aspect of the upper arm. The sensory and motor nerves implicated being derived from the seventh and eighth cervical and first dorsal nerves, it was surmised that the anterior and posterior roots of these nerves passed through a tubercular tumour, which was situated in the membranes of the left half of the spinal cord, on a level with the affected nerves. The paralysis of the left third nerve was supposed to be due to a tubercular tumour, situated in the membranes of the brain, at the point of emergence of the left third nerve from the cerebral peduncle. At the necropsy, nodules of tubercle were found in the suspected localities.

Death from Chloroform.—Mr. Young related the circumstances attending a death from chloroform, and showed the condition of the heart, which presented a remarkable malformation.

Tetany of the Hand.—Mr. Stocks showed a case of tetany of the hand occurring in a young man.

The Surgery of the Stomach.—Mr. F. A. Southam read a short paper in which, after reviewing the various operations on the stomach which had recently been introduced, he mentioned the particulars of a case of duodenostomy for stenosis of the pylorus.

On a Peculiar Form of Pneumonia.—Dr. Dreschfeld read a paper on a peculiar form of pneumonia, which seems to have been very prevalent lately in Manchester, and which was especially interesting, as it resembled in its symptomatology the "epidemic pneumonia" described by several observers in recent times. The disease commenced, as a rule, without a rigor, its onset being marked by general malaise and pyrexia, which lasted for two or three days before any characteristic physical chest-symptoms appeared. When these appeared, they had a very distinct creeping character; they consisted of fine crepitations, with dulness on percussion, and commenced at the apex of one lung, gradually passing downwards to the base, and then often attacked the other lung in a similar way. The characteristic rusty sputum was absent in about half of the cases, where there was either no expectoration at all, or expectoration of a muco-purulent character. The temperature was never very high, and the curve irregular. In one case, where the invasion of each lobe was more sudden, every fresh attack was marked by a sudden rise of temperature. In but few cases was there a distinct crisis; where recovery took place the temperature showed a more gradual defervescence. The disease ran a somewhat protracted course, and was very fatal. Amongst its complications were noticed enlargement of the spleen, pericarditis, and albuminuria. *Post mortem*, the lungs showed typical croupous pneumonia, the several stages of which could often be seen in the same lung. Portions of the lung, placed at once in absolute alcohol, and examined after Gram's method, showed the presence of enormous masses of diplococci; these were seen both in the alveoli amongst the exudation, as well as in the lymphatics and capillaries. This form of pneumonia bore a very close resemblance to the pneumonia which occasionally occurred epidemically, as described by Costello, Jürgensen, Kühn, and others; it also resembled the pneumonia observed complicating typhoid fever and other zymotic diseases, and the pneumonia observed in old people and in alcoholics. It seemed to form a connecting link between the ordinary pneumonia and the so-called septic and the epidemic pneumonia. The inferences which Dr. Dreschfeld drew from his observations were these. 1. However much croupous pneumonia might vary in type and symptoms, there was only one kind of pneumonia; 2. The causes, such as catching cold, etc., were simply predisposing and not exciting causes; and 3. Pneumonia was due most probably to a specific infective agent, the pneumono-coccus.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

Monday, April 7th.

J. S. Turner, M.R.C.S., L.D.S., President, in the Chair.

Union of Fractured Incisor.—Dr. Bellisario, of Sydney, New South Wales, read notes of the case of a gentleman aged 27, who was thrown out of a dog-cart, striking his face against the stump of a tree.

Three of the upper incisors were displaced, and the fourth broken across transversely. The lower fragment could be moved about in any direction, though with great pain to the patient; and crepitus could be distinctly felt. The displaced teeth were brought into their proper position, and a thin gag inserted between the molars. Only liquid nourishment was taken for several weeks. In the result, not only did the dislocated teeth become fixed, but the fractured incisor also united firmly; and at the end of three months all four were as strong and useful as they had been before the accident, and quite natural both in appearance and in sensibility.

The Influence of Micro-Organisms in the Production of Dental Caries.—Mr. **ARTHUR UNDERWOOD** read a paper giving the results of further investigations on this subject made by Mr. Milles and himself, since the date of a previous communication read before the Dental Section of the International Medical Congress in 1881. In this, they had shown that certain forms of micro-organisms were invariably present in carious dentine; that no change resembling caries could be produced in the absence of these organisms—*i.e.*, under septic conditions; and that, under septic conditions, a change could be produced artificially, which, if not undistinguishable from ordinary caries, certainly resembled it. The fact that organisms were invariably present had since been confirmed by numerous observers. It had been stated by Dr. Miller of Berlin that the dentine was first softened by acid; that the invasion of micro-organisms was only secondary to this; and that a zone of softened dentine not infected by organisms always existed in front of that which was so infected. He and his colleague Mr. Milles had, on the contrary, always found that the organisms extended as far as the softening; they could not find any softened dentine which did not contain micro-organisms; and they were of opinion that the acid which softened the dentine was produced by the organisms, just as occurred in ordinary processes of acid fermentation. They had cultivated the various organisms found in carious dentine, in flasks containing purified blood-serum, after the method introduced by Professor Koch, and had ascertained that there were several distinct varieties; but experiments, made with the view of finding which of these were the most active agents, gave negative results. Dr. Miller had stated that he had produced artificially caries which he defied anyone to distinguish from that which occurred in the mouth. Messrs. Underwood and Milles had repeated his experiments, and had made several of their own, but with very partial success; for, though a change resembling caries did take place in some instances, it invariably became arrested before it had gone very far. This comparative failure was, no doubt, caused by the difficulty of reproducing, in a flask or incubator-experiment, all the various conditions which were present in the mouth; and instances were quoted from the experiments of Koch, Pasteur, and Nägeli, to show that micro-organisms, cultivated under conditions not altogether favourable, became weakened, and even lost their special properties; so that the bacillus of anthrax, for instance, could be harmlessly inoculated. The authors of the paper claimed to have established that micro-organisms of a special form were an essential element in the production of dental caries. Food became lodged between the teeth, and underwent fermentation, with formation of acid and bacteria; the acid destroyed the enamel; the micro-organisms invaded the dentine, proliferated in its tubes, and lived at the expense of its organic material, their advance being accompanied by decalcification of the intertubular substance.—A long discussion followed, the tone of which was decidedly favourable to the adoption of the views promulgated by Messrs. Underwood and Milles, which, it was remarked, would clear up some points which the purely chemical theory of caries did not explain—*e.g.*, the fact that the dentine was destroyed more rapidly than the enamel.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.

WEDNESDAY, MARCH 26TH.

E. MACKEY, M.D., in the Chair.

Collective Investigation of Acute Pneumonia.—Dr. **STURGES** of London introduced a discussion on acute pneumonia, with special reference to the collective investigation of that disease. He remarked that the acute idiopathic form, which was alone under discussion, was a mysterious disease; and that, though recovery was the rule, the prognosis was, up to the time of the crisis, always doubtful; that chill was the chief cause, but that the disease might arise under various other circumstances, such as overwork, mental distress, trifling injury, etc.; and that then the prognosis was not as favourable as when the onset could be traced to cold. Medicine was of very little avail. Dr. Hughes Bennett, under his "restorative treatment," had a death-rate of under 4 per cent. Tabulating 700 consecutive cases obtained by the collective investigation cards showed, in the first 175, 27 deaths; in the second, 32; in the third, 29; in the fourth, 29; or an average per cent. of 16, very evenly distributed; and that although the cases were those of many different observers from all parts of the country. This rate was as high as when the disease was treated by bleeding, etc., and was much in excess of that recorded by Dr. Hughes Bennett. The disease probably had very much its own way under any form of treatment. What was the pathology of the disease? Was it an inflammation pure and simple? or was it a specific fever, with local manifestations in the lung? These and many other important questions were to be answered by the combined observations of many. Individual inquiry was not sufficient, and from no single point of view could a complete survey be obtained. One observer, though he had seen many cases, might never have come across one from any cause but cold. Books were not sufficient; they recorded diseases as they were in the past. We should make use of our own native material, and make the pneumonia of the time work out its own history. Surely the disease could not be the same now, with its death-rate of 16 per cent., as it was in the time of Dr. Hughes Bennett, with 4 per cent. of fatal cases. Nearly one thousand cases of pneumonia had been sent in, and the committee who had tabulated them were prepared to answer questions as to its causes besides exposure; its morbid associations; what proportion was due to sanitary causes; the probability of recurrence in the same person; the significance of "crisis"—was crisis a proper feature of pneumonia? what was its favourite day?—how far the local seat of the disease was an indication of its character. These were instances of points on which collective investigation had thrown light. By such combined inquiry there must at least be enlarged knowledge. Some said that they were not going the right way to work, and that they ought to find the bacillus; that would come all in good time. There were two departments of inquiry, the clinical and the pathological; and it was the former that must be taken up by the great body of general practitioners.—Dr. **FULLER** (Shoreham) thought pneumonia was probably of a different nature at different times. Some cases would die whatever was the treatment. He was afraid the cards were too complicated, and entailed too great a tax on the time of the general practitioner; that therefore there was a good deal of lukewarmness about the matter. Would it not be better if the cards asked only a few simple facts, such as the daily pulse and temperature, without the expression of any opinions? He thought that great trouble should be taken to find out the best way of obtaining information from the many.—Dr. **TREUTLER** (Fletching) felt sure there could be no doubt about the value of collective investigation, all that was needed was that all should put the shoulder to the wheel.—Dr. **BAGSHAWE** (Hastings) thought it would be easier to speak after the report on pneumonia had been published; it was looked forward to with great interest. Pneumonia most commonly arose from chill during the prevalence of north-east winds. Pneumonia was most common in high altitudes; bronchitis in low. Several cases were on record caused by nervous shocks. About "pythogenic pneumonia" there was all to learn. He related the case of a footman who had an attack of pneumonia, which then spread to others in the same house, and finally to the medical man.—Dr. **MACKEY** related three cases of pneumonia that he had lately seen. He remarked on the small value of statistics, which might be made to point to any conclusion that was desired. In the case of pneumonia, statistics had not shown that any treatment was better than the "energetic." The death-rate generally varied according to the different seasons. It was a dangerous dictum to say that treatment was of no value. He suggested that the action of medicines should form a subject of enquiry for the collective investigations.—Dr. **STURGES**, in reply, said that he could not as yet discuss the results of the Collective Investigation Committee's inquiry concerning pneumonia. Some other facts that [illegible] would mention. Pneumonia and typhoid were not found associated, so that it was doubtful whether pneumonia ever arose from defective sanitation. Tonsillitis, erysipelas, and bronchitis, were frequently associated with it. He related the history of an epidemic in a school, where an escape of sewer-gas, during the prevalence of [illegible] had apparently been the cause of the disease. [illegible] of cases occurred among phthisical people, who [illegible] liable.

BORDER COUNTIES BRANCH.

[illegible]—In opening a [illegible] on this subject, Dr. **ANGUS MACDONALD** approached it from the point of view of the thermometer. After a brief [illegible] that lay in the way of the early observers of temperatures through the defective action of the instruments, and the [illegible] that perfection of the

clinical thermometer introduced, the author proceeded to formulate the subject to be discussed under five heads, or queries. 1. What are the normal limits of temperatures in what may be regarded as the strictly healthy puerperium? 2. How are we to explain the frequent sudden rises in temperature during the lying-in period, which pass off rapidly, and leave no evil results? 3. In cases of complicated puerperium, when does the degree of rise become decidedly dangerous, and when can we trust the depression in temperature as indicating safety? 4. Is it possible, by mere consideration of the temperature alone, to determine the presence of septicæmia, or to conclude that a given case of pelvic inflammation is still aseptic, and likely to remain so? 5. Are there cases in which the temperature is apt to mislead us? If so, how are we to explain these alterations? In regard to the first question, the author referred to a series of observations, with a view of ascertaining the normal puerperal chart, made at the Edinburgh Royal Maternity. The result was to show that, from the third to the seventh day inclusive, there was normally a slight rise, but that the highest attained was only about 99.5°. Subsequently the temperature became normal. In treating of sudden rises of temperature during the puerperium, the author stated that he believed the bulk of them were really septicæmic. Reference was made to a series of hitherto unpublished observations on the lochia, the result of which was to show that, even as issuing from the os uteri, the lochia invariably, though removed with every antiseptic precaution, rapidly produced putrescence in sterilised fluid. Reference was also made to the recent observations of Kehren, Karewski, and Ahlfeld, upon the putrescent qualities of the lochia, and the portions of membranes left *in utero.* It was argued that autogenetic infection was much more likely to occur than British obstetricians were inclined to believe, and a demand was made for the greatest consideration being exercised by medical practitioners in judging of another in whose hands such an accident occurred. It was maintained that, with due use of cleanliness and antiseptics, a medical man ought never, on any occasion, to carry disease to his patient. How to combat the autogenetic disease had yet to be worked out. Rupture of perinæum, rupture of vagina, local abscesses, hæmatocele, etc., might also cause these sudden rises; so did frequently mental impressions on the part of the patient. The author expressed grave doubts regarding the secretion of milk as a cause of high temperature. He had never noticed such rise, except the tension was so great as to approach congestive mastitis. In that case, one or two degrees of elevation might occur. In most cases of so-called milk-fever, careful exploration was able to elicit some other source, usually some traumatism in the genital tract. In dealing with the third head, the author expressed as his opinion that a case became decidedly dangerous in which the temperature was over 102.5°, and the higher and the longer the greater the danger. No certainty of improvement was warranted unless the temperature remained under 100° for at least twenty-four hours. Attention was directed to the radical differences of the chart of lymphatic septicæmia compared with that of phlebitic septicæmia. In the former case, there was a single rigor, and sudden and continuous temperature; in the latter, a series of successive rigors, followed by corresponding depressions. These facts were pointed out as important in establishing a diagnosis. In dealing with the fourth question, Dr. Macdonald maintained that, while as a rule the temperature in non-septic pelvic inflammations did not exceed 102.5° or 103°, and in septic cases, at some times at least, ran up to 104° or 105°, or more, yet it was unsafe to form a judgment from temperature alone, and the whole circumstances of each case had therefore to be considered. On the other hand, when metritic or parametritic mischief was present, one never knew when it might take on septic action. The centre of gravity of such cases, according to the opinion of the author, lay not so much in the temperature-elevation, as in the metritic and parametritic complications. In respect to the fifth head, Dr. Macdonald pointed out that in some of the very worst and most rapidly fatal cases of septicæmia the temperature never rose over 101°, if so high. These cases were explained on the view that the vital centres were attacked with such a quantity of the poison, that death occurred before the tissue-changes ending in heat took place. On other occasions, very high temperatures—104° and 105°—were clearly due to nervous causes.—A short reference to treatment concluded the paper.—Dr. Macdonald showed a series of charts illustrative of the various positions maintained.

QUARANTINE.—A telegram received at Lloyd's from Suez, dated May 6th, says: "Arrivals having passed fourteen days at sea from Galle, Colombo, or Perim, provided there have been no cases of death or sickness during the voyage, are subject to twenty-four hours' observation until these ports establish quarantine against all the points declared infected by the Conseil Sanitaire."

REVIEWS AND NOTICES.

ANNALS OF CHOLERA FROM THE EARLIEST PERIOD TO THE YEAR 1817. By JOHN MACPHERSON, M.D., Inspector-General of Hospitals, H.M. Bengal Army (retired). London: H. K. Lewis.

WE hail with pleasure the re-issue of this learned work, which, to our regret, has been for some time on our table awaiting notice. The author modestly describes his book "as merely a collection of facts gathered from all available sources;" but the gathering has been a work of much patient labour and research. It is not easy to give a correct notion of Dr. MACPHERSON's work by extracts; it is a book that must be studied as a whole, and we can recommend it to all who desire to master the history of cholera up to the date of the memorable outbreak of the disease in the camp of Lord Hastings.

The theory of an exclusive "endemic area" put forward by the late Dr. Bryden cannot be maintained to the extent insisted on by that eminent statistician; for, although in comparatively recent years many epidemics of cholera have had their starting-point from this area, there is abundant evidence that many epidemics of a highly destructive nature had no such birthplace as the "area" so strictly defined by Bryden. Southern India has its own endemic area, which Surgeon-General Cornish, as well as the author of the work before us, has defined. This is the delta of the Cauveri, *i.e.*, in the Tanjore and Trichinopoly districts. But, as Cornish has observed, there is a peculiarity about the disease in the above districts, viz., that it occurs for the most part in single cases, which are not followed by others; in other words, although cholera is endemic in the delta of the Cauveri, it does not appear to be the starting-point of epidemics invading other parts of India, at least in recent times.

As above observed, we cannot by extracts give in detail the facts on which Dr. Macpherson bases his conclusions, and must content ourselves by an abridged statement of his general summary.

1. Cholera of various degrees of intensity has existed in all parts of the world, in varying extent, as long as there have been any records of the healing art. There is no positive evidence of there having been epidemics of the disease before the sixteenth century. The earliest epidemic of cholera, described by name in Europe, occurred at Nismes in 1564. The disease was first observed by Europeans in India in 1503, and the first epidemic of it that has been described took place at Goa.

The disease in India was recognised to be more violent than the cholera of Europe. Cholera was first seen by Europeans on the coasts of Malabar and Canara, where it continued to prevail, almost without interruption, up to 1817.

In the seventeenth century, it was known at Sumatra, in Java, in Japan and China, in Arabia and Mauritania, at Goa and Surat, and on the shores of India generally. In the seventeenth century, cholera, not so severe as in India, was a common sporadic disease in Europe, and was known in France and Belgium as *trousse galant*, and there were outbreaks of it in the latter half of the century in London.

In the first half of the eighteenth century, there was little cholera in India, and no epidemic of importance in Europe. In the last half of the eighteenth century, it prevailed in Malabar, and was common on the Coromandel coast. It was constantly at Vellone and Arcot, and in epidemic form was seen at Bellary, Ganjam, and Calcutta. It appeared also in Java and China, and the Mauritius. It died away in the end of the eighteenth century, and was quiescent in the early years of the nineteenth; and, although endemic in India, did not assume an epidemic form.

2. In more limited areas, the periods of increase and decrease are thus given. There was little cholera in the delta of the Cauveri in the beginning of the eighteenth century; about the middle, there were extended epidemics, which died out towards its end. There was little cholera in lower Bengal during the last half of the eighteenth century, little in the beginning of the nineteenth until 1817, when it broke out with extreme virulence, and has never since ceased to exist there. From the above facts, it is clear that a district at one time free from cholera may become its favourite seat, and then, after a longer or shorter period, cease to be so. In the present state of knowledge, no sufficient reason can be given in explanation of this fact. It is not to be explained by drainage, or changes in the habits of the people or country. Lower Bengal, now known as the home or endemic area of cholera, is the portion of India in which we hear least of cholera in early times; although, from occasional notices of cholera in Bengal, and the existence of a cholera-temple, it must have been at times very well known. It is certain that no disease appeared in India in 1817 that had not often appeared there before. The natives of India in-

vented no new name, and worshipped no new goddess, for the disease of 1817; a pretty sure sign, Dr. Macpherson adds, that they did not think the disease a new one.

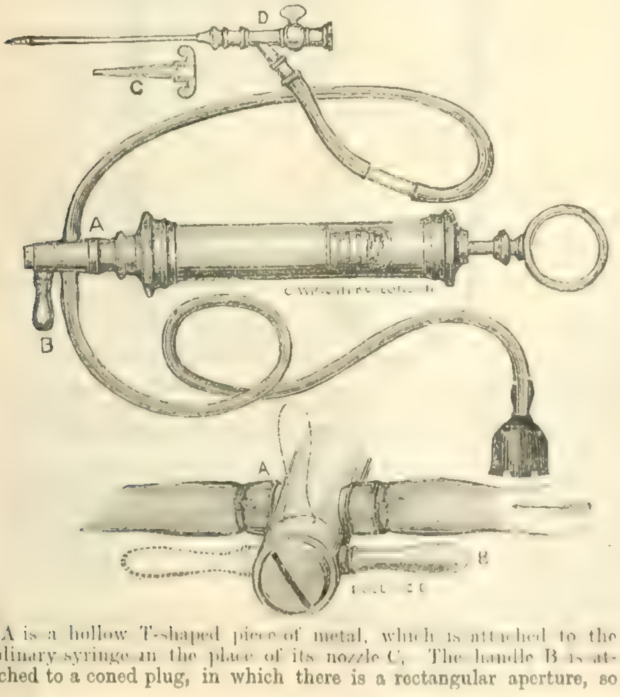
NOTES ON BOOKS.

An Index of Surgery. Being a Concise Classification of the Main Facts and Theories of Surgery, for the Use of Senior Students and others. By C. B. KEETLEY, F.R.C.S., Senior Surgeon to the West London Hospital; Surgeon to the Surgical Aid Society. Second edition. London: Smith, Elder and Co. 1884.—Mr. Keetley is making his *Index*, by dint of judicious revision and addition of new material, a valuable dictionary of contemporary surgery. The student preparing for the higher examinations at the College of Surgeons and at the universities, can refer to any question which he hears discussed freely at his hospital, yet is not satisfactorily explained in the popular text-books. We do not think, however, that this work can be read through systematically by candidates. As we observed, in reviewing the first edition, the *Index* is particularly suitable for the hard worked practitioner, who cannot visit hospitals, and has no time to read through new text-books, nor long communications on special subjects in medical journals, or in the annual publications of societies.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

IMPROVEMENTS IN SYRINGES.
By R. F. BENHAM, M.R.C.S., ETC.

HAVING observed for some time past the great inconvenience and expense one experiences in having to use various forms of syringes for the innumerable purposes for which they are required, both in medical and in surgical cases, I have been induced, in consequence, to modify the mechanism of the extremity of the ordinary type of syringe, so that one syringe may be used for numberless different purposes. The modification to which I refer will, I have no doubt, be readily understood from the accompanying diagrams.



A is a hollow T-shaped piece of metal, which is attached to the ordinary syringe in the place of its nozzle C. The handle B is attached to a coned plug, in which there is a rectangular aperture, so that by turning the handle B either to the left or to the right, the way, so to speak, is opened to either the inlet or the outlet aperture, or *vice versâ*, as desired. To the end of each transverse extremity of A, a piece of thick rubber tubing is attached, as in the ordinary aspirating syringes. To one extremity of the tubing a hollow weight is connected, whilst at the other various attachments may be adjusted; for instance, if the syringe be required for the purpose of washing out a cavity or syringing a wound, the nozzle C of the syringe may be attached to the extremity of the flexible tube, and thus fluid may be driven in either direction by simply turning the handle B to the left or to the right at will. Apart from the advantages to be obtained by applying this modification or addition A to an ordinary syringe, it may be mentioned that, first, it is impossible for one aperture to be opened before the other is completely closed, nothwithstanding they may be of considerable size; secondly, no matter how small the extremity of the nozzle C may be, it does not impede the flow of the fluid when the syringe is being refilled; thirdly, when the nozzle of syringe is once *in situ*, it may be allowed to remain so until it is no longer required; fourthly, as there are no valves or complicated mechanism, the working parts cannot possibly get out of order or become corroded; fifthly, the attachment A may be applied to all existing syringes by simply causing the size of its screw to be made to correspond with the nozzle, while the other portions, such as a cannula and trocar, may be adapted at will. In conclusion, I may state that Messrs. C. Wright and Co., of 108, New Bond Street, have in stock various sizes of the attachments as above described, and that, on their receiving an ordinary syringe, they will supply them accordingly.

SUGGESTION FOR A SOLDIER'S POCKET DRESSING-CASE.

As great interest has lately revived on the subject of the antiseptic treatment of the wounded on the battle-field, a little pocket-case has been constructed for me by Messrs. Weiss. This is intended as a mere voluntary suggestion as to the possibility of every soldier on active service being provided with a simple antiseptic dressing; so that, in the case of overwhelming numbers of wounded, or from other reasons a surgeon not being within reach for some time, the wounded man would be enabled by himself, or with the aid of a comrade, not only simply to bind up his wound at once, but also to apply an antiseptic covering until skilled aid arrived. This little case is rather larger than a full-sized cigar-case, weighs under 9 ounces when filled, contains amply sufficient for a first dressing, is rounded off at the corners, and could, without discomfort or inconvenience, be carried in a breast-pocket on the left side.

The contents are as follows: 1, a large strip of protective; 2, a collapsible tube to contain an antiseptic cream (*e.g.*, of iodoform and eucalyptus); 3, a packet of carbolised tow, compressed; 4, about six yards of carbolised gauze bandage. Iodoform-wool, salicylic silk, or whatever antiseptic preparation might be in vogue, could be substituted, if preferred, for the cheaper carbolised tow. If, however, the question of expense could be overcome, I would suggest a small cylindrical dredger containing powdered iodoform instead of the collapsible tube, and compressed boracic wool instead of the carbolised tow, the iodoform-boracic dressing having proved of the greatest value in the treatment of gunshot-wounds in the late Egyptian war.

EDGAR M. CROOKSHANK.

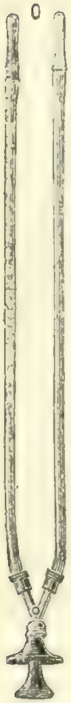
A NEW FORM OF STETHOSCOPE.
By E. T. AYDON SMITH, L.S.A.

IN originating this instrument, my primary object was to [illegible] a stethoscope which would carry the sound to the ears direct, and not through tubes of different calibre, or through any cavity in the instrument which might in any way modify the sound.

I also intended that it should be of the smallest possible bulk, and capable of acting as a simple, a binaural, or a differential stethoscope, as required. I finally designed that it should [illegible] to the busy practitioner, in being useful for other purposes in an emergency.

I have had an instrument made by Messrs. Mayer and Meltzer, of Great Portland Street, the chest-piece of which is formed by a piece of gutta-percha. The tubes are Jaques' India-rubber catheters, and the ear-pieces those of an otoscope.

The stethoscope is shown complete in Fig. [illegible], but, for greater portability, the larger chest-piece can be removed, and carried in the waistcoat-pocket, as in Fig. 1, although the whole instrument can easily be carried in a watch-pocket, as it goes, when closely folded up, into an ordinary match-box 3 inches long 2 inches broad and 1 inch deep.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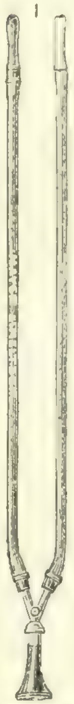
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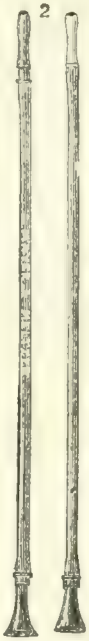
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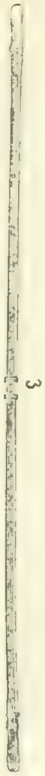
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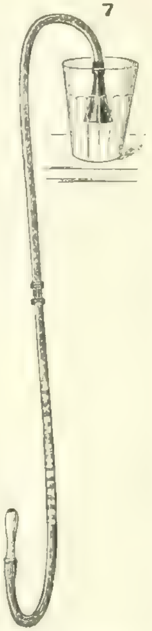
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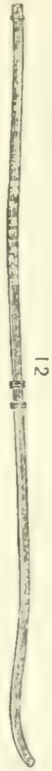
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It will be seen by the woodcut that there is no cross-bar or elastic band in the middle, as in the ordinary binaural; so that the hum produced in some by the breath from the nose of the auscultator impinging on an elastic band is avoided.

It has a small tube communicating with the interior, and, by holding the instrument when in use in such a way that the index-finger is free to close it or leave it open (Fig. 6), the sound can he heard as conveyed by either the simple or the binaural stethoscope, without moving the instrument, a greater depth of sound being obtained when the tube is closed.

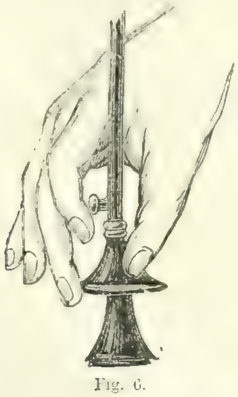
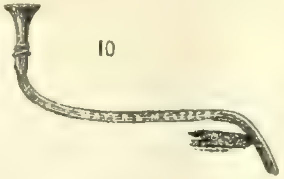


Fig. 6.

It is converted into a differential stethoscope by placing one of the ear-specula in each tube, as shown in Fig. 2. By joining the tubes as in Fig. 3, it is an otoscope. By removing the ivory ear-piece, and joining one of the ear-specula (Fig. 10), it forms a useful means of administering an emetic or nutriment to a stubborn or an insensible patient, by passing the tube into the œsophagus through the nares, and using the speculum as a funnel. Fig. 7 shows it in use as a nasal douche.

In Fig. 11, it is shown as a tourniquet over the brachial artery, and by using the edge of the larger chest-piece to compress the artery, the pulsation at the wrist can be stopped.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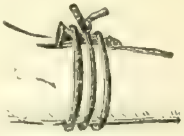


Fig. 11.

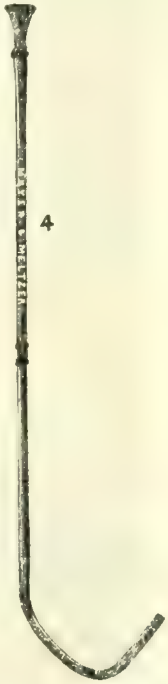
Figs. 8 and 9 simply show the catheters and ear-specula. If it should have to be used as a female catheter, it will be found long enough when joined (as in Fig. 12) to reach over the side of the bed.

8

9

When connected as in Fig. 5, a sufficient hydrostatic pressure is obtained to administer an enema; but, if used for this purpose, care must be taken that the ivory ear-piece be not passed beyond the sphincter ani, or the India-rubber tube may be compressed so as to stop the passage of the fluid.

As shown in Fig. 4 (the ear-piece having been removed), it can be used to wash out the vagina, bladder, or any cavity, by raising the end so as to have hydrostatic pressure to inject the fluid, and lowering the end as a siphon to draw it off. The parts are easily replacible, so that, when used for such purposes, they can be replaced by new ones on arriving home.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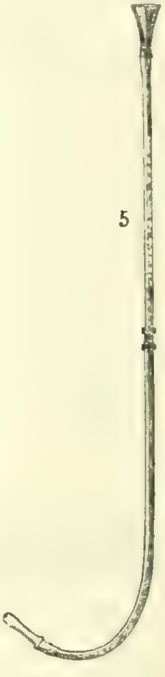
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From the above, it must not be inferred that this instrument is intended to be used in place of other contrivances for injecting fluids, etc.; but it is quite possible, for instance, that a stream of fluid might have to be thrown into a bleeding uterus, when delay would be dangerous, and no other instrument at hand, as we invariably carry a stethoscope, but not the other instruments for which it might, in case of need, be used.

In first using this stethoscope, a feeling of uncertainty may be conveyed as to whether the ear-pieces will retain their place in the ears; but when this passes off, it will be found to be a very convenient and serviceable stethoscope.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 10th, 1884.

THE INTERNATIONAL HEALTH EXHIBITION.

THE International Health Exhibition, which was opened on Thursday, promises to take rank amongst the most considerable events of recent years in the history of sanitary progress. In this Exhibition, for the first time, a national recognition has been given on a large scale, to the desirability of encouraging those hygienic arts which tend to the improvement of the physical conditions of the people. The Prince of Wales, in laying out the programme of the Exhibition, sought from the first the advice of skilled experts in the medical profession, and of those engineers and others, whose work is the essential accessary to progressive sanitation. The Exhibition is comprehensive and systematic. It includes not only all that relates to the sanitation of the home and to the hygiene of the individual in his physical relations, but it was the desire of its founder that it should include the subject of education in relation especially to health, but also to progress in the technical arts. In this last respect the Exhibition will, therefore, include subjects which have no inherent relation to health, but which, for other national reasons, it was desired to include under the head of education; nor can there be any doubt that in the extensive display of the products of technical education which will be found at South Kensington, there will be material which will greatly add to the general interest of the show; and which will be of considerable public utility.

The President of the Council, the Duke of Buckingham, the Vice-President, Sir James Paget, Sir Philip Cunliffe Owen, and others, have given to the work of organisation continued attention and unwearying labour; and the work generally devolving upon the Council has been of a very onerous and increasing nature, and, upon the part of men engaged in busy practice, and involved in many pursuits, has required no small sacrifice of time and labour. The general committees which have been formed have included a great body of scientific and practical workers in all that relates to the various subjects of the programme; and it may be hoped that it will be thought, by those to whose criticism and for whose instruction and entertainment the buildings are now thrown open, that their efforts have not been wasted. In addition to the vast miscellaneous display which belongs to a programme containing so many heads of interest, and which aspires to present a picture of all that has most daily interest in relation to food, dress, to the habitation and education, there will be found special features which have much of novelty and scientific interest. The biological laboratories, arranged by Mr. Watson Cheyne and by Dr. Corfield, under the direction of a committee, of which Sir Joseph Lister is the President, will present features of great scientific importance and instruction, and will, no doubt, be to the more serious medical visitors to the Exhibition among its greatest attractions. The Sanitary and Unsanitary Houses, arranged under the supervision of a committee of architects and engineers, will show in the most simple and demonstrative manner what are the ordinary conditions of sanitary failure under which health most frequently suffers in the everyday houses of the nineteenth century, and how such errors and failures may most easily and inexpensively be avoided or overcome. A library will be provided, to which foreign nations have promised liberal contributions. It has been placed under the charge of a competent librarian, and it may be hoped that the documents here collected may prove to the medical officers and the authorities of Sanitary Boards, a fruitful source of suggestive information.

These are among the more serious and directly scientific sides of the Exhibition, to which every effort has been made to give the prominence hitherto frequently wanting on such occasions. We have already given the list of the series of handbooks in preparation, many of which are now ready, and which will issue from the press in rapid succession, and a large circulation will, it is anticipated, be secured for them. The subjects and the authors speak for themselves; and if the material attractions of the Exhibition only serve to quicken the interest of the visitors sufficiently to induce them to become the possessors of a mass of literature so opportune and so carefully devised in the interests of sanitary progress, this alone will be a great gain. A long series of lectures with like objects, and dealing with all the chief topics of health in its various connections, has been arranged.

As a show, the Exhibition promises to have unusual attractions and features of entertainment. The food-stuffs and cooking of various countries; the water-temples; the illustrations of electric and other lighting; the unique display of Old London, on which great sums of money have been expended, through the liberality of the City of London, will all constitute elements of amusement as well as instruction. In the department of dress, Mr. Louis Wingfield and his colleagues have arranged an extensive series of life-size figures arrayed in the costumes of the past, with singular artistic finish and historic accuracy. The most modern devices of hygienic dress will stand in direct contrast and comparison with the fashions of bygone days, and in both will be found suggestions of wisdom and freaks of folly at which we may laugh, or from which we may learn.

It was not to be expected that the Exhibition would be found complete on its opening day. Probably no such great show was ever completed at the date fixed for opening. In the present case, there have been particular difficulties, obstacles, and delays, due to the extreme shortness of the time available for preparing the Exhibition. It was only in October last that the decision to arrange such a display was fully arrived at, and the preparations for it necessarily did not begin until a later date. Under such circumstances, the formalities necessary for inviting the assistance of foreign countries could not be got through until a comparatively recent date; and the active steps necessary to secure their co-operation could not be made until a time which gave but little space for preparation. Under such circumstances, it is not surprising that many of the foreign courts are unfurnished. On the whole, however, the present Exhibition will be found to be in a state of forwardness and completion far beyond what could have been anticipated, and there is enough to attract and arrest the attention of the least serious and the least instructed. Every day will add new features of interest. The International Health Exhibition opened this week is destined, it may be hoped, to have a career not less successful than its predecessors. It combines elements of instruction and entertainment on an extensive scale and in a rare degree.

THE LUNACY LAWS AGAIN.

THE labours of the House of Lords cannot be said to be excessive. Hence an occasion for discussing the Lunacy Laws is no great hardship to their lordships; indeed, the subject is one upon which it is easy to spend a pleasant hour of debate without [illegible] fatigue or profound meditation. A very detailed knowledge of either the existing enactments or the difficulties which beset the question is not expected. Nothing is easier than to [illegible] upon the [illegible] theme of the liberty of the subject, and the danger [illegible] tampering with it for the personal interests of the proprietors of madhouses. Nor is anything easier than [illegible] attempt to bring such men into contempt by characterising their calling as a "trade," and describing the men themselves as holding the same social position as drapers or the keepers of boarding-houses. The Earl of Milltown had no doubt good intentions in directing the notice of the House, last Monday, to the case of Weldon *v.* Winslow, and in moving that "the existing state of the Lunacy Laws is eminently unsatisfactory, and constitutes a serious danger to the liberty of the subject." The noble lord, however, damaged his own cause by exaggeration, as when he spoke of the present state of things as "intolerable," and ended his fervid speech by expressing the trust "that a most damning blot would be removed from the statute-book." It might have been supposed, from such language, that numbers had been improperly confined in asylums, instead of the fact being, as shown by Lord Shaftesbury, that from 1859 to 1877, there had passed through the Lunacy Board 185,000 medical certificates on the admission of patients into asylums, all of which had been found good on examination. During the same period, there had been 90,000 discharges, of which 22,000 had been of patients from private asylums.

Lord Shaftesbury also quoted from the report of the Select Committee of the House of Commons of 1877-8, to the effect that "allegagations of *mala fides*, or of serious abuse, were not substantiated." Public opinion has not been altogether silenced, however, by this assurance; and now the Weldon case has attracted fresh attention to the question of depriving persons of their liberty on medical grounds, without magisterial sanction.

We are far from thinking the subject an unimportant one. We do not regret that the Lord Chancellor has undertaken, on behalf of the Government, to introduce a Bill next session, with a view to consolidate the existing law, and to propose additional safeguards in regard to persons alleged to be insane. Excellent as are the present laws of lunacy, they undoubtedly admit of improvement. And, as regards private asylums, if any plan can be devised by which they can be abolished with a proper regard to the rights of the proprietors, we know that the majority of this class would be only too glad to be rid of a burden which subjects them to constant and unjust aspersions of inhumanity, and the opprobrium of making a profit out of the misfortunes of men and women who are, by the nature of the disease under which they labour, incapacitated from deciding upon the spending of their money or upon their detention in an asylum. But while we are aware that this feeling exists, and that legislation may be thereby facilitated in the direction indicated, we know that Mr. Dillwyn's efforts have so far failed to bring all lunatics under the care of the State, independently of private interests. Our great desire is that, whatever enactments may be passed in future, nothing will tend to increase the difficulties of placing the insane promptly under medical care in well conducted institutions. The delay and exposure caused by examinations before magistrates or courts of law are to be deprecated. The Scotch system we believe to be worse than useless as a check on improper detention. The greatest safeguard of all would be official medical examination of private patients within a week of their admission into an asylum, quite apart from the visits of the Commissioners in Lunacy.

THE ARMY MEDICAL SERVICE.

In the discussion on the vote for the medical services of the army, which took place in the House of Commons on Monday night, Mr. Guy Dawnay, member for the North Riding of Yorkshire, called attention to the working of the medical department with the field-forces in the recent Egyptian campaign. We share his regret that the discussion on the medical conduct of the war, and on the report of Lord Morley's Committee, did not take place last year, when the subject was fresh in the minds of the public. There can be no doubt that a very painful impression was created by the evidence of Lord Wolseley before the Committee, the more so as it was quite unanticipated, and in complete contradiction to all that he had previously expressed. This evidence was published prematurely by the leading journal, and appeared by itself without the contradictions which the evidence of other witnesses before the Committee had given to it.

Mr. Dawnay's speech contains but a mild indictment when we compare it with the loud and ignorant talk at the time of a total breakdown in the medical arrangements in Egypt; of an entire absence of the most ordinary drugs and medical appliances; of operations done without chloroform; of patients being starved in the hospitals, and lying for hours untended on the battle-field. Mr. Dawnay, who accompanied the Guards division in Egypt, once more tries to fasten on the medical officers the charge of giving their patients, without remonstrance, "bread unfit for human food," as Lord Wolseley expresses it, bread which the commanding officers instantly refused. This charge has been fully and completely rebutted by the evidence of Dr. Veale and others. A perusal of Mr. Dawnay's evidence before the Committee, published in the Blue-book, will show how very imperfectly he was acquainted with the arrangements upon which he constituted himself a judge, and how very little he knew of the medical provision made for an army in the field.

The speech is one which may be interpreted, and is apparently intended, as a plea for the restoration of the old system of regimental surgeons. One cannot but feel some suspicion that the complaints which were so persistently urged against the "system," while admitting the zeal and efficiency of individual medical officers, were prompted by the desire to destroy it, and substitute one in which the medical officer was really little else than the servant, and, in some cases, a too humble one, of the commanding officer of his regiment. The military surgeon should be doctor first and soldier a very long way afterwards. The departmental system now existing commends itself more and more to the good opinion of the medical officers in the service. It is, too, one in which better opportunities of acquiring professional knowledge and doing professional work arise, and we are glad to find the Minister of War does not show any sign of yielding to the pressure put upon him to revert to the old plan. The Committee, with two exceptions, having all the evidence before them, went so far as to urge that it would be to the advantage of the service if the medical officers of the Guards were, in this respect, placed in a similar position with the rest of the medical service. Lord Hartington, at present, does not see his way to make this change, almost the only one of the recommendations of Lord Morley's Committee which he does not propose to carry out; but he foreshadowed a time when there may be in London a great military hospital, as there is in other capitals. When this is established, and the Medical School at Netley attached to it, we shall have an institution which will do much to benefit our army medical officers, and raise the *prestige* of the service.

Mr. Dawnay asserted that "the present system, in the opinion of all the authorities, has utterly broken down, that it is thoroughly detested by the medical officers, and is also utterly opposed to the best interests of the army itself." If this be so, it is not a little remarkable how completely subsequent speakers not only failed to endorse, but contravened his opinions. Here again we must assume that Mr. Dawnay speaks with a very imperfect knowledge of the subject, and the requirements of the military medical service.

Dr. Farquharson, himself an old medical officer of the Guards, regarded the hon. gentleman's attack on the medical department as both elaborate and unjust, and expressed his own conclusion, gathered from the Blue-book, that in the recent campaign the medical department had proved itself one of the most successful, from a medical point of view, that had ever been known in this or any other country.

Colonel Stanley, who speaks with the authority of one having official experience in the War Office during the previous administration, said "the charge of inefficiency and want of care brought at an earlier period against the medical officers had been entirely dropped, and that they had come out of the inquiry, so to speak, with flying colours." No doubt there were grave defects, but, in regard to these, he adopted the opinion of Sir John Adye, a soldier of large and varied experience in war, that they were due to the military necessities of the war.

Sir William Mac Cormac, he considered, was fully justified in pointing out, in his separate report, that the medical results of the campaign contrasted most favourably with those of any previous one. Dr. Lyons, M.P., did not think it necessary to make any defence of the medical department. The charges hastily and unjustly brought against it had fallen to the ground. He urged the larger employment of female nursing in future campaigns, a difficult subject to which the committee has paid much attention.

The Marquis of Hartington, in concluding the debate, regretted that Mr. Dawnay should have thought fit to reproduce the vague allegations as to a break-down in the medical administration in Egypt; and, notwithstanding the attention which he told the House he had bestowed upon Lord Morley's report, he, Lord Hartington, considered he had failed to establish any of them. In the War Minister's opinion, this report clearly proved that nothing approaching a break-down had taken place. There had been a certain amount of inconvenience and hardship, a certain amount of want of preparation at particular stages of the campaign, but it had been conclusively proved that these depended upon the conditions of the war, which made it impossible for the medical department to be always as efficiently organised as, under other circumstances, it might have been. At Cairo, what took place afterwards, so far as any reason or justification existed for complaint, was to be attributed to a failure of admittedly the most difficult problem which can occur to a military nation, the thorough organisation of the department of supply for an army in the field.

The Medical Department of our Army may, indeed, be congratulated on the complete vindication which has followed upon the cruel aspersions cast upon them as men almost devoid of ordinary feeling, although belonging to what is generally admitted to be a humane profession. It is now established, to the satisfaction of all unprejudiced persons, that they discharged a difficult task with an amount of devotion, self-sacrifice, and ability, which entitled them to the very highest praise, and which is now being given to them, despite unworthy efforts to fasten responsibility upon them which was in no degree theirs.

The medical record of the Egyptian campaign will remain as one of the most conspicuously successful in history. The outcry at the time came chiefly from young men, and some old ones, too, who were without any experience of actual warfare, and found themselves unable in the Egyptian desert to procure the luxury of a Pall Mall club.

Great good will, however, accrue from the inquiry which has taken place. Measures for the improvement of the nursing of the sick soldiers, and the training in cooking of the hospital orderlies, are already being taken—steps, it should in justice be added, which have for a long time past been urged by the Director-General.

The Military Commandant at Netley Hospital has been abolished, and a Medical Officer of high rank will command instead. The Army Hospital Corps and the Army Medical Service are to be made one, and the Surgeons of the Army Medical Department will in future be the officers of their own men. Care will hereafter be taken that the complaints, not without reason, of a too frequent change of medical officers at military stations will be met, and obviated in the future, as they readily can be. We expect that the popularity which the Medical Service of our Army is beginning to acquire, will not be tampered with; and that it will continue to attract some of the best men in our medical schools.

Nothing, perhaps, emphasises the manner in which public opinion has veered round, than is afforded by the report of the General Officer lately commanding in the Soudan Expedition. On this occasion, the same medical material was employed, the same system was in force, some of the same medical officers were employed; the conditions and the country were to a great extent alike; and we find with pleasure that General Graham has nothing but the highest praise to give of the conduct of one and all of his medical officers. We have only to add, may they continue to deserve it in all future campaigns, as we believe they did deserve it not only on the recent occasion, but during the expedition under Lord Wolseley a few months before.

THE TREATMENT OF THE APPARENTLY DROWNED.

In our annotations of April 26th, we drew attention to a demonstration in Paris of the treatment of asphyxia by Dr. Howard, in which he desired to show that the traction of the tongue does not suffice to raise the epiglottis away from the posterior wall of the pharynx. It is satisfactory that these more recent observations of Dr. Howard entirely confirm those of our associate Dr. Bowles, who enunciated precisely the same principles in his paper published in the *Medico-Chirurgical Transactions* in 1860. Attached to this paper is an illustration of the anatomical relations found by him on dissection, indicating in the clearest manner that, in the recumbent position, the epiglottis ordinarily lies in contact with the posterior wall of the pharynx, and is immediately raised and drawn away from the posterior wall by elevating the chin and throwing the head backwards; as Dr. Howard puts it, by placing the head and neck in a position of forced extension. It has also been strongly insisted upon by Dr. Bowles that the pulling of the tongue forward in drowning, asphyxiated, and comatose conditions, when the patient is supine, is absolutely untrustworthy as a means of treatment; for, in opening the mouth to lay hold of the tongue, the base of the tongue and the epiglottis are pressed back against the pharynx, and one cannot be sure that even severe traction of the tongue will then remove those obstacles to respiration. To this extent, Dr. Howard's observations appear in accord; and it is to avoid these obstacles, in addition to the fact that it is quite impossible to evacuate the water, inspissated mucus, and foam, from a loaded chest by the adoption of the prone position for a minute or two, that Dr. Bowles still maintains that the only simple, ready, and effective method of treating the apparently drowned is the method of the late Dr. Marshall Hall. This conviction, we understand, is forced upon his mind after an experience of five and twenty years, and a careful unprejudiced comparison of all the methods of treatment that have been advocated during that time. We think it well, from time to time, to draw attention to such a momentous question as that of drowning, in order that the profession should not rest too contentedly on authorities and names, but should continue to make independent and accurate observations.

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The first dinner of the Aberdeen University Club is fixed for Wednesday, May 21st, at the Holborn Restaurant; the Duke of Richmond and Gordon in the chair.

The Guy's Hospital biennial festival will take place in the Venetian Room of the Holborn Restaurant on Thursday next, the 15th instant. Dr. Braxton Hicks will be chairman. Mr. N. Davies-Colley is the honorary secretary.

The distribution of prizes, in connection with the Faculty of Medicine, at University College, will take place on Wednesday, May 21st, when the Right Hon. the Earl of Kimberley, President of the College, will preside. The chair will be taken at 3 P.M.

Dr. Koch, with the other members of the German Cholera Commission, returned to Berlin on Saturday, after nearly nine months' absence in Egypt and India. They have been warmly welcomed and congratulated by the entire Press on their highly successful expedition. Dr. Koch will shortly receive a Professorship at the Berlin University.

The Metropolitan Public Garden, Boulevard, and Playground Association have succeeded in securing a public playground for the children in the neighbourhood of Southwark, on the site of the old Horsemonger-lane Gaol, which was formally opened by Mrs. Gladstone on Monday last. The society may be congratulated on having successfully carried out this long-desired object under many difficulties. This result has been largely attained by the munificence, as well as the intelligent perseverance, of Lord Brabazon, chairman of the society, to whom the public are greatly indebted for his indefatigable efforts, not only in connection with the establishment and development of the Metropolitan Public Garden and Playgrounds Association, but of many other useful enterprises, having for their object the moral and physical welfare of the poor.

AN amateur dramatic entertainment will be given in the new wing of St. Mary's Hospital, in aid of the funds required for furnishing the wing, on Wednesday and Thursday, May 14th and 15th, at 8 P.M., and on Saturday, May 17th, at 7.30. The wing is intended to contain seventy beds; but funds are required before these can be used. The piece to be performed is George Colman's comedy, *The Heir at Law.*

PROFESSOR VIRCHOW, the celebrated anatomist, has written to the newspapers to express his opinion, come to after careful scientific investigation of the subject, that the danger arising from trichinosis in German pork is "infinitely greater" than the peril of an epidemic from American-bred pigs, and that, to be consistent, the Imperial Government, which has forbidden the importation of all sorts of pig-flesh from the United States, ought not to allow the rearing of any swine at all in Germany.

WE have have received a copy of the Scheme of Conjoint Examination to be conducted by the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, aud the Faculty of Physicians and Surgeons of Glasgow, as approved by the Medical Council at its last meeting. This scheme has its merits and its demerits, the consideration of which must be altogether postponed until we see the result of the pending legislation. Of course, the Bill which has passed the House of Lords, and which awaits its second reading in the House of Commons, will put an end to all such partial arrangements as the above.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

DR. EWART's paper was in our last number erroneously announced to be read on May 7th; it will come before the Society on May 14th, when it is expected that many of those interested in the diseases of infancy will be present.

THE MEDICAL ACTS AMENDMENT BILL.

SPEAKING in response to the toast of his health at the St. Mary's Hospital festival dinner on Wednesday last, Lord Carlingford said that the prospects of the Bill were not as certain as they ought to be, and that the Government asked for and needed the support of the profession of medicine. Certain of the corporate bodies, bodies which the Government Bill would retain and maintain, were yet, as he thought, unduly suspicious, and were, by the course of action they appeared anxious to adopt, jeopardising the prospect of the Bill becoming law.

CROSSING THE LEGS, AND THE MODE OF SITTING.

M. DELAUNAY, of Paris, has made an extended and careful investigation to ascertain if, in the majority of cases, the right upper and lower extremity be crossed over the left, or the left over the right, and which side most persons incline to when in the sitting posture. According to M. Delaunay, certain breeds of dogs, such as terriers, Newfoundlands, and poodles, cross the right paw over the left. The Chinese and Japanese cross the left arm over the right. Europeans cross the right over the left. M. Delaunay observed, in the *crèches* and *salles d'asiles*, that infants under three years of age cross the left arm over the right, older children crossing the right over the left; sixty per cent. doing so at six years of age. Robust children cross the right arm over the left; the idiotic and weak, including those who are incapable of working, cross the left over the right. The Calmucks and Arabs cross the right over the left, like the Europeans. A great many women cross the left leg over the right. Among the opera-dancers some always cross the right leg over the left, but not one the left over the right habitually; the majority cross the left over the right or the right over the left indifferently. Robust children cross the right leg over the left earlier than their weaker playmates. Persons who cross the right leg over the left lean towards the left when sitting, those who place the left uppermost lean to the right. Hence, consistently with what might have been expected from what is observed in children with regard to crossing legs, until six years of age children lean towards the right, and afterwards towards the left. French schoolmasters, it would appear, try to prevent their pupils from assuming this position, believing that scoliosis results, hence they encourage or enforce the use of elbow-rests (*accoudoirs*), which oblige the children to sit straight, a useless measure according to M. Delaunay, as the position they choose is in conformity with the process of evolution. Tailors affirm that the back of a pair of trousers is always more worn on the left side than on the right. Left-handed people always sit towards the right. M. Delaunay concludes from these observations that the left brain develops previously to the right, and finally the right predominates.

UNDERGROUND CISTERNS.

IT would appear that a general raid has lately been made upon the underground cisterns which exist in certain districts of London, on the ground that it is possible for them to be fouled by contaminated surface-water, or by infiltration from neighbouring drains. In Clerkenwell, a baker was recently summoned in respect of an underground cistern, which admittedly had not been cleaned out for two years, but the summons was eventually dismissed. There can be no doubt that underground cisterns are liable to pollution in many ways, and that it would be a most unwise thing, in London at least, to rely upon them for the supply of potable water, inasmuch as the covers of these underground cisterns are rarely raised above the surface of the ground, and are generally faulty in regard of their cementing rim round about the superior portion of the cistern-mouth. There is always a doubt, also, as to whether they leak or not, by reason of faulty ball-valves; and certainly they cannot be easily cleaned or flushed out, owing to their base being generally below the sewer, and only the overflow communicating with it in the ordinary shape of an overflow-pipe. Of course it is vexatious to be compelled, after taking a house, to erect at one's own proper expense a cistern above ground; but the propriety of so doing is undoubted, and one cannot wonder that the water-companies are making use of the powers which they possess by Act of Parliament for abolishing these underground cisterns, many of which are covered over by heavy stones, fitted inside by leaky ball-cocks, and sometimes in a very unsanitary state. It would appear that the search for these underground cisterns is becoming general, and we cannot say unwisely so. We know a case where such a cistern exists for carriage-washing in the yard of a West-End mews, and where the proprietor was peremptorily ordered to abolish it forthwith, and erect a cistern above ground, chiefly on the score of waste of water belonging to the Grand Junction Waterworks Company. By all means let the water-companies exercise their full powers in respect of these misplaced cisterns; only they should act once and for all, and make, while so employed, a house-to-house visitation, and by this means, and by dint of suitable expostulations, make evident to their clients that a certain amount of danger is likely to result from water stored underground.

THE PROVISION FOR SMALL-POX IN THE METROPOLIS.

FROM the statement made by Sir E. H. Currie at a recent meeting of the managers of the Asylum District, we gather that the accommodation at their disposal for cases of small-pox, though perhaps not adequate to meet the requirements of a serious epidemic, is at least amply sufficient to satisfy the demands at present made upon it. So far as the metropolis is concerned, this is necessarily limited, owing to the conclusion arrived at by the Royal Commissioners, "that large small-pox hospitals in populous neighbourhoods are appreciable sources of infection." Thus there are but fifty beds reckoned to each district-hospital, making a total provision of 250, but the patients treated in these institutions are only such as are suffering from the more severe forms of the disease, the milder cases being transferred, the day after admission, to the hospital-ship *Atlas* in Long Reach, which affords accommodation for about 200. When convalescing, patients are further transferred to the camp at Darenth, from which they are finally discharged. No patients are received either at the ship or camp, except such as have passed through one of the district-hospitals of the Board. Up to the present time the great bulk of the cases have passed through the Small-pox Hospital at Homerton, more than 700 having been admitted there since the beginning of the year. In addition to the above, the arrangements on board the *Castalia* for the reception of about 150 cases will very shortly reach completion, and the building of a Convalescent Hospital to accommodate from 600 to 1,000 cases as necessity demands, is also under consideration. The transfer-depôts for the removal of patients from the hospitals to the ship consist at present of two wharves, one at Rotherhithe for parishes and unions south of the Thames, and the other at Blackwall for those north of the Thames, but the managers intend purchasing a third wharf which will serve as a transit-station for removal of patients from the western and south-western districts. From these wharves, an ambulance-steamer, the *Red Cross*, effects their further removal to Long Reach; a second steamer, however, being deemed necessary, the consent of the Local Government Board has been obtained for its construction. An ambulance-station, in addition to those already existing at London Fields and Deptford, is ready for use at Fulham, and ambulances constructed so as to convey from four to six patients in a recumbent position, are, we understand, in contemplation. It may be mentioned that, owing to the increase in the number of cases coming from Hackney, the camp was opened sooner than was expected. It is now in complete working order, and was inspected on Saturday, the 3rd inst., by Sir E. H. Currie, Dr. Fowler, Dr. Collie, Dr. MacCombie, Deputy Surgeon-General Bostock, the Rev. Darby Reade, Mr. Latham, General Batten, Mr. Sedgwick, Mr. Sweeting, and others. The rapidity with which the camp was got ready, and the completeness of the arrangements, reflect great credit on the management. We may mention that, should the epidemic assume serious proportions, special measures will be adopted to meet any emergencies which may arise.

THE CORONERSHIP FOR THE CITY OF LONDON.

At least three medical candidates are, we understand, in the field for the coronership of the City of London, and two of them possess legal as well as medical knowledge; Dr. Wynn Westcott, the deputy coroner for Middlesex, has also considerable experience in the office. Thus it will be seen that, if qualifications are to gain the day, one or other of the medical candidates ought certainly to be elected. It is the essential duty of the coroner to search out the cause of death, and he frequently has to do this without any assistance from medical experts, or with the presence in court of a medical man who may be a more or less interested witness, and whose statements might naturally have such a bias as to require control. Moreover, the coroner has to decide upon *primâ facie* evidence, whether it is or is not necessary to hold an inquest, and to have a *post mortem* examination performed. It is quite certain that a very large number of the existing legal coroners do not possess any of the scientific or medical knowledge which is really essential for forming an accurate judgment in such a matter, and that they do not possess the scientific knowledge which can enable them to cross-examine a medical witness in the absence of any lawyer instructed on the other side; or to estimate the scientific value of his statements. The possession of medical and scientific knowledge on the part of an officer whose special business it is to investigate the causes of death, would seem to be so obviously essential that it might readily be judged to be indispensable, but for the fact that a very large number of coroners are appointed who are devoid of it. We cannot consider this state of things consistent with the public safety; and we have always held the appointment of legal coroners in the present state of the law, and without the provision of scientific medical assessors, to be a grave anomaly, and a constant source of danger. We hope that the Corporation will give full consideration to this important aspect of the question, and, notwithstanding any prepossessions or personal friendship, determine to show a good example, and to emulate Central Middlesex by appointing a medical coroner.

POPULAR LECTURES AT THE WEST LONDON HOSPITAL.

We are asked to announce that a short course of lectures to ladies and nurses on the Health and the Nursing of Children, will be given at the above Hospital, by members of the medical staff, on the following Mondays, at 5 o'clock in the afternoon, as follows: 1. May 26th, The Nursery and its Management, by Dr. Venn. 2. June 2nd, Food and Feeding, by Dr. Drewitt. 3. June 9th, The Care of the Eyes, by Mr. Vernon. 4. June 16th, The Care of the Teeth, by Mr. Underwood. 5. June 23rd, The Early Symptoms of Illness, by Dr. Hood. 6. June 30th, Simple Remedies and their application, by Dr. Thorowgood. 7. July 7th, Care not Over-anxiety, by Dr. Goddard Rogers. We think the precedent of a hospital-staff lecturing to the public on this fashion is of very doubtful character. It may easily lead to obvious abuse, and might with advantage be reconsidered.

SMALL-POX IN LONDON.

The Registrar-General reports that the fatal cases of small-pox, which had been 11 and 12 in the two preceding weeks, were 10 in the week ending May 3rd, and 16 below the corrected weekly average. Six of these fatal cases were recorded in the Metropolitan Asylum Hospital at Homerton, and 4 in private dwelling-houses. After distributing the hospital cases, 4 belonged to Hackney, 2 to Mile End Old Town, 1 to Islington, 1 to Shoreditch, 1 to Bethnal Green, and 1 to Lambeth. The 4 fatal cases in private dwelling-houses occurred at Eagle Terrace, Hackney; at Craven Buildings, Bethnal Green; at Sion Square, Mile End Old Town; and at White Hart Street, Lambeth. The number of small-pox patients in the Metropolitan Asylum Hospitals and hospital-ships, which had steadily increased in the six previous weeks, from 148 to 450, further rose to 502 on Saturday last; 107 new cases were admitted to these hospitals during last week, against 61 and 119 in the two previous weeks. The Highgate Small-Pox Hospital contained 20 patients on Saturday last, 8 new cases having been admitted during the week.

THE CONTAGIOUS DISEASES ACTS.

A deputation of gentlemen who are opposed to the working of the Contagious Diseases Acts had an interview on Tuesday with Sir William Harcourt at the House of Commons, and presented a memorial signed by the Bishop of Southwell on behalf of seventy-nine delegates from towns subjected to the Acts. This memorial asked for the complete and unconditional abandonment of the Acts. The Home Secretary informed the deputation that he had before him resolutions of the Justices of Plymouth regretting the withdrawal of the Metropolitan police appointed to carry out the suspended clauses, and from other public bodies to the same effect. He had also a presentment from the Grand Jury at Colchester, forwarded through the Recorder, who, with an experience of fourteen years, testified to the improvement in outward decorum and public morals by the enforcement of the Contagious Diseases Acts, and regretting the partial suspension. Mr. Stansfeld said he declined to be bound by the statements of such authorities. Gentlemen representing Devonport, Aldershot, Gravesend, and Canterbury (Canon Rawlinson) said they did not believe there had been any increase of immorality in their towns since the suspension. To this Sir William Harcourt replied by producing a resolution passed by the Board of Guardians of Canterbury, and documents from the Recorder and Grand Jury of Portsmouth, the Vicar and Clergy of Portsmouth, the Town Council of Dover, and different public bodies, in favour of the Acts, which, they contended, had had an admirable effect. Considering the difference of opinion on the question, which would cause it to be bitterly and violently fought in the House of Commons, to introduce any attempt at repeal this session would be impossible. With reference to the present state of things, the operation of the Acts had been suspended by the House of Commons; and, to meet the evils shown in the memorials which he had read to them, the Government had introduced a Bill into the House of Lords to give the police powers to deal with prostitution, such as already existed in Glasgow and Leamington. He hoped that these police-clauses would be passed, and that the result of the police-powers would be to mitigate, if not altogether remove, the objection taken to the suspension on the score of disorder

THE MEDICAL STUDENTS' REGISTER.

THE *Medical Students' Register*, which has been just issued by the General Medical Council, contains a list of medical students registered during the year 1883, and is interesting as showing the numbers registered from the different schools and places of medical study whereat students were registered as having commenced medical study in 1883. A list is also added of the eighty examining bodies whose examinations fulfil the conditions of the General Medical Council as regards preliminary education, showing that there were 1,729 students registered in the United Kingdom, and 54 registered in Indian, colonial, and foreign universities and colleges, being 79 less than the previous year. Taking the number of students furnished by the various hospitals, medical colleges, and schools, we find Edinburgh and Glasgow Universities again taking the lead, with 255 and 131 respectively. St. Bartholomew's Hospital supplied 82, the University of Aberdeen 79, and the University of Cambridge 76. It is seen from a summary of the number of medical students registered since 1865, that the steady total increase maintained up to 1881 has not been maintained, there being a falling off in 1882, and a still further decrease in 1883, Scotland alone showing no reduction in numbers; the number of students from Scotland for this year being 596, the highest of any number registered. Ireland shows a falling off in 1883 of 54. The total number of students registered in the 19 years from 1865 to 1883, has been 26,998; of this number England contributes 48.2, Scotland 28.1, and Ireland 23.7 per cent.

INCREASE OF METROPOLITAN HOSPITALS.

NOTWITHSTANDING the fact that many of the older hospitals are closing their wards for want of funds, and that hospitals, especially such as the London, Guy's, and St. Thomas's, have recently complained of being unable to raise the funds necessary for utilising their existing buildings and the number of beds at disposal, the more enterprising philanthropists do not fear to continue the extension of our voluntary hospital-system to meet the increasing demands of an ever growing population. We recently had to record the inauguration of a new hospital in north London; last week we spoke of the new and extended buildings which have just been commenced for the Temperance Hospital, and of the extension which is planned, and in process of being carried out, for the Middlesex Hospital. This week two other hospitals are before the public, with their plans already far advanced, and with the guarantee of enough public support to justify the commencement of further increase and extension.—The Duke of Westminster presided on Monday over a public meeting, held at Westminster Town Hall, in behalf of the Westminster Hospital, of which he is president. His Grace, in opening the proceedings, explained that the Westminster Hospital, established in 1719, was the oldest hospital supported by voluntary contributions. It was, he said, well and economically managed; and the friends of temperance would be glad to learn that the quantity of alcohol consumed in the treatment of disease in the institution was now very small indeed. In 1878 the accommodation for in-patients was improved at a cost of £16,000, but the accommodation available for out-patients remained unsatisfactory. The latter were accommodated in an apartment underground, which was very dark, noisy, ill-ventilated, unsanitary, and altogether inadequate to the requirements. More room, too, was needed for the medical school, and for the erection of a new school a suitable site had been secured, near Westminster Town Hall, at a cost of £4,500, £2,000 of which was specially raised for the purpose, £1,000 was given by the lecturer of the hospital, and the remainder was provided by the hospital authorities, who hoped to be reimbursed the amount. It was estimated that the building would cost £8,000. No vivisection would be carried on within its walls. In addition to these sums, £1,000 or £2,000 would be wanted to adapt the present hospital building for the better accommodation of out-patients, in the event of the removal of the school. The public were confidently invited to subscribe £15,000 for these purposes. Not only was the new school needed for the benefit of the hospital itself, but for the general advancement of medical science throughout the country. On the motion of the Ven. Archdeacon Farrar, the meeting pledged itself to assist the committee of the hospital "to raise £15,000 to erect on the site already obtained a new medical school, and to arrange the present school-buildings for the use of the out-patients." A cordial vote of thanks to the chairman closed the proceedings.—The ceremony of laying the foundation-stone of a new building for the Royal Hospital for Diseases of the Chest, in the City Road, was performed on Tuesday last by the president of the institution, the Earl of Shaftesbury, K.G. The secretary, Mr. Lowther Kemp, briefly stated what is proposed for the enlargement of the hospital. At present there are beds for 26 patients, and the larger building, which is now to be erected on a contiguous plot of ground, of which the freehold has been secured by purchase from St. Bartholomew's, will provide accommodation for 75 in-patients. The new building, which will be in the Elizabethan style, after designs by Mr. John O. Abbott, will be four stories high, and, it is estimated, will cost about £11,000. Of this sum £6,000 are already in hand or promised. The committee trust to the generosity of the public to contribute £5,000 for the completion of the building, and about £2,500 more for fitting up and furnishing the hospital.

METROPOLITAN HOSPITAL SUNDAY FUND.

A MEETING of the constituents of this fund was held at the Mansion House on Monday last to consider the working, and, if necessary, the abrogation of law that "no institution to the benefits of which admission can only be gained by election from the general body of subscribers, shall be eligible for grants from the funds." Sir Sidney H. Waterlow moved the adoption of the report by the Council, which stated that, in consequence of a motion of which notice was given at the annual general meeting in December, relative to abrogating Law 7, with the view of securing participation in this fund by the Royal Hospital for Incurables, the council had had the whole of this matter again under consideration, and after an interview with the proposer and seconder of the motion, unanimously agreed to the following resolution:—"That having again reconsidered the terms of Law 7, the Council, after twelve years' experience, are satisfied that it is important to the continuance and well being of the Hospital Sunday Fund that it should be maintained. They were satisfied that the abrogation of this law would entail a material and most undesirable alteration of the fundamental principles on which the Hospital Sunday Fund was founded." If the Royal Hospital for Incurables were admitted to participate, or Law 7 were abrogated, a large number of institutions, other than hospitals and dispensaries, could not reasonably be refused: thus the original character of the Hospital Sunday Fund would become so materially altered that its present success, or even its future existence, might be greatly endangered.—The Rev. Mr. Bennett moved an amendment, which was supported by the Rev. Mr. Lorraine and others, that the Royal Home for Incurables ought to share in the benefits of the fund.—Mr. Samuel Morley, M.P., did not think institutions to which admissions could only be given by patronage should at present be included in the objects of the fund.—In answer to a question, the Rev. Mr. Lorraine said the average time of obtaining admission to the Royal Hospital for Incurables was eighteen months. The amendment was lost by a large majority, and the original motion carried.

MANCHESTER AND SALFORD SANITARY ASSOCIATION.

In their last annual report, the Committee of this excellent Association announce that very substantial progress was made during 1883. They notice, with peculiar satisfaction, that there is a growing public interest in questions of hygiene, temperance, and thrift, and they confidently anticipate great results to follow. The report expresses regret that the local authorities of Manchester and Salford have refused to respond to the appeal of the Committee to take comprehensive action for the improvement of cottage-property. The passing of the Bakehouses Regulation Act last session is naturally referred to, seeing that the Committee were amongst the first to agitate for reform in this respect. Efforts were also made to secure a measure providing for the registration of midwives, and for the better regulation of milk-supplies, but these have not met with the success they deserve. Other portions of the report refer to the action of the Association towards obtaining better provision for cases of infectious disease, the analysis of food at popular prices, and the repression of smoke-nuisances. The appendix contains a copy of a circular extensively circulated in the district, setting out the precautions to be observed by parents for the prevention of blindness in infancy. Considering the useful and important work that the society has been instrumental in bringing about, it is to be regretted that the Committee receive so little pecuniary support. At present, their total income is less than £160 *per annum*, a sum quite inadequate to meet even current expenses.

ST. MARY'S HOSPITAL FESTIVAL DINNER.

St. Mary's Hospital, as our readers may remember, received a few years ago a munificent bequest under the will of Mr. Stanford, but hampered with the provision that the whole sum should be spent on bricks and mortar. A large wing has, therefore, been erected, and is now ready for occupation; but the hospital authorities are at present unable to open it, owing to lack of funds to maintain it. There can be no sort of doubt that the extra seventy beds which the wing provides could be easily filled. We have not as yet reached the limit of the "bed-consuming capacity"—to coin a phrase for the nonce—of the population of London; and there can be little doubt that there is far less abuse of charity among the in-patients than among the out-patients of a hospital. Moreover, those who are acquainted with out-patient work know well how easy it would be, comparatively speaking, to deal with a vast number of cases of illness, if larger numbers could be admitted. We trust, therefore, that the appeal of Lord Carlingford, who occupied the chair at the festival dinner on Wednesday, May 7th, and who has just become the President of the hospital, may meet with a hearty response; and that the £2,400 subscribed at the dinner may quickly be doubled. Lord Carlingford was well supported, having on his right hand His Eminence Cardinal Manning, and on his left Mr. Daniel Grant, M.P., and Canon Boyd Carpenter. No man is a prophet in his own country; but St. Mary's Hospital is most highly honoured by those who know it best, and are able, from their residence in its neighbourhood, to judge of the hearty thorough-going spirit which pervades every one of its departments.

THE ORATION AT THE MEDICAL SOCIETY OF LONDON.

At the annual conversazione of the Medical Society of London, on May 5th, the oration was delivered by Dr. C. Theodore Williams, who took for his subject the relation of the medical profession to other professions. He thought that the profession, while [illegible] influence with the public and vast opportunities of benefiting mankind, did not take the rank in the State which was justly its own. Comparing the medical with the legal profession, he dwelt on the larger share which the members of the latter profession took in the public life of the country, thus earning greater recognition from the State. He thought the time had come when the medical profession should make itself felt in the councils of the country, and hoped to see more and more medical men following the example of Dr. Cameron and Dr. Farquharson, and entering public life. He thought that justice might frequently be rendered more sure if the judges had in certain cases the assistance of medical assessors, and that we should not have had the complaints of over-pressure on pupil-teachers and on pupils if due weight had been given by the Education Department to the importance of medical advice and medical supervision. In dwelling on the relation of the medical profession to the Army and Navy, Dr. Theodore Williams took occasion to pay a warm tribute to this Journal, and attributed the success of recent efforts to improve the status of the medical services in no small degree to the continuous energetic action of the editor of the British Medical Journal, and to the action of the Parliamentary Bills Committee of the Association, which had brought its influence to bear on the authorities. Dr. Theodore Williams thought the Government might give still more countenance to scientific investigation on the lines now followed by the Local Government Board, but to a too limited extent owing to a want of more liberal provision of funds. The oration was much applauded, and Dr. Williams received on every side congratulations on his restoration to health after his recent severe illness. A formal vote of thanks was moved by Mr. Arthur Durham in eulogistic terms, and was seconded by Dr. Fordyce Barker, of New York. During the subsequent conversazione, Dr. Heneage Gibbes exhibited a number of specimens of micro-organisms, illustrating, especially, the occurrence of very varied forms in phthisical sputa. Messrs. Beck exhibited an anemograph for registering automatically the force of the wind, and a microscope fitted with the electric light.

THE PORT OF LONDON.

By section 8 of the Diseases Prevention (Metropolis) Act, 1883, it is competent for the Local Government Board to assign to the port sanitary authority of London any of the powers and obligations of an urban authority under the Public Health Act. This course has now, for the first time, been adopted, and a number of sections of the Act have been declared to be in force within the district of the port authority. Ample powers are given in regard to the purification of houses, offensive ditches, the removal of filth, polluted wells, nuisances, offensive trades, and unsound meat. Sections 120 to 130, relating to infectious diseases, sections 131 to 140, relating to hospitals and the prevention of epidemic diseases, and sections 141 to 143, relating to mortuaries, have also been conferred. By section 125, any local authority may make regulations for removing to any hospital to which such authority are entitled to remove patients, and for keeping in such hospitals, so long as may be necessary, any persons who are brought within their district by any ship or boat, and are infected with a dangerous infectious disorder, and such regulations may impose on offenders against the same any reasonable penalties. In view of this, a very complete and exhaustive code of regulations was drawn up by the port authority, and these, having been sanctioned by the Local Government Board, have come into force. Now that the new hospital for the district has been completed (see *Sanitary Record*, June 1883, p. 560), these regulations should be sufficient for effectually dealing with all cases of infectious disease that may be brought into the port of London.

SUDDEN DEATH FROM [illegible]

The [illegible] particulars of the [illegible] Pugh, [illegible], whilst [illegible] with a [illegible] [illegible], was bitten by a panther, and [illegible] his return to England, has been [illegible] Street. It appears that on January [illegible], whilst the [illegible] after [illegible], one of the [illegible] was [illegible] by a [illegible] Pugh, who was in charge of the [illegible], given towards the dog, when a panther, which had previously [illegible] the little animal, sprang from some long grass upon Pugh, bit him severely in the left arm, near the elbow, inflicting four ugly lacerated wounds and a fracture of the radius, and throwing him to the ground. One of the beaters attacked the brute with his stick, and the spaniel, having overcome his fear also sprang at him, whereupon the panther made off, receiving in his retreat a charge of No. 7 shot in his shoulder, which, unfortunately, was not enough to stop him. Dr. Slater, as the doctor of the party, conveyed Pugh back to camp, and dressed his wounds with carbolic lotion. Inflammation set in, but was subdued by linseed-poultices. Some days later he had to enlarge one of the wounds, which was in the bend of the elbow, to allow the sloughs to escape. The patient went on well, and by March 18th, when he arrived in England, the wounds had healed, the bone united, and passive motion had improved the mobility of the joint. As there was still considerable stiffness, Mr. Willett saw the patient, and offered to take him into St. Bartholomew's, and break down the adhesions by manipulation. Pugh went to his home near Canterbury, and a day or two afterwards took cold. In the following week, Dr. Slater found him suffering from acute pneumonia. He was being attended by Mr. Hamilton of Chilham, but, in spite of that gentleman's care, he died on April 8th. The pneumonia was accompanied by delirium, and both Dr. Slater and Mr. Hamilton concur that the cause of death was not hydrophobia, as has been stated. But, interesting pathologically as such a case of hydrophobic poisoning would have been, the facts of the case do not, Dr. Slater says, warrant any association of the bite with the death.

GASTROSTOMY.

A REMARKABLE operation of this kind was performed by Mr. Knowsley Thornton on Tuesday, May 6th, at the Samaritan Hospital, A girl aged 18, who was a patient of Mr. H. P. Symonds of Oxford, had indulged for some years in the habit, not unknown in the records of clinical medicine, of eating the combings of her hair, and swallowing cotton and other like materials. A large mass gradually collected, which was moulded into the shape of the stomach, and measured nine and a half inches in length, and five in breadth at the cardiac end. The stomach was opened on its anterior surface by an incision five inches long. Very little hæmorrhage ensued, and the mass was extracted by means of a vulsellum. During this process, precautions were taken so that neither the wound nor the peritoneum was fouled by the contents of the stomach. The wound was closed by five silk sutures, deep and superficial, interrupted and continuous. A case of a similar kind, which terminated in the recovery of the patient, is recorded by Schönborn in Langenbeck's *Archiv*, vol. xxix, 1883, page 619. Mr. Thornton's patient was doing well at noon on Thursday, May 8th.

THE VACCINATION DEADLOCK AT DEWSBURY.

OWING to the continued neglect of the Dewsbury Board of Guardians to appoint public vaccinators for Mirfield and Thornhill, the Local Government Board have given them notice that, unless they proceed to such appointments on or before the 9th instant, the Board will have no alternative but to place the matter in the hands of their solicitors, with the view to an application to the High Court of Justice. The penalty attaching to the refusal of a board of guardians to appoint public vaccinators is nowhere laid down in the Vaccination Acts; but Section 3 of the Act of 1867 specifically lays down that the guardians shall enter into a contract with some duly registered medical practitioner for the performance of vaccination of all persons resident within such district; and every such medical practitioner shall be termed the public vaccinator of such district; and as and when the contracts now existing shall determine, the guardians shall enter into others, with such modifications as the circumstances shall render necessary, subject to the like approval of the Local Government Board as aforesaid. Other sections of the Act also point, either directly or indirectly, to the same end, and there seems but little hope that the guardians can successfully contend against the anticipated action of the Local Government Board. About eight or nine years ago, similar proceedings were taken against the Keighley guardians, who refused to appoint a vaccination-officer, with the result that, after a period of imprisonment, they were compelled to give effect to the law. Of this decision, the Dewsbury guardians are well aware, and it cannot but be regretted that they should seek to emulate so dangerous an example.

THE OBSTETRICAL SOCIETY OF LONDON.

AT the last meeting of the Obstetrical Society, on Wednesday, May 7th, several specimens of considerable interest were exhibited. Dr. Matthews Duncan showed microscopic sections of an angiomatous growth from the labium majus. Dr. Bantock brought forward four large myomata of the uterus, all successfully removed during life, one from a pregnant woman. She had concealed her pregnancy, and on removing the uterus after the application of Koeberlé's clamp, a two months' fœtus was found in its interior. There was much discussion on a paper by Dr. Mathieson, of Toronto, describing a case of extra-uterine gestation, when the child was delivered at term, by the vagina, an incision having been made in the cyst, which protruded into the pelvic cavity; the placenta was removed. Perhaps the most remarkable feature in this meeting was a paper by Dr. Arthur Mitchell on strong mental emotion affecting pregnant women, as a cause of idiocy in the offspring. Dr. Mitchell brought forward some cases where pregnant women had witnessed the death of a relative by accident, or foreseen the certain loss of means of subsistence, and had subsequently given birth to idiots. Dr. Matthews Duncan considered that Dr. Mitchell's evidence was strongly in favour of his theory of causation, which was a very old one, but never satisfactorily settled. Dr. Fletcher Beach, medical superintendent of the Darenth Asylum, brought forward evidence to show that intemperance and the unhygienic conditions to which drunken husbands subject their wives, play a large share in the production of idiots. Dr. Charles West, who met with a most cordial reception, stated that he never could make up his mind as to the true cause of idiocy, and the relation which mental emotions in pregnant women bore to it, though he had often deeply considered the matter, and studied numerous cases within his own experience. He believed that the question was not proven. It might be suggested that the antecedents of idiocy is a subject peculiarly suitable for the attention of the Collective Investigation Committee of the British Medical Association.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE quarterly meeting of this association was held at Bethlem Hospital on Tuesday, May 6th, Dr. Orange, president, in the chair. A letter was read from Dr. Manley, the president-elect for the ensuing year, announcing his inability, through ill-health, to fulfil the office to which he was elected at the last annual meeting. A resolution of regret and condolence having been duly passed, the president stated that, acting under the association's rule providing for such emergency, the council had exercised the duty imposed upon them by electing Dr. Rayner to act as president during the coming year. Papers were read by Dr. Hayes Newington on Unverified Prognosis, and by Dr. Bonville Fox on Exaltation in Chronic Alcoholism, and Dr. Mercier introduced resolutions in favour of the transference of lunatics of foreign nationality to their own countries.

THE APOTHECARIES' SOCIETY AND THE MEDICAL ACTS AMENDMENT BILL.

ON Monday last, a meeting of Members and Licentiates of the Society of Apothecaries was held at the Hall in Blackfriars, to consider the position of the Society with regard to the Medical Acts Amendment Bill. The chair was taken by the Senior Warden, Dr. Corfe, who explained that the reason for summoning the meeting was the unfair treatment to which it was proposed to subject the Society in the Bill. Mr. Upton, the solicitor to the Company, explained the provisions of the Bill bearing on the subject under notice, and read a petition which had been drawn up. On the proposal of Dr. R. Fowler, which was supported by Dr. Alfred Carpenter and other gentlemen, the petition was approved. Another resolution was passed, on the proposal of Mr. Wickham Barnes, to the effect that the Right Hon. H. Fawcett and Sir Trevor Lawrence should be requested to watch the progress of the Bill in Committee, with a view to the insertion of a clause providing that the Society of Apothecaries should be represented in the Medical Board of England. On the motion of Dr. Rogers, a deputation of Licentiates was appointed to wait on Mr. Mundella and explain the views of the meeting. A vote of thanks to the Chairman terminated the proceedings.

THE INTERNATIONAL HEALTH EXHIBITION.

The ceremony of opening the International Health Exhibition took place at noon on Thursday last. Owing to the recent death of the lamented Duke of Albany, his Royal Highness the Prince of Wales, the President of the Exhibition, was not able, as he had purposed, to take part in the opening ceremony. His place was supplied by his Royal Highness the Duke of Cambridge, who was received by the Executive Council, and conducted to the Science and Art Gallery, where he found already assembled a large and distinguished audience, among whom were Count Munster, the German Ambassador, the Turkish Ambassador, the representatives of China and Japan, Lord Carlingford, the Lord Mayor and Sheriffs, Mr. Gladstone, Sir William Harcourt, Sir Charles Dilke, Sir Lyon Playfair, and numerous representatives of the scientific world, headed by Professor Huxley, the President of the Royal Society. After the address of the Executive Council had been read by the Duke of Buckingham and Chandos, the Chairman, the Duke of Cambridge, in a few appropriate sentences, dwelt on the great advantages which would, it was fair to hope, accrue from the Exhibition, and then formally declared the Exhibition open. During the course of the afternoon, the vast corridors were thronged by an ever increasing crowd. Cheap dinners at sixpence, one shilling, and half-a-crown were provided by the National Training School for Cookery, and its organisation was quickly strained to the utmost, the large room in which the one shilling dinner of three courses, fish, joint, and pudding, was served, being filled almost as soon as the doors were open. If we may judge by the interest manifested on the opening day, we may prophesy that the Exhibition will be brilliantly successful.

INTERNATIONAL HEALTH EXHIBITION LIBRARY.

In response to an invitation, issued by the Executive Council, who have assigned large rooms to be used as a library and reading-room in connection with the Exhibition, numerous authors and publishers have already sent copies of works on subjects embraced by the two divisions of the Exhibition—Health and Education. The books are being classified by Mr. Carl A. Thimm, the librarian, and a catalogue will shortly be published. As it is very desirable that the library should be rendered as complete as possible, and that the catalogue should be issued at an early date, it is hoped that those desirous of sending books will forward them, with as little delay as possible, to the Librarian, Albert Hall, S.W.

THE BOWER AND KEATES CASE.

Another action by the plaintiff in the former proceedings against Dr. Bower and Mr. Keates, whose case excited universal professional sympathy some months ago, came before the Lord Chief Justice on Thursday last. The plaintiff conducted his own case; and at the end of his statement, the foreman of the jury said that the jury did not think it necessary to hear the defendants' counsel. The case has thus ended in a verdict for Messrs. Bower and Keates, given under circumstances which must be peculiarly gratifying to them. We understand that Dr. Samuel Wilks, Dr. J. S. Bristowe, and Dr. Walter Moxon were in attendance, and would have given evidence had the defendants been called upon.

SCOTLAND.

THE WEATHER IN SCOTLAND.

The month of May was ushered in with showers of sleet and a continuance of east winds. On the 3rd instant snow fell in many districts of Scotland, giving the higher mountains quite a wintry coating. During the last day or two there have been indications of more genial weather and milder showers, which should hasten on the vegetation, somewhat retarded as it has been by the easterly winds of April.

SCOTCH FISHERY BOARD SCIENTIFIC INVESTIGATIONS.

In the last number of the **Journal** we expressed our regret at the failure of the funds necessary for completing the scientific investigations set on foot by the Scotch Fishery Board into the habits of food-fishes on the Scotch coasts. We are glad to hear that intimation has been received that an arrangement has been come to by which the Treasury is to place a further sum of £600 at the disposal of the Board to enable them to continue the investigations and extend a work which there is every reason to believe will result in permanent advantage to the valuable fishing industries of Scotland.

SUMMER SESSION, EDINBURGH.

The classes are all at work, the examinations at the Royal Colleges of Physicians and Surgeons have terminated, and the clinical examinations of the university are proceeding. In our notice last week it should have been observed that a course of lectures on pathology has been commenced by Alexander Bruce, M.B., F.R.C.P.E.

THE GLASGOW FACULTY LECTURES.

These lectures for this year were delivered last month by Professor D. J. Hamilton of Aberdeen, the subject being the Structure and Functions of the Brain in relation to Disease. All the three lectures of the course were characterised by originality of thought, and by several new views as to the microscopical anatomy of the brain, not exactly in accordance with the generally received opinions on these matters, but the result of Professor Hamilton's own researches. The lectures were very well received, and the interest in them was much enhanced by the excellent microscopical preparations by which they were illustrated.

GLASGOW UNIVERSITY.

The winter session of this University was formally brought to a termination on April 30th, by the conferring of degrees and the presentation of the different class-prizes. The ceremony took place in the new Bute Hall. On May 1st, the summer classes in the medical faculty were opened; and, so far, the numbers enrolled have been very encouraging, the botany class being over two hundred, which is larger than in previous years. The list of those students who purpose presenting themselves for their final examination is not yet completed, but it is probable that it will contain above one hundred names. The extra-mural summer classes seem also to have attracted a fair proportion of the students in the different subjects. Of new lecturers, there is only one, namely, Dr. Downie, on Diseases of the Throat and Ear. His course is given in connection with the Western Medical School.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

The closing meeting of the winter session of this Society was held on the evening of the 2nd instant, when the President, Professor Gairdner, brought before the members some cases of pseudo-hypertrophic paralysis, two of which were well marked, while the third was more or less in an initiatory stage of the malady. To render the demonstration more complete, a number of microscopical sections of the spinal cord and muscles from a fatal case of the disease were shown.

but it could not be said that in the former any specially characteristic alterations could be made out. Time did not allow of any discussion on the cases, the only speaker being Dr. Middleton, who, at Professor Gairdner's request, gave a short *résumé* of present views of the pathology of the disease. The President formally closed the session with a few remarks, taking as his text a recent statement in a contemporary journal as to a want of harmony and union among the members of the medical profession in Glasgow. While admitting that certain occurrences of late gave a colouring to such a charge, he believed that collectively the bonds of professional feeling among Glasgow medical men were of the strongest, that the standing of the profession had within the last few years materially improved, and that it only required the individual effort of every medical man to ensure perfect *esprit de corps*, and to keep the profession at the higher standard it had reached.

INVERNESS INFIRMARY.

THE managers of the Northern Infirmary, Inverness, held their annual meeting last Monday. The financial report submitted stated that, during the past year, the total expenditure had been £3,005, showing a deficit of £271 for the quarter. Owing to the deficit which occurred the year before, a special committee was appointed to consider the unsatisfactory condition of the finances, and to form a scheme for the purpose of increasing the revenue; this committee has recommended the appointment of a salaried clerk and collector, who is to devote the whole of his time to the institution, and the recommendation has been adopted.

ROYAL HOSPITAL FOR SICK CHILDREN, EDINBURGH.

DURING the month of April, 101 cases were treated in the Royal Hospital for Sick Children. Of these, 39 were in the hospital on March 31st, and 62 had been admitted during the month. Twenty-seven were discharged from the hospital cured, and 10 were relieved. The average daily sick was 52 ; 875 patients were treated at the dispensary, and 41 vaccinated, making, in all, 916. Of the 463 new cases treated during the month, 363 were from the city, 73 from Leith, and 27 from the country. The total number of patients treated at the hospital during the month was 1,017.

THE AITKEN MEMORIAL FOUNTAIN.

A VERY graceful tribute to the memory of the late Dr. Aitken of Govan has just been paid by the inhabitants of that suburb of Glasgow. Desirous to perpetuate his memory, and the grateful recollection they still have of his many valuable services to the community, they have erected to his memory a very handsome drinking-fountain, the unveiling of which took place on the 3rd instant, the task being entrusted to Professor Leishman of Glasgow. Dr. Aitken died in 1880, at the exceptionally early age of 41, having practised in Govan for more than twenty years ; and during that time he had won the confidence, respect, and regard of the community by his high qualities and the faithful discharge of his duties. It is a pleasing task to have to notice this public acknowledgment of the worth and good qualities of a member of the profession. We observe, too, that the ceremony was very appropriately made available for the public presentation to the Govan authorities of a new ambulance-wagon, which has been subscribed for by the employers of Govan for use in all kinds of accidents.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.

AT the recent professional examinations of the Royal College of Physicians, Edinburgh, fifty-three candidates passed the first, and fifty-eight candidates passed the second examination. At the Royal College of Surgeons, six candidates passed the first, and nine candidates passed the second professional examination, while one candidate passed the first, and two candidates passed the second professional for the diploma of Dental Surgeon. In connection with these two colleges and the Faculty of Physicians and Surgeons, Glasgow, announcement is made this week that an agreement has been made between the Royal Colleges of Physicians and Surgeons in Edinburgh and the Faculty of Physicians and Surgeons in Glasgow, the three medical corporations of Scotland, for an amalgamation in the matter of examinations, to come into force on October 1st. Each of the bodies will, however, be at liberty to confer its licence on candidates who already hold qualification from other recognised bodies. A mutually appointed board will carry out the examinations, except on special subjects, in which each body will have its own examiners. The examinations will be held for two periods in Edinburgh, and for the third period in Glasgow.

EDINBURGH TERCENTENARY.

THE Senatus Academicus of Edinburgh University have, in a formal way, expressed their cordial thanks to the students of the University who assisted at the Tercentenary celebration, and have communicated the same to the Students' Representative Council. In the communication, it is stated that the success of the festival was greatly due to the co-operation of the students under the able direction of the executive of the Students' Representative Council, and a hope is expressed that this great historical occasion may be the commencement of a new corporate life among the students of the University. The Council also received the following telegram from the students of the University and Polytechnic of Bologna. "We are extremely touched by the kind reception you made to the illustrious and dear delegate of our university, Professor Saffi. Let us say that we accompanied him in spirit with our most hearty vows for the ever-increasing prosperity of your celebrated university, and of your corporation, recently born, yet so promising of vigorous life."

IRELAND.

QUEEN'S COLLEGE, CORK.

A VISITATION will be held at this college this month for the purpose of inquiring into certain matters connected with the discipline and management of the institution. The visitors will be His Grace the Duke of Leinster, Lord O'Hagan, Dr. William Moore, and Mr. Wheeler.

HEALTH OF CORK.

DURING the four weeks ending April 19th, the births registered numbered 155, or a rate of 25.01, and the deaths 157, or 25.04 per 1,000. Zymotic diseases caused a mortality equivalent to 1.4. As contrasted with the corresponding period last year, the death-rate shows a decrease from 33 to 25.04.

THE DUBLIN LADIES' SANITARY ASSOCIATION.

THE annual general meeting of this Association was held last Tuesday, in the Hall of the King and Queen's College of Physicians. Mr. Justice O'Hagan presided, and Her Excellency the Countess Spencer was present. The report of the Council for the past year expressed regret at the limited amount of work done, and attributed this result to the difficulty in awakening amongst the ladies of Dublin sufficient interest in the poor who live so close to their own homes. Only 160 rooms were under the care of the visitors. With justifiable pride, however, the report claimed that it was owing to the representations of the Association that hygiene and sanitation had been introduced into the curriculum for the education of teachers under the National Board of Education for Ireland. Most sensible people will agree with the belief of the Committee of the Association, that until ignorance of the laws of health in the educated classes is dispelled, little improvement can be looked for from the poor. The establishment of classes for instruction of the richer classes in hygiene and domestic sanitation and cookery by the Association is certainly a right step in this direction. And it is to be hoped that a larger number of ladies will avail themselves of these classes than has been the case heretofore. We cordially agree with the Registrar-General in the statement that the efforts of this Association are worthy of the increased support of the public, especially of the idle women of the Irish metropolis, of whom, according to the same authority, there are a larger number in Dublin than in any other city.

ROYAL COLLEGE OF SURGEONS IN IRELAND: ELECTION OF EXAMINERS.

THE annual election of examiners of this College took place on Tuesday. In addition to the outgoing examiners, all of whom presented themselves for re-election, there were nine new candidates for the Court of Examiners for the Letters Testimonial and Fellowship. Some additional interest was attached to this election, as it was the first of its kind under the provisions of the recently granted supplementary charter, in which the entire Council, instead of, as formerly, seven of its members selected by ballot, elected. No change, however, was made in the constitution of the different Courts of Examiners, all of the outgoing members of each being re-elected. The following is the official list:—*Examiners to Examine Candidates for Letters Testimonial and Fellowship*—Messrs. Edward A. Stoker, Edward S. O'Grady, Henry Gray Croly, William Thomson, Robert L. Swan, William Frazer, Benjamin G. M'Dowel, and Phin. S. Abraham. *Examiner in Ophthalmology*—Mr. Arthur H. Benson. *Examiners to Examine Candidates for the Diploma in Midwifery*—Messrs. Henry Croly, John J. Cranny, and Edward J. Quinan. *Examiners to Examine Candidates in General Education*—Messrs. Henry J. Tweedy, Frank J. Davys, and Robert Morton.

THE REUBEN HARVEY MEMORIAL PRIZE.

IT will be in the recollection of some of our readers that a fund was subscribed by some of the friends of the late Dr. Reuben J. Harvey of Dublin, who died in December 1883 of typhus fever, to found a memorial of him. The subscribers decided that the memorial should take the form of a triennial prize open to competition to all students of the various schools of medicine in Dublin, as well as to graduates or licentiates of the Irish medical licensing bodies of not more than three years' standing. The first award of this prize, it is now announced, will be made on July 1st, 1885, and the prize will be awarded to the writer of the best essay evidencing original research in animal physiology or pathology. The subject of the essay is left to the option of the candidate. The pecuniary value of the prize will probably be about twenty guineas. Essays are to be lodged with the registrar of the King and Queen's College of Physicians before June 1st, 1885.

ROYAL COLLEGE OF SURGEONS, IRELAND.

IT is reported that Dr. Kidd, ex-president of the Royal College of Surgeons in Ireland, will oppose Dr. A. H. Corley for the vice-presidency of the College at the ensuing annual election. Since the last annual election, it has been known that Dr. Corley was a candidate for the office, which is the stepping-stone to the presidency; and, until quite recently, it was anticipated that, as he was in every way worthy of the honour, he would be unopposed. The Medical Acts Amendment Bill is, however, the ground upon which this unusual opposition has sprung up. Dr. Kidd, as is well known, is an uncompromising opponent to the Bill; and his object in seeking the election for a second time within a very short interval of years, would seem to be to commit the College thereby to an unyielding hostility to medical legislation. The supporters of Dr. Corley profess that they are as loyal to their College as Dr. Kidd's friends are; but, believing as they do, that the present condition of affairs cannot much longer continue, they state that, accepting legislation as inevitable, they feel they will act best for the interests of the corporation by endeavouring to amend the proposed measure, and not by obstinately opposing it altogether.

THE MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

A MEETING of the Provisional Executive Committee was held at 38, Wimpole Street, on Wednesday, April 30th. There were present: Dr. Ord, Mr. E. Noble Smith, Mr. J. Brindley James, Mr. F. Wallace, Mr. Major Greenwood, Mr. Radley (Secretary); Mr. Ernest Hart in the chair.

The minutes of the previous meeting were read and confirmed.

The Secretary read the report, which showed a total of 360 members, and entry-fees, etc., up to date, to the amount of £268 13s. 2d.

The Chairman stated that there had hitherto been a steady influx of members, which he thought would continue up till the general meeting, after which local branch meetings would be organised.

The Chairman reported the amount of preliminary expenses incurred for actuarial charges, and that the greater part of them had already been paid; whereupon it was resolved, "that all such preliminary expenses be paid out of the 'Preliminary Expenses Fund,' at the disposal of the Chairman; and that he be requested accordingly to apply that fund for the purpose."

The Secretary read a letter received from Mr. Gilbert Walker, referring to a resolution passed at the previous meeting, when it was decided to limit the enrolment of dentists to licentiates only, in which he pointed out that, of the 2,252 registered dentists, only 759 were licentiates, and suggesting that this rule might be relaxed, so as to admit a large number of highly respectable dentists who were at present members of the Dental Association; and further suggesting that the conditions of membership of the Dental Association might also form the basis of such an arrangement. It was not considered advisable to make any alteration at present; and the further consideration of the letter was postponed.

It was reported that letters had also been received from Dr. Langmore and Mr. Oakley Coles on the extension of the movement to the dental profession.

Mr. E. Noble Smith suggested certain modifications in the declaration-form, which it was decided to adopt; and the Secretary was instructed to have new forms printed and issued in the place of those now in use.

A letter was read from Mr. Ravenhill (Birmingham) desiring to be furnished with the names of the members residing in his district, in order that local committees might be formed and meetings held at an early date in that town. Mr. Ravenhill urged the importance of personal interests being brought to bear upon the practitioners in each neighbourhood. It was also announced that Dr. Brierley (Manchester) was about to lay the subject before a meeting of the profession in that city.

The Secretary read a draft letter which had been drawn up and approved by the Chairman, which it was proposed to send, with copies of the Society's documents, to the President and Secretary of each Branch of the British Medical Association, requesting that they would bring the Society's operations before their Branch meetings.

The question of holding an annual general meeting in London was discussed; and it was proposed by the Chairman, and approved by the meeting, that an annual general meeting be held in the provinces, and a semi-annual meeting in the metropolis.

The Secretary was requested to convene a meeting of the General Committee at a convenient date, within fifteen days after the auditing of the accounts (which are to be made up to June 30th), to consider the report to be presented at the meeting at Belfast, on the occasion of the annual meeting during the session of the British Medical Association.

It was decided to appoint Messrs. Price, Waterhouse, and Co., as auditors of the Society.

It was agreed that members joining before the end of May be considered foundation-members, and that their membership date from March 1st; the first premiums thus become due on May 31st, and such members become free to sickness-benefit on September 1st.

ST. JOHN'S AMBULANCE ASSOCIATION.—A public meeting was held at Bassaterre, St. Kitt's, last month, for the purpose of forming a centre, of which Sir Charles Lees, the Governor of the Leeward Islands, has been appointed president, among the other supporters of the movement being Bishop Branch, his Honour C. M. [illegible], Rev. H. E. Holme, and Dr. W. J. Branch. A meeting for the same purpose took place last week at Lewes, Sussex, among the speakers being Mr. John Furley, deputy-chairman of the London committee, and Lord Sidney Godolphin Osborne.

COLLECTIVE INVESTIGATION OF DISEASE.

LIST OF RETURNS RECEIVED IN APRIL, 1884.

I.—Pneumonia (51).

G. R. Allan, M.D.; James Allan, M.D.; Edgar G. Barnes, M.D.; H. B. Boulter, Esq.; James Brown, Esq.; M. H. Bulteel, Esq.; W. F. Cleveland, M.D.; C. P. Coombs, M.D.; W. H. Copley, Esq.; A. Evershed, Esq.; J. W. Gooch, Esq. (2); M. Greenwood, jun., Esq.; J. Griffin, M.B.; Laurence Humphry, Esq.; S. Johnson, M.D. (2); Hugh R. Ker, Esq. (2); A. W. Leachman, M.D. (2); A. Cowley Malley, M.B. (2); James Martin, Esq.; A. McAldowie, M.D.; J. T. McMahon, Esq.; N. A. Messiter, Esq. (3); W. J. Mickle, M.D.; W. A. Moseley, M.D.; W. Odell, Esq.; Thos. F. Raven, Esq. (3); John Reid, M.B. (2); H. S. Renshaw, M.D. (2); R. Ross, Esq.; A. Stewart, M.D. (4); T. E. Underhill, M.B.; E. G. A. Walker, Esq. (2); J. Walters, M.B.; R. H. Wolstenholme, Esq.; E. M. Wrench, Esq.; W. H. Wright, Esq.

II.—Chorea (10).

E. L. Dixon, M.D.; J. E. Garner, M.D. (2); R. S. Peart, M.D. (2); G. H. Philipson, M.D.; A. C. Rich, M.B. (2); C. E. Robbs, Esq.; E. G. A. Walker, Esq.

III.—Acute Rheumatism (5).

John Griffin, M.B.; Hugh R. Ker, Esq.; J. Quirke, Esq.; T. F. Raven, Esq.; H. S. Renshaw, M.D.

IV.—Diphtheria (Clinical, 13).

J. Bridger, Esq. (5); W. M. Crowfoot, M.D. (5); E. L. Dixon, M.D.; C. J. Myers, Esq.; A. C. Rich, M.B.

IVa.—Diphtheria (Sanitary, 4).

W. M. Crowfoot, M.D. (2); J. E. Garner, M.D.; C. J. Myers, Esq.

V.—Syphilis (Acquired, 1).

F. J. Allan, M.D.

Va.—Syphilis (Inherited, 1).

F. J. Allan, M.D.

VI.—Acute Gout (2).

R. H. Lloyd, M.D.; Joseph White, Esq.

VII.—Puerperal Pyrexia Cards (14).

A. D. Leith Napier, M.D. (9); Robert Boxall, M.D. (5).

VII.—Puerperal Pyrexia Forms (21).

Reginald Bayley, Esq.; J. Campbell, M.B. (2); Edwin Child, Esq. (2); T. Corbett, Esq.; G. W. Crowe, M.D. (2); James Donald, Esq.; G. T. McKeough, Esq.; J. W. Millen, M.D.; A. D. Leith Napier, M.D. (9); J. J. Stack, Esq.

Enteric Fever (2).

M. Greenwood, jun., Esq.; B. G. Morison, M.B.

Germanic Cremation in Russia.—The remarkable picture, mentioned in the *Daily News* of April 11th, of the Polish artist Siemiradzki, which has created so much interest abroad, refers to the cremation customs of the Teutonic Northmen who founded the Russian Empire. The burning of dead bodies was an universal rite with the ancient Germans and the kindred Anglo-Saxons and Scandinavians. In *Fire-Burial among our Germanic Forefathers*, by Karl Blind (Longmans and Co.), which gives a short "Record of the Poetry and History of Teutonic Cremation," the following occurs: "Among the Northmen abroad fire-burial was continued down to the tenth century. In Orkney and Shetland the heathen Northmen practised for at least a century and a half the fire-burial customs which they had brought with them from Norway. (See introduction by Mr. Joseph Anderson to the *Orkneyinga Saga*). The same was done in the tenth century by the Warangian rulers of Russia, who had given the country a Norse dynasty and aristocracy, and probably even its name. A striking picture of those Germanic cremation rites in Russia has been handed down to us by Ahmed Ibn Fozlan, an Arab ambassador from the Khalife Al Moktador, who, in 921, wrote a report of his journey. His description is one of the most graphic, the minutest details being given. "You Arabs," said one of the Northmen in Russia to Ahmed Ibn Fozlan, "are fools! You take the man whom you must have loved and honoured, and put him down in the earth, where vermin and worms devour him. We, on the contrary, burn him up in a twinkling, and he goes straight to Paradise." It is this description by Ibn Fozlan which the Polish artist has chosen as his theme.

Abuse of Alcohol in Switzerland.—A report has been drawn up in Switzerland as to the best method of checking the rapidly increasing consumption of alcohol in the cantons of Berne, Argovie, Soleure, and Lucerne. It embodies the result of inquiries made as to the measures employed in those European countries, the climate, revenues, and social condition of which most resemble those of Switzerland. The three remedies which have been recommended are, first, that the police should be empowered to interfere in cases of drinking to excess; the second, that a high duty should be levied on the manufacture, commerce, and the retail selling of alcoholic liquors; and, third, that educational methods should be employed to combat the evil.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

Meetings of the Council will be held on Wednesday, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

Cards for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
IVa. Diphtheria, sanitary.
V. Syphilis, acquired.
Va. ,, inherited.
VII. Puerperal Pyrexia.

Note.—The further 150 cases of pneumonia asked for by the Committee have now been received, and will be included in the forthcoming issue of the *Record* in July. The Committee hope that cases will still be communicated, as opportunity may occur, with a view to a further report upon the subject in the future.

Inquiries will almost immediately be issued upon the habits of aged persons who may have attained or passed the age of 80 years, and upon the occurrence of Albuminuria in apparently healthy persons.

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
April, 1884. 161a, Strand, W.C.

Notice.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

The North-Western Provinces and Oudh Branch.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons Shirley Deakin and W. A. Morris, 8, City Road, Allahabad.

South-Western Branch.—The annual meeting of this Branch will be held at Exeter, on Wednesday, May 21st. The President-elect, Dr. Lewis Shapter, kindly invites all members to lunch at his house in the Barnfield, from 12 to 1.30 p.m. The order of business will be as follows: 1.15 p.m., Meeting of Council at the Devon and Exeter Hospital; 1.30 p.m., General Meeting at the Devon and Exeter Hospital. The annual dinner will take place at Pople's New London Hotel, at 6 p.m. The Exhibition of the Devon County Agricultural Association opens on May 21st, so opportunity of visiting the show will be afforded to members attending the meeting. Members intending to read papers, or make communications at the meeting, are requested to give notice to S. Rees Philipps, M.D., Honorary Secretary, Wonford House, Exeter.

Staffordshire Branch.—The third general meeting of the present session will be held in the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 29th, at 3 p.m. In connection with the Collective Investigation Committee, a debate will take place upon Puerperal Pyrexia, and the discussion will be commenced by Dr. J. Braxton Hicks, F.R.S., Consulting Obstetric Physician to Guy's Hospital.—Vincent Jackson, General Secretary, Wolverhampton.—May 5th, 1884.

East Anglian Branch.—The annual meeting of this Branch will be held in the ancient Castle at Colchester on Thursday, May 15th; John Lowes, M.D., President; R. F. Symmons, Esq., President-elect. Programme of Proceedings: 10.30. Meeting of Council of Branch. 11.30. *Dejeuner*, Cupar Hotel, by the President-elect. 1 p.m. General meeting of members. President's address. 6 p.m. Dinner at Cupar Hotel. 8 p.m. *Conversazione* at the Castle, by President and members of Colchester Medical Society. The President-elect will be obliged if those members who propose to attend the dinner will communicate their intention to him not later than Monday, the 12th instant. The following papers have been promised. 1. Cadge, W., Esq., F.R.C.S.: On Traumatic Pleurisy, with remarks. 2. Humphry, G. M., Professor, M.D., F.R.S.: Collective Investigation Committee—Card for Aged People. 3. Johnson, George, M.D., F.R.S.: Picric Acid as a Test for Albumen. 4. Laver, Henry, Colchester: Notes on a Case of Calculi in the Kidney, with remarks. 5. Veale, Dr., Colchester: On the Treatment of Pleuritic Affections. 6. Thornton, John Knowsley, M.B., M.C.: On the Surgical Treatment of Renal Calculus, with notes of two cases of Nephro-Lithotomy. All qualified members of the profession are invited to attend the meeting, even if not members of the Association.—W. A. Elliston, M.D., Ipswich, M. Beverley, M.D., Norwich, Honorary Secretaries.

MIDLAND BRANCH.—The annual meeting of this Branch will be held in Nottingham on Thursday, July 3rd. Notice of papers, etc., to be sent to the Secretary, LEWIS W. MARSHALL, M.D.

EAST YORK AND NORTH LINCOLN BRANCH.—The annual meeting will be held at the Infirmary, Hull, on Wednesday, May 28th, 1884, at 1.30 P.M. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the Secretary not later than May 16th.—E. P. HARDEY, Honorary Secretary, 17, Brunswick Terrace, Spring Bank, Hull.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—A meeting of the members of the above district will be held at the Castle Hotel, Wellington Square, Hastings, on Tuesday, May 27th, at 3.30 P.M. Dinner at 5.30 P.M.; charge 6s., exclusive of wine. Mr. Kaye Smith of St. Leonard's will take the chair. Communications with respect to the reading of papers or cases, or the exhibition of morbid specimens, should be addressed to the Honorary Secretary, T. JENNER VERRALL, 97, Western Road, Brighton.—April 29th, 1884.

YORKSHIRE BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at the Beckett Hospital, Barnsley, on Wednesday, April 30th, the President, Dr. KEELING, in the chair.

Papers.—The following papers were read:

1. Dr. Dolan: On the less frequent Use of the Trephine in Modern Times.
2. The President: Specimens removed in Extirpation of the Kidney and Hysterectomy, with Remarks.
3. Dr. Goyder: Note on a Peculiar Retinal Light, and its probable cause.

Dinner.—After the meeting the members dined together at the Queen's Hotel.

NORTH OF ENGLAND BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held in the library of the Newcastle-on-Tyne Infirmary on Wednesday, April 30th, at 2.30, Dr. DIXON, President, in the chair. Twenty-five members and four visitors were present.

Alteration of By-law.—On the motion of Dr. EASTWOOD, seconded by Dr. OLIVER, By-law 3 was altered so as to accord with By-law 17 of the Association, the President explaining the necessity for the alteration.

Representatives on the Council of the Association.—The following resolution was proposed by Mr. S. W. BROADBENT, seconded by Dr. GIBSON, and carried unanimously, "That the Secretary (Dr. Drummond) and Dr. Philipson be elected to represent the Branch on the Council of the Association.

Homœopaths.—The Secretary having explained why questions bearing upon the admission of homœopaths into the Association were circulated, and read a communication from the President of the Council and Mr. Dix asking the opinion of the Branch with regard to (1) the admission of homœopaths as members of the Association; and (2) the retention of those homœopaths already members, stated that he had received forty-eight replies, of which forty-one were against, and seven were in favour of, the admission of homœopaths, whilst twenty-four were in favour of those already members being allowed to remain, and twenty were against.

Communications, etc.—The following communications were made:

1. Dr. Mantle read a paper on Acute Rheumatism, dealing especially with the varieties met with in scarlatina, erythema, and infectious sore-throat. The President, and Drs. Gibson, Drummond, and Morison made some remarks; Dr. Mantle replied.
2. Mr. Williamson read a paper in which he dealt with the Effects of Strong Light upon the Eye.
3. Dr. Drummond read a paper upon a Strange Neurosis. The President, Drs. Forster, Jeaffreson, Mantle, Eastwood, and Ellis, joined in the discussion which followed, and Dr. Drummond replied.
4. Dr. Hume introduced a man with a Rectal Tumour, upon whom he had performed Colotomy, and detailed the history of the case and the features of the operation.

Dinner.—The members and their friends dined together at 5 o'clock in the County Hotel. Thirty-two sat down to dinner, including the vicar, the mayor, and the under-sheriff of Newcastle.

BEQUESTS AND DONATIONS.—Mr. William Foster of Queensbury and Hornby Castle, bequeathed £1,000 to the Endowment Fund and £500 to the Building Fund of the Bradford Infirmary, £1,000 to the Halifax Infirmary, £750 to the Bradford Fever Hospital, £500 to the Bradford Children's Hospital, and £250 to the Bradford Eye and Ear Hospital. Two ladies have given £1,000 additional to the British Home for Incurables, for endowing one of the vacant beds, to be known as "Our Neighbour's Bed." Captain Thurlow has given 100 guineas to Charing Cross Hospital, and 100 guineas to the City of London Lying-in Hospital.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The International Health Exhibition.—Albuminuria concomitant with Strangulated Hernia.—The Dermatobia Noxalis.—Sialorrhœa of Nervous Origin.—Trichinosis.—Dental Cysts.—Influence of the State of the Blood on the Nerves innervating the Circulatory Organs.—Inhibitory Phenomena.—The Physiological Action of the Poison used by the Mois.—A New Method of Preserving Dead Bodies.—The Statistics of Diphtheria.—The Biological Station of Concarneau.

THE Municipal Council of Paris have voted 35,000 francs (£1,400) to enable the city to be represented at the International Health Exhibition to he held in London.

Dr. Englisch, of Vienna, on examining the urine of patients under treatment for strangulated hernia, has ascertained that it always presents albumen in proportion to the duration of the strangulation. If surgical means be not adopted, the albuminuria continues until the death of the patient. The quantity of albumen is not affected either by the date of the hernia, the size of the sac, the frequency of anterior strangulations, nor by a febrile condition. When there is simple protrusion of the omentum, albumen is absent. Professor Nothnagel attributes this albuminuria to diminished intravascular pressure resulting from the presence of a strangulated hernia.

M. A. Robin relates an interesting case which has recently come under his notice. The patient, an inhabitant of Rio Janeiro, one day suddenly felt a violent pain in the thigh, which quickly passed off, but reappeared on the following days; and at the same hour, simultaneously with the pain, a small purple pimple appeared. The medical men at Rio Janeiro diagnosed it as a carbuncle; but it continued to increase in size without presenting any sign of suppuration. The patient decided to go to Paris. During the journey, the pains became especially acute; they appeared in the morning and late in the night; she described them as pinching, burning, dragging pains. Towards the end of the journey, they attacked the stomach, head, and limbs. The patient then suffered from convulsions; after these fits, trismus frequently set in. Several physicians in Paris diagnosed the condition as nervous, and considered the tumour to be unimportant. M. Robin commenced by trying to ascertain the nature of the tumour. He observed a small orifice at its centre, but there was not the slightest indication of suppuration. On pressure, a small mass was expelled, which resembled the core of a boil, and, when carefully examined, was observed to present spontaneous movements, due to the presence of a larva, which M. Laboulbène pronounced to be that of a dipterous insect, *Dermatobia noxalis*, a species unknown in France. After the expulsion of the larva, the nervous attacks ceased, and the patient is now completely cured. M. Megnin quotes the history of a similar case communicated to him by Dr. Josseaume. The larva M. Megnin believed to belong to the same species as that described by M. Laboulbène, which he considered, however, to be the larva of a gad-fly well known in France. M. A. Robin does not agree with M. Megnin. The body of the insect examined by M. Laboulbène was different from that described by M. Megnin, who assured M. Robin that the exterior aspect of an insect is unimportant, and is frequently decided by age.

M. Gilles de la Tourrette furnishes an interesting observation of a case of sialorrhœa of nervous origin. The patient presented neuropathic antecedents. He was suddenly attacked by violent neuralgic pain in the cheek and maxillary region, which was quickly followed by an abundant flow of saliva, presenting all the characteristics of the parotid secretion; it was thready and viscous. The quantity excreted amounted to 1,200 grammes, exceeding the quantity excreted after administering a sialogogue. The seat of the pain was swollen, and presented a marked hyperæmic coloration, which increased or diminished according to the degree of pain. The saliva which escaped was almost exclusively of the parotid, which is never obtained in an isolated form by means of sialogogues.

M. Duprez, a veterinary meat-inspector, fed some rats on trichinous meat for thirty-one days; they remained in perfect health. A piece of muscle was removed from the thigh of each animal, and was observed to be free from both young and encysted trichinæ.

M. Malassez, at a recent meeting of the Biological Society, referred to a former communication of M. Magitot on the formation of dental cysts. Unlike M. Magitot, he does not believe that they proceed from true periosteum, which does not form part of dental tissue. The connective tissue fibres, constituting what many authors describe as dental periosteum, are not closely enough packed to constitute a membrane; they are also implanted vertically on the tooth. The periosteum is a pathological formation resulting from the presence of matter which pushes back the fibres. M. Malassez is induced to regard dental cysts as epithelial products evolved from epithelial relics in the region of the dental follicles, which are, towards the fifth or sixth month of gestation, thoroughly isolated. These relics present the aspect of small epithelial masses in the substance of the connective tissue, which fills the dental alveoli. These masses in the walls of the cysts resemble a stage in the formation of fœtal teeth, and induce M. Malassez to consider dental cysts as of an epithelial origin. If there be an absence of suppuration or acute inflammation, an epithelium covers the walls of the cysts. Thus, the presence of these epithelial masses explains the development of epithelial products in the mesodermic tissue, which would otherwise be inexplicable. There is no example of epithelial tissue proceeding from connective tissue. Dental cysts generally owe their origin to some anterior affection of the tooth, which, by irritating the fœtal epithelial relics, provokes a new formation. The presence of the epithelial relics at the root of the tooth explains the subsequent presence of the cyst, which, in process of formation, opens and remains attached to the root of the tooth. M. Magitot's theory that these cysts develop in pre-existing cavities, leaves unexplained the cysts from new formation, even if considered conclusive for cysts from retention. These latter cysts must be rare. Not a single author has described a pre-existing cavity in the tissue erroneously called dental periosteum. M. Magitot's anterior publications on the normal anatomy of teeth bear evidence that he has never met with an example.

M. Dastre, in a communication to the Société de Biologie, states the results of his experiments, carried on in concert with M. Morat, to study the effect of asphyxia on the different orders of nerves which innervate the organs of circulation. Venous blood exercises a general action on the nerve-centres of the spinal nerves and those of the medulla oblongata. If the heart be submitted to a stimulus of equal force, the action of the inhibitory nerves predominates. The same law applies to the integument. In the case of the viscera, it is exactly the reverse; the action of the accelerator or constricting nerves predominates.

M. Beaunis, Professor in the Faculty of Nancy, in a communication to the Biological Society, makes the following statements. If, as facts observed indicate, every stimulus determines in the nervous substance an inhibitory and an accelatory phenomenon, the inhibitory may result from any manifestation of nerve-function. All nerve-stimulation provokes two opposite tendencies: the one increased activity, the other an arrest of this activity. All phenomena, whether they be of movement, secretion, or otherwise, are provoked by stimulation, the resultant of these two contrary actions. Likewise every psychical process is the resultant of these contrary actions: anger, voluntary movements, thinking, etc.; our intellectual life is a struggle between these two tendencies, the one of impulsion, the other of arrest. The relative predominance of either of these tendencies determines the character of the individual. Inhibitory action is of great pathological importance; when it is exaggerated, paralysis may ensue; its absence may provoke contracture. It is, therefore, necessary to distinguish this class of paralysis and contracture from those of an ordinary character.

M. Bochefontaine has made some experiments with the poison used by the Moïs of Cochin China for poisoning their arrows. This substance is zealously guarded, in order to prevent strangers from obtaining it. M. Moquin-Tandon of Saigon forwarded a sample of it to M. Bochefontaine, who injected it under the skin of frogs. The heart was arrested during systole. It acts on the cardiac muscle, and should be classed with digitalis and adonis. M. Bochefontaine promptly communicated these facts to M. Legemble of Saigon, who proposed experimenting on himself with this poison.

M. Philippeaux recommends the following method for preserving dead bodies. The body should be placed in a coffin or wooden case, and covered with wood shavings; the case should then be filled with charcoal broken up into small pieces. M. Philippeaux has preserved dead dogs during twenty months, without the slightest odour escaping; nevertheless, the skeleton was all that remained of one of the dogs.

Diphtheria is alarmingly on the increase. During the first quarter of 1883, 762 deaths occurred from diphtheria, or 16 per 100,000, which would be an annual mortality of 136 per 100,000. In 1865-69, the annual mortality from diphtheria amounted to 43 per 100,000; from 1871 to 1876, it was 65 per 100,000; from 1877 to 1881, 100 per 100,000. In 1882, the death-rate was 106 per 100,000; in 1883, 88. The statistics of the last three months show that infants from one to two years of age are the most frequently attacked. From January 3rd to April 4th, 1884, among children from 0 to 1 year were 215 deaths per 100,000 (of that age); from 1 to 2 years, 564; from 2 to 5, 384; from 5 to 15, 52; from 15 to 35, 1; from 35 to 60, 1; above 60, 1. The number of deaths in the different districts offer remarkable differences. The lowest occurred in the Elysée district (8), and in the Bourse (10). In Vaugirard and the Observatoire districts, the numbers were 66 and 64.

Professor Robin, of the Faculty of Medicine, and Professor Pouchet, of the Natural History Museum, with several pupils, have left Paris for the biological station at Concarneau. The Minister of Marine has placed at their disposal a small advice-boat, for the purpose of deep sea-sounding and dragging.

ALEXANDRIA.

An occasional correspondent writes:

Your recently published letters from the Italian Riviera show that, however superior the cities of the northern shores of the "Middle Sea" may be as regards picturesque site, luxuriant vegetation, beauty of architecture, and general attractiveness to the lovers of art, they still require much to be done in the future before they can lay any claim to sanitary excellence apart from the natural mildness of their climates. But there is a city on the southern shore where not only is there no sanitation, but where the natural beauties of site and natural tendencies to hygiene are so neglected that these advantages become sources of danger and disgust. The blue waters of the bay whose waves break on the shore of the harbour of Alexandria are anything but the source of health and delight they might be, casting back as they do the house and street refuse, the rotten vegetables, the shreds of old rags and wood and offal an indolent and careless population leave thrown on the margin of the shore. One may drive through the whole of Alexandria without a glimpse of the sea, unless, indeed, by going down some narrow lanes to the backs of the houses which skirt the shore. This part of the town requires much to be opened out; the condition of the shore and dirt of the water is seldom seen except by those occupying the neighbouring houses, although the foul odour of decaying matter is perceptible enough; and no one would imagine the unsanitary condition of the place, where the few drains which Alexandria possesses open, not far out under the water, but just at its edge. Were the place cleaned, the drains run out, and some land reclaimed from the sea, one of the most beautiful promenades possessed by any city could be made here.

Dr. Koch arrived at Alexandria on his way home from India on the 19th, and left for Germany by the P. and O. mail-steamer of the 22nd. It was intended, by the medical men practising in Alexandria, to entertain him at a banquet; but this project was abandoned, in consequence of the state of Dr. Koch's health, as it appears he has suffered from the effects of malaria in India. Thus it seems, while trying to catch one bacillus, he has nearly been caught by another, if the views of Tomasi-Crudeli and his colleagues on the *origo malariæ* be correct. Although no very definite statements are made in the seventh report of the German Cholera Commission on the subject of the conditions under which the bacillus retains its vitality, Dr. Koch considers that before long he will be able to predicate certain conditions of environment which render it inactive. The publication of these results will, of course, be looked forward to with keen interest, and scrutinised with all the scientific ingenuity their importance deserves. During the two days Dr. Koch was here, he examined the water of the tanks about Chatby, the village where the second outbreak of cholera last year originated. By-the-by, talking of Chatby, its railway-station—a small wooden structure—was blown down in one of the last gales here—a curious commentary on the opinion that the stagnant air over Chatby, which was said to be in a sheltered position, had something to do with the origin of the cholera-outbreak.

Some excitement was caused here by the report that a fatal case of cholera had occurred on board a homeward-bound steamer from India. The truth, however, turned out to be that before reaching Suez a death from hepatic disease occurred on board the steamer referred to; and, after leaving Suez, a man on board was attacked by illness, which was reported to be cholera; but, before the vessel passed Port Said, this patient was reported as much better and progressing favourably. Nevertheless, quite a sensation was caused, and people began to inquire for passages by the steamers bound for Europe; some actually left, although no personal communication took place between this vessel and the shore.

It is reported that there are a good many cases of cholera now existing in the seaports of Southern India; and the *Temps* advocates energetic action on the part of the Egyptian authorities. The Quarantine Board of Alexandria has decided that the regulations applicable in cases of outbreaks of cholera shall be put in force with regard to all vessels arriving from Bassein or Calcutta, or from any port situated between these two; and, in consequence of the outbreak of bovine typhus in the Esneh Province, the same authority has directed that all bills of health issued to vessels leaving Egyptian ports are to bear the endorsement—"Bovine typhus exists in Egypt."

ABERDEEN.

Professor Struthers on "the Aberdeen Medical" School.—Quatercentenary of Aberdeen University.—Rare White Whale of the Genus Beluga.

SIGNOR VERA, in an address presented to the University of Edinburgh on the occasion of its tercentenary, remarked that one of the characteristic features of the University of Edinburgh is that she is a genuine offshoot of the reformation. Professor Struthers, in opening his anatomical lectures, took occasion to remark that Edinburgh University is not the only post-reformation Scottish university, for in Aberdeen we have a vigorous new university, constructed by the union of an university of the middle ages with its post-reformation sister, a united university in which has been preserved what was admired in the middle ages, and at the same time in which the baptism of the new spirit is manifested in a manner which could not fail to gratify the Italian patriot. Previously to the reorganisation of the Scottish universities in 1858, old Aberdeen and Aberdeen each had its university; the one King's College and University, founded by Papal Bull in 1494, the other Marischal College and University, the post-reformation university, founded in 1593. By the Scottish Universities Act of 1858, the two universities were, from and after September 15th, 1860, united and incorporated as the "University of Aberdeen." The Aberdeen Medical School has been particularly fortunate in having Marischal College at its disposal; and as a matter of fact, by adapting rooms to meet modern requirements in the matter of practical teaching, it may be said to have kept in the forefront in the way of providing satisfactory and efficient laboratories and class-rooms for the natural sciences and more strictly medical classes. The Aberdeen School, in its modern development, has striven for something more, it has regarded the teaching and superintendence of the individual student, and the seeing that he worked, as a fundamental part of the system. The Aberdeen School well deserves the name of being a "working school," and this is due in no small degree to the "quality" of the students themselves, as well as to the careful superintendence, on the part of the professors, of the teaching and work of each individual student.

The quatercentenary of this University will fall to be celebrated in 1894.

Whales like evils do not seem to come singly. No sooner has the Tay whale gone on its tour than another and rare species turns up. Professor Struthers of Aberdeen received a few days ago a fresh specimen of the rare genus beluga. Though common in the Polar seas, the beluga is very rare on the British coast. A specimen was taken in the Firth of Forth in 1815, an account of which was given by Dr. John Barclay, the well-known lecturer on anatomy in Edinburgh at that time. The specimen now at Aberdeen was taken on Saturday in the salmon nets at Dunbeath, Caithness-shire, and towed ashore, where it lay for some time, exhibiting considerable activity. It was forwarded to Professor Struthers, Aberdeen University, for whom it was purchased, through Mr. Adam Mackay, student, residing at Dunbeath, and it now lies in one of the courtyards of Marischal College. It is pure white throughout, and being quite fresh, presents a beautiful appearance. The fact of the animal being white is a proof of its being an adult, for, when young, whales of the beluga species have a bluish-coloured skin. It is a female, length about 12½ feet. The pectoral fin is very broad and short, length 16 inches, breadth 10 inches. The tail fin is deeply notched, and measures 32 inches from tip to tip. There is no fin on the back, but a low ridge 2 to 3 feet long about the middle of the back. The teeth are nine in number on each side of both upper and lower jaws. The blow-hole is 18 inches from the snout, measured round the very projecting forehead. The minute rudimentary ear-passage was found 6 inches behind the eye.

At the last meeting of the Stafford Guardians and Rural Sanitary Authority, a letter from the Local Government Board was received and read, declining to sanction the proposed reduction of the salary of the medical officer of health from £75 to £50 *per annum*, "as such alterations are calculated to induce a diminution of zeal on the part of the officers affected," and urging the authority to reconsider the matter, which they decided upon doing at the next fortnightly meeting.

CORRESPONDENCE.

THE MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

SIR,—As it has been several times asserted that the life-assurance rates of this Society are higher than those of existing and well established companies, and as several letters have been sent me on the subject by members and intending members, I shall be glad of an opportunity of explaining the facts—the more especially as this assumed excess is sometimes taken as an indication that the rates for other descriptions of assurances, which are more difficult to test, are on a corresponding scale.

I have made a careful comparison of the premiums for life-assurance in the new society with those of the respectable established companies (with participation in profits), and the result is that, at the earlier ages—say from 20 to 30—the rates are about on a par; and that, from that period upwards, the Medical Assurance Society rates are progressively higher—the disparity increasing with each gradation of age. Instead of this, however, telling against the new society, the real facts are in its favour, inasmuch as the difference is more than accounted for by the premium in the one case being charged throughout life, and in the other ceasing altogether at age 65. How large an influence this provision, which I think it will be generally conceded is a wise one, exercises on the rates at the higher ages is often but imperfectly appreciated; and, in order that it may be more readily realised, I have prepared the following table, showing the number who may be expected to be alive at age 65 out of 1,000 persons joining at the ages given.

No. Joining.	Age.	No. Living at age 65.
1,000	25	476
1,000	30	494
1,000	35	516
1,000	40	547
1,000	45	583
1,000	50	624

The average expectation of life of the survivors at age 65 would be 10½ years, and thus it is easy to see how the extinguishment of premiums at a given age affects the rates. Take as an instance age 40, where, out of 1,000, there would be 547 survivors at 65. The new society, as compared with others, sacrifices 5,743 yearly premiums, or an average of 5.74 per member on the whole 1,000, an advantage which must obviously be paid for. I think, if this is carefully considered, it will be seen the rates are not inequitable where they are apparently higher than those with which they may be compared, but, on the contrary, favourable to the members. This may be seen at once from the fact that a member joining at 25 has only the same amount to pay up to age 65 that is generally demanded throughout life.

Another element in the question is the mutual assurance principle of the new society, which renders it impossible for any trading profit to be made out of the premiums. Thus, should carefully analysed experience show that too much has been contributed, the excess is the absolute property of the members, from whose possession and control it cannot possibly be withdrawn. The only direction in which the contributions could possibly be appropriated to purposes of no advantage to the members would be that of lavish and costly management. As the percentage on this account has been fixed at a maximum of ten per cent., and experience already tends to show this will be more than sufficient, the Society is in a position to bear comparison on this most important point with any existing organisation.

I should be glad if you would allow me, in addition, to clear up another point on which there appears to be much uncertainty, by announcing that the term "sickness" covers inability for professional duty caused by accident, and that the half sickness-pay, after twenty-six weeks' continuous illness, is payable for the whole period of incapacity, no matter how long it may last.—I am, dear sir, your obedient servant, C. J. RADLEY, Secretary.

26, Wynne Road, Brixton, S.W., May 5th, 1884.

THE PAIN OF DISEASED ARTERY.

SIR,—In reading over the interesting article on "The Use of Opium as an Aid to Surgery," by Mr. George Pollock, in your last issue, recalling the attention of the profession to an use of opium well nigh forgotten, I was much struck by his remarks upon the pain experienced in cases of arterial degeneration with gangrene in the limbs. He says: "The pain of diseased artery is a very marked point, and practically important; inasmuch that in continuous pain, with obscure cause of explanation, I have usually been inclined to prognosticate the arrival of some later positive evidence of diseased artery, or, in its absence, the existence of cancer." To me this sentence is pregnant with suggestion. All physicians know that aneurysms produce pain by pressure on nerves, or by erosion of bone from pressure, and in persistent pain in the spine are on the outlook for aneurysm. But is there not also pain belonging to the affected arterial wall *per se?* This is a matter of some practical importance. Pain is not associated with disease of the heart. Even angina pectoris is not truly a "heart-pain;" for true angina is "angina vaso-motoria," and false angina is a "neuralgia;" and the pain of Piorry is connected with the serous membranes of the heart; local pain may occur coincidentally with organic mischief in the heart, pain regionally near the heart, as intercostal rheumatism, or intercostal neuralgia, or pleurodynia, or a lithæmic "spot of pain" over the pectoral muscle, and be referred by the patient to the heart. Nevertheless, local pain has nothing to do with the heart. There is no "heart-pain."

Some time ago, at the Victoria Park Hospital, a resident clinical assistant drew my attention to the fact that a patient of mine, with aortic regurgitation, complained of considerable pain in the region of the aortic root. This conflicted with the view that disease of the heart produced no pain. The man was the subject of degenerative change in his tissues; and, in a week or two later, an unmistakable aneurysm could be both seen and felt close to the heart. About the same time a patient of mine, in the country, fell dead suddenly. His local medical attendant attributed the cause of death to the bursting of an aneurysm. Here the patient had complained for some days before death of pain in his chest.

The moral of all this is this—1. "If there be no pain produced by disease of the heart, what does pain when present in the region of the heart mean? 2. Though many an aneurysm produces no pain; is there 'the pain of diseased artery' in some cases; and, if so, what is its significance?"

If pain belong to degenerate, or diseased arterial walls, and pain be complained of in a case of heart-disease, may not this throw some light upon the nature of the case, both diagnostically and prognostically? It seems to me that we are beginning to "see in a glass darkly," a point of considerable value; and as individual experience will certainly be tedious and probably be doubtful, I appeal, through your columns, to your readers; and ask if any of them can help me in this matter.—I remain, etc. J. MILNER FOTHERGILL, M.D.

MEDICO-LEGAL AND MEDICO-ETHICAL.

SIR,—I am sorry to trouble you once more, but I am afraid my question was indefinite. Has a committee power to take a relative (whom he believes sufficiently well for the purpose,) from an asylum and place him under the private care of a practitioner without permission, and without going through the interminable delay of satisfying the Lunacy Authorities as to the advisability of the step?

A CONSTANT READER.

⁂ The committee has the power referred to, but it is necessary to communicate with the Masters in Lunacy. There will be no "interminable delay" as feared by our correspondent. Application should be made to the Office, Royal Courts of Justice, Strand.

PUBLIC APPOINTMENTS AND MEDICAL ETIQUETTE.

SIR,—As I am the "Brother Chip" alluded to in a letter under the above heading, in the JOURNAL of May 3rd, I trust you will allow me to make a few remarks thereon.

While I quite admit the general principle in medical ethics, that a man should not disturb his neighbour in his possession of a post, the circumstances of this case, are, I think, exceptional; and for these reasons.

1. The appointment in question had been held by my predecessors in the practice—who, like myself, lived in the largest parish of the union—for a great number of years, till October, 1879.
2. It was then resigned by my immediate predecessor, in consequence of the guardians' refusal to raise the salary, although the grounds on which the increase was asked were not disputed.
3. The appointment was then given to a stranger, who, though doubly qualified, was not accepted by the Local Government Board.
4. It was thereupon transferred to Mr. Powell, who was then in possession of the single qualification of L.S.A., obtained in 1876, after many years' practice in the district without any qualification.
5. As he could, therefore, only be appointed by the year, he made an attempt to get another qualification, which failed.

In these circumstances I beg to submit the question whether a rule of medical etiquette—even if applicable in this case—should be allowed to override the principle that the poor, who are entirely dependent on the parish doctor, should have efficient medical attendance.

It is to secure this that a singly qualified man has to be re-elected yearly, and properly speaking, if there is a doubly qualified man resident in the district willing to take the post he ought to have it.

Had Mr. Powell held his qualification from a period previous to the making of this regulation, or from the time of his entering on the practice, I should not have opposed him. Apologising for troubling you with this communication, which however, has only been written in self-defence.—I am, faithfully yours,

Grosmont, Hereford. W. P. WARREN.

MEDICAL ETIQUETTE.

SIR,—My attention has been directed to a letter in your JOURNAL of April 26th, signed "Parish Doctor," in which that gentleman seems to consider himself injured by my action regarding the admission of a lunatic into the County Asylum.

The following are the facts of the case. The patient in question, having attempted to commit suicide, and not being under treatment by the parish doctor or any other medical man, his friends naturally sent for me, as I resided within a minute's walk, the parish doctor's residence being five miles off. On my arrival, I found the case was urgent, and the friends in a great state of dismay. Under these circumstances, I took immediate steps for the removal of the patient to the County Asylum, as any delay would have been quite unjustifiable. Had the case admitted of any delay, I would naturally have communicated with the parish doctor, but, under the circumstances, I do not see how he can accuse me of any want of courtesy.

I may add that I have not the remotest intention of starting a practice in the neighbourhood, and that I have only taken up a few cases among the working people, from whom I do not take any fees, also that I am particularly careful not to interfere in any case which may be under treatment by another man; in any case, it is exceedingly seldom that this parish doctor is called in by any of these people here.—I am, sir, yours, etc., THE NEWLY FLEDGED ONE.

SIR,—Some months ago, I put up a plate, on my own account, in a growing neighbourhood, near town, and at the same time called upon the neighbouring practitioners. With one or two exceptions, I was, as one might expect under the circumstances, very coldly received, and no further notice taken of me, beyond one firm leaving their cards.

Not having the pleasure of these gentlemen's acquaintance, am I, when called to attend in a fresh illness, at a house which has previously been visited by one of "the opposition," to write (which appears to me must, to both practitioners, be an unwelcome business) to the former medical attendant, and acquaint him that "Mr. —— has requested me to attend in place of yourself," or is it sufficient for Mr. —— to write me a note to that effect, leaving it to the patient to communicate the fact to his former doctor?

Again, having attended, some weeks back, for one of the local medical men, a distant midwifery case, I applied to him, after a fortnight, for the usual half fee, and as yet without success. As this gentleman is frequently away, what am I to do if again called, in his absence, to another such case? Should I be justified in making my own terms with the patient, or should I decline to attend unless guaranteed by the patient the amount due?—I am sir, yours obediently,

SAWBONES.

⁂ Notwithstanding the discourteous omission of the local practitioners to return our correspondent's professional call of courtesy, it should not for a moment deter him from maintaining a courteous demeanour towards them whenever brought into contact, or other circumstances enjoin it.

In reply to his several questions, we would observe: 1. That, in the case of a "fresh" (as he terms it) illness, in which no practitioner has been attending, it would not be necessary for him to communicate with the "opposition," so called.

2. In respect to the moiety of the obstetrical fee, we consider that he has been somewhat hasty in applying for it. The pre-engaged but absent accoucheur will, no doubt, hand it to him when received, or prior thereto if need be.

3. In our opinion, he would not, in a like case, "be justified in making his own terms with the patient;" and, in the event of an obstetrical emergency, a sense of duty would doubtless prewarn him not "to decline to attend unless the fee be guaranteed by the patient." Such an exaction, and especially in such an exigency, would be justly regarded as morally and professionally wrong.

Our correspondent, "Sawbones," as a young practitioner, will not, we trust, misinterpret the motive which induces us, in the interest of the faculty at large to remark that, in public medical correspondence it is, in our opinion, especially desirable that care be taken in selecting a pseudonym; for, unless we personally evince professional self-respect, the general public will also, sooner or later, fail to recognise any necessity therefor on their part. *Verbum sap.!*

MEDICAL ADVICE IN NEWSPAPERS.

A CORRESPONDENT forwards the subjoined extract from the *English Mechanic* of May 2nd, page 194.

"*Lady Feeling on Ice.*—I should be very pleased to offer my opinion on her case without fee. I have had, in my long experience of my profession, cases which were not understood by members of my profession, and the results of my opinion afterwards proved true. I am not egotistical, but my professional status is known. Should the lady like to make an appointment to see me here, my residence, I shall be pleased to see her.—J. M. Croft, M.D., M.R.C.P. London (guardian of Marylebone), Mandarin Villa, 15, Abbey Road, St. John's Wood, London, N.W."

He adds: This paper has many letters from medical gentlemen, who reply to questions, give their names, and offer to treat people they have never seen.

J. R. S.—The special point on which our opinion is sought by "J. R. S." is a purely legal one, and our correspondent will do well to submit it to his solicitor, together with a copy of the contract he entered into with the local practitioner.

THE *National Gazette* understands that should any subject not directly connected with the law of liquidation be discussed at the proposed Conference, the necessity of settling the question of the Egyptian quarantine system will be brought by Germany under the notice of the delegates.

SIR HENRY THOMPSON has written a letter to Dr. Cameron, expressing his gratification at the result of the debate on the cremation question, and speaking hopefully of the future of the movement.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

NOTIFICATION OF INFECTIOUS DISEASES AT BRIGHTON.

WE announced last week that, at a meeting of townspeople, held at Brighton on the 30th ultimo, resolutions were passed, requesting the Town Council to withdraw from their Improvement Bill, now before Parliament, the clauses relating to the compulsory notification of infectious disease, on the ground that "their operation would be very detrimental to the prosperity of the town as a health-resort." The meeting was very enthusiastic, and, as a consequence, the Town Council have adopted their conclusions. At a meeting held on the 1st instant, the Council approved, by 23 votes to 12, resolutions unconditionally expunging the clause providing for compulsory notification, as well as those authorising the closure, in certain cases, of day-schools, and shops where food and clothing are sold. The General Purposes Committee of the Council, who had received on April 1st a deputation concerning the Bill, were at first disposed to recommend the omission of all these clauses; but, on consideration of a report by the Sanitary Committee, they withdrew their objection to the clause as to compulsory notification, providing that the notice were sent to the Town Clerk instead of to the Medical Officer of Health—a detail which does not touch the principle of the matter. But the general body of the Town Council followed the resolutions of the town meeting, and gave directions for its absolute withdrawal of the clauses.

In their opposition to the compulsory notification of cases by the medical man to the local authority, the medical practitioners of Brighton have naturally our entire sympathy. It is not easy to pick out, amidst the tangle of comment and criticism, the particular objections felt to the registration of disease upon notification by the householder—a principle which has been repeatedly recommended and approved by the Association at its general meetings. The argument that knowledge as to the existence of infectious disease would be injurious to the place, receives, of course, no countenance from them. Nothing can be gained, and everything may be lost, by concealment of cases. From what we understand Dr. Taaffe to have said in his much interrupted remarks at the meeting on the 30th ultimo, the local Medical Society passed resolutions approving of notification on the Nottingham plan—*i. e.*, by the medical man to the occupier, and by the latter to the local authority. If this were so, these views do not appear to have been communicated to the Town Council, who merely received an intimation of the objections of the profession to the Bill as it stood. Perhaps, if the full opinions of the Medical Society had been communicated to the Council, a compromise might have been made by the adoption of some plan of notification which would apparently have satisfied both parties; but, the fears of the townpeople having been aroused, the clauses have been condemned root and branch; and there, for the moment, is the end of the matter, which is to be regretted in the sanitary interests, and therefore in regard to the general welfare, of Brighton. But the satisfactory feature is, that there was apparently a general feeling that a measure on the subject ought to be fully considered in the House of Commons, and that the town would cheerfully accept whatever is decided by the wisdom of the Legislature to be good for the whole country. When the political atmosphere is a little clearer, we may perhaps hope that such trifling questions as the prevention of the spread of epidemics may be thought worthy of legislative attention. Just now there is but little hope.

THE HOMERTON SMALL-POX HOSPITAL.

SINCE the appearance of the report of the Royal Commission on Small-Pox and Fever Hospitals, it has been somewhat the fashion to ascribe outbreaks of small-pox, that are a little obscure in origin, to the influence of a neighbouring infectious hospital. Undoubtedly some very striking evidence was brought before the Commission, of the way in which streets in the vicinity of such hospitals suffered from small-pox; but to condemn the hospitals generically as foci of infection is carrying the argument a little too far. There was an appearance of panic in the question put by Lord George Hamilton, on Monday, which the circumstances hardly justified. The Medical Officer of Health for Hackney is stated to have reported that the re-opening of Homerton Hospital for small-pox patients is causing a spread of that disease in its vicinity. It may possibly be that the re-opening of the hospital has been followed by a recrudescence of small-pox in the neighbourhood; but whether the two things stand to each other in the relation of cause and effect is a matter upon which judgment may be suspended until the full evidence is produced. The Metropolitan Asylums Board are carefully investigating the subject, and are meanwhile making special efforts to prevent any possible risk of the spread of small-pox from the hospital, not only by reducing largely the number of patients in the building, but by clearing adjacent properties which have been purchased by them for the purpose of securing a free space round the hospital.

But the question of the senior member for Middlesex had a wider significance. Was it the fact, he asked, that the Diseases Prevention Act of last session took away from the public their legal protection against the use of the metropolitan infectious hospitals in such a manner as to cause the spread of disease; and, if so, why? Sir Charles Dilke was able, without difficulty, to quiet these fears, and to point out that all that the Act provided about hospitals was that the managers might utilise their existing small-pox and fever establishments for cholera-patients, in the event of the Act being put into force.

The second clause, about which Lord George Hamilton was so apprehensive, appears, indeed, to be particularly innocent. It merely provides that, subject to the regulations of the Local Government Board, "the managers may from time to time utilise any of their buildings, ambulances, and other property, and their staff, for the execution of any powers or duties conferred or imposed on them" under the Diseases Prevention Acts of 1855 or 1883. There is nothing here suggestive of a charter to the Asylums Board to conduct their hospitals without regard to the public health of the neighbourhood. The responsibilities of the managers are already sufficiently great with real difficulties in other directions, and they may well ask to be spared from fancied grievances.

SMALL-POX IN SUNDERLAND.

WE have before us copies of the *Sunderland Daily Echo* of April 4th and 21st, which reveal such terrible neglect, and condonation thereof by the urban sanitary authority and the guardians of the poor of this town, that we feel compelled to put the salient points before our readers, with the hope that public attention will be called thereto, and an honest official inquiry insisted on.

For some time past, this town has been visited by an epidemic of small-pox. At the outbreak of the disease, the urban sanitary authority, contrary to the advice of two of its medical members, arranged with the guardians of the poor of the Sunderland Workhouse to take, in addition to their pauper, all non-pauper cases of small-pox as they arose.

On February 11th, one Selby was sent into the Sunderland Infirmary with compound fracture of the leg. Small-pox developing itself, he was sent, on February 17th, to the Workhouse Small-pox Hospital. On March 21st, he was removed from the hospital and sent to the private residence of the workhouse-tailor, who had a wife and family, where he died on March 30th.

It would appear that he was removed on the authority of the chairman of the house-committee of the workhouse (one Mr. Fairless), who stated, at their meeting, that, as Selby was now free from small-pox, the infirmary-authorities would be requested to take him back to their institution, which they very naturally delined to do; but they deputed Dr. Ayre Smith, one of the staff, to visit him, which he did in the company of his colleague, Dr. Douglas. To their utter astonishment, they found the unfortunate man still suffering from small-pox, as the scabs were still on his body. He had a pulse of 140, respiration 28, temperature 103.2°. On the following day, his condition was the same; and, although for a time he appeared to rally, he ultimately sank and died on the 30th.

Dr. Ayre Smith, considering that he had been improperly removed, refused to certify; and the coroner was requested to hold an inquest, which that official refused to do—giving, however, a certificate which allowed the body of Selby to be buried.

This matter having caused some local scandal, the guardians held an inquiry, at which some ugly facts were elicited. Thus, the medical officer would appear to have admitted "that patients were sent home, as a rule, before they were free from infection;" and the same journal from which our facts are derived states positively that such infected convalescents are permitted to travel in the tram-cars and public conveyances of the town.

In the issue of the 21st, there appears a letter from one William Hunter, an ex-non-pauper patient of this workhouse small-pox hospital. *Inter alia*, this man states: "I was put into the bed Mr. Wilson came out of, without it being cleaned, and it was very dirty, I can tell you. After I left that bed for another, a young man was put into the dirty bed I had just left. There was a woman nurse; she did little but walk about with her handkerchief to her mouth. There was also an old chap who used to walk about amongst the men. He asked me to help him to carry out some of the dead patients; but I told him to get someone else, as I did not come there to carry dead folks out. One towel was used to dry seventeen to eighteen of us. I paid ten shillings a week for being there, but I would not send a dog to such a place."

This opinion of William Hunter, strong as it is, would appear not to be an exaggerated one, as from the columns of the same journal of May 19th, 1883, we find letters from Dr. Morley Douglas and Dr. Ayre Smith, giving a detailed account of what they saw when they paid a visit to the fever and small-pox wards of the Sunderland Workhouse; but our space does not admit quotation therefrom. We will, therefore, content ourselves with stating that during the height of the epidemic there were at one time forty severe cases of small-pox, there being only cubic space sufficient for twenty-eight persons.

Our readers, we feel certain, will ask, What has the local poor-law inspector been about, that he has not discovered and indignantly denounced this strange condition of things?

THE EPIDEMIC OF SMALL-POX.

AT the Metropolitan Asylums Board, on April 26th, the clerk, Mr. Jebb, read the returns from the small-pox asylums. In the Eastern District Asylum, during the last month, 226 patients had been received, 23 had died, 4 had recovered, and 200 had been transferred to convalescent asylums. In the South-Western District Asylum, 17 had been received, 5 had died, 21 had recovered, and 14 had been transferred as convalescent. In the hospital-ship, *Atlas*, 189 patients had been received, 5 had died, 21 had recovered, and 204 had been transferred as convalescents. In the South-Eastern Asylum, 15 patients had been received, 2 had died, 4 had recovered, and 12 transferred. In Darenth Camp, which had been in full operation during the recess, under the medical superintendence of Dr. Bernard, 230 patients had been received, and 16 had been discharged. At the time of the report there were 43 acute patients in the Eastern Asylum, 16 in the South-Western, 133 in the hospital-ship *Atlas*, 22 in the South-Eastern Asylum, and 214 convalescents at Darenth Camp, in all, a total of 428 under treatment, against 264 a fortnight previously, making an increase of 164 in the four weeks. The chairman said that the epidemic had been constant in its rise, and had, as nearly as possible, been confined to the east end. Sir E. H. Currie added that the districts principally attacked by the disease had been Hackney, Shoreditch, and Bethnal green.

FEVER IN LONDON.

AT the meeting of the Metropolitan Asylums Board, April 26th, the returns from the five fever asylums of the managers showed that during the four weeks 133 patients suffering from infectious fevers had been received at the asylums, 56 at the South-Western, 52 at the Eastern, 2 at the Western, 11 at the South-Eastern, and 12 at the North-Western. In the same time 21 had died, and 147 had been discharged, leaving 304 scarlet fever cases, and 64 enteric fever cases under treatment, a decrease of 25 on the reports a month ago.

SUPERANNUATION OF POOR-LAW MEDICAL OFFICERS.

A MEMORIAL, of which the subjoined is a copy, has been forwarded to the President and Fellows of the College of Physicians, to the President and Council of the College of Surgeons, and to the Warden and Society of Apothecaries.

"Poor-Law Medical Officers' Association, 3, Bolt Court, E.C.,
"April 28th, 1884.

"Gentlemen,—We have been deputed by the Council of the Poor-Law Medical Officers' Association to apply to you under the following circumstances.

"In the year 1870, an Act was passed, called the Poor-law Medical Officers' Superannuation Act, whereby it was enacted that, on and after a given date, boards of guardians might at their discretion grant superannuation-allowance to Poor-law medical officers who had been in office a certain term of time, or who had reached 60 years of age, or who, not being of that age, were incapacitated by infirmity of performing their duties with efficiency.

"Under the provisions of that Act, some of the members of the Poor-law Medical Service have been granted superannuation-allowance; but, owing to the fact that the Act is merely permissive, many aged and indigent members of the profession, after holding office for periods varying from twenty to forty years, have been refused by the Board they have faithfully served any superannuation-allowance whatever. In some instances, the refusal has been accompanied by an offer of the workhouse or out-door relief.

"Many of these aged or broken-down ex-Poor-law medical officers have, in consequence, been compelled to apply to be pensioners of the Medical Benevolent College, or have been recipients of the bounty of the Medical Benevolent Fund.

"We believe that it was the intention of the Legislature, on passing the Poor-law Medical Officers' Superannuation Act, that all Poor-law medical officers who had complied with the conditions contained in the Act should receive superannuation-allowance; but, as the Act has lamentably failed in such respect, we have to respectfully ask you in your corporate capacity to memorialise the Local Government Board, and to petition the House of Commons, praying that the Act should be amended so as to render the permissive clauses compulsory.

"We would respectfully point out that a precedent for such action exists in Ireland, where the Colleges of Physicians and Surgeons have severally memorialised the Local Government Board, Ireland, and the House of Commons, in favour of a Bill having such subject in view for the benefit of the Irish dispensary medical officers.—We are, gentlemen, yours obediently,

"JOSEPH ROGERS, Chairman.
"J. W. BARNES, Honorary Secretary."

AN OVER ZEALOUS RELIEVING OFFICER.

SIR,—Would you kindly inform me if the relieving officer of a parish has the power (or right) to enter into a private house, where the patient, "lunatic," is not on the parish, and require that certain conditions, which in his estimation are not sufficiently attended to, must be carried out, notwithstanding that the private medical man of the family certifies that all is correct. Also, if the relieving officer be wrong, what redress can be had; and is he not bound to show his warrant before entering any private house, whatever the circumstances.—I am, sir, faithfully yours, A. CROSBIE FINEY, M.R.C.P.

*** By the 16th and 17th Vict., c. 97, s. 68. "every relieving officer who shall have knowledge that a person wandering at large (whether or not such person be a pauper) is deemed to be a lunatic, shall immediately apprehend and take, or cause such person so to be apprehended and taken, before a justice, to be dealt with as in the section is provided." It will be seen from the above that the powers of a relieving officer are limited to a person wandering at large, and were not meant to apply to a person, whether he be a lunatic, or supposed lunatic, who is within doors, and under the care of a qualified medical attendant. In the case before us, the relieving officer has exhibited rather more zeal than discretion. He will probably not commit a similar offence, especially if the parties aggrieved make a representation thereof to the board of guardians.

PHTHISIS AND DRAINAGE OF THE SOIL.

SIR,—It is due, both to the accuracy of historical facts, and to the memory of the late Mr. A. B. Middleton, surgeon of Salisbury, to state that he was the first to notice the diminution of phthisis from subsoil drainage. In 1849 (during my house-surgeoncy at the Salisbury Infirmary) this city was severely visited by cholera. Quoting from Rammell's Report, 1851, "it destroyed nearly 200 persons, or about 1 in 45 of the inhabitants." Again, "there appears to have been a very large mortality from consumption and diseases of the lungs and organs of respiration."

Mr. Middleton, by public letters and other means, aided by Sir John Lambert, the late Dr. Wm. Finch, the late Mr. F. R. Fisher, the late Mr. Cobb, Mr. Coard Squarey, and other leading inhabitants, petitioned the General Board of Health for an inquiry, which was granted, and held by Sir T. W. Rammell (then Mr. Rammell, Superintending Inspector), followed by his report in 1851.

This report recommended "the adoption of subsoil drainage, sewerage, and water-works, extramural interments, and other improvements." (See page 113.) Money was raised, the plan carried out, and completed by the year 1855.

I remember Mr. Middleton telling me of his discovery of the fact of the diminution of the death-rate from phthisis, on the annual return of deaths after the completion of the works, and this he attributed to the drainage of the subsoil.

We often talked of Dr. Bowditch's observations in America, and considered that their mutual discovery of the fact was contemporary. I believe it was in 1865 that Dr. Buchanan came to Salisbury, and called on Mr. Middleton, and I distinctly remember the latter telling me that Dr. Buchanan doubted the inference about the cases of phthisis. It was not until the latter gentleman had ascertained that it was a fact, by seeing the results in other towns which followed Salisbury in these important improvements, that he announced it publicly.

It is not necessary at present to go into greater detail; but as a friend and companion of the late Mr. Middleton, from 1849 until his death in 1879, I am in a position to make the present statement, and to be certain of its accuracy.—Faithfully yours, W. D. WILKES, Surgeon Salisbury Infirmary.

P.S.—"Salisbury, the English Venice" (3d.), "The Benefits of Sanitary Reform as shown at Salisbury" (1s.), a paper read at the British Association at Bath in 1864, are two pamphlets of much interest by the late Mr. Middleton, and can still be obtained of Messrs. Brown and Co., Canal, Salisbury.

THE EPIDEMIC OF SORE-THROAT AT DOVER.

SIR,—It may interest your Dover correspondents to know that, during the last week, I have seen thirteen cases of follicular sore-throat; all of which have been in adults, and in one of which no milk was taken at all. I rarely go a week, during the winter months, without seeing two or three fresh cases; coming mostly from a poor neighbourhood, in a cold and damp locality, in my immediate vicinity, which was built upon ten or eleven years ago; since when I have noticed the frequent recurrence of this throat-affection. May I suggest the idea of the sore-throat being only pharyngeal herpes, modified by the situation. Certainly, it frequently co-exists with labial herpes, and the premonitory malaise of an ordinary influenza; the early high temperature points to a catarrhal origin; probably, also, it may occasionally proceed from stomach-derangement, as in labial herpes. I may mention that, at the end of 1882, we had here a large number of cases, which caused a semi-panic in the town. On investigation, the milk-supply to the various cases was found to come from every dairy in the neighbourhood; the largest dairy naturally supplying the largest number of suffering households. Every cow of the various milk-supplies was examined, and found healthy. E. M. SHIRTLIFF, Medical Officer of Health.

Kingston-on-Thames.

SIR,—In the JOURNAL of April 12th is a letter from Dr. Parsons, commenting upon Dr. Robinson's report of the late epidemic.

As one of those present at the recent meeting of the medical men of this town, invited by Dr. Robinson to discuss the subject with him, I feel that Dr. Parsons's mild impeachment, of "hasty generalisation upon insufficient data," applies to all present at that meeting, for all agreed as to the case being quite clear.

Dr. Parsons says that he is not convinced. Was it not a pity that he was not present at the meeting called for the very purpose of investigating Dr. Robinson's conclusions? That the evidence brought forward by those present would have convinced even him, we may fairly believe, as Mr. Colbeck, who had previously publicly announced his disbelief in the milk-theory as strongly as Dr. Parsons does now, altered his opinion there and then. I wish to point two facts only bearing on the question, and shall leave Dr. Robinson to take what notice he may think fit of the other parts of the letter.

First, Dr. Parsons writes as if it were alleged that *all* the sore-throats in Dover, at the time named in the report, were caused by the milk of a certain dairy. Such is not the case. Dr. Robinson stated over and over again that this epidemic consisted of a large number of sore-throats which broke out about the first ten days of February, but that, besides and apart from these, there were cases of ordinary sore-throat scarcely to be distinguished from them, such as commonly exist in the early months of the year. In other words, what is clear is, that a large number of sore-throats were caused by the milk; but beyond that Dr. Robinson does not go or attempt to go.

Secondly, were the epidemic one of a purely atmospheric origin, as Dr. Parsons suggests, let me ask him to explain the fact, stated by Mr. Wood (Resident Medical Officer of the Dover Hospital), that not one case of sore-throat existed at that time amongst the home-patients of that institution. These patients, from their number and distribution over all parts of the town, necessarily form a far better guide in any epidemic of atmospheric origin than the practice of any private practitioner.

These poor patients did not use milk at all, or obtained it from some less fashionable dairy than the one inculpated, which is essentially the dairy of the upper class. Hence so few of the poor were affected.

As regards my own experience, it is exactly the opposite of that of Dr. Parsons. I had not a single case in my hospital-practice, and, out of about twenty cases in private, had only one that could not be traced to the condemned milk.—I am, yours truly,

RICHARD E. ENGLAND, M.D.

30, Pencester Road, Dover.

HEALTH OF ENGLISH TOWNS.—In the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons, 5,733 births and 3,804 deaths were registered during the week ending the 3rd inst. The annual rate of mortality per 1,000 persons living in these towns, which had been 22.5 and 22.3 in the two preceding weeks, rose again to 22.7 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow:—Hull, 15.0; Leicester, 16.5; Cardiff, 17.3; Derby, 18.5; Newcastle-upon-Tyne, 19.3; Bradford, 19.9; Norwich, 20.2; Salford, 20.9; Brighton, 21.2; Halifax, 21.8; London, 22.0; Birmingham, 22.2; Portsmouth, 22.4; Sheffield, 23.1; Huddersfield, 23.7; Bolton, 23.9; Bristol, 24.2; Sunderland, 24.6; Manchester, 24.7; Birkenhead, 24.7; Liverpool, 25.2; Preston, 25.2; Blackburn, 25.5; Nottingham, 25.7; Oldham, 26.4; Plymouth, 27.0; Leeds, 28.5; and Wolverhampton, 29.3. In the twenty-seven provincial towns, the average death-rate last week was 23.2, and exceeded by 1.2 per 1,000 the rate recorded in London. The 3,804 deaths in the twenty-eight towns included 173 which resulted from whooping-cough, 172 from measles, 94 from scarlet fever, 36 from "fever" (principally enteric), 33 from diarrhœal diseases, 21 from small-pox, and 17 from diphtheria; in all, 546 deaths were referred to these principal zymotic diseases, against 522, 544, and 576 in the three preceding weeks. These 546 deaths were equal to 14.4 per cent. of the total deaths, and to an annual rate of 3.3 per 1,000. In London, the zymotic death-rate was equal to 3.6 per 1,000, while it did not exceed 2.9 in the twenty-seven provincial towns, among which it ranged from 0.0 in Brighton, and 0.7 in Halifax and in Bradford, to 4.9 in Leeds, and 5.0 in Liverpool. The deaths referred to whooping-cough, which had been 189 in each of the two previous weeks, declined to 173, and showed the highest proportional fatality in London, Salford, and Liverpool. The fatal cases of measles, which in the three preceding weeks had increased from 142 to 193, fell last week to 172, and showed the highest rates of mortality in Leeds, Oldham, and Portsmouth. The 94 deaths from scarlet fever exceeded the number in any recent week, and showed the greatest fatality in Preston, Cardiff, and Sheffield. The fatal cases of "fever", which had been 40 in each of the two preceding weeks, declined to 36 last week, and caused the highest death-rates in Newcastle-upon-Tyne and Birkenhead. The 17 deaths referred to diphtheria in these towns were fewer than those recorded in any week since last September; 11 occurred in London, 2 in Birmingham, and 2 in Leeds. The 21 fatal cases of small-pox included 10 in London, 4 in Liverpool, 2 in Hull, 1 in Birmingham, 1 in Sheffield, and 1 in Newcastle-upon-Tyne. The deaths from diseases of the respiratory organs in London, which had been 285, 318, and 327 in the three preceding weeks, further rose to 360 last week; they were 10 above the corrected weekly average, and were equal to an annual rate of 4.7 per 1,000. The causes of 84, or 2.2 per cent., of the 3,804 deaths registered last week in the twenty-eight towns were not certified, either by medical practitioners or by coroners. The proportion of uncertified deaths did not exceed 1.2 per cent. in London, while it showed a considerable excess in Hull, Birkenhead, and Leicester.

HEALTH OF SCOTCH TOWNS.—During the week ending the 3rd instant, 945 births and 574 deaths were registered in the eight principal Scotch towns, having an estimated aggregate population of 1,254,607 persons. The annual rate of mortality, which had been 23.3 and 24.2 per 1,000 in the two preceding weeks, declined last week to 23.8, and exceeded by 1.1 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns the death-rate was equal to 16.3 in Dundee, 19.5 in Leith, 20.0 in Greenock, 20.7 in Edinburgh, 21.8 in Perth, 27.3 in Glasgow, 27.7 in Paisley, and 28.0 in Aberdeen. The 574 deaths registered last week in these towns included 93 which were referred to the principal zymotic diseases, against 96 and 91 in the two previous weeks; of these, 41 resulted from whooping-cough, 15 from measles, 15 from diarrhœal diseases, 10 from diphtheria, 7 from "fever," 5 from scarlet fever, and not one from small-pox. These 93 deaths were equal to 16.2 per cent. of the total deaths, and to an annual rate of 3.9 per 1,000, which was 0.6 above the average zymotic death-rate last week in the large English towns. The zymotic rates in the Scotch towns ranged from 1.4 and 2.4 in Greenock and Dundee, to 5.0 and 5.4 in Perth and Paisley. The 41 fatal cases of whooping-cough showed a considerable further increase upon the numbers returned in recent weeks; 24 occurred in Glasgow, 6 in Edinburgh, and 5 in Aberdeen. The deaths referred to measles, which had declined in the three preceding weeks from 19 to 10, rose again last week to 15, and included 5 in Glasgow, 4 in Paisley, and 3 in Edinburgh. The 10 deaths from diphtheria showed a further decline from the numbers in the two previous weeks; 4 were recorded in Glasgow, 2 in Aberdeen, and 2 in Edinburgh. The 7 fatal cases of "fever" were 4 less than those in the preceding week, and included 2 in Leith and 2 in Aberdeen. All the 5 deaths from scarlet fever were returned in Glasgow. The mortality from diseases of the respiratory organs in these Scotch towns showed a slight further increase upon that prevailing in recent weeks, and was equal to 5.1 per 1,000, which somewhat exceeded the rate last week from the same diseases in London. As many as 63, or 11.0 per cent., of the 574 deaths registered last week in these towns, were uncertified.

HEALTH OF IRISH TOWNS.—In the week ending May 3rd the number of deaths registered in the sixteen principal town districts of Ireland was 452. The average annual death-rate was 27.4 per 1,000, the respective rates being as follows, ranging in order from the lowest to the highest: Limerick, 10.8; Galway, 13.4; Lisburn, 14.5; Cork, 19.5; Londonderry, 19.6; Armagh, 20.7; Belfast, 24.7; Dundalk, 26.2; Dublin, 30.7; Newry, 31.6; Drogheda, 33.8; Lurgan, 35.9; Waterford, 41.7; Kilkenny, 42.3; Sligo, 52.9; Wexford, 55.6. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.5 per 1,000, the rates varying from 0.0 in Galway, Newry, Kilkenny, Drogheda, Wexford, Lurgan and Armagh, to 9.6 in Sligo; the 11 deaths from all causes tabulated for the last named district comprising 1 from whooping-cough and 1 from diarrhœa. Among the 102 deaths from all causes registered in Belfast, were 2 from scarlatina, 1 from typhus, 2 from whooping-cough, 1 from enteric fever, and 2 from diarrhœa. Among the 18 deaths in Waterford were 2 from scarlatina, and 1 from typhus; and the 30 deaths in Cork comprised 1 from scarlatina, 1 from typhus, 1 from whooping-cough. One death from typhus, and 2 deaths from diarrhœa were registered in Limerick. In the Dublin Registration District, the deaths registered during the week amounted to 212. Twenty deaths from zymotic diseases were registered, being 1 under the number for the preceding week, and 9 under the average for the eighteenth week of the last ten years; among them were 8 deaths from scarlet fever, and 5 from whooping-cough. The deaths from diseases of the respiratory system amounted to 57, being 18 over the average for the corresponding week of the last ten years, and 21 over the number for the week ended April 26th; They comprised 36 from bronchitis, and 11 from pneumonia. The deaths of 11 children under 5 years of age (including 9 infants under 1 year old) were ascribed to convulsions. Five deaths were caused by apoplexy, 12 by other diseases of the brain and nervous system (exclusive of convulsions) and 14 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 29 deaths, mesenteric disease [illegible], and cancer 5. Two accidental deaths were registered. In 2 instances the cause of death was "uncertified," and in 2 other cases there was "no medical attendant."

HEALTH OF FOREIGN CITIES.—It appears from statistics published in the Registrar-General's return for the week ending May 3rd, that the annual death-rate was recently equal to 28.3 in Bombay, and 76.5 in Madras. Small-pox caused [illegible] deaths in Madras (a higher number than in any previous week of the present epidemic), and 26 in Bombay; the fatal cases of cholera were 23 in Madras, and 3 in Bombay. According to the most recent weekly returns, the average annual death-rate per 1,000 persons estimated to be living in twenty of the largest European cities was 29.0, and was no less than 6.3 above the mean rate during last week in the twenty-eight large English towns. The death-rate in St. Petersburg was 42.3, and almost identical with the rate in each of the two previous weeks; the 752 deaths included 54 from measles, 24 from "fever," and 22 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged only 22.6, and ranged from 15.5 in Christiania, to 24.9 in Stockholm; diphtheria and croup caused 3 deaths in Stockholm. In Paris, the death-rate was equal to 30.1 (against 22.0 in London), and higher than in any recent week; the deaths included 57 from diphtheria and croup, 39 from typhoid fever, and 38 from measles. The 215 deaths in Brussels were equal to a rate of 26.2, and included 13 from small-pox, 7 from croup, and 5 from whooping-cough. In Geneva, the rate was 25.8; 6 more deaths resulted from "fever," showing, however, a further decline from the numbers in recent weeks. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 25.6, the highest rate being 28.8 in Rotterdam; croup caused 12, and scarlet fever 5 deaths in Amsterdam, and 5 fatal cases of measles were recorded in Rotterdam. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 27.0, and ranged from 23.2 and 23.4 in Berlin and Dresden, to 36.8 in Munich, and 39.3 in Prague. Small-pox caused 37 deaths in Prague (showing a decline from the numbers in previous weeks), and diphtheria continues to show fatal prevalence in several of these German cities, especially in Berlin, Dresden, and Breslau. The death-rate was equal to 19.2 in Venice, and 35.6 in Turin; the 173 deaths in Turin included 8 from measles, and 3 from diphtheria. The usual return from Lisbon does not appear to have come to hand. In New York, Brooklyn, and Baltimore, the mean death-rate was 22.1, the highest rate being 23.9 in New York. Scarlet fever and diphtheria continued somewhat prevalent in New York and Brooklyn, and 8 of the 128 deaths in Baltimore resulted from measles.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Monday, May 5th.

The Lunacy Laws.—Lord **MILLTOWN**, having called attention to observations of Mr. Baron Huddleston in the case of Weldon *v.* Winslow, pointed out various defects in the lunacy laws. He moved that, in the opinion of the House, the state of those laws was eminently unsatisfactory, and constituted a serious danger to the liberty of the subject.—Lord **SHAFTESBURY** explained that there were precautions required under the Lunacy Acts which afforded to persons against whom lunacy was alleged far greater protection than the words used by Mr. Baron Huddleston would seem to imply. He did not allege that there were no abuses, but he said that there was much exaggeration in this matter.—Lord **COLERIDGE**, while bearing testimony to the great improvement that had been effected by the Lunacy Act of 1855, for which the country was indebted to Lord Shaftesbury, said his experience as a judge had shown him that our system of dealing with allegations of lunacy, though perfect on paper, broke down in practice. Where lunacy was clear, it worked well; and where lunacy was not clear, it worked well; but where the question was as to whether there was such an unsoundness of intellect as made it necessary that a person should be deprived of his liberty, the system broke down.—The **LORD CHANCELLOR** by no means contended that there were not points in which the existing lunacy laws required amendment; but he could not accept the motion, because he regarded its terms as extravagant. The assertion that the state of these laws constituted a serious danger to the liberty of the subject was one not borne out by any evidence that had ever been adduced on the subject. He promised that, if the present Government remained in office till next session, they would then introduce a Bill for the consolidation and amendment of the lunacy laws.—Lord **SALISBURY** thought that the debate had been an useful one; and, after the statement made by the Lord Chancellor, he recommended Lord Milltown not to press his motion. He himself was of opinion that the present state of the lunacy laws was very unsatisfactory.

HOUSE OF COMMONS.—Thursday, May 1st.

Deaths from Charbon.—In answer to Mr. **GRANTHAM**, Mr. G. **RUSSELL** said: We have not failed to observe the occurrence of anthrax or charbon among persons engaged in the hide and skin trades of Bermondsey, and have caused inquiry to be made by one of our medical inspectors—the inspector who recently investigated the same disease as it occurred among woolsorters in and about Bradford. In all, during the past eleven years, between 40 and 50 cases of anthrax, about a quarter of them fatal, are known to have occurred in the metropolis among persons thus engaged, about half this number of cases and of deaths having occurred during the last two years. They have not been restricted to one single tanyard. A report on the subject has been presented to Parliament, and will soon be in the hands of members. The more recent aspects of the matter are now being inquired into. Pending this inquiry, it would be premature to consider whether the Employers' Liability Act should be extended to meet cases of persons dying from the disease referred to.

The Registration of Cowhouses.—Mr. **READ** asked the Chancellor of the Duchy of Lancaster whether a *bonâ fide* farmer, who sold milk and kept cows in an urban sanitary district, was compelled to register his cowhouses, etc., under the Dairies, Cowsheds, and Milk-shops Order of 1879; and, if so, whether he was exempt from such registration if, although selling milk within the said district, his cowsheds happened to be outside it.—Mr. **DODSON**: The local authority, under the Order, or under the Act, of 1878, is the quarter sessions in a county, the town council in a municipal borough. The registration which each local authority is to require and enforce is a registration of persons carrying on in the district of the local authority the trade of cowkeepers, dairymen, or purveyors of milk. A *bonâ fide* farmer who carries on this trade is to be registered. The district in which the trade is carried on is, as I am advised, the district in which the principal or central seat of the trade is situated; not every district in which any portion of the milk is distributed.

Monday, May 5th.

The Homerton Small-pox Hospital.—Lord G. **HAMILTON** asked the President of the Local Government Board whether he was aware that the medical officer of health for Hackney had reported that the reopening of the Homerton Hospital of the Metropolitan Asylums Board for small-pox patients was causing a spread of that disease in its vicinity; whether he was aware that the Diseases Prevention (Metropolis) Bill (by the alteration in the existing law effected by clauses 1 and 2) took away from the public the legal protection they hitherto possessed against the Asylums Board, or other similar authorities, so conducting their hospitals as to cause disease to spread therefrom; and, if so, whether he could explain why no intimation was given to Parliament of a proceeding so seriously affecting the rights, and even the lives, of the public; whether, in any authority given by the Local Government Board to the Asylums Board for using their hospitals for small-pox or fever patients, he would stipulate that such user must be contingent on their being able to prevent disease spreading therefrom; and whether, in the event of any application being made by Government to Parliament for an extension of the Diseases Prevention (Metropolis) Act beyond September 1st, he would undertake that there should be no general power asked for which would deprive the public of the legal protection they previously had against hospitals proved to be so conducted as to spread disease.—Sir C. **DILKE**: The Local Government Board have no information as to the report of the medical officer of health of Hackney beyond that which has appeared in the public press, but they learn from the chairman of the managers of the Metropolitan Asylums Board that that report will be the subject of inquiry by the managers. I may, however, say that the managers are making special efforts to prevent any possible risk of the spread of small-pox from the hospital, not only by largely reducing the number of patients in the building, but by clearing adjacent properties, which have been purchased by the managers for the purpose of securing a free space around the hospital. As regards the Act of last session, clause 1 merely gives the short title of the Act. As to clause 2, it was not intended by that enactment to take away from the public any legal protection which they previously possessed against the asylums managers, or any other local authority carrying on a hospital in such a manner as to cause the spread of disease; neither is it considered by the Board that such is the effect of the clause. The clause, in effect, provides that if the Diseases Prevention Act is put in force, and the managers of the asylum district are called upon to exercise powers as a local authority under that Act, they may utilise the buildings, etc., which they have provided for small-pox and fever cases for patients suffering from the epidemic disease which has led to the statute being put in force. The Diseases Prevention Act never has been brought into operation, in consequence of an epidemic either of fever or small-pox, and the Board have never contemplated its being put in force, except in the case of an outbreak of cholera. The Board have always endeavoured to secure such arrangements in connection with the fever and small-pox hospitals of the Asylums Board as would prevent disease spreading therefrom, and they are fully satisfied that the managers desire to take all due precautionary measures against such a result. The Board, for the reasons mentioned, do not consider that an extension of the Act will take away from the public any protection which they previously possessed.

The Professor of Anatomy in Queen's College, Cork.—Mr. O'BRIEN asked the Chief Secretary to the Lord Lieutenant of Ireland whether it was a fact that the Professor of Anatomy in the Queen's College, Cork, had for the past two or three sessions introduced a new rule whereby he engaged two students simultaneously in dissecting each part; whether this professor was making a profit of over £100 a year out of the subjects supplied to the Cork Medical School, which was not included in the return of class-fees presented to Parliament; and whether this course was legal and would be permitted to continue.—Mr. TREVELYAN: The Professor of Anatomy informs me that he has made no such rule, but that occasionally, as a matter of extreme necessity, the plan mentioned has been resorted to. The entire amount of the fees paid by students for attending at the anatomical school is expended in connection with the support of the school, no portion whatever being retained by the professor for his own use. These fees are not class-fees, and therefore are not included in any return of class-fees. With regard to an alleged refusal on the part of the president to comply with a requisition, I have to point out that if the students have any matter of that kind to complain of the college statutes provide them with a remedy by application to the visitors.

The Army Medical Service.—On the vote of £303,000 for medical services, arising out of the Army Estimates, Mr. DAWNAY said there was no doubt that, owing to the inherent faults of the existing system of organisation, to the manifest and glaring defects of training and selection in the Army Hospital Corps, and to the unwillingness of the medical authorities to assume the proper authority and responsibility, a very considerable amount of needless suffering was caused to the soldiers who served in the Egyptian campaign, and a great deal of unnecessary expense was inflicted on the nation. At the same time, he wished, as an impartial witness, to bear testimony to the unflagging exertion and the untiring devotion which had been displayed by surgeons in the field. He considered that many of the recommendations of Lord Morley's Committee were very valuable; but he strongly dissented from the proposal to assimilate the medical service of the Household Troops to the general medical system of the army. It was most unjust to the medical officers of the Household Troops, who joined the service on the distinct understanding that they were to remain with their regiments. He advocated a return to a modified form of the regimental system.—Dr. FARQUHARSON considered that the late campaign was one of the most triumphantly successful, from a medical point of view, that had ever been known in this or any other country. He quite agreed with Sir W. Mac Cormac that, considering the difficulties under which it was placed—the want of transport, the sudden change in the base of operations, etc.—the zeal, efficiency, and skill of the Army Medical Department were fully shown in the only way in which they could be shown—viz., by the medical results of the campaign. These results were as good as, and in some cases better than those achieved in the great civil hospitals, where every accommodation and every scientific appliance were immediately to hand.—Colonel STANLEY remarked that by general consent all charges of want of care on the part of the medical officers themselves had been entirely dropped, and those officers had come out of the inquiry with flying colours. The truth about the Egyptian campaign was that military necessities had to override every other consideration, and when the base of operations was suddenly and secretly changed, a severe strain and pressure was put upon the Army Medical Department, with results which could not be underrated; and which all must deplore. He thought the evidence of Lord Wolseley was quite reconcilable with his former expressions of opinion, because all the commanding officer complained of was that the initiative was not taken early enough by the medical officers. The question was, how far the shortcomings were due to circumstances, and how far to the system. A great deal was often laid at the door of the unification system with which it could not be really chargeable; and, although he was brought up under the old regimental system, he did not believe they could now revert to that system. With regard to regimental medical officers, he had never been able entirely to appreciate the difficulty which seemed to be felt of officers doing regimental duty and also garrison duty in the district from which they came. During the time the late Government was in office, the War-office never lost sight of the proposal to attach a medical officer to each battalion and battery in the service. But, although that was deemed a desirable reform, they should remember there was an influential department of the State which held the public purse, and which did not always coincide with the views of the Secretary of State for War. He should wait with some anxiety what the noble lord would say with regard to the brigade of Guards. For himself, he believed, in the present state of affairs, it would be wise to leave things as they were in that respect, always providing that the public service did not suffer.—Dr. LYONS believed there was now no doubt in the public mind that the charges hastily, unwisely, and unjustly made against the medical profession during the Egyptian campaign had totally fallen to the ground.—The Marquis of HARTINGTON did not think that the honourable member for the West Riding (Mr. Dawnay) had established any of the allegations as to a break-down of the Medical Administration in Egypt. In his opinion, it was conclusively proved by Lord Morley's Committee that there was nothing like a break-down in the medical or other arrangements in Egypt. There was a certain amount of inconvenience, of hardship, of want of preparation, at certain stages of the campaign; but it had been conclusively proved by the report of the Committee, and by the various discussions upon it, that such failures as did take place were owing to the conditions of the campaign, in which there were necessarily sudden military movements which made it impossible to have as efficient an organisation as there might have been under different circumstances. Such failures as were not to be attributed to that cause only formed part of the problem of increased efficiency which the Government were seeking to solve, and with a view to the solution of which a Departmental Committee and a Committee of the House had been appointed. He fully admitted that the report of Lord Morley's Committee had done a great deal of good, but doubted whether much good would be done after this lapse of time by the reproduction in that House of charges more or less vague and unsubstantiated. With respect to the unification and modification of the present system, the arguments for and against the present system were fully set forth in the report of Lord Morley's Committee, and anything he might say would not add much weight to the authority of that report, in which the complaint of too frequent changes in the medical officers in charge of hospitals was acknowledged as reasonable. The matter was under the consideration of the Army Medical Department, with a view to such a modification being made as would not radically alter the existing system. With regard to the proposal for attaching medical officers to battalions, the difficulty was a financial one, and great consideration would have to be given to such a proposal before reverting to what would be a more expensive system. The change would necessitate the appointment of 41 additional medical officers, at a cost of £22,000 *per annum.* One result of the present system, during the last two years and a half, was 85 medical appointments, and it was but reasonable to suppose that the sanitary condition of our troops had been greatly improved in consequence. He was favourable to the proposal for establishing a general hospital for the Guards in London, but thought it could not be carried out until the general question of regimental hospitals had been decided.—Colonel M. HOME expressed himself gratified at hearing that no change was contemplated in the medical system adopted in the Guards and the Household Cavalry. He thanked Mr. Dawnay for the kind manner in which he had spoken of the medical officers who served in Egypt, and assured the committee that the medical arrangements of the War Office during that campaign were far from perfect. He was of opinion that one surgeon should be attached to each regiment as a regimental officer, but advocated, in addition, the appointment of assistant-surgeons, who could be sent from one station to another.

The Burial Acts.—Sir W. HARCOURT informed Mr. Richard that he and the Judge Advocate-General had carefully considered the best mode of removing the practical difficulties experienced by burial authorities in providing new parochial burial-places under the existing Acts. If they were able to introduce a measure, they would be very glad to do so, but the hon. member was aware how difficult that was.

Tuesday, May 6th.

The Burgh Police and Health (Scotland) Bill.—In answer to Mr. Buchanan, the LORD ADVOCATE said that he had put this Bill on the paper on every Government night in the hope that the second reading might be obtained, but the Bill had been blocked. If the block was withdrawn, the Bill might be read a second time after a short discussion, and then might be referred to a large Select Committee, when the clauses might be got through without much loss of time.

VACCINATION.—Dr. R. L. Batterbury, Public Vaccinator for Berkhampstead, has received a grant of £20 19s. for successful vaccination.

MILITARY AND NAVAL MEDICAL SERVICES.

MEDICAL SERVICES IN THE SOUDAN CAMPAIGN.

The following testimony to the efficiency of the Army Hospital Corps during the recent campaign in the Soudan appears in an official dispatch from Major-General Sir G. Graham to Lieutenant-General Stephenson, issued by the War Office.

The Army Medical Department, under Deputy Surgeon-General McDowell, was most ably administered, and the wants of the wounded carefully provided for and promptly attended to. As soon as we were in possession of the position at El Teb, on February 29th, about 4.25 P.M., I signalled to Fort Baker, at the instance of Deputy Surgeon-General McDowell, for tents, medical comforts, etc., to be sent on immediately. As mules had been kept ready laden, the convoy, under Surgeon Prendergast, arrived at 6 P.M., and the serious cases were at once placed under cover for the night. Additional blankets were provided for the slighter cases, which were kept in the open. Immediately after the action, Surgeon-Major Connolly, who was Principal Medical Officer of the Cavalry Brigade, by my orders, took out eight mule-cacolets with a Cavalry-escort, and proceeded over the ground where the Cavalry had charged, to make sure that no wounded were left, and, as far as possible, to bring in the dead. After the action of Tamai the wounded were at once brought into the zeriba, and promptly attended to. As the Surgeon-General remarks in his report: "Though many of the wounded had injuries of the severest form, still we had no deaths from hæmorrhage, a fact which exhibits, in the strongest light, the skill and attention of the medical officers, working under the most trying circumstances."

The following medical officers are especially brought to your notice for their care and attention to their important duties in the field on the occasion of the actions at El Teb and Tamai: Surgeon-Major Wilson, Principal Medical Officer of the Infantry Brigade; Surgeon-Major Connolly, Principal Medical Officer, Cavalry Brigade; Surgeon Prendergast, who was badly wounded while attending a wounded man at Tamai; Surgeon-Major Catherwood, Principal Medical Officer at the base, and Surgeon-Major Greene at El Teb. Surgeon-Major Venour had charge of the sick on hospital-ship at the base (H.M.S. *Jumna*), and, assisted by a detachment of Army Hospital Corps, made every possible provision for the care of the wounded on their passage to Suez. I also beg to bring to your notice the services rendered by the Army Hospital Corps. Quartermaster Enright, Army Hospital Corps, is reported as having carried out his duties with indefatigable energy and devotion. Staff-Serjeants Clarke and Genese, also Serjeant A. G. Chalk (whose leg was broken by a fall from a mule), are favourably mentioned. The names given are those of officers whose conduct came most prominently to notice, but all the medical officers attached to the force have contributed to the excellent results attained.

Among the names of others specially mentioned in Major-General Sir G. Graham's dispatch as having specially distinguished themselves for coolness and gallantry in action in the engagements with the rebel forces in the Soudan, are those of Surgeon Lucas, R.A.; Surgeon Treherne (1st Royal Highlanders), for attention to the wounded in action; Surgeon Pellow, A.M.D. (2nd Royal Irish Fusileers), for great devotion to duty; Staff-Surgeon Martin, R.N., for attention to the wounded in the field. Among those specially brought to General Graham's notice, is the name of Surgeon Cross.

Brigade-Surgeon Theobald Matthews, M.B., has been permitted to retire from the service from April 24th.

Brigade-Surgeon J. Fairweather, who has just returned from leave, is appointed Medical Officer to His Highness the Rájá of Kaparthála.

Surgeon J. Duke, of the 3rd Punjáb Cavalry, is appointed Civil Surgeon in Káshmir for this season.

INDIA AND THE COLONIES.

INDIA.

Temperature at Allahabad.—Our correspondent at Allahabad writes, under date March 27th, 1884: Some of your readers may like to compare notes with us on the temperature of the air. It is 4 P.M., and my thermometers have been hanging in the verandah for two hours five feet above the stone plinth, and perfectly protected from either direct or reflected sun-rays. The arches of the verandah have curtains made of coarse canvas or matting over each, and these are let down every morning about 8 o'clock, and not raised until about 6 P.M. The verandah, twelve feet deep, is thus converted into a covered promenade. The dry bulb against the bungalow-wall is marking 90°, and the wet bulb 65°, giving a difference of 25°. Within doors, the temperature of the air is exactly 10° lower, so that I am now writing in a very dry atmosphere of 80° Fahr. After sitting for half an hour, the heat becomes oppressive, but a few turns up and down our large room—33 feet long and 18 broad—soon cools us down. We have not yet put up punkahs or tatties, as the hot weather is only commencing; in fact, only a few people have yet gone to the hills. Next month, there will be a great clearing out. A case of cholera was reported yesterday. We hope sincerely that we shall not have a repetition of last year's experience, nor that of July 1880, when poor young Surgeon Noad died here of the disease, and, within the same twenty-four hours, eighteen men in the station-hospital.

Epidemic Diseases.—The public health in Calcutta, it is satisfactory to learn, is improving; and, although the death-rate from cholera and small-pox is still high in Calcutta and the vicinity, the mortality is steadily diminishing. The small-pox epidemic in Madras is gradually dying out, and it has apparently quite ceased in Rangoon.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF LONDON.

Examiners.—The following gentlemen have been elected examiners for degrees in medicine. Experimental Philosophy: Professor G. Carey Foster, F.R.S., and Professor A. W. Reinold, F.R.S. Chemistry: Professor J. Emerson Reynolds, M.D., F.R.S., and Professor T. E. Thorpe, Ph.D., F.R.S. Botany and Vegetable Physiology: Professor Bayley Balfour, M.D., D.Sc., and Sydney H. Vines, D.Sc. Comparative Anatomy and Zoology: Professor E. Ray Lankester, F.R.S., and Professor Alexander Macalister, M.D., F.R.S. Practice of Medicine: W. H. Broadbent, M.D., and W. Miller Ord, M.D. Surgery: Sir William Mac Cormac, and Professor John Wood, F.R.S. Anatomy: Professor D. J. Cunningham, M.D., F.R.S.E., and H. Greenway Howse, M.S., M.B.; Physiology: Professor Arthur Gamgee, M.D., F.R.S., and Professor Gerald F. Yeo, M.D. Obstetric Medicine: J. Matthews Duncan, M.D., LL.D., F.R.S., and John Williams, M.D. Materia Medica and Pharmaceutical Chemistry: T. Lauder Brunton, M.D., D.Sc., F.R.S., and Professor F. T. Roberts, M.D., B.Sc. Forensic Medicine: Augustus J. Pepper, M.S., M.B., and Professor George Vivian Poore, M.D.

OBITUARY.

A. W. BARCLAY, M.D., F.R.C.P.

By the death of Dr. Andrew Whyte Barclay, after a few days' illness, at Whitney Wood, Stevenage, Herts, on April 28th, the profession has lost one of the more eminent members of the elder school of medicine, whose face was familiar in London, and whose high character and sound judgment were held by all who knew him in the greatest respect.

He was the son of Capt. John Barclay, a naval officer whom Nelson made lieutenant on the eve of Trafalgar, and to whose care he committed a Spanish prize-vessel, that kept him perforce in quiet duty, held aloof from the supreme excitement of the battle. Born July 17th, 1817, at Dysart, Fife, N.B., he passed his youth in Scotland, educated at the High School of Edinburgh, and entering upon his medical studies in 1834 at the Edinburgh University. There he made easy progress, and found time to spend the winter of 1836-7 in London, and entered as a student at Westminster Hospital. He returned to Edinburgh, finishing his course with such honours as were then attainable in 1838, and then betook himself to Berlin for a wider view of his profession, amusing himself meantime by making the Prussian compositors set up for him in type, with numberless mistakes, the thesis for his M.D. degree at Edinburgh, which he took next year.

He did not settle anywhere at once, but travelled in Germany, Switzerland, Italy, and France, staying at Paris in 1841 for medical studies, and spending three months in Madeira with a younger brother who was out of health. On returning to England, his desire for more complete medical knowledge led him to become a student at Caius College, Cambridge, in 1843, and subsequently at St. George's Hospital. He carried off the medical prizes at his college, the Mickleburgh, Perse, and Tancred scholarships, and graduated as M.B. Cantab.

in 1847, proceeding, in due course, to the M.D. degree in 1852. Meanwhile, he was appointed Medical Registrar at St. George's Hospital, an office which he held for many years, and used to the full as an opportunity of wide and careful clinical study. The first fruits were seen in an essay read before the Royal Medical and Chirurgical Society in 1848, and printed in their *Transactions*, "Contributions to the Statistics of Valvular Disease of the Heart"; and again, in 1852, a second "Statistical Report upon Cases of Disease of the Heart occurring in St. George's Hospital, especially in connection with Rheumatism and Albuminuria." His Scotch caution led him to no startling conclusions, but furnished, from the personal examination of a long array of cases, most indisputable data for maxims which have now become the common property of text-books.

In 1851 he was elected Fellow of the College of Physicians, a year senior to Sir William Jenner. To the college he gave much time and attention, contributing much to the preparation of the Nomenclature of Diseases; serving five years as examiner, five years as councillor, and three years as censor; being chosen in 1864 as Lumleian Lecturer, Harveian Orator in 1881, and finally, as a mark of the high respect and confidence in which he was held, as treasurer in 1884.

At St. George's Hospital an opportunity had offered, owing to the resignation of Dr. Nairne on his nomination as Commissioner in Lunacy, and Dr. Barclay was elected assistant physician in 1857, and five years later, physician. The latter post he held for twenty years, retiring, according to the hospital rules, in 1882, and being elected consulting physician, and able then to enjoy at Stevenage his taste for a quiet country life. He married, in 1864, the eldest daughter of Dr. Noble, once the physician and afterwards the parliamentary representative of Leicester. He had, throughout his career, shown much interest in sanitary management, had been elected at Chelsea in 1856 in competition with Dr. B. W. Richardson as their first medical officer of health, to carry out the Local Government Act of 1855, and kept these duties and responsibilities up to the time of his death. He published some of his views in an essay on *The Progress of Preventive Medicine and Sanitary Measures*; at Cambridge, also, he served as examiner for the Sanitary Science Certificates given of late years by the University.

In clinical teaching he was never inclined to consider the theoretical before the practical, and found himself more at home by the bedside than in the lecture-room. A single glance told him much that would have cost some labour to learn to anyone with less shrewd an eye, and the delicacy of his ear and touch, in physical examination, was most noteworthy. On all points of medicine, his judgment, when he expressed it, was most sound; but he was far too conscientiously accurate not to admit that there were cases in which his judgment must be reserved. He was thoroughly impressed with the importance of the continued study of the commoner diseases, even after long experience, and was ready to consider that apparently slight improvements in every-day treatment and prognosis were of as great value to most men as some fragmentary knowledge of curiosities. His chief work, the *Manual of Medical Diagnosis*, first published in 1857, and reaching a third edition in 1870, was widely recognised as furnishing a most trustworthy guide to the painstaking student.

To those few who knew him intimately, he showed his naturally genial and affectionate temperament, his kindly generosity, and the easy courtesy which was associated, nevertheless, with a pervading shyness and delicacy that made it impossible for him to push himself upon the world. None who met him could help being struck by his upright integrity and urbane presence, but he had not the superfluous vitality necessary for a wide popularity and a crowded private practice.

He had attended the meeting of the Royal College of Physicians on Thursday, April 24th, and returned to the country with apparently most trifling indisposition; but during the next three days symptoms of abdominal discomfort increased, pointing to obstruction, accompanied by much restlessness, and followed on the night of the 27th by rapid cardiac failure.

SAMUEL D. GROSS, M.D., OF PHILADELPHIA.

THE announcement of the death of Professor Gross, at a ripe old age, will be received by the medical profession in this kingdom with sincere regret and warm sympathy. There are few names better known among British surgeons than that of Gross. He has long been held here as a type of what an honourable, accomplished, and manly member of the profession should be; and as a representative of American Surgery, who, in the course of a long life, has done honour to his country, and would have been an honour to the profession of any country. As a teacher, as a surgeon, and as a cultivated gentleman, he was known, respected, and widely beloved. He was several times a visitor at the annual gatherings of the British Medical Association, of which he was one of the few honorary members—a distinction very rarely conferred, and highly prized. Had the state of Professor Gross's health allowed him to visit these shores during the last month, he would have taken part in the tercentenary festival at Edinburgh, and would once more have received a mark of the high esteem in which he has long been personally held in this country; and of the desire which we, in Great Britain, entertain to do honour to the representative men of our common profession in America.

Professor Gross received his degree of M.D. at the University of Pennsylvania in 1828, and commenced the practice of medicine in Philadelphia in the same year, devoting his leisure time to the translation of French and German medical works. In 1856, he became Professor of Surgery in the Jefferson Medical College, Philadelphia, previous to which he filled professorships in several medical colleges. In 1882, he retired from active professional work. He brought out several books on medical science, including *Elements of Pathological Anatomy* and *System of Surgery*, each of which passed through three editions in a few years; *Wounds of the Intestines*, *Manual of Military Surgery*, *John Hunter and his Pupils*, etc. He founded and edited for several years the *American Medico-Chirurgical Review*, and was a member of the American Philosophical Society and the Imperial Medical Society of Vienna.

By the death of Professor Samuel Gross, the medical profession has lost one of its greatest ornaments, and one of its most sterling characters; and while we condole with Americans on the loss of such a man, we may congratulate them that such a life has been passed among them, for the influence of it must have been great, and the good of it will last long after the man has passed away. His *System of Surgery* which, since its first edition in 1859, has been a standard work in this country as well as in America, in "the whole domain of surgery," and the sixth edition of which, in two large volumes, addressed to his "numerous pupils, who during half a century attended his lectures," appeared only two years ago, tells how earnest, and laborious, and wise a surgeon he was, how thoroughly he appreciated the work done by men in other countries, and how much he contributed to promote the science and practice of surgery in his own. There has been no man to whom America is so much indebted in this respect as to the Nestor of surgery just departed. Rarely, moreover, is a man so calculated to command the respect and esteem—indeed, the veneration—and to win the affections of others. His fine figure, his open genial countenance, his mellow voice, his tender feeling, and his hearty shake of the hand were irresistible. His last appearance in England was on the occasion of the meeting of the British Medical Association at Cambridge, when he was one of the recipients of the degree of LL.D. conferred by the University in the Senate House. "To receive that honour," he wrote to the President, "I will come, old as I am, and liable to sea-sickness as I am." The venture was regarded with some anxiety by his family, and he was attended by one of his sons; but he came and returned in safety. He was warmly welcomed by his numerous old friends, and made many new ones, who will never forget him; and at his parting not a few tears were shed. Few who were present at the banquet in the Hall of Trinity College will have forgotten the most memorable incident of the feast, when the noble patriarchal form of Samuel Gross rose on the dais with folded arms, and addressing them as "men and brethren," in a speech of weighty words well worthy of the man and of the occasion, bore testimony to the high merits of British surgery and the British nation, and expressed his strong conviction that two such people as the British and American must ever be united by the bonds of brotherhood and mutual admiration. He felt, and we must all feel, that this union, so important to the welfare of mankind, is not a little promoted by the fraternisation of eminent men from the two sides of the Atlantic at the meetings of our great associations. The more our brethren from the far west came among us the better shall we be pleased; and the more they resemble the noble man whose loss we deplore, the more sincerely shall we reverence and admire them.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 26th ultimo.

Messrs. G. A. Syme, M.B., [illegible] H. [illegible] Holloway, F. H. Lane, L.S.A.; [illegible] C. W. [illegible] L.R.C.P.L.; [illegible] F. A. P. Hunt, L.S.A.; [illegible] F. Bryceson, L.S.A.

Shooter's Hill; W. Urwick, L.S.A., St. George's Road, S.W.; R. T. Finch, Roehampton; J. R. Collyer, Enfield; F. R. Humphreys, L.S.A., Finsbury Circus; G. H. Monks, M.D.Harvard, Boston, U.S.; J. T. Cheves, L.S.A., Devonport; and B. G. Bullen, L.S.A., Sidmouth, Devon.

Five gentlemen passed in Surgery; one candidate was referred for three months, and four for six months.

The following gentlemen passed on the 28th ultimo.

Messrs. C. E. F. M. Biggs, L.R.C.P.Lond., Hammersmith; W. T. Strugnell, L.S.A., Portsdown Road; W. R. de Meric, L.R.C.P.Lond., Myddelton Square; C. A. Piesse, L.S.A., New Bond Street; F. W. Kendle, King's Lynn; R. W. Murray, L.R.C.P.Lond., Blackheath; S. H. Agar, L.S.A., Henley-in-Arden; D. P. Gaussen, M.D.Dub., Belfast; F. S. Turner, Chiswick; and A. Perry, L.S.A., Philpot Street, E.

Eight gentlemen passed in Surgery; three candidates were referred for three months, and five for six months.

The following gentlemen passed on the 29th ultimo.

Messrs. P. Jackson, L.S.A., Torrington, Devon; P. R. Mander, L.S.A., Grimsbury; W. H. Bailey, L.S.A., Colney Heath; S. M. P. Roberts, B.A.Cantab., Stuffield; H. Parker, Highgate; E. H. Freeland, L.S.A., Chichester; H. H. Lankester, L.S.A., West Kensington; H. C. E. Cooper, Finsbury Square; A. J. Dixon, L.S.A., Donnington; and E. E. Newnham, L.S.A., Somersham.

Five gentlemen were approved in Surgery, and, when qualified in Medicine, will be admitted Members of the College; six candidates were referred for six months, and two for three months.

The following gentlemen passed on the 30th ultimo.

Messrs. C. Alsop, L.S.A., Teignmouth, A. C. Fearnes, L.S.A., Sidcup, and J. H. Menzies, L.S.A., Gwendwr Road, of St. Bartholomew's Hospital; H. H. Graham, M.B.Toronto, Toronto, of the University of Toronto; M. W. Roe, L.S.A., Melbury Osmond, and A. E. Hayward, L.S.A., Maxilla Gardens, W., of St. George's Hospital; A. C. Deare, L.R.C.P.Lond., Shepherd's Bush, of Guy's Hospital; W. A. Wetwan, L.S.A., Bridlington Quay, and F. Hichens, L.S.A., Redruth, of the London Hospital; P. E. Maitland, L.R.C.P.Lond., Albert Street, N.W., of University College.

Four candidates passed the examination in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members of the College; three candidates were referred for three months, and seven for six months.

The following gentlemen passed on the 1st instant.

Messrs. A. F. Stace, L.S.A., Ledbury Road; F. Dean, L.S.A., Albany Street, N.W.; C. R. Edwards, Antigua, West Indies; W. R. Tuckett, L.S.A., Bath; and W. J. E. Sumpter, L.S.A., Clay-next-the-Sea, Norfolk.

Six gentlemen passed in Surgery, and, when qualified in Medicine, will be admitted Members of the College; and six candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months. Two hundred and thirty-three candidates presented themselves for the examinations just concluded, as compared with 220 at the corresponding period of last year; of this number, 23 were referred to their professional studies for three months, 50 for six months, and two for nine months, making a total of 75 referred candidates.

[The introductory paragraph to the pass lists of the Royal College of Surgeons at page 889 should have indicated that the candidates had passed the final examination in Surgery, etc.]

The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 5th instant, and, when eligible, will be admitted to the pass examination.

Messrs. C. H. Melville, E. Roberton, A. R. Aldridge, Kenneth M. Scott, C. Terrey, D. D. Black, D. Hume, E. W. Clarke, E. T. Roberts, T. J. Pritchard, E. B. Turner, and J. R. Hill, students of the University of Edinburgh; W. Calwell, of the Belfast School of Medicine; E. L. Burd, of the University of Cambridge; G. M. Fox, of the Birmingham School of Medicine; J. E. Stott, of the Liverpool School of Medicine; J. Exley, of the Leeds School of Medicine; F. W. Clark, of the Middlesex Hospital; and W. V. Morgan, of the University of Aberdeen.

Four candidates were referred for three months, and one for six months.

The following gentlemen passed on the 6th instant.

Messrs. T. H. Griffith, H. H. Marshall, E. C. Kington, F. W. Collinson, A. E. Nevins, E. F. Pritchard, R. W. Smeddle, F. G. Clemow, F. T. King, and J. Warnock, of the Edinburgh School; C. T. Hudson, of the Bristol School of Medicine; G. A. H. Ambler, of the Leeds School of Medicine; F. Wilson, of the Liverpool School; J. N. Lewis, of University College; W. Race, of the Newcastle School of Medicine; and W. Downing, of the Birmingham School of Medicine.

Eight candidates were referred for three months.

The following gentlemen passed on the 7th instant.

Messrs. W. H. Turton, C. C. Teacher, A. Wood, J. G. Glover, J. W. Smith, of the University of Edinburgh; W. Routh, of St. George's Hospital; C. H. Wild, of the Liverpool School of Medicine; H. S. Fremlin, of the Westminster Hospital; A. M. Gledden, of St. Bartholomew's Hospital; E. Posnett, of the Leeds School of Medicine; F. J. Lankester, of St. Thomas's Hospital.

Twelve candidates were referred for three months, and one for six months.

University of St. Andrew's.—The following registered medical practitioners, having passed the required examinations, had the degree of Doctor of Medicine conferred upon them on April 25th, 1884.

K. M. Chisholm, L.R.C.P.Ed., L.R.C.S.Ed., Radcliffe, Manchester; J. Clapperton, L.R.C.P.Ed., L.R.C.S.Ed., Broughton, Winchester; J. Farrar, L.R.C.P.Ed., L.R.C.S.Ed., Morecambe; T. F. Higgs, L.R.C.P.Ed., M.R.C.S.Eng., L.S.A., Dudley; E. Hollings, L.R.C.P.Ed., L.F.P.S.Glasg., London; S. Lloyd, M.R.C.S.Eng., L.S.A., London; J. L. H. H. Porteous, M.R.C.P.Ed., F.R.C.S.Ed., Pathhead, Fife; W. Smith, L.R.C.P.Ed., L.S.A., F.R.C.P.Ed., Eccles, Manchester; E. D. Tomlinson, M.R.C.S.Eng., L.S.A., L.R.C.S.Lond., Army Medical Department; A. Wilkinson, M.R.C.S.Eng., L.S.A., L.R.C.P.Ed., M.D.Brussels, Shaftesbury.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 1st, 1884.

Ackland, Charles Kingsley, Bideford, North Devon.
Des Voeux, Harold Antoine, 5, Sussex Villas, Kensington.
Hodgson, Gerald George, 52, Montpelier Road, Brighton.
Penny, Francis, Coombe, Crewkerne.
Phillips, Ernest Willmer, 75, Lansdowne Place, Brighton.

The following gentlemen also on the same day passed their Primary Professional Examination.

Jackman, Charles Howard, London Hospital.
Roberts, Leonard, St. Mary's Hospital.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN. Vacancy on the Honorary Acting Staff of the Out-patients. Applications to H. C. Fulford, 35, Augustus Road, Edgbaston, Birmingham, by May 10th.

DENBIGHSHIRE INFIRMARY, Denbigh.—House-Surgeon. Salary, 85*l.* per annum. Applications by June 7th.

DUNSHAUGHLIN UNION.—Medical Officer, Dunboyne Dispensary. Salary, 125*l.* per annum and fees. Applications to L. Ward, Honorary Secretary, the Grove, Clonee, Co. Meath.

FLINTSHIRE DISPENSARY. House-Surgeon. Salary, 100*l.* per annum. Applications by June 11th.

FOLKESTONE FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Medical Officer. Salary, 150*l.* per annum. Applications to C. J. Moore, 135, Dover Road, Folkestone, by May 17th.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Ophthalmic Surgeon. Applications by June 2nd.

HARTLEPOOL FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Medical Officer. Applications to T. Tweddell, Commercial Terrace, West Hartlepool.

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square.—Resident Medical Officer. Salary, 50*l.* per annum; after one year's service, 100*l.* Applications by May 25th.

HOSPITAL FOR SICK CHILDREN, 49, Great Ormond Street. Assistant-Physician. Applications by May 14th.

METROPOLITAN ASYLUMS BOARD.—Medical Superintendent for the Small-Pox Hospital-Ships lying in the Thames at Long Reach. Salary, 400*l.* per annum. Applications by May 23rd.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street.—Anæsthetist. Applications by May 16th.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Surgeon to the Out-patients. Applications by May 12th.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Resident House-Surgeon. Salary, £52 10s. per annum. Applications by May 12th.

OWENS COLLEGE, Manchester. Medical Department.—Assistant Lecturer in Medical Jurisprudence and Demonstrator in Practical Toxicology. Applications by May 21st.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant House-Surgeon. Applications to Dr. Broster, Marland Place, Southampton, by May 19th.

ROYAL SOUTH LONDON DISPENSARY, St. George's Cross, Lambeth Road, Surrey. Resident Medical Officer and Dispenser. Salary, 100*l.* per annum. Applications by May 12th.

SALOP INFIRMARY, Shrewsbury.—House-Surgeon. Salary, 100*l.* per annum. Applications by May 13th.

SUNDERLAND INFIRMARY.—Senior House-Surgeon. Salary, 100*l.* per annum. Applications by June 2nd.

WORCESTER GENERAL INFIRMARY.—House-Surgeon. Salary, 100*l.* per annum. Applications by May 16th.

MEDICAL APPOINTMENTS.

Green, Charles, M.D., M.R.C.S., has been appointed Medical Officer to the East Relief District, Gateshead-on-Tyne, *vice* George Douglass, M.D., resigned.

Morrison, J. T. J., B.A., M.B., B.S.Cantab., F.R.C.S.Eng., appointed Resident Surgical Officer to the General Hospital, Birmingham.

Wright, Chas. J., M.R.C.S.Eng., appointed Assistant-Surgeon to the Hospital for Women and Children at Leeds.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

Owen.—On April 27th, at Nicosia, the wife of Surgeon-Major Owen Owen, A.M.D., Senior Medical Officer, Cyprus, of a son.

Robertson.—At Kimberley, South Africa, on April 1st, 1884, the wife of William Robertson, M.D., of a son.

White.—On the 4th instant, at Malmesbury, Wilts., the wife of Edward Arthur White, M.D., of a son.

DEATH.

Carnegie.—At Chesterfield, on the 4th instant, John Carnegie, M.A., M.D., in his fifty-first year.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY ......St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

Charing Cross.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

Guy's.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

King's College.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

London.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

Middlesex.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

St. Bartholomew's.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

St. George's.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

St. Mary's.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

St. Thomas's.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

University College.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

Westminster.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. F. J. Gant: A Pelvic and Parietal Tumour of the Abdomen; Removal by Operation, and Recovery. Dr. George Harley: An Easy and Safe Method of Sounding for Impacted Gall-stones. Dr. G. E. Herman: An Average or "Composite" Temperature-chart of Small-pox.

WEDNESDAY.—Epidemiological Society of London, 8 P.M. Dr. Joseph Ewart: On the Colonisation of the Sub-Himalayahs and Neilgherries, with Remarks on the Management of European Children in India. A Council Meeting will be held at 7.30 P.M.—Royal Microscopical Society, 8 P.M. Dr. P. Herbert Carpenter: On the Minute Organisation of the Nervous System of Crinoids.

THURSDAY.—Harveian Society of London, 8.30 P.M. Mr. Edmund Owen will show a case of Hypospadias; sex of the child originally mistaken. Adjourned Discussion on Scarlet Fever, which will be reopened by Dr. Cheadle.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal should be addressed to the Editor at the office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

Correspondents who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered, are requested to look to the Notices to Correspondents of the following week.

Public Health Department. We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

An Appeal.

Mr. H. A. Collins, of Saxmundham, desires us to convey his thanks to all who have subscribed to the fund which is being raised on behalf of the widow of the late Dr. Wilson, of Yoxford, Suffolk. Mr. Collins also sends the following list of additional subscriptions.

	£	s.	d.
Dr. Burchell	0	10	0
H. F. L.	0	5	0
Dr. T. Colam, Inspector-Gen. R.N.	1	0	0
Mr. C. Higgens	2	2	0
Dr. J. Andrew	2	2	0
Dr. Pye-Smith	1	1	0
Mr. J. C. Worthington (Lowestoft) .	2	2	0
Dr. Beverley (Norwich)	0	10	0
Dr. Crowfoot (Beccles) .	1	1	0
Sir James Paget, Bart.	2	2	0
Mrs. Webber (Aldeburgh) ..	1	0	0

A Morphia Habitué.

Sir,—Having incautiously resorted to the hypodermic use of morphia for the relief of insomnia and other distressing nervous symptoms some years ago, I have never since succeeded in leaving it off, although the occasion for its original employment has long since passed away. The quantity at present used is about three grains of the tartrate per diem. Being at present precluded from consulting any authorities on the subject, I would feel grateful for any suggestions from any member having experience in the treatment of such cases, calculated to assist me in getting rid of the incubus.—Yours, etc.,

A Country Surgeon.

*** Our correspondent should put himself under the care of a medical man and experienced nurses, or enter a hospital. He should leave his practice for a time, for this purpose. The habit should be broken suddenly and completely, and the consequences of the suspension of the drug necessitate temporary seclusion, and watchfulness on the part of the attendants. It is very unlikely that our correspondent will ever free himself from his bondage by any less decisive course.

The English Weather.

Whenever two or three Englishmen are gathered together they begin to talk about the weather, and whenever two men talk about English weather they disagree. An evening paper states that there could be no better proof of our climate's consistency in fickleness than the deliberate opinion of two of our contemporaries, that, in the first place, "it is no wonder, with such a climate, that the English are a grumbling and melancholy lot," and in the second, "it is surprising, seeing that no other climate in the world is so favourable to genial outdoor exercise, that Englishmen should ever complain of English weather." The fact is, however, that these opinions are as consistent in their variability as the weather, and have as much to be said for them. English weather is not, at its best, to be compared with the best weather and brightest skies of France or of America, and, of course, of Italy or Greece. On the other hand, it is free from the extremes of their worst weather. The epidemic sun-strokes of New York, its winter mountains of snow, are unknown here; the baking summer sun and enveloping dust clouds of Athens, the ceaseless glare and enervating night temperature of southern Italy in the summer, all these are harder to bear than any of the weather-troubles against which we English people grumble. Take the whole year round, and the mean of English weather is much more tolerable and favourable than we persuade ourselves, or allow our neighbours to think. Our worst folly is, that we leave Great Britain just when the weather is most delightful, and the scenery at its loveliest, and that we live in towns all through the beautiful spring and summer. Winter holidays [illegible], the habit of doing homage to the beauties of our Irish, Scotch, and [illegible] in summer and autumn, would add something appreciable to health and happiness.

Ulcerative Endocarditis: A Correction.

In our report of the meeting of the Medical Society of London, Dr. Sansom is reported to have said that some cases of ulcerative endocarditis were "[illegible]." It is hardly necessary to say that the word ought to have been "[illegible]." The point of his remark was that, in some cases where erosion of diseased endocardium took place, it was probable, not that any septic influence was imported into the blood, but that such violence was done, as, for instance, by the beating of a pedicle of a vegetation, or the irregular and violent coaptation of diseased valves, as led directly to necrosis.

The Contagious Diseases Acts.

In justice to our contributor we ought, perhaps, to have pointed out that the printer's error referred to by Dr. Routh in his letter last week had already been corrected in the number of the British Medical Journal next following that in which the original error occurred (see April 5th, p. 701).

The Regulations of the University of Durham.

Sir,—The recent letters in the Journal, attacking the regulation which relates to the age of all candidates for the M.D. degree without residence, are well worth the consideration of the university authorities. The rule cannot, I think, be defended. In December last, I should have been glad to take advantage of the privilege granted by the University, to appear for examination as a medical practitioner of fifteen years' standing, but I am still not "old enough" to earn the distinction conferred by a degree in medicine, although I have fulfilled every other condition required by the authorities. The pressure of work and fatigue, which, in general practice, increases each year, renders it very improbable that, when I shall have reached the necessary age, my leisure or inclination for the possession of a British university degree will be equal to the strain of the imposed conditions. For the sake of others, however, who may be placed in a similar position, I shall watch the progress of the correspondence with considerable interest.—I am, sir, yours very faithfully, L.R.C.P.Lond., M.R.C.S.

New Athenæum Club, S.W.

Sir,—I read in a recent number of the Journal, that it is proposed to present a memorial to the Senate of the University of Durham, in connection with the granting of degrees to practitioners of fifteen years' standing. Would it not be as well, at the same time, to express a hope that the authorities may see their way to abolishing the little classical flourish, which at present, as it were, paves the way to the more serious and practical parts of the examination? Nothing of this kind is required at St. Andrew's, and considering that the candidate is permitted to select his own author (Latin), and for the rest no marks are awarded, it is obvious the examination resolves itself into the parrot-like getting up of a given amount of a given author. I do not make these remarks on account of any severity in the examination, for none exists. Anybody, I presume, can easily work up two or three books of Virgil; but to people whose Latin and Greek have become only a little rusty, it means extra time, which to a man in active practice is a serious consideration. I suppose few men would care to go up for the M.D. examination, without a thorough refreshing of their memories in the various professional subjects in which they are required to pass; this of itself would sufficiently occupy the leisure time of most practitioners, without reverting to the more or less forgotten wanderings of Æneas and his contemporaries.—I am, sir, yours, etc., Thirty-Two.

Sir,—Seeing that many professional men have little time or inclination for letter-writing, a large number of names of those ready to advocate the change referred to by "Thirty-One" are likely to be withheld. To obviate this loss of support, we would suggest that printed forms be sent to such medical men as would be likely to avail themselves of the alterations in question, in order that they may merely add their signatures. We take it that there would be little difficulty in getting a sufficient number of names to guarantee this preliminary expense, as it is a matter of great interest to many young practitioners. We would suggest that the class of men to whom these circulars should be sent, should be chiefly men who have been qualified for a few years, but do not possess the M.D. degree.—We are, sir, your obedient servants, Two More "Thirty-Ones."

Sir,—I do not think "Thirty One," or any one, need trouble their heads about the liberality of the University of Durham when they hear (and I have it on the authority of the registrar) that that University will not even recognise the matriculation of the London University as an equivalent standard for their Latin examination that old practitioners are expected to pass, as well as in professional subjects.—Yours truly, William H. Day.

Norwich.

Sir,—In the British Medical Journal of March 29th appear communications from gentlemen complaining of the regulations of the University of Durham, and suggesting such an alteration as would render it easier for practitioners to obtain the M.D. degree. "M.R.C.P." wishes that a memorial to this effect should be presented to the University, and he thinks it would be successful.

As a graduate in medicine of the University of Durham, and one who obtained his degree through the regular course, I can assure "M.R.C.P." and his friends that such a memorial would meet with the strongest opposition from a large and increasing number of graduates, many of whom have only obtained their degree after considerable sacrifice and self-denial during their student-days; they prize their degree as evidence of a liberal education, and as a reward for work over and above that done by men who are content with the diplomas of the corporations; such alterations as "M.R.C.P." asks for would be considered by them a great injustice, and as detracting from the value of their degree.

What would be the result of such alterations? This: that men knowing they could ultimately obtain an M.D. degree on such comparatively easy terms, would shirk, as students, the trouble and hard work inseparable from the usual university curriculum; and this would assuredly mean the depreciation in value of the degree in the eyes of the profession and the educated public. So far from expecting any relaxation of the rules applying to practitioners of forty years of age and fifteen years' standing, the writer believes that, were it referred to the body of graduates in medicine of the University of Durham, a majority would vote against its continuance, regarding it as deteriorating from that value which is attached to the possession of an university degree.

If "Thirty-two" looks at the matter simply from a "monetary" point of view, and desires the M.D. only as an aid to practice, the Brussels University will supply all his wants; but those who think that an university degree means more and better than this, will decidedly object to the opening of a back door in a respected English university.—I am, sir, yours truly,

A Graduate in Medicine.

A Medical Advertisement.

Sir,—The enclosed is culled from the *Western Morning News* of the 3rd instant. The insertion of it in the British Medical Journal, and consequent gratuitous and efficient advertisement of Dr. Budd's prowess, ought to kindle at least a spark of gratitude in his bosom.—I am, yours, etc., L.R.C.P.

"Dr. Budd's blood-tonic. This medicine is prepared from a prescription designed by Dr. Budd, of Plymouth. It possesses extraordinary power in renovating the blood and in clearing it from impurities. It is the identical medicine prescribed by him in the remarkable cure of dropsy effected by him in September 1881, which was classed in the *Three Towns Almanack* as one of the chief local events of the year. A bottle containing twenty doses forwarded to any address (carriage paid) on receipt of Post-Office Order for three shillings and threepence, payable to Dr. George Budd, 1, Durnford Street, Plymouth."

Dr. W. Donovan will be glad to hear where an idiot boy, aged 17, whose parents are hospitable but in humble circumstances, could be placed. Only a very small sum could be paid for his keep.

The Treatment of Abortion.

Sir,—"A Member" (p. 451) asks for some information on the treatment of abortion. I think there are a few well recognised rules which may help him, but which one rarely finds in text-books.

One is generally summoned to attend a woman who is reported to be flooding. In such a case, having ascertained that the patient is pregnant, the first question to consider is, whether we should endeavour to check the uterine action set up, and give the patient the chance of a labour at full time, or assist nature in the attempt she is making to throw off the ovum. The point which should decide this is the nature of the pain. If this be slight and unfrequent, and the hæmorrhage be not excessive, we should, I think, at least attempt the first course; but, if the pain be frequent and considerable (and we find, on examination, a patent os uteri), together with considerable hæmorrhage, the attempt will not succeed, and we must help nature to throw off the ovum.

In the first plan of treatment, opium given in full doses, and complete rest in bed, are means to be used. In the second plan, we should, I think, make a vaginal examination with two or three fingers (not the whole hand), as it often happens that the ovum, or at any rate a large clot, will be found between the lips of the os; and very slight manipulation will detach it. This interference should only be very slight, for I have seen at least one case in which fatal metritis followed attempts to remove the ovum. If we find nothing to remove, and the hæmorrhage be not alarming, the patient should be put to bed, and doses of ergot given frequently. The liquid extract of ergot *P.B.* in twenty-minim or half-drachm doses, every two or three hours, is, I think, the best form. Many practitioners combine it with dilute sulphuric acid. In case the bleeding is serious, the vagina should be plugged, to give the ergot time to act. In addition to these measures, it is a good plan to inject a stream of warm water through a Higginson's syringe, either through the os uteri, or, if it be closed up, to it. By this means, I once succeeded in detaching the ovum in a woman who was pallid and fainting through hæmorrhage which had lasted nearly twenty-four hours, at intervals.

There is no necessity to explore the uterus in ordinary cases, for time will expel the ovum, and thus clear up our case. It is important that all clots should be saved by the nurse, and examined by the medical attendant himself, and then the ovum will generally be fonnd. Even if it be not, and after treatment the hæmorrhage and pain cease, and vaginal examination tells us that the uterus is undergoing involution, we may, I think, conclude that it has escaped unnoticed by us; and, after nine or ten days' rest in bed, our patient may be allowed to get up. Of course, it is possible for part of the ovum to be left behind, but in such cases hæmorrhage nearly always persists, and warns us that we must face the risks of an uterine exploration; in which I think "Barnes's bags," followed by skilful fingers, are less likely to do harm than instruments.—I remain, etc.,

M.R.C.S.

Sir,—Permit me just to mention a case which may be of interest to "A Member." When I saw the patient, hæmorrhage was beginning to tell upon her strength, and the placenta was undetached. I gave ergot, and waited; then introduced a sponge-tent into the cervix—repeating the ergot—and allowing the tent to remain *in situ* for six hours. At the end of this time, I pulled down the uterus by a *volsella*, which I gave in charge to the nurse, and, finding the internal os too undilated to permit hooking out the placenta with the finger (as may be done by the aid of suprapubic pressure in many cases), I passed a forceps, with which I seized and easily extracted the after-birth.

"A Member" will find a very complete essay on this subject at page 104 of Professor Simpson's *Contributions to Obstetrics and Gynæcology.* I am, sir, your obedient servant, A. Drummond Macdonald, M.B.Edin.

Liverpool.

Hour-Glass Contraction of the Uterus.

Sir,—I have just read Mr. J. Robertson Day's letter in the Journal of April 26th, headed as above. Apparently he has never seen my second communication on the same subject in the British Medical Journal of April 5th ("Spasmodic Contraction of Uterus on Placenta," p. 702). To this I would refer him, and politely ask him to think twice and to be sure of his *data* before he accuses another practitioner of irrational treatment.

The case, as originally recorded by me in the Journal of March 1st, still remains a most interesting one, and the precise cause of the spasmodic contraction of the uterus still uenxplained. In an extensive midwifery practice I have never met with a similar case (although constantly giving ergot whenever it is required); for not only was there this spasm of the uterus, but the placenta itself was rotten and broken down, making its extraction all the more difficult. I would also remind your correspondent that I did not say "it was a natural labour," my exact words being, "the child was born naturally."

It may interest some of your readers to know that I have recently attended the same patient again. This time the placenta came away without any difficulty, and was likewise quite intact; but I was interested to note that the pulse was 110 (or even more), both soon after the termination of the labour and for a day or two afterwards; and this, too, without any apparent cause, as convalescence was uninterrupted, whereas, in the original case, the pulse never rose above 60, notwithstanding the manipulation which was necessary in consequence of the spasmodic contraction.—Yours faithfully,

Buckingham. W. L'Heureux Blenkarne, M.R.C.S.E.

Sir,—Having read Dr. Gorham's case, on the above subject, in the British Medical Journal of March 22nd, I think it is quite likely that the abnormal contraction in his patient was due to over distension of the uterus by twins. In my opinion over distension of this organ, either by liquor amnii or by twins, is one of the common causes of hour-glass contraction. I have had several cases, and all have been traceable to either over distension or sudden emptying of the uterus as in precipitate labour. With regard to the binder being used at the end of the second stage of labour, I believe it to be useless, and if not properly applied, injurious. At the end of the second stage I apply my left hand firmly over the uterus (not kneading it) and expel the placenta by a "vis a tergo" (as Dr. A. W. Stirling recommends).

I have adopted this plan for some years, and find it answers in all ordinary cases. The great benefit of this plan is, that having your hand on the uterus you know exactly whether this organ is contracting or not. Internal hæmorrhage, caused by a detached placenta, blocking the os, is at once diagnosed by this method.—I am, etc, W. J. Beatty, L.R.C.P., etc.

Stockton-on-Tees.

M.B.M.Assoc.—Yes; such a circumstance as alluded to by Mr. Swain did occur, when the late Mr. Samuel Solly, the Senior Vice-President of the College, was passed over, and Sir William Fergusson was elected President in his place.

Abdominal Neuroses.

SIR,—May I be allowed a small space for a few remarks on the very admirable Gulstonian Lectures by Dr. Clifford Allbutt, published recently in the BRITISH MEDICAL JOURNAL? They deal with a class of ailments which is necessarily of great importance to the general practitioner; since sufferers therefrom constitute a large proportion of his patients. The lectures illustrate very well the different standpoints from which the same ailments may be viewed; and it is to be hoped that a full consideration of their varied aspects will lead to a solid advance in our knowledge, both of their nature and the treatment appropriate.

Dr. Allbutt dwells chiefly on the neurotic aspect of the question. I am disposed to agree with him as to the highly important part which the nervous system plays in the production of individual symptoms and groups of symptoms, but it seems to me just as great an error to disregard the state of the gastric mucous membrane as it is to disregard the nervous system. That the nervous system determines in which way gastric disturbance shall express itself, is certain; but that there is also underlying it a pathological condition of the gastric coats seems to be equally certain. There seems to be no more difficulty in supposing such a condition of the gastric mucous membrane to be present in certain individuals, and that the least exposure to cold shall be attended with catarrh, or an aggravation of a previously existing catarrh, than there is in the acknowledged and evident sensibility of the throat and bronchial mucous membrane in others to similar influences. No one would think of calling a case of bronchial catarrh or chronic inflammation of the tonsils, either of them aggravated by the least climatic changes, a neurosis; nor would there be any surprise expressed if removal to a warmer climate and to a drier subsoil exercised a marked curative influence. But in the case of a gastric catarrh which may express itself by gastralgia, or, on the contrary, by a train of nervous symptoms, such as giddiness, flatulence, and the passing of large quantities of clear urine, any curative influence exercised by a change of climate and other conditions is set down to the fact that the whole affair was a neurosis.

That purely nervous alterations may take place in the gastric nerves, and thence be reflected, is quite possible and probable; but to call the greater number of cases of dyspepsia neuroses may possibly hinder, instead of advancing, our knowledge by drawing off attention from the real nature of the disease. I have in my mind's eye two cases which I was called to see at the same time, which illustrate very well the different symptoms produced by the same cause. They are two females, both sufferers from chronic gastric catarrh, who partook at the same time of a meal of beans, etc. This was speedily followed in the one by an acute attack of asthma, and in the other by so-called gastralgia. I have attended both in like attacks before, due to similar causes, and I have had both under treatment at other times for dyspepsia. There is certainly a highly sensitive condition of the nervous system in both, but there is a morbid condition of the gastric mucous membrane underlying it.

Gastralgia is, in many cases, undoubtedly due to the passage of a gall-stone, which may make itself evident after some days by jaundice, or the passage of a stone by stool without jaundice. I have repeatedly seen cases of this nature where diagnosis was clear enough after the lapse of a few days, in apparently unlikely subjects for gall-stone, and whose cases would certainly have been regarded as gastralgia had not clear evidence of the presence of gall-stones subsequently shown themselves. It seems unreasonable to expect such clear evidence in all cases, and it would be absurd to call them neuroses when the evidence is not quite conclusive. A gall-stone may, for instance, enter the duct, cause pain, vomiting, and the usual symptoms, and in the course of a short time pass back into the gall-bladder, where it may previously have lain quiescent for years. There are such things as gastric ulcers laying bare portions of nerve, of cicatrices including filaments of nerve; and we have evidence in gastric catarrh that the pyloric region is chiefly affected, and the nervous supply of that region is especially rich. It is not difficult to associate these conditions with the occurrence of pain should any special irritant, in the shape of food, act upon them, or should the gastric mucous membrane be congested from cold. Congestion of other organs from cold is recognised; why not of the stomach?

The argument derived from the results of treatment by bromides and arsenic is, to my mind, no more convincing. Arsenic has a specific action on the mucous membrane of the stomach, and may just as well be included in the so-called dyspeptic remedies as bismuth and soda. Whether dyspeptics shall be treated by tonics, by alkalies, or by both, is a question to be decided by each individual case; but, whichever may be employed, the action is as much on the mucous membrane of the stomach as on the nervous system. Do we not employ quinine, strychnia, etc., in chronic bronchial catarrh?

Dr. Allbutt's lectures may do much good by directing attention to the use of tonics as producing more permanent relief than alkalies, etc., but I should be unwilling to see their action set down to their influence on the nervous system alone. More light is needed, and any hint as to treatment is of the greatest service. I am afraid, however, that the way of regarding dyspepsia as a neurosis will contribute little to the more thorough knowledge of the disease. It is rather by a careful examination of the contents of the stomach, obtained during the existence of dyspeptic conditions during life, and a comparison and record of the symptoms and ascertained conditions of the stomach and duodenum after death, that we may expect permanent results. I am, etc.,

[illegible] JAMES MCNAUGHT, M.D., M.R.C.S.

Life Assurance and Medical Fees.

SIR,—The "competent authority" to whom you referred the Blue Ribbon Life Assurance Society's papers forwarded you by "G. S.," has overlooked a most important factor therein [illegible], that medical examination is not [illegible] necessary in every case of total abstainer life assurance, but only in special cases; and for this special examination and report thereon (a report, by the way, which throws very much more responsibility on the medical referee than in ordinary life assurance) the medical referee is offered the fee of 2s. 6d. I quite agree with your "competent authority" as to fees in the abstract, but in this special case I agree with "G. S." that the proposed fee "deserves public condemnation."

Total abstainer and an advocate of temperance though I am, I have too much respect for my profession, and [illegible] for the value of my own opinion and capability, to accept so paltry a fee for the services required.

If the examination were compulsory in every case, and of the same nature as that on joining the Foresters and Odd Fellows Societies, I, and probably "G. S." also, would be willing to accept the small fee.—Yours faithfully, H. A. L.

[illegible]

Artificial Tympanum.

MR. WALTER PEARSE desires to know what is the best form of artificial tympanum, and where it can be procured.

Eucalyptus Oil.

MR. E. H. GRIMWADE, noticing a statement in the *Pharmaceutical Journal* that eucalyptus oil of the kind that has been in the market for some years is obtained from Eucalyptus globulus, writes that this is an error. Eucalyptus oil was first distilled by Dr. Bosisto, of Melbourne, twenty years ago, from the Eucalyptus amygdalina, which is as distinct from E. globulus as Mentha piperita is from M. sativa, and is an entirely different oil from that obtained from the E. globulus. The success which Dr. Bosisto's oil has met with has induced people having no knowledge of the different kinds of Eucalyptus, or gum-trees as they are called in Australia, to distil any oil from the leaves gathered indiscriminately from one or any of the forty or more Eucalypti growing in the Australian bush, and consequently have obtained an oil totally different from Dr. Bosisto's. Two years ago Dr. Bosisto distilled an oil from E. dumosa, or, as it is known in Australia, the mallee scrub. This oil differs slightly from the amygdalina in perfume, but Dr. Bosisto is of opinion that medicinally its properties are the same. The E. globulus is the tree that has a great power of absorbing moisture from the earth and passing it off by its leaves into the air, and has hence been largely planted in malarial districts. The introduction of this tree into Europe (at Rome, etc.) has doubtless been the source of the constant confusion as to the origin of Dr. Bosisto's well known oil.

Official Reports on Prisons.

SIR,—I should feel greatly obliged if you, or any of your correspondents, could afford me information on the following points.

1. What is the name of the Blue-book in which I can find the annual reports of large English prisons, such as Chatham, Dartmoor, Woking, etc. I have one Blue-book on prisons, but it only contains reports on small prisons. At what time of the year is it published?

2. In what Blue-book can I find a description of the different classes of labour enforced in these large prisons, the regulations relative thereto, and the amount of labour exacted as a task?

3. Where can I find the rules relative to the duties of the surgeons of these large prisons, and their medical reports? In addition to the standing rules, are any others issued occasionally? and, if so, where can they be found?

4. Where can I find a statement of the results of imprisonment, short and long, as affecting the weight of a prisoner?

5. Is there any Blue-book issued annually in which is contained all the new rules affecting the executive and medical officers of these large prisons?—I enclose my card; and am, sir, your obedient servant, A COLONIST.

*** *Reports of the Directors of Convict Prisons*, published generally at the end of the year, and to be obtained of Eyre and Spottiswoode, and other publishers, or through any bookseller.

2. Not any Blue-books are published other than above.

3. By application by letter to the Home Office, Whitehall, S.W., Her Majesty's Convict Prisons Department. Rules and regulations are not published, but are supplied to the various establishments, as also new orders as issued.

4. There are some statistics on this subject published by the Anthropometric Department of the British Association for the Advancement of Science, at 22, Albemarle Street, London.

5. Not any.

A Head as a Legacy.

An evening contemporary gives the following account of a rather unusual dispute which has arisen between an eminent medical professor and the relatives of a deceased gentleman residing at Kiev. It is narrated that about ten years ago the individual in question, whose head differed in shape to most people's heads, sold it to a professor, who was anxious to examine it after its owner's death, for a stipulated sum. The gentleman was at that period struggling with poverty; his health was not robust, and his praiseworthy object in disposing of his head previous to his decease was that a sufficient sum of money might be left to his family with which to pay the expenses of his funeral. He has just died at Kiev; but since the bargain was concluded, placed on paper, and duly attested by witnesses, he had grown rich, so that his relatives had no need of the small sum for which he made over his head to the professor. They are, consequently, naturally anxious to avoid fulfilling the contract; but the professor will listen to no compomise, and insists on having the bargain carried out. He has been offered compensation, and rejects it; the family decline to admit his rights, so the dispute is to be brought before the law courts, and pending the hearing of the case, the defunct gentleman has been interred with his head on his shoulders.

Treatment of Caries of the Spine.

SIR,—Speaking as a general practitioner, and as one whose practical experience of Sayre's jacket is limited, I beg to ask those of your readers who have had greater experience if they have carried out the ingenious plan detailed and depicted in the BRITISH MEDICAL JOURNAL, June 1880, p. 953, by Mr. R. Davy, who slings his patient in a hammock, lying on the face, and [illegible] with the jacket. The device seems to be so practical and so admirably adapted for the purpose it was designed, that I have greatly wondered other observers have not subsequently alluded to it, although many advise the adaptation of the jacket while the patient is recumbent.—Obediently yours,

RICHD. NEALE, M.D. Lond.

H. R[illegible], M.D.—The case in question appears to have been exhibited for the first time at the recent meeting of the Academy of Medicine in Ireland, Anatomical and Physiological subsection. A description will doubtless be published in the Academy's *Reports*; meanwhile the inventor will, no doubt, be ready to give any correspondent any information he desires.

ERRATA.—In the JOURNAL of April 26th, page 810, column 1, line 27, [illegible] "tongue [illegible]," [illegible] "tongue has not been." At page 814, column [illegible], lines 8 to [illegible] from bottom, should read as follows: "and, when [illegible] medical man, [illegible] practice [illegible] business [illegible] lucrative, [illegible] etc." In the JOURNAL of May 3rd, page [illegible], column [illegible], lines [illegible], [illegible] "Royal [illegible], Edinburgh," [illegible] "Dr. Wallace Jamieson," read "Dr. W. Allan Jamieson."

SIR,—Can any of your readers give me any information as to the climate of [illegible] and the district around each. Is it dry and bracing, or otherwise? Also with regard to the [illegible]?—Yours truly,

[illegible], Banwell, Somerset, April 28th, 1884. ALFRED J. [illegible]

Educational Overpressure.

Sir,—I think it must be confessed that the Education Act of 1870 has been one of the most practical and useful measures ever introduced into this country. If it has been costly, it has been thoroughly efficient and uniform. Can such good results, in so short a time, be pointed out as the result of any other recent Act of Parliament? Do you not think that far greater and more satisfactory results would have accrued if provision for a thorough and efficient system of inspection had been made in the Public Health Acts, and, indeed, many other statutes affecting the medical profession?

I am led to make these remarks as the result of reading your leader in the Journal of April 12th, as in it you seem to infer that the teachers would do their work better without the inspectorial system provided for in the Act. Should this be your meaning, I am quite at issue with you on that point. I think Her Majesty's inspectors are quite as interested in having the rules of the new code so modified as to protect delicate and dull children, and prevent them from being overworked, as are the parents, teachers, or the members of our own profession. I scarcely think that too much can be said in favour of Government inspection; and the uncared for condition of many of our crowded towns and country villages is sad evidence of local inability to deal uniformly or fairly with grave questions involving the happiness, prosperity, and progress of the general community.—I am, sir, your obedient servant, J. O.

Sir,—Your admirable article in the Journal of April 12th on overpressure in elementary schools appears exhaustive as far as our present knowledge of brain-forcing is concerned. There is, however, another condition in elementary schools, perhaps quite as important, which has not, I believe, been as yet mentioned in any of the published documents. I allude to inefficient ventilation. During the visit of inspectors, the schoolroom windows are generally open; at other times, they are generally closed. Taking the figures quoted by the Bradford School-Board as correct, of the 6,784 children who died from hydrocephalus under five years of age, as much may be attributed to the breathing of vitiated air as to educational overpressure.

This is a subject which peculiarly demands the attention of medical men. Bad ventilation in schoolrooms is certainly one of the "disturbing causes" which has depressed the nervous vitality of our children, and prevented the death-rate attributable to brain-disease from diminishing as other diseases among children appear to have done during the years 1876-80.

Anyone who will spend an hour in an ordinary elementary school with the windows closed will realise the depressing nervous influence to which I have alluded. Teachers and taught are affected, but especially the latter, who are crowded together in little groups. If medical men, in their several districts, were to investigate this subject, one of the "disturbing causes" would be soon removed. I am, sir, your obedient servant, Henry Lee.

9, Savile Row, W.

Preliminary Education.

Sir,—I think the letter of "W. S." on the above subject deserves investigation. There is evidently a misunderstanding between examiners and teachers, or an attempt by the examiners to drive candidates to the professional crammers. It is truly hard that, after we have sent our boys to the first schools in England, and they have been reported diligent there, we should have them plucked by such a court of examiners. Could we not obtain some investigation into the subject? The object of the examination should be kept in mind, to prove that candidates have received a sound preliminary education, not to foster any special views of a few individuals.—I am, etc.,

A Father of Three Boys at a Public School.

Cancer Mortality in England and Wales.

The following table, giving the mortality from cancer in England and Wales during the three decennials, is interesting and instructive in connection with the discussion on the subject at the Royal Medical and Chirurgical Society, on Tuesday, April 22nd. The figures of the first two decennials are derived from the decennial reports of the Registrar-General, and those in the last from the proofs placed at my disposal from the Registrar-General's office. The increase in the mortality is due to other than accidental causes, and I hope to discuss the subject with mortality from all other causes before the ensuing Annual Meeting of the British Medical Association.

Ages.	1851-60.	1861-70.	1871-80.
All ages	314	383	472
Under five years	22	13	12
Five to nine years	9	7	7
Ten to fourteen years	8	8	7
Fifteen to nineteen years	17	18	16
Twenty to twenty-four years	28	30	27
Twenty-five to thirty-four years	102	112	125
Thirty-five to forty-four years	383	439	529
Forty-five to fifty-four years	854	1038	1263
Fifty-five to sixty-four years	1392	1754	2214
Sixty-five to seventy-four years	1927	2343	3119
Seventy-five and upwards	2051	2543	3342

The table gives the average annual mortality from cancer at the given ages to one million persons living of those ages in England and Wales.

Montague D. Makuna, L.R.C.P.Lond., M.R.C.S.Eng.

In our report of Mr. Harrison Cripps' remarks on this subject at the Royal Medical and Chirurgical Society, which appeared in the Journal of April 26th, there is a misprint of so evident a character that it can hardly have led to misapprehension. The number of deaths from cancer, and from all causes, ought to have been 81,000 and 2,300,000.

Stephanotis and W. J. S.—Holden's *Osteology*, Gray's *Anatomy*, Kirkes', Hermann's, or Power's *Physiology*, will suit your purpose. A student can very profitably study osteology in his own home before joining a medical school, provided he has a set of bones; but to attempt to learn the muscles, arteries, etc., before commencing dissections is worse than useless.

COMMUNICATIONS, LETTERS, etc., have been received from:

Our Glasgow Correspondent; Mr. W. H. Owen, Liverpool; Dr. Arthur Kempe, Exeter; The Secretary of the Chelsea Hospital for Women; Mr. Herbert C. Dent, Woolwich; An Irish Member; Mr. R. W. Jenkings, London; Mr. J. Brown, Bacup; Mr. Osward A. Browne, London; Mr. H. S. Trower, London; Mr. A. E. Snook, Dulwich; Dr. Shirley Deakin, Allahabad; Mr. B. J. Vernon, London; Dr. Stark, Wantage; Dr. E. Gordon Hull, Withern, Alford; Mr. Walter Buchanan, Chatham; Mr. J. R. Somers Vine, London; Dr. W. Allan Jamieson, Edinburgh; Mr. J. A. Shaw Stewart, London; Mr. John Toplis, Chesterfield; Dr. Robert Bowles, Folkestone; Mr. James West, London; Dr. C. S. Grant, Ouchy, Switzerland; Dr. Mackay, Brighton; Mr. H. Codd, Leamington; Messrs. Welford and Sons, London; Mr. George Meadows, Hastings; Mr. Clement Walter, Dover; Mr. Talfourd Ely, London; Mr. H. S. Reynolds, Castle Donington; Mr. W. A. Elliston, Ipswich; Mr. J. Goodwin Shea, Chesterfield; Dr. Walter Gripper, Wallington; Mr. H. A. Collins, Saxmundham; Dr. Thin, London; Dr. Styrap, Shrewsbury; Mr. J. Brown, Bacup; Dr. C. Bell Taylor, Nottingham; Dr. Macdonald, Liverpool; Mr. Shirley F. Murphy, London; Mr. A. H. Barrett, Aberdeen; Mr. R. M. Bruce, Homerton; Mr. J. W. Honeyman, London; The Honorary Secretaries of the Aberdeen University Club; Mr. G. Williamson, Durham; Mr. W. Lamond, Jarrow-on-Tyne; Mr. C. Clark Burman, Belford; Mr. F. Stockwell, London; Mr. T. H. Smith, Edinburgh; The Secretary of the Royal College of Surgeons; Dr. Lee, London; Mr. W. H. Anderson, Harleston; L.R.C.P.; Mr. Vincent Jackson, Wolverhampton; Messrs. A. and F. Pears, Isleworth; Mr. W. Eassie, London; Dr. L. W. Marshall, Nottingham; Dr. James Adams, West Malling: Dr. Thomas Jones, Calcutta; Dr. Crichton Browne, London; Dr. Wm. Hickman, London; Our Dublin Correspondent; Mr. C. J. Wright, Leeds; Dr. Myers, London; Mr. T. M. Stone, London; Mr. J. T. J. Morison, Plumstead; Dr. Ewart, London; Our Edinburgh Correspondent; Professor Humphry, Cambridge; Dr. M. Mackenzie, London; Messrs. Bermingham and Co., London; Messrs. H. C. King, London; Mr. J. F. Pink, London; Mr. James Woolley, London; Mr. Mark H. Judge, London; Mr. J. Loane, London; Dr. Robertson, Buxton; Mr. J. D. McCaw, Portglenone; Messrs. Jeffrey and Co., London; Dr. Collier, Hastings; Mr. C. J. Bond, Leicester; Messrs. Booth and Fox, London; Dr. E. Creswell Baber, Brighton; Mr. Nelson A. Dobson, Clifton; Dr. Suckling, Birmingham; Mr. Alex. Cook, Cannock; Mr. J. Grant, West Bolden, Durham; Mr. F. H. Appleby, Newark-upon-Trent; Mr. Roger Williams, London; Mr. William Wallace, Glasgow; Mr. P. B. Handyside, Drem; Mr. A. Scott Myrtle, Harrogate; Mr. M. G. Biggs, London; Mr. Alex. Wheeler, Darlington; Mr. Wilson Eager, Melton, Woodbridge; Mr. T. A. Cox, Wisbech; Mr. James Lattey, London; Dr. A. E. Sansom, London; Dr. Philpot, Croydon; Mr. Edward Swales, Sheerness; Mr. C. Thimm, London; Mr. James Hughes, Middlewick; Mr. J. H. Raffety, London; Mr. C. G. Wheelhouse, Leeds; Dr. J. Milner Fothergill, London; Dr. Carter, Liverpool; Mr. C. H. Taylor, Bradford; Dr. Langmore, London; Dr. Withers Moore, Brighton; Our Aberdeen Correspondent; Mr. W. P. Warren, Hereford; Mr. Vacher, Birkenhead; The Secretary of the North of England Branch; Mr. John Walcot, Newcastle-on-Tyne; Messrs. H. and J. Cooper, London; Mr. G. W. Swalby, London; Dr. Taaffe, Brighton; The Right Hon. Sir Charles Dilke, London; Messrs. H. W. Carter and Co., Bristol; Mr. G. T. Harrison, Leicester; Mr. G. A. Kenyon, Chester; Mr. Arthur Jackson, Sheffield; Our Birmingham Correspondent; The Secretary of the General Post Office; The Secretary of the Royal Hospital for Diseases of the Chest: Mr. R. Oakley, London; Professor Hamilton, Aberdeen; Our Belfast Correspondent; Dr. Drage, Hatfield; Mr. G. W. Whiteley, Rickmansworth; Mr. Henry Barrett, Aberdeen; Mr. Herbert L. Snow, London; Mr. Latimer Lemarchant, London, etc.

BOOKS, ETC., RECEIVED.

The Elements of Physiological and Pathological Chemistry. By T. Cranstoun Charles, M.D. London: Smith, Elder, and Co. 1884.

Nineteen Centuries of Drink in England. By Richard Valpy French. London: Longmans, Green, and Co. 1884.

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A LECTURE
ON
HAY-FEVER.

Delivered at the London Hospital Medical College.

BY MORELL MACKENZIE, M.D.Lond.

[IN a few introductory remarks, the lecturer stated that his course was partly systematic and partly demonstrative. The former portion consisted of a brief review of the diseases affecting the pharynx, œsophagus, larynx and trachea, and nose and naso-pharynx. Each of these subjects occupied one session, so that a period of four years was required for the completion of the series. At the conclusion of each lecture, selected cases were brought forward and demonstrations made on them, full opportunity being also afforded to the members of the class for examining the patients themselves. Dr. Mackenzie then announced that during the present session he would lecture on diseases of the nose and naso-pharyngeal region, and that his first subject would be hay-fever.]

Hay-fever is a complaint which, though not dangerous to life, causes at certain times suffering of so intense a character as to prevent some people from following their ordinary avocations, and render a still larger number, who are not actually disabled, thoroughly miserable during the most agreeable season of the year.

The affection has received various names, such as hay-asthma, pollen-catarrh, summer-catarrh, and rose-catarrh, according as the most prominent symptoms, or the supposed cause in a particular case, has been made the basis of nomenclature, and I have thought it convenient to make use of the one most commonly employed in this country.

The disease may be defined to be a peculiar affection of the mucous membrane of the nose, eyes, and air-passages, giving rise to catarrh and asthma, almost invariably caused by the action of the pollen of grasses and flowers, and therefore prevalent only when these are in blossom.

The history of the affection is interesting in many respects, and appears to show either that the complaint, like influenza and cholera, did not occur in Europe in the "good old times," or that the disease was entirely overlooked till a comparatively recent period. The circumstance, already referred to, that the ailment does not actually kill, and the fact that in its different forms hay-fever resembles some other complaint, tend to support the theory that the older physicians may not have observed this transitory affection; but, on the other hand, the fact that it has certainly become more common in the last few years points to the probability that irritating properties have been newly acquired by certain vegetable bodies, and that a peculiar idiosyncrasy has been developed.

The first detailed account of hay-fever was given by Bostock[1], who, in 1819, described a "periodical affection of the eyes and chest," from which he was himself a sufferer. In 1828[2] this physician published some further observations of the complaint under the name of "summer catarrh." A short paper on hay-asthma, by Gordon,[3] appeared in 1829, and in 1831 Elliotson[4] gave a brief description of the complaint. A few years later, the same physician discussed the subject more fully, and with characteristic sagacity pointed to pollen as the probable cause of the affection.[5] A systematic inquiry into all the circumstances of the disease was made in 1862 by Phœbus,[6] of Giessen, whose own personal observation was, however, confined to a single case. Unlike most of the other writers upon the subject, moreover, he did not himself suffer from the complaint. His method consisted in issuing circulars and advertisements inviting medical men all over the world to send him answers to a series of questions so framed as to embrace every possible kind of information about the causes, symptoms, and progress of the disorder; its periods of prevalence, geographical and ethnological distribution; and its prevention and treatment. In this manner, a vast quantity of facts and observations was collected, and from these Phœbus endeavoured to extract a complete theory of the disease. During the ensuing ten years, pamphlets on hay fever were published by Abbott Smith,[7] Pirrie,[8] and Moore,[9] dealing with the disorder from various points of view, but all showing more or less a disposition to limit the cause of its development to emanations from plants.

In 1869, a theory of hay-fever was propounded by Helmholtz,[10] himself a sufferer from the complaint. He held that the symptoms were produced by vibrios, which, although existing in the nasal fossæ and sinuses at other times, were excited to activity by summer heat. He professed to have found a ready means of relief, and even of prevention, in the injection of quinine, which Binz had shortly before shown to be poisonous to infusoria. Subsequent experience has not confirmed Helmholtz's conclusions. In the following year, a short practical paper was written by Roberts,[11] in which he claimed to have been the first to observe that excessive coldness of the tip of the nose is "*the* pathognomonic" symptom of hay-fever, and desired to have due credit awarded for this remarkable discovery. In 1872, Morrill Wyman[12] discussed the disease as it prevails in America, and tried to establish that two distinct forms of the complaint exist in that country—one occurring in May and June, and corresponding to English hay-fever, and a later variety peculiar to America, which he called "autumnal catarrh." In 1873, Blackley,[13] of Manchester, produced a work which is a model of scientific investigation. By a most ingenious and carefully conducted series of experiments, he proved that, in his own person at least, the pollen of grasses and flowers was the sole cause of hay-fever; and that, in the case of two other patients, the severity of the disease bore a direct relation to the amount of pollen in the air. His subsequent observations make it extremely probable, indeed almost certain, that, though transient irritation of the mucous membrane may occasionally be caused by simple dust, pollen is in fact the true *materies morbi* of summer catarrh. In 1876, a short treatise was published by Beard,[14] of New York, in which he dealt with the complaint as it is met with in the United States. His information was collected chiefly by circulars, after the manner of Phœbus; but, more fortunate than that observer, Beard had himself seen and treated many cases. He received replies from over 200 patients, and on these data he came to the conclusion that the immediate exciting causes are more than 30 in number, and that further investigations may extend the number of secondary causes to 50, or even 100. Beard showed clearly from his statistics that a large proportion of the sufferers are of nervous temperament, and that nerve-tonics are of considerable value in the treatment of the affection. In 1877, an essay was published by Marsh,[15] in which he completely accepts the pollen theory. The influence of a morbid condition of the nasal mucous membrane in favouring the development of hay-fever has been recently insisted on by Daly,[16] Roe,[17] and Hack.[18]

In accordance with the usual method of dealing with *ætiology*, the causes of hay-fever may be conveniently divided into the predisposing and the exciting.

The predisposing cause of the complaint is the possession of a peculiar idiosyncrasy, but on what that idiosyncrasy[19] depends is quite unknown. Whether it is due to some local abnormality affecting the structure of the mucous membrane, the capillaries, or the periphery of the nerves, but of too delicate a nature to admit of detection by available methods of research, cannot be determined. The fact, however, remains, that whilst millions of people are exposed to the cause of the affection, very few actually suffer from it. The idiosyncrasy is generally developed suddenly, without apparent reason. Once acquired, however, it is seldom lost, the predisposition, on the contrary, seeming rather to increase with each recurring summer. The circumstances which are supposed to influence this idiosyncrasy are race, temperament, occupation, education, mode of life, sex, heredity, and age. These various points may, with advantage, be considered in brief

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[1] Med.-Chir. Trans., London, 1819, vol. x, pt. i, p. 161.
[2] Ibid., vol. 14, pt. ii, p. 437, 1828.
[3] London Med. Gazette, 1829, vol. iv, p. [illegible]
[4] Ibid., vol. viii, p. 411, 1831.
[5] Lectures on the Theory and Practice of [illegible]
[6] Der typische Frühsommer-Katarrh, Giessen, 1862.
[7] [illegible]
[8] [illegible], London, 1867.
[9] [illegible], London, 1869.
[10] [illegible]
[11] [illegible]
[12] [illegible], New York, 1872.
[13] [illegible], London, 1873; [illegible] 1880.
[14] [illegible], New York, [illegible]
[15] [illegible] 1877.
[16] [illegible], 1881, vol. [illegible]
[17] [illegible], May [illegible]
[18] [illegible]
[19] [illegible] London, [illegible]

The influence of race is seen in the fact that it is the English and Americans who are almost the only sufferers from the complaint. In the north of Europe—that is, in Norway, Sweden, and Denmark—it is scarcely ever seen, and it rarely affects the natives of France, Germany, Russia, Italy, or Spain. In Asia and Africa, also, it is only the English who suffer. As far as I have been able to ascertain, the complaint is more common in the south of England than in the north; whilst in the north of Scotland it is very rare. In America, it occurs in nearly every State, though diminishing in frequency towards the south. I think it extremely likely that the disorder will be found in Australia and New Zealand, but I am not aware that any cases have yet been reported from those countries. In support of the view that race has an important influence, it may be mentioned that in New York, where hay-fever is comparatively common at certain seasons, Dr. Jacobi, whose practice lies largely among Germans, has never met with a case of the disease in a person of that nationality, and that Dr. Chaveau, of the same city, has never observed the complaint among his French compatriots residing there.[20] Beard never heard of a case amongst Indians or negroes, except the instance related by Wyman, in which an Indian child was the subject of the disease.

The nervous temperament has undoubtedly a certain influence in predisposing to hay-fever. This, of course, does not mean that all the patients are highly nervous people; some are of nervo-bilious, others of nervo-sanguineous temperament, but nearly all belong to the active energetic class of so-called nervous organisation.

One of the most singular features of this complaint is, that it is almost exclusively confined to persons of some education, and generally to those of fair social position. In 1879, I had notes of sixty-one cases of hay-fever from my private practice, and had seen many others of which I kept no record, whilst amongst my hospital patients I have not met with a single instance of the disease. Of forty-eight cases which came more or less directly under the notice of Blackley, every one belonged to the educated classes, whilst, out of fifty-five cases reported by Wyman, in forty-nine the patients were educated people. Merriman[21] also states that hay-fever chiefly affects "the upper and middle classes."

The influence of mode of life is shown in the fact that the rustic is much less subject to the affection than the citizen. Thus farmers and agricultural labourers, who of all people are most exposed to the disease, very rarely suffer from it, there having been only seven cases among the two hundred reports collected by Beard. I am not able to say whether the villager owes his exemption to the vigorous health maintained by an out-door life, or whether habitual exposure to the cause of the complaint begets tolerance; but the fact remains, that dwellers in towns are much more prone to the affection than those who live in the country.

Sex has a distinct influence, many more men than women suffering from the disease. Out of a grand total of 433 cases cited by Phœbus, Wyman, and Beard, only 142, or about a third, were females. Against these statistics, it may be urged that the information on which they are based was collected by circulars, to which, perhaps, women would be less likely to reply than men. This objection, however, does not apply to my own cases, amongst which I met with thirty-eight belonging to the male, and only twenty-three to the female sex.

Heredity has likewise a powerful influence. This has been abundantly proved by Wyman and Beard, and is supported by my own observations. In Wyman's experience there was heredity in twenty per cent., and, in Beard's, in thirty-three per cent. Out of my sixty-one cases, in twenty-seven one or more near relatives had suffered in the previous generation. I have also several times treated a father and his children at the same time.

Age, to some extent, governs the disorder, which, in the great majority of cases, appears before forty; but several instances have been reported of the first occurrence of the malady in patients as old as sixty. It is somewhat rare for this affection to show itself in very young children, but I have seen it in one patient at two years of age, and in another at three. In these cases, as in all those of very young patients that have come under my notice, the little sufferers were the children of parents who had themselves been victims to the complaint. Had not the parents been subject to the affection, it is most likely that the true import of the symptoms would not have been recognised in the children, but would have been attributed to a common cold; and from this it may be inferred that, when the complaint attacks the young, it is often overlooked.

A great variety of agencies have been looked upon as the exciting causes of this disease; but there can now be little doubt that pollen is the essential factor in the case of those possessing the peculiar predisposition. Before, however, proceeding to show that pollen is the real cause of the affection, it may be well to pass in review some of the other sources to which its origin has been attributed. The most important of these are heat, light, dust, benzoic acid, coumarin, excess of ozone, and over-exertion, or several of these influences in combination.

Heat.—Popular observation had already associated hay-fever with effluvia from grass or hay, at the time when Bostock, from his own personal experience, put forth the view that the affection is due to the influence of solar heat. The obvious difficulties in the way of this theory led Phœbus to attribute the affection to "the first heat of summer," which, he observed, "is a stronger cause than all the grass-emanations put together." Later on, however, Phœbus remarked that the "first heat of summer only acts in an indirect manner as an exciting cause;" and he admitted that hay and the blossom of rye cause exacerbations. Heat alone will not, however, produce the disease. It is not met with in the plains of India when the heat is greatest, though occasionally it is seen in the cooler months, before the vegetation is burnt up. Hay-fever is also found in the milder climate of the Indian hills, when the grasses and cereals are in blossom. The intense heat of the desert does not produce the disease; nor does it occur at sea in the sultry equatorial regions, though the heat, when vessels are becalmed, is sometimes almost beyond endurance. In America, hay-fever is much more common in autumn than in the tropical summer of that country.

Light.—The observations as regards heat apply equally to light. Phœbus thought that the longer days, which produce a more continuous action of light, are perhaps to blame; but where the light is strongest and lasts longest—indeed, in the land of "the midnight sun"—hay-fever is almost unknown. At sea, when the sun is bright, it is well known that nothing can exceed the glare; yet a sea-voyage is the best safeguard for the sufferer from hay-fever. Persons with a sensitive mucous membrane, especially those subject to hay-fever, are, no doubt, sometimes liable to attacks of sneezing from sunlight; and incautious observers might mistake these symptoms for true hay-fever. Some of Beard's patients even attributed the affection to gaslight; but gaslight is used much more in winter, when hay-fever is absent, than in the English summer and American autumn, when the affection prevails.

Dust.—This is a more difficult subject to dispose of. Most writers who accept dust as a cause of summer catarrh, speak of "common dust;" but, as Blackley remarks, there is no such thing as *common* dust. The constitution of dust depends upon the geological character of the soil, upon the vegetation which it supports, and on the season of the year, as well as on "the number and kind of germs and other organic bodies" present in the atmosphere. Beard's statistics, if accepted without consideration, strongly point to dust as the most common cause of hay-fever; for, out of 198 patients, no fewer than 104 attributed the affection to dust. Of these 198 cases, however, 142 occurred between May and September; and it may well be asked, How was it that dust did not affect these patients in the winter months? Does this not clearly point to the presence in the dust of some special irritant during the summer and autumn months, which does not exist at other times? In England, in the months of February, March, and April, when strong east winds often blow clouds of dust against the face, symptoms of hay-fever do not appear; whilst in June and July, when there is comparatively little dust, hay-fever attacks its victims. It is true that in many of Beard's cases, collected by circulars, the patients attributed the affection to "indoor dust," and some even to "cinders;" but, as people stay in the house more in winter than in the autumn and summer, and use fires at that time, these agencies, if of any real power, would produce their greatest effect in winter. Directly the opposite, however, occurs. Is it not highly probable, therefore, that these patients were misled as to the real cause of their malady? We all know how easy it is for the trained physician to make erroneous observations and to overlook important physical signs, and how much more likely is the untutored patient to make a mistake in the obscure and highly complicated problems of etiology!

Ozone, Benzoic Acid, etc.—An excess of ozone in the atmosphere was suggested by Phœbus as a possible cause of hay-fever, but Blackley purposely breathed air highly charged with this substance for five or six hours without effect. He, moreover, inhaled artificially prepared ozone, in quantities far exceeding what is ever found in the same volume of atmospheric air, without feeling any inconvenience. The same physician also studied the effects on his own person of benzoic acid,[23] coumarin (the odorous principle of many flowering grasses), and of the volatile oils which impart to many plants, such as peppermint, juniper, rosemary, and lavender, their characteristic perfume. The results were in all these cases entirely negative.

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[20] Beard: *Op. cit.*, pp. 90-1.

[21] BRITISH MEDICAL JOURNAL, June 30th, 1883.

[23] This substance has been shown by Vogel to be contained in *anthoxanthum odoratum* and *holcus odoratus*, the two species of flowering grasses to which the causation of hay-fever has been in a special manner attributed.

Over-exertion, or prolonged exercise, in the open air, never has any effect in cold weather, or indeed at any other time except when grass is in flower. Its influence, however, in aggravating hay fever, in the hay season, is very great, and will presently be considered.

Combined causes of hay-fever.—Several writers have contended that, although any one of the above causes may not alone be sufficient to produce hay-fever, several of them acting together may be able to do so. Such theories are the last resource of those who are unable to discover the true etiology, and there is not a tittle of evidence in their support.

It having been shown what does *not* generate hay-fever, its real mode of origin must now be demonstrated.

Blackley's observations leave no doubt that the cause of hay-fever is the action of pollen on the mucous membrane. His experiments were framed on a most comprehensive plan, and carried out in a rigorously scientific spirit. By well devised tests, he succeeded in proving: first, that in his own person the inhalation of pollen always produced the characteristic symptoms of hay-fever; secondly, that in his own case, and in that of two other persons, there was a direct relation between the intensity of the symptoms and the amount of pollen floating in the air; and, thirdly, as already shown, that none of the other agents referred to, such as heat, light, dust, odours, or ozone, can of themselves cause the complaint.

Blackley's experiments were made with pollen of various grasses and cereals, and with that of plants belonging to thirty-five other natural orders.

The grasses which, as already stated, were at one time considered to be especially active are the *anthoxanthum odoratum* and the *holcus odoratus*; but this idea, no doubt, originated in the extremely fragrant odour of these plants, and there is no reason to suppose that their pollen is more active than that of the *alopecurus pratensis*, and the various *poæ* and *lolia*. The pollen of rye is, however, more potent than some of these; and that of wheat, oats, and barley is also very active. The careful observations of Blackley show that, in England, during the season of hay-fever, 95 per cent. of the pollen contained in the atmosphere belongs to the *graminaceæ*. This order generally comes into full blossom between the end of May and the latter part of July, and that is precisely the period of the year when hay-fever prevails. If the season be wet and cold, the disease usually sets in rather later, and is milder in character than when the weather is fine, and the vegetation luxuriant.

There are persons in whom the presence of roses will give rise to an attack, and in America the affection is sometimes called "rose-fever." No doubt it is the pollen of the rose which is the active agent. The celebrated Broussais[24] appears to have been impeded in his botanical studies by this idiosyncrasy, whilst the case related by Hünerswolff[25] of a man in whom the perfume of roses invariably produced an attack of coryza, has been often cited by modern writers. I have myself met with a similar instance. A lady living in Devonshire consulted me in 1864, on account of constant severe coryza, which came on whenever she smelt a rose. All treatment proved futile, and she was ultimately obliged to banish these flowers from her garden.

In America the pollen of the Roman wormwood (*ambrosia artemisiæfolia*) appears to be the most common cause of hay-fever. This plant (which belongs to the genus *ambrosiacea*, nat. ord. *Compositæ*) is not met within Europe, but is extremely common in nearly every part of the United States. Wyman[26] found that when a parcel containing this plant was opened at White Mountain Glen, where he had retired in order to avoid hay-fever, he and his son were immediately attacked with all the symptoms of the malady. The plant blossoms in August and September, and it is then that hay-fever most prevails in America. Several varieties of the *artemisia*, a closely allied genus, are met with in England, and I think it not improbable that some cases of hay-fever which have occurred at the seaside in this country may have been due to the pollen of the *artemisia maritima*, or its variety, *artemisia gallica*. It is curious that, except in the case of Indian corn, the pollen of grasses appears to have but slight effect in America, though a mild form of hay-fever is met with in that country from May to August.

There are certain supposed fallacies in the pollen theory which must be mentioned. Thus a case is mentioned by Walshe,[27] in which the patient retained the symptoms of hay-fever during a passage across the Atlantic; and another has been reported by Abbott Smith,[28] in which the disease came on at a distance of nine miles from land. These are, I believe, the only authentic instances in which hay-fever has continued to exist, or has originated, at sea, and they are open to various explanations. It has been distinctly shown by Blackley that pollen may be retained in an article of dress for many weeks; and in Smith's case, the patient, who was yachting, experienced the symptoms after assisting "to hoist the sails." The attack came on on the 13th of June, and it is not unlikely that when the sails were unfurled a large quantity of pollen collected in their folds was set free. In Walshe's case, the symptoms may have been kept up by some other irritant to which the patient may have had a peculiar susceptibility, or the case may not have been a true example of hay-fever, but of ordinary asthma, complicated with catarrh. It is not altogether impossible, however, that pollen may be deposited on a ship miles away from land. Darwin[29] has shown that dust is sometimes carried by the wind far out over the Atlantic. "The dust," he observes, "falls in such quantity as to dirty everything on board, and to hurt people's eyes; vessels have even run on shore, owing to the obscurity of the atmosphere." Again, in speaking of the distribution of pollen, Darwin reminds us that the ground near St. Louis, in Missouri, has been seen covered with pollen as if it had been sprinkled with sulphur, and there is good reason to believe that this has been transported from the pine-forests at least 400 miles to the south.[30] A shower of yellow pollen was wafted to Philadelphia[31] from some distant pine-forest so recently as March 16th, 1883. It caused such a thick deposit as to lead ignorant people to take it for brimstone. These facts are sufficient to show that the influence of pollen may be experienced under circumstances where it would not generally be looked for.

Whilst asserting that pollen is the universal cause of the peculiar form of catarrh known as hay-fever, I do not mean to deny that other irritating particles might produce a similar complaint if persistently brought into contact with the mucous membrane. Thus, it is well known that powdered ipecacuanha will in some persons cause a peculiar form of asthma closely resembling hay-asthma, and with many people the fumes of burning sulphur have the same effect. I have frequently observed slight attacks resembling hay-fever produced by the insufflation into the larynx of powdered lycopodium; and, indeed, I have for this reason been compelled to give up the use of this drug as a diluent for medicinal powders. Some people experience symptoms somewhat analogous to those of hay-fever from smelling certain fruits, whilst others are troubled in the same way by the presence of cats, rabbits, and guinea-pigs; and Bastian[32] suffered from an affection closely resembling hay-fever whilst dissecting the *ascaris megalocephala*, a parasite which infests the horse. If the specific exciting influence be kept in operation on a person subject to an idiosyncrasy of this kind, a complaint almost precisely similar to hay-fever is produced; but, as a rule, the conditions leading to its manifestation are exactly known by the patient, and can therefore be avoided. The etiological peculiarity of hay-fever consists partly in the fact that the idiosyncrasy as regards pollen is more common than other individual susceptibilities, but chiefly in the circumstance that at certain seasons pollen exercises its influence over wide areas, and can be excluded only with great difficulty.

In a recently published article, Daly,[33] of Pittsburg, has endeavoured to show that, in a large proportion of cases, there is an intimate relation between hay-asthma and chronic nasal catarrh, and that, except when disease of the nasal mucous membrane exists, the alleged exciting cause of summer catarrh is inoperative. He reports two cases of thickening of the turbinated bones, and one of polypus, in which, after the cure of the local condition, the patients lost their susceptibility to hay-fever. These persons had suffered from summer catarrh for twenty-one, fifteen, and six years respectively. Roe[34] and Hack[35] have since enunciated views similar to those propounded by Daly. It is not at all unlikely that an unhealthy state of the mucous membrane of the nasal fossæ may predispose to hay-fever; but I may remark that I have repeatedly examined the interior of the nose in cases of hay-fever without finding anything more than general congestion.

The *symptoms* of the disease are seen under two well marked types, the catarrhal and the asthmatic. In the former, the onset is very sudden, the patient becoming conscious of an itching smarting sensation in the nose and eyes, and sometimes in the fauces and roof of the mouth. Not unfrequently, the attack commences with a feeling of extreme irritation at the inner canthi. Paroxysms of sneezing, often of extreme violence, quickly ensue, followed by an abundant thin discharge from the nose. The mucous membrane of the nasal fossæ swells so as to block up the passages and make respiration through them impossible. At the same time, there is profuse lacrymation, with much pricking and stinging of the conjunctival surfaces, and sometimes photophobia. There is often a certain amount of chemosis, and occasionally the eyelids become puffed so as almost to close the eyes. The discharge from both nose and eyes gradually grows thicker, sometimes even becoming semipurulent in character. There may be severe neuralgic pain in the eyeballs and over the back of the head. Now and then there is some degree of pyrexia, but this is by no means the rule. The disorder often varies considerably in intensity, even in the same person, within short intervals of time, so as almost to give an intermittent character to the complaint. This is probably due to the varying quantity of pollen present in the atmosphere, the severity of the disease being, as a rule, in direct proportion to the abundance of the *materies morbi*. An attack lasts from a few hours to several days, or even longer, finally ceasing almost as suddenly as it set in, and leaving little or no trace of its presence either in local lesion or systemic disturbance. In some patients, hay-fever is accompanied by nettle-rash.

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[24] Anglada: *Du Coryza [illegible].* Thèse de Paris, 1827, p. 14.

[25] *Ephem. Nat. Curios.*, dec. ii, ann. x, obs. xvii.

[26] *Op. cit.* p. 101.

[27] *A Practical Treatise on Diseases of the Lungs.* London, 1871, 4th ed. p. 228.

[28] *On Hay Fever.* London, 18[illegible], 4th ed.

[29] *Journal of Researches, etc.* London, 184[illegible], 2nd ed., p. [illegible]

[30] *The Effects of Cross and Self Fertilisation in the Vegetable Kingdom.* London, 18[illegible], p. [illegible]

[31] *Philadelphia Medical News*, April 7th, 188[illegible]

[32] *Pathological Transactions*, 18[illegible], vol. [illegible]

[33] *Archives of Laryngology*, 1882, vol. [illegible], No. [illegible]

[34] *Loc. cit.* [35] *Loc. cit.*

The asthmatic form of the complaint may be superadded to the disorder just described, or it may constitute the entire affection. It generally comes on in the day-time, and the paroxysm may pass off in a few hours, the patient at first expectorating a little ropy mucus, and, later, an abundant frothy secretion, or the dyspnœa may continue with only a slight remission, as long as the sufferer is exposed to the influence of pollen. The attacks seldom produce any emphysema, and the patient sooner or later entirely recovers.

The *diagnosis* of hay-fever from common catarrh on the one hand, and spasmodic asthma on the other, is not always easy, and mistakes in diagnosis were formerly very common; but the disease is now so much better known that errors are less likely to occur. The first attack might, perhaps, be confounded with ordinary coryza; but the suddenness of the onset, the characteristic œdematous puffiness of the eyelids, together with the absence of constitutional symptoms, will speedily lead to a truer diagnosis. People who are prone to catarrh are very apt to catch cold in the changeable weather of the spring and early summer of this country, and these cases are sometimes mistaken for hay-fever; but the readiness with which they yield to anticatarrhal treatment at once shows their real nature.

The asthmatic form of hay-fever may, in some instances, be less easy to recognise; but the history of the case will generally guide the practitioner to a correct opinion. The fact that hay-fever comes on, as a rule, in the daytime, out of doors, and in the summer, whilst, on the other hand, paroxysms of true asthma most frequently occur in the evening or night, indoors, and in one of the other seasons of the year, may help to distinguish the two complaints.

The *prognosis* is in all cases favourable as regards the termination of each attack; *cessante causâ, cessat effectus*. When the season of flowering grass is past, the complaint will certainly depart; but it will almost as surely reappear whenever the patient is again exposed to the action of pollen.

Hay-fever leaves no permanent structural lesion behind it, and cannot, therefore, be said to have any pathology. Blackley thinks that pollen has a peculiar and specific effect in causing dilatation of the capillaries and exudation of serum from them; but it appears to me highly doubtful whether this is anything more than the reaction which ordinarily follows the application of an irritant.

It need scarcely be said that zealous "bacterio-maniacs" have, of course, sought for parasitic germs in the nasal secretions of those subject to hay-fever; but although bodies resembling pollen-corpuscles have been found,[36] no specific organisms have, so far as I am aware, been detected. It is almost a comfort in these days to find one disease for which the ubiquitous bacillus does not appear to be responsible.

The *treatment* of hay-fever is by no means satisfactory, and in no disease is the old adage, that "prevention is better than cure," more truly applicable than in the case of this complaint. If the poison be continually introduced into the system, the antidote, if one exist, can have but little chance of effecting a cure. The first measure, therefore, must be to remove the patient from a district in which there is much flowering grass. A sea-voyage is probably the most perfectly satisfactory step that can be taken. Patients who are unable to go to sea should endeavour to reside on the coast, where they will generally be free from their troublesome complaint, except when land-breezes blow. Dwellers in towns should avoid the country, and those who reside in the country should make a temporary stay in the centre of a large town. It often happens, however, that such a change of abode is not practicable; and, under such circumstances, if the complaint be very severe, the patient should, if possible, remain indoors during the whole of the hay-season. Many persons, of course, cannot keep in the house during the month or six weeks of the hay-fever period; and those who can, are apt to find such detention not only exceedingly irksome, but very injurious to the general health. If, therefore, a patient be obliged to go out of doors, he should plug his nostrils with cotton-wool or wadding, by means of one of Gottstein's screws, and should defend his eyes by wearing spectacles with large frames, accurately adapted to the circumference of the orbits.[37] Plugging the lacrymal ducts with small glass rods has also been recommended,[38] and Thorowgood speaks[39] favourably of a little apparatus containing a few drops of a camphorated or carbolised solution, which can be comfortably worn in the nostrils. Instead of *plugging* the nose, it has been advised[40] to close it by compression with a little metal clip. As rapid motion in the open air almost always aggravates the complaint, it may be advantageous to wear a veil over the face whilst driving. One made of "three ply" of fine silk gauze has been found very useful.[41] It is recommended that it should be made in the form of a bag open at both ends, one end fitting round the hat, whilst the other has attached to it a heavy wire ring about ten inches in diameter, which lies on the shoulders and keeps the veil off the face. Those who do not mind being occasionally mistaken for the "veiled prophet of Khorassan," will no doubt adopt this plan. Protected in this way, many people predisposed to hay-fever escape altogether, whilst others contract the affection in a very mild form.

As the disease most commonly occurs in persons of nervous temperament, nerve-tonics and other constitutional remedies have been used for the purpose of warding off hay-fever, or controlling the violence of its attacks. Amongst these, quinine, arsenic, opium, and belladonna have been employed; but I have found valerianate of zinc, in combination with assafœtida, more valuable than any other drug. I usually give the remedy in the form of pills containing one grain of valerianate of zinc, and two grains of the compound assafœtida pill, doubling the dose at the end of ten days or a fortnight. I direct my patients to begin taking these pills as the hay-season approaches; and, under the use of this remedy, many persons who formerly suffered most severely from hay-fever have ceased to be troubled with it.

When the disease is established, tincture of opium is of great benefit in controlling hay-asthma, reducing the secretion, diminishing the sneezing, and at the same time bracing up the nervous system. It should be given in small doses of five or seven drops twice daily, and a saline purgative should be taken on alternate mornings. Belladonna has been recommended, but I have had no experience of its use in this complaint.

I trust very little to local measures in the treatment of hay-fever; but when there is profuse secretion, with an excessive tendency to sneeze, the inhalation of strong ammonia salts often gives great relief. I have not found injections of quinine, as recommended by Helmholtz, at all useful. Though in a few cases benefit was derived, in most instances no effect was produced, whilst some patients were actually made worse. The good effect is probably to be explained by the injection mechanically washing away the *corpus delicti* rather than by any parasiticide action. The same remark may apply to the case in which Binz[42] states that a solution of one part of salicylic acid to one thousand of water, thrown into the nares, cut short the disease. The vapor benzoini of the Throat Hospital Pharmacopœia has occasionally produced a soothing effect; and I have also seen good results from insufflations into the nose of a powder consisting of one-sixteenth of a grain of morphia and one grain of bismuth. This should be applied several times a day. Ferrier's snuff may be substituted for the above formula, but it should be applied by insufflation. It is also said[43] that great advantage has been derived from the snuffing of pure salicylic acid, ten or fifteen grains being used in this manner in the course of the day. As, however, this powder is very "strong," I am inclined to believe that most persons would find the remedy worse than the disease.

In a few cases I have known some benefit result from the use of medicated bougies, such as the bismuth, and acetate of lead Buginaria of the Throat Hospital Pharmacopœia; but, like quinine-spray, they occasionally aggravate the mischief they are meant to cure.

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[36] British Medical Journal, 1881, vol. [illegible], p. [illegible].

[37] Both the screw and the spectacles are sold by Messrs. Mayer and Meltzer, Great Portland Street.

[38] Hannay: Brit. Med. Journ., 1881, vol. ii, p. 572.

[39] *Lancet*, 1881, vol. ii, p. 82.

[40] Hannay: *loc. cit.*

[41] Brit. Med. Journ., 1881; June [illegible].

[42] *Deutsche Med. Wochenschr.*, September 22nd, 1877.

[43] British Medical Journal, 1878, vol. ii, p. 101.

The upper lip and the margins of the nostrils should be smeared over with benzoated zinc-ointment two or three times a day, when those parts are inflamed, or aconite liniment may be used in the same way.[44]

For the relief of the irritation of the eyes, frequent bathing with very cold water is sometimes useful, though Roberts[45] appears to have found more benefit from warm and slightly salt water. Sulphate of copper (two grains to one ounce) or sulphate of zinc (two grains to one ounce) may sometimes do good, but I have found a lotion containing two grains of acetate of lead with two drops of dilute acetic acid in an ounce of water, the most soothing application. Sedative collyria occasionally allay the irritation; for this purpose a small quantity of a solution of acetate of morphia (one to three grains to an ounce) may be dropped into the eyes when they begin to itch.

Asthmatic patients are often relieved by inhaling the fumes of nitrated blotting-paper, the good effect of which is further increased by steeping the paper in a solution of stramonium, datura tatula, belladonna, or lobelia. A patent American remedy, consisting of nitrate of potash and powdered herbs, of which stramonium or datura tatula is probably the most important, is sold under the name of "Himrod's Cure,"[46] and when this powder is lighted and the fumes inhaled, they sometimes quickly relieve the spasm.

In hay-fever, the food should be nutritious and easily digestible. Owing to the depression which the complaint causes, stimulants are sometimes necessary; but they should, if possible, be avoided, or only taken in small quantities. Light claret, hock, and whisky diluted with water, are the least injurious. Tea and coffee have a special value in the asthmatic form of the disease, both in relieving the spasm and counteracting the exhaustion which follows it. Thorowgood[47] recommends citrate of caffeine for the same purpose, especially in cases where the heart is weak; he gives it in doses of two to three grains, dissolved in water or in warm coffee.

ABSTRACT OF A PAPER

ON

SCURVY, IN ITS BEARING ON EXPLORATIONS BY SEA.

By SIR WILLIAM SMART, K.C.B., R.N.,
Honorary Physician to Her Majesty.

It is now very generally admitted that the scurvy is a disease of the blood, showing itself with anorexia and signs of general debility, as weakness of the legs and stiffness in the hamstrings, with pains; and, when this diathesis becomes more developed, there are tumescence and ulcerations of the gums, hæmorrhages under the skin and periosteum, and into the enteric and urinary canals, ending by serous and fibroplastic effusions in the areolar tissue of the limbs, and into the serous sacs; it is, then, a true dyscrasy of the blood. Mr. Busk has found, microscopically, that the changes in the blood are an excess of watery with decrease of solid constituents, increase of the white with diminution of the red corpuscles, also increase of the albuminous and the fibrinous components, which last have parted with some degree of their normal vital cohesiveness.

In 1699, there was an epidemic of it in Paris, where, at the Hôpital St. Louis, Poupart observed, in extreme cases, spots of [illegible] under the periosteum and perichondrium of the ribs, with [illegible] of their extremities and separation of the cartilages from their capsules.

Of late, several London authorities have noticed among ill nourished infants an acute form of scurvy, affecting the shafts of the long bones; curable under a more natural diet with the ordinary antiscorbutics.

We owe to Dr. James Lind, physician of Haslar Hospital, the only classical work extant on scurvy, which has been reprinted recently in Paris. He testified to the lesions described by Poupart; he discarded the then prevailing idea that the use of salted meats was the exciting cause, further than from their being less digestible, and therefore less nutritious; and he thought that the want of vegetable food alone was not its cause. His views of the [illegible] and exciting causes are given, p. 516, thus: "I am [illegible] opinion that whatever weakens the constitution, and especially the organs of digestion, may serve, without any other cause, to introduce the disease in a slighter or higher degree, even among such as live upon fresh greens, vegetables, or the most wholesome diet, in the open air." And, with regard to remedies, he states: "Experience indeed shows that, as greens or fresh vegetables and ripe fruits are the best remedies for it, so they prove the most effectual preservatives against it; and the difficulty of obtaining these at sea, together with the long continuance in the moist sea-air, are the true causes of so general and fatal malignity on that element. Heaven has kindly provided these fruits (lemons and oranges) as a specific for the most terrible of evils."

His experience of the disease, both at sea and on land, was very great, and thus he was able to afford many illustrative examples of its occurrence under very dissimilar circumstances, among which are some of its appearance in ships at Portsmouth Harbour and at Spithead, in which the men were well supplied with fresh beef and vegetables. Perhaps the most striking of these instances were seen by him in juxtaposition in 1758-60, when the victorious Channel fleet, under Sir E. Hawke, remained eight months at sea in health, because kept supplied occasionally with fresh beef and vegetables sent out to them in tenders. And yet, in April 1759, scurvy began in Haslar Hospital, and continued till November 1760, among those [illegible] admitted for other diseases, of whom several died of it. But it would appear that greens were not in the dietary, as he then ordered them to be supplied in the food of convalescents and of fever-patients. At the same time, he says, "scurvy raged among the prisoners of war confined in Porchester and Winchester Castles, having no appearance of fever among them, well victualled as they were on fresh beef, soft bread, peas, beer, butter, and cheese; it began in February 1859, and died out in the summer, when greens were substituted for dried peas." "What medicines," he exclaims, "can counteract the continued influences of improper diet, air, and confinement, the last of which in particular I now judge to be a principal cause of the [illegible] mortality of the scurvy in long voyages at sea?" He thought that the disease, and its cure by the citronaceæ, were known to the Dutch seamen who traded to Spain in the fourteenth century, and availed themselves of the needful remedies out of their cargoes. And, when longer voyages began to be taken, then its presence became more alarming.

Vasco de Gama lost 100 out of 160 men before rounding the Cape of Good Hope. Magellan's expedition brought back only 18 out of 234 Spaniards, the rest being lost mainly by scurvy. Drake was the next to go round the world; and, although his crews were scorbutic at three different periods, yet his historian—the chaplain—recorded no death by scurvy, while showing that its cure was effected by means of a diet of seals' flesh, birds' flesh, and wild herbs. A hundred and sixty years after that, Anson followed in almost the same track, and his men suffered so seriously, that he brought back only 380 out of 800 of them. Within thirty years of that [illegible], Cook had twice completed the circumnavigation; in his first voyage, his crew contracted the scorbutic diathesis when inside the barrier reef of East Australia, after having been ten months on ship's rations. They were cured, without any deaths occurring, by buffalo flesh, poultry, vegetables, and fruits at [illegible], from which they proceeded to Batavia to repair the ships; but within a week of arrival there, [illegible] there in great severity, so that, out of 84, [illegible] and others, there, at sea, and at Prince's Island. [illegible] tropical fever [illegible] scurvy, [illegible]. In his second voyage, [illegible] died by [illegible] scurvy, which, however, [illegible] on these [illegible], and was checked [illegible] a part of [illegible]. The [illegible] of the voyage [illegible] frequent [illegible] the disease [illegible]. [illegible] awarded the Copley Gold Medal. That voyage left [illegible] profitable to all future expeditions [illegible] world at large.

Arctic voyages recommenced in 1773, when Phipps, with two ships, attempted to reach the North [illegible] by the Spitzbergen route [illegible] first tried by Hudson in 1607. His furthest was at 80° 14' north latitude, from which he returned within four months. From that time, polar explorations were in abeyance until 1817, when Scoresby, in a whaler, followed that route; also Buchan and Franklin in 1818, and Parry in 1827; and from then until 1848, when Franklin's disaster occurred, there were several expeditions to the north-west, which made great discoveries. In 1820, Parry sailed to Melville Island, and wintered there; although he found reindeer, his crew suffered from scurvy, and he returned in the next summer. His second voyage, in 1822-24, was an effort to sail into Prince Regent's Inlet through Hudson's Straits, and a discovery was made of a frozen channel that linked them. He spent two winters in frozen harbours, and in the first only one case of scurvy occurred in an officer; but in the second spring, it broke out severely among the officers, and then among the seamen, which caused him to return to England. His third voyage, in 1824-25, was made into Prince Regent's Inlet, from Lancaster's Sound; but, losing one of his two ships, he returned after one winter without any scurvy.

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[44] Ringer's Handbook of Therapeutics, London, 188[illegible]
[45] New York Med. Gaz., Oct. [illegible]
[46] The original formula of this remedy has recently been published in one of the [illegible]. It is said to consist of stramonium, [illegible] and nitre in equal parts. If a little powdered [illegible] this preparation it certainly produces a compound which [illegible] effect is very similar to that of Himrod's remedy. [illegible] when the formula now given has been used. On the other hand, bearing in mind the fact mentioned in the text, that the drinking of tea often gives great relief to asthmatics, it is not at all improbable that the [illegible] may have some effect. [illegible]
[47] [illegible]

Read before the Epidemiological Society.

In 1829-33, John and James Ross, by penetrating further south than Parry, found that Prince Regent's Inlet was a closed gulf. They discovered the magnetic pole and King William's Land, and gave names to the shore and the capes off which Franklin's ships were abandoned in 1848.

The Rosses were the first to explore in a steamer, and they escaped scurvy for two years, on the flesh of seals, bears, and foxes in the winters, with salmon in abundance, reindeer, hares, and birds in the summer. In the third winter, the scurvy fell on them, and in the spring, they left their ship, and travelled north to the mouth of Prince Regent's Inlet. Finding no chance of escape, they returned to the huts they had made in the spring, and passed a third winter in them, where the scurvy affected them all badly, having only a few foxes. One death by scurvy occurred in February. In June, they had bears' flesh and many birds, and early in July they began to move northward again, the carriage of the most sick proving an obstacle; but, fortunately, the sick improved. At the mouth of the inlet, they found open water, and late in August they were received on board a whaler, and brought back to Scotland, where they had been given up, as having perished on the ice, two years ago.

This was the first instance known of passing two winters in Arctic regions free from scurvy; and what is equally remarkable is that, out of 22 persons, there were in four years only three deaths, of which only one was by scurvy.

Eleven years later, Sir John Franklin went out with two ships to try an inlet further west, for a passage to Behring's Straits. In his first winter, he buried three from unknown causes; and at the end of the first year, when nearly accomplishing his object by reaching the continental coast he had explored twenty-five years before, his ships were beset in the ice off the coast which James Ross had explored sixteen years before. In the second summer, Franklin died, and in the third winter they must have experienced scurvy of malignant form. After their third spring, having lost 9 officers and 15 men, the ships were abandoned; and, of the 105 who took to the ice with boats on sledges, not one returned to tell the tale.

From 1848 to 1854, no year was without search-expeditions for the missing ships, but without success, although steamers were chiefly engaged on it; but very extensive geographical discoveries were made, mainly by sledging-parties of men alone, who, for the most part, found a sufficiency of animal food to keep away the scurvy without antiscorbutics, in journeys of varying duration up to 110 days; the work accomplished amounting to 40,000 miles, which proved how much can be done in the open air of the Arctic regions.

Of these search-expeditions, two suffered by scurvy; these were the *Investigator* and the *Fox*, of which the first passed two winters without scurvy, having obtained an abundance of fresh animal food through the second winter. In the third spring, when equally well supplied, the disease appeared suddenly, within a few days after a grievous disappointment in not finding relief near at hand, which did not arrive to them for another year, while still frozen in. They were well supplied with lime-juice, but they were on short allowance of ship's provisions, and the ship had become very wet and damp, so that the scorbutic diathesis became general. In the fourth spring, the ship was abandoned, and the crew was removed by an easy journey across the ice to a relief-expedition, where they received plenty of animal food, and antiscorbutics, with the very best of ship's provisions; notwithstanding which deaths occurred, showing how difficult it is to eradicate the scorbutic diathesis after it has once taken firm hold on the constitutions of men, so long as they are detained longer in the Arctic regions or the actual conditions of ship-life followed there.

In 1857-59, the *Fox*, a yacht equipped with twenty-four officers and men, under McClintock, spent two winters in the ice; the first in Baffin's Bay, the second in the Gulf of Boothia, where Ross had passed four winters. In the second winter, although they were well provisioned, the scorbutic diathesis grew up; and in the following spring—their second out—they performed wonders in sledging, by visiting Back's River, from which the first intelligence of Franklin had been brought by Rae in 1854; as well as all the coast of King William's Island, where they discovered the locality of Franklin's death, and the subsequent disasters of his crew, bringing from it the only authentic record, with very many relics, which they collected in following up the track of the retreating crews; they also made the discovery of a channel north-west of King William's Land, to the north coast of Banks' Land, where the *Investigator* was frozen in. These were effected by the almost incredible labour and perseverance of sledge-parties, which returned scorbutic, two out of three, to the little yacht, but all recovered; whereas one man, who had not left her, died.

The sledge-rations were of pemmican and meat in tins, without any antiscorbutic juices. That sledge only which had obtained flesh from the natives, although the longest out, 78 days, returned free from scurvy.

These expeditions entered the ice late in July; and, although on two-thirds of ship's rations after two years, yet they were fortunate in obtaining fresh meat occasionally. All used lime-juice on board while it lasted, but the sledges of the *Fox* took none, and she performed the heaviest sledge-work. Scurvy appeared on the *Fox* in the second spring, in the *Investigator* in the second spring, and in the *Victory* in the third winter. In Franklin's expedition, it appears to have begun severely in the second summer or third winter—the limit of human endurance of the predisposing causes.

The voyages of Parry, Ross, McClure, and McClintock, seem to bear this evidence: that the ordinary dietetic resources of a ship will suffice to ward off scurvy, with very little supply of fresh meat, in the first winter in the ice. But, even with a fair supply of it up to late in the second winter, yet, in the ensuing spring, the diathesis will culminate in the disease, or dyscrasy of the blood, on the application of exciting causes, such as moral depression from severe physical labour, without antiscorbutics, as in the *Fox;* or from disappointment of unfulfilled hopes to get free from the ice, as in the cases of the Franklin expedition and the *Investigator*, with full use of an antiscorbutic; or it may be postponed till the third winter, *cœteris paribus*, as in the instance of the *Victory*. And, after such outbreak of the insidious disease, the constitutions of those who suffer will have derived so much of diathetical change of the blood, that it may resist the curative influences of all the antiscorbutic remedies, unless supported by some prospect of release from Arctic imprisonment. On this assumption, an inference may be based that the outbreak of scurvy in a first winter is an exceptional occurrence, dependent on some abnormal conditions, to counteract which nothing short of removal is likely to avail completely.

I have been actuated to compile these and other facts concerning the circumstances surrounding various outbreaks of scurvy, whether of a productive or of a preventive character, in order to learn their bearings on the strongly contrasted cases of the last grand Polar expedition, under Sir George Nares, and the yachting voyage of the *Eira* of Mr. Leigh Smith to Franz Josef Land, between which there are no grounds of similarity.

In 1875-6, the *Alert* and *Discovery* wintered further north than any previous expedition had done—the first in 82° 27', and the latter in 81° 42'; and of course they lay immersed in darkness longer than had ever before been experienced, and were exposed to a longer term of intense cold. In their voyage up the channel from Smith's Sound to the entrance of the Polar Sea, both enjoyed a large share of fresh animal food; but during the winter, though separated by only sixty miles of latitude, yet the *Alert* fared much worse in this respect than the *Discovery* did. The former procured only fourteen days' fresh meat, while the latter got fifty-three, which was a great difference in the dietary—insufficient of itself, perhaps, to account for the difference in results, as the ships' service-rations were the same, and of choice qualities. Another disadvantage to the *Alert* was that, as eight of the *Discovery's* people were weather-bound on board her through the winter, her seamen's deck was more crowded, in the ratio of seven to five persons. The means of warming the ships differed also; that of the lower deck of the *Alert* being done by open stoves placed on it, while that of the *Discovery* was effected by hot air in iron pipes from a Sylvester stove in the hold. With reference to dampness and dripping, both suffered in about equal degree, apparently; but this cannot be asserted in default of registered hygrometrical observations. Ventilation was imperfect in both the ships, but perhaps not more than is usual. So early as the 1st of December, Sir George Nares noted: "All are in perfect health, except one. Many of the officers are experiencing a loss of appetite. A few of the men are similarly affected; but, as they have had more of outdoor bodily labour to undergo, they are not so liable to feel the change as the officers." Was this in any degree an indication of scorbutic causes being so soon in operation in the *Alert?* In the *Alert* there was a case of incipient scurvy on January 8th, and another on April 8th, both in men who had not been employed in sledging; and consequently the scorbutic diathesis had developed in them on board the ship. When sledge-work commenced early in March, the first returned in four days with a frost-bitten man, in whom scurvy then developed itself on board, of which he died. The larger sledge-parties left on April 3rd; and on April 4th two scorbutic men were sent back to the ship, one of whom had failed in the first twenty-four hours out. Of the *Discovery's* men, one who had not sledged was taken with scorbutic symptoms on January 3rd; and that was the only case attributable to ship's influences in her, all her other cases being from the long sledge-party to North-west Greenland; and it was noted that the first man taken ill on it had passed the winter on board the *Alert*, and he gave in on the sixteenth day, with no other case till after a fortnight.

These facts indicate that the scorbutic diathesis had grown up in the winter—on the *Alert's* men at least; and that, on going with the sledges, they were less efficient than those of the *Discovery.* That that comparative inefficiency could have been due to any previous want of lime-juice, would not appear to have been the case, as through March a double allowance of it was issued to the *Alert's* men, and not to the *Discovery's* men. Lime-juice was not taken out by any of the extended parties; and they were without fresh animal food also, or, at most, having one or two meals of it during fifty-seven, seventy-three, eighty-one, and eighty-four days respectively; and the deaths occurred on the fifty-fourth, sixty-sixth, and eightieth days, in the first three periods, among forty persons who had travelled, in groups of four parties, across more than 1,800 miles of ice in eighty-six days; in which journeys, that of the *Alert* to the westward lost none; that from her towards the North Pole lost one; and that of the *Discovery* to the north-east lost two men, one of whom had wintered in the *Alert*, and was the earliest of all to fall a victim.

It has been generally admitted that the *Alert's* men, to say the least of it, were more predisposed than those of the *Discovery*, and it must be presumed that the causes of that predisposition were developed within the ship. Whether the differences in the ships' internal economy, alluded to, were the causes of this may be disputed; but it is scarcely tenable that a difference of four days in the duration of the sun's absence can have been sufficient; as, to have scurvy, of the most destructive character, was formerly the rule in the first winter in the comparatively low latitudes of Hudson's Bay, where the sun does not disappear; while there are instances of exemption from it in at least two instances of a winter passed in higher latitudes, even approaching to that of this expedition, viz., in Franz Josef Land and in Spitzbergen, in which the castaway men were compelled to dwell in huts on the shore, and to subsist in great degree, or entirely, on the products of the chase. In these instances, the great difference lay in circumstances compelling them to breathe a less confined, but at the same time, a less agreeable atmosphere with regard to temperature, throughout the winter; while in the spring they were not subjected to any of the extreme labour to which the *Alert's* and *Discovery's* men were subjected, with their thermometers marking below zero; they being then predisposed by the conditions incurred through dwelling between decks, where the air was artificially heated, and, consequently, the more damp. Sir George Nares relates that the difference of heat between the interior and external atmospheres was often 100° Fahrenheit, the former containing an abnormal quantity of carbonic acid, and other excreta of respiration and the skin in a crowded space. These I regard as very productive of that organic debility which precedes the appearance, in ships, of indubitable symptoms of scurvy, whether in the individual or in the community; and I consider that it may be also the cause of the frequent complication of lung-disease in scurvy. In huts buried in snow, and especially in those constructed of it, the moisture exhaled from the lungs is frozen to the walls, while, in a heated between-decks, it is breathed over and over again; and, when condensed on the walls, by admission of the purer external air, it is the constant cause of the most detrimental dampness so frequently complained of, and remarkably so in the *Alert* and *Discovery.*

Sir George Nares has given his opinion of this condition of heat and moisture, as experienced by him, being a very effective cause of the developed predisposition to scurvy.

(To be continued.)

THE Secretary of State for India has appointed Mr. David Hooper, F.C.S., of Birmingham, Analytical Chemist and Quinologist to the Nilgiri Government Cinchona Plantations, in the Madras Presidency.

ON THE ANTIPYRETIC TREATMENT OF TYPHOID FEVER.

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THE discussions at the London Medical Society on the antipyretic treatment of typhoid fever, in connection with the papers of Drs. Coupland, Bristowe, and Cayley, and the leading article in the BRITISH MEDICAL JOURNAL of March 1st, have reopened a subject of much interest and importance, which, it is to be hoped, may engage still wider professional attention. The matter is one deserving careful consideration, as bearing upon the successful management of one of the more common and serious of the infectious diseases; and statements of the case from various sources, and from other than one point of view, are desirable, with the object of determining the soundest and most rational principles and methods of treatment, as well as of estimating the advantage of any particular therapeutic measure.

That this disease owes some of its dangerous characters and damaging effects to the long continuance of pyrexia will hardly be disputed. Few who have observed a severe case of enteric fever going on continuously for four or five weeks, and thereafter followed by a succession of relapses extending over another period nearly as long, can doubt that the patient is in imminent danger of sinking from sheer exhaustion and wasting of his every tissue, notwithstanding it must be allowed that fever-temperature is very differently borne by different individuals. But mere tissue-metabolism cannot be regarded as by any means the sole source of danger. The toxic action of the fever-poison, particularly on the nervous system, the local lesions in the intestines, and their results, not merely in the form of catarrhal discharges, but in structural changes and atrophies which render the assimilative processes comparatively inert, must be held to form a large part, if they do not, indeed, constitute the main part, of the morbid process. In the therapeutical, no less than in the pathological and clinical, survey of the disease, these various factors must be accorded their due prominence.

The treatment of typhoid fever has long been a topic of interest; and whatever is added to our information, or tends to shed light, upon the subject of the rational therapeutics of this disease, cannot fail to be welcomed by all, particularly by those who are specially concerned in the treatment of large numbers of fever-patients in hospitals. Much of our present knowledge of the matter is due to the labours of Gairdner, of Jenner, of Murchison, of Cayley, and of many others; and to the methods of treatment advocated by them must be ascribed a diminished mortality-rate in this disease. The dieting and regimen of the patient, and the recognition and treatment of complications, have all been placed upon a sound basis.

Since the introduction of the clinical thermometer, which has enabled the amount of fever-temperature to be accurately measured, and the course and progress of the disease methodically traced, attention has been turned in an especial manner to the treatment of the pyrexia, with the view of lessening its amount, or, at least, of breaking its continuity. For this purpose, various antipyretic drugs of known potency (quinine, salicylate of soda, salicin, kairin, etc.) have been turned to account, and they undoubtedly, in many instances, succeed in bringing down for a time a high degree of temperature. To most of them, however, there exists the objection that their continuance, upon which, indeed, their efficacy depends, is often ill borne by the digestive organs, and in some cases they appear to be rather hurtful than otherwise.

The modern employment of the cold bath or cold bathing of the body in fever appears to have been first resorted to in Germany by Liebermeister, Brand, and others; and this form of antipyretic treatment has hitherto been more in use on the Continent than in this country. Of late, however, it would seem to have been making its way among us as a therapeutic agent, and the discussion already referred to will probably lead to a wider use of this method of treatment than has hitherto prevailed. In this view of the matter, it might be not unprofitable to inquire a little into the alleged advantages of this system; to consider whether it actually accomplishes all that some of its advocates claim for it; and, further, to see whether or not there exist any serious objections to its general employment.

The advantages are briefly stated by Dr. Cayley to be the following (BRITISH MEDICAL JOURNAL, March 1st, 1884).

1. It fulfils the physiological indications that, by keeping down the temperature, the febrile metabolism of the tissues, and the accumulation in the blood of the products of this metabolism—and to this

Dr. Murchison attributed most of the symptoms of the typhoid state—are much diminished. The granular infiltration and softening of the central nervous system, of the heart, of the liver, of the kidneys, of the voluntary muscles, is, to a great extent, prevented; and, by the stimulating effect of the treatment on the vaso-motor system, that want of tone and general relaxation of the arteries, which is a marked feature of the disease, is counteracted.

2. Where efficiently applied, the treatment produces marked alleviation of the symptoms. When the temperature is kept down, the so-called typhoid symptoms are seldom seen, etc.

3. Complications are rendered neither more frequent nor more severe.

4. The rate of mortality is greatly diminished.

With reference to the first of these points, it may be observed that the mere height of the temperature, and its effects on tissue-metabolism, will not satisfactorily account for the peculiar symptoms of typhoid fever. In fact, the temperature in typhoid is not, in the majority of instances, very high; the type of the fever is somewhat remittent, and cases of hyperpyrexia are certainly rare in this disease. In not a few acute maladies, *e.g.*, rheumatism and catarrhal pneumonia, we find a temperature of higher amount, with less remission, and nearly, or quite as long, duration, as that of enteric fever, and where yet anything like typhoid symptoms are not in general present. There is undoubtedly more than the mere temperature required to account for the remarkable prostration of the muscular and nervous systems conspicuous in enteric fever, and equally so in the shorter fever of typhus.

A septic process is in operation throughout the course of these diseases, of which the temperature is but one of the manifestations, and not always, *per se*, an accurate or reliable one, as regards our estimation of the severity of a case. But, in addition, in enteric fever there is a distinct visceral lesion, which obviously bears some relation to the temperature, the latter being apparently influenced, in no small degree, by the continuance of the ulcerative process.

It can scarcely be contended that the mere combating of the febrile action can counteract either of these great factors in the disease. Whatever antipyretic remedies may do in the way of lowering a high degree of temperature, it is not clear that they have any effect in shortening the progress of a case, nor in preventing or curing the intestinal lesions.

Although I have had but a limited experience in the treatment by the cold bath or cold sponging, I have made extensive use of antipyretic drugs, more especially quinine; and while willingly acknowledging its value in breaking the continuity of a course of high temperature (and no doubt a like effect would follow the cold bath in such circumstances), I have not found it in any way cut short an attack, but rather the reverse, the cases so treated often proving unusually prolonged; although, of course, this might be due to their severity. A different result could scarcely be expected from a line of treatment specially directed to a mere symptom, and incapable of influencing the still existing cause underlying all the phenomena.

As regards the second point referred to by Dr. Cayley, viz., that, where the cold bath treatment is efficiently applied, it produces marked alleviation of the symptoms, it seems only necessary to remark that the efficient application of this method is limited by requirements which appear to render its accomplishment impracticable in a very considerable proportion of cases. Thus, it seems to be essential to the success of the treatment that it be resorted to from the very first, and that should the first few days have elapsed before it is put in practice, the hope of benefit is materially lessened. To say nothing of the difficulty, even to men of large experience, of recognising typhoid fever "from the first," it is well known that at least in hospital-practice most of the cases have gone on for a good many days before they come under the cognisance of the physician; when, however faithfully the antipyretic (cold bath) treatment might be carried out, the result would be failure, so far as this method is concerned, in a large proportion of instances. Further, even its advocates would appear to discountenance, or at least to recommend great caution in, the adoption of the cold bath treatment where severe local lesions are indicated, although it is just in such cases that the temperature is often highest, and consequently antipyretic action is most called for.

Thirdly, as to the influence of this method of treatment upon the complications of typhoid fever, it is extremely doubtful whether the proof is sufficient to warrant the strong assertion that pulmonary diseases are rendered much less frequent, in view of testimony of a directly contrary character; while as regards intestinal lesions there is evidence which cannot be explained away, that the liability to these is somewhat increased.

With reference to the last point—a greatly diminished mortality-rate—it must be allowed that here too the proof is inconclusive. In few diseases is the numerical test less reliable than in typhoid fever. In the first place, the diagnosis is in not a few cases a matter of considerable uncertainty, even throughout the whole course of the disease; so that, taking hospital-experience as affording the most extensive field for statistical information, it must always be a question how far the numbers represent absolutely cases of typhoid, and may not include other of the many morbid conditions which are known to simulate it. Nevertheless, as Dr. Cayley justly remarks, "a sufficient number of instances, spread over a sufficiently long time, must be collected, so as to exclude accidental sources of error; and like instances only must be compared." Judging, however, even by this standard, it is doubtful whether much has been gained as regards the mortality-rate of typhoid by the antipyretic method of treatment. It must not be forgotten that recent years have witnessed a vast improvement in the management of fever-cases from that which used to prevail. Our nursing, our dieting, our general hygiene, and our medical treatment of fever-patients have all made marked advance, even since Dr. Murchison wrote his famous work; and this fact must, I am persuaded, be credited with much of the diminished death-rate. Notwithstanding Jaccoud's assertion that "while the mortality in typhoid under the old method of treatment was about 19 per cent., under the antipyretic mode it is under 11 per cent.", evidence is not difficult to obtain tending to cast doubt upon the justness of his ascribing this diminution solely to the cause assigned. Thus I have, with the aid of Dr. Wood, the resident in the fever-hospital of the Edinburgh Royal Infirmary, of the typhoid wards of which I have the charge, collected the mortality-statistics of cases treated there during the past four years, where certainly the antipyretic method has not been carried out, but where the greatest attention is paid to the nursing, dieting, and watching for and treating complications, and the following is the result, the details of each year showing remarkable uniformity:

Year.	No. of Cases.	No. of Deaths.	No. of these Deaths occurring within 48 Hours after Admission.
1880	106	12	1
1881	91	12	3
1882	200	23	5
1883	112	13	1
	509	60	10

Thus, under a non-antipyretic treatment the total mortality was not more than 12 per cent., and if cases moribund when admitted, and dying in less than forty-eight hours, be excluded from the list, as they ought to be, the rate is reduced below 10 per cent. This number, too, includes a considerable proportion of cases brought long distances from the country, which, as Dr. Murchison and Sir W. Jenner both point out, often prove to be serious, obviously from the hurtful effects of a long journey. I doubt not that other hospitals not practising the antipyretic method could show a still smaller mortality; but, as already mentioned, it is not desirable that too much should be made of mere death-rate experience; for, unquestionably, the mortality in typhoid fever varies greatly in epidemics, and in relation to the character of the cases under treatment at any given time.

The objections to the cold bath treatment of typhoid fever need not be enlarged upon. Only a few of the more important can now be referred to. One of the most serious is the necessity which the method entails of frequent disturbance of the patient, which, in this fever, is ill borne, and may even be dangerous.

Everyone who treats this disease must notice how trying to the strength are even the most careful movements of the patient when diarrhœa is present, or when the case is a severe and protracted one; and to add to this the fatigue involved in the cold bath treatment, would be to seriously increase the already existing risks. Yet these are the very instances in which fever often tends to persist. Keeping in view the fact that a progressive bowel-lesion is present from the beginning, it can scarcely be doubted, that the less the movement of the patient, the better for his safety. Further, the depressing effect which the treatment is apt to have upon the circulation, renders it unsuitable in a large number of severe cases. This tendency was acknowledged by Liebermeister, and such experience as that of Dr. Collie, at the Homerton Fever Hospital (BRITISH MEDICAL JOURNAL, September 20th, 1879) is abundant evidence that it may be a real source of danger. Lastly, the risk of intestinal congestion, hæmorrhage, and other complications, by the action of the cold in driving the blood from the surface, would appear to be by no means a theoretical one.

In offering these criticisms and stating these objections, I am far from holding that the antipyretic (cold bath) treatment has no place in the therapeutics of enteric fever; but I contend that the limit of its applicability is a comparatively narrow one, and that, until much more extensive and satisfactory evidence of its advantages is forthcoming, it is not to be recommended as a general principle of treatment to be pursued in this disease.

At the same time, there may be conditions present, in exceptional instances, which are capable of being materially alleviated by antipyretic treatment.

In ordinary cases of the disease, with moderately high temperature and a distressing sense of heat, together with restlessness and sleeplessness, the cold bath, cold sponging of the body, or cold applications to the head for a time, will often, even at any stage of the disease, lower the temperature and afford relief to the other symptoms; but apart from this, it is not to be expected that they can have much influence on the course or duration of the fever; and, moreover, most of such ordinary cases do perfectly well if carefully dieted and nursed. Again, in a protracted case, with continuous high temperature, and, it may be, evidence of severe intestinal lesions (diarrhœa, etc.), some antipyretic drug, such as quinine, is a safer plan of treatment for lessening the febrile action than the external application of cold; yet should this medicine fail, it might be justifiable to resort to the latter plan, in the form, however, of cold sponging rather than the bath. Still, such treatment, even if successful for the purpose, will probably have but little power to control the progress, or the ultimate issue, of the case. It is to be noted, however, that in neither of the above-named instances would advocates of the antipyretic system admit that it had been properly carried out, seeing that it had not been begun early and persevered in all along.

Lastly, in the rare event of hyperpyrexia, the cold bath should be resorted to, just as in acute rheumatism or other malady in which this formidable symptom may arise.

These observations are submitted as an humble contribution to the discussion of a subject upon which diversity of opinion exists; and as an exposition of my reasons, founded on considerable opportunities for observing the phases of this disease, for declining to adopt as a principle of treatment a practice which, notwithstanding the strong advocacy it receives from eminent authority, has not, in my view, been proved to possess the advantages claimed for it as a method of rational therapeutics. It is not necessary, in order to an estimation of its value, that it should have first been tried, for *a priori* reasons and observations may be quite sufficient to furnish arguments against any system of practice which may entail avoidable risks, and for the alleged benefits of which other considerations may be assigned.

It does not fall within the scope of this paper to deal with other measures of treatment in typhoid fever, but I cannot conclude without quoting some weighty sentences from the memorable address on this subject of Sir William Jenner, delivered before the Midland Medical Society, on November 4th, 1879. "Typhoid fever cannot be cured; but more lives may be saved by the judicious treatment, and more lives lost by the improper treatment, of typhoid fever than of any other acute disease. For a very large proportion of cases no other treatment is really required from beginning to end than rest in bed, quietude, fresh air, pure water, and regulated diet, although most cases are benefited by a little wine in the third or fourth weeks......Temperature so high and continuous as to be a cause of danger, either directly, or indirectly by favouring serious degenerative changes of structure, is present in exceptional cases only, and for such cases alone is the direct application of cold to the general surface required......My experience has impressed on me the conviction that that man will be the most successful in treating typhoid fever who watches its progress, not only with the most skilled and intelligent, but also with the most constant care, and gives unceasing attention to little things; and who, when prescribing an active remedy, weighs with the greatest accuracy the good intended to be effected, against the evil the prescription may inflict, and then, if the possible evil be death, and the probable good short of the saving of life, holds his hand.' While admitting, without reserve, that heroic measures fearlessly but judiciously employed will save life when less potent means are useless, the physician whose experience reaches over many years will, on looking back, discover that year by year he has seen fewer cases requiring heroic remedies, and more cases in which the unaided powers of nature alone suffice for effecting cure; that year by year he has learned to regard with greater diffidence his own powers, and to trust with greater confidence in those of nature."

The Wandsworth and Clapham Guardians have, upon the recommendation of a committee, added £40 *per annum* to the salary of Dr. Field Flowers Sutton, Medical Officer for the Streatham district, in consideration of his arranging to have five dispensing stations, at various points within the district.

ANEURYSM OF THE POPLITEAL ARTERY: CURE BY DIGITAL COMPRESSION IN SIX HOURS AND A QUARTER, AFTER FAILURE OF INSTRUMENTAL COMPRESSION AND LIGATURE.

By ARTHUR E. J. BARKER, F.R.C.S.Eng.,
Assistant-Professor of Clinical Surgery at University College, and Assistant-Surgeon to University College Hospital.

In the British Medical Journal of June 30th, 1883, I recorded a case of popliteal aneurysm, cured in about eight hours and a half by digital compression; and to this I may now add another, with an equally favourable result, after a still shorter treatment. Besides affording encouragement in the adoption of a mode of treatment for this disease, to which we are, perhaps, becoming a little too cool of late, the case offers some special points of interest. In the first place, the patient had been subjected to instrumental compression for five weeks before he came under my care; then, almost immediately afterwards, I ligatured the femoral artery in Scarpa's triangle with a twisted silk ligature, entirely obliterating the vessel at that point up to the present, and apparently curing the aneurysm; then, four months later, pulsation appeared again in the tumour, which became as large as before, but was this time cured finally, by digital compression of the common femoral artery, in about six hours and a quarter.

The case is briefly as follows.

J. D., aged 36, was admitted into University College Hospital, under my care, on August 29th, 1883, suffering from an aneurysm of the right popliteal artery. For this he had been already carefully treated, by Mr. Gandy of Norwood, with a Skey's tourniquet, applied almost continuously for five weeks. This compression had had no effect upon the tumour. The patient was a particularly healthy, fresh-looking, cheerful man, whose personal and family-history were excellent, and showed no evidence of constitutional disease of any kind. He had always been a gardener, working for the last eleven years in a very hilly garden, and doing all the work (which was very heavy) himself. This overstrain appears to have been the only exciting cause for the aneurysm in this case.

The appearance of the tumour dated from eight weeks before admission, when he first noticed pulsation in the ham. He was unaware of any special strain or other cause for it, and it gave him at the time no pain. Its size had remained the same since first observed. On admission, the swelling was of flattened oval shape, about two inches in diameter; it was tense and elastic, and pulsated strongly. It was seated exactly opposite the middle of the knee-joint, and was slightly red on the surface, having a distended vein on its outer side. There was aching pain on flexing the leg, but none when the limb was at rest in extension; some tenderness on pressure on the tumour was complained of, but none in the thigh or leg. Pressure on the superficial femoral artery arrested all pulsation in the sac.

Instrumental compression having failed, and the man being extremely anxious that something radical should be done, I ligatured the superficial femoral artery in Scarpa's triangle on September 6th, 1883. The operation was done in the usual way under spray, and the vessel was tied with a twisted silk ligature well carbolised, which was cut short and left in the wound. The first ligature broke in drawing the second half of the knot; the next piece of silk bore the strain well, and was placed a quarter of an inch above the first spot chosen. The pulsation in the aneurysm was now found to be completely controlled, and no pulsation was felt in it until about five hours later, when it was just perceptible. The tumour gradually shrank, while over it a small artery could be easily felt. The wound healed, without any trouble of any kind, by first intention throughout, the ligature showing no signs of coming away. The patient left hospital on October 1st, looking and feeling very well. At this time there was no pulsation to be felt in the tibial arteries, and no discomfort or pain anywhere. In this condition the patient remained at home until the second week in January, 1884 (about four months). He then noticed a return of pulsation in the right popliteal space, with pain in the knee; this gradually increased. A week later he came up to see me, when I found the aneurysm almost, if not quite, as large as before the ligature of the femoral artery, although the latter, below the seat of occlusion, was now pulseless, as were also the tibials. Above the ligature the vessel pulsated strongly. Pressure on the common femoral, below Poupart's ligament, completely controlled the expansile stroke in the aneurysm, and from this there could be no doubt that it was fed by branches of the profunda, which had been presumably enlarged during the five weeks of instrumental compression of the common femoral which had preceded ligature. Of course here there could be no question of the ligature having dissolved away, as it was of strong silk, and the vessel was still pulseless below its seat; moreover, pressure on the femoral at this spot did not affect the aneurysm, whereas pressure above the profunda did so at once.

I now determined to try digital compression, and, on the readmission of the patient on January 26th, he was put upon a somewhat restricted diet for two days, being confined to bed, and smartly purged. The effect of this treatment in lowering the arterial tension was most marked, and to it, no doubt, some of the good result may be attributed. Then, on the 28th, having a number of most willing volunteers from among the students, I commenced digital pressure of the common femoral at 10.50 A.M. This was carried out with the same attention to details referred to in my former case, and, at 5.15 P.M., all pulsation in the aneurysm had ceased finally. Compression was still continued until 8 P.M., and then stopped. The temperature of the limb remained lower than the other for some time, but all discomfort and pain was soon gone. The patient returned home cured on February 5th. Since then, I have seen him several times; there has been no return of the aneurysm, which has shrunken up to small size. The pulsation in the tibials is still absent. The man is now engaged in his gardening work as before, without any pain or trouble from his former ailment.

A CASE OF FACE-PRESENTATION.

BY P. J. CREMEN, M.D.,

Physician to the Cork North Charitable Infirmary, and the Cork Union Hospital (Female Department).

ON June 19th, 1883, at 1 P.M., I was summoned to see Mrs. D. in labour. This was her third pregnancy. The membranes had burst at 6 A.M. on the same day. Slight labour-pains commenced at 8 A.M. Strong expulsive pains set in at 10, lasting until my arrival. On each previous occasion, it was necessary to deliver her with the long forceps, in consequence of a narrowing of the conjugate diameter of the brim; and, when called on this occasion, I thought it was probably the same condition of things as before, namely, arrest of the head at the brim. However, on making an examination, I discovered that it was a face-presentation, and in the most unfavourable position—first mento-posterior. The presenting part had not yet entered the brim, although strong expulsive pains had lasted for the space of three hours. I decided, if possible, to change it into a vertex-presentation, as offering the best chance, in my opinion, both to mother and child.

The os uteri and soft parts were well dilated and cool. After passing the catheter, and emptying the rectum by enema, in the interval between the pains, I passed two fingers of my right hand over the vertex as far as they could reach, and applied the left hand externally over the hollow of the occiput as it lay in the left inguinal region. I felt I had complete control over the head, using gentle pressure externally with the left hand, aided by the two fingers of the right on the vertex internally. This served a double purpose; first, that of a tractor, and second as a director, preventing any contusion of soft parts. I was thus enabled to push down the vertex with very little difficulty into the right oblique diameter of the pelvis, thus changing the most unfavourable facial position into the most favourable cranial one.

I then left the case to nature, so that the head might mould itself into the cavity of the brim, and thus enable the woman to be safely delivered with the forceps, as, from previous knowledge of the case, I was satisfied that delivery would not be effected naturally. In two hours, the head fully occupied the brim; and, as a *caput succedaneum* was rapidly forming, I applied the forceps, and had the satisfaction of delivering a healthy living male child.

REMARKS.—The treatment usually recommended in face-presentations in most of the modern works on obstetrics is to leave them to nature, although the mortality is stated by Playfair and others to be one in ten of the children when rotation takes place, and all lost when it does not take place. Why then leave such a case to nature if you see it before it enters the brim? Does it not, under the most favourable circumstances, involve a tedious labour and its consequences to the mother, and a certain risk to the child? I am certainly inclined to agree with Hodge, so far at least as mento-posterior positions are concerned, when he argues that they should be all changed into vertex-presentations, and for the valid reason of diminishing infantile mortality, and sparing the mother the effects of a tedious labour. One of the most recent authorities states it is more difficult and painful to the mother to bring down the vertex than the head, and prefers podalic version.

The slight operation of substituting the vertex for the face above the brim, in my limited experience, bears no comparison to podalic version, for in the latter, as we are well aware, the maternal mortality is one in fourteen, that of children one in three. In the case related it would have indeed been difficult, and not unattended with danger, to perform podalic version, when the waters had escaped for seven hours, and when the uterus was contracting powerfully. On the other hand, the operation of bringing down the vertex was accomplished with the greatest ease, and with little or no pain to the mother. This, however, I think it right to state, was mainly due to the external pressure.

This plan is one which, I feel confident, will prove successful in the hands of any accoucheur of ordinary experience, in cases where the face is yet above the brim.

A NEW EFFERVESCING CHALYBEATE SPRING AT STRATHPEFFER SPA, N.B.

BY D. MANSON, M.D.

I WISH to bring to the notice of the medical profession a new effervescing chalybeate at this Spa. For centuries the spring has been well known in the Scottish Highlands as the "Iron Well." It rises at the foot of Ben Wyvis, about three miles from the Spa, and was brought in iron pipes to the Pump-room a few years ago. Up to the present time, the water had stood, on its way to the Pump-room, first in a large deep open well where it rises, and then at the Spa-buildings in an open filter, allowing of the partial precipitation of the iron at each place from atmospheric oxidation, and the escape of carbonic acid gas, the iron existing in the spring as a carbonate of the protoxide. The filter having now been done away with, and the well emptied down to the effluent pipe at its bottom, the result is the conservation of the iron and of a very large amount of free carbonic acid gas in the water, with the delivery at the now permanently open taps in the Pump-room of an opalescent highly effervescent chalybeate, which, when received in the drinking-glass, gradually clears up like champagne. Like the most used and the most successful iron waters, it contains the essentially small quantity of iron (in its case, ¼ grain of the carbonate to the 10 ounces); and as the supply of the water is abundant (900 gallons per day), there will be sufficient for carbonated chalybeate baths, in addition to the present sulphur-bath establishment of the Spa. Besides, therefore, Strathpeffer possessing sulphur-springs, among the strongest of their class in Europe, as well as recently established facilities for the inhalation of sulphuretted hydrogen-vapour, it will now have the advantage of a first-class acidulous chalybeate, to enhance its attractions as a Highland health-resort.

CLINICAL MEMORANDA.

DIAGNOSTIC VALUE OF SPUTUM.

THE very interesting contribution by Dr. Gabbett in the JOURNAL of April 26th, on the diagnostic value of sputum stained by Koch's method, reminds me of a case which occurred here in March last, occurring in a patient whom I saw in consultation with my partner, Mr. Gowing. The patient was a young lady, aged 16, for whom Mr. Gowing had been consulted first on February 19th, for what was said to be a slight cough. He informed me that he considered the case to be suspiciously phthisical, although there was not sufficient evidence to justify at first a positive diagnosis. I saw her and examined her carefully, and, with the exception of a limited dulness over the upper border of the left scapula, and some crepitation in the same region, and a temperature varying from 100° to 102°, which had persisted for some days, material evidence of phthisis was conspicuous by its absence. The girl was plump, and apparently well nourished, with good appetite until within a day or two of my visit; bowels and catamenia regular. She slept well and coughed very little; and had had then no expectoration. In view of the temperature and dulness, I concurred in the diagnosis, and suggested an examination of any sputum that could be obtained. As soon as some could be procured, I prepared and stained it according to Dr. Heneage Gibbes' method, when swarms of bacilli were at once apparent. Thereupon, a most unfavourable prognosis was given, and the patient was removed to her home on the first suitable day. She died of acute phthisis on April 21st. After her removal, the right lung was very quickly invaded.

In mentioning this case, I do not, for obvious reasons, wish to draw any positive conclusions; such can only be justified by a far larger amount of material than anyone can encounter in private practice. Nevertheless, we assumed for once the truth of the dictum "No bacilli (*i.e.*, the bacilli which alone stain by the method we employed) without phthisis;" and gave a positive and, as proved, a reliable prognosis, under circumstances which would not, without microscopic examination, have justified such a decided and unfavourable opinion.

T. Sanctuary, M.D., Salisbury.

SURGICAL MEMORANDA.

INJECTION OF SOLUTION OF CORROSIVE SUBLIMATE IN PROSTATIC RETENTION OF URINE.

Having lately read certain articles, part of which were taken up in discussing the merits of certain agents as injections for the bladder, I have been induced to relate shortly my experience in a case of retention of urine from enlarged prostate, with catarrh of the bladder, treated with corrosive sublimate injections, of strength 1 in 1,000. The patient, J. A., aged 71, married, was under treatment for a similar attack fourteen months ago, when suprapubic tapping was required for relief; and the length of time during which the attack lasted was six weeks. The present attack was ushered in with rigors, frequent desire to micturate, restlessness, constipation, and various other feverish symptoms. By the rectum was found a prostate about the size of an orange, tender and hot to the touch. With a large prostatic silver catheter, easy access was gained to the bladder this time, and eight or nine ounces of decomposing smoky urine were drawn off. By means of the same catheter I injected three ounces of the sublimate-solution warm, and allowed it to remain in the viscus three or four minutes. The same night the patient passed comfortably, with a much modified desire to micturate. The urine drawn off next morning was clearer, but yet cloudy, with less odour. During the day he could retain his urine up to the evening, when the urine drawn off was almost free from decomposition, and only cloudy towards the end of the stream. The night following this was one of comfort. A bungling use of the catheter next morning set up anew the former symptoms to a certain extent, with smoky urine and frequent desire to micturate. In twenty-four hours this had subsided, with a return of the urine to its normal (as far as this patient is concerned) state. The patient has now been one week under supervision, with injections night and morning, and can retain, with ease, his urine during the interval of catheterism. The propulsive power of the bladder is now considerable, and handling of the prostate is borne with much less distress. Defæcation causes little or no pain. The urine is in quantity 50 ounces, of specific gravity 1012, acid and albuminous. Its colour is amber. This is but one case; nor can the local use of the sublimate carry much weight until more extensive trial has been given it; but after having in similar cases used other ingredients for such injections, my experience does not furnish such a favourable result as I have had here; and in a patient who, from a consideration of his age alone, and also the state of his urine, requires the most cautious handling.

Wm. Robertson, M.B., Kimberley.

THERAPEUTIC MEMORANDA.

MENTHOL.

In the Journal of April 19th, page 775, there appears a notice of an article by M. Genois in the *Polyclinic* on the subject of this drug, of which I am pleased to observe it said that it will, in a short time, "take its place as a regular remedial agent."

Having been the first (I was then a student) to point out the antiseptic and "antineuralgic" properties of menthol, and some misconceptions having arisen regarding this, I wish to reassert my right to the credit of its introduction, and to state in a few words what my experience of it has been in the course of the past five years. The first results of my investigations were stated in a note in the *Lancet* of June 7th, 1879, wherein I was named Archibald "Duncan"—an error which was corrected the following week. Later, in the beginning of 1880, I laid my views at some length before the Edinburgh Medico-Chirurgical Society, and the paper was published in the *Edinburgh Medical Journal* for August of that year. The affections there alluded to as being successfully dealt with are facial neuralgia, sciatica, and toothache; and the antiseptic properties of the drug are experimentally demonstrated.

I think it was Mr. Malcolm Morris who, some time ago, spoke of its antiseptic use in ringworm of the scalp. I applied a solution in rectified spirit to the tinea tonsurans of a young friend in the winter of 1879, and cure resulted; and recently I have met with success in this disease from a pomade of menthol, iodoform, and vaseline.

In facial neuralgia, in some forms of sciatica, in neuralgic headache (clavus), and in toothache—the most recent instance being in a severe case of a lady recovering from acute alcoholism—I have repeatedly found relief follow within a few minutes of its application. The cones or sticks are useful for external application. Frequently, however, I use now the following formula; menthol 30 grains; spirit of rosemary and rectified spirit, each two drachms; or compound spirit of lavender may be used instead of the rosemary for application to the cavity of a carious tooth. I have only taken it once internally myself, but never have prescribed it. This has, however, been done.

I am glad to find that more and more human suffering is being relieved by a wider appreciation of a very useful drug.

Archibald D. Macdonald, M.B.Edin.,
26, Spellow Lane, Liverpool.

OBSTETRIC MEMORANDA.

EARLY ESCAPE OF THE LIQUOR AMNII.

Mrs. H., aged 38, very obese, and mother of six children, when eight months gone with her seventh, sent for me on March 10th. When I arrived, she informed me her waters had come away, and she felt she would be delivered in a few minutes. On placing her on the bed in the usual position, I made an examination. I found the os firmly contracted, but waters coming away freely. When interrogated, she could not attribute it to any cause, it first appearing when she was in the act of walking across the floor. The waters continued to flow for six days without producing much inconvenience beyond the wetting of her clothes. On the seventh day, their discharge had apparently stopped, and she came downstairs. She then complained of a heavy weight, bearing-down pain in the lower part of the abdomen, and a continuous desire to micturate. Whilst she kept in the sitting position, she felt tolerably comfortable. On the 15th, true labour-pains began, and, in a little over an hour and a half, she was delivered of a well nourished male child. Thirty-five minutes later a dead male child was expelled, and, in twenty minutes more, the placenta came away, which was somewhat larger than that for a single child. Its appearance was healthy, its vessels were well charged with blood. There were two cords, one, about the centre, represented the supply to the living child, and one, close to the edge, for the dead child. When these two cords were slit up from their origin, they ran together for about an inch, but kept distinctly separate; they then began to diverge, the cord for the dead child taking a sharp curve, and then followed a straight course. In the dead child, as far as could be seen, there was nothing abnormal. From the escape of the liquor amnii until delivery, there were repeatedly uterine contractions. According to the facts of this case, it would appear that uterine contractions are not so fatal to the full grown fœtus as is generally supposed. The death of one of the children might be well accounted for by the sharp curve in the cord whilst in the placental substance, a greater amount of force being required to effect the circulation of pure blood to the child. Both the mother and the other child are doing well.

T. A. Mitchell, L.R.C.S.I., Rushey Green House, Catford, S.E.

Fashion in Beverages.—The Revenue returns for the first quarter of this year would seem to show that the public are beginning to give heed to the many warnings that have been uttered against the too indiscriminate use of tea. It is no new thing to find that the quantity of spirits has decreased 160,000 gallons, but the decrease of 80,000 lbs. in the quantity of tea is a striking fact; and it is further most interesting to note that the quantity of cocoa has been increased by 650,000 lbs. There has been a large decrease in the quantity of coffee imported, which may probably be in great part explained by the increased facilities for adulteration.

Bequests and Donations.—Mrs. Mary Tait, of York Terrace, Regent's Park, has bequeathed, under the name of "The Carlyle Bequest," £2,000 each to the Royal Infirmary Lunatic Asylum and Lock Hospital, the Northern Hospital, the Southern Hospital, the North, South, and East Dispensaries, and the Infirmary for Children, all at Liverpool, the Hospital for Consumption and Diseases of the Chest, St. George's Hospital, St. Mary's Hospital, and the Birkenhead Hospital, and £1,000 each to the Bootle Borough Hospital, the Hospital for Consumption and Diseases of the Chest, Liverpool, and the Eye and Ear Infirmary, Liverpool; and the general "residue" of her estate in augmentation of the above and her other charitable bequests, in proportion to the respective amounts thereof.—Mr. Robert Hanbury, of the firm of Truman, Hanbury, Buxton and Co., has bequeathed £100 to the Hertford Infirmary.—Captain Ernest Thurlow of the 60th Rifles, has given £105 to the Norfolk and Norwich Hospital.—Mrs. Dowling has given £50 to the Charing Cross Hospital.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

VICTORIA HOSPITAL FOR CHILDREN, CHELSEA.

MULTIPLE FRACTURE AND DISLOCATION OF FRONTAL BONE: MENINGITIS OF BASE EXTENDING BACKWARDS ALONG WHOLE EXTENT OF SPINAL CORD: NECROPSY.

(Under the care of Mr. Cowell.)

[Reported by Beaven Rake, M.D.Lond., Registrar.]

H. D., aged 9, was admitted about 8 P.M. on October 26th, 1883, having been run over by a hansom cab. He vomited three times after admission, bringing up about two pints of blood. He appeared to recognise his father. The temperature on admission was 97.2°; at 10 P.M., 96.6°; and at 12 P.M., 102.6°.

October 27th. There was great ecchymosis beneath the conjunctiva on both sides, more marked on the left. The corneæ were clear; the pupils were equal, of normal size, and reacted to light. He protruded the tongue straight when told to do so; it was covered with brownish fur. The right angle of the mouth was slightly drawn down. Occasionally, there was some spasm of the extremities, most often in the right upper limb, but no paralysis. There was subcutaneous extravasation in both temporal regions, and emphysema in the right. Crepitus and a depression could be felt over the bridge of the nose; the nasal bones were loose. No bleeding or discharge from the ears was noticed. The plantar reflex was slightly more marked on the left side. Ankle-clonus and knee-reflex were absent. The chest-sounds were normal in front, the only part that could be examined. He said a few words when spoken to. Fæces and urine were passed involuntarily. He swallowed well; and, at 1 P.M., vomited a quantity of dark grumous material, but no fresh blood.

October 28th. He was a little more drowsy, and did not recognise his brother. There was no paralysis, and he took nourishment well. The face was flushed, and there was a slight discharge from the eyes.

October 29th. He lay on his back, breathing quietly. The pupils were equal. He put out his tongue when told; it was covered with creamy fur. Urine was passed involuntarily; the bowels had not been open for two days. A sharp ridge could be felt extending upwards and outwards from the centre of the left orbital ridge. A separation of the two halves of the frontal bone could also be felt along the line of the suture. The ecchymosis of the eyelids, and also in the left temporal region, had lessened, so that a considerable depression could be felt there. He used his hands freely to pull the bedclothes together.

October 30th. He was very drowsy, and only spoke when spoken to, but had described the accident. He had control over the bladder, swallowed well, and had had no sickness. The upper eyelids were still swollen, but the discoloration was disappearing. The temperature in the evening was 101.6.°

October 31st. He lay on his back, with the legs crossed. The conjunctival reflex was very much diminished, and there was hardly any reflex action on pinching various parts of the body. He rubbed his face with his hand. The tongue was furred. There was no priapism. Œdema extended behind the left ear as far as the occiput.

November 1st. He did not recognise a voice, and said little more than monosyllables. The eyelids were still very swollen, and the œdema was assuming a bright yellow. The plantar and cremasteric reflexes were good. The pupils were equal, and reacted to light. He swallowed well. The bowels were open, and the abdomen was sunken.

November 2nd. He could open both eyes about a quarter of an inch, and counted fingers correctly. The œdema of the left temple was less; it was slightly excoriated. He held the prepuce in order to avoid passing urine involuntarily.

November 3rd. The œdema of the lids and temples had much diminished. The tongue was raw, but only slightly furred. He was very drowsy.

November 5th. He was still very drowsy, and put out his tongue very slowly; the lips and tongue were covered with sordes. The plantar and cremasteric reflexes were still good, and he wiped his eyes. He could give his name. The line of fracture of the left half of the frontal, and the depression in the left temporal region, were now very evident, in consequence of diminished œdema. A small piece of the right orbital ridge could also be felt loose. The bowels had been opened on the previous day, after a dose of calomel, and the motion had not been involuntary. On November 6th, his condition was about the same; but, on November 7th, there was fresh œdema, and a red blush below the left eye.

On November 8th, there was œdema and redness of both left eyelids and of the right upper lid. The latter was also more tense; the lids were glued together by purulent discharge, and there was slight chemosis, more marked on the left side. The tongue was red, with some creamy fur, and trembled when protruded. The plantar reflexes were markedly less; the cremasteric was good. There was slight ankle-clonus, but the knee-reflex was doubtful, on account of muscular contraction. The œdema of the right temple was increasing. The urine was acid; specific gravity 1024°; it contained no albumen, and there was a deposit of urates. The pulse was 104, and jerking; and the temperature was high (see Table).

November 9th. The pulse beat in a regular series of triplets, the three individual beats gradually diminishing in force. The tension of the upper lids was less, and the chemosis had disappeared. Purulent material was discharged from the right nostril. The tongue was tremulous, and covered with sordes. During the night, there were spasmodic movements, which affected more the right side. Ankle-clonus was very marked on both sides. The red blush between the eyes was extending.

November 10th. The right eye was opened, and the œdema of the lids had disappeared on that side, but persisted on the left side. Both corneæ were intact. The tongue was covered with creamy fur. He lay on the left side, with the legs drawn up. Pulsation in the right carotid was very marked, and the first sound of the heart was loud and tympanitic. He frequently picked at his lips. The left hand trembled when he raised it, and there was slight trembling of the head, and twitchings about the angles of the mouth. Convulsive movements of the limbs were again present last night. The ankle-clonus was more marked on both sides. The red blush on the forehead was less. An incision was made over the right temporal region, and some caseous pus escaped. He hardly seemed to feel any pain.

November 11th. He was quite unconscious, and would not answer nor protrude his tongue. Alternate flushing and pallor of the face, at intervals of about a quarter of an hour, were noticed, as well as "Cheyne-Stokes respiration." The flexors of the hands were contracted, and there was rigidity of the right lower extremity. Both the urine and fæces were passed involuntarily; and there was complete loss of reflexes (the abdominal and cremasteric disappeared before the plantar). The pupils were dilated, the eyeballs rather protruded, and there was burning heat of the skin. His condition continued about the same till he died at 3 A.M. on November 12th. From 11.30 P.M. till 2.30 A.M., the temperature was between 107° and 108°. At 2.30 A.M., it reached 108°, and at 3 A.M., just before he died, it was 108.2°. After death, the temperature was: at 3.30, 107.2°; at 4, 105.8°.; at 5, 101°; at 6, 98.6; at 7, 95.8.

	Temperature.		Pulse	Respiration		Temperature.		Pulse	Respiration
	Morning	Evening				Morning	Evening		
Oct. 27	102.0	100.4	120	36	Nov. 4	98.2	99.0	..	..
,, 28	100.2	100.0	..	..	,, 5	99.2	100.0	..	..
,, 29	100.4	100.6	96	28	,, 6	99.0	99.4	96	20
,, 30	101.0	101.6	108	28	,, 7	99.4	100.6	108	24
,, 31	101.4	100.4	112	24	,, 8	103.8	103.4	104	36
Nov. 1	100.0	99.4	96	24	,, 9	104.4	104.6	92	32
,, 2	99.8	99.8	112	28	,, 10	104.6	104.6	100	24
,, 3	100.0	99.0	104	24	,, 11	104.6	105.0	..	..

The necropsy was made eighty hours after death. Only the head and spinal canal were examined. The frontal bone was loose, having separated at the fronto-sphenoidal suture. On the left side was a fracture extending from the suture through the roof of the orbit, and upwards and outwards for about three inches through the vertical portion of the frontal bone; the bone was depressed on the outer side of this line of fracture. On the right side a smaller fracture started at the orbital ridge, and extended for about an inch. Over these fractures the membranes were adherent, and there was a small amount of coagulated blood and lymph. The nasal and ethmoid bones were fractured. There was a quantity of pus in both orbits, but the eyeballs were intact. The base of the brain was covered with a sero-purulent exudation causing adhesions, so that the brain was considerably lacerated on removal. The exudation extended back through the foramen magnum, involving the left half of the pons much more than the right, and being found in great quantity around the medulla. The whole extent of the cord was pretty uniformly coated with the same yellow exudation. A thick false membrane could be peeled off the choroid plexuses. The hemispheres, corpus striatum, thalamus, pons, medulla, cerebellum, and spinal cord appeared healthy on section.

REMARKS BY DR. BEAVEN RAKE.—The gradual development of the ankle-clonus is very interesting. This symptom, as far as at present understood, appears to be associated with sclerosis of the lateral columns (Dr. Horrocks, *Guy's Hospital Reports*, vol. xxvi; but, of course, in this case, such a change could not be thought of in so short a time, and hence it would appear to be due to direct extension of the inflammation to the surface of the lateral columns. It is noteworthy that the recurrent œdema and redness about the left eye, and high temperature, began on November 7th, and the ankle-clonus and spasmodic movements on November 8th, just fourteen days after the accident. This is exactly the time given by Mr. Holmes for the commencement of suppuration (*Surgery, its Principles and Practice*, p. 131). When once suppuration had begun, it was not long in leading to a fatal result, though we cannot gauge accurately its backward progress. The fact of ankle-clonus being decidedly marked on November 9th, points, however, to implication of the lateral columns at that date. The high temperature, flushing of face, Cheyne-Stokes respiration, and triplet pulse, all point to affection of the centres in the pons and medulla oblongata. The facial twitchings on November 10th would also point to the portio dura or its nucleus, whereas the spasms of the limbs and final loss of reflexes might of course mean implication of any part of the motor tract. As a matter of fact, however, the right side of the pons was found at the necropsy to be more covered than the left by the exudation, thus agreeing with the right-sided spasms. It is known that spinal meningitis may be even more insidious in it progress than in this case. Thus Dr. Wilks says (*Diseases of the Nervous System*, p. 204): "I have several times quite unexpectedly found the surface of the cord covered with lymph, where the inflammation has extended from the cranium." In this case the difficulty lay in deciding in what part or parts of the motor-tract to localise the cause of the spasm. As already stated, the diagnosis of implication of the pons was correct, but there was a good deal more.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 13TH, 1884.

GEORGE JOHNSON, M.D., F.R.S., President, in the Chair.

Pelvic and Parietal Tumour of the Abdomen: Removal by Operation, and Recovery. By FREDERICK J. GANT, F.R.C.S. The author related the particulars of a case in which a tumour grew from the ilium, and lay between the muscles of the abdominal wall. The question of diagnosis had reference principally to the distinctive characters of a tumour thus located, and an ovarian or a uterine tumour; but the distinction between a pelvic fibroma, as in this case, and other forms of pelvic tumour was also noticed, and the circumstances which indicated its parietal relations were considered. The operation was then described, including the precise relations of the tumour, and the antiseptic dressing employed. The tumour proved to be a fibroma. Some references to similar cases were appended, but they were rare in the records of surgery. All such cases agreed in two particulars; they had occurred only in women who had borne children; and, whether fibrous or apparently recurrent fibroid, the growth had not returned after removal by operation. The increasing and sometimes rapid growth of these pelvic and parietal tumours demanded surgical interference; but the liability to open the peritoneum, accidentally or unavoidably, and the almost certain result of a ventral hernia through the weakened abdominal wall, might so far deter the surgeon from having recourse to operation, were it not for the assurance that he had to deal with a tumour which had hitherto proved to be non-recurrent. Mr. BARWELL, after congratulating Mr. Gant on the very successful issue of his case, remarked that most new growths from the deep structures of the pelvis proved malignant, and that the case which Mr. Gant had described seemed likely to be a welcome exception. He had examined the woman (who was in attendance in an adjoining room), and could thoroughly corroborate what Mr. Gant had said, viz., that there was no tendency to a ventral hernia. That was due very probably to the position of the tumour outside the fascia of the transversalis muscle, which supported the subjacent parts.—Mr. GANT said he had only been able to find similar cases among some noticed by Nélaton, and in one of Mr. Holmes's. The non-malignant character of the tumours in those cases had led him to attempt the operation; if the tumour had been malignant, it would have been impossible to have removed it all. Its exact relation to the peritoneum was impossible to diagnose before operation, and he had been quite prepared to find himself obliged to open the peritoneum; and, in such a case, he should have considered a free opening the best. The fortunate avoidance of any tendency to ventral hernia he attributed to the sewing together of the muscular aponeuroses after the operation.

An Easy and Safe Method of Sounding for Impacted Gall-Stones. By GEORGE HARLEY, M.D., F.R.S. The method recommended in this paper for indubitably ascertaining the existence of impacted biliary calculi was illustrated by the narration of a case in which it was successfully performed, in the following manner. The patient, a lady, aged 36, who had been under the care of Dr. Diver for many weeks, suffering from the signs and symptoms of obstructed bile-duct, was placed under an anæsthetic. Dr. George Harley inserted a six-inch long French exploring trocar midway between the umbilicus and margin of the liver, an inch and an half to the right of the median line. Its point being pushed upwards and backwards in the direction of the common bile-duct, no hard substance was met with; on the stilette being withdrawn ascitic fluid came away, and the trocar could be moved freely in all directions. The instrument was withdrawn and reinserted an inch higher up, and about two inches to the right of the umbilicus. On pushing it in the same direction as before, to the depth of six inches, its point struck into a hard substance, presumed to be a biliary calculus. It was endeavoured to estimate the size of the stone by pressing the end of the cannula firmly against the hard substance, and moving the point of the instrument all round it. The inference was that the stone was of the size of a hazel-nut. The punctures were closed by means of sticking plaster, and the abdomen bandaged. The signs of obstruction now began rapidly to disappear, and it was supposed that the operation had caused the stone to change its position in the duct, and had thus enabled it to pass along into the duodenum. Convalescence at once set in, but was of short duration, for an attack of enteritis followed by peritonitis supervened, and the patient succumbed twenty-seven days after the sounding, and twenty-four after the stone was supposed to have left the duct. At the necropsy the thirteen calculi shown to the Society were found in the gall-bladder, the longest being an inch in length, the next of the size of a hazel-nut, the remainder all much smaller. The paper ended with the following conclusions. 1. The presence of an impacted gall-stone may be readily as well as safely ascertained in the way described. 2. Not only the position, but even the size and shape of a biliary calculus, may be instrumentally ascertained. 3. A knowledge of these facts may possibly induce surgeons to undertake the earlier artificial removal of dangerously impacted gall-stones than heretofore; an operation which Dr. George Harley thought ought to be, under ordinary circumstances, no more hazardous to the life of the patient than the operation of lithotomy, believing, as he did, that the fatality that had hitherto attended the operation had been almost entirely due to the fact of its having been delayed until the exhaustion of the patient precluded the possibility of recovery.—Mr. F. B. JESSETT drew attention to four cases in which Mr. Lawson Tait had successfully cut out impacted gall-stones, and stitched the gall-bladder to the abdominal walls; remarking, nevertheless, that the whole question of how to deal with them was very difficult. For himself, he could not but consider that the method of exploration by a sharp instrument was too liable to seriously wound the viscera to be at all advisable. He had operated often upon the dead body by introducing one finger through an abdominal incision and drawing forward the gall-bladder into view; and, if any cause for opening the gall-bladder were by this means ascertained, he should prefer to stitch it to the abdominal parietes before proceeding further. By such a method, operation was comparatively easy, and the escape of bits into the peritoneum could be avoided. Mr. GANT could not accept Dr. Harley's analogy of the opening of the gall-bladder and the urinary bladder for calculi; for, in the latter case, there need be no extravasation of the secretion into the peritoneum. That was a very important point: and, though Dr. Harley had told them that bile might be tolerated with impunity in the peritoneum of dogs and rabbits, he thought nearly every surgeon must have seen cases of peritonitis following a ruptured gall-bladder and extravasation of bile in human subjects. It might be possible to empty the gall-bladder by a syringe, but he could feel no confidence in such a method. He had tried also to gather from Dr. Harley's paper how he would diagnose an impacted gall-stone.—Sir WILLIAM MAC CORMAC said he failed to understand how, after an example ending in peritonitis and death, Dr. Harley could call his method "safe," and how, after the first sounding had been completely unsuccessful, he could call it "easy." If any operation were to be attempted, he should, for his part, much prefer that of abdominal section.—Dr. DYCE DUCKWORTH pointed out that the discussion had tended to diverge into a consideration of cholecystotomy, which he was sure could not have been Dr. Harley's intention. He would confine himself to Dr. Harley's subject, viz., a "method of sounding for impacted gall-stones," and presuppose that the presence of an impacted gall-stone had been ascertained. As for the operation which Dr. Harley had performed, he could neither consent to do it, nor to witness it. And it was very necessary to have some clear idea of the method before the *tactus eruditus* of a surgeon could be applied to it. Was it to end by certain titillations six inches deep in the abdomen? or, if not, what more was to be done? Much previous *post mortem* experience of impacted gall-stones did not lead to the conclusion that that would be a likely method of displacing them successfully. They were generally found very firmly set, and they could only be moved by very forcible use of the finger and thumb, or perhaps not even then. The issue of Dr. Harley's case was certainly not encouraging. For himself, if he were allowed an opinion on a surgical point—for Dr. Harley's method was pure surgery—he should throw in his lot with those who advocated abdominal section.—Dr. B. O'CONNOR hoped that Dr. Harley might be able to give some more information on various points which seemed to him of importance, and which had not been touched upon. Was the liver enlarged? Was the gall-bladder enlarged? Was there spasmodic pain after the sounding, as is usual in passage of gall-stones? He was sorry that no satisfactory evidence of the presence of the gall-stone in the evacuations could be given, and he should be interested to know the contents of the peritoneal cavity after death.—Mr. BARWELL remarked that it was difficult to induce patients to submit to any cutting operation, such as even a very limited abdominal section, without being able to promise them something; and he did not feel sure he could do so in cases of obstructed gall-duct. He regretted that Dr. Harley had brought forward his case, as he was not able to tell them more exactly what he did with his trocar. He thought it might be possible to sound the gall-bladder for calculi; and, if they were found, to go further by abdominal section, using the puncturing instrument as a guide. He should be sorry if Dr. Harley's unfortunate surgical practice should discredit all attempts to relieve these cases of biliary obstruction.—Dr. C. J. HARE asked how it was ascertained that the stone, touched by this diagnostic instrument of the future (which Dr. Harley had shown), was impacted and not free in the gall-bladder. He should have imagined the point difficult to determine. Moreover, the existence of the thirteen other gall-stones found in the gall-bladder after death was not ascertained at all.—Dr. GEORGE HARLEY, in reply, remarked that the whole subject of gall-stones was very little known; and it was remarkable how few people realised in what a large number of cases they led to death. He could recommend the perusal of a little pamphlet of M. Jules Cyr on that point. The symptoms of impacted gall-stones were, in some points, similar to those which might follow from tumour of the head of the pancreas, ulceration of the duodenum, cancer of the liver, and other causes, so that a determination by sounding was very desirable. He thought it absurd to say that his method was more dangerous than abdominal section. It had been shown over and over again that fine needles could be run into the brain, the heart, the intestines, without ensuing harm, and he had no doubt it was the same with the gall-bladder. There could be no doubt that this sounding loosened and set free the impacted stone, for during the ten days following the operation the urine lost its bilious colour, the motions became darker, and the jaundice lessened. The subsequent symptoms of enteritis and peritonitis, he thought, were very probably due to the passage of the stone along the intestine, and possibly its lodgment in the appendix vermiformis, or near the ileo-cæcal valve.—The PRESIDENT asked in what condition he had found these parts on necropsy.—Dr. GEORGE HARLEY, in reply, explained that the necropsy had been conducted by persons who, being engaged in surgery and midwifery, had not ventured on any abdominal or intestinal examination beyond cutting out the gall-bladder, which they had forwarded to him, so that he was not able to give any further information on the condition of the abdomen and viscera. He did not deny that there was danger in such sounding as he had described, but there was danger in everything. He did not wish to advocate taking out gall-stones that were loose in the gall-bladder, as such stones, he explained, caused no symptoms. He had been asked how impaction of a stone was recognised, and he had to reply that it was by acute pain and vomiting.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 9TH, 1884.

Sir ANDREW CLARK, Bart., M.D., LL.D., F.R.C.P., President, in the Chair.

Intestinal Obstruction (by a Diverticulum) Successfully Treated by Operation.—Mr. CLUTTON described this case. A boy, aged 10, was brought to Mr. Clutton's notice by Dr. Purvis of Greenwich. He had had several other attacks of a similar kind, but lasting only two or three days, and always terminating with a copious evacuation from the bowels after enemata. On this occasion, he was suddenly taken ill at the seaside with vomiting, and great pain in the abdomen. He was brought home to Greenwich on the third day, and, as treatment by enemata and opium proved of no avail, Mr. Clutton was asked by Dr. Purvis, on the fourth day of the illness, if operation would be likely to afford him relief. He was at once transferred to St. Thomas's Home, where, after the administration of an anæsthetic, the abdomen was opened. A collapsed portion of bowel was soon found, and, on bringing it to the surface, a tight ring-like cord could be felt and seen to be the cause of strangulation. This band was clamped by two pairs of forceps and divided; each end was then ligatured with catgut, and the forceps removed. The bowel was found, after the division of the constricting band, to have been set free from strangulation. It was not thought desirable to make more than a cursory examination for the origin of the band causing the obstruction, as the boy was much collapsed before the operation commenced. The two catgut ligatures formed the means of recognising the original position of the now divided band. One of these ligatures was situated at the extreme point of a diverticulum two inches in length, and the other was placed upon the wall of the same loop of intestine, at a distance of about six inches. A portion of bowel, about three inches in length, between these two points of attachment, was the part strangulated, and was of an extremely dark colour, with a deep sulcus at each side. The boy made an uninterrupted recovery, and left the hospital on September 12th. The explanation of the condition found in the abdomen seemed to Mr. Clutton to be as follows. The vitelline duct had been obliterated at the umbilicus, and set free from the abdominal wall; but, remaining patent toward the ileum, the lower end had become a pouch-like diverticulum from the intestine. This diverticulum, terminating in a pointed extremity or cord—part also of the vitelline duct which had been obliterated—had remained floating about among the intestines till it became attached to the bowel in contact with it. The gut between the two points of attachment had slipped beneath the cord which united them, and, being unable to extricate itself, had become strangulated.—Dr. COUPLAND said that no instance of recovery had occurred in any of the several cases of this nature he had seen operated on. It was probably owing to the prompt interference that Mr. Clutton's success was due. The form of strangulation met with in this case seemed that most commonly encountered, and on the *post mortem* table he had seen more than one example of unrelieved Meckel's diverticulum. In one instance especially, a man who during life complained of pain in the intestinal region, and whose umbilicus was depressed, the diverticulum had never become free, and was attached at the umbilicus. Possibly the umbilical symptoms might aid diagnosis. In another case, under Dr. Greenhalgh, a boy, who was not operated on, there was found, *post mortem*, a strangulated coil of ileum passing through a mesenteric diverticulum the dimensions of which much exceeded the natural limits of such openings.—Mr. TREVES congratulated Mr. Clutton on the good success he had obtained, and mentioned that, of the twenty-nine cases collected by Perrot, but seven recovered, while of the four patients in whom the strangulation was associated with Meckel's diverticulum, but one survived operation. As a result of his own researches, Mr. Treves had found that eight recoveries occurred out of thirty cases; and he inclined to think that even this mortality would be much increased did surgeons report all unsuccessful cases. As a rule, death took place on the fourth day, and it was necessary to remember that, as well as the strangulated intestine, the strangulating agent shared in damage done to nervous and vascular structures. The diverticulum was attached to the free end of the mesentery in twenty-five out of fifty cases collected by himself. It would have added to the value of Mr. Clutton's paper had this contained more of detail in relation to the clinical history of the case. A history of previous attacks was of no particular importance, since but twelve per cent. afforded any such history. Except in cases of complete strangulation, pain would be intermittent in character, not continuous, as in those where strangulation was complete. The seat of pain would not afford a clue as to the site of strangulation, because, in most instances, it occurred at the umbilicus, or in deeper situations difficult of localisation by the patient. Mr. Clutton's was the first case in this country in which recovery had taken place. Dr. MAHOMED was convinced that paroxysmal pain might be present also in complete obstruction of the intestine, his own experience of nine or ten cases having led him to this conclusion. Was it possible that in cases of extreme distension the obstruction would be found always in the large intestine? This had an important relation in connection with relief by colotomy. Dr. Mahomed concluded by urging reasons why the site selected for operation in all cases should be on the outer side of the right rectus muscle.—Mr. TREVES explained that he did not wish to convey that there was an absence of pain in incomplete cases of strangulation. His reference was to its continuous nature in the one class, and paroxysmal in the other.—Mr. SYMONDS thought more information was to be desired respecting the spot selected for incision. In this connection, his opinion was not in agreement with that of Dr. Mahomed. As a rule, the most prominent part should be chosen, as in the two cases he had most recently seen, both, however, fatal. He approved of the middle line as the situation for the incision, because it afforded access to all parts likely to be involved. The excessive mortality among these cases in hospital-practice might be explained on the ground that they were subjected to a deferred treatment until their nature had been fully understood.—Mr. H. MORRIS quoted a case in which operation by the median incision had been performed immediately after admission of the patient—a subject of old double hernia—into hospital. On the left side, a knuckle of small intestine had been displaced by the hernial sac, the neck of which was divided, and the strangulation thereby relieved. Diarrhœa came on, and death occurred thirty-six hours after. After death, the large intestine was found obstructed, the cæcum largely distended, and perforated. Right-sided colotomy might be employed at first in doubtful cases, and subsequently the median operation, if necessary. In one case of this nature in which this course was followed, it was found after death that the small intestine was the seat of obstruction, although relief was afforded by evacuation of a distended large intestine as a result of the colotomy.—Mr. CLUTTON said his patient experienced exacerbations followed by chills, during one of which operation was performed, it being deemed unwise to wait for recurrence of urgent symptoms. As a proof that some fatal cases survived the fourth day, he mentioned one in which death occurred on the ninth day; it was not operated on. On every ground, Mr. Clutton approved the selection of the mid-line as the place of operation.

The Treatment of Fractured Patella.—Mr. CHRISTOPHER HEATH exhibited three patients, in fulfilment of his promise at an earlier meeting of the Society, to produce patients treated immediately after the accident by plaster-of-Paris. He gave Mr. Hutchinson the credit of first combatting the old teaching that separation of the fragments depended on muscular action, and agreed with him in believing that it was the fluid in the joint which was the difficulty. Mr. Heath got rid of the fluid by aspiration, and had never seen any bad result from the practice, but preferred, when possible, to prevent effusion by at once enclosing the joint in plaster-of-Paris. This required renewal in about six weeks, and at the end of three months a leathern splint was applied to the knee and thigh, so as to control the action of the extensor when the patient was walking. Two women and a man were shown, in all of whom the plaster was applied within an hour of the accident, with very good results as to short fibrous union.—Mr. MORRIS exhibited two cases treated since Sir Joseph Lister's address, both men. In one the fracture was high, the upper third of the patella being broken off and dragged up in the thigh, but being subsequently "kneaded" down by the patient himself. This showed, Mr. Morris thought, that retraction by the muscle did occur. Displacement, however, was influenced by laceration of the fibrous investing capsule, as had been proved by experiments on the cadaver. Tearing of the capsule might easily attend the application of such muscular force as sufficed to bring about the fracture. The treatment adopted was primary extension by a special form of splint and strapping, and subsequently an apparatus was worn which permitted of gradually increasing flexion of the joint, the patients meanwhile pursuing their usual callings.—Dr. ALTHAUS inquired if the patellar tendon-reflex existed in these cases; and on the suggestion of the President he proceeded to examine the patient exhibited, with the view of determining the point. At a later period of the meeting, Dr. Althaus reported that the reflex phenomenon was present in equal degree on both sides.—Mr. PARKER observed that effusion would prevent approximation of the fragments, whatever agency might originally separate them. Aspiration of the joint had been formerly denounced at the Surgical Society of Paris.—Mr. SYMONDS asked what quantity of fluid Mr. Heath had withdrawn by aspiration. Were two drachms a satisfactory amount to remove? He had recently treated these cases of fractured patella by immediate compression with Martin's rubber bandage, and followed this by application of plaster-of-Paris. In three weeks' time, the patients were about, with good and useful limbs.—Mr. TURNER contended that the results obtained by Sir Joseph Lister were better even than that exhibited by Mr. Morris. He had found bony union to have taken place in a patella treated by wiring. The specimen was in King's College Museum. He was unaware of a similar result obtained by any other mode of treatment. With an intact capsule, patients might possess the power of moving the leg usefully, notwithstanding fracture of the patella, with no union, but separation of the fragments. The success of the cases shown could not be properly estimated so early after recovery. In one case treated by Malgaigne's hooks, three inches of space separated the fragments after six months. Wiring was subsequently resorted to, with the best possible result.—Mr. GODLEE remarked that advocates of treatment by wiring contended that this mode of treatment alone yielded perfect results, notwithstanding other methods also gave good results. On the other hand, opponents of the practice denied that any justification for opening the joint could be found.—Mr. HEATH expressed himself unconvinced by Mr. Morris's case in proof of the fallacy of Mr. Hutchinson's theory that it was not muscular force which kept the fragments apart. The fact that Mr. Morris's patient was able to bring down the retracted fragment showed how brief the muscular spasm was. He (Mr. Heath) had removed as much as 3 or 4 drachms of fluid by aspiration. Now, however, this practice was rarely resorted to, all patients being treated by immediate application of plaster-of-Paris on admission. He promised to keep his cases in view, for the purpose of testing the permanency of cure.

Hydrocephalus, probably of old standing, followed by Insanity and Death.—Dr. WHIPHAM brought this case before the Society. The patient, aged 39, was one of twins, his brother having died in infancy of effusion on the brain. In early years, the subject of the communication had been uncertain in temper, and had occasionally squinted. After 12 years of age, he enjoyed remarkably good health; his intellectual capacity was above the average; he was well informed on most subjects, and fond of exercise. He had suffered in early manhood from a soft sore, but never had syphilis. On October 7th, 1882, he consulted Dr. Whipham, because "he had been mad." It then appeared from inquiries through his wife and friends, that he had been for eighteen months, from time to time, strange in manner and irritable; and that he often sat by himself at his club muttering; that in conversation he often lost the thread of his discourse; that he had written inexplicable letters to a relative and to a friend. Of late, he had become very drowsy, and even went to sleep occasionally while at meals. His memory had been failing for eight months or so. He had been a regular, but not excessive, smoker. At the date above mentioned, his expression of face was vacant, and, unless questioned, he stared vacantly at space. His answers were inaccurate, and he had one or two delusions. His gait was steady, his grasp feeble, his special senses natural. He became more and more captious and irritable, and his usual reading was distasteful. Once or twice he was obstinate and somewhat violent in the streets. By Dr. Blandford's advice, he went to Folkestone for change, but derived no marked benefit. On one occasion, he started for a walk by himself in the middle of the day, and returned, without being able to give any account of himself, at nearly midnight. On his return, he became morose and sullen, rather than violent, and was eventually sent to Munster House. Soon after his arrival, it was noticed one day that the left pupil was larger than the right, and he had a fit during dinner. Ten days later, he was again violent and noisy, wet and dirty. Two days before his death, when walking with the support of an attendant, he suddenly fell headlong to the ground, sustaining no injury save an abrasion of the nose. The patient died early on December 28th, 1882, and on the morning of the previous day had been excited, and very noisy. Subsequently he became unconscious for some hours. At 7.[illegible] P.M. he [illegible], and was more rational than at any time since October 10th. This condition lasted for a quarter of an hour, when he again became drowsy, and at last unconscious till his death. At the necropsy, the ventricles of the brain were so distended as to contain about [illegible] of a pint of fluid. The dura mater was adherent [illegible]. No other lesion of the brain was found. Dr. Blandford, who was [illegible] in consultation, rather inclined to the diagnosis of general paralysis, basing his opinion on the elation, [illegible] to concentrate his attention. Dr. Savage, in the [illegible] Society, July 1880, recorded a case in which great distension of the ventricles was found in a female [illegible] months before her death. In this case, however, there was the complication of granular kidneys. In the case before the Society, all the symptoms of general paralysis were not present, and [illegible] was not made. Elation certainly existed at one time, but only lasted or a day or two, and the gait, save on one or two occasions after the attack, was remarkably steady. In the absence of any evidence of other disease, the symptoms must be referred to the hydrocephalus, presumably of long standing.—Dr. **Blandford** said he had seen the case on two occasions. Though anomalous in many respects, yet it seemed to promise to become one of general paralysis. He had anticipated maniacal outbreaks after admission into the asylum, but, instead of this, the patient fell into a comatose condition, and could be roused out of it only with difficulty. It was curious that an interval of sensibility preceded death. The case was a difficult one in many ways, and deeply interesting.—Dr. **Althaus** asked if there was any history of syphilis, to which Dr. **Whipham** replied in the negative; as also to a question from Mr. Parker respecting the existence of notes on the condition of the choroids.

Specimens.—Living specimens of rupture of the brachial plexus (two cases) were exhibited by Mr. Symonds and Mr. Davies-Colley, and two cases of fractured patella (recovery) by Mr. H. Morris.

HARVEIAN SOCIETY OF LONDON.

Thursday, May 1st, 1884.

Thomas Buzzard, M.D., in the Chair.

Clinical Evening.

The late Mr. O. A. Field.—Before the business for the evening was proceeded with, a vote of condolence with the President, Mr. George P. Field, and with Mrs. Field, senior, was proposed by Mr. Malcolm Morris, and passed unanimously. Mr. O. A. Field, whose decease had taken place since the previous meeting, was at that time the Society's oldest member.

Case of Epileptiform Convulsions, with unusually slow Pulse.—Mr. **St. George Mivart** read the notes of this case. The patient was a retired policeman, aged 61, without any history of syphilis or acute rheumatism. There was no albumen or sugar in the urine. The first convulsive seizure took place six years ago; since then, the patient had had five other fits, which all occurred in the stooping posture. The last fit occurred eight weeks ago; on the following day, the patient was found to have a pulse of only 20 per minute; the pulse was firm and full between the beats. There was a slight systolic mitral together with an aortic systolic murmur; no hypertrophy apparently existed, since the impulse was diminished. Mr. Mivart considered the case to be one of fatty heart, with atheromatous deposit about the valves. He thought also there might be some slight aortic stenosis, giving rise to anæmia of the brain. He referred to the connection between attacks of syncope and those of minor epilepsy, and quoted the opinion of Dr. Russell-Reynolds to that effect. In this case, he considered the seizures to be essentially of a syncopal character, modified by the epileptic tendency of the patient. Though much improved in other ways, the patient, at the end of eleven weeks, still presented a pulse as low as 24 per minute.—Dr. **Hare** related at some length a closely analogous case of unusually slow pulse, associated with *petit mal*. The pulse had gradually dropped to the unparalleled rate of 13½ per minute, at which it was maintained for a considerable period, ultimately rising to 30 and 40. The patient, a nobleman aged 67, had, up to the time of his illness, displayed the greatest activity, both mental and physical. Death occurred in a fit. No abnormality of the heart-sounds had been observed during life; and, at the *post mortem* examination, the valves were found competent, and the heart but slightly enlarged, and not markedly fatty. With the exception of slight enlargement of the kidneys, the other organs were practically normal.

Hypertrophy of Bone due to Congenital Syphilis.—Mr. **St. G. Mivart** exhibited a lad, aged 18, in whom the left tibia was greatly thickened, and curved anteriorly, as a result of congenital syphilis.—Mr. **Pepper** gave the full details of a similar case (aged 22), where both tibiæ were affected, even to a greater extent. The diagnosis of congenital syphilis was based upon the recent occurrence in the patient of interstitial keratitis, and upon the condition of the mother, who was at the same time under treatment for periosteal nodes—Mr. Juler raised the question of treatment, which was also discussed by Mr. **Pepper** and Dr. **Buzzard**.

Struma, Syphilis, and Cancer in the same Patient.—This case was narrated by Mr. Pepper. The patient, a woman, aged 36, had suffered from scrofulous keratitis thirty years ago, presented scars on both her legs, and had suffered amputation of the breast in September last. A short time ago, she had an epileptiform seizure, and, within a few days, paralysis of the right facial auditory and sixth nerve. The author was of opinion that the intracranial affection was probably syphilitic, although mercury had rapidly produced salivation.—Dr. **Buzzard**, in commenting on the case, suggested that the cerebral symptoms might very probably have been due to the deposition of cancer within the skull.

Pathological specimens were exhibited by Dr. A. Q. **Silcock**.

1. *Dilated Bronchi in a Child.*—The dilatation was uniform, tubular, and occurred at the right base, which was adherent to the pleura, and much condensed. Dr. Silcock had made the interesting observation that the right bronchus was pressed upon by some enlarged lymphatic glands, and he attributed to this cause the occurrence of the dilatation.—Dr. **Ewart** agreed with the view which had been given of the pathology of this case. He was familiar with a form of bronchitis which was due to pressure upon some part of the bronchial tree, and he alluded to specimens from the *post mortem* room of the Brompton Hospital, in which he had demonstrated the condition in question. He also called attention to the influence of the pleural adhesions and of the chronic interstitial pneumonia due to retained secretion, which favoured the bronchial dilatation.—Dr. **Hare** inquired whether there was in this case any evidence of chronic pneumonia, consolidation being often due, as in cases of whooping-cough, to pulmonary collapse.

2. *Cancer of Uterus with Unusual Diffusion of Secondary Growths.*—The clinical history of the patient from whom the specimen was derived excited considerable interest and discussion. When admitted, her symptoms and her aspect bore such a resemblance to those of diabetic patients, that diabetes was at first sight diagnosed by two independent observers. No sugar, however, could be detected in the urine.

3. *Subperitoneal Sarcoma.*—The chief interest of this specimen lay in the widespread growth and in the great rapidity of the extension of the disease. The case was at one stage supposed to be one of ovarian disease, and ovariotomy was for a time contemplated.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

Wednesday, April 23rd, 1884.

J. Urquhart, M.D., in the Chair.

Hemiplegia in Youth.—Dr. **Mackenzie Booth** showed two cases of hemiplegia in adolescents. The first of these was a lad aged 18, who had a markedly strumous family history, and some of whose sisters were distinctly deficient mentally. When about seven years old, he had a spasmodic affection, implicating the left arm and leg, but he could not give a very distinct account of the nature of this attack. In December last, he became a patient at the Dispensary, complaining of pain in the left side below and three inches external to the nipple, accompanied by meteorism, anorexia, and flatulent dyspepsia. He was very thin and anæmic, and had been losing flesh for some time. He was still working as a combmaker, and living on very poor diet. About this time paralysis of the muscles of the left side of the face with ptosis of the left eyelid gradually came on, and weakness and spasmodic twitchings of the left arm and leg. The sight of the left eye became impaired, and the hearing on the left side much less than on the right. The tuning-fork placed on the vertex was weakly heard on that side. Ophthalmoscopic examination gave no information. The cervical lymphatics and those behind the angle of the jaw were enlarged, but not painful. He was ordered a mixture containing iodide of potassium, quinine, and cod-liver oil; and under this treatment the spasmodic affection gradually declined, and the movements of the face became slowly stronger. After a month he had improved considerably in health, and had regained his strength to some extent, but was still weak and anæmic. When he appeared on the evening of the meeting (April 23rd), there was scarcely any trace of paralysis remaining. The second case was that of a girl aged 16, a jute-worker. All her relatives were dead, except her mother, a mill-worker, whose age was 48. She had suffered from weakness, giddiness, and breathlessness on exertion, for some months; and on February 9th of this year she took to her bed. On the 16th, she suddenly lost the use of the left side, and was then visited at her home. When seen, she was conscious; the face, lips, tongue, gums, and skin generally, were very pale. She had suffered from severe frontal headache for a week previously, and this had been accompanied by giddiness, breathlessness, and palpitation on exertion; she had never, however, been unconscious. The cardiac impulse was very faint, and the first sound of the heart was weak over the apex. Cardiac dulness was normal in extent. A soft blowing systolic murmur was heard over the pulmonary valve-area, and a loud venous hum over the cervical veins. The appetite was quite gone, a little milk and water only being taken occasionally. The bowels were very costive, opening only once in four or five days. The power of moving the left arm was quite lost, and that of the left leg almost equally so. The face was drawn to the right side, and the left eye was more open than the right. There was no ptosis. She could move the palsied side of the face to some extent by making an effort. Sensation was much blunted over all the left side of the body and face. The pupils were equal, and responded equally to light. She was ordered to have the bowels opened by senna-mixture, and aloes and iron were administered afterwards. Under this treatment the paralysis began to wear off in a few days, so that, five days after the seizure, she was able with difficulty to raise the arm to the head. Dr. Booth proceeded to make some remarks on the second of the two cases. He was inclined to attribute the cause to thrombosis and serous effusion into the right lateral ventricle. The weakened heart and sluggish circulation of severe anæmia would be in keeping with the state of venous fulness predisposing to venous thrombosis. The absence of any evidence of cardiac mischief (apart from anæmia) and the left-sided palsy were against the supposition of embolism of the middle cerebral artery. The fact that consciousness remained intact on the occurrence of hemiplegia, the age of the patient, the presumable absence of diseased vessels, and the low arterial pressure of anæmia, were opposed to the diagnosis of cerebral hæmorrhage. The sequel of the case was also in keeping with the idea of thrombosis and serous effusion. At the date on which the girl appeared at the meeting, she had still evidences of muscular paresis in the dragging of the left leg during walking, the weak grasp of the left hand, and the slight fulness of the left side of the face.

Dropsy in Pregnancy.—Dr. HALL reported a case of pregnancy complicated by dropsy. In October 1881, he was called to see the patient, a young woman of 26, who was pregnant three months, and who complained of pain in walking caused by swelling of the labia. The left labium especially was greatly enlarged, tense, hard, and red. There was also follicular inflammation internally. At the entrance of this left side there was a small fissure-like ulcer. The treatment employed was nitrate of silver to the ulcer, astringents for the inflammation, and rest. Four or five days after this the swelling remained, and gradually became worse till, in a few more days, there was every appearance of abscess. One day, shortly after this, pain was found gone from the left side to the right, which was now as large as the other side had been at first, while the left was about the same size as at the last visit. The follicular inflammation was as before. As the ulcer gave rise to a suspicion of specific disease, she was ordered iodide of potassium, which, after some time, produced its own eruption. The other treatment was continued, the astringents being injected by Higginson's syringe. The diet was of the most nourishing kind. From this time she began to recover, and the ulcer disappeared, but the swelling did not go entirely from the labia, and the inflammation of the vulva, etc., continued slightly. At this time the patient seemed very large, much more so than the pregnancy would account for. She was lost sight of for some time after this, but at the eighth month she was again seen, when the legs and thighs were distended with fluid, like anasarca, but there was no swelling of the hands, and very little of the face; there was no albumen. The swelling in the legs increased, and the hands and face became much swollen. The swelling of the abdomen was larger than in ordinary pregnancy. One morning, early in March, labour came on at 4 A.M., and, on seeing the patient at 9 A.M., a foot was found in the vagina. The patient was very much swollen about the face, and was very weak, and was delivered at once under chloroform. The child was full grown, but very feeble, and hardly breathed. When delivering this child, the swollen labia rendered force necessary in order to extract, the pains also being very inefficient. After attempting to restore the child for some time without effect, and the cord being pulseless, it was tied, and the child removed dead. Another child was then found with head presenting, and this was delivered with forceps, on which a great gush of fluid took place, running through to the floor. This second child lived. After delivery, the mother seemed well, and she continued fairly well for a few days; the swelling diminished in the legs, but continued in the face and arms, being greatest on the side on which she lay. On the fifth day after delivery the temperature was 103.8° Fahr., the pulse quick and feeble. Lochia kept up well. The swelling then diminished, first in the legs and then in the face, but continued slightly for weeks after, so as to threaten to become chronic. Fifteen days after birth the child suffered from swelling of the scrotum and penis, and difficulty in passing water. Three weeks after delivery the mother suffered from pain in the labia, and on each there was found a flat unhealthy ulcer, covered with diphtheritic membrane. These ulcers were not exactly opposite each other. Under stimulants this condition gradually improved, and she was fairly well at the time she was last seen, *i.e.*, on the day of the report. There was, however, still a slight amount of swelling. He thought it doubtful whether the case was or was not specific.—Dr. MACKENZIE BOOTH mentioned that he had seen a case of twins somewhat similar as to swelling in the legs. There was, however, no swelling in the face, and no symptoms of syphilis, or signs of heart-disease.—Dr. MCGREGOR mentioned a case of general dropsy in pregnancy, where compound jalap-powder, to the extent of a drachm daily, and diuretics, effected a cure. He remarked that occasionally pulsation in the cord arose from the child and not from the mother.—Dr. SIMPSON thought the fact of ulcer coming and going was interesting. He expressed a suspicion that the dropsy might have been set up by some diphtheritic mischief.

OPHTHALMOLOGICAL SOCIETY OF GREAT BRITAIN.

THURSDAY, MAY 8TH, 1884.

JONATHAN HUTCHINSON, F.R.C.S., F.R.S., President, in the Chair.

Additional Meeting.—The PRESIDENT announced that a meeting would be held on Thursday, July 3rd, at 4 P.M.

Choroiditis.—Mr. NETTLESHIP showed an ophthalmoscopic drawing of a case of central choroiditis (Tay's disease). The patient was a woman prematurely presbyopic, with extensive symmetrical guttate choroiditis, without any diminution in vision. He also showed a second drawing of a peculiar appearance seen after neuritis. A number of straight parallel dark lines were to be seen, probably due to folding of the choroid, and, perhaps, produced by œdema of the choroid occurring at the same time as the neuritis.—Dr. STEPHEN MACKENZIE had recently seen two cases of papillitis from cerebral tumour, in which a white streak running from the yellow spot subsequently appeared.

Ossification of Choroid.—Mr. ADAMS FROST showed a specimen of ossification of the choroid, which had followed on an injury inflicted thirty years earlier. The eye had been the subject of several attacks of sympathetic irritation.

Nævus of the Choroid.—Mr. JENNINGS MILLES showed a case of nævus of the choroid; the patient was a boy aged 15. He presented a congenital subcutaneous nævus on the right of the face; it varied in size. When he was six years old, his mother noticed that he was blind. When he was first brought to the hospital recently, it was found that the retina was completely detached, and close against the lens. The eye was excised, owing to symptoms of irritation. The nævus occupied the outer and posterior portions of the globe, and consisted of a simple angioma, in parts cavernous.—Dr. STEPHEN MACKENZIE referred to a case which Dr. Allen Sturge had shown, some years ago, at the Clinical Society; the patient had a large portwine-mark on the face, tortuous retinal vessels, and suffered from epileptic attacks; Dr. Sturge suggested that the epilepsy was dependent on a similar nævoid condition of the vessels. It was in this connection that these intraocular nævoid conditions were of interest.—Dr. BRAILEY thought the point of interest in the case was that the detachment of the retina was accompanied by the formation of a new layer on the surface of the choroid; a fibroid layer in that situation always preceded the formation of a bony patch.—Mr. NETTLESHIP said that, in Dr. Sturge's case, the condition differed markedly from this case, as the eye on the affected side was quite different from the opposite; it was myopic, and the choroid was darker.—In reply to the PRESIDENT, Mr. JENNINGS MILLES said that there was no nævoid condition of the orbit or of the conjunctiva; and Mr. NETTLESHIP made the same statement with regard to his case.

Acute Spasm of Accommodation.—Dr. C. E. FITZGERALD reported two cases of sudden accession of apparent myopia, which relaxed on instillation of atropine, but in the first case returned on the discontinuance of the drug. Spasm of accommodation, to a greater or less extent, was, he considered, always present in young persons who were hypermetropic or myopic; but this acute spasm was, in his opinion, very rare. Donders stated that he had never seen a clear case of it; but he quoted three cases, two of them recorded by von Grafe, and one by Liebreich. In 1879, a case had been published in the [illegible], by Professor Rava. These were the only ones with which Dr. Fitzgerald was acquainted, and the only work he knew which dealt fully with the matter was Professor Nagel's monograph on [illegible], published in 1866.—Mr. ADAMS FROST asked whether, in the first case, the occupation was likely to have [illegible], and also the age of the patient.—Dr. FITZGERALD replied that the patient was a bank-clerk, aged 23.

Nervous Disease with Ocular Symptoms and Alleged Monocular Diplopia.—Dr. JAMES ANDERSON read [illegible], for Mr. Marcus Gunn and himself, of a case of [illegible] with ocular symptoms, including alleged monocular diplopia. The patient, a painter, aged 34, came to the Moorfields Eye Hospital [illegible], complaining of seeing several images of [illegible], especially when he looked to his left. He had convergent strabismus from partial paralysis of the left external rectus, with the usual homonymous diplopia arising therefrom; but, in addition, he asserted that with the right eye shut he still saw things double to the left of him. Except the paralysis of the left external rectus, there was no abnormality in the muscular or refractive apparatus of either eye. The two images seen with the left eye were quite distinct, the right clear, the left dim, as were the images in the binocular diplopia, but nearer together than these. By the use of a prism, it was sought to separate the images given by the two eyes, and so to ascertain if he saw three images with the two eyes, but he never did so. The patient, a fairly intelligent man, answered with the manner of perfect *bona fides*, and, so far as could be discovered, had no interest whatever in deceiving. In addition to the above ocular symptoms, there was also atrophy of the left quadriceps extensor cruris, with loss of the left knee-jerk, the right being prompt and vigorous; also slight atrophy of the right scapular muscles and right thenar eminence, symptoms present in 1882, when he was under treatment in the London Hospital. When he applied at Moorfields, there was also very great loss of sensation, both common and special, in all areas supplied by the left trigeminus, as well as atrophy of the muscles supplied by its motor branch. There was no atrophy of the interosseous muscles of either hand, and none of the usual symptoms of lead-poisoning. The multiformity of the lesions, the affection of the trigeminus, and an obscure history of venereal disease, justified diagnosis of syphilitic nervous disease, and under iodide of potassium the paralysis of the abducens gradually disappeared. With this also disappeared the diplopia, both binocular and uniocular. The patient had recently, since giving up treatment, had several "fits" of doubtful character, in which he lost consciousness. After referring to the three cases already recorded in the Society's *Transactions* for 1882 (pp. 201, *et seq.*), and to the subjective and therefore difficult nature of the symptom, Dr. Anderson, considering that there were too few cases for generalisation, simply emphasised, first, the occurrence of paralysis of the abducens nerve with dilated pupil as a concomitant of uniocular diplopia, the two disappearing together in two of the four cases; and second, the presence of coarse cerebral disease in the two cases where there has been a *post mortem* examination, with the occurrence in the other two of symptoms consistent with, although not decisive of, coarse cerebral disease.—Dr. **Brailey** had met recently with a case of paralysis of one external rectus and alleged monocular diplopia; the patient also presented symptoms of locomotor ataxy. He had felt sceptical as to the existence of the diplopia, but he proposed to make further investigation.—Mr. **Nettleship** referred to the case of a young man whom he had seen recently. He was probably suffering from coarse cerebral disease; he complained of diplopia, which appeared to be due to paralysis of the right external rectus, but there was said to be double vision with the right eye alone in the extreme right of the right field of vision. He had observed that the pupil was very commonly dilated in paralyses of the sixth nerve.—Dr. C. E. **Fitzgerald** had seen this condition without paralysis of any ocular muscles. In one case, that of a young lady with marked hypermetropia and asthenopia, marked monocular diplopia came on after reading. Another patient was a young boy, also the subject of hypermetropia; he was always consistent as to the presence of two images. In these cases, as the asthenopia disappeared, so did the diplopia. Dr. Fitzgerald concluded by referring to a third case.—Dr. **Brailey** said that Mr. Snell was preparing a paper on this subject for the Society.—Mr. **Juler** said that he had seen, some time ago, a woman, aged 40, who had slight paralysis of the left external rectus; she had homonymous diplopia, but also diplopia with the left eye alone.

On Tortuosity of Retinal Veins in Association with Hypermetropia.—Dr. **Stephen Mackenzie** showed a drawing and read the notes of a case of great tortuosity of the retinal veins, in the left eye of a patient of Mr. Streatfeild's, who was affected with hypermetropic astigmatism. The condition was practically confined to the one eye, which was the most hypermetropic. He stated that, in the case of the girl he had exhibited last December, there was hypermetropic astigmatism, which was greater on the side where the retinal vessels were most tortuous. He had also a case now under care, a girl suffering from anæmia, whose retinal veins were tortuous, and there was slight hypermetropia. He alluded to other cases recorded, and showed that, in most of the cases, great tortuosity had been associated with hypermetropia; and in some the tortuosity had been greatest in the most hypermetropic eye, yet in others the tortuosity had been equal in the two eyes when the hypermetropia had predominated in one; and similar tortuosity had been present in one patient who was emmetropic. He also alluded to the association of headache with the tortuous retinal vessels in some cases. He thought further facts bearing on the question were needed.—Dr. **Brailey** had had an interesting case of extreme tortuosity of the retinal veins associated with hypermetropia. Division of both internal recti had been performed, and the case was thus complicated. In answer to Dr. Stephen Mackenzie, he said that orbital cellulitis might have come on after the operation, and have produced tortuosity. He did not think that mere section of the internal recti could produce the result.

Extraction of Cataract.—Mr. **Higgens** read a paper summarising the results of his practice, accompanied by a table, in which were recorded the sex and age of the patient; the eye operated on; the form of cataract; the operation performed; the result; and remarks, when necessary. The number of operations was two hundred, and they were performed on one hundred and seventy-five patients; ninety-three males and eighty-two females. One hundred and eighty-one of the cataracts were nuclear; nineteen were cortical. The results of the two hundred operations were: 175 (87.5 per cent.) successful; 9 (4.5 per cent.) partially successful; and 16 (8 per cent.) failures. Extraction by a small flap-section, the incision being situated in the sclero-corneal junction, associated with iridectomy, was advocated. Anæsthetics were almost always employed, twelve operations only having been performed without. Reference was made to a paper printed in the sixth volume of the Royal Medical and Chirurgical Society's *Transactions*, in which the details of one hundred and fifty operations were given.

Hæmorrhage in Yellow Spot Region.—Mr. A. **Stanford Morton** read notes of a case of hæmorrhage in the region of the right macula, occurring in a patient aged 35, under Mr. Tay's care. The hæmorrhage was semicircular, but there were disturbances over a perfectly circular area extending from the optic disc to beyond the macula lutea. The patient's vision when first tested was only J. 20, but on March 31st was J. 1 and $\frac{20}{20}$. There was no history of a blow, or any illness except that the patient was liable to attacks of "rheumatic gout" (probably true gout). The urine and heart were normal. The patient stated that, for the last two years, he had been subject to bleeding from the right nostril once or twice a week, but that this had ceased from the time his sight became defective until two days previously to his vision being found normal, a period of about three months.—The **President** observed that it seemed clear that the patient had suffered from true gout.

Card Specimens.—Mr. **Adams Frost**: Detachment of the retina, with organised blood-clot. Detachment of retina and choroid by blood. Detachment of retina; globe filled with organised blood-clot.—Mr. **Jennings Milles**: microscopic specimens from (1) ciliary staphyloma and irido-cyclitis, (2) fibrous growth in the vitreous body in a case of chronic glaucoma.—Mr. **Lang**: new vessels on a fibrous growth in the vitreous body in a chronic glaucomatous eye.—Mr. **Morton** showed a drawing of this case, and Mr. **Milles** a microscopic specimen of a similar condition.

REVIEWS AND NOTICES.

NINETEENTH ANNUAL REPORT OF THE SANITARY COMMISSION WITH THE GOVERNMENT OF INDIA.

The first section of this report is, as usual, devoted to a summary of the meteorological phenomena of the year, month by month. Section II is the one that is most interesting, giving as it does the health-statistics of the European army of India, recording the lowest death-rate on record. The strength of the army in 1882 was 57,269; the ratio per mille of strength gives the following numbers—admissions, 1,445; daily sick, 65; deaths, 12.07; invaliding, 33; total loss, 45.

Dr. Cunningham records that the mortality from cholera in the Bengal Army in 1882 was only 1.28 per mille, for, although the disease prevailed to a considerable extent among the civil population, the troops, both native and European, suffered less from it than in 1881; the reason given is, that the area over which the disease prevailed was one where few troops are quartered. The total mortality from all causes was 13.17, the lowest death-rate in the Bengal Presidency, with the exception of 1877, when it was at a minimum of 11.64.

The sanitary condition of the troops in Madras was, in 1882, most satisfactory; the total mortality from all causes was only 10.25 per 1,000; the mortality from cholera was very small, amounting to only 0.82. During the last three years the mortality in this Presidency has been under 11 per 1,000.

The strength of the Bombay Army in 1882 was 11,020; the death-rate, 10.37, is noted as the lowest on record. In the year in question, there was an average strength of 929 men quartered in Southern Afghanistan, the death-rate among them was only 9.69.

It is interesting to note the chief diseases causing admission into hospital in each of the three Presidencies which are given in the report. In the Bengal and Bombay Presidencies, malarial fevers gave the largest number of admissions per 1,000 of strength, Madras the fewest. It is a satisfactory fact that this class of fevers has been steadily decreasing in Madras for some years past. Thus, in 1880, it was 450 per 1,000; in 1881 it was 279, in 1882 only 171. Venereal diseases in Madras give a larger number of admissions than malarial fevers, amounting to 288. Dysentery in Madras gave 50 admissions per 1,000 of strength: in Bengal, from this cause, the number was 27; in Bombay, only 14 per 1,000. In Bengal, the admissions from hepatitis were 30, in Madras 36, in Bombay 14 per 1,000. Respiratory diseases in Bengal were 80, in Madras only 47, in Bombay 84 per 1,000.

Enteric fever, in all three Presidencies, was the chief cause of death, and exceeded the average mortality of the ten-year period, 1870-79. In Bengal, the death-rate stands at a maximum of 2.90; in Bombay, it was at a minimum of 1.90; in Madras, the rate was 2.09.

As already said, cholera was remarkably quiescent among the troops all over India. In the whole army, only 98 cases were admitted, being 1.7 per mille of strength, and of these 61 died, a death-rate of 1.07 per mille.

Returning for a moment to enteric fever, there is a gradual increase in the admission-rates from this disease. Whether this is to be accounted for by an actual increase in the number of cases, or to the fact that this fever is better diagnosed than before, we cannot say. Throughout the whole army of India, 357 cases were admitted, equal to 6.2 per 1,000, and of these 146 died, a death-rate of 2.55. The mortality from this disease was greatest in Bengal, and least in Bombay; while in Madras it slightly exceeded that in Bombay. Departmental orders in Madras at one time pretty nearly forbade the appearance of enteric fever in the returns; the then principal medical officer of British troops, disbelieving in the existence of enteric fever in India, made its diagnosis by medical officers under his orders almost penal. It would appear that more enlightened views now obtain on this question. The sanitary commissioner, remarking on the evidence that enteric fever is not a new disease in India, says "there is strong reason to believe that under the name of enteric fever now appear a large proportion of those cases which used formerly to be recorded as remittent and continued fevers; and this view is borne out by a comparison of the relative mortality among fever-cases now-a-days compared with what it used to be formerly."

Our space will not allow us on this occasion to give more extracts from this exhaustive report, which, as usual, is most complete, and reflects great credit on the sanitary commissioner and his able assistants. But as there are still some important points bearing on the health of the army in India, we hope to be able to bring them before our readers. Enough has been shown in this report in proof of the priceless value of sanitation, and to shut the mouths of those who, when the sanitary movement began in India, were given to sneer at the labours of the sanitary department, because, after a century of neglect, the fruits of reform were not reaped before the seed had time to germinate.

ATLAS OF FEMALE PELVIC ANATOMY. By D. BERRY HART, M.D., F.R.C.P.Ed., Lecturer on Midwifery in the School of Medicine, Edinburgh. Edinburgh: W. and A. K. Johnston. 1884.

THERE was once a period in the history of medical education when dissection was looked upon with suspicion, when subjects were hard to procure, and when demonstrators were few and incompetent; then students flocked to distant centres of learning, or saved up their money to purchase the bulky and costly illustrated works of great anatomists. In the British Islands, the student of to-day suffers from an opposite evil, as there is a regular, though not overabundant supply of subjects in our medical schools, and hosts of ambitious young demonstrators ready to teach; but the number of young men studying medicine neutralises the benefits of the Anatomy Act. Hence the familiar spectacle of groups of students studying ready-made dissections or anatomical plates in the museum of their hospital. It would be better if they could all have their "parts" to dissect; but, as this is impossible, the study of preparations is more advisable than the study of illustrations, and the study of illustrations is better than the cramming up of verbal descriptions, or complete idleness.

Notwithstanding its enormous importance as regards the future of the great bulk of medical students, female pelvic anatomy has not yet received from demonstrators and lecturers on anatomy the attention which they bestow liberally on many other parts that are not nearly so often the subject of disease. Scientific obstetrics and abdominal surgery have greatly raised the character of the speciality of diseases of women, and this favourable influence has extended freely to pure pathology, but as yet it has only partially affected anatomy.

A work like Dr. BERRY HART's *Atlas* is eminently adapted for furthering the cause of female pelvic anatomy as an anatomical study, and not as a mere stepping-stone to pathology and practice. In other words, it encourages the student to begin his studies of female anatomy and physiology in the same manner as he begins the study of every other subject pertinent to his profession, that is to say, in the right manner. It is needless to waste words in proving why this manner is the best; when the surgeon has hernia to deal with, it is all the better for him and his patient if he have a fair knowledge of the anatomy of the umbilical or inguinal region, or of Scarpa's triangle, and the groundwork of this knowledge has for long been laid in the dissecting-room and at anatomical lectures, long before the student begins to turn his dissection to surgery. Unfortunately, it is not so as yet with female pelvic anatomy; as a rule, the student hears but little of it till he has commenced attendance at midwifery-lectures. It would be better in future if he would study Dr. Hart's work or any similar publication when working in the dissecting-room, never forgetting to prove the truth of what he sees in its illustrations by careful examination of pelves, and studious dissection of the pelvic region and abdomen in female subjects. Then, when waiting for his "part," he can pass away his time in osteological work of a kind even more profitable than learning the origins and insertions of muscles, nor afterwards, should he be allotted a female abdomen by his demonstrator, will he look upon it as a calamity, as though his future was to be a lithotomist to whom uterine anatomy was worth nothing.

Dr. Hart's *Atlas*, for reasons given above, ought to be found in every hospital-library, in company with Dr. Savage's *Surgery of the Female Pelvic Organs* and Dr. Fancourt Barnes's translation of Martin's *Atlas*.

The special opinions of the author of this work are well known to the profession through the *Manual of Gynæcology*, which he prepared in conjunction with Dr. Barbour, and other works that he has written either alone or with the co-operation of other obstetricians. There must ever be great varieties of opinion among anatomists regarding the relations of the female pelvic organs. To dissect layers of muscles off from bone is not a very difficult task, and the result will be clear and conclusive; but, in the case of the female organs, the natural relations of parts, and the very pressure (a most important point) of the abdominal viscera and other structures on the uterus, bladder, and vagina are all altered after death; and sections through bone and soft parts, simultaneously, include numerous sources of fallacy caused by changes due to preliminary hardening in spirit, or to freezing. These fallacies, it must be said, our author has done his very best to avoid. There are thirty-seven large plates, as well as a considerable number of small woodcuts, and these illustrations include the bony pelvis; the external organs, the vagina, and the alterations in its axis caused by distension of the bladder and rectum, extra-uterine fœtation and the genu-pectoral posture; the uterus; the bladder, urethra, ureters, and rectum; the arterial, venous, lymphatic, and nerve-supply of the pelvic organs; the pelvic peritoneal folds and fascia; the perinæum; the general relations of pelvic structures to each other; the anatomy of pregnancy and parturition, and the microscopical anatomy of the female organs. It is quite impossible for us to review these subjects at length; many of the drawings are original, and these are by far the most satisfactory; but Dr. Hart has only admitted such illustrations from other works as bear the sanction of high authorities, and have been verified by his own labours in the dissecting-room. The illustrations are not artistically of the most even merit, as the coloured arteries and veins want, in most cases, a little toning down; but anatomic accuracy is never sacrificed for artistic effect.

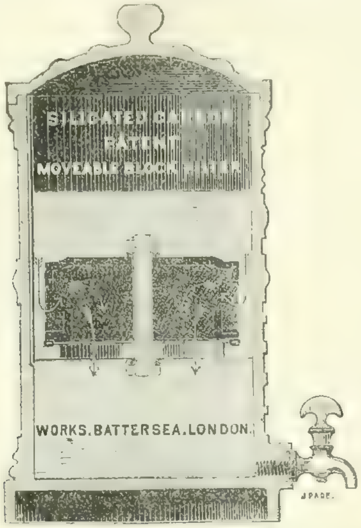
NOTES ON BOOKS.

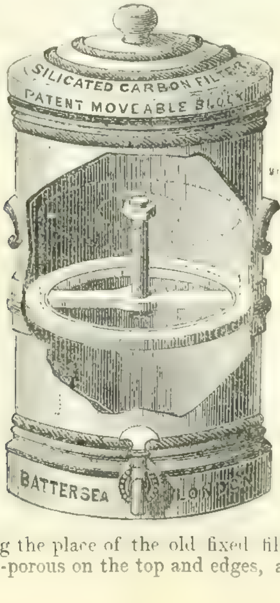
A Treatise on Surgery, its Principles and Practice. By T. HOLMES, M.A.Cantab., Surgeon to St. George's Hospital. With four hundred and eighteen illustrations. Fourth Edition. London: Smith, Elder and Co., 1884.—The deserved popularity of Mr. HOLMES's excellent text-book is proved in a most satisfactory manner by the fact that a fourth edition has appeared within [illegible] years of the publication of the first. In the new issue the author has [illegible] some of the valuable new material introduced into the third edition of the *System of Surgery*, of which he is the [illegible] his own strong [illegible] of the [illegible] wounds which Sir Joseph Lister has [illegible] the germ-theory. In fact, Mr. Holmes distinctly states that the anticipation which he expressed in the preface to the last edition, of being able to express [illegible] new [illegible] logical speculations, with which the name of Koch is now chiefly associated, has not been realised, and the origin and significance of bacteria still furnish abundant matter for controversy. Mr. Holmes's *Treatise* maintains, in its fourth edition, all those merits which have placed it in the first rank of standard British text-books on surgery, and it will prove invaluable to the advanced student for study, and to the practitioner for reference.

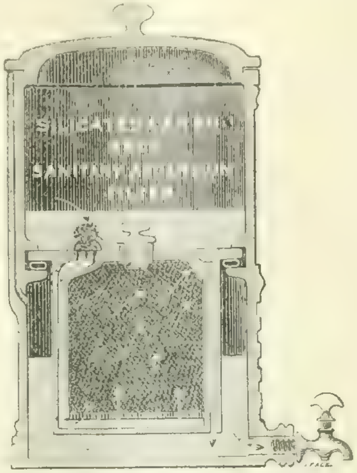
REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

IMPROVED SILICATED CARBON FILTERS.

The improved silicated carbon filters introduced by Mr. Dohlke have much to recommend them. They are constructed on sound scientific principles, and can be renewed or repaired by the user, without returning to the maker. These filters have been largely improved, a patent movable silicated carbon block, which can be instantly removed, leaving the whole of the interior of the filter open for inspection and cleansing, taking the place of the old fixed filtering mediums. This block being non-porous on the top and edges, an upward direction is given to the water, which thus passes through a greater thickness of the silicated carbon. To cleanse the block, it is only necessary to plunge it into boiling water, and well scrub it with a hard brush. We note that these filters of the Silicated Carbon Company have been tested and approved by the late Dr. E. A. Parkes, Dr. Sedgwick Saunders, Mr. G. W. Wigner, and other authorities on this subject.







IMPROVED INHALING APPARATUS.

By J. W. DYAS.

This is an ingenious and cheap contrivance for the ready inhalation of the vapours of hot fluids. It consists of a sort of India-rubber cap which can be applied air-tight to the top of almost any narrow mouthed jug; a glass mouth-piece, fitted into this cap, projects externally, and a narrow glass tube, also fitted into the cap for the admission of air, projects internally and dips into the hot fluid. By sucking at the mouth-piece, the air can be drawn through the warm fluid, and the vapour it gives off thus inhaled. Its cost is two shillings, so that it is cheap as well as simple and portable.

A "NEW FORM OF STETHOSCOPE."

Sir,—Every now and again it occurs that new inventions are brought before the medical profession. In a week or two, the old maxim is enforced that "there is nothing new under the sun"—it is only a rediscovery. Last week, Mr. Smith described a new form of stethoscope, "which would carry the sound direct to the ear, etc." This instrument is very similar to one I made and described in the *Lancet* in 1877. Messrs. Arnold and Sons called on me, and saw the original. The only difference is that the ear-plug of mine is oval in shape, so as to fit the auditory meatus. In practice, it is very useful. It is cheap, portable, and can be adapted to various uses in cases of emergency, as so well described by Mr. Smith.—Yours, etc., Jno. Brown, L.R.C.P.Lond., etc.

Bacup, May 10th, 1884.

At the last meeting of the Royal Botanic Society—Mr. J. P. Gassiot, Vice-President, in the chair—Dr. Cogswell laid upon the table dried specimens of medicinal plants used in Canada and the United States, and made some interesting remarks upon their properties and uses. Professor Bentley said medical science was much indebted to local observers in all countries who gave to the world the results of their personal experience with regard to the reported virtues of natural products.

Metropolitan Free Hospital.—The anniversary festival of this hospital was held recently at the Holborn Restaurant, the Lord Mayor presiding. Since 1875, it has occupied temporary and inadequate premises in Commercial Street, the centre of a densely populated and notoriously poor neighbourhood. A special fund is now being raised for the erection of a new and complete hospital on a site which has been acquired in the Kingsland Road, to build and furnish which the sum of £30,000 will be needed.

Sheffield Medico-Chirurgical Society.—At the annual meeting on April 24th, the following officers for 1884-85 were elected: *President:* Mr. W. A. Garrod. *Treasurer:* Mr. G. S. Taylor (re-elected). *Secretary:* Mr. Simeon Snell (re-elected). *To complete Committee:* Drs. Bartolomé, Law, Keeling, and Banham. *Pathological Committee:* Dr. Dyson, Mr. Pye-Smith, Dr. Martin, Mr. C. Atkin. The annual dinner was held on May 8th, when about thirty sat down.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 17th, 1884.

CREMATION.

THE House of Commons, in rejecting Dr. Cameron's motion, declined to undertake the regulation of cremation, or the provision of safeguards against its possible abuse, but did not condemn a practice which Sir R. Cross, when Home Secretary, and Sir J. Stephen, in his recent charge at Cardiff, had declared to be no breach of any law, provided only no nuisance were created. On the contrary, despite the known personal hostility of the present Home Secretary, the House tacitly admitted its legality; though it was thought that the number of persons who would choose this mode of disposal of their own remains or of those of their friends was as yet so small that, in the present state of parliamentary business, there was no urgent need for legislation on a matter which would certainly provoke opposition. It might be argued with some plausibility that the absence from the statute-books of any express prohibition was to be accounted for by the fact that the perpetration of cremation, except, indeed, in cases of religious contumacy and witchcraft, had never been imagined, and that judicial cremations had always been performed on the living, not on the dead; and, further, that burial and interment has always been looked on as synonymous, historically no less than etymologically, with inhumation, but that the committal of the body to the sea has always been deemed a form of burial, though, as a matter of fact, it is strictly analogous to its exposure to be devoured by wild beasts.

But since these questions have not been finally decided, and one of Gorini's crematoria has been erected at Woking, where the rite may be legally performed without the possibility of offence, we can approach the subject, free from all legal considerations, from the several standpoints of the inconveniences attaching to earth-burial in densely peopled countries like our own; the sentimental objection felt by many with regard to cremation, and the possibility of its being used as a means of preventing the detection of crime. In rural districts, where the population is sparse, and land is cheap, there is little danger or inconvenience likely to accrue from earth-burial, if performed with ordinary care; but the most ardent adherents of the present practice cannot deny that in the crowded cemeteries in the vicinity, or, as they soon become, in the midst, of large cities, the case is different, and the dangers to the health of the living real, albeit sometimes exaggerated. It is true that, as Küchenmeister, an advocate of cremation, admits, the carbonic acid which has proved fatal to persons entering vaults may have been sucked in from the [illegible], and not derived from the corpses, though it is one of the chief products of decomposition; and that Pettenkofer, Fleck, and [illegible], have failed to detect ammonia, hydrocarbons, or compounds of sulphur and phosphorus, in the atmosphere or ground-air of cemeteries, or in the wells in their vicinity, and that the pollution of the latter may be obviated by intercepting drains, judicious selection of sites, and so on; but abundant evidence of a positive character as to the contamination of air and water, and of injury to the health of the surrounding populations, has been adduced by Vicq d'Azyr, [illegible], and [illegible] on the Continent; by Chevers, in India; and by Chadwick, Southwood Smith, and Sutherland in this country, and may be found *ad nauseam* in the fearful, though now almost forgotten, report of the General Board of Health of London in 1850.

The absorbent and oxidising power of different soils differs widely; so widely, indeed, that the best German authorities inform us that while reinterments may be performed without offence in sandy soil in five or six years, and in ten in the chalk and sandy or marly loams, decomposition in the stiffer clays and in water-logged soils may be far from complete after the lapse of twenty to thirty years; and to this class belong the already crowded metropolitan cemeteries of Highgate and Abney Park, to say nothing of others further east and north.

The next side of the question, the sentimental one, cannot be approached better than by quoting the words of the Bishop of Manchester, who, in consecrating a new cemetery, said, "Here is another hundred acres of land withdrawn for ever from the food-producing area of the country, and I feel convinced that before long we shall have to face this problem, how to bury our dead out of our sight, more practically and more seriously than we have hitherto done. In the same sense in which the 'Sabbath was made for man, and not man for the Sabbath,' I hold that the earth was made, not for the dead, but for the living. No intelligent faith can suppose that any Christian doctrine is affected by the manner in which, or the time in which, this mortal body of ours crumbles into dust and sees corruption." In the same speech he admitted that his sentiments were "somewhat revolted by the idea of cremation," but he added wisely, "they are perhaps illogical and unreasonable sentiments." This is different language from that of another right reverend prelate, who denounced cremation as "an impious attempt to destroy a belief in the resurrection of the body."

The truth is, that the processes involved in putrefaction and in cremation are identical in kind, and differ only in degree; they are alike those of oxidation, of slow or rapid combustion. The destiny of all flesh is to be resolved into carbonic acid, ammonium-compounds, and earthy salts, to be assimilated, sooner or later, by plants, and directly or indirectly again to provide food for animals. The order of Nature or the design of Providence, call it which one will, is irresistible. Man cannot prevent its ultimate accomplishment; he can only delay it, and, in the attempt, can achieve no good, but may bring ill results on himself.

Even on the ground of sentiment there is much which would lead us to seek some substitute for earth-burial in urban districts. In the village churchyard the peasant's remains may indeed repose for ages beneath the moss and grass grown mound; but, while in urban cemeteries the rich may rest in the freehold grave, the provision for reinterment after a certain number of years in the unreserved portion implies the deliberate desecration of the tombs of the poor, who are reminded of the inevitable by the rules forbidding the erection of permanent gravestones, while the possible carting away [illegible] of the dead to make room for metropolitan improvements [illegible] more shocking.

Yet, with an almost incredible inconsistency, Mr. Holland, rather than tolerate cremation, would resort to so-called "burial" at sea, though, but for the green veil of water hiding the corpse from view, he might as well give it to be devoured by swine, as the effects on the [illegible] would soon show. Cremation, as performed in Gorini's Woking, or Siemens' crematoria, [illegible] preceded by solemn and impressive [illegible] conducted in the chapel, and [illegible] buried, [illegible] old and new; [illegible] literally following their relative to the grave [illegible] the sense of annihilation or waste [illegible] dried and diffused, are caught up by vegetation [illegible] than the purchase of ground and erection of [illegible] of harm or annoyance to the living [illegible] other sentimental [illegible].

With the migratory habits of modern life, few persons pass their lives near the resting-places of their deceased relatives, but the funeral-urn could be carried, if necessary, even to other lands. The ashes of the mass of the people would rest meanwhile in the columbarium, those of the landed proprietor in the family mausoleum, and those whom duty called away from their former homes might consecrate a mortuary-chamber wherever they might be, and "go to the grave to weep there."

But there is the practical objection, constantly reiterated by the opponents of cremation, that, by precluding the possibility of exhumation, it may be used to conceal the perpetration of crime. This is, at first sight, plausible; but it really reflects on our present usage as regards the registration of deaths. The answer is, that we now permit burials with the most improper negligence. In a larger number of cases than most persons imagine, the causes of death are registered without any medical certificate whatever, on the mere statement of persons who may have been guilty of murder; and even medical certificates are given with culpable negligence. It is very rarely that exhumation is resorted to; and, when it is, it often betrays gross carelessness in the previous certification of an erroneous cause of death. Nor is a posthumous detection of poisoning always so easy as is sometimes alleged. Only mineral poisons, as arsenic, can be detected with certainty after putrefaction has reached an advanced stage; vegetable poisons are no longer discoverable; and, in all, *post mortem* changes are apt to efface the pathological appearances which afford the most valuable clues. The Italians are a very practical people, and, while legalising cremation, have provided a safeguard in demanding, before its performance, positive evidence of the true cause of death by a special form of certificate. If the medical attendant have a shadow of a doubt, recourse must be had to a *post mortem* examination by an expert, and, if deemed advisable, an analysis of the contents of the alimentary canal must be made; and it is an interesting fact that already it has been the means of detecting accidental poisoning in one case, and of preventing the occurrence of poisoning others. A child having died of what appeared to be gastro-intestinal catarrh or enteritis, the medical man gave a certificate of the cause to the best of his belief; but, the parents subsequenly determining to present the body for cremation, he felt it his duty to institute an examination before signing the more stringent form. Copper was found, and traced to some coloured sweetmeats, which were seized at the shop where they had been purchased. Other children, too, had suffered; but the discovery was made before any other fatal case of poisoning had occurred.

NEUROLOGY AS A SPECIALITY.

The recent publication of the *Transactions* of the Ninth Meeting of the American Neurological Association suggests some reflections on the particular department of medicine to which they exclusively refer, as well as on the question which may be asked, whether or not our brethren of the New World are in advance of us in the pursuit of this special branch of our profession. Of late years there has been a tendency in some quarters, by isolating diseases of the nervous system from the general study of pathology, to raise them into a speciality. In this country, however, it is only during comparatively recent times that it has been the custom even to describe this class of disorder in monographs entirely devoted to their consideration, or to treat the sufferers from them in special hospitals; and it is only quite recently that we have possessed a journal dedicated to the same object. As yet, no society or congress has been formed for the purpose of discussing only this subject. In America, however, the modern leaning towards differentiation in practice has been carried into effect by the establishment of the Neurological Association, a series of meetings assumably devoted exclusively to the consideration of the nervous system.

It is an important question to determine whether the disassociating in this way of any particular class of diseases from the general stock, with a view to its independent study, is in reality an advantage gained. It will be admitted that, as general knowledge has advanced and information accumulated, as the various collateral sciences have been recruited and must be mastered to elucidate its principles, the study of medicine has become so vast and so rapidly expansive, as to render it impossible for any single individual to successfully compass all its details. Hence certain arbitrary divisions have been resorted to, which necessity and custom have sanctioned. In former days, religion, philosophy, science, and physic, were all more or less the province of the wise man of the age. The time has long since passed when it was found necessary that each of these should be conducted by its separate professor. At a not distant date was the last of these separated into medicine and surgery, a distinction which even now is not practically recognised by the large bulk of the profession. Each of these again as time went on became subdivided into further special branches; hence the oculist, the aurist, the gynæcologist, the dermatologist, and others, whose technical knowledge or individual manual dexterity constitutes a plea for their isolated position, who are now on that account ranked as legitimate specialists, and whose labours have doubtless, though not without exception, been to the advantage of the community.

It may, however, well be asked, How far is it advisable that such divisions should extend? While it is admitted, in the arts and in commerce, that a workman called upon to perform a variety of operations will never attain the skill and dexterity in any one of them which will be arrived at by him who spends his whole time and energies in a single direction, it is questionable if the practice of medicine can be taken as an analogous case. Here man has to be studied in health and disease as a totality, and the ailments which befall him cannot be looked upon as special entities, but must be considered in all their bearings to the animated being. Unlike, then, the successful artisan or mechanic, the best physician is he who confines himself to no special branch of his profession, but who as far as possible makes himself proficient in all, who studies mankind in all his aspects from a general point of view, and from a broad standpoint contemplates and attempts to alleviate the sufferings of his fellow-creatures. This view of the case, however admirable in theory, is unfortunately not found to be practically realised. The large bulk of our profession are necessarily compelled to adopt this ideal attitude, but such is the multifarious and ever increasing demand on their receptive faculties, that it cannot be expected of any one of them to acquire more than a very general knowledge of the facts accumulated for their acceptance. On the other hand, at least in modern times, those who constitute the leaders in medicine have distinguished themselves through devoting their energies and thoughts to some particular branch of their calling. While, then, in the abstract, we look with distrust upon the principle of specialism, we must acknowledge that, owing to the growth of knowledge, it has to a certain extent become unavoidable, and may be considered admissable in those departments which demand particular technical information or manual dexterity, provided that it be practised in a liberal and far-seeing spirit.

Although time and custom have sanctioned certain specialities, many still remain on the borderland of doubtful propriety, and amongst these is that of the neurologist. If the preceding considerations be sound, it would certainly seem unadvisible to isolate the study of diseases of the nervous system, and constitute a special branch of practice. At the same time the whole subject of neurology is now so vast and daily expanding, involving as it does a knowledge of all the structures and functions of the body, and demanding such a varied and elaborate aquaintance with so many physical sciences for its elucidation, as almost to furnish an excuse for the necessity of making it an independent study. To pursue this department of medicine with success, requires not only an extended general knowledge, but an intimate acquaintance with physiology, histology, and pathology, with special dexterity in the employment of various physical processes, such as the application of the microscope, the ophthalmoscope, electricity, etc. These, to be utilised with advantage for the investigation of nervous diseases, demand all the time and energy of any single individual for their acquisition, and hence has resulted the fact that to obtain perfection in this branch of the profession it is almost essential for the physician to more or less devote his energies to this particular field of action. As a matter of fact, those who have rendered themselves eminent throughout the scientific world in the investigation of nervous diseases, have for the most part mainly, although not necessarily exclusively, limited their studies in that direction. To England this equally applies, although it is to be observed that our most distinguished neurologists have never been specialists properly so called, and, if attached to a special institution, were in addition physicians to a general hospital. Neither in this country has it been thought necessary to found any society to specially promote this department, and so far it has been judged sufficient to incorporate it under the head of general medicine. In New York, however, a Neurological Association has been founded, and it is the publication of the transactions of the annual meeting of that body which has given rise to the present observations. On reviewing the work therein accomplished, it may be stated in general terms that throughout the proceedings there was nothing brought forward to specially attract attention, nor can it be said that anything novel of importance or originality was advanced. At the same time, it is impossible for a body of intelligent and educated observers to discuss any branch of medicine without suggesting points of interest, placing received opinions in a new light, or, by the accumulation of facts, examining and determining the characters of some of the difficult and complex phenomena connected with the nervous system.

THE RELATIONS OF MEDICAL OFFICERS OF HEALTH AND MEDICAL PRACTITIONERS.

THE Public Health Act of 1872, by enforcing the appointment of a medical officer of health for every sanitary district throughout the kingdom, has brought into more prominent position a difficulty which, though it existed before the date referred to, was, on the whole, so little felt by those whom it affected as to be scarcely appreciable. Up to that time, the appointment in question had been practically limited to the larger centres of population; and, though in very few of these centres was the medical officer of health required to give his whole time to the duties of his office, and thereby consequently restricted from private practice, we believe that, as a matter of fact, his time was, in the majority of these cases, so largely taken up by his official work that the possibilities of private practice must have held only a secondary place in his consideration. Whether it be due to this condition of things, or to the fact that the gentlemen so situated were generally men of some position in their profession, and, therefore, in all probability, of experience and discretion, we cannot say; but it may, we think, be asserted with some certainty, that little, if any, friction was found to exist between the medical officer of health in these places and his professional brethren. But if any causes for such friction were found to exist at all, they have been largely accentuated and intensified by the operation of the Act. For, as we have said, it called into being a little army of officials, only a comparatively small number of whom could, by their age, position, and experience, or by the fact of their being expressly debarred from practice, be placed in the same line with the veterans of the service. The majority were young men with no experience of any kind in dealing with the delicate relations into which they were suddenly inducted; and not only engaged in active practice, but, as may be assumed from their being generally in the Poor-law service, struggling to make their way to the upper rounds of the professional ladder from the lower level which pauper-practice indicates.

Considering all these circumstances, it is a subject for satisfactory remark, that though, as our correspondence-columns have from time to time shown, differences have occasionally arisen between medical officers of health and other members of the profession with whom they have in various ways been brought into personal relations, those differences have, on the whole, been less numerous than they might have been. Still, it is useless to ignore the fact that they do occur, and that they necessarily must do so unless both parties be on their guard not to give any cause for misconception on either side, and to overstep the limits of action which courteous consideration for the interests of others, as well as professional obligations, impose. The difficulty of avoiding collisions of this kind is greater, from the unfortunate ambiguity of the Public Health Act and of the orders of the Local Government Board as to what the duties and powers of the medical officer of health really are, especially in regard to cases of infectious sickness. At first sight of the powers with which he is invested by these prescriptions, it might be thought that they are very extensive, and that he is quite a small autocrat in his way. We fear that this is the view of the matter which has commended itself to some few, and, we are glad to say, only a few, medical officers of health, if we may judge from the reports of some proceedings in these matters which have come to our ears. We may refer for an illustration of such cases to a letter from a correspondent which appeared in the JOURNAL some time ago, which discloses, if the statements made in it be accurate, an imperfect sense, to say the least of it, of the duty which the medical officer of health inculpated owes to his fellow-practitioners no less than to the public. It will be seen by a perusal of the correspondence that it involves the question, which has been frequently raised in our columns before, of the right of the medical officer of health, not merely to visit premises where infectious diseases exist, for on this point there can be no doubt, but to inspect the sick person, and to make inquiries of a technical nature, which, if they are to be made at all by him, as they frequently should be, require to be made with very great care, lest they should become the means of exciting any distrust, in the mind of the patient or his friends, about the competency of the diagnosis or treatment of the medical practitioner who may happen to be in attendance.

Now, we are far from wishing to suggest that occasions may not arise in which the medical officer of health may not find himself placed in a very difficult position in this respect. It may be his duty to point out, in the interest of the public, that an attack which has been pronounced non-infectious by the medical attendant is really infectious, or that precautions which the medical attendant has omitted to prescribe must be taken. But it is equally his duty when he does find himself in that position, to act in such a way as to do the least injury possible under the circumstances to his brother practitioner, and, in fact, to say and do as little as he can without at the same time communicating with him, so as, if possible, to obtain his co-operation, or, at the least, his friendly acquiescence. On the other hand, the duty is no less imperative on the medical practitioner of remembering the responsibility which is imposed upon the medical officer of health, of investigating such cases in the public interest; and he will be well advised if he err rather on the side of recognising that responsibility too much than too little, since he will, thereby, lighten what would otherwise rest upon his own shoulders.

But, after making all due allowance for the part which the unavoidable infirmities of human nature must play in creating these difficulties, we believe that they are largely due to the not unnatural dissatisfaction with which the medical attendant of a sick person must view the unsolicited visit of another practitioner, who is, not to mince matters, in many cases competing with him for the patronage of the public. Even the most scrupulous care on the part of the medical officer of health will be often insufficient in such cases to protect himself from misconception. There can be no doubt that [illegible] for this unfortunate state of things, and that is the extension [illegible] the country of the system of appointments of medical officers of health for combined districts, [illegible] any suspicion of unfriendly competition with his local medical brethren. The [illegible] which [illegible] appointments were originally made [illegible] fully [illegible] by the Local Government Board, and if the County Government Bill pass the House of Commons next session, we [illegible] within measurable distance of their general adoption for all parts of the country outside the larger centres of population. But even then, and in all cases, whatever be the exact position of the medical officer of health, he will find abundant scope for the necessity of conducting his proceedings with the greatest consideration for the sensibilities of his medical brethren, if he desire to enlist them in hearty co-operation in his work; and without this, he will find himself greatly handicapped, no matter with what powers the law may invest him.

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THE remains of Professor Gross of Philadelphia have, in accordance with his request, been cremated at the Lemoyne Furnace at Washington, Pennsylvania. His wife's remains were recently cremated there.

A MEETING of the Executive Committee of the General Medical Council was held on Tuesday last. The business transacted was of a routine character.

A MEETING of the Provisional Executive Committee of the Medical Sickness, Annuity, and Life-Assurance Society will be held on Tuesday, May 20th, at four o'clock, at 38, Wimpole Street.

THE Council of the Royal Society have selected fifteen from the sixty-seven candidates for the Fellowship, to be recommended for election at the annual meeting on June 12th. Amongst those who have been selected are Dr. A. Ransome, Professor C. S. Roy, and Professor Morrison Watson.

THE President, Vice-President, and Council of the Pharmaceutical Society have issued cards for a *conversazione*, which will be held, by the permission of the Lords of the Committee of Council on Education, at the South Kensington Museum, on Wednesday, May 21st, at eight o'clock.

AT the inaugural dinner of the Oxford Graduates' Medical Club, on Thursday May 22nd, which will be held at Limmer's Hotel, Dr. Fincham will take the chair. The Secretaries, Dr. Samuel West and Mr. John H. Morgan, will be glad to hear from any gentlemen who have not received the formal notices of the Club.

DR. KOCH.

GERMANY is no less grateful than munificent to her men of science. In the Reichstag, Herr von Bötticher brought forward a Bill for placing the sum of 135,000 marks, or £6,750, at the disposal of the Emperor, in order to reward the members of the German Cholera Commission for their brilliant and important discoveries in Egypt and India. This Bill was passed on Tuesday by acclamation, when Professor Virchow, welcomed this, the first occasion, as he said, on which he had ever been able to give his full support to the Government, and paid a high compliment to the energy, the diligence, the intelligence, and the disregard of danger, which had won for German science such a splendid victory. But, though Dr. Koch had discovered the germ or bacillus of cholera, medical men should not be too sanguine about the future prevention and cure of the disease. Of the sum, 100,000 marks will be assigned to Dr. Koch, the chief of the commission, and the rest divided among his colleagues. A less substantial, though equally honourable, reward has been conferred on Dr. Koch, in the shape of a high decoration—the Crown Order of the second class. Lastly, at a sitting the other day of the Imperial Board of Health, the great nosological explorer, in addition to being officially eulogised for his successful researches, was presented with a life-size bust of the Emperor, by a distinguished German sculptor.

SOUNDING FOR GALL-STONES.

AT the Royal Medical and Chirurgical Society on Tuesday last, some rather brisk discussion followed on a paper by Dr. George Harley describing a "safe and easy method" of sounding for an imp acted gall-stone by a fine six-inch trocar, which had, in the sing le case in which it was used, to be run up to its hilt in two places in the abdomen before impinging on any gall-stone. There was some evidence that the complete biliary obstruction was for a time relieved, but symptoms of enteritis and peritonitis came on after ten days, and the patient died. The case rather lost its interest when it was learnt from Dr. Harley's closing speech that, at the necropsy, no examination of the abdominal contents had been made, beyond the excision of the gall-bladder, which contained thirteen stones, some large, some small. The exact nature of the operation, the parts wounded, the changes for good or evil effected, remained obscure. But it was remarkable how general the agreement was among those who spoke in favour of some form of operation on the gall-bladder by abdominal incision, a method which Mr. Lawson Tait has, among others, practised successfully for impacted calculi; and how confident was the expression of opinion in some quarters that there was here a new field for the triumphs of abdominal surgery.

DR. CREIGHTON.

FOR the newly created Chair of Pathology at Cambridge, Dr. Creighton is a candidate. Of his remarkable abilities, his generous enthusiasm, his persevering zeal, and his original power as a researcher, the principal electors must be fully aware; and the profession at large is too well acquainted with the singular claims of Dr. Creighton to the new post thus created in the University which he has served long and well not to desire to see him reap, in this appointment, the natural fruit of scientific labours of unusual vigour and promise. His Address in Pathology at the last meeting of the British Medical Association was a masterly excursus in one of the most difficult and debateable fields of doctrinal and philosophical pathology. The article on Pathology in the *Encyclopædia Britannica* bears testimony to his valuable power of accurate yet popular exposition of difficult scientific problems.

SEATS FOR FACTORY-WORKERS.

THERE has been of late a considerable popular outcry in favour of the provision of seats for assistants in shops. This movement is a laudable one, with which no fault can be found; but the advocates of the movement have now gone a step further, and propose to limit compulsorily the hours of shop-workers in the same manner as those of factory-people are now limited. A bill has been introduced into the House of Commons, under the title of the Shop-Hours Regulation (Liverpool) Bill, which, did it not bear on its back the highly respectable names of all three members for Liverpool, might provoke some sarcasm. It will undoubtedly send the Vigilance Association into hysterics. The Bill proposes that on and after the first day of October next it shall not be lawful for any premises, *i. e.*, shops and warehouses, to be open on Sundays for any period whatever, nor shall it be lawful for them to be open on any of the first five days of the week beyond the hour of eight o'clock in the evening, or on Sat rdays beyond two o'clock in the afternoon. Section 5 imposes a penalty not exceeding £10 for each offence, and the schedule ex empts the following from the operation of the Act: milk-sel lers; tobacconists' shops where tobacco and smoking-utensils alone are sold; shops licensed for the sale of refreshments; and apothec aries' shops for the sale of drugs only. We shall not be accused of any lack of sympathy with the objects which this Bill propos es to forcibly carry into effect, if we say that it introduces local o ption of a very dangerous and undesirable description. That a majority of people who approve this Bill should be able to d ictate absolutely to their fellows at what hours they shall do the r shopping, is a somewhat risky innovation from the politico-econ mical point of view. Hence we fear that any direct prohibitive l gislation of this sort will fail of its effect. The most practical way of limiting shop-hours of work is to educate and enlighten local opinion upon the hardships and physical discomforts which long hours entail upon the persons employed. Abundant medical evidence has been adduced to prove these points; but any limitation of hours will have, we feel assured, to be made voluntary if it is to succeed at all. What is bad for shop-assistants cannot, of course, fail to be had also for factory workers as well; and it is with the object of strengthening, as far as possible, the hands of those who are agitating for seats in shops and workplaces that we draw attention to some recent remarks of Mr. Redgrave, the Chief Inspector of Factories and Workshops. Mr. Redgrave observes in his last report, that in some factories the hands, when not actually occupied, as "doffers" of spinning-frames, for instance, are permitted to sit until called upon by the overlooker to doff a frame. A great deal of the time of weavers is occupied in watching the work, which can be done as well by a person sitting as standing; but it is rare to see any means provided for the rest of the weavers. On the contrary, the looms are placed so closely together, side by side, front to front, and back to back, that no seat could be placed. It is gratifying to learn, therefore, that an attempt has been made at several places to give the weavers and operatives an opportunity for rest during their hours of work. At Stourport an entire seat has been constructed for 1s. 9d., which can be fitted to any factory or shop. The seats cannot be damaged, and will not wear out. They may be thrown upon the floor without injury, and as the socket into which they fit does not project more than one inch from the surface to which it may be attached, the seat-fixture cannot infringe materially upon the narrow space behind any shop-counter. Similar seats have also been provided to several factories in Kidderminster, and are gratefully appreciated. At any odd moment when the weaver is not engaged at another part of the loom, he or she can sit down, and thus obtain rest for the legs during the lengthened period of daily labour that ten hours of work entail upon the life and limbs of a factory-weaver. The circumstances of a shop-hand and of a weaver doubtless differ in many respects, but in both cases the injury brought about by constant standing is the same; and what is necessary for the one is undoubtedly necessary for the other.

DEBATE ON INDIAN DRUGS.

In the new Section on Pharmacology and Therapeutics of the British Medical Association, there will be a special discussion on "Indian Drugs" at the Belfast meeting in July and August next, in which it is hoped that Sir Joseph Fayrer, Dr. Waring, Mr. Charles Macnamara, Dr. Ewart of Brighton, and other authorities, will take part. The subject of *Abrus precatorius* and "sui-poisoning" will probably receive attention. Gentlemen desirous of reading papers or exhibiting Indian drugs are requested to communicate, with as little delay as possible, with one of the Secretaries to the Section, Dr. Gray, of Castlewellan, or Dr. Murrell, 38, Weymouth Street, London.

EFFECT OF CHANGE FROM ONE ASYLUM TO ANOTHER.

In his able report on the Royal Lunatic Asylum at Montrose, Dr. Howden calls attention to the marked improvement in health that frequently takes place when a lunatic is removed from one asylum to another. Of nineteen male pauper patients, received into the Montrose Asylum during the last two years from other institutions, eleven gained in all 147 lbs., six lost in all 38 lbs., and two remained stationary. Of nineteen female patients of the same class, fourteen gained in all 187 lbs., four lost amongst them 20 lbs., and two remained stationary. Again, three private patients, transferred from other asylums, gained respectively 7, 10, and 41 lbs. The individual losses were in all cases trifling, and resulted from temporary illness, or increased waste entailed by work. The individual gains, on the other hand, were often remarkable. Five men gained from 20 to 41 lbs. each in twelve months, and seven women, in the same period, gained from 15 to 40 lbs. As an instance of remarkably rapid increase in weight, Dr. Howden cites the case of an imbecile, transferred from the lunatic ward of a poorhouse, who, in one month, gained 7 lbs. This increase of weight in lunatics, transferred from one establishment to another, must, Dr. Howden thinks, be due to one of two causes: either to improved diet and more healthy surroundings, or to the mere effect of change of residence. In the case of lunatics transferred from poorhouses, he is inclined to suspect that the first is the most important factor; but, in the case of other lunatics, he cannot doubt that the second cause mentioned is the more influential. If it can be shown, he argues, that in the cases of all lunatics transferred from one asylum to another, we have improvement in bodily, and perhaps also in mental condition, we have at our command a valuable, but hitherto only imperfectly recognised, means of treatment. We are all aware of the benefit some persons derive from a change of air; and there is every reason to believe that the insane derive a similar, or even greater, advantage from it.

RAINFALL AND ENTERIC FEVER.

On more than one occasion Kendal has been the scene of epidemics of enteric fever, and during the earlier part of the present year the borough was visited with an outbreak of an unusually sudden and severe character. Previously to January 19th, the health-officer (Mr. C. E. Paget) was cognisant of six cases of enteric fever which had sprung up in widely different parts of the town and without any apparent cause. But on January 19th he suddenly heard of six more cases, which were all situated within a stone's throw of one another. The number of sufferers then rapidly increased up to the early part of February, and then slowly declined towards the middle of that month. Altogether thirty-eight houses were invaded, and the number of reported cases amounted to fifty-five, all of which, with the exception of five, occurred in the Stricklandgate and Stramongate districts, and in certain cottages. The disease manifested itself in the greatest force on the five days January 14th to 19th, and the 22nd, and 26th, 27th, and 28th. In their early stages the cases appeared to have commenced with sore throats, combined with cough or even catarrh. These were most frequently the first symptoms noticed by the patients' friends. The death-rate was high; excluding the case where death occurred, and which Mr. Paget did not previously know of, there were fifty-four cases with eleven deaths, giving so high a per-centage as 20.3 per cent. Of these fatal cases half appear to have died from hæmorrhage or perforation of the bowels, and the other half from pneumonia. The incubation-period appears in some instances to have been shortened very much more than is usual, several being reduced to four or five days' duration. From a consideration of the barometrical and thermometrical phenomena of the period of the outbreak, Mr. Paget arrives at the conclusion that the epidemic was caused by the concurrence of several meteorological conditions at the same time, acting in concert with certain unwholesome conditions of the affected district, which were peculiar to that district, and which have remained more or less dormant for some considerable time. The chances are very much against any single one of the conditions having of itself caused the outbreak, and the occurrence was due, in all probability, to an intercurrence and concurrence of some possible causes acting at specified times. In reference to the known effects of a heavy rainfall, it is to be observed that on the 10th, 22nd, 26th, and 29th of January the barometer fell suddenly, and the rainfall was either heavy at the time or had been continuous immediately preceding these dates. The barometrical chart appended to the report shows that the greatest length of fall was on the 21st and 22nd, and the lowest was on the [illegible]. The consequences of these occurrences in causing the ground-water to rise, was to effect the expulsion of the air contained in the upper ground-surface. If the sudden removal of atmospheric pressure could cause the rising of the ground-water and the consequent expulsion of ground-air, it would also be likely that if gases were pent up within sewers these would find outlets wherever they could, and this all the more because of the increase in volume which they would acquire upon the reduction of atmospheric pressure. It is likely, moreover, as Mr. Paget observes, that if the proper ventilation of the sewers and drains was insufficient for the demand made upon it, the sewer-gases would discover other means of exit through the weakest part of the sewers or their connections. Of the existence of such [illegible] [illegible] and of defective ventilation, there is abundant evidence, and it may well be that, owing to the strain thrown on the sewers by the large rainfall there was, during nearly the whole month of January, a tendency through this to subject the sewer-gases to great pressure, and to back them up in different directions. Mildness of the temperature, taken with moisture of the atmosphere, is very suitable to the propagation of known germs of disease, and both these concurred during January.

REPORTED CHOLERA ON BOARD-SHIP.

WE are authorised to state that the report that there is cholera on board the ship *Ironcross*, recently arrived from Java, and now lying at Queenstown, is without foundation. There were, the medical officer of quarantine at Queenstown informs us, some fatal cases at Java before the vessel left that port. There were no deaths or sickness on the homeward voyage, with the exception of that of the captain, who suffered from Java fever and rheumatism, but who is now well. The vessel has a clean bill of health, and the Custom-house officers did not deem it necessary to send for the medical officer of quarantine at Queenstown.

NURSING IN THE ROYAL NAVY.

THE Navy Estimates for the financial year make provision for what has been long since a desideratum in the medical department of the Royal Navy—*i.e.*, a new system for nursing the sick, which brings the sick-attendants, ashore and afloat, under one classification, to serve alternately in either position. Strangely enough, until now these have been unconnected, the nursing afloat resting on the basis of voluntary help in time of trouble; and it was surprising to what extent that principle was effective for good. In our naval hospitals, as in all others, the earliest practice was by female hands, which stood good for just one hundred years, till 1854, when, for social and moral reasons, it was advised to substitute male for female hands in all, except partially in the surgical, accident, and operation wards. Now, the attempt will be made to combine, under an experienced ward-master and matron, the superintendence of the nurses, and the actual nursing of serious cases by certificated female attendants co-operating with male attendants, who, originally trained in the wards and distributed at sea, shall return to ward-work while ashore. For this, youths from Greenwich Hospital are to be sent to the training ships, and, if fit, then to Haslar Hospital, "for systematic instruction in elementary anatomy, in bandaging and dressing, including exercises in rendering first aid to the wounded afloat and ashore; also in dispensing, and the art of cookery in the kitchen and the sick-room." Having passed an examination in due course, they will commence with instruction in nursing, and, at eighteen and a half years of age, be drafted for sea-service as sick-berth attendants on 1s. 4d. a day, who, by proving their capabilities, may look forward, after about fifteen years' of mixed service, to be ward-masters of hospitals on 4s. 6d. a day and victualling money, now equivalent to £17 7s. 10d. *per annum*. From this they will rise by rotation, after passing an examination, to the denominations of second and first-class sick-berth stewards, and may attain to the pay of 5s. 6d. a day after twelve years' service, with the rank of a first-class petty officer. It is strongly recommended "that a senior sick-berth steward of experience should form part of the complement of small vessels not carrying a medical officer.". It is laudable to provide efficient subordinates to perform inferior duties, but this seems to touch on the obsolete system of several ratings (down to the fifth) of surgeon's mates, of which the last probably performed similar duties to most of the present first-class sick-berth stewards; and the question might be evolved, how far such non-medical attendants should be held responsible in the case of grave casualties? It might be that such delegation of professional duties is, to a certain extent, anticipated, as it is announced in the sequel, in favour of the scheme, that what may be saved by a further reduction of the medical officers, "would by itself nearly cover the increased charge which we estimate the adoption of our proposal will entail." Embracing the entire nursing-staff, there will be 501 persons (male and female) at a total cost of £27,862, which is no extravagant outlay, with the end in view of nursing, ashore and afloat, the sick of the Royal Navy. We are pleased to notice in the appendix an improved scale for dieting the patients in our royal naval hospitals and marine infirmaries, in addition to a proposal to provide more consistent domestic and table conveniences for sick officers, which have hitherto scarcely differed from those in use in the wards occupied by the seamen. The female element introduced, although numerically small, 17 out of 501, will form an important integer; it will be under the control of the clinical medical officers, equally with the larger male element employed at Haslar and Plymouth. Its employment may be said to be experimental; for, if successful, it will be quite susceptible of extension. The male and female elements will differ, in that the former will have been trained by the service itself, whilst the latter will obtain their education at civil hospitals; experienced matrons and sisters, possessed of extraneous certificates of efficiency, being thus secured as a beginning. We may say that the *coup-de-grâce* has been now administered to a system of expedients outworn by time. In the days of Roderick Random, and much later than those, the junior medical men of the navy were accustomed to perform, in the interests of the sick, many of the offices that in later days have fallen to the hands of sick-berth attendants; but the time has never been, and perhaps never will come, when, in ships, the principal medical officer will cease to consider himself personally the head nurse in all the administrative arrangements, and in special cases in the details also, with an assiduity that will invest him, as it hitherto has done, with anxiety for the welfare of those for whom he is primarily responsible. This new scheme, adapted from that of the army, reflects credit on its promoters; and we wish it every success.

OUTBREAK OF PLAGUE.

OUR Paris correspondent writes: The plague has broken out in the Ottoman territory, in the Bedra district. A sanitary inspection has ascertained that the plague has now attacked Bedra, Dyessan, Mendeli, and Zorbatia; also affecting the Arab tribes, wandering or settled, camped within this area. Bedra is about ten or fifteen hours' journey from Bagdad; but, at the present time, the inundation which is ravaging Mesopotamia renders communication laborious. The overflowing of the Tigris has converted Bagdad into an island, and couriers take eight days to go from Bagdad to Bedra and return. The danger of the plague spreading is centered in the north. Mendeli is already attacked. The road from Hanneguine to Bagdad serves as the high road, and is traversed by all the pilgrims journeying from Persia to Bagdad. The districts of Dizfoul and Chuster lie to the south-east. If the epidemic reach the Lower Tigris, towards Kout-el-mara, it would probably travel along the innumerable canals which cut up this territory, and would devastate Trak-Arabi southwards, as happened in 1875, when more than twenty thousand inhabitants perished. Should the plague travel to the port of Bassorah, the danger that would result is evident; also the necessity for framing protective measures. Egypt now exacts twenty-four hours' surveillance on all importations from this port, and has rigorously prohibited the importation of rags, or of clothes already worn. It is stated that the plague appeared at Bedra two months ago; but it may really date from several months back. There are no precise data, and no one knows. There is one thing certain: the plague is endemic at Trak-Arabi. Since the terrible epidemic of 1830, it has never been quite stamped out any more than in Kurdistan in Persia. There are yearly epidemics of plague in the Persian Kurdistan. It exists also in the Persian Khorassan, probably in Afghanistan, and certainly in a permanent form southwards of the Anglo-Indian Himalayas. Specialists believe that it exists in Yun-Nan, China. In all the epidemics at Trak-Arabi a diurnal temperature of 40° Centigrade made it disappear. The International Sanitary Council of Constantinople has taken sanitary measures. Dr. Lubiez, of Bagdad, Dr. Saad, of Hanneguine, and Pardálaki, of Bassorah, are on the spot. They tend the plague-stricken, aided by indigenous civil and military medical men.

THE PETERBOROUGH INFIRMARY AND DISPENSARY.

On the afternoon of Friday, May 9th, this hospital was almost entirely destroyed by fire, the ground floor alone being left uninjured. The reports of the catastrophe in Saturday's newspapers were greatly exaggerated, it being generally stated that over a hundred patients were in the hospital, which only contains forty-two beds. The fire broke out in one of the rooms of the upper stories, and when it was discovered, a patient was being placed under the influence of an anæsthetic prior to an intended operation. The patients in the building at the time were removed to the neighbouring vicarage-house, and none of the staff, visitors, or nurses were injured, though a fireman was burnt by falling timbers. The medical library and the greater part of the surgical appliances kept on the premises were saved.

WESTMINSTER HOSPITAL.

A further step has been taken, by the Governors of the Westminster Hospital, to promote the success of the appeal they are making to the public for funds to reconstruct the out-patient department, and to erect a medical school. On the 9th instant, the Lord Mayor took the chair at a dinner at the Holborn Restaurant, and was supported by Lord Algernon Percy, M.P.; Sir Rutherford Alcock; Alderman Sir R. Carden, M.P.; Admiral Gore-Jones, C.B.; Colonel Sparkes; Lieut.-Colonel Howard Vincent; Lieut.-Colonel and Sheriff Cowan, etc. During the course of the evening, the Secretary of the Hospital announced that £4,500, including £1,000 from the Duke of Westminster, had been subscribed. As nothing can be done to the out-patient department till the school is finished, and the buildings at present used for that purpose in the hospital are vacated, the erection of the new school is to be commenced forthwith; and it is hoped that the amount required (£15,000) for these purposes will be raised before the work is completed.

DEATH OF M. WURTZ.

The eminent chemist, M. Wurtz, died suddenly at 10.30 on Monday morning at his house, rue Guillaume, Paris. M. Wurtz was born at Strasbourg in 1817. He occupied the chair of medical chemistry at the Paris Medical Faculty, formerly held by [illegible] In 1865 he was elected dean of the Faculty of Medicine. In 1874 he organised a special course of lectures on chemistry at the Sorbonne. In 1875 he resigned the deanship at the Medical Faculty. M. Wurtz was commander of the Legion of Honour and life-senator. His works and researches gave a fresh impetus to the study of organic chemistry in France. He is especially known as an author on the atomic theory. In 1865 he received the biennial prize of 20,000 francs (£800).

THE BOWER AND KEATES CASE.

Few legal cases have excited more interest throughout the medical profession in England than the several actions brought by a Mr. Wood against Messrs. Bower and Keates; the happy termination of the last of these was noticed in our issue last week. The action tried on May 8th was brought by the father of a child, upon whom it had become necessary to perform tracheotomy, and the ground of action was the alleged negligence of the two medical attendants, who told him to suck the tracheotomy-tube when it was first inserted, without warning of the danger of infection, a danger which was apparently present in the minds of the medical attendants, though they [illegible] been quite convinced, at the time of the operation, that [illegible] had not to do with a case of simple croup. The case was tried by the Lord Chief Justice, who cannot be supposed to have any strong bias in favour of the medical profession; and Lord Coleridge emphatically expressed his opinion that the medical men were quite justified in asking the father to suck the tube. The foreman, at the end of the plaintiff's case, asked "what father in the world would not have done it," and Lord Coleridge added, "So I should say, gentlemen." Without calling upon Sir Hardinge Giffard, who was leading counsel for the defendants Messrs. Bower and Keates, the jury in a few moments returned a verdict for the defendants. Thus terminated, as we may hope, a series of prosecutions and law-suits which have been very little on the hither side of vexatious litigation. The case was given a fictitious air of importance and genuineness by the action of the Public Prosecutor, who was unfortunately persuaded into giving his sanction to a preliminary application to a magistrate to grant a criminal information against Messrs. Bower and Keates on a charge of causing the death of the child by culpable negligence; the magistrate, however, dismissed the case without calling on the defence, observing that if the case were further persisted in "it would amount to persecution." How thoroughly these words expressed the sentiment of the profession of medicine was well shown by the very remarkable response to the appeal made for subscriptions to defray the heavy legal expenses to which Messrs. Bower and Keates were put. An appeal, which had the support of the Presidents of the two Colleges, of Sir James Paget, Sir William Gull, Sir Andrew Clark, Sir Spencer Wells, Sir Joseph Lister, to mention only a few leading names, was responded to throughout the length and breadth of the land with such promptitude and liberality that within three weeks the honorary secretaries were forced to cry Hold! enough! The case has had one result of great importance; it will be remembered that it was resolved, when the appeal was first made, that the College of Physicians and the College of Surgeons should obtain an opportunity of laying before the Government their views with reference to the mode of proceeding in cases where it was proposed that the Public Prosecutor should take action against medical men for alleged offences connected with their profession. We understand that these representations have been favourably received by the Government, and that steps have been taken which will ensure that any action taken by the authorities in the future will be such as to give satisfaction to the feelings of the profession at large.

DEATH FROM CHLOROFORM.

We regret to hear that a death occurred at St. Bartholomew's Hospital last Wednesday during the administration of chloroform. The patient was a woman seven and a half months advanced in pregnancy, who had been admitted on account of placenta prævia. She had taken chloroform on the previous day without any untoward symptoms; but, on the second occasion, died soon after the commencement of the administration. The child was rapidly extracted by Dr. Clement Godson, and was living twenty-four hours later. Death from chloroform administered during labour is generally recognised to be an extremely rare event. The fact that the patient in this case was suffering from placenta prævia suggests the probability of death having been due to a syncopal attack.

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SCOTLAND.

It [illegible] between the medical corporations of Scotland will come into operation [illegible]

[illegible] the country.

[illegible]

BEQUEST TO PAISLEY INFIRMARY.

A very substantial bequest has just been made by the late Mrs. Weir, of Paisley, who has left the residue of her estate, after the payment of certain legacies, to the Infirmary of that town, to provide a ward to be called the "Dr. Andrew Weir Ward." In the list of legacies is the sum of £500 to the University of Glasgow, to found a medical bursary to be called the "Andrew Weir Medical Bursary."

EDINBURGH ROYAL INFIRMARY.

Another vacancy in the staff of assistant-surgeons in the Edinburgh Royal Infirmary has been declared, and already a number of names are mentioned as probable candidates; among them are Mr. C. W. Cathcart, M.B., F.R.C.S.Eng. and Edin.; Mr. F. M. Caird, M.B., F.R.C.S.E.; Mr. Hodsdon, M.B., F.R.C.S.E.; Mr. J. Maxwell Ross, M.B., M.A., F.R.C.S.E.; and Mr. J. Macdonald Brown, M.B., F.R.C.S.Eng. and Edin.

EDINBURGH UNIVERSITY TERCENTENARY.

On its three hundredth birthday, the University of Edinburgh received congratulatory addresses from the principal universities of the civilised world, and from many learned corporations and societies. Many of these addresses are beautiful as works of art, and, to give everyone interested an opportunity of observing them, the addresses are now being exhibited in the Museum of Science and Art.

DEATH UNDER CHLOROFORM.

We regret to have to announce another of those distressing cases in which death occurred whilst the patient was under the influence of chloroform, in addition to that reported on a previous page. The occurrence took place at the Glasgow Royal Infirmary on the 9th instant, the patient being a young lad who was undergoing an operation for disease of the wrist. It was observed that under the anæsthetic the heart's action was not very satisfactory, and, before the proposal to substitute ether for the chloroform could be carried out, the pulse ceased. All the usual restorative means were tried, but without success. It is only very recently that special rules for the administration of anæsthetics in this hospital were drawn up, in the hope of eliminating all fatal cases, but an incident such as the present shows that, with every available care and precaution, such as was taken here, deaths under chloroform will from time to time happen.

GLASGOW ROYAL INFIRMARY.

The contemplated changes in the staff of this hospital, to which reference has already been made in the Journal, have been carried out. The number of physicians has been reduced to four, and to each of these an additional number of beds have been allocated; whilst an additional surgeon has been added to the surgical staff. For this vacancy there were four candidates, the choice of the directors falling on Dr. Lothian, who was declared unanimously elected. In August there will be another vacancy among the surgeons, owing to the retirement of Dr. Morton, whose tenure of office expires in the following November.

DYNAMITE AS AN EXPLOSIVE AGENT.

At the present time, when dynamite conspiracies are frequent, the terribly explosive power of this substance is at once brought home to the public by the recent accident at Ardeer Works in Ayrshire, where the dynamite is manufactured and made into cartridges. From some unexplained cause, the nature of which can only be a matter of conjecture, the dynamite in one of the huts exploded, blowing to atoms the hut itself and killing instantaneously the four girls who were the occupants of it. The bodies were very much mutilated, portions of them being found many hundred yards distant from the accident, so great was the force of the explosive. Owing to the dynamite in three of the adjoining huts being set on fire, six of the ten girls employed there were overwhelmed by the flames and burnt to death, raising the number of victims to ten in number. A Government inquiry is being held as to the cause of the disaster, but as yet nothing of importance has been elicited throwing light on it.

THE REPORT OF THE REGISTRAR-GENERAL.

The recently issued report of the Registrar-General shows that the birth-rate in Scotland during 1883, and also the percentage of illegitimate births, were lower last year than in almost any year since 1855, when the Registration Act came into force. In fact, with the exception of the years 1856, 1879, 1880, and 1881, it is the lowest recorded. The marriage-rate was about the same as in 1882, but higher than in the three years preceding. It has been pointed out, however, that some of the counties in Scotland possess the unenviable notoriety of having a high rate of illegitimate births; and as it is asserted that, where this is the case, it is found the bulk of the agricultural population live a barrack-life, huddled together, and without any proper separation of the sexes, it is really incumbent on those with whom the responsibility rests to initiate a better state of things, and, by providing proper living and sleeping accommodation, do away with this blot on the national character.

SCHOLARSHIPS IN THE UNIVERSITY OF EDINBURGH.

At the close of the winter session, a number of scholarships and bursaries fall to be competed for. In the Faculty of Medicine, the results of the competition this year are as follow. The Vans Dunlop Scholarship in Anatomy, Institutes of Medicine, Materia Medica, and Pathology, has been gained by R. F. C. Leith, B.Sc., the "proxime accesserunt" being Frederick T. King and J. C. Lamont. The Vans Dunlop Scholarship in subjects of preliminary examination for students of medicine to William Smith, the "proxime accesserunt" being Robert Buest and William Fraser. The Thomson Bursary on the same subjects to John Wilson, a preferential candidate. The Senior and Junior Mackenzie Bursaries in the Senior and Junior Classes of Practical Anatomy, the senior to James M. Campbell and John Garvil, and the junior to A. C. Cox; and the Senior and Junior John Aitken Carlyle Bursaries, in the subjects of Anatomy and Institutes of Medicine, and Anatomy and Chemistry respectively, to W. Fraser Wright and James R. Bibby.

IRELAND.

Dr. Carson, J.P., medical officer of Coleraine Workhouse, has resigned, after a service of nearly thirty years, in consequence of failing health. It is expected that Dr. Carson will receive the maximum superannuation permitted by the Act.

It has definitely been decided that dispensary medical officers making inquiries, by the request of their guardians, into the question of accommodation under the Labourers' Act, can claim remuneration for the extra services performed by them.

DEATH OF DR. GEORGE F. ROUGHAN.

Dr. Roughan, Local Government Board Inspector, died at his residence in Galway last week, aged 62, after a short illness, the immediate cause of his decease being hæmorrhage. In 1847, he was appointed by the Board of Health medical officer to Moycullen district during the famine-years, when cholera and fever prevailed. On leaving, he was elected to Ballinrobe Union, and in 1866 was appointed an Inspector of the Local Government Board, the duties of which he performed in a most efficient manner. The Galway Board of Guardians, at their meeting last Saturday, unanimously passed a vote of condolence to the widow and family of the deceased gentleman.

QUEEN'S COLLEGE, CORK.

At a quarterly meeting of the Cork Corporation, held on the 9th instant, the following resolution was adopted. "That, in view of the contemplated appointment of a Royal Commission on the Queen's Colleges, this Corporation hereby places on record an emphatic claim, on behalf of the City of Cork, to the retention of its rights as a collegiate centre in the Irish University system, and in any legislation that may result from the forthcoming investigation, the preservation to Cork, for collegiate and university teaching purposes, of the grants at present enjoyed by the Queen's College, Cork."

OUTBREAK OF SCARLET FEVER IN WATERFORD.

AT a recent meeting of the Waterford Board of Guardians, the mayor drew attention to the serious outbreak of scarlet fever which had taken place in the city. The Fever Hospital had 64 patients, and the disease was increasing. He suggested that a committee should be formed to meet the trustees of the Fever Hospital, so as to arrange about getting further accommodation. Dr. Connolly also reported that the Fever Hospital was overcrowded, and a committee was appointed as suggested. Later, the same day, it was stated that nine additional patients had been admitted into the hospital, which was crowded to excess.

PROFESSOR RAWDON MACNAMARA.

AT the last meeting of the governors and court of the Apothecaries' Hall of Ireland, the licence of the corporation was conferred *honoris causâ* on Professor Macnamara, in consideration of his high scientific and professional attainments, and especially for his valuable contributions to the materia medica and pharmacy." We understand that this high distinction has been only once before so bestowed. The diploma was enclosed in a beautifully carved bog oak casket.

THE IRISH LOCAL GOVERNMENT BOARD MEDICAL INSPECTORSHIP.

WE are glad to announce that Dr. Stewart Woodhouse has been appointed a permanent medical inspector of the Local Government Board for Ireland, in the place of the late Dr. George F. Roughan of the Galway District. Dr. Woodhouse has for some years been temporarily employed as an inspector by the Local Government Board, and his appointment to the present important position is a gratifying recognition of the ability Dr. Woodhouse displayed in the discharge of very important and difficult duties, for some of which parliamentary approval was deservedly expressed. Although Dr. Woodhouse is not a Poor-law medical officer, he has an intimate personal knowledge of the working of the system, and his appointment is, in every respect, an admirable one, both on public and professional grounds. The salary is £500 *per annum*, with an annual increase of £20.

THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

THE stated quarterly meeting of the committee of the Belfast Branch of this Society was held on May 7th. In the absence of Dr. T. H. Purdon, Senior Permanent President, Dr. Wilberforce Arnold, J.P., was called to the chair. Dr. Beck, Honorary Treasurer, reported that, although the great mass of subscribers had with promptitude and generosity responded to the call of their honorary collectors, yet a few subscriptions remained unpaid. He (the Honorary Treasurer) would express the hope that those who had not yet sent in their subscriptions would kindly do so without delay. The time being near at which the funds of the Society are annually distributed at the general meeting of the parent Society in Dublin, which is to be held in the King and Queen's College of Physicians, several applications were submitted for the consideration and disposal of the meeting, in order to be transmitted to the parent committee for placing on the roll for grants in sums proportional to the exigency and urgency of each case; and six cases which came before the committee were approved of as suitable to receive assistance. It was observed that it could not be too frequently stated that, in all its operations, this Society was purely benevolent; and that it would be difficult to over-estimate the immense amount of good it had accomplished during the forty-two years of its existence. The death of one of the recipients of the bounty of the Society, an aged lady (widow of a deceased surgeon), having been reported, it was intimated that the friends of the deceased, who had attained the age of nearly ninety years, desired, through the honorary secretary of this branch, to thank the Royal Medical Benevolent Fund Society of Ireland very cordially for the grants which for long years it had extended generously and unfailingly, and which to this aged widow had been a stay and comfort during the long evening of her life.

THE CERTIFICATE OF SANITARY SCIENCE OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS.

ACTING upon the recommendation of their Inspection Committee, and with the view of meeting the wishes of many applicants, the King and Queen's College of Physicians in Ireland has resolved to open its examination for the certificate in sanitary science to all registered medical practitioners. Heretofore, candidates for the certificate were restricted to licentiates in medicine of the College. The fee for such candidates remains as before, viz., five guineas: that for other candidates has been fixed at ten guineas. Stated examinations for the certificates are held quarterly, on the Thursday and Friday following the first Friday of the months of January, April, July, and October. The examination, which is conducted by five examiners, comprises the following subjects. 1. Etiology and Prevention of Disease: epidemiology, infection, hereditary influence, accommodation and conveyance of the sick, hospitals and their management. 2. Engineering: including hospital and house-construction, sewage, drainage, ventilation, water-supply. 3. Law: the Acts relating to public health, duties of health-officers. 4. Chemistry: with special reference to air, water, and food. 5. *a.* Meteorology and Climatology; *b.* Vital Statistics. A printed examination-paper of five questions is given on each of the above subjects, one hour being allotted for the answering of each paper; on the second day, the candidates are examined in the reading of engineering plans, sections, and scales, and in analytical chemistry, with special reference to air, water, and food. Mr. W. Kaye Parry, M.A., and Master of Engineering of the University of Dublin, has been elected extern-examiner in sanitary engineering for the above certificate, in the room of the late Mr. Mervyn Pratt, C.E.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

A MEETING of the Committee was held on Wednesday, May 14th, when a large number of replies to the circular letter distributed to members of the College residing in the principal towns of England was read. A long list of the names of members of the College willing to act as local secretaries was submitted; and these gentlemen having been appointed, the Honorary Secretary of the Association (Mr. James Rocheid Forrest, M.R.C.S.) was instructed to prepare a circular for the use of the local secretaries, embodying the aims of the Association. It was the unanimous opinion of the meeting that the diploma of membership should carry with it the right to practise medicine, midwifery, and surgery; and that, while an annual meeting of Members and Fellows of the College should be held, at which Members should have an equal voice with Fellows, that the interests of Members should be further secured by a certain number of seats on the Council of the College being allotted to them. The offices of the Association are at 3, New Inn, London.

THE COLLECTIVE INVESTIGATION RECORD.

THE Collective Investigation Committee of the British Medical Association propose to publish a second number of the *Collective Investigation Record* early in July next. A form will shortly be issued in the JOURNAL, when all applications for copies should be at once made.

A TELEGRAM from Constantinople announces the sudden death of Midhat Pasha from anthrax of the thigh.

INTERNATIONAL HEALTH EXHIBITION, 1884, SOUTH KENSINGTON.

I.—*Its general scope and scientific objects; special provisions for scientific instruction.*

Sanitary science and art are the creatures of modern progress, and result from the application to the conditions of modern life of a considerable mass of new knowledge, and of observations and deductions special to our time. Pestilences and epidemics were, at no distant date, looked upon with the same kind of uninquiring and superstitious awe as thunder and lightning. It was not possible, in the twilight of prehistoric days, to discern the working of the natural forces which influence them, to ascertain their causation, or to learn how to prevent them. The cholera, the black death, the yellow fever, the marsh-fevers, the plagues which ravaged Europe, were regarded as visitations which came by Providence, and which could only be cured, if cured at all, by medicines. This, which sounds like old world lore, was in truth the fixed opinion of yesterday, and has much more than antiquarian interest, because the insufficient knowledge which lay at the base of this uninquiring superstition underlies still the silent acquiescence in polluted water, air, and soil, and in the poisonously destructive effects of bad drainage, overcrowding, insufficient notification and isolation of spreading diseases, and the other everyday causes to which we must still attribute much of the excessive mortality of our cities. An International Exhibition which aims at bringing under the eyes of the million the conditions of habitation, of food, air, and water, most favourable to health; which enables them to pass in review the most recent appliances for healthy living, and to assimilate in a doctrinal and didactic, as well as in a practical and material form, the latest teachings and products of enlightened sanitation; such an exhibition is only possible in these our latest days, and even yet only capable of imperfect realisation. To be complete, such an exhibition would need to be handed over to a Council of experts, guided only by the desire to make the display systematic, rational, eclectic, and severely exclusive. That the Executive Council to whom the Prince of Wales entrusted the development and execution of this design would have been capable of coming as near as modern knowledge permits to such a plan and method of work, no one will doubt. It suffices to examine the list of names, to see that they have the knowledge, and may fairly be credited with the will, but against such a conception of their duty, and such a way of carrying it out, many obvious conditions militated.

It was a preliminary condition of the work that the Exhibition should be at once vast and popular, that it should be attractive to the million, and that it should be carried out in such a manner as to secure that co-operation from the great body of exhibitors, manufacturers, and traders, as would induce them to incur the great expense incidental to this kind of show; and that the whole display should fall in line with preceding and succeeding shows of the kind, for which there is a traditional precedent which could not safely be disregarded. Thus, then, the condition had to be accepted that the show must be attractive, as well as instructive; and that the materials should mainly be furnished by the industrial world.

To have indulged the dreams of schoolmen; to have converted an exhibition into an academy; to have effected an extreme purist censorship, which would have excluded from the show all but perfection, or the nearest approach to it, would have been inconsistent with the preliminary basis of the organisation. As practical men, the Executive Council have had to content themselves with taking those precautions which the very title and scope of the Exhibition justified and necessitated, and with giving those warnings which might best secure the absence of undesirable objects. In the first instance, therefore, steps were taken to secure the co-operation, on subcommittees, of a great number and variety of experts in every one department of the Exhibition. To those who look through the lists of the committees and subcommittees, prefixed to the official catalogues in the various *Guides*, it will be apparent that no pains have been spared at the outset to secure the aid derivable from the advice, in drawing the programme and defining the classification, from a thoroughly representative list of eminent persons. The special objects of the Exhibition are "to illustrate, as vividly and in as practical a manner as possible, Food, Dress, the Dwelling, the School, and the Workshop, as affecting the conditions of healthful life; and also to bring into public notice the most recent appliances for elementary school teaching and instruction in applied science, art, and handicrafts." Thus, the display is divided into two parts: first, that of Health; and, secondly, that of Education. We shall here be chiefly concerned with that which relates to the first part. The leading subdivisions of the health-display are the groups of food, dress, the habitation—which again subdivides itself into the dwelling-house, the school, and the workshop—and a further group, devoted to naval and military hygiene and ambulance work. It was decided, in the first instance, that all space should be given free of charge; and thus a right of selection was obtained, and greater freedom in rejecting what might appear to be useless or unsuitable exhibits. The right has also been reserved by the Committee of Council of causing examinations or analyses to be made of any of the products exhibited.

In this Exhibition, too, for the first time, considerable sums have been set apart for exhibits procured from scientific and professional sources, and arranged under the supervision of the Council, and which have a more purely didactic aim than anything that has previously been attempted on occasions of the kind. Among those of the greatest interest, and to which we shall hereafter have specially to refer, are, first, the sanitary and unsanitary houses, which have been arranged under the direction of a small committee of architects and engineers appointed *ad hoc*. These are designed to show, on the one side, the ordinary defects of the customary dwelling-house, in respect to drainage, water-supply, ventilation, and location of apartments. Facing the insanitary houses, which will be recognised as a type only too extensively multiplied in our towns and cities, will be found a dwelling of similar character, inexpensively constructed, so as to avoid these faults. These houses are shown partly in section, so that those who walk may see; but the whole information to be derived from them can only be obtained by ascending to the upper floor, and passing through them; for these houses, a special grant was made. With a like didactic object, arrangements have been made for the construction and working of two typical laboratories of public health; the one over which Mr. Watson Cheyne will preside will illustrate in a practical manner the kind of investigations with which it is important that medical officers of health should henceforth be familiar in the investigation of the germs of disease which multiply in air, soil, and water; the methods, the materials, the instruments, and the results of Pasteur, Koch, Klein, and others will be shown; and demonstrations will be given at stated intervals, by which the teaching influence of this laboratory can be extended and maintained. A sister-laboratory has been arranged under the charge of Professor Corfield. In this will be shown the methods and instruments for the physical investigation of soil, of building material, and clothing; the chemical examination and analyses of articles of food and dress, and generally of the inquiries which a medical officer of health and public analyst is called upon to make. These model laboratories will, it is hoped, not only prove a means of instruction and of abiding interest to practical sanitarians visiting the Exhibition, and who may be expected to carry away from it the most fruitful lessons and suggestions for the use of the populations among whom they live, but it is especially hoped that the attention of sanitary boards and sanitary authorities will by this means be directed towards a part of the equipment to their sanitary service which, in all but a few large towns, is signally wanting. It may also be hoped that the local medical officers throughout the country may induce their boards to send deputations, by appointment, to this part of the Exhibition, in order that they may be present at some of the demonstrations, and that they may have its uses explained, and its importance brought home to them. A few successes in this direction would be a very useful outcome for the Exhibition. Foreign visitors, too, may be expected to take an enlightened interest in these laboratories, from which they have something to learn, and towards which they will, no doubt, be able to contribute useful suggestions out of their own scientific knowledge. Anthropometrical measurements will be carried out in this pavilion under the guidance of Mr. Galton.

The meteorological pavilion, organised by the Meteorological Society and a committee of experts, will deserve much attention. The display of smoke-abating grates and stoves and heating-apparatus, and the continuation of the tests devised and applied by the Smoke Abatement Institution, will also be a feature of considerable scientific and sanitary interest. Mr. W. R. E. Coles, Professor Chandler Roberts, and Sir F. Able are lending their valuable help in this matter. Sir F. Bolton has induced the water companies to make a collective display of singular extent, beauty, and scientific value.

Again, there is reason to hope that the extensive sanitary library which is being organised within the Exhibition may become, by the voluntary loans and gifts of local sanitary bodies, of the Governments of foreign countries, of authors, and of publishers, so large, if not so complete, as to afford a valuable meeting-place, and a place of reading and study, for the sanitarians who will flock to the Exhibition, not only from all parts of the United Kingdom, but from all parts of Europe. Towards the better understanding and more easy inspection of this part of the Exhibition, contribution will be made by little special guide-books, which will shortly be issued, giving an account of their organisation and their meaning; and the lectures and conferences which are in course of arrangement will help to their further elucidation. This part of the Exhibition arrangements has received attention from the Executive Council; and we hope it will be found that the time and trouble which so many busy men have voluntarily lavished on this public object will be found not to have been wasted, either in its immediate or in its more remote results. We shall next week proceed to give a more detailed description of some of the principal objects.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

An ordinary meeting of the Council of the College was held on Thursday, the 8th instant. The minutes of last meeting, held on the 13th ult., were read and confirmed.

A letter was read from Sir Erasmus Wilson, resigning his seat as a member of Council, owing to ill-health. His resignation was accepted with an expression of regret at its cause, and of thanks for his liberality towards the College.

Mr. Frederick Treves was introduced, and received the Jacksonian Prize awarded him at the last meeting.

A report was received from the Court of Examiners. It was recommended that candidates rejected at the final membership examination be not required to produce certificates of attendance on Lectures on Clinical Surgery as heretofore. The report was adopted.

A report was received on Mr. Quain's letter, proposing that busts of the past conservators should be placed in the museum of the College. The suggestion was not adopted.

In regard to Mr. Tweedy's letter, calling the attention of the Council to Section 7 of the Charter of the 15th Victoria, in reference to members of Council who have ceased to be in the *bonâ fide* practice of the profession of a surgeon, thereby ceasing to be members of Council, and suggesting that the Council should take action when such was the case, the President and Vice-Presidents reported that, inasmuch as one member named in the letter had since retired, and the other would retire by rotation in July, they have not thought it necessary to inquire whether those gentlemen are engaged in the active practice of their profession as surgeons, and recommended that no action be taken in the matter. The report was adopted.

The annual meeting for the election of members of Council was arranged to take place on Thursday, July 3rd.

The several suggestions and recommendations carried at the meeting of Fellows and Members held on March 24th, deferred from last meeting of the Council, were considered. Regarding the proposals of Messrs. Swain and Pemberton "That, in the opinion of this meeting, it will materially conduce to the welfare of the College, that the Fellows and Members be invested with a larger share in its management," and the next "That, in the opinion of this meeting, it is desirable that no alteration in the constitution or relations of the College shall be effected without the consent of the Fellows and Members convened to discuss such alteration," it was resolved that the Council do not consider it advisable to take any action. In regard to the third resolution "that, in the opinion of this meeting, there should be an annual meeting of the Fellows and Members at which the annual report of the Council should be presented, received, and adopted," the Council resolved that an annual meeting of the Fellows and Members be called, a report of which shall be presented to the Council.

As to the fourth resolution, "That, in the opinion of this meeting, the president for the ensuing year should be elected by the majority of the Fellows present at such annual meeting," Mr. CHRISTOPHER HEATH moved and Mr. CADGE seconded, "That the question of election of president from among the existing members of Council be referred to the Committee on Charters and By-Laws, to report thereon to the Council." Mr. HULKE moved an amendment, which was seconded by Professor HUMPHRY, "That, in the opinion of the Council, the election of President should, as at present, vest in the Council." The amendment was carried by 13 to 5. Sir James Paget, Sir Spencer Wells, Sir Wm. Mac Cormac, Professor Humphry, and Messrs. Forster, Savory, Lund, Wood, Power, Bryant, Hulke, Croft, and Jones voted in the majority, while Sir Joseph Lister, and Messrs. Erichsen, Holmes, Cadge, and Heath voted in the minority. Mr. T. Smith did not vote; and Sir Erasmus Wilson, and Messrs. Holden and Hutchinson, were absent. The Council resolved to take no action in regard to Mr. Hickman's resolution, which was "That this meeting of Fellows and Members of the Royal College of Surgeons of England begs most respectfully to recommend that the Council of the College do obtain a Charter to enable the Council to combine with the Royal College of Physicians of London, with a view to the amalgamation of the two colleges into one great College of Medicine, to be endowed with authority to examine and grant licences to practise in all branches of medicine and surgery, and to confer on its Licentiates the degrees and titles of Doctor of Medicine and Master of Surgery."

A letter was read from the Poor-Law Medical Officers' Association, pointing out the hardships under which the medical officers labour in respect to the Poor-Law Superannuation Act. The letter was referred to the President and Vice-Presidents' Committee.

It was resolved, on the motion of Mr. COOPER FORSTER, that the publication of the "pass and pluck" list for the diploma of Member be discontinued, but that statistics relating to such returns be still compiled for collegiate purposes.

Sir SPENCER WELLS' motion (of which he gave notice at the last meeting), "That all confirmed resolutions of the Council be considered as in force until they have been formally rescinded, and that any existing resolutions which are not binding on the Council be rescinded," was deferred till the next meeting of Council.

UNIVERSITY OF LONDON.

The annual meeting of Convocation took place at the University Building in Burlington Gardens, on Tuesday, the 13th instant.

Mr. P. Magnus and Dr. F. Stock presented the report of the annual committee, and moved its reception. This resolution was carried.

The same gentlemen moved the adoption of the following resolution, recommended in paragraph 5 of the report of the annual committee, respecting proposed local examinations of boys and girls from middle-class schools.

"That any examination established by the University of less difficulty than the matriculation-examination should be held simultaneously in London and at the provincial centres where a sufficient number of candidates present themselves; and that it should be of such a character as to assist and encourage pupils, both girls and boys, of secondary schools of all grades to proceed to the matriculation and degrees' examination." This was opposed, but was eventually carried; as were also the two following resolutions: "That no candidate shall pass who does not satisfy the examiners in (i) English (ii) some other language, (iii) mathematics, (iv) science;" and "That in the examinations in language other than English, no special book shall be previously set, the examinations consisting of easy questions in grammar, and of translation at sight with help of a vocabulary."

The following resolution, recommended in paragraph 10 of the report of the annual committee, "That candidates must be under the age of sixteen on the day immediately preceding that on which the examination begins," was not carried. For it was substituted the following, on the motion of Mr. T. C. Lowe, B.A., seconded by Mr. T. Kimber, M.A.: "That candidates be admitted to the examination without any limit of age."

The following graduates in the Faculties of Medicine and Science were elected members of the annual committee for the coming year: M. Baines, M.D., A. W. Bennett, B.Sc., W. L. Carpenter, B.Sc., W. C. Coupland, B.Sc., J. Curnow, M.D., G. Eastes, M.B., W. H. Holman, M.B., H. G. Howse, M.S., B. Kisch, B.Sc., A. McDowall, B.Sc., P. Magnus, B.Sc., H. Morris, M.B., R. Neale, M.D., W. J. Spratling, B.Sc., F. Taylor, M.D., W. C. Unwin, B.Sc.

The house then adjourned.

The annual ceremony of presenting diplomas of degrees and exhibitions to graduates was held on Wednesday, the 14th instant, in the theatre of the buildings at Burlington Gardens, under the presidency of the Vice-Chancellor, Sir James Paget. The large hall was crowded in every part, a majority of those present being ladies. A noticeable feature of the meeting was the appearance of the young lady graduates in arts, science, and medicine, who, to the number of thirty or more, occupied the second row of seats, robed in their black stuff full-sleeved gowns with brown or gold-lined silk hoods. Nearly a third of the seats in the body of the hall were appropriated to the new graduates.

Thirty (of whom four were ladies) obtained the degree of Bachelor of Science, passing in honours; 8 took the LL.B.; 53 the M.B., pass and honours, one of the number being a lady, Miss Emily Tomlinson, of the London School of Medicine for Women and the Royal Free Hospital; 1 candidate passed the examination in subjects relating to public health; 10 passed with honours for the degree of Bachelor of Surgery; 2 gained the Bachelorship of Music; 3 graduates passed the examination in the Art, Theory, and History of Teaching; 9 took the degree of Master of Arts; 1 graduated as Master in Surgery; 6 as Doctors of Science; 1 as Doctor of Laws; and 24 as Doctors of Medicine.

After the distribution of prizes, certificates, diplomas, and medals, the Vice-Chancellor, Sir John Lubbock, Bart., M.P., and Viscount Sherbrooke, addressed the meeting.

The Vice-Chancellor (Sir James Paget), in the course of his address, said that the University had now had a somewhat large experience in the granting of diplomas to ladies. The University was rapidly collecting facts for the consideration of those who were still in doubt as to the admission of ladies to the higher intellectual pursuits. For his own part he might say that he had not yet heard anything which would cause him to doubt that they were safe in trusting the reputation of the University in the hands of such ladies as had received their diplomas and certificates. [*Cheers.*] Sir James Paget next dealt with the erroneous supposition that the Senate contemplated making the examination for the M.B. degree more difficult. Nothing of the sort was intended, or was likely to follow from the change which had been decided upon, but which would not come into operation until next year, requiring students to possess a general knowledge of chemistry, botany, physiology, physics, etc., before beginning the four years' course of special medical studies. He believed that this University had in this respect taken a step which all other examining bodies would follow, and which would have the effect of saving very largely the time of candidates and of examiners. The Vice-Chancellor spoke with pleasure of the accession to the Senate of Professor Huxley.

AN INQUIRY CONCERNING PERSONS WHO HAVE ATTAINED OR PASSED THE AGE OF EIGHTY YEARS.

MEMORANDUM BY PROFESSOR HUMPHRY.

THIS inquiry, as will be seen by the card, is intended to be general, the object being to obtain, by collective investigation on a large scale, information respecting the present and past condition, habits, and maladies, as well as the family history and other circumstances, of those who have attained to advanced periods of life, in order that we may be able to ascertain, with greater certainty than we now can, what are the circumstances which favour longevity, the means by which it may be promoted, and the maladies which are most, and those which are least incidental to it.

The following are some of the questions which arise in connection with this subject, and for answers to which we may look.

What bodily conformation, temperament, and habits, are most associated with, or conducive to, longevity?

Do women more frequently attain to great age than men, and have women somewhat below the ordinary stature the advantage in this respect?

Are the married, or the unmarried, the stout or the spare, the active or the sedentary, the industrious or the idle, the indoor students or the outdoor workers, the well-to-do or the poor, the town-dwellers or the country-dwellers, the more likely to become octogenarians?

It is said that "small eaters and short sleepers are long livers." Is this so? Will the "early to bed and early to rise" maxim receive confirmation? What is the influence of alcohol?

It has been remarked that a considerable proportion of aged persons have been more or less ailing during a great part, or the whole, of their lives. Is that the case? It has also been remarked that many of them have been troubled with constipation, and that many have long been in the habit of resorting to aperient medicine.

The cartilages of the ribs and the trachea have been found soft and elastic in some very aged people, Old Parr forming no exception in this. Should this be shown to be generally the case, the inference would follow that persons in whom they are not so are not destined to attain to great age.

Do octogenarians often suffer, or do they enjoy a comparative immunity, from affections of the urinary and genital organs, and of the abdominal organs, also from malignant disease and scrofula?

Are they, on the whole, comparatively exempt from disease?

To what affections are they most liable, and to what morbid influences are they most susceptible? Do any maladies seem to have an influence in promoting longevity? What influence upon the longevity of an individual has the age of the parents at his birth? Do twins, or the children of twins, often attain great age?

Information, though not positive, yet of much interest and importance, upon these and other points, will accrue from the replies to the questions on the forms. It need hardly be said that the questions are by no means exhaustive, and that information upon other points which are judged to be of interest and importance by those who fill up the forms will be valuable, as also information on any special points in particular cases which seem worthy of note.

Though the questions are such that they may, for the most part, be answered by the persons themselves, or by their friends, it is hoped, in most instances, the observations will be made and the information given by medical men; and the person who fills up the form is, in each instance, requested to state whether he is a medical man or not.

It will be an additional advantage if some information can be gleaned respecting the succession of maladies in the same person, and in different individuals of the same family, or respecting the preservative influence upon the system of certain maladies against the inroads of others.

Something in the hereditary problem may be also learned respecting the cross-action and modifying influences of certain diseases. For instance, is there any foundation for the view that chronic gouty affections retard the development of other diseases?

The strength and enduring quality of the body, like that of a chain, must be measured at its weakest point; and though in it, more than in a chain, the strength and quality of some parts may compensate for deficiency in others, yet the very opposite may be the result. The stronger organs may relieve, but they may also oppress the weaker members. A strong digestive system may overload a weakly circulation and prove injurious to the liver, lungs, or kidneys, in fact, be a disturbing agent to the general nutrition. The requisite for longevity, therefore, we may expect to be not so much strength of organs as their enduring quality, their good mutual adjustment, in other words, their good balance. The replies relating to "plethora" and other features of general condition will have an important bearing on this view.

No. X. AGED PERSONS.

[illegible]

Name or Initials. Age. Male or Female.
Single, married, widowed. Residence. Occupation.
Circumstances—Affluent, comfortable, poor.
General condition:
Fat, spare, average; full-blooded, pale, average; strong, feeble, average.
Height feet inches. Weight Figure erect, bent.
Voice—loud, clear, full, weak.
Sight—good, short, long. Are glasses required for reading? If so, for how many years?
Hearing—good, bad, indifferent.
Are the joints of the fingers or hands natural, stiff, or deformed?
Teeth—how many remaining? Artificial teeth used? If so, how long?
Digestion—good, bad, moderate. Appetite—good, bad, moderate.
Small eater, large eater, moderate. How many meals each day.
Amount and kind of alcoholic beverages daily?
" " other beverages daily? Amount of animal food daily?
Bowels—act daily, alternate days, irregularly. Are aperient medicines taken frequently, rarely?
Disposition—placid, irritable, energetic, lethargic.
Intellectual powers—high, low, average. Give any details.
Memory—good, bad, moderate, for past or recent events.
Habits—active, sedentary, confined to bed. Amount and kind of outdoor exercise.
Smokes tobacco—much, little, moderately. Takes snuff.
Sleep—good, bad, moderate. No. of hours. Hour of going to bed. Of rising.
Any present maladies—their nature and duration.
State any other points in the general condition, habits, etc., worthy of mention.

Past History.

Occupation. Residences. Age when married.
Duration of married life. No. of children.
Circumstances—affluent, comfortable, poor.
First, second, third, or child of parents.
General condition—stout, spare, average; delicate, robust, average; health usually good, moderate, often ailing, rarely ailing.
Digestion—usually good, indifferent. Bowels—usual condition of.
Baldness or greyness of hair; occurring early in life, or late.
Disposition—placid, irritable, energetic, lethargic.
Intellectual powers—high, low, average. Any special evidence respecting them.
Habits—active, sedentary, moderate. Amount and kind of outdoor exercise.
Hours in bed , hour of rising . Good, bad, average sleeper.
Appetite—good, indifferent. Large, small, average eater.
Amount and kind of alcoholic beverages daily.
" " other beverages daily. Amount of animal food daily.
Smoked tobacco—much, little, moderately. Has taken snuff.
Illnesses undergone—their nature, and the period at which they occurred.
Whether severe. Their duration and completeness of recovery.
Slight ailments—to which specially liable; and period of life at which they occurred.
Accidents—with dates.
State any other points or peculiarities which may seem worthy of mention, in the case of either sex.

Family History.

	Age at Death.	Cause of Death.
Father's father		
" mother		
Mother's father		
" mother		
Father		
Mother		
Brothers		
Sisters		
Sons		
Daughters		

Ages of brothers now alive. Ages of sisters now alive. Ages of children now alive.
Was there any, and, if any, what, blood-relationship between father and mother, or between grandparents on either side?
Age of father when the subject of the inquiry was born.
„ mother „ „ „ „
Is any member of the family known to have had cancer, consumption, scrofula, gout, rheumatism, epilepsy, or insanity? State which member in each case.
State any other points in family history that may seem worthy of mention.

The following Questions can only be answered by a Medical Man.

Chest-girth round nipples in inspiration, inches.
„ „ expiration, „
Elasticity of rib-cartilages (as ascertained by gentle pressure upon them, and upon lower end of sternum), distinct, indistinct.
Pulse: No. per minute , regular, intermitting, large, small, compressible, incompressible. Arteries tortuous, visible, even, knotty.
Respirations: No. per minute , regular, irregular.
Arcus senilis: much, little, absent.
Teeth—how many remaining?
Upper incisors , canine , molar . Lower incisors , canine , molar .
Any evidence of failure of heart, lungs, brain, urinary or other organs?
Micturition: slow, difficult, painful, natural.

ASSOCIATION INTELLIGENCE.

NOTICE OF EXTRAORDINARY GENERAL MEETING.

Notice is hereby given, that, in accordance with Article 13, an Extraordinary General Meeting of Members of the British Medical Association will be held at the Queen's Hotel, Birmingham, on Wednesday, the 28th instant, at Three o'clock in the afternoon:

To consider Requisition, of which the following is a copy.

To the President and Council of the British Medical Association.

We, the undersigned, Members of the British Medical Association, request the Council of said Association to forthwith convene in London an Extraordinary General Meeting of the Members of said Association for the following purposes:

"1. To consider complaints made by Members of the Association of their being deprived by the Journal Committee and the Reform Committee of their right to communicate through the medium of the Journal with their fellow Members concerning questions affecting the rights and privileges of the general practitioners of the Association.

"2. To reconsider those provisions of the General Medical Bill now before the House of Lords, which are alleged by Members of the Association to be detrimental to the interest and welfare of the general practitioners of the Association.

"3. To devise means to remedy, satisfactorily to the Members of the Association, that for which the meeting is convened as above expressed in paragraphs 1 and 2."

The requisition is signed by 53 Members of the Association.

Left at the office by George Brown,
John P. [illegible],
R. H. S. Carpenter,

on this 6th day of May, 1884.

Francis Fowke, *General Secretary.*

161a, Strand, London, May 13th 1884.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

Meetings of the Council will be held on Wednesday, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

Cards for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

- I. Acute Pneumonia.
- II. Chorea.
- III. Acute Rheumatism.
- IV. Diphtheria, clinical.
- IV*a*. Diphtheria, sanitary.
- V. Syphilis, acquired.
- V*a*. „ inherited
- VII. Puerperal Pyrexia.
- VIII. Paroxysmal hæmoglobinuria.
- X. Habits of Aged Persons.
- XI. Albuminuria in the Apparently Healthy.

Note.—The further 150 cases of pneumonia asked for by the Committee have now been received, and will be included in the forthcoming issue of the *Record* in July. The Committee hope that cases will still be communicated, as opportunity may occur, with a view to a further report upon the subject in the future.

An inquiry is being now issued concerning the general condition, habits, and circumstances, past and present, and the family history of persons who have attained or passed the age of 80 years.

The replies to this inquiry will be most valuable when given by a medical man; but the questions have been so arranged, that, with the exception of some on the last page, they may be answered by another person. *Partial information will be gladly received.*

There is also now being issued an inquiry as to the occurrence of Albuminuria in apparently healthy persons.

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
May 1884. 161a, Strand, W.C.

Notice.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

The North-Western Provinces and Oudh Branch.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons Shirley Deakin and W. A. Morris, 8, City Road, Allahabad.

South-Western Branch.—The annual meeting of this Branch will be held at Exeter, on Wednesday, May 21st. The President-elect, Dr. Lewis Shapter, kindly invites all members to lunch at his house in the Barnfield, from 12 to 1 P.M. The order of business will be as follows: 1.15 P.M., Meeting of Council at the Devon and Exeter Hospital; 1.30 P.M., General Meeting at the Devon and Exeter Hospital. The annual dinner will take place at Pople's New London Hotel at 6 P.M. The Exhibition of the Devon County Agricultural Association opens on May 21st, so opportunity of visiting the show will be afforded to members attending the meeting. Members intending to read papers, or make communications at the meeting, are requested to give notice to S. Rees Philipps, M.D., Honorary Secretary, Wonford House, Exeter.

Staffordshire Branch.—The third general meeting of the present session will be held in the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 29th, at [illegible] P.M. [illegible] Committee, a debate will take place upon Puerperal Fever, and the discussion will be commenced by Dr. J. Braxton Hicks, F.R.S., Consulting Obstetric Physician to Guy's Hospital. After the meeting, the members [illegible] will dine together at the Star and Garter Hotel, Victoria Street, [illegible] 7s. 6d. each.—Vincent Jackson, Secretary, Wolverhampton, May [illegible], 1884.

Midland Branch.—The annual meeting of the Branch will be held at Nottingham, [illegible] July [illegible]. Notices of papers, etc., to be sent to the Secretary, Lewis W. Marshall, M.D.

East York and North Lincoln Branch.—The annual meeting will be held at the Infirmary, Hull, on Wednesday, May 28th, 1884, at 1.30 P.M. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the Secretary, E. P. Hardey, Honorary Secretary, [illegible] Brunswick Terrace, Spring Bank, Hull.

South Eastern Branch: East Sussex District.—A meeting of the members of the above district will be held at the Castle Hotel, Wellington Square, Hastings, on Tuesday, May 27th, at [illegible] P.M. Dinner [illegible] P.M.; charge [illegible] exclusive of wine. Mr. Kaye Smith of St. Leonards will take the chair. Communications with respect to the reading of papers, cases, or the exhibition of specimens, [illegible] Honorary Secretary, T. Jenner Verrall, [illegible] Western Road, Brighton.—April [illegible], 1884.

DORSET AND WEST HANTS BRANCH: SPRING MEETING

The spring meeting of this Branch was held at Stewart's Hotel, Bournemouth, on Wednesday, May 7th; W. Stewart Falls, M.D., President, in the Chair. There were also present thirty-two members and visitors, including Dr. A. T. H. Waters of Liverpool, President of the Association.

Vote of Thanks.—A vote of thanks was unanimously accorded to Dr. W. H. Williams of Sherborne, the retiring President, for his services during the past year.

Local Council.—Dr. G. Ross, and Mr. G. Wickham [illegible], of Blandford; Mr. W. D. Harwood and Dr. F. F. [illegible] of Bournemouth; Mr. E. P. [illegible] of Weymouth; Dr. F. M. Spooner, of Blandford; and Dr. W. H. Williams of Sherborne, were elected members for the ensuing year.

Representative of the Branch in the Council of the Association.—Dr. W. G. Vawdrey Lush, of Weymouth, was elected as representative of this Branch in the Council of the Association for the ensuing year.

New Members.—The following gentlemen were elected: James Davison, M.D., Southbourne; J. F. H. Ellerton, Bridport; D. C. Embleton, Bournemouth; T. F. Gardner, Bournemouth; H. A. Lawton, Poole; D. A. MacCarthy, M.D., Bridport; P. W. Macdonald, M.B., Dorset County Asylum; William Turner, Poole; J. N. Villers-Ryan, M.D., Weymouth; J. H. Webster, Wareham; and Waller Wyke Smith, Wimborne.

Next Meeting.—It was resolved, That the autumn meeting be held at Weymouth in October.

Homœopaths.—The opinion of the Branch having been requested by a Subcommittee of the Council with regard to 1, the admission of homœopaths as members of the Association; and 2, the retention of those homœopaths who are already members—it was resolved: 1. That no homœopath ought to be admitted a member of the Association; 2. That in the case of any homœopath who has been admitted by inadvertence, or become a homœopath since his admission, it is not desirable to proceed to the expulsion of such member.

Discussion.—An able paper was read by the President on "The Past and Present Treatment of Disease;" and the President of the Association, Mr. Husband, Mr. Nunn, Dr. Williams, Dr. Thomson, and Mr. Tarzewell took part in the discussion that followed.

Communications.—1. Mr. C. H. Watts Parkinson exhibited a patient with Skin-disease.

2. Dr. Dyer made some remarks upon a case of Uterine Polypus.

Dinner.—The members and visitors dined together at the hotel.

SPECIAL CORRESPONDENCE.

MANCHESTER.

Monsall Fever Hospital.—Crumpsall Workhouse.—Proposed New Park.—New Park for Rusholme.—Noxious Vapours Society.—Sanitary Association.—Demonstrations on the Eye.—Clinical Lectureships at Owens College.

At a preliminary meeting of representatives of local authorities in and near Manchester, held lately at the Royal Infirmary, it was resolved, "That for five years, commencing the 5th of June, 1884, the sanitary authorities of the city and adjoining districts contribute the sum of £1,300 *per annum* towards the establishment-charges of Monsall Fever Hospital, the proportion payable by each participating health-authority being calculated upon the mean percentage which its population and rateable value bears to the whole; that, in addition to the annual contribution, a charge of 2s. per day be made to such health-authorities for each patient sent by them, provided that, whenever the daily average number of all the patients at Monsall Hospital during any one quarter of the year falls below fifty, the charge per patient shall be at the rate of 3s. per day."

The visiting committee have reported favourably upon Dr. Hardie's suggestion in reference to the rearrangement of the medical staff at the Crumpsall Workhouse. They recommended that a visiting physician be appointed, at a salary of £200 a year; and that the salary of Dr. Hardie be reduced, with his consent, from £250 to £200. They further recommended that the visiting physician and the medical officer (as visiting surgeon) should be required to examine every case in their respective departments, with the resident assistant medical officer, at least once a week, and be familiar with the condition of the more serious cases from day to day; and that they be requested to visit the workhouse four times a week, or oftener, if necessary.

It is to be greatly regretted that the Town Council persistently refused to entertain the proposal to buy the late Mr. Compton Potter's beautiful grounds (about twenty acres in extent) as a park for South Manchester. The park is beautifully wooded and elegantly laid out, and could be secured for £45,000. Its situation would make it most accessible to the crowded districts of Chorlton-upon-Medlock and Hulme, and it is the general opinion that it would soon become the most popular park in Manchester. It is to be hoped that some wealthy resident or residents will step in and present it to the city, and thus deserve the eternal gratitude of the citizens.

The Local Board of Rusholme, one of the suburbs, at their last monthly meeting, said that Sir William Anson, a landowner in the district, had offered to give gratuitously five acres of land towards forming a new park, and was willing to sell a reasonable additional quantity of land at one penny per yard. Twenty acres had been offered for £6,500. The ratepayers should show their desire at once to secure this most favourable and praiseworthy offer.

In their annual report, the Noxious Vapours Society say that the Salford Council is as yet far from being abreast of Manchester in the question of smoke-abatement. The borough contains an area of eight square miles, and yet only a portion of the time of one man is given to the work of inspection. It is to be hoped that the Salford Health Committee will see that this provision is quite inadequate to give effect to the law. In Manchester, there has been considerable activity on the part of the Nuisance Department in smoke-abatement. The inspectors have kept a close check upon smoke-producers; and the City Council, in the local Act obtained last year, secured the power to inflict a continuing fine of £10 a day for offences against their smoke-regulations. They acknowledge the assistance and co-operation of the medical officer of health, Mr. Leigh.

The committee of the Manchester Sanitary Association have issued a circular for special subscriptions towards providing country and seaside holidays for poor town-children, and we are glad to learn that the appeal has been, so far, heartily responded to. No work this useful Association has been engaged in deserves more hearty support than this. It is proposed to send a number of children from the poorest and most crowded districts to cottages in Alderley Edge, Bowdon, Rostherne, and other pleasant country places. It is calculated that a guinea will suffice to give three weeks' holidays for one child. The committee propose to circulate widely an useful popular leaflet on rickets.

Dr. Glascott will continue his summer course of clinical ophthalmoscopic demonstrations, and Dr. Mules and Dr. Emrys-Jones their conjoint course of clinical demonstrations on the eye, at the Royal Eye Hospital, on Mondays. The admission to both courses is free.

The Council of Owens College have sent an intimation to the medical staffs of the Infirmary, St. Mary's Hospital, and the Eye Hospital, that a number of clinical lectureships on medicine, surgery, obstetrics, and ophthalmology, will be instituted in connection with the College. Candidates are requested to apply immediately.

CORRESPONDENCE.

THE UNION OF WOUNDS AND FRACTURES IN OLD PERSONS.

Sir,—Having observed that ulcers often—indeed, commonly—heal quickly in old people, I shall be much obliged by any information, given either through the Journal or by letter addressed to me, which will assist in determining the rate at which the repair of wounds and fractures ordinarily takes place at advanced periods of life; a brief statement of any case or cases, giving the bone fractured, the part of the bone, the age of the patient, and the time required for bony union, with any other points that may seem of interest; also any similar data respecting the union of wounds from operation or otherwise inflicted.—I am, etc., G. M. Humphry.

Cambridge, May 13th, 1884.

A METROPOLITAN AND A PROVINCIAL MEETING OF THE BRITISH MEDICAL ASSOCIATION ANNUALLY.

Sir,—I would like to invite attention to a proposal which, as the time goes on, may have to be considered with reference to the annual meetings of the British Medical Association. I would like to propose that two annual meetings be held—one, being a distinct "May meeting," to be always held in London, in May; and the other, as now, to be the provincial meeting, held in the cathedral cities and towns, in August.

The British Medical Association is progressing in numbers "by leaps and bounds;" and I confess, if I were a member living in a small cathedral city, I would think twice, and three times, before I invited this huge body to come to our single annual meeting. There is an immense element of uncertainty with our large numbers. You may have hundreds come to a meeting, and you may have fewer, but the element of uncertainty exists; and the more we make the Association expand, the more the uncertainty will prevail.

I am aware of the provincial origin of the Association, and that it was meant to foster the provincial side of the profession. It has done that duty well, and will continue to do it, but the question is how best to achieve the object.

London is to-day a great centre, and it is to that centre men are looking for evidences of our national life. Medically speaking, London does very little. There is in London no large representative body standing forward as the spokesman of the aspirations of the profession.

We may compare the General Medical Council to the king "who reigns, but does not govern." The various medical corporations represent the House of Lords, not a very radical body; but the British Medical Association is our Commons House of Parliament, based on popular suffrage, speaking in the name of the medical democracy, as it were, and only needing the path to be sketched out upon which to advance to achieve its desires. It seems to me to be to-day the only organised body speaking in the name, not of corporations or cliques, but of that vast body of medical men who, neglected by the corporations that hold the gates of the profession, are striving how to make their influence felt, and how to give public expression to their desires.

To this Association I would say: You have survived your precarious infancy, you have gone through your struggling boyhood, to-day you are of age; step into your birthright and come and take the place that is waiting for you as the spokesman of a profession which needs to-day to make its voice heard. If you want to dignify the country-doctor, let him who is chosen as your President annually preside at your London May meeting, and you will give to him a position most prominent, and which will throw into the shade the chiefs of the older corporations.

1. You can, in London, ask to your table the statesmen and the leaders of public life; and you can show to them a profession which ought to be the most powerful in England, and which is simply weak for want of organisation.

2. It will not cause expense to the London medical men. London is big, and the greatest kindness you can show a country visitor is to leave him alone. He will amuse himself. The President need not be put to any London expense. We can all pay our way, and leave it to the provincial meeting to receive local hospitality.

3. The country-doctors, those hard-worked men with few holidays, need to have holidays given to them. Let us say that in May annually we shall have our London meeting, and they can all come up and, while learning much, can also have rest from their labours and a change. They can come to the August country-meeting also.

4. The great hospital-dinners and reunions of old friends and students would gradually take place, not in October, when country-doctors are better in their own houses, but in May, when the pictures, the music, and the social enjoyments of London, are at their best.

5. It would, perhaps, lead up to our one day having in London a real headquarters, where a combined club, library, meeting-rooms, etc., would give to the members of the Association from the country the opportunity of meeting old friends, and enjoying a side of social life in London not now possible to the average country doctor.

6. As the Association will always consist of the country medical men in large proportion, it is for them to think if the provincial meetings will seriously suffer. I think they will not suffer. It is perfectly possible to relegate certain sections to the country meeting annually. Thus, if surgery is one year in London, the next year it may be in the country, and so on. An association founded on the wishes of the provincial medical men can easily guard their interests.

7. There are, no doubt, many sides to this question, and they need discussion and ventilation. One thing, however, is certain—there is to-day no independent representative body speaking in the name of a numerically strong, but singularly weakly organised, and indeed oppressed profession. The British Medical Association is, as far as I can see, the only representative of such a want. If it be so, where best is its influence to be felt, in London or in the country? I think in London, and if only these May meetings in London could be founded, I think they could really become, for good or ill, the mouthpiece of the profession. Our very errors would be made before the world, and would be exposed to the world's criticism, and even that is a distinct factor of progress. It is by such action that we can force the hand of the corporations, for we are all wise enough to see that the moment the Medical Bill passes, and a State examination throws the corporation examination in the shade; these latter bodies, if they desire to attract men to them, must offer advantages in the way of protection, and other points in which to-day they are singularly defective. Instead of being, as they might be, the headquarters of well organised and protected corps, expelling from their midst all evil-doers, and guarding the good name of their graduates, they take the fees, and then fling the graduates out into the world. The stimulus of the profession, speaking through the Association, would bring them to a sense of their duty. I am, sir, G. J. H. Evatt, M.D.,

Woolwich, 1884. Surgeon-Major, A.M.D.

Mr. J. Foulkes Jones, Surgeon, of Towyn, Merionethshire, has died in consequence of injuries received through being knocked down by the Irish mail, while he was walking along the line at Flint.

THE REGULATIONS OF THE UNIVERSITY OF DURHAM.

Sir,—In response to my letters in the Journal of a few weeks ago ("Thirty-one"), I have received a large number of letters expressing approval of the movement, and the writers have desired to sign the memorial. A committee has now been formed, which will meet in Manchester in about a fortnight; and I shall be glad if those who live within easy reach of Manchester, and would like to attend that meeting, will kindly apprise me of their wish. As there must still be many in favour of the movement who have not yet sent their names, the committee will be glad if they will do so at the earliest opportunity.

I see that, in to-day's Journal, "A Graduate in Medicine" expresses his disapproval of the movement, and says that an university degree is a reward for work done over and above that required for a diploma of the examining bodies.

Without discussing that question, which has nothing to do with this movement, and about which a great deal could be said on the other side, allow me to point out that Durham already grants degrees without residence; and all that we ask is, that this degree may be obtained at such a period in a man's life that it may be of some service to him. Were the ordinary examinations open without restriction as to residence, our movement would be unnecessary, as what we desire is not an easy portal to a degree, but rather that we may not be debarred from one because we have not spent a year in Newcastle.

I hope all who are in favour of the movement will send in their names at once, as it is not our object to engage in a wordy warfare, but to make out such a case as will convince the authorities that our request is fair and reasonable, and compatible with the highest interests of the university.—I am, sir, your obedient servant, B. Jones.

Leigh, Lancashire, May 10th, 1884.

INFLUENCE OF DRYNESS OF SOIL ON PHTHISIS.

Sir,—In Dr. Andrew's recent lecture on phthisis occurs the following passage. Alluding to Dr. Buchanan's report for the year 1866, he states, "in this he establishes this fact, at that time an unexpected one, that the drying of the soil effected by sewage-works is generally followed by a great reduction in the mortality from phthisis." This fact was not by any means an unexpected one, for it had been previously discovered and given to the world by the late Mr. A. B. Middleton, of Salisbury. In a paper read at Bath, on September 16th, 1864, before the British Association for the Advancement of Science, entitled, "The Benefits of Sanitary Reform as shown at Salisbury," he states, "There was one disease very fatal in Salisbury, as some figures will presently show—consumption. The causes may have been various, but I am inclined to think that humidity, and nastiness of atmosphere produced by the canals and cesspools.........were mainly the causes." Again, "The evils then were wet subsoil, bad sewerage, and bad water. The indications of treatment were to dry the subsoil." Again, "Since drainage, a great change has taken place in the number of deaths from the allied tubercular diseases, phthisis, tabes mesenterica, and hydrocephalus, as the annexed table will show (here the table was given). This diminution in a class of diseases admitted to be intimately connected with dirty and moist atmosphere is remarkable." Again, "At Salisbury, for the last seven years, about one-tenth of the deaths have been from phthisis; for the last three years only one-thirteenth, and for the year 1863, only eleven deaths occurred from phthisis, or 1 in 818 of population; the proportion for London having been 1 in 363, and for all England 1 in 374." At page 26, in assigning a cause for the diminished general mortality, he adds, "The diminution of consumption certainly appears to be a demonstrated effect from an evident cause." The year following the publication of this paper, Dr. Buchanan visited Salisbury as Government inspector, and the late Mr. Middleton then gave him a copy of it, and informed him of his theory as to the causation of phthisis. The Blue-book already alluded to appeared a year after this meeting, but, from some unassigned cause, Mr. Middleton's name is not mentioned in it. As these facts do not appear to be generally known, I ask their insertion as due to the memory of one who was certainly one of the [illegible] sanitarians of his day, and to whom Salisbury is indebted for her position amongst the healthiest of English towns.—Yours obediently,

Bruton, Somerset. [illegible] Stockwell.

ATMOSPHERIC DISINFECTION.

Sir,—In the paper I read [illegible] the Sussex District of the South-Eastern Branch of our Association, I endeavoured to explain the scientific principles on which the antiseptic disinfectants must be based

The chief point of practical interest contained in my remarks was the fact that carbolic acid, when combined with water and boiled, evaporates with the steam in a constant ratio, and that the steam contains the same relative quantity of the acid as the water from which it evaporates. This valuable fact is not yet familiar to many, and its importance not yet appreciated.

Dr. Piesse and Mr. C. Johnston have taken much trouble in determining exactly, as far as chemical analysis allows, the accuracy of this statement. Carbolic acid resembles hydrochloric acid, which, I believe, evaporates equally with water when boiled with it.

The reason why carbolic acid was mentioned, and not sanitas oil, or any other substance, was because, as far as I am aware, it is the only antiseptic agent that possesses the peculiar property above described.

There is no doubt that sanitas is an agreeable and valuable disinfectant; but Mr. Kingzett will find that when boiled with water it resembles pine-oil, benzoic acid, thymol, and some other oils, in coming off rapidly and not equally from boiling water. It can be diffused in the atmosphere of a room when thus boiled, and is certainly more agreeable than carbolic acid; but for the treatment of a case of phthisis, diphtheria, or whooping-cough, it cannot be used with the same accuracy as carbolic acid.

By mixing a part of that acid with 80 or 100 of water, we can obtain a vapour of the same strength, and thus we can vary the strength of the vapour exactly as we can vary the strength of a solution.—Yours truly,

ROBERT J. LEE.

6, Savile Row, W.

MEDICO-LEGAL AND MEDICO-ETHICAL.

PAYMENT OF MEDICAL WITNESSES AT INQUESTS.

SIR,—I wish to ask your opinion or advice on the following circumstances. In this district the coroner has to pay medical witnesses out of his own pocket. The result is that medical witnesses are seldom called, and the [illegible] not called as a witness [illegible]. Consequently, in cases of accident—which happen mostly to strangers—I get seldom get any fee at all. Is there no remedy for this, and must I still go on attending such cases on the chance of [illegible] the fee? I receive [illegible] the few times I am so summoned some compensation for my trouble in those cases when I am not so summoned, and, consequently, as a rule receive no compensation whatever?

A. B. C.

Although it is a duty imposed upon the coroner by law to advance all fees and pay them immediately after the termination of the inquests, he is reimbursed at least quarterly by the magistrates of the county, or by the corporation of a borough, so that the reason assigned by "A. B. C." for his not being called as a medical witness is hardly the correct one; [illegible] probably the coroner [illegible] to appreciate or recognise the value of medical evidence. The fee paid for giving evidence at the coroner's court should not be regarded by "A. B. C." in the light of compensation for any services he may have rendered to the deceased during life or at the time of the death. We know that medical men are frequently called to cases as described by our correspondent and receive no fee or remuneration for the attendance on same. This should not be. If called by railway officials, the company on application will, as a rule, remunerate the practitioner attending; if called by the police, the practitioner should obtain a certificate at the station, which entitles him to a fee. Again, if any injured person himself or his friends be unable to pay the usual fee, the case should be transferred to the care of the parochial authorities.

It frequently happens that the members of our profession are called upon in the name of humanity to render gratuitous service. These services, as a rule, are cheerfully accorded so long as imposition is not practised, and undue advantage taken by the recipients or their friends.

INDIA AND THE COLONIES.

THE HEALTH-OFFICERSHIP OF CALCUTTA.—It has for some time been known that Dr. Kenneth McLeod, Professor of Surgery in the Calcutta Medical College, and Health-Officer of the city, is about to return to England for a season. This officer has resigned his appointment as health-officer, and we have before us a full report of the meeting of the Municipal Commissioners convened to appoint his successor. It is a matter of sincere congratulation to all who wish well to the progress of sanitation in India, that the municipal authorities, native and European, were evidently duly impressed with the importance of a right solution, and of their responsibilities to the community whose representatives they are. It was not always so. Time was when such an opportunity of serving the public would have been unblushingly used to perpetuate a job. "Any stick is good enough to beat a dog," says a well known proverb; and in days not long gone by, an advertising and ignorant homœopath was thought good enough to preside over the health of the greatest city in the Indian empire. There seems to have been a consensus of opinion on several important points; 1, that the health-officer should give his entire time to his work; 2, that he should be able to produce evidence of fitness; and 3, that he should be liberally paid. The salary agreed on is 1,250 rupees to 1,500 rupees monthly, which wouid be about equivalent to £1,000 to £1,500 a year, rising from the minimum, by annual increments, to an amount not yet settled. This is a fairly liberal salary, calculated to secure the services of a competent expert. Mr. Thomas Jones, who is a Judge of the Court of Small Causes, as well as a member of the municipal body, moved, in effect, "That the time for receiving applications for the appointment should be extended for six months," with the evident intention of, if possible, obtaining the services of a sanitary officer, accustomed to the work in one of our English cities. This motion was, on a division, lost, seventeen voting for and twenty-nine against it. An attempt was then made to proceed to the election from the list of, we believe, eleven candidates, most of whom, so far as we can gather from the report before us, appear to have been, with the exception of Dr. Ghose, Civil Surgeon of Khulna, medical men not in the service of Government. After much debate, a motion was carried to adjourn the meeting for three months. So this important appointment is still vacant. Mr. Jones's speech was, in many respects, a good one, and we sympathise with his earnestness in behalf of the interests of the half million of people of Calcutta. His desire was to obtain the services of a man who has had long practical experience of city sanitation in England, but we think Mr. Jones would have done better had he suppressed the Philistine sneer at such men as Virchow and Pettenkofer, and others who "labour in bacterial pathology" over the microscope, or "working only in the laboratory." Among the candidates was a German, a Dr. Horcks, who appears to have gone to India on a scientific mission, partly on his own account, partly on that of his own Government. An effort was made by some of the members to secure the election of this gentleman, which we are heartily rejoiced did not succeed. It would have been nothing less than an insult to our countrymen at home and abroad to have selected a foreigner for work in which the members of the medical profession in England and India have shown themselves to possess unrivalled qualifications. If only the Government of India can be persuaded to place at the service of the municipality one of their own medical officers of known capacity for work of this kind, a pupil of the late Dr. Parkes for example, we are sure the municipal body need not go far afield in search of an efficient health-officer; if only the Government will consent not to saddle him with other duties. Such an officer would possess the inestimable qualifications of knowledge of the language, habits, and customs of the people. In conclusion, we venture to impress on the minds of the municipal corporation of Calcutta, that, when the word sanitation is translated into the vulgar tongue, it means money. They have abuudance of valuable reports on disease-factors in India; what has to be done is to give money in sufficient abundance to remove these factors. Without this, all the health-officers in the world will avail nothing to improve the health and save the lives of those committed to their care, who now perish by thousands every year from causes distinctly preventable.

MILITARY AND NAVAL MEDICAL SERVICES.

THE PRISONS MEDICAL SERVICE AND THE ARMY MEDICAL DEPARTMENT.

SIR,—Referring to your editorial of March 8th, 1884, on the Prisons Medical Service and its future, I beg to offer the following suggestions.

1. It is so essential for the nation to have young and active men in its military service, that a regular stream of promotion at a fair rate is essential. This can be maintained in part by liberal retirement, but other aids should not be lost sight of.

2. I accordingly would suggest that, after a certain date, all appointments of civilians to [illegible] should cease, and that medical officers of the Army, Navy, and Indian Medical Services should alone be eligible for these posts; the number of the appointments given to the various services to be in proportion to the strength of the service they come from.

3. No medical officer who has not completed twenty years' service, of which eight were foreign service, to be eligible, unless in cases of men broken down by active service in the field.

4. By this system a young man would look forward to the prisons service. It would be practically a retirement for those who had borne the heat and toil of the day, and I think few will deny that the medical officers of the services are quite the men to undertake prison duties.

5. Speaking personally, I should think this system of appointment would be better than taking young men [illegible] in their early years to prison service. But, after a man has seen the world, served the country and learned

discipline in the military service, [illegible] and [illegible] appointments [illegible] the Home [illegible] and the War [illegible] tary could probably [illegible] easily.

The [illegible] of the various services concerned.—Yours, [illegible] H. E.

INDIAN MEDICAL SERVICE.—We understand that Mr. [illegible] will shortly bring his motion before the House of Commons about the grievances of the Indian Medical Service, [illegible] we are authorised to intimate to the medical officers concerned that Mr. [illegible] has their interest at heart, but that, owing to press of business, it is impossible for him to reply to all the letters he [illegible] on the subject.

HOSPITAL AND DISPENSARY MANAGEMENT.

BARNWOOD HOUSE, NEAR GLOUCESTER.

THE report for 1883, presented by Dr. N[illegible], is a highly satisfactory one. At the end of the year [illegible], and we earnestly hope that the institution [illegible] for one great source of the success of the [illegible] Asylum is the family character which it presents [illegible] Mrs. N[illegible] being able to maintain [illegible] with the patients which is impossible in very large [illegible]. The constant personal superintendence of the inmates is spoken of in the report of the Commissioners in high terms, and contrasts favourably with the merely medical routine visit which in not very remote times too often constituted the complete duty of the [illegible] asylum. The statistical tables give a large amount of [illegible] information. They are in some respects a great improvement [illegible] presented in most of the former reports. We have been [illegible] interested in Table 2A, which presents at a glance what we really want to know, but what we can rarely get from these reports. It tells us the real net results up to date of the care and treatment the patients have received. We find that the actual number admitted during the last twenty-four years was [illegible]. Of these, [illegible] persons discharged recovered, being 27.5 per cent. of those admitted. But the table tells us more than this. Thirty-six unfortunately relapsed, and returned to the asylum. Further, of these relapsed persons, twenty-two recovered again, and so we have at the present time [illegible] of 164 patients in a state of mental health, or 24.8 per cent. of the persons admitted. It will be interesting to trace in future reports the ever changing population of the asylum.

THE LONDON TEMPERANCE HOSPITAL.

ON April 24th his Grace the Duke of Westminster, K.G., laid the foundation-stone of the new wing of the London Temperance Hospital, Hampstead Road, in the presence of a large [illegible] of spectators. Prayer having been offered, Mr. T[illegible], [illegible] of the Board of Management, read an address to the Duke of Westminster, which stated that the original plan of the hospital [illegible] provision for 100 in-patients, and that the west wing, of which his Grace was about to lay the foundation-stone, would [illegible] that design. On May [illegible], 1879, the [illegible] the east wing and the central offices was laid, and [illegible] amounted to about £26,000, [illegible] and the completion of the hospital by the erection of the [illegible] a further cost of about £1[illegible], would increase the [illegible] beds from [illegible] to 120. From the establishment of the hospital [illegible] to April 5th, the in-patients [illegible] had been treated during the last three years. The out-patients numbered 15,722. The characteristic feature of the hospital was the exclusion of alcohol, in every form, from the [illegible] dietary, and experience had proved the wisdom of this system. The Duke of Westminster having spoken in [illegible] feature of the hospital, and [illegible] already met with in the work, [illegible] of devotion and [illegible] to enable [illegible] build the new wing. The hospital was showing day by day that [illegible] could be cured as well—they might, perhaps, [illegible] without the use of alcohol as with it, though this was a subject on which he would not speak with authority, as it was out of his province. He was glad to see there was a steady diminution in the [illegible] in all the London hospitals, with the exception, he was sorry to [illegible] in which he took great interest, viz., St. George's Hospital. He earnestly hoped that every blessing might attend the work of this great and valuable Temperance Hospital, which was not only doing great good, but was setting a bright example of what might be done in other parts of the country, and of what would be done. In the course of the proceedings it was stated that the Board of Management [illegible] their way to start with the [illegible].

OBITUARY.

W. FAIRLIE CLARKE M.D. (OXON.), F.R.C.S.

IT is with deep regret that we record to-day the death of Dr. Fairlie Clarke, which occurred on the [illegible] instant at [illegible], Isle of Wight, where he had gone in search of health only a few weeks before.

The stage of life is now so crowded, and the [illegible] so rapid, that it is difficult to believe it is barely eight years since he voluntarily relinquished an enviable and honourable position among the rising [illegible] and teachers of the London medical schools.

William Fairlie Clarke came of good stock. His great-grandfather and namesake, William Fairlie, the East India merchant, was [illegible]. His paternal great-uncle, Sir Alured Clarke, C.B., was a distinguished soldier, and another Alured Clarke was Dean of [illegible] in the last century. His father was in the Honourable East India Civil Service, and William, his youngest son, was born at Calcutta in 1833. His early years were spent in Edinburgh, and at school in Sunderland. He was sent, at 15, to Rugby, and proceeded to Christ Church, Oxford, where he graduated B.A. in due course. He then went to Edinburgh, with the intention of studying for the bar, but, finding medicine more to his taste, gave up the law and entered as a student at King's College in 1858. He was already a man of high character and decided religious convictions, and the influence which his greater age and standing naturally gave him with his fellow students made him a power for good in the medical school.

He became M.A. and M.B.Oxon. in 1862, and F.R.C.S. in the following year; but, before settling down to practise, accepted an appointment to travel abroad with Lord Shaftesbury, and some similar work in Scotland. Finally he took a house in Curzon Street, and started as a pure surgeon. He was now a demonstrator of anatomy at King's College, and clinical assistant to Mr. [illegible], at Moorfields, a post which he held for three years, and relinquished on being appointed assistant-surgeon to the Royal Westminster Ophthalmic Hospital. He also became, in succession, surgeon to the St. George's and St. James's Dispensary; assistant-surgeon to the West London Hospital, and finally to Charing Cross Hospital.

In 1865, he wrote for Mr. Renshaw a small *Manual of Surgery*, of which two subsequent editions have since been published, incorporating the contents of another small volume on *Bandaging*. The book, however, by which he will be best remembered was a monograph on *[illegible]*, a subject which he was making [illegible], and on which he also wrote two excellent papers published in the *Medico-Chirurgical Transactions*.

Various subjects of a philanthropic character, more or less remotely connected with medicine, claimed much of his time and thoughts, perhaps too much for a purely professional success. When quite a young man, he had seen the enormous importance of trying to improve the dwellings of the poor, and had, in conjunction with his friend, Mr. [illegible], established one of the earliest associations for carrying this out upon a sound financial basis. The medical relief of the sick poor was another question on which he threw himself, especially as an advocate of hospital-reform and provident dispensaries. Besides being a clear and correct, though somewhat too deliberate, speaker, he wrote [illegible] question, appeared in the *Edinburgh* and *Quarterly Reviews*, and in [illegible] for many years, and up to the date of his death.

He married, in 1870, a lady of [illegible] M.D.Oxon. [illegible] has since lived, beloved and respected, taking his due part in local affairs, but not ceasing to aid, with voice and pen, in the solution of wider questions. We may instance those of temperance, medical missions, and the spiritual welfare of students. Two of his temperance addresses have been published by the Church of England Temperance Society, one only a few months ago. He was one of the founders of the London Medical Missionary Society, and edited its quarterly paper. Even when a student he had gathered a few like minded men round him for the study of the Bible, and he was connected from the first with the Medical Prayer Union, and addressed its members on two occasions. His introductory address at Charing Cross in 1875 was impressive by its high moral and religious tone, as well as by its excellence of style, and every year afterwards he used to gather as many of the first year's men in London as he could induce to come to a friendly meeting at which addresses were delivered.

Three years ago he had typhoid fever severely, and remained in weak health till his death. About two months ago he showed symptoms of some obscure intracranial disease, which has proved fatal rather rapidly at the last, with symptoms of pressure.

Many deeply attached friends will mourn his comparatively early loss. He was one in whom the amiable and accomplished gentleman and the earnest Christian man were so blended, as to produce a type, happily not rare in England, but none the less deeply to be admired and prized. He leaves a widow and four sons.

ROBERT ANGUS SMITH, M.D., F.R.S.

We regret to record the death of Dr. Robert Angus Smith, which occurred during the early part of the present week. Amongst English chemists who have turned their attention to the solution of the difficult problems abounding in sanitary science, the name of Dr. Smith stands in the first rank; and there are few men who have contributed so much as he to the knowledge we now possess of the extent to which disease may depend on agencies we can control, or to the manner in which we can exercise this control.

A training under the illustrious Liebig at Giessen, following on a sound education received in the Glasgow Grammar School and College, fitted him well for his career as a chemist, and his attention was at once drawn to sanitary matters; for, as early as 1842, he aided Dr. Lyon Playfair in some investigations into the health-conditions of some of the Lancashire towns. Settling in Manchester, he soon attached himself to one of the oldest and best of the scientific institutions out of London, the Manchester Literary and Philosophic Society; and to it he, like his predecessor Dalton, and fellow-workers Joule and Roscoe, has been a constant contributor. In loving remembrance of his long connection with the Society, he, two years ago, published the *Centenary of Science in Manchester*, a record of the main features of its work during the hundred years of its existence.

Many of Dr. Smith's sanitary researches have been more or less connected with the offices he has held under Government, or with reports made for commissions. His appointment as inspector-general of alkali-works in 1863 led him to continue those laborious researches into the composition of the air which he had already carried on for seventeen years; and the publication, in 1872, of that most valuable work, *Air and Rain*, is the outcome of these researches.

He was requested by the Royal Commission on the Cattle-plague to prepare a report on disinfection; and his *Disinfectants and Disinfection*, published in 1869, contains the records of the experiments he made for this report, and of his antecedent work on the subject. As an inspector under the Rivers Pollution Act, he experimented much on water and drainage, a subject to which, however, his attention had been very early directed, as shown by his paper *Sewage and Sewage-rivers* in 1855. Up to the time of his death, his attention was actively directed to the pollution of water by sewage; and a report by him to the Local Government Board, which is shortly to be issued, will contain, it is said, much valuable information as to the organic impurities of water, and their estimation and effects.

Undoubtedly, Dr. Smith's most important contributions have been connected with sanitary science; but his valuable papers on chemical and physical subjects, not immediately connected with sanitation, indicate the vigour and wide range of his working power. A careful observer and a close reasoner, he was, above all things, a practical man; and hence the great reliance which was invariably placed on his judgment. His work will live, for it is good work; and his investigations will form a sound basis for advances which will add to the health and happiness of thousands.

HARRY GAGE MOORE, M.D.

We regret to announce the death of this gentleman, which occurred on Sunday, April 27th. A large circle of patients and acquaintances have thereby lost a good friend, and the medical profession one of its hard-working members. He resided in early life at Newbury, Berkshire; and received his medical education at Guy's Hospital. He became L.R.C.P.Lond. and M.R.C.S.Eng., in 1863, and obtained the post of House-Surgeon to the East Suffolk Hospital, Ipswich, in 1864. He discharged the duties of this appointment to the complete satisfaction of all concerned; and, after a few years, entered into partnership with the late Mr. G. Bullen, sen., of Ipswich; but eventually commenced practice on his own account. His patients rapidly increased in number, and he became Surgeon to the Ipswich Borough Police, so that, for many years past, his practice had required his constant attention. Notwithstanding this, however, he yet added to the strain by presenting himself, in 1882, for examination at Durham, and obtained the degree of M.D. of that University. But his professional labours told prematurely upon his apparently vigorous constitution. He had been ailing for some time past, but, unfortunately, did not spare himself. He was at a patient's house on Thursday, April 24th, when he was suddenly taken ill. He went home to bed, and, after a brief illness, died on the fourth day from a convulsive attack, due to uræmic poisoning.

Dr. Moore was only forty-two years of age at the time of his decease. He married, shortly after commencing to practise in Ipswich, the second daughter of Mr. Henry Clarke, of that town; and this lady and their thirteen children now mourn their sad loss. The Mayor made a feeling allusion in the Police Court to Dr. Moore's death; and his funeral on Friday, the 2nd instant, was attended by a large number of the official and all other classes of the community in Ipswich.

In appearance, the deceased gentleman was tall and handsome; he was of a cheery genial disposition; and was highly popular and deeply respected amongst all classes of society.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE INFECTIOUS CLAUSES IN THE CROYDON CORPORATION ACT.

A correspondent in Croydon writes to us:—

The clauses regarding infectious diseases which have been introduced into the Croydon Corporation Act have given rise to some discussion in the borough, and have excited considerable opposition on the part of some of the profession in Croydon. A meeting was called about two months since for the purpose of taking these clauses into consideration; a few of the profession attended the meeting, but, as it was pretty equally divided between those who approved of the dual notification and those who disapproved of notification altogether, the consideration of the matter was adjourned for further information. A second meeting was held, at which the majority was against any legislation, and a communication to that effect was made to the Town Council, through Dr. Strong, the chairman of the meeting. The Council, however, declined to be advised by the non-notifiers, and have retained the clauses requiring dual notification in the Bill which is before the House. It has passed through Committee, and awaits its third reading, so that it is not now likely to be interfered with. There are six divisions in the sixtieth clause, which fix that the occupier, etc., shall notify as well as the medical attendant. The corporation is to pay 2s. 6d. for each medical certificate for private cases, and 1s. for those which are notified by any officer to any public body or institution, and the penalty for non-notification is fixed at not more than forty shillings.

The sixty-first section declares that, upon report of medical officer of health, and with the approval of the Local Government Board, any infectious disease other than mentioned in the interpretation-clauses—viz., small-pox, cholera, typhus, typhoid, scarlatina, relapsing, continued, and puerperal fever, and diphtheria—may be added to the list, and deemed infectious diseases.

It was proposed at the first meeting of the profession, to which reference has been made, that the Act, as regards the profession, should be permissive, not penal. This view, however, did not find favour, as the larger number were against any kind of notification whatever; and, as is usual in such cases, *Divide et impera* is a motto which is frequently successful among medical men, as well as among other classes. It was owing to this difference of opinion in the profession here that the assistance of the Parliamentary Bills Committee was not sought in the matter. It was felt that, with so strong a division of opinion in the profession—it being unable to act with anything like unanimity—they could not with advantage appear before the House of Commons, even if such a committee had been willing to accord them a *locus standi* under such circumstances. Further, one party could not undertake the assistance of the Parliamentary Bills Committee without running the risk of introducing the sentiment of professional discord.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

THE Registrar-General's quarterly return, which has just been issued, comprises the births and deaths registered in England and Wales during the first three months of this year, and the marriages in the fourth quarter of 1883. The marriage-rate, although below the average for the corresponding period of the ten preceding years, was higher than in any autumn quarter since 1877. The birth-rate was lower than that recorded in the first quarter of any year since 1850: while the death-rate was the lowest on record for the corresponding quarter of any year since civil registration was established in 1837. The weather almost throughout the quarter was exceptionally favourable to the public health, the mean temperature of each month considerably exceeding the average. The rainfall was somewhat below the average amount.

During the first quarter of this year, the births of 224,694 children were registered in England and Wales, equal to an annual rate of 33.2 per 1,000 of the population, estimated by the Registrar-General to be 27,132,449. The birth-rate showed a further decline from the rates recorded in recent corresponding quarters, and manifested in the various counties the usual wide divergencies, owing chiefly to the different age and sex distribution of the population; for while it did not exceed 24.4 and 25.3 respectively in Rutlandshire and Herefordshire, it ranged upwards in other counties to 37.7 in Staffordshire, 37.9 in Durham, and 38.2 in Nottinghamshire. In the twenty-eight large towns for which the Registrar-General publishes weekly returns, the birth-rate last quarter averaged 35.4 per 1,000, and was, therefore, above the general English rate. The births registered during the first three months of this year exceeded the deaths by 92,597, which number represents the natural increase of the population during that period. In order accurately to estimate the net increase or decrease of a population during a given time, it is necessary to know the amount of emigration and immigration that has taken place, or, at any rate, the balance between the two. The records of immigration are, however, far from complete, but the returns supplied by the Board of Trade afford means of judging of the rate of emigration. From these returns it appears that, during the first three months of this year, 45,492 emigrants sailed from the various ports of the United Kingdom at which emigration-officers are stationed; of these, 25,758 were English, 4,279 Scotch, and 7,792 Irish. The proportions of emigrants to a million of the population in the three divisions of the United Kingdom were 949 from England, 1,107 from Scotland, and 1,573 from Ireland.

The deaths of 132,097 persons were registered in England and Wales, equal to an annual rate of 19.5 per 1,000 of the population, which, as before stated, was a lower rate than has been recorded in the first quarter of any preceding year, and implies that nearly 34,000 persons were living at the end of the quarter who would have died had the death-rate been equal to the average rate in the corresponding period of the 46 years 1838-83. This saving of life occurred at all ages among the people; the death-rate of infants under one year of age was 8.8 per cent., that of children and adults aged between one and sixty years 14.8 per cent., and that of persons aged sixty years and upwards 17.5 per cent., below their respective averages.

The 132,097 deaths from all causes registered in England and Wales last quarter included 13,552 which resulted from the principal zymotic diseases; of these, 3,265 were referred to scarlet fever, 3,034 to whooping-cough, 2,516 to measles, 1,671 to "fever" (principally enteric), 1,481 to diarrhœa, 1,270 to diphtheria, and 315 to small-pox. These 13,552 deaths were equal to an annual rate of 2.00 per 1,000, which was considerably below the average; indeed, the death-rate last quarter from each of these zymotic diseases, except diphtheria, was below the average of the ten preceding years. This immunity from the general prevalence of any serious epidemic is a highly satisfactory feature in the latest quarterly return of the Registrar-General.

DR. PULLIN AND THE HONITON BOARD OF GUARDIANS.

AT the meeting of the Board of Guardians of the Honiton Union, held on the 3rd instant, Dr. Pullin, one of the district medical officers, who has had the misfortune of having been called before the Board on several occasions to answer groundless accusations of neglect, attended, by request, to meet a charge of not having duly attended one Ann Soloman, of Sidbury. This charge had been preferred in writing by the Rev. G. T. Comyns, Vicar of Sidbury. The charge was addressed to the guardians, and, if it could have been substantiated, it would have been a very grave one; but, in the progress of the inquiry, it came out, in the clearest possible manner, that the charges against Dr. Pullin were unfounded. The inquiry lasted two hours, and would appear to have been of a complete and exhaustive character. At its close, it was moved, by Major Porter, "That the charges brought against Dr. Pullin have not been proved." This was seconded by Colonel Darnell, and supported by the Rev. J. Copleston and Mr. Ford, the Vice-Chairman, the latter gentleman remarking "that he thought the woman Soloman should be cautioned to be careful of what she said in the future." The motion was carried *nem. con.* The Chairman subsequently addressed Mrs. Soloman, expressing "the hope that her statements were not intentionally incorrect; she had caused a great deal of pain to the medical officer, and much trouble to the Board;" but, by an obvious omission, he did not censure the reverend vicar, who had thus carelessly pointed the arrow and winged its shaft against an honourable member of a sister profession.

We congratulate Dr. Pullin on his very honourable acquittal, which we see was accorded by six justices and eighteen representative guardians; and, in concluding our notice, we may express the hope that there may be adequate material to enable Dr. Pullin to bring his attackers before a court of justice, in order to obtain personal reparation, as well as in the interest of all Poor-law medical officers.

THE SMALL-POX IN LONDON.

AT the Metropolitan Asylums Board, on Saturday, it was made manifest that the steps taken, even in the face of the opposition by the local authorities of the metropolis, to meet an attack of small-pox, had been abundantly necessary, for, as Sir Edmund Currie stated, no fewer than 346 fresh cases of this disease were received by the asylum authorities within the fortnight, as against 144 in the previous fortnight. The fresh cases were mostly from east-end parishes, Hackney, Bethnal Green, Shoreditch, and Mile End Old Town heading the list; but the disease had now spread more or less over the whole of London, only two parishes being exempt, Kensington and North Woolwich. The East End cases had been taken to the Eastern Asylum, where Dr. Collie had classified the cases, some being taken to the hospital-ships, under the most rigidly disciplined system of land and water ambulance (the latter by the *Red Cross* steamer), and some, convalescent cases, had been taken to the camp at Darenth, where now there were 409 cases. In the other asylums there were: at the Eastern, 46 cases; at the South-Western, 41; on the hospital-ships, 175; at the South-Eastern Asylum, 27; at the North-Western Asylum, which the committee had asked the Local Government Board to sanction the opening of, there were 11 cases. In all, under treatment on Saturday, there were 709 cases, against 439 the fortnight ago. Sir Edmund asked the managers, on behalf of the committees of which he is the chairman, to sanction the appointment of a medical officer to the *Red Cross* steamer, to sanction the purchase of the *Albert Victor* steamer from the liquidating London Steamboat Company, at the cost of £3,150, to carry the recovered patients from Long Reach on their way to their homes, and to approve of the action of the committee in obtaining the opening of the North-Western Asylum for small-pox cases. The Board approved of all the proposals.

THE SUPERANNUATION QUESTION IN THE AYLESBURY UNION.

WE learn, from the *Bucks Herald* of April 2nd, that, at the meeting of the Board of Guardians, held just previously, Mr. Spencer of Whitchurch, who has been one of the district medical officers for forty years, waited on the Board for the purpose of announcing the resignation of his office in favour of Mr. [illegible], and of asking for superannuation-allowance; grounding his application on the fact that, during his lengthened tenure of office, he had never been censured or in any way complained of, and was now past work, as he was in his 71st year.

The application having been made, one Mr. [illegible] desired to know whether he wished for an [illegible] or a pecuniary [illegible]. Mr. Spencer replied [illegible]. This was followed by a question from a [illegible] named Clarke, asking whether Mr. Spencer had any relatives to maintain him, and whether he was aware that they, the guardians, only met there to relieve the destitute, a question so obviously beyond the mark that the chairman very properly declined to allow it to be put. This was followed by another question, from the same person, which was to this effect: "What had he made in his practice?" which the chairman similarly refused to put.

On the retirement of Mr. Spencer, the chairman proceeded to deliver the law on the subject, which was that the Board could grant superannuation-allowance, subject to the consent of the Local Government Board, who would send down an inspector to inquire into the circumstances of the case, and one element in an applicant's favour would be if he had sustained any injuries, etc., in the performance of his duty. Ultimately, after several other members of the Board had expressed their opinion of the application, it was moved and carried, *nem. con.*, that the application could not be entertained, and Mr. Spencer was called in and informed of the Board's decision, on which, we learn, he expressed his great disappointment.

We do not suppose that it would have been possible, with a Board constituted as the Aylesbury Board of Guardians evidently is, that any other decision could have been arrived at; but, in the interest of other applicants, we would point out that Mr. Spencer should have announced his resignation of office, apart altogether from the question of his successor. The resignation having been accepted, he should then have sent in a formal application for superannuation-allowance. This, by the regulations governing the grant of such allowance, must have been submitted to the consideration of the whole Board specially summoned for such purpose. By adopting the course he did, he gave members of the Board the opportunity of connecting him with the transfer of the practice to his successor, and alleging that *inter alia* as the ground for their refusal.

NEW CONVALESCENT SMALL-POX ASYLUM.

THE managers of the Metropolitan Asylums Board have agreed to recommend the erection of a convalescent small-pox asylum at the Gore estate, Darenth, at a cost of £116,400.

FEVER IN LONDON.

THE number of fever-cases in the asylums of the Metropolitan Asylums Board showed a diminution on Saturday last; but only to a small extent, there being 362 cases, as against 369 a fortnight before. Of the total, 312 were cases of scarlet fever, and 50 of enteric fever. The managers agreed to recommend that they should be allowed to raise £72,000 on loan for the purposes of a convalescent fever-asylum which it is proposed to erect on the newly acquired site at Winchmore Hill.

PAUPER RELIEF AND MEDICAL CERTIFICATES.

SIR,—I shall be obliged by your opinion upon the following questions.

1. In cases of application for pauper-relief, is a certificate of inability to work from the district medical officer a *sine quâ non*?

2. Have not boards of guardians power to grant such relief upon certificates of registered medical practitioners other than the district medical officer?

3. Are boards of guardians justified in refusing relief in cases such as the following. The son of a poor widow, whose family I have attended without payment for twenty years, came under my care for pneumonia. At the end of a week, pauper-relief became necessary. Application was made to the relieving officer, and subsequently to the board upon two occasions, inability to work being certified by myself; relief was refused, because the patient had not the parish doctor; the applicant being told that if the patient had the district medical officer he would be relieved, and not otherwise.—I am, sir, yours faithfully,

JOHN T. SKRIMSHIRE.

Holt, East Dereham, May 8th, 1884.

*** 1. Boards of guardians generally insist on the production of a certificate from their medical officers, and from them only, but we know of no provision precluding them from accepting one from any qualified medical man.

2. They have the power, but we very much doubt whether they ever avail themselves of it, except in a case of urgent necessity.

3. As our correspondent puts the case, we consider that it was a very ungracious and harsh procedure to refuse relief under such circumstances; but the guardians acted strictly within their legal power in so doing. Indeed, our correspondent must, on reflection, see that anything beyond a very exceptional departure from the regulations governing the grant of relief to poor persons would open the door to abuses of all kinds; for it must be observed that the relieving and medical officers are required to act with discretion in giving or recommending relief to poor persons. No outside medical gentleman, however benevolent or respectable he may be, can be held responsible by the guardians of the union for any recommendation he may make.

SANITARY CONTROL OF CARAVANS.

SIR,—In reference to your remarks in the JOURNAL of April 26th, page 828, allow me to mention that, in January last, my attention as medical officer of health was called to the overcrowded state of a travelling caravan, at the time laid up for the winter. In a room about 10 feet by 5 feet, and 5 feet high, lived man and wife, two children, and a servant-boy. This latter slept under the bed occupied by the man and woman, surrounded by curtains and valance. My board decided they had no jurisdiction; and, on application to the Local Government Board, they informed me, "that unless the case came under the 91st section of the Public Health Act, 1875, the urban authority could not take any proceedings; and they doubt if a caravan on wheels could be regarded as a house for the purposes of that Act; but, if it remained long, though on private premises, it might in time become a nuisance." If this opinion be a correct one, will the Local Government Board, or, rather, can they, sanction such a by-law as that of Jarrow-on-Tyne. Have any local authority power to constitute a caravan a house for sanitary purposes? If they have, all other authorities should take the same steps. If not, then the Government should be applied to for the purpose of meeting such cases, so many caravans being overcrowded and injurious to the health of those occupying them, children especially suffering.—Yours,

[illegible]

*** Jarrow proposes to take the further powers to which we referred by means of a private bill that is proceeding in Parliament. There is nothing, except the expense, to prevent other local authorities from taking similar powers under local Acts. Evidently the matter should be settled by imperial, and not local, legislation; but this particular point is only a very small part of a much larger question.

HEALTH OF ENGLISH TOWNS.—During the week ending the 10th instant, 6,278 births and 3,666 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly returns, which have an estimated population of 8,762,354 persons. The annual rate of mortality per 1,000 persons living in these towns, which in the two preceding weeks had been 22.3 and 22.7, declined to 21.8 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow:—Brighton, 14.3; Derby, 14.3; Hull, 16.1; Norwich, 17.9; Bristol, 18.2; Salford, 19.3; Sheffield, 20.5; London, 20.6; Huddersfield, 20.6; Sunderland, 21.2; Birmingham, 21.4; Bolton, 22.0; Newcastle-upon-Tyne, 22.1; Cardiff, 22.3; Bradford, 22.4; Oldham, 22.5; Halifax, 23.2; Wolverhampton, 23.3; Birkenhead, 23.5; Leicester, 23.6; Portsmouth, 24.7; Leeds, 25.0; Nottingham, 25.9; Manchester, 27.0; Preston, 27.3; Liverpool, 27.4; Plymouth, 28.3; and Blackburn, 28.8. The average death-rate last week in the twenty-seven provincial towns was 22.9 per 1,000, and therefore exceeded by as much as 2.3 the rate recorded in London. The 3,666 deaths registered last week in the twenty-eight towns included 553 which were referred to the principal zymotic diseases, against 576 and 546 in the two preceding weeks; of these, 194 resulted from whooping-cough, 176 from measles, 66 from scarlet fever, 47 from diarrhœal diseases, 35 from "fever" (principally enteric), 22 from small-pox, and 13 from diphtheria. These 553 deaths were equal to 15.1 per cent. of the total deaths, and to an annual rate of 3.3 per 1,000. This zymotic rate was equal to 3.7 per 1,000 in London, while it did not exceed 3.0 in the twenty-seven provincial towns, among which it ranged from 0.4 and 0.6 in Leicester and Derby, to 5.9 in Liverpool, 6.4 in Oldham, and 6.7 in Portsmouth. The fatal cases of whooping-cough, which had been 189 and 173 in the two preceding weeks, rose last week to 194, and showed the highest proportional fatality in London, Bolton, and Liverpool. The 176 deaths referred to measles exceeded by 4 the number in the previous week, and caused the highest rates of mortality in Plymouth, Portsmouth, and Oldham. The deaths from scarlet fever, which had been 76 and 94 in the two preceding weeks, declined to 66 last week; this disease was proportionally most fatal in Sheffield and in Leeds. The 47 deaths from diarrhœal diseases showed a considerable increase upon recent weekly numbers. The fatal cases of fever were fewer than than those recorded in any recent week, and caused the highest rates in Blackburn and Portsmouth. The 13 fatal cases of diphtheria were fewer than those recorded in any week since the middle of 1882, and included 7 in London and 2 in Cardiff. Of the 22 deaths from small-pox in these towns, 19 occurred in London, 2 in Liverpool, and 1 in Sunderland. The deaths from diseases of the respiratory organs in London, which in the four previous weeks had increased from 285 to 360, declined last week to 326; they were slightly below the average, and equal to an annual rate of 4.2 per 1,000. The causes of 86, or 2.3 per cent., of the 3,666 deaths registered last week in the twenty-eight towns, were not certified either by medical practitioners or by coroners. In London, the proportion of uncertified deaths did not exceed 0.8 per cent., while it showed a considerable excess in Birkenhead, Salford, and Oldham.

HEALTH OF SCOTCH TOWNS.—During the week ending the 10th instant, 900 births and 600 deaths were registered in the eight principal Scotch towns, having an estimated aggregate population of 1,254,607 persons. The annual rate of mortality, which had been 24.2 and 23.8 per 1,000 in the two preceding weeks, rose last week to 24.9, and exceeded by 3.1 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns the death-rate was equal to 12.5 in Leith, 18.7 in Dundee, 21.8 in Perth, 22.9 in Greenock, 23.4 in Edinburgh, 26.2 in Aberdeen, 28.6 in Glasgow, and 29.4 in Paisley. The 690 deaths registered last week in these towns included 41 which resulted from whooping-cough, 17 from measles, 12 from diarrhœal diseases, 11 from diphtheria, 7 from scarlet fever, 6 from "fever," and not one from small-pox; in all, 94 deaths were referred to these principal zymotic diseases, equal to 15.7 per cent. of the total deaths, and to an annual rate of 3.9 per 1,000, which was 0.6 above the average zymotic death-rate last week in the large English towns. The zymotic rates in the Scotch towns ranged from 0.3 and 1.5 in Perth and Dundee, to 5.4 and 6.3 in Paisley and Edinburgh. The fatal cases of whooping-cough, which had risen from 29 to 41 in the three preceding weeks, were again 41 last week, of which 18 were returned in Glasgow, and [illegible] in Edinburgh. The 17 deaths from measles showed a further increase upon recent weekly numbers, and included 5 in Glasgow, and [illegible] in Paisley. Of the 11 deaths from diphtheria, 5 were recorded in Glasgow. The fatal cases of scarlet fever, which had been 12, 8, and 5 in the three previous weeks, rose again to 7, of which 6 were returned in Glasgow. The 6 fatal cases of "fever" were within 1 of the number in the preceding week, and included 4 in Edinburgh. The mortality from diseases of the respiratory organs in these Scotch towns showed a considerable further increase upon that prevailing in recent weeks, and was equal to 6.2 per 1,000, which exceeded by as much as 2.0 the rate from the same diseases last week in London. As many as [illegible], or 11.5 per cent., of the 690 deaths registered last week in these towns, were uncertified.

MEDICAL NEWS.

Royal College of Surgeons of England. The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 8th instant, and, when eligible, will be admitted to the pass examination.

Messrs. H. A. P[illegible], P. H. [illegible] Hospital; E. P. [illegible] W. Ord, of the [illegible] Hospital; W. G. P[illegible], of the Middlesex Hospital; H. W. S[illegible], of St. Mary's Hospital.

Four candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months, and one for six months.

The following gentlemen passed on the 9th instant.

Messrs. [illegible] C. M. H[illegible] [illegible] Hospital; [illegible] Hospital; [illegible] Westminster Hospital.

Six candidates were referred for three months, and one for six months.

The following gentlemen passed on the 12th instant.

Messrs. J. O. [illegible] of St. Bartholomew's Hospital; [illegible] G. R. [illegible] of St. [illegible] Hospital.

Seven candidates were referred for three months.

The following gentlemen passed on the 13th instant.

Messrs. A. W. [illegible] Hospital.

Six candidates were referred for three months, and one for six months.

The following gentlemen passed on the 14th instant.

Messrs. [illegible]

Two candidates were referred for three months, and one for six months.

[illegible] the examination just completed [illegible] the corresponding period of last year [illegible] three months, and six for six months, making a total of [illegible] candidates.

Royal Colleges of Physicians and Surgeons of Edinburgh. Double Qualification. The following gentlemen passed the first professional examination during the April sittings of the examiners.

R. A. N[illegible], Belfast; W. G. [illegible], Sussex; W. H. [illegible] E. A. M[illegible]; W. A. [illegible] [illegible] J. E. Leach, Rochdale; D. D. Black, Cockburnspath; J. St. Johnston, Bir[illegible] [illegible] Doncaster; J. Wingfield, St. Petersburg; L. E. de Boucherville, Mauritius; W. H. Carter, Tiverton; J. McGaw, co. Down; E. Priestley, co. Down; W. D. Marston, London; [illegible] shire; M. J. Morgan, Carnarvonshire; E. E. Jones, Flintshire; J. E. Tisdall, Castletown Berehaven; A. D. Dunn, Canterbury; A. H. Whittell, Plymouth; J. T. Woodhouse, Stockport; [illegible] Tyrone; J. W. Patrick, co. Cavan; C. Beesley, Southsea; T. Godley, Kerry; D. R. Macdonald, Edinburgh; A. F. Turner, Wiltshire; P. A. Moriarty, co. Kerry; D. Davis, Abingdon; R. T. Paton, Edinburgh; V. P. Mart, Salford; D. G. Hughes, Llandilo, South Wales; M. Fitzgerald, Ballynaly; F. R. Longden, Geelong, Australia.

The following gentlemen passed their final examination, and were admitted L.R.C.P.Edinburgh and L.R.C.S.Edinburgh in April and May.

G. Todd, Manchester; C. Burland, Isle of Wight; F. Laird, Aberdeen; F. W. S[illegible], Yorkshire; [illegible] L. L. Llewellyn, London; [illegible] H. H. Bigg, London; C. S. Earle, Manchester; R. B. Graham, Berwickshire; H. W. G. [illegible]; M. D. Hart, Jamaica; A. E. Drury, Dublin; H. A. Tuxford, Boston; J. J. McNulty, [illegible] Cape of Good Hope; [illegible] H. Goodwyn, Lucknow; P. S. Oram, Ashton-under-Lyne; G. V. Fourquemin, Glasgow; R. H. Brew, co. Clare; [illegible] Glasgowshire; B. F. P. McDonald, Edinburgh; J. N. Constable, co. Mayo; J. K. Goodall, Nottingham; C. C. McFarlane, Victoria; C. B. Harvey, co. Wexford; [illegible] North Wales; [illegible] South Wales; J. W. Elliott, Carrickfergus; A. E. N. Browne, London; G. [illegible] Galway; [illegible] V. O. Taylor, Mauritius; G. W. O'Flaherty, co. Galway; D. G. Donaldson, Perthshire; C. A. Mitchell, Yorkshire.

University of Edinburgh. The following candidates have passed the undernoted examinations held during last month.

[illegible] J. J. André, A. Asher, B. Barnard, G. T. Beatton, Walter Bell, William Bell, W. W. O. Beveridge, H. L. Blacklaw, W. S. Bower, C. W. Brown, J. L. Brown, J. Bruce, F. O. Buckland, B.A., A. E. Bullock, M. B. Burton, P. Cairns, J. Cameron, L. B. Christian, J. M. Clarke, A. E. Cox, H. B. Densham (with distinction), D. Drummond, E. H. Ezard, A. D. Fleming, R. S. Forrest, S. C. Fowler, D. A. Fraser, W. M. Gabriel, T. H. Gee, F. S. Genney, J. A. Gibson, R. W. Gibson, A. L. Gillespie, G. F. Grant, J. Grant, [illegible] Juckes, W. Kemp, H. R. Kenwood, G. Knowles, J. W. Lewis, W. J. Lewis, F. Liddell, J. R. Lownds, J. M'Andrew, J. Macdonald, G. S. Macgregor, H. Mackay, W. A. Mackintosh, D. M. Maclachlan, A. A. Macleod, H. W. G. [illegible] Matheson, S. W. Mathias, T. G. Meikle, T. Meiring, A. van der Merwe, J. G. [illegible] Morrison, P. R. Murison, M. F. X. Nalletamby, W. S. Nason, A. B. North[illegible] Paton, H. N. Pelly, J. A. Perez, A. F. R. Platt, J. F. Prdie, G. M. Rae, C. Reid, H. Robinson, A. R. Russell, J. S. R. Russell, G. S. Samuelson, H. C. L. Scofield, W. Scott, L. Segol, W. A. Simpson, J. H. Slayter, H. M. Smellie, C. A. Smelt, F. Smith, T. Smith, W. C. Sprague, C. D. Stewart, [illegible]

Meadows, C. H. Melville, W. Miller, C. J. Morton, E. Morton, A. W. Nash, G. Ozanne (with distinction), A. Paterson, J. Paterson, M. G. Pereira, H. H. Pridie, E. E. Pringle, E. T. Pritchard, E. Robertson, G. M. Robertson, G. A. Scott, K. M. Scott, J. Simpson, T. Slingsby-Tanner, G. R. Smeits, G. L. Somerville, W. C. Spiller, W. H. G. Stephen, R. Stirling, R. C. Strode, J. Stuart, W. G. Sym, J. R. Talbot, J. W. Talent, C. Terrey, W. E. Thomas, J. T. Thompson, A. Turner, J. C. S. Vaughan (with distinction), S. T. Vine, D. Walker, D. H. Walsh, P. E. Warburton, J. Warnock, F. E. Welby, W. J. Will, A. B. Winder, W. S. R. Woodforde, H. Worsley.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—The following gentlemen passed their first professional examination during the recent sittings of the examiners.

H. H. Williams, Holyhead; A. E. Nevins, Liverpool; W. Smithies, Clitheroe; J. G. Uppleby, South Africa; E. E. Taylor, Manchester; R. S. Smith, Edinburgh.

The following gentlemen passed their final examination, and were admitted L.R.C.S.E.

R. H. Blaikie, Edinburgh; S. Keith, Edinburgh; J. Thomarson, Carlisle; W. K. Pauli, Lincoln; R. Smailes, Whitby; K. J. Framjee, Kolapur, India; S. G. Sharpe, Norwich; C. G. King, Pollockshaws; J. C. F. Whicher, Gosport.

The following gentlemen passed their first professional examination for the Licence in Dental Surgery.

L. L. Wilde, Winchester; J. L. Fraser, Inverness.

The following gentlemen passed their final examination, and were admitted L.D.S. Edinburgh.

J. G. Munro, New York; A. H. Thomas, Chester.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the April sittings of the Examiners, the following gentlemen passed the primary professional examination of the Faculty.

E. Ball, W. G. Booth, C. S. Bowker, M. G. Davies, C. Dolman, J. Eatock, W. C. Halpin, A. Lindley, A. M'Arthur, A. R. Owst, J. S. Sargeant, A. E. Thorpe, W. F. C. Woodhead, H. K. Young.

The following passed the final examination for the licence of the Faculty.

J. C. Aldred, Dore, Sheffield; F. H. Davis, Dawley; W. Duncan, Larne; J. Herron, M.D., London; E. Hopkins, Glasgow; T. M'Ilroy, M.D., Newtownwards; J. Miller, London; W. S. Pratt, Weedon; G. C. Richardson, Glasgow; T. Russell, Glasgow; R. W. Sclater, Kirkwall.

The following passed the final examination for the double qualification, granted conjointly by the Faculty and by the Royal College of Physicians, Edinburgh.

H. M. Addison, London; W. A. Algie, Glasgow; G. B. Buttery, Govan; D. P. Gage, Kilwinning; H. A. Keegel, Ceylon; J. M'Ilwraith, Glasgow; R. D. Morgan, Glasgow; A. A. Sutton, Glasgow; E. Thomas, Glasgow; G. D. Trevor-Roper, Maidenhead.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 8th, 1884.

Clarke, James Fernandez Howard, 23, Gerrard Street, Soho.
Crisp, James Ellis, Lacock, Wilts.
Kiddle, Thomas, Ellore, Godavery District, Madras.

MEDICAL VACANCIES.

The following vacancies are announced.

ARMAGH UNION.—Medical Officer for Workhouse. Salary, 120*l.* per annum. Applications to the Clerk of the Union up to May 20th.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.—Acting Physician. Applications by June 4th.

BOROUGH HOSPITAL, Birkenhead.—Honorary Surgeon. Applications to W. W. St. George, Esq., 11, Holly Bank Road, Clifton Road, Birkenhead, by May 27th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—Resident Clinical Assistant for six months. A gratuity of 20*l.* is usually awarded. Applications to the Secretary, 24, Finsbury Circus, E.C., by May 31st.

DENBIGHSHIRE INFIRMARY, Denbigh.—House-Surgeon. Salary, 85*l.* per annum. Applications by June 5th.

DUNSHAUGHLIN UNION.—Medical Officer, Dunboyne Dispensary. Salary, 125*l.* per annum and fees. Election on May 17th.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, 100*l.* per annum. Applications by June 11th.

FOLKESTONE FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Medical Officer. Salary, 150*l.* per annum. Applications to C. J. Moore, 185, Dover Road, Folkestone, by May 17th.

GENERAL HOSPITAL, Birmingham.—Resident Assistant Surgical Officer. Salary, 70*l.* per annum. Applications by May 31st.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Ophthalmic Surgeon. Applications by June 2nd.

GUEST HOSPITAL, Dudley.—Resident Medical Officer. Salary, 120*l.* per annum. Applications to Mr. E. Poole, Secretary, by June 4th.

HARTLEPOOL FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Medical Officer. Applications to T. Tweddell, Commercial Terrace, West Hartlepool.

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square.—Resident Medical Officer. Salary, 50*l.* per annum; after one year's service, 100*l.* Applications by May 25th.

HOSPITAL FOR SICK CHILDREN, 49, Great Ormond Street, W.C.—Junior Resident Medical Officer. Salary, 50*l.* per annum. Applications by May 26th.

LIVERPOOL INFIRMARY FOR CHILDREN, Myrtle Street.—Assistant House-Surgeon for six months. Applications to H. R. Robertson.

METROPOLITAN ASYLUMS BOARD.—Medical Superintendent for the Small-Pox Hospital-Ships lying in the Thames at Long Reach. Salary, 400*l.* per annum. Applications by May 23rd.

NORWICH FRIENDLY SOCIETIES' MEDICAL INSTITUTE.—Three Medical Officers. Salary, 200*l.* per annum each. Applications to H. B. Mitchell, Ivy House, Lady Lane, Norwich, by May 31st.

OWENS COLLEGE, Manchester. Medical Department.—Assistant Lecturer in Medical Jurisprudence and Demonstrator in Practical Toxicology. Applications by May 21st.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant House-Surgeon. Applications to Dr. Broster, Marland Place, Southampton, by May 19th.

SHEFFIELD FRIENDLY SOCIETIES' MEDICAL INSTITUTION.—Chief Medical Officer. Salary, 200*l.* per annum. Applications to Mr. George Abbott, Secretary, 9, St. James Row, Sheffield.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL.—Pathologist and Teacher of Histology. Salary, 100*l.* per annum. Applications to W. Wadham, M.D., Dean.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square, W.—Resident Medical Officer. Salary, 105*l.* per annum. Applications by May 19th.

SUNDERLAND INFIRMARY.—Senior House-Surgeon. Salary, 100*l.* per annum. Applications by June 2nd.

TOWN OF CALCUTTA.—Health Officer. Salary, Rs. 1,250 per month. Applications to the Secretary to the Municipality, Calcutta, by July 15th.

TUNBRIDGE WELLS BENEFIT SOCIETIES MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, 200*l.* per annum. Applications to Mr. J. Wallis, 26, Newcomen Road, Tunbridge Wells, by May 29th.

UNIVERSITY COLLEGE, Liverpool.—Professor of Medicine. Applications to the Dean by Saturday, May 24th.

MEDICAL APPOINTMENTS.

BIGGS, Charles E. F. M., M.R.C.S., L.R.C.P., appointed Junior House-Surgeon and Chloroformist to the Cheltenham General Hospital and Dispensary.

BUCK, L. A., L.R.C.S., appointed Ophthalmic Clinical Assistant to King's College Hospital.

CASE, P. W. Perkins, M.B., C.M., appointed Medical Officer to the Fourth District of the Croydon Union, *vice* T. H. Barnes, M.D., resigned.

CHEVES, J. T., M.R.C.S., appointed House-Surgeon to King's College Hospital.

CHILDE, C. T., M.R.C.S., appointed House-Surgeon to King's College Hospital.

DUNCAN, W. A., M.D., appointed Assistant Obstetric Physician to the Middlesex Hospital.

DYKE, T. J., F.R.C.S.Eng., reappointed Medical Officer of Health for the Urban Sanitary District of Merthyr Tydfil.

ERSKINE, James, M.A., M.B., C.M., L.F.P.S., appointed Surgeon to the Ear Department of Anderson's College Dispensary, Glasgow, *vice* Thomas Barr, M.D., resigned.

FINDLATER, S. W., M.D., appointed Medical Officer to the Parochial Board of the Parish of Mortlach, *vice* J. A. Innes, M.D., resigned.

GOSTLING, J. Harry, M.R.C.S.(Eng.), L.S.A., appointed House-Surgeon to the Morpeth Dispensary, *vice* J. Erskine Paton, M.B., resigned.

GREVES, E. Hyla, M.B., M.C., appointed Physician to the Liverpool Infirmary for Children, *vice* F. Pollard, M.D., resigned.

HASELL, E. S., L.S.A., appointed Assistant House-Accoucheur to King's College Hospital.

HODGSON, G. G., M.R.C.S., appointed Assistant House-Physician to King's College Hospital.

LILBURNE, J. T., B.A.. M.R.C.S., appointed Physician Accoucheur's Assistant to King's College Hospital.

MAILE, C. E. Drayson, M.R.C.S., L.R.C.P.Ed., reappointed Medical Officer of Health for the Westbury and Whorwellsdown Union District.

PALMER, F. Craddock, L.K.Q.C.P., M.R.C.S., L.S.A., appointed Medical Officer of Health for Broughton, Brigg, Lincolnshire.

PRUEN, Septimus T., M.B.Durh., M.R.C.S., appointed Senior House-Surgeon to the Cheltenham General Hospital and Dispensary.

SHORT, T. S., M.R.C.S., appointed Physician's Assistant to King's College Hospital.

TURNER, N. H., M.R.C.S., appointed Assistant House-Surgeon to King's College Hospital.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

DICKSON.—On the 7th instant, at South View, St. Helier's, Jersey, the wife of John E. Dickson, M.B., C.M.Edin., of a son.

MARRIAGE.

SMITH—JONES.—May 8th, at St. Cyprian's Church, Liverpool, by the Rev. H. S. Maye, George Francis Kirby Smith, F.R.C.S., to Amy Ethel, daughter of the late Robert Norris Jones, of Liverpool.

DEATHS.

SLOAN.—At Mossend Cottage, Bellshill, on the 8th inst., after a long and lingering illness, John Charles Sloan, L.R.C.P.London, aged 64 years. Friends please accept of this (the only) intimation.

WILKS.—May 10th, at Shirley Vicarage, suddenly, Elizabeth, widow of the late G. F. Wilks, Esq., M.R.C.S., of Ashford, aged 68 years.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY ......St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Hospital for Epilepsy and Paralysis, Regent's Park, [illegible] Dr. Julius Althaus: The Causes of Locomotor Ataxy.

TUESDAY.—Pathological Society of London, [illegible] Dr. [illegible] Stephen Mackenzie: [illegible] Potassium [illegible] Cerebral Aneurysm [illegible] Cerebral Hæmorrhage. Dr. Percy Kidd: [illegible] Aneurysms. Dr. Sharkey: 1. Multiple Stricture [illegible] A Case of Cystic Squamous Epithelioma (card); [illegible] Œsophagus with Atrophy of Stomach (card). Dr. [illegible] Aneurism of Middle Cerebral Arteries. Mr. [illegible] Petrous Portion of Temporal Bone; [illegible] Mr. Shattock: 1. Congenital Malformation of Heart; [illegible] Hydrocephalic Head (card). Mr. Parker: Congenital [illegible] Dr. [illegible] a Case of Congenital [illegible] Dr. [illegible] Cancer of Prostate with Secondary Osseous Deposits [illegible] Dr. [illegible] Dr. Handfield Jones: Preparations of Pale and Red Clot in Cerebral Arteries. Mr. Lockwood for Surgeon [illegible] R.N.: Cholera with [illegible] in the Blood and Urine (living). Dr. [illegible] Mr. Morgan: 1. Extensive Calcareous Deposit in Pleura (card); 3. Perforation of Occipito-atloid Articulation of Cerebellum (card). Dr. Hebb: 1. A Sponge-like Liver (card); 2. The Muscular Nerves and Spinal Cord in Diphtheritic Paralysis (card); Tubercle in the Wall of the Heart. Mr. Lane: 1. Tumour of the Bladder (card); 2. Partial Mollities (card). Dr. Hale White: Left Inferior Vena Cava (card). Mr. J. Poland: Suppurative Arthritis of Infants (card).

WEDNESDAY.—Royal Meteorological Society, 7 P.M. Mr. Robert H. Scott: Note on the Proceedings of the International Polar Conference, held at Vienna, April 1884. Dr. A. Tucker Wise: Meteorological Observations on the Maloja Plateau, Upper Engadine, Six Thousand Feet above the Sea. Mr. Naylor Pearson: On Some Results of an Examination of the Barometric Variations in Western India. Mr. Richard Inwards: Illustrations of the Mode of taking Meteorological Averages by the Method of Weighing Paper Diagrams. Mr. Rupert T. Smith: Ten Years' Weather in the Midlands.

FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Wm. Anderson: A Case of Pyelo-lithotomy. Dr. Finlay: Sequel to a Case of Aortic Aneurysm. Mr. Golding Bird: Two Cases of [illegible] Dr. F. Taylor: A Case of Impaction of Bone in the Larynx. Living Specimen.—Uncommon Lateral Curvature of Spine with Extreme Osseous Deformity, by Mr. B. Roth.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

THE WILSON FUND.

THE following additional sums have been received:—

	£	s.	d.
Mr. R. D. Mason, Ipswich	10	0	0
Mr. Cooper Forster	2	2	0
Mr. Howse	1	1	0
W. M. B.	2	2	0
Dr. G. S. [illegible], Ipswich	1	1	[illegible]

H. A. [illegible]

The Chantry, [illegible], May 1[illegible]th, 1884.

VASELINE POMADE.

SIR,—Allow me to corroborate "W. H." in his remarks upon the action of vaseline pomade.—Yours truly, T. W.

INTERMEDIATE EXAMINATION IN MEDICINE.

SIR,—I should esteem it a favour if any of your readers would [illegible] of the usual course of preparation taken by candidates for the [illegible] and pharmaceutical chemistry part of the "Intermediate Examination in Medicine" of the University of London; and where to procure specimens of [illegible] plants.—I am, sir, yours truly, [illegible]

*** [illegible] from the Apothecaries' Hall. We are informed that many, perhaps a majority of [illegible]

[illegible]

SIR,—[illegible] I, etc.

AN IRISH MEMBER.

[illegible]

SIR,—[illegible]

[illegible]

SIR,—[illegible]

[illegible] L.R.C.P.I., M.R.C.S.E., L.S.A.

Medical Advertising.

Sir,—I inclose a cutting from the *Southport Visitor* of the 6th inst., containing the advertisement of a "Dr C. W. Bringloe." He has also had a number of "cards" distributed in the neighbourhood, the inclosed specimen having been left at my brother's house last week in an unaddressed envelope, as a dealer in second-hand clothes or a coal-agent would have left their cards of advertisement. It is a great pity that such practices as these cannot be put a stop to. I inclose my card, and remain, sir, your obedient servant, DISGUSTED.

"Dr. Bringloe, Bismarck Villa, 56, Windsor Road, Southport. Surgery hours: 9 to 10 A.M., 2 P.M., 7 to 8 P.M."

Hour-Glass Contraction of the Uterus.

Sir,—I have referred to Mr. W. L'Heureux Blenkarne's second, as well as to his original, communication again. I find the substance of what I said remains the same. Before expulsion of placenta, 1st, ergot ("a dose or two") was given; 2nd, "slight traction on the cord" was used. What is this but a *vis a fronte*? It is a mere question of degree; but it is denied, in the second communication, that there was any "*vis*" at all.

Evidently, Mr. W. L'Heureux Blenkarne, from his expression about the placenta coming away "of its own sweet will" in his second communication, has not read Dr. Playfair's directions as to the management of the third stage of labour, to which I would politely refer him (4th edition, vol. ii, p. 342-340), where it is stated: "In nineteen cases out of twenty, the finger need never be introduced into the vagina after the birth of the child, nor the cord be touched. This may seem an exaggerated statement to those who have accustomed themselves to the usual method of dealing with the placenta; but I feel confident that all who have learnt the method of expression of the placenta would testify to its accuracy."

While obstetric assistant at University College Hospital, I had abundant opportunity of putting this to the test, and have often, without soiling my fingers, expressed the placenta, to the astonishment of the junior student, who had tried in vain and considered it a case of retained placenta.

It is also one of the cardinal rules of our hospital never to give ergot till the placenta is expelled.

The above are the modern and most approved views as laid down by our leading obstetricians, whose directions I simply claim to have followed.—Yours truly, J. ROBERSON DAY, L.R.C.P.(Lond.), M.R.C.S.(England),
L.S.A (Lond.), Clinical Assistant, Brompton Hospital, S.W.

Brompton Hospital, May 10th, 1884.

Alcoholic and Alkaloidal Dyspepsia.

Sir,—I should be much obliged if any of your numerous readers would be kind enough to give me any information with regard to the increase of dyspepsia arising from the increased consumption of tea, coffee, *et hoc genus omne*, as I am trying to work out the question of the relative evils of alcoholic and non-alcoholic stimulants. Yours, etc., A. AMBROSE.

Westbourne Tower, Bournemouth.

⁂ In the working-classes in our great towns, especially amongst women severe dyspepsia is very frequent, owing to the free consumption of tea that has stood for half-an-hour or longer, or has been kept on the hob. Boiling water should be poured on the tea-leaves in the tea-pot, which should then be placed on the table, and the tea should not be allowed to stand longer than ten minutes. Even then, it is not advisable to drink more than two small cups of such tea. This beverage should never be drunk within an hour before a meal nor immediately after dinner or heavy lunch, as it may cause flatulence or gastric catarrh. Tea-dinners, or tea with meat, are not wholesome, and often upset persons whose digestion is naturally weak. Lastly, tea increases or causes insomnia and tremors of the hands, and masks the effects of over work in studious subjects of sedentary habits. As the drinking of strong over-brewed tea is very general among the poor, and as good tea is drunk to excess, owing to certain fashions amongst the upper classes, the dyspepsia which it causes is on the increase. Coffee is very often consumed with tobacco, between meals, a habit which has been known to cause severe gastric catarrh until both luxuries have been given up; it is also less tolerated than tea by persons suffering from ill-health due to debility or excesses of diet. Cocoa and chocolate are nutritious drinks, but, like all other hot fluids such as soup, they may cause or increase dyspepsia when drunk in quantities at a time. These drinks certainly never produce the very grave visceral diseases universal amongst the intemperate, but it must be remembered that chronic dyspepsia, which they so often cause, is strongly suspected by eminent authorities as one of the origins of chronic nephritis.

Popular Belief Regarding Zymotic Diseases.

Sir,—In the April 26th number of our JOURNAL, p. 828, you have called attention to "the belief so tenaciously held by many working-class mothers, that their children must, at some time or other, suffer from the various forms of zymotic disease, and the sooner the better."

I am sure you will do a great public service if you will also point out that this belief is kept up, if not actually created, by the practice of a large number of the public institutions for the reception of poor children; who place the inquiry whether the children for admission have had the various zymotic diseases on the same footing as the inquiry whether they have been vaccinated. The effect of this upon the parents' minds is necessarily to create the belief that these diseases are as beneficial as vaccination, and that, "the sooner they have them the better," so as to be the better qualified for admission to the various charitable institutions.

When I was examining physician to the Royal Albert Orphan Asylum, I induced the Committee to expunge this inquiry from their examination-papers.

After a child has been admitted to an institution, a note should be taken by the resident medical officer as to what zymotic diseases it has or has not had, but no such inquiry should be placed on the published admission-papers. I am, yours, etc., HORACE DOBELL, M.D.

Loosening of Teeth.

Sir,—Any suggestion for the treatment of the following will be gladly received. Teeth, apparently quite sound, become loose and gradually come out. There is no scorbutic or mercurial taint, and no undue accumulation of tartar.—Yours truly, G. C.

Abdominal Neuroses.

Sir,—The very courteous and flattering observations by Dr. McNaught of Boothfold concerning my Gulstonian Lectures, in your number of May 10th, deserve a brief reply. May I refer Dr. McNaught once more to these lectures, which Messrs. Churchill are now about to issue in a small volume? In them Dr. McNaught will find, I believe, that I have myself expressed, as fully as he can desire, the distinction to be drawn between local irritations, local irritations reinforced by neurosis, and pure neurosis. I have, indeed, used Dr. McNaught's own illustrations. I have distinguished, for example, between bronchitis, bronchial asthma, and pure asthma; and I have also considered, as he does, the effect of latent gall-stones in arousing gastralgia. I have cautioned my readers against the error of allowing a secondary but overshadowing neurotic reaction to blind them to any local irritation which may have called it forth. I have said that in persons of a certain diathesis local disorders are liable to be lost in these nervous reactions, and that no treatment can succeed which fails to deal with both the local irritation and also with the nervous phenomena which, consequential at first, do often, in a later stage, form the chief part of the malady. For these reasons, it is even of greater importance in neurotic persons to remove any cause of local offence with one hand, while with the other we deal with the special susceptibilities which in them give even to the most trivial local irritations an excessive power for evil. Yours truly, T. CLIFFORD ALLBUTT.

6, Park Square, Leeds.

Resuscitation after Apparent Death.

Sir,—I lately attended a woman in her first confinement; and, owing doubtless to the lengthened period to which the labour was protracted, I eventually extracted by the forceps what was apparently to myself as well as to the nurse and relatives, a perfectly dead child. It was livid, quite flaccid, the pupils were immovable, and there were no signs of respiration or life about it. It being believed to be dead, the body was put away, and I attended to the mother; but, while doing so, I determined to have a good try at resuscitating the infant, if possible, and I ordered at once a basin of warm water and other necessary articles to be got ready. Ten minutes after the actual birth, to the evident amusement of the nurse, I commenced operations by plunging the body into warm water and holding it immersed; then I rubbed and smacked the body, and compressed the thorax unsparingly for some minutes; then, cutting the tied cord, I induced bleeding to commence. The attendants holding the child still in the basin face downwards, but not under water, and with the tongue kept well drawn out, and occasionally blowing forcibly into the mouth, I assiduously kept up the movements known as Silvester's for about twenty minutes; after which, to the great astonishment of the nurse and grandmother, the child gave a gasp, and eventually I restored to the mother a living and kicking child, to the satisfaction of all present.

Now, the question remains in these cases, "Was this child actually and really dead, or was it simply a case of suspended animation, or intensely feeble respiration and cardiac action? My opinion is, that the death was real and positive, but that there being no disease present, and the blood being still warm, the machinery of life is set going when suitable means are taken and persevered with, and without undue delay. For the future, I do not intend to allow any of these still-born infants to be put away without having a good trial at restoration to vitality. I am, sir, yours faithfully, W. ARNOLD THOMSON, F.R.C.S.

Ampthill.

St. John's Wort.

In Parkinson's *Theatrum Botanicum*, published 1640, amongst the "vertues" of St. John's wort, is the following.

"The oyle of St. John's wort, eyther simple or compound, but the compound is the more effectualle, is singular good, both for all greene wounds, and olde sores and ulcers, in the legs or elsewhere, that are hard to be cured, and is effectualle also for crampes and aches in the joynts, and pains in the veins and sinewes, and is also goode for all burnings by fire, to be presently used, or the juice of the greene leaves applyed; the hearbe dryed and made into pouder is as effectualle for wounds and sores to be strowed thereon, as the oyle or juice. The simple oyle is made of four ounces of the flowers infused in a pint of oyle ollive, called sallett oyle, and three ounces of white wine, for ten or twelve dayes to be set in the sunne, and afterwards boyled in a balneo or kettle of seething water, strayned forth, and refreshed with new flowers, so set in the sunne, and in the same manner boyled, strayned forth, and renewed the third time with fresh flowers, which, after they have lastly stood in the sunne a fortnight or more, are to be boyled in the said balneo or kettle of seething water, strayned forth, and the oyle, having some turpentine dissolved in it whiles it is hot, and so kept, is singular good for purposes aforesayd . . . The compound oyle is made of the simple oyle, after the last infusion being strayned forth there is added dittanie of candy, gentian, or felwort, carduus benedictus or blessed thistle, and tormentill, of each a small quantitie, and some earth-wormes washed and slit, and all of them infused in the said oyle and set in the sunne, and after boyled, strayned forth, and turpentine and oyle of wormwood put thereunto, which is then to be reserved in some pot or glass, close stopped, to be used as occasion doth require.

Physician and Surgeon.

Sir,—A new comer to a small town puts on his door-plate "Physician and Surgeon." Such a title was unknown before his arrival. The technical right may be conceded, and in large towns it may matter little what a man calls himself. But is it not so far contrary to the established usage of the word physician, and to the usual title of general practitioners, as to justify other medical men in assuming that the new comer wishes the public to consider him something better than his neighbours? It has been intimated to him that such a door-plate is not kindly received by his brethren, but he declines to alter it.—Yours truly,

NEMO.

First Class Examination of the College of Preceptors.

Candidate asks: Will any one kindly name the manuals best suited for reading in English grammar, history of the English language, English history, and geography physical and mathematical?

Polydactylism and Maternal Impressions.

Sir,—Mrs. H., multipara, was confined on May 5th of a healthy female child, with six fingers on each hand and six toes on each foot. She had repeatedly expressed the opinion that the child would be deformed, as she had frequently seen a man with a mutilated hand.—I am, etc., W.

The Brussels Degree.

Sir,—Will any of your numerous readers who have lately passed the M.D. Brussels kindly inform me the best works to prepare for the same, the standard of examination, and the language in which it is conducted?—I am, etc., MEMBER.

THE SHOEING OF HORSES.

WE have received a number of communications from correspondents on this subject.

Mr. W. H. [illegible], Maryport, Cumberland, finds the Charlier shoe very satisfactory on [illegible] roads, but [illegible] of earthy material [illegible] or where there are loose stones, it is useless. Dispensing with shoes [illegible] incurable navicular disease.

"M.R.C.S., L.R.C.P." has found that the Charlier [illegible] tramway-horses, and [illegible] where the [illegible] paved with granite cube setts. If a horse be [illegible] less; if otherwise, it may be worth while trying Charlier shoes [illegible] feet only.

Mr. B. Duke finds that the Charlier shoe [illegible] very expensive.

Mr. H. Adcock, of 50, Grange Road, S.E., [illegible] At first his horses [illegible] lame and tender, but this soon wore off, as the [illegible] now travel over rough [illegible] without flinching [illegible] Charlier shoe go just as [illegible] at first without shoes [illegible] accustomed to the hardness and roughness of the [illegible] Mr. Adcock finds to the Charlier shoe is, that the [illegible] quite so long as the old form of shoe, but [illegible] in the end it comes to much the same thing.

Mr. Alfred Grant (Chipping Sodbury) has [illegible] the Charlier shoe suitable for a medical man's horses.

A LOVER OF HORSES states that this shoe is [illegible] Brigade exclusively, by the Manchester tram-[illegible] horses are still [illegible] the entire satisfaction [illegible] any shoes at all.

Mr. J. W. H[illegible], Sheffield, after [illegible] requires an [illegible] has found that [illegible] Sheffield [illegible] nothing [illegible]

Mr. G. E. S[illegible] TAYLOR (Sheffield), has tried the Charlier [illegible] years, but has returned to the old plan, a plain hunting-shoe. His reasons for giving up the Charlier shoes were, first, [illegible] free, and they lost their knee-action. Then [illegible] screws, [illegible] the matter. And, [illegible] for four-wheeled carriages. The advocates of the Charlier shoe state that horses shod on this plan can travel on [illegible] roads. [illegible] but at a very slow pace, and this does not suit him.

FLEAS.

SIR,—At this period of the year I am a martyr to fleas. [illegible] rounds, good houses or bad. I am [illegible] two about me, [illegible] underclothing; and [illegible] My skin is peculiarly sensitive to insect irritation, [illegible] a trouble from [illegible] that I [illegible] and rep[illegible] of your readers [illegible] which [illegible] the presence of [illegible]

And [illegible] gratify [illegible] Yours [illegible]

[illegible]

SIR,—I know nothing of the [illegible] case but what I [illegible] Bengal.

Now, the [illegible] under a charter from Her Majesty the Queen, and are neither more nor less than [illegible] year.

It may be of some use [illegible] these facts [illegible] I am, sir, [illegible]

B.A. (Madras).

[illegible]

SIR,—[illegible]

Kensington.

SIR,—The following [illegible] surgeon [illegible] Hospital [illegible] I am, yours, etc., [illegible]

[illegible]

SIR,—[illegible] of May [illegible]

W. M. K.

EXAMINATION PAPERS: ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following [illegible] Anatomy and the Principles and Practice of Surgery, [illegible] the Diseases of Women, and the Principles and Practice of Medicine, [illegible] for the diploma of [illegible] the following drugs—dilute nitric acid, subnitrate of bismuth, confection of senna, creasote, elaterium, extract of cannabis Indica, liquid extract of opium, [illegible]

[illegible]

SIR,—[illegible] the above disease in its early stage.

[illegible]

[illegible], M.D.

[illegible]

SIR,—[illegible]

[illegible], M.D.

[illegible]

J. R. S.—The special point on which our opinion is sought by "J. R. S." is, strictly speaking, neither medico-legal nor medico-ethical, but one of common law; and our correspondent will do well to submit it to his solicitor, together with a copy of the contract he entered into with the local practitioner, his present master.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

SIR,—Would you allow me to apologise to those gentlemen whose letters were accidentally returned by the porter, and to ask them if they would kindly communicate with me again? Yours faithfully,

JAMES ROCHEID FORREST, Honorary Secretary.

3, New Inn, London, W.C., May 13th, 1884.

ARTIFICIAL TYMPANA.

SIR,—In addition to the papers referring to the different forms of artificial tympana to be consulted in Section 1798 of the *Medical Digest*, very instructive papers appeared in the JOURNAL, by Drs. Pierce and Barr, October, 1883, pp. 720-722; and in the *Lancet*, by Mr. Dalby, January, 1884, p. 102; also in the *Medical Times and Gazette*, June, 1879, p. 558, where Dr. B. W. Richardson describes a golden tympanum.—Obediently yours, RICHARD NEALE, M.D.Lond.

60, Boundary Road, South Hampstead, N.W.

MILK.

SIR,—At an interesting lecture on milk, given at the Parkes Museum on April 24th, Dr. Poore of University College, in the course of the discussion, made some valuable remarks regarding feeding-bottles, and drew attention to the sour, unwholesome condition into which they were frequently allowed to fall. Severe as his strictures were, I do not think he mentioned the whole case against them. Why has the old-fashioned elongated feeding-bottle, on the end of which an ordinary nipple was placed, gone out of use?

Some time ago, I investigated the various feeding-bottles in order to obtain the best. I adopted this one without hesitation, and it has given every satisfaction. I employed, however, for closing the large opening, a solid India-rubber cork, having a triangular piece cut out of the side vertically. By forcing this cork more or less into the bottle; it is easily possible to regulate the supply of air, or even to close the bottle entirely. At the right time, the food made very hot, placed in the bottle, and rolled up in flannel, will keep warm all night, and save a deal of trouble now spent in warming the food in the night time. Every part of this bottle is easily washed, and if not clean, the dirt can be seen. It is also cheaper than the ordinary bottles; but it appears to me that it is not liked, because it must be held when a child is being fed, and, unfortunately, many people are too lazy to do this, and they care not how much wind an infant sucks in with the new-fashioned bottles, provided only they can leave the child "to take care of itself."

I have hesitated to bring this question of feeding-bottles up publicly, for it is beyond my province as an agricultural chemist, but I am pleased Dr. Poore has drawn attention to it, and I hope, for the public good, it will not be allowed to drop.

There is, however, another question which medical men might, perhaps, keep in mind in the performance of their duties, and which, indirectly, is of great interest to me, and also to the agricultural community, apart from its importance to the general public. Does the use of condensed milk excite skin-disease in children? So far as my limited, and non-professional observation goes, I would give an answer in the affirmative. I may be wrong, but if so, am sure you will give those who have had special opportunities of judging, the means of correcting me.—I am, sir, yours etc., FREDK. JAS. LLOYD, F.C.S.

4, Lombard Court, E.C., April 25th, 1884.

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

SIR,—I think it would be a very desirable thing, and one which would be acceptable to many parties who are personally concerned, if the word "Benevolent" were altogether expunged from the title of that most excellent institution. It cannot be a pleasant thing for young gentlemen, the sons of gentlemen, to hail from a "Benevolent" school; and it can hardly be denied that it would be detrimental to any of them who are able, after leaving school, to proceed to one or other of the universities. To parents also, and to the sisters and friends of those young gentlemen, it cannot be otherwise than distasteful that their relative is at a benevolent institution. I know perfectly well that this is only a false pride; but still it is human nature, and is likely to continue so, at any rate for the present. I believe there are many medical men who would be glad to send their sons to "Epsom school" if it were not for the charitable element; but it is that, and that only, which deters them from doing so. Such is my own case, and I have no doubt that one would not have far to seek before meeting with plenty more. The authorities of Epsom school lay themselves out to receive as pupils the sons of those who are not medical men, who pay on a somewhat higher scale. Is it not probable that many more would avail themselves of this excellent school, except for the name? There is no reason that I can conceive why Epsom should not in time rank with Clifton, Marlborough, Christ's Hospital, or any other of the leading public schools; but never, so long as it is handicapped with the word Benevolent. Many men who would send their sons to Epsom school would be horrified at the idea of the Medical Benevolent College. My own wish would be that the school should be called simply Epsom School, and the college for pensioners Epsom College, or, if it be preferable, Royal Epsom College; and I would venture to assert that there is scarcely a medical man in the three kingdoms, not even passing over the colonies, but would know perfectly well the nature and purposes of those institutions. If this letter will have no further effect than to ventilate the subject, I shall feel that it has not been written in vain.—I am, sir, yours, etc.,

HENRY F. WINSLOW, M.D.

METHODS OF RESTORING THE APPARENTLY DROWNED.

SIR,—Whatever method is recommended to restore breathing, I think it should be preceded by instructions how, first, to get all the water possible out of the lungs and stomach. For many years I have advised turning the patient on his face, with the wrists crossed over the upper part of the sternum; then, standing astride him, to pass the hands beneath until the tips of the fingers meet over the stomach and lower ribs, and lift him by the hands in this position as high as necessary for the water to run and be pressed out. Assistants can, at the same time, clear the mouth and nostrils.—I am, etc., E. S.

C. E. W.—The query is, we think, a little too wide for the scope of a medical journal.

COMMUNICATIONS, LETTERS, etc., have been received from:

Our Edinburgh Correspondent; Dr. S. S. Lungren, London; Mr. G. Innes, Dufftown; Dr. Alfred Carpenter, Croydon; Mr. Wm. Williams, Festiniog; Dr. E. Gordon Hull, Withern, Alford; Dr. W. L. Chester, Cork; Mr. E. H. Croghan, Bloemfontein, South Africa; Dr. D. J. Mackenzie, Glossop; Mr. F. W. D. Harris, London; Mr. J. B. Richardson, Torquay; Mr. M. Duggan, Castle Eden; Dr. C. R. Francis, London; Mr. F. C. Palmer, Brigg; Mr. W. A. Norry, Epsom; Dr. W. H. Tayler, Anerley; Mr. Hoff, London; Dr. Milson, London; Dr. Wilson, New Washington; Dr. Willoughby, London; Mr. Edward Crickmay, Laxfield; Dr. C. Wells, London; Dr. Althaus, London; Dr. R. J. Browne, Birkenhead; Mr. Joseph Hadley, London; Mr. H. A. Collins, Saxmundham; Mr. H. W. Peard, Fermoy; Mr. Vincent Jackson, Wolverhampton; Dr. T. S. Grant, Lago Maggiore; Surgeon-Major Grant, Edinburgh; Mr. J. Rochied Forrest, London; Mr. C. L. Brandreth, Blackpool; The Kreochyle Co., Leytonstone; Our Cairo Correspondent; Mr. Paul, Liverpool; Dr. R. Caton, Liverpool; Mr. W. Prowse, Cambridge; Mr. C. McDonnell, Manchester; Mr. W. Marriott, London; Mr. W. A. Thomson, Ampthill; Surgeon-Major Evatt, Woolwich; Mr. Oswald Browne, London; Dr. W. A. Greenhill, Hastings; The Dean of the Medical Department, King's College; Mr. Henry Blake, Great Yarmouth; Mr. J. H. Morgan, London; Mr. T. A. Mitchell, London; Our Aberdeen Correspondent; Our Dublin Correspondent; The Secretary of the Pharmaceutical Society, London; Mr. Walter Maine, Clacton-on-Sea; Mr. J. G. Macmuller, Auckland, New Zealand; Dr. Skrimshire, Holt, East Dereham; Dr. Strahan, Belfast; Dr. M. Williams, Liverpool; Mr. A. Ambrose, Bournemouth; Mr. R. H. S. Carpenter, London; Mr. A. H. Cook, London; Mr. W. H. Goode, Sydney; Dr. Emrys-Jones, Manchester; Mr. R. Jones, Leigh; Mr. C. R. Francis, London; Mr. E. Jepson, Durham; Mr. E. C. Baber, Brighton; Dr. Clifford Allbutt, Leeds; Mr. T. L. Walford, Reading; Mr. J. G. Douglas Kerr, Bath; Mr. C. Clark Burman, Belford; Lord E. Fitzmaurice, London; Mr. W. J. Meharry, Belfast; Messrs. Thomas Christy and Co., London; Mr. H. Claud Lisle, Nantwich; Sir William Smart, London; Mr. J. W. Vickers, London; Dr. J. Burdon Sanderson, Oxford; Mr. Charles Lunn, Birmingham; Mr. James McCaw, London; Messrs. W. Clowes and Sons, London; Mrs. W. A. Williams, Southsea; Our Belfast Correspondent; Mr. Alfred Reckless, Sheffield; Mr. W. J. Law, Tunbridge; Dr. Leech, Manchester; Dr. Neale, London; Mr. H. Nickoll, Stockton-on-Tees; The Chesebrough Manufacturing Co., London; Mr. B. H. Dale, Devizes; Mr. P. W. Perkins Case, Croydon; Mr. Carr H. Roberts, London; Our Birmingham Correspondent; Dr. Drury, Birmingham; Mr. J. Edwards, Leeds; Dr. Garson, London; Mr. R. M. Miller, Upper Norwood; Messrs. Woollam and Co.; Professor Hamilton, Glasgow; Dr. Beaven Rake, Trinidad; The Secretary of the Aberdeen, Banff, and Kincardine Branch; Mr. J. T. Hill, Newbridge, near Newport; Dr. James H. Turtle, Homerton; Dr. Danford Thomas, London; The Honorary Secretary of the Belfast Branch of the Royal Medical Benevolent Fund Society of Ireland, Belfast; Our Glasgow Correspondent; Mr. F. C. Davage, London; Dr. Holland, London; Dr. Baildon, Southport; Dr. Affleck, Edinburgh; Mr. J. R. Day, London; Mr. J. Brown, Bacup; Dr. Lush, Weymouth; Dr. W. M. Young, Woodbridge; Dr. Keelan, Warwick; Mr. M. Knipe, Derby; Dr. Downing, Queenstown; Mr. A. Ford, Harrogate; Dr. Cameron, Dublin; Dr. F. de H. Hall, London; Mr. E. W. Jollye, Spalding; Mr. E. S. Jackson, Carnforth; Mr. P. Q. Karkeek, Torquay; Mr. Dyke, Merthyr Tydvil; Mr. James Erskine, Glasgow; Dr. FitzHenry, Aix-les-Bains; Our Manchester Correspondent, etc.

BOOKS, ETC., RECEIVED.

Histological Notes for the Use of Medical Students. By W. H. Waters, M.A. Manchester: J. Cornish. London: Smith, Elder, and Co. 1884.

Lectures on Diseases of Infancy and Childhood. By Charles West, M.D. London: Longmans, Green, and Co. 1884.

The Student's Guide to Systematic Botany. By Robert Bentley, F.L.S., M.R.C.S London: J. and A. Churchill.

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TWO LECTURES
ON
SCLEROSIS OF THE SPINAL CORD.

By JULIUS ALTHAUS, M.D., M.R.C.P.,
Senior Physician to the Hospital for Epilepsy and Paralysis, Regent's Park.

LECTURE II.—THE CAUSES OF TABES SPINALIS.

THAT certain poisons, when habitually taken into the system, may lead to sclerosis of certain portions of the spinal cord, cannot be disputed. It has long been known that a peculiar form of spinal debility is caused by eating bread mixed in undue proportions with ergot of rye, the permanent mycelium or sclerotium of a fungus of a family of the pyrenomycetes, which grows on the flower and fruit of secale cereale, and which contains, according to the researches of Dragendorff and Podwissotzki, two active principles, viz., sclerotinic acid (about 4.5 per cent.) and a colloid substance termed sclero-mucine (from 2 to 3 per cent.). The term ergotine, which was first introduced by Wiggers, and afterwards used by Bonjean and Wenzell, had better be avoided, as very different substances are comprehended by it; and it is by no means proved that what is called ergotine really constitutes the active principle of ergot. Even less is known of other alkaloids said to be contained in the mycelium, viz., ergotinine and ecboline. Sclerotinic acid, however, is a definite poison, five grains of which will kill a kitten. The phenomena produced by the administration of this substance are, according to Nikitin, paralysis, lowering of the temperature of the body, and retarded respiration, which latter ceases before the heart's action is arrested. Tuczek has endeavoured to produce locomotor ataxy artificially, by feeding animals with small doses of ergot and of sclerotinic acid. Under the influence of ergot, mice and fowls died rapidly, with symptoms of wasting and fatty degeneration of the principal organs. Rabbits, on the other hand, appear to be insusceptible to the action of that poison, since they remained perfectly well when fed for months with doses varying from half an ounce to an ounce. Cats and dogs, again, wasted away, became unsteady, more especially in the hind legs; but the knee-jerk persisted, and after death no change in the spinal cord was discovered. Sclerotinic acid in small doses produced, according to the same observer, more distinctly the phenomena of locomotor ataxy, first in the hind legs and afterwards in the fore legs; but the knee-jerk could be elicited to the last, and inspection of the cord showed that organ to be unaffected. Experiments made with trimethylamin have likewise given uncertain data.

While, therefore, the results of purely experimental pathology are ambiguous, and so far bear out Vulpian's statement, made [illegible] years ago, that it is impossible to produce tabes artificially in animals, it is certain that, when bread contaminated with ergot of rye is habitually taken as food, posterior sclerosis becomes developed. Until lately, the description of the symptoms which occurred in such cases has been somewhat obscure, and the results of inspection not sufficiently [illegible]; but recently Tuczek has given a lucid description of an epidemic of this kind, which occurred in the district of Frankenberg, Hesse, subsequently to the bad harvest of 1879, when as much as ten per cent. of ergot of rye was found to be mixed with the flour of which the bread supplied to the inhabitants was made. The district mentioned contains twelve villages, with a population of 2,500; five hundred of the latter fell ill, many of whom were children. The common people there are miserably poor; the dwellings and the food are [illegible] abominable; and, in addition to this, the people have an extraordinary proneness to dram-drinking. [illegible] potato-spirit are consumed daily by each person [illegible] children are found addicted to this pernicious habit. The harvest of 1880 contained much less ergot of rye than the one of 1879, [illegible] appear to have led to any fresh [illegible] rise to many relapses, and although the harvest [illegible] and the meal pure, cases nevertheless occasionally presented themselves even then for admission into the hospital. [illegible]

In a few instances the action of the poison [illegible] since severe [illegible] symptoms were [illegible] ingestion of the poisonous bread. In by far the [illegible] cases, however, the mental affection, as well as the [illegible] broke out some months afterwards, and, in some [illegible] set in a considerable time after the consumption of the bread had been discontinued.

This seems to show that there is, apart from the primary affection, a kind of secondary or late intoxication—resembling somewhat the progress of syphilis—and leading eventually to severe disease of the centres of the nervous system. Seventeen patients suffering from ergotinic tabes were received into the University Hospital of Marburg, eleven being males and six females, including six children under fifteen years of age. There were other cases in which attacks of mania, with epileptiform seizures, formed the principal symptoms; yet in all cases, without exception, the knee-jerk was absent, and eventually returned only in a single instance, although a good many cases recovered. Even in children, in whom, as a general rule, the patellar reflex is well marked, it could not be elicited after they had shown symptoms of ergotism.

In the cases of tabes, numbness, pins and needles, lightning-pains, a feeling of constriction round the waist, analgesia, staggering on closing the eyes, and ataxy of gait were present. The tactile sensibility was much diminished; and the faradic wire-brush applied with a powerful current caused hardly any reddening of the skin. The pupils were large, as is often seen in the commencement of tabes. In four fatal cases, Burdach's columns were found sclerosed, while Goll's columns appeared to be either normal or only slightly affected. The antero-lateral columns and the grey matter were healthy. In Burdach's columns, the degeneration could be traced throughout the entire extent of these tracts, from the lumbar portion up to the medulla oblongata. The pia spinalis was fonnd to be healthy. The changes in the cord consisted essentially of overgrowth of the neuroglia and atrophy of nerve-fibres. There were no traces of acute myelitis anywhere. Corpora amylacea were present.

The absence of the knee-jerk was of the greatest diagnostic value in all these cases. In some, where at first only epileptic seizures or mental symptoms were present, this symptom justified the conclusion that there was even then a definite anatomical alteration in the posterior columns of the cord. In one of these patients, absence of the knee-jerk was the only sign of tabes, and yet the inspection showed that even at such an early stage there was decided evidence of degenerative atrophy in the cord. The blood-vessels and the pia mater were healthy, and so were the posterior roots and spinal ganglia; but, in the lumbar and lower dorsal cord, the whole transverse section of Burdach's columns was found to be diseased; further upwards, only the median portion of this system appeared to have suffered, while in the cervical cord only a small tract contiguous to Goll's columns was found in a state of sclerosis.

A counterpart to ergotism is seen in the causation of spastic spinal paralysis, with, presumably, sclerosis of the pyramidal tracts of the cord, by eating bread mixed with the meal of the grain of *Lathyrus cicera*. This bread is consumed by the poorest classes in Upper and Central India, especially near Allahabad and in Upper Scinde, in Algeria, in some parts of France, and in the south of Italy, where the people call it [illegible]. Hippocrates and Galen speak of [illegible] in those who fed on ervum, which is analogous to *Lathyrus*. Since then, much has been written on this complaint; but it was [illegible] of Rome who recognised that the peculiar affection caused by eating *Lathyrus* shows the symptoms of spastic spinal paralysis. He happened to see, in October 1880, five cases of this kind, and found that all the patients had come from the commune of [illegible]; they were small farmers, three of whom belonged to the same family, and they had for several months been obliged to subsist on bread consisting of equal parts of rye and *Lathyrus*. Proceeding to [illegible], he found six more persons similarly affected. Most of them were young men under thirty-five years of age. The aged and the children who partook of the same bread did not appear to suffer.

The first symptoms of illness consisted of debility and [illegible]; the patients had the appearance of being drunk. [illegible] weeks when the *Lathyrus* bread had been [illegible]. If the use of the bread was [illegible]

It has been noticed [illegible] on the fresh plant of *Lathyrus Cicera*, begin presently to drag their hind legs. The dried grain of the same plant, when taken by pigs, dogs, and rabbits, causes similar effects. Rabbits seem to die soon after they have fed on it, while hogs resist the action of the poison much longer. Lathyrism is by some authors believed to be identical with beri-beri; but recent researches seem to make it probable that the paraplegia of beri-beri is not owing to spinal disease, but to acute multiple neuritis.

I now proceed to consider the influence of another poison, which is far more subtle in its nature, more widely diffused over the earth, and more destructive of human life and happiness in its effects than any other, viz., the poison of syphilis. Syphilis, which begins as a blood-disease, and, if unchecked in its course, ends as a flesh-and-blood disease, has long been known to play an important part in the production of certain diseases of the brain, such as tumour, arterial thrombosis, and meningo-encephalitis. It is, however, only quite recently that evidence has been brought forward from different quarters showing that it lies at the root of most cases of locomotor ataxy which come under our observation in practice; and I have no doubt that it will presently be found to have likewise a direct or indirect influence in the causation of other forms of primary sclerosis of the spinal cord. For practical medicine, this is one of the most important facts which have been elicited by recent researches, as it seems to open up to us a new prospect of our being able, by energetic and long continued treatment of the venereal distemper, to prevent the outbreak of tabes in many instances, and to cure it, if the patient come under care in the initial stage of the malady.

When it once becomes known throughout the profession that insufficient treatment of the earliest symptoms of venereal disease opens the door to the invasion of such an awful disease as tabes, which causes the most severe sufferings that men are called upon to endure, and which, when fully established, baffles all our therapeutical resources, it may surely be hoped that the treatment of primary syphilis, and of the earlier stages of secondary syphilis, will be carried out in a more systematic manner than is now frequently the case, and that every trouble will be taken to destroy that baneful and insidious poison before it has taken a thorough hold of the system. Instead of telling the patient, as is now often done, that his primary affection is "nothing," and "will soon be well," his attention should be drawn to the necessity of a long and persevering treatment, if he value his health and happiness; and he should be plainly advised that it is very often in cases which have a mild beginning that, years afterwards, the most terrible consequences are apt to supervene. We fortunately possess specific antidotes to the syphilitic poison in mercury and iodide of potassium; but these can only exert their full effects if perseveringly used for many months from the very beginning of the malady. Thus only can we eventually succeed in preventing the evolution of some of the direst diseases to which the human species is liable.

The earlier observers of tabes did not recognise the connection between that malady and the venereal poison. Thus we find that Romberg, that sagacious physician, to whose clinical acumen we owe the first and truly masterly description of the symptoms of the disease, when discussing the causes of it, does not say a single word about syphilis. Duchenne, many years afterwards, noticed that several of his patients had had syphilis, and that this appeared to be the only rational or obvious cause of the ataxy; but he added that such a conclusion was hazardous, inasmuch as there was no novel or special symptom in those cases, apart from certain well-known signs of the venereal distemper. It is true that the pain complained of appeared occasionally to be more severe or was only felt at night, but this also happened when there was no syphilis; while with regard to treatment, antisyphilitic remedies had no beneficial influence on the disease. Fournier was the first who, in 1876, expressed himself decidedly for the syphilitic origin of tabes, and has more recently developed his ideas fully in a work which, although written in the spirit of a special pleader, contains, nevertheless, a large amount of irrefutable evidence establishing his thesis. He was followed in France by Vulpian, who placed syphilis in the first rank of those influences which determine the outbreak of the malady, and asserted that there are few patients suffering from tabes who have not, a few years before the appearance of the first symptoms, had an infecting sore and secondary syphilitic manifestations; that a few of these have been properly treated, but most of them very insufficiently so; and that amongst twenty patients suffering from tabes, there were at least fifteen who had previously been syphilitic. Caizergues, who has reported a hundred cases of syphilitic affections of the spinal cord observed by various authors and himself, has, from his own experience, recorded three cases of undoubted syphilitic tabes. Grasset has recently made the inspection of one of these latter cases, and found in the brain diffuse lesions of meningo-encephalitis, and in the cord systematic sclerosis, which, below the cervical enlargement, affected the whole of the posterior columns, and above that point, only Goll's columns. In that case the ataxy had been confined to the lower extremities, but the patient had also suffered from general paralysis (megalomania). According to him, the circumstance that syphilis habitually produces diffuse lesions in the brain does by no means show that it could not produce systematic lesions in the spinal cord; and he is of opinion that clinical evidence should, as far as this point is concerned, be held of greater weight than pathological anatomy.

In this country, Moore, Dreschfeld, Drysdale, Gowers, Hutchinson, and others have expressed themselves in favour of the syphilitic origin of the disease in the majority of cases.

A few years ago, it occurred to me that it would be worth while to ascertain the influence of syphilis in the production of other diseases of the nervous system, and to compare the numbers thus obtained with those which had already been recorded for tabes. In this way a kind of cross-experiment would be made, whereby I thought that a good deal of light might be thrown upon this question. I therefore analysed a thousand consecutive cases of nervous affections recorded in my case-books with regard to this point, without making the least attempt at selection.

These cases were chiefly of epilepsy, hemiplegia from cerebral hæmorrhage or softening, hysteria, neurasthenia, tabes, chorea, and allied affections; and I found that, while the percentage of syphilis in tabes was above ninety per cent., it was only eleven in neurasthenia, six in hemiplegia, and four in epilepsy. Since taking these percentages, I have analysed another set of cases which have been more recently under my care, and found a percentage of above eighty-two in which locomotor ataxy had been preceded by syphilis.

In Germany, it was chiefly Erb who made himself the champion of the syphilitic theory of tabes, and found a percentage of ninety. He was therefore led to the conclusion that few people who have not had syphilis are likely to get tabes. Leyden, on the contrary, states, in a somewhat peremptory manner, that the theory is wrong, because it is based on statistics only, and that statistics may prove anything. He considers that the anatomical changes found in tabes have not the slightest resemblance to other notorious lesions of syphilis, and that specific treatment does no good in tabes. For these reasons, he rejects the specific theory of the disease; yet, in the same paper, he states that iodide of potassium must, after all, be looked upon as the most useful remedy for it! Westphal, whose opinion is entitled to the highest respect, has likewise been, from the beginning, a consistent opponent of this theory. He has no faith in statistics, as he finds it impossible to rely on the statements of patients. Some of these latter consider any sore on the sexual organs to be venereal, and even surgeons are in the habit of treating any abrasion on those parts as syphilitic, in order to be on the safe side.

Where opinions amongst those best qualified to judge differ so widely, a full discussion of all the different points in dispute appears to me the only way to arrive at the facts of the matter.

1. With regard to statistics, it seems hardly fair to exclude them altogether, as they are constantly utilised for determining various points in the pathology of other diseases, such as fevers, consumption, epilepsy, etc. To my mind, the adversaries of the syphilitic theory of tabes would combat this view more effectually if they would furnish us with statistical data from their own practice, showing that syphilis has been absent in a large proportion of cases. All the percentages which have been published are in favour of syphilis being of great influence in leading to the appearance of the disease.

This surely cannot be a simple coincidence; moreover, if all the facts were known, it seems probable that these percentages would appear even higher than they actually are. It is well known that syphilis is often overlooked by careless persons, where its manifestations, whether primary or secondary, are mild. A small primary sore, which heals readily in a short time, may be followed by a few spots of roseola and a slight soreness in the throat and tongue. This disappears with or without any treatment, and the patient thinks that he never had syphilis; yet four, five, or ten years afterwards, double vision and a severe attack of lightning-pains may herald the invasion of tabes, which is as plainly owing to the venereal disease as gummata or sarcocele.

2. It is frequently noticed in practice that patients deny having ever exposed themselves to infection, at a time when they show the most evident signs of it. More especially in hospital, we often see patients who are covered all over with a syphilitic rash, and have ulceration in the throat and palate, and yet state plainly that they never had any "venereal." Even private patients, who ought to know better, occasionally suppress the information which is so important for us, from a sense of false shame. Some, no doubt, forget it in the course of time;

others overlook it; and, where there has been an urethral chancre or inherited syphilis, patients may be well excused for not knowing that they ever had such a complaint.

In August 1879, Dr. Wright of Derby asked me to see a commercial traveller, aged 53, who had been twice married, and acknowledged having exceeded a good deal in his sexual relations. His habits had been irregular. Three years ago, his present illness commenced with a feeling of numbness in both hands. When he put his hands into his pockets to feel for anything, he had not the least notion of what was there. I made him close his eyes, and put coins and other familiar objects into his hands, but found him totally unable to determine their nature. He could, however, still feel sharp pricking and pinching. He had optic atrophy in both eyes, to such an extent as to be unable to read No. 19 of Jäger's test-types. The hearing in the left ear was defective. He complained of pain in his legs, which was sometimes acute and darting, at other times dull, and was frequently confined to a small area in the leg, not larger than a crown-piece. The patellar reflex was absent in both sides. He was very unsteady on his legs; he could not stand on one without being supported and with his eyes open; nor could he balance himself on both legs with his eyes closed. The gait was ataxic in the highest degree; he had the greatest difficulty in going down stairs, and in the dark he could not walk at all. The spine appeared to be tender on pressure. The bladder was sluggish; the sexual power and desire very much diminished; on attempting copulation, erection was imperfect, and ejaculation premature. He had lately been often subject to small abscesses on the second finger of the left hand, which made the whole arm so tender that he was unable to use it. On being asked whether he had had syphilis at one time or another, he answered, "that he thought he had had something, but did not remember what it was; yet he believed that a doctor had burned him."

In the following case, antecedent syphilis was at first denied, and subsequently acknowledged.

In October 1879, Mr. Bader asked me to see a merchant, aged 44, who had for three years past suffered from paralysis of the left rectus externus muscle, and gradually advancing atrophy of both optic nerves. He could only just read No. 6 Jäger, and had achromatopsia and bilateral myosis. He denied having ever had any syphilis, and attributed his illness to excessively hard work and annoyance in business. He also suffered from chorea, which had commenced during childhood and never left him; and he had been impotent for five years. The patellar reflex was absent, and there was some ataxy in standing, but not in walking. After the patient had been under my care for some time, he one day told me that he had really had syphilis about ten years ago, and suffered for twelve months from various manifestations of the distemper, chiefly in the mouth and throat. He gave as his reason for denying this, in the first instance, that "the very thought of his foolish behaviour at that time annoyed him so much, that he preferred not to talk about it."

In April 1879, I was consulted by a merchant, aged 35, married, and father of four children, who attributed the symptoms of tabes from which he was then suffering to an accident which he had had in a tramcar. Ten months ago, he noticed that he suddenly saw everything double; and the right eye was turned outwards, so that he evidently had had paralysis of the right rectus internus. He recovered from this in about three months. When I first saw him, there was a degree of ptosis in the right eyelid, making the right eye look considerably smaller than the left.

The knee-jerk was absent in both sides. Walking was troublesome, the right leg being worse than the left. He could stand pretty well on the left leg, but could not balance himself when standing on the right. There was a tight feeling across the chest and throat, and great numbness from the waist downwards. I asked him whether he had had syphilis, and he denied it indignantly. On examining the penis, however, I discovered an enormous scar on the gland. To my question as to the origin of this scar, the patient replied that it was owing to the resistance he had experienced on consummating marriage. It had, however, all the appearance of a syphilitic cicatrix; and the patient eventually recovered completely under specific treatment.

In some cases, the initial symptoms of syphilis are so very slight, that a lay patient might have some difficulty in believing that so little could have led to so much; while the medical intellect is better able to grasp the full bearings of this influence.

In September 1882, I was consulted by an Irish practitioner, aged 40, single, who told me at the beginning of the interview that twenty years ago he had had a very mild form of syphilis, namely, a small chancre, which healed rapidly; and, six weeks afterwards, a slight ulceration in the tongue. He had never had any rash on the skin, or ulceration in the throat, or any further manifestation of the specific diathesis; and he had remained apparently in very good health for fifteen years. Five years ago, however, the first symptoms of his present illness appeared, and affected more particularly the right side of the body. Dimness in the vision of the right eye came first, and optic atrophy is now well established. Lightning-pains in the right knee then supervened, and are at present apt to come on in almost any part of the body. They last a few hours, and then vanish, generally under the influence of chloral. Eight or ten days afterwards, there is another bout of pain. There is a slight degree of ptosis of the right eyelid, but no palsy in the muscles which move the eye itself. Great numbness is felt in the sphere of the right ulnar nerve. The sexual power and desire are gone. Twelve months ago, he had the last imperfect connection; but he still has occasionally seminal emissions during sleep. The bladder is sluggish; incontinence is not unfrequent; the bowels are constipated. The knee-jerk is absent in both sides, and the muscles of the lower extremities are much wasted. The patient staggers when standing with his eyes closed and in the dark, and the gait shows well marked ataxy. He had never been able to take iodide of potassium, and had just returned from Aix la Chapelle, where he had had forty mercurial inunctions without the least result.

It may be safely assumed that, if this patient had not been a medical man, he might have forgotten all about the very slight specific affection which had preceded the outbreak of tabes by fifteen years. As it was, however, he was quite convinced of the syphilitic nature of his affection, as he could not think of any other cause which might have led to his present illness.

In August 1881, Dr. Meurer of Wiesbaden sent a gentlemen to me who was forty-two years old, married, and a great sportsman. Some years ago, he noticed that he saw everything double, and had, therefore, great difficulty in shooting. This arose apparently from paresis of the right rectus internus. When I saw him, that muscle was quite paralysed, and there were also ptosis and paralysis of the rectus superior of the right eye. The tendon-reflexes in the knee were absent, and the patient experienced the characteristic difficulties in walking and standing. On my asking him whether he had had syphilis, he said that twenty-five years ago he had had a "soft sore, which lasted only two days;" that he had swallowed large doses of iodide of potassium, and had undergone a long treatment at Aix-la-Chapelle without the slightest benefit; and that he did not consider that he really ever had had syphilis.

Fournier's experience with regard to this particular is, that tabes generally becomes developed where the early symptoms of syphilis have been unusually mild. Amongst eighty-four cases in which this point was particularly inquired into, there was not one of severe syphilis; ten were of medium intensity, twenty-one mild, forty very mild; in ten there had been a chancre without subsequent secondary symptoms; and in three the patients were unaware that they had had syphilis. He says that most of his tabid patients have only had a slight rash on the skin, insignificant erosions of mucous membranes, alopecia, and swollen lymphatic glands; and that all these symptoms disappeared rapidly with or without treatment. A natural consequence of this is, that such cases are insufficiently treated. Of seventy-nine such patients, two had undergone no treatment at all, forty-six had had treatment extending from a fortnight to four months, while thirty-one had had a longer treatment. It is, however, well known that syphilis cannot be cured by a short treatment, which latter does little but suppress its manifestations for the time being.

In other cases, again, the syphilitic symptoms are prolonged and severe, and become so intertwined with those of tabes, that no one would be able by any amount of sophistry to explain away the connection between the two diseases.

In January, 1883, I saw a patient in consultation with Dr. [illegible] of Kilburn, who was aged 31, a baker by trade, married and childless, and who had had a hard chancre and a bubo, quickly followed by secondaries, six years ago. Ever since that time, he had suffered from some constitutional manifestations of the syphilitic dyscrasia, being never thoroughly well. Six months ago, [illegible] [illegible] developed in the left testicle. Ten days ago, he had a severe epileptic fit, which lasted five minutes; and the day before I saw him, he had had another, in which he passed the evacuations under him. His memory had of late become much impaired, he was [illegible] [illegible] in business, in consequence of feeling always muddled and confused. The knee-jerk was absent on both sides, and the patient staggered when standing with his eyes closed. I saw him again [illegible] [illegible] [illegible], when some additional symptoms of tabes [illegible] [illegible] the left [illegible] extremities and lightning pains [illegible] [illegible] [illegible]. The mental hebetude was more marked [illegible] [illegible] [illegible] out breaks of temper. On one occasion [illegible] [illegible] [illegible] [illegible] his nurse, in the presence of several other people, then threw himself on the floor, where he rolled about on all fours, and swore in such a frightful way as to terrify all those present. The symptoms of tabes were in this case evidently being developed, together with those of general paralysis of the insane; and meningo-encephalitis, combined with sclerosis of the posterior columns, would most probably be found, were it to come to an inspection.

About the same time I saw, in consultation with Dr. Grasemann, a patient who was an auctioneer, aged 44, married, but childless, and who had had a somewhat severe form of syphilis ten years ago. There had been an indurated chancre and a bubo, followed by bad and prolonged secondary symptoms. He had altogether lived a wild life, masturbated as a boy, committed venereal excesses later on, and had drunk and smoked heavily. He had suffered from diplopia some time ago, and five years ago had an attack of aphasia and right hemiplegia, from which he recovered in a few days. Several such attacks had taken place since then at intervals, leaving no traces after a short time. The last hemiplegic attack occurred only five days ago, and then affected the left side of the body. The memory was much impaired, and the patient felt occasionally so confused that he was unable to attend to his business. When I saw him, the hemiplegia of the left side had already disappeared. There was, however, total loss of knee-jerk, Romberg's symptom, constipation of the bowels, sexual excitement and debility, and occasional attacks of spasmodic incontinence of urine, thus rendering the diagnosis of tabes certain.

Occasionally, tabes results from direct inoculation of the syphilitic virus.

A well known and able surgeon consulted me in May 1871, and informed me that, while examining a woman in a workhouse-infirmary in 1866, he had inoculated the index-finger of his right hand with syphilis. For two years afterwards, he was, to use his own words, never free from that wretched disease in one form or another. He then became apparently quite well, and continued so until Christmas 1870, when he was rather suddenly seized with tingling in the legs and numbness in the left arm and side of the body; a day or two afterwards, double vision supervened, and there was a feeling of constriction round the waist and inability to walk. Some of the medical friends whom he consulted thought the symptoms owing to the extreme cold which prevailed at that time, while others believed them due to syphilis; and there was, therefore, some hesitation how to treat it. However, he slowly but steadily improved, and was able, during the last six months, to resume his practice. He now complained chiefly of more or less constriction round the waist, which was at times almost unbearable. His left arm and both legs were numb and stiff. He could not balance himself with his eyes shut, but would fall backwards unless supported. He also had sudden shocks of stabbing pain in the lower extremities, and, on awaking in the morning, felt a curious wave of sensation flowing down the left arm and up the leg towards the perinæum.

3. Several observers have expressed the opinion that the morbid anatomy of tabes speaks against the syphilitic origin of the disease. Thus Chauvet says "that syphilis can never cause a primary sclerosis of the posterior root-zones." Lancereaux considers that the lesions of tertiary syphilis never invade an organ through its whole extent; they are, according to him, circumscribed, forming single or multiple nodes grouped in one or several spots, which undergo a granular, fatty, or hyaline degeneration, and terminate in loss of substance or a cicatrix. The lesions of tabes, on the other hand, are diffuse, extended, systematic, and although slowly developed, like those of syphilis, do not produce loss of substance, nor do they leave a scar. Westphal expresses a similar opinion; yet I do not hesitate to say that no one, however experienced, is able by inspection alone, even if aided by the microscope, finally to decide what is syphilitic or not. Moreover, we are familiar with diffuse changes occurring not only in the blood-vessels, but also in the liver, kidneys, and other organs, and which are generally acknowledged to be owing to syphilis. Diffuse acute hepatitis and acute glossitis may be of a specific nature, and affect the whole, or almost the whole, of the liver or tongue. Lancereaux's statement, that tabes does not produce any loss of substance, seems to be somewhat of a solecism, for what is wasting but loss of substance?

On looking through pathological literature, we find all and every kind of lesion in the spinal cord described by reliable observers as arising from syphilis. Cases are on record of acute myelitis, either diffuse or limited to certain portions of the cord, such as the lumbar enlargement, the lumbo-dorsal, the dorsal, or the cervical portion; this, again, may be transverse, superficial, or central. Then we find cases of acute ascending spinal paralysis without any appreciable anatomical lesion, and all the different forms of chronic myelitis; while the different systems of the cord, including the anterior horns, have been seen to be separately or collectively affected. If this be true—and anyone may convince himself that it is by searching the vast storehouses of the records of morbid anatomy—then we can certainly not accept the statement *ex cathedrâ*, that syphilis cannot produce sclerosis of the posterior columns. The principal lesions of tertiary syphilis are gummata and sclerosis. The hard chancre, to begin with, is a form of sclerosis; and the "cirrhosis" which is found in the tertiary period in the rectum, the liver, lungs, and kidneys, is nothing but sclerosis.

The objection that syphilis never produces any system-disease elsewhere is surely untenable. We know the distemper often attacks exclusively such systems as the skin and hair, the lymphatic glands, and the periosteum. As the syphilitic virus is one of a highly specialised character, it seems only rational to expect that it should affect certain systems in preference to others. Nobody doubts that the influence of cold may produce tabes; but it is certainly more difficult to understand how a general cause, like cold, should set up morbid changes in special systems than that a special poison like syphilis should do so.

Quite apart from this, however, we know that tabes is not absolutely a system-disease confined to the posterior columns of the cord, but that almost invariably, besides sclerosis of those parts, posterior spinal meningitis, wasting of the posterior roots and the posterior cornua of the grey matter, and of Clarke's vesicular columns, is found, while the ganglionic cells of the anterior grey matter are not unfrequently seen to be wasted, and the cranial nerves sclerosed. We are therefore justified in stating that tabes is a much more general disease than is expressed by the terms of sclerosis of the posterior columns.

The idea that something absolutely special ought to be discovered, showing a definite syphilitic origin, appears unreasonable, more especially if we consider that what is called the "classical type" of tabes is probably only rarely idiopathic, and much more frequently specific.

Finally, it will surely be acknowledged that, where morbid anatomy and clinical medicine appear to clash concerning the nature of a disease, the latter science should carry the day. I may here fittingly refer to an interesting discussion which took place at a recent meeting of the Clinical Society of London (October 26th, 1883), when I brought forward a case of apparently syphilitic tumours of the cerebral membranes, in a patient in whom there had been no history of congenital or acquired syphilis during life. The anatomical appearances in that case were as characteristic as possible for syphilis; yet there was an almost unanimous expression of opinion on that occasion that anatomical structure without life-history is, in a general way, insufficient for a diagnosis, and that the tumours which were described might have been owing to the tubercular or some other dyscrasia.

[*To be continued.*]

ABSTRACT OF LECTURES

ON THE

STRUCTURE AND FUNCTIONS OF THE BRAIN IN RELATION TO DISEASE.

Delivered before the Faculty of Physicians and Surgeons, of Glasgow.

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LECTURE I.

[As an introduction to the more special subject-matter of the lectures, a short sketch was given of the evolution of the nervous system, founded upon the phylogenetic and autogenetic records. Commencing with the cœlenterata, brief allusion was made to Kleinenberg's observations on the neuro-muscular cells of hydra. It was shown that, in all probability, these form the first step in the differentiation of a special apparatus for receiving and transmitting external impressions. The sensitive cells of actinia were next considered, and the nervous system of medusa, as investigated by the Hertings and others, was also described. The gradual steps by which certain epidermic cells become endowed with specific perceptive properties, sink into the deeper tissues, and become converted into bodies resembling ganglion-cells, if not identical with them, were illustrated by examples taken from the nemertines, echinodermata, etc. The remarkable transformations which the nervous system of the ascidian undergoes from its embryonic to its adult condition, were also noticed; and, finally, the progressive stages in the development of the vertebrate myelencephalon were briefly referred to.

[The identity in the mode of development of the nervous system in invertebrata and vertebrata was also described, both being derivations of the ectoderm; the formation of the ganglionic cords of the former, and of the neural canal in the latter, were contrasted. The origin of the sympathetic and cerebro-spinal nerves from the epiblast, as related by Balfour, was lastly described. The conclusions arrived at from this double method of examination were alike, namely, that the nerve-centres have arisen from the simplest elements; that they were originally derived from the epidermis, and that the first trace we possess of their presence is in the form of certain sensitive cells of the integument. A differentiation and specialisation of these to higher purposes evidently followed, while, later on, they sank into the body-wall of the animal, and became endowed with properties fitting them to perform the duties of nerve-cells.

[The convolutions of the human brain were then shortly referred to. The method of preparing the brain for the purpose of tracing its fibres was next described, the description being a synopsis of that given by the lecturer in detail in *Brain* for July, 1883. The different stages in the process were illustrated by specimens.]

The Connections of Functional Significance of the Corpus Callosum.—The almost universal idea at the present day is, that the corpus callosum is composed of fibres which run between the two hemispheres, uniting their cortical centres, and thus bringing them into direct contact. It is held that the fibres which become concentrated in the corpus callosum from the cortex on one side, spread out in a fan-shaped manner in the opposite centrum ovale, and become attached to parts of the cortex corresponding to those from which they have arisen. Not only structurally is the corpus callosum considered to be a means of joining the two hemispheres, but functionally it is supposed to act by associating the two sides of the brain, and bringing them into harmony. It belongs to the great "association" system of connections, by which the functions of one part are correlated with those of another. The corpus callosum is held to be the commissure of the upper half or two-thirds of the hemispherical cortex, while the anterior commissure is regarded as standing in a similar relationship to those parts of the cortex which are not reached by the callosal fibres.

At first sight, this certainly seems a feasible enough theory, and, as such—as a theory—has met with almost universal acceptance of late years. There are no striking facts, however, to prove that the function of the corpus callosum is simply that of a commissure, and there is still less demonstrative proof to show that, when one part of a hemisphere is destroyed from which callosal fibres arise, the other hemisphere, in a corresponding situation, suffers either structurally or in function. Its fibres, so far as we know, do not become the seat of secondary degeneration when, for instance, the neighbourhood of the fissure of Rolando is injured; but, on the contrary, the degeneration is found to proceed downwards, and to enter the inner capsule. What, therefore, can be the function of this enormous mass of white matter, and why is it that, in animals with a highly developed cerebral cortex, it is always present, increasing in size as the hemisphere grows in dimensions and develops in functional complexity? It is beyond all reason to suppose that such a vast congeries of nerve-fibres does not subserve some very important purpose in the internal economy of the brain. Had it gone on decreasing in size in the higher orders, it might have been argued that it was a remnant of a structure which, in the evolution of the brain, had become debased in its function and rudimental in its structure. But this is not the case; for, on the contrary, the corpus callosum advances in size *pari passu* with the intelligence of the animal.

The idea of it being a pure commissure of the hemispheres has not been always entertained by anatomists and physiologists. [illegible] and Willis looked upon it as in part at least a decussation of the peduncular fibres; while this view was amplified in later times by Foville and Gratiolet. Foville made a series of dissections of the brains of different animals, by which he thought that he had demonstrated that the fibres arising from one side of the brain, after crossing in the corpus callosum, partly turned down, and joined the peduncular tract. His means of showing this were very rough, but were sufficient to have given him at least a clue to what in my opinion actually exists. He says that if the finger be introduced between the gyrus fornicatus and the corpus callosum, forcibly pushed into the centrum ovale, and drawn forwards and backwards, a system of fibres is exposed coming out of the corpus callosum at each side, and arching downwards. He figures these in his *Atlas*.

Gratiolet repeated Foville's dissections, and found that his description was perfectly correct. He came to the same conclusion as Foville, namely, that the corpus callosum is in part the decussation of the peduncular fibres. His observations, however, have lain for many years almost unnoticed, and it was only when inquiring more particularly into the literature of the subject, after I had investigated the matter for myself, that I found these two observers had struck the key-note of what I believe is the true interpretation of the significance of this so-called commissure. Foville and Gratiolet regarded it as only in part commissural. My own observations lead me to conclude that it is not a commissure at all; that its fibres do not stretch from cortex to cortex; but that it is the decussation of a particular set of cortical fibres on their way down to enter the inner and outer capsules of the opposite side.[1]

If a human brain be handled in the method I have recommended (*loc. cit.*); if it be subsequently cut perpendicularly into slices, half-an-inch thick, if these be frozen, and subsequently polished on the surface by means of a specially constructed microtome, the following appearances can be noticed. The course of the fibres is marked out with very much the same clearness as the grain of a piece of polished mahogany.

If the segment correspond to a section through any part of the corpus callosum from genu to splenium, it can be easily noticed with the naked eye that at each side the fibres issuing from the corpus callosum, pass downwards instead of upwards. They arch outwards, and then curve downwards and slightly inwards, forming a tract whose outline is as sharply marked out as if it had been drawn with a pencil. The external border is particularly sharp, and in turning outwards and downwards, comes to lie within an eighth to a quarter of an inch from the cortical grey matter. In a fresh brain, and in one hardened in spirit, the distinction of the fibres is so slight that the arching downwards of those issuing from the corpus callosum cannot be detected. In one hardened by the method just recommended, there is no shrinking of the brain-substance, and all the tracts of fibres are much better defined than when fresh. The yellow colour of the Muller's fluid aids the definition, and picric acid, from a like cause, has much the same action.

The fibres to which I refer are better seen in an opaque thick section than in one which is rendered transparent, evidently because they are in greater mass. They are usually cut somewhat obliquely; and hence, unless a considerable number of the cut extremities be seen together, they may be lost in the fibres pursuing a different direction among which they lie. The fibres which have crossed and which are turning downwards, intermingle with those which are going to cross, and, if examined microscopically, the two sets may be seen to decussate.

In passing through the corpus callosum, the fibres do not run at all parts directly across. Opposite the knee of the internal capsule, they run certainly almost in one perpendicular plane, but anteriorly and posteriorly they incline obliquely in the corpus callosum. The decussation of the fibres in the middle of the corpus callosum is easily seen. They are gathered into large bundles, and these interlace in a somewhat complicated manner.

[Some general remarks were here made in regard to the position of the nasal ganglia, the inner and outer capsules, and other parts in their neighbourhood, as seen on perpendicular and horizontal sections. The comma-like shape of the caudate nucleus was demonstrated, and the splitting of the conjoined head of the caudate and lenticular nuclei by the inner capsule anteriorly was briefly described. The three divisions of the lenticular nucleus, as marked off by the two striæ medullares, was also shown; and it was demonstrated from drawings that, in reality, at one part, the striæ medullares of the lenticular nucleus are three in number, and the divisions of the ganglion four. The thalamus was then delineated, and four ganglia were shown to be present in it—an anterior, a median, an upper, and a posterior or pulvinar. The inner and outer capsules were also described in a general manner, and, finally, the parts lying further out in the same transverse axis, namely, the claustrum, white substance of the island, and the island of Reil itself were briefly referred to. Numbers of diagrams from [illegible] sections and models were employed for the purpose of showing how these parts are situated in a series of consecutive [illegible] perpendicular sections.]

The fibres of the corpus callosum, after they have crossed to the other side of the brain, in turning downwards, form [illegible] a distinct leash, and I propose to call [illegible] Corpus Callosum. The [illegible] from the cortex of the opposite hemisphere, [illegible] The greater number of its fibres [illegible] tail or limb of the [illegible] almost entirely of these crossed callosal fibres. They enter it in huge concentrated masses, which all tend to run backwards towards the knee of the inner capsule. This knee of the inner capsule is constituted by the junction of its anterior and posterior limbs, and it is placed immediately behind the anterior nucleus of the thalamus. It is not correct to suppose, however, that the knee is merely a bend in the capsule. It is something more than that; it is a point of convergence of certain of the fibres of the anterior and posterior limbs. These meet at an angle in the position just indicated, and here become attached to the thalamus. The fibres, therefore, composing the knee of the inner capsule, do not merely lie in contact with the thalamus, but become united to it, and end, no doubt, in its nerve-cells. They are callosal, and are derived from the "crossed callosal tract." I do not mean to say that all the callosal fibres become attached to the thalamus at this point. The whole outer border of the ganglion is pierced by these fibres, so that in some places it has an almost white appearance. The thalamus seems to be the great intermediate ganglion to which the callosal fibres entering the inner capsule are united. It is a "switch" centre, as it were, for the callosal fibres, towards which they converge, and in which, no doubt, attachments are formed that serve to concentrate their functions.

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[1] [illegible]

This, however, is not the only destination of the crossed callosal fibres entering the inner capsule. Certain of them, a very few, are attached to the caudate nucleus anteriorly. Compared, however, with those passing into the thalamus, their number is extremely small. The caudate nucleus in man neither receives nor sends out any great number of fibres. In its posterior two-thirds, hardly a bundle of fibres can be seen. There are a few bundles, however, anteriorly, which turn sharply round from the "crossed callosal tract," and which undoubtedly terminate in its anterior expanded extremity. There is still, I think, another attachment of the callosal fibres entering the inner capsule, which as yet I have not been able to examine so thoroughly as the others. It is to centres below the basal ganglia, namely, those of the pons Varolii and medulla oblongata, particularly those of the former.

The "crossed callosal tract," however, does not send the whole of its fibres into the inner capsule; a considerable number of them enter the outer capsule. The outer capsule is composed of two distinct layers, consisting of fibres having totally different connections. The external of these two layers derives its fibres from the third frontal convolution and edge of the operculum of the same side. The internal is composed of a leash of fibres from the "crossed callosal tract." The two are simply in apposition; they do not intermingle. It is with the internal stratum that we are at present concerned; and I have come to the conclusion that the significance of its fibres is very great, owing to the very remarkable and important attachments which it forms. The fibres composing it, as they leave the "crossed callosal tract," have to diverge a little outwards in order to turn into the outer capsule. When they have reached its neighbourhood, they enter the capsule, and, closely embracing the outer margin of the lenticular nucleus, terminate by making the following attachments to parts below. 1. The most anterior of them enter the inner capsule, and, mingling with its other fibres, are carried back to the thalamus. 2. On a plane a little way behind the point where these fibres join the inner capsule, they pass down to the base of the brain in the region of the anterior perforated space, and become united with the olfactory. They form, in fact, one of its roots, and, as far as I see, place the olfactory nerve in communication with the cerebral cortex of the opposite side. 3. Proceeding backwards, the next attachment which this inner or callosal stratum of the outer capsule forms is to the optic tract. These connections, however, are so important, that I shall specially consider them in my third lecture. As in the case of the olfactory, this union of the optic with the callosal layer of the outer capsule is one of the many channels through which this most complicated of all nerves comes to be in direct communication with the motor and other centres in the cortical grey matter of the hemispheres. 4. At a point corresponding to the posterior extremity of the lenticular nucleus, the callosal fibres of the outer capsule pass into the temporo-sphenoidal lobe, and mingle with those derived from the anterior commissure. To which particular part of the temporo-sphenoidal cortex they are distributed, I cannot as yet distinctly make out, the different sets of fibres of the white matter of this region being so closely intermingled.

The callosal fibres which I have been describing are derived from that part of the cerebral cortex opposite the corpus callosum. The fibres forming the corpus callosum, however, do not exclusively arise from this part of the cortex, but quite as much from the prefrontal and parieto-occipital regions. I shall leave the consideration of the former until my second lecture, as they are so intimately associated with the subject of aphasia. In the parieto-occipital region, they sweep inwards and forwards, so as to line the posterior horn of the ventricle, forming what was known in former times as the *tapetum*. In this course, they have to cross Gratiolet's "occipital optic radiation." They run somewhat obliquely through it, and afterwards become concentrated in the thick layer lining the ventricle bearing the above name. From this they pass forwards and decussate in the splanium of the corpus callosum to form the attachments to the thickening before related.

Such then being the destinations of the great bulk of the callosal fibres, it comes to be a question whether any of them pass across to the cortex of the opposite hemisphere. Of course it is very difficult to say positively that a few fibres do not. If such do exist they must be in very small number, because the bulk of fibres turning down in the "crossed callosal tract," to enter the capsules and to become united to the thalamus and other parts just described, quite corresponds with that of those passing into the corpus callosum at the opposite side. My own conviction is that such interhemispherical callosal fibres do not exist.

I have said that the inner capsule is in great part composed of callosal fibres. It must not be supposed, however, that these are the only fibres entering into its composition. There are many other kinds of fibre bound up in it. The two most important additional components are the direct motor and the sensory fibres. The former of these appear to come from the motor centres on the surface of the cortex, while the latter join Gratiolet's "occipital optic radiation" as it passes forwards. Neither of them seems to decussate in the corpus callosum, but each enters the internal capsule of the same side directly, decussating subsequently in the anterior pyramids. The inner capsule is thus composed of crossed or uncrossed fasciculi. The crossed are exclusively callosal in their origin, the uncrossed are derived from various sources. When a portion of the cortex is destroyed, it is the motor fibres which degenerate. The callosal fibres, even those arising from the motor regions, do not seem to be subject to the same laws of secondary degeneration. This question would require, however, to be more carefully investigated than it has hitherto been. The whole matter is at present *sub judice*, and I will say nothing further of it than that the general opinion is that in destructive lesions of the motor areas of the cortex, the secondary degeneration has not been found to cross the corpus callosum, but to descend through the inner capsule to the spinal cord. In any destructive lesion of a hemisphere in the neighbourhood of the fissure of Rolando, which implicates even a small extent of the white matter, three tracts of fibres will be involved. The first of these is composed of the motor fibres running directly into the inner capsule of the same side. The second is made up of the callosal fibres which are going to cross; and the third is the "crossed callosal tract," constituted of the callosal fibres which have already crossed, and which are about to enter the two capsules. It is hardly possible for an embolic lesion to escape involving them all, and in experiments on the cortex they must, in small animals at least, be all liable to be simultaneously injured, either directly or indirectly. There is this striking and distinctive fact, however, in regard to them, namely, that only one of them undergoes secondary degeneration, that being the motor.

And now, in conclusion, we come to the great question of the function of the callosal fibres. We know that, where the corpus callosum is congenitally deficient, motor paralysis and paralysis of ordinary sensation are not characteristic symptoms, but that persons in whom this defect occurs are more or less imbecile. Injuries of it do not cause motor paralysis, nor is common sensation apparently annulled. What then can be the use of this enormous mass of white matter, and why is it that, as we advance in the mammalian scale of intelligence, it progressively increases in size? My own impression is that the fibres which composed it are concerned, not with ordinary motor co-ordination, or with painful or tactile sensibility, but that they are part of the anatomical substratum of those faculties of the brain which may be termed psychical, and which reach their highest development in the brain of man. In animals not possessing a corpus callosum, the intelligence is feeble or confined to a few definite circles of action; but, as the callosal brain is reached, more or less improvement in the intelligence of the animal is noticed. Partial destruction of the corpus callosum might not give rise to any very evident clinical phenomenon; and, similarly, destruction of part of the thalamus, the great callosal ganglion, does not manifest itself in any readily appreciable symptom, or set of symptoms. The change in the mental condition of the patient may be so subtle, that it becomes almost inappreciable, unless on the closest examination. Whenever the destruction of the corpus callosum, however, is extensive, it seems as if the whole internal economy of the brain were disturbed, and more or less mental alienation or idiocy follows. Whether as yet unobserved morbid changes in the corpus callosum may throw any light upon those great blanks in our pathology, namely, mania in its various forms, melancholia, and, more especially, general paralysis of the insane, remains to be seen. It is possible that even a vascular change, an abnormal vaso-motor action influencing this part of the brain, might be sufficient to account for many forms of mental derangement.

ABSTRACT OF A PAPER

ON

SCURVY, IN ITS BEARING ON EXPLORATIONS BY SEA.

By SIR WILLIAM SMART, K.C.B., R.N.,
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(Concluded from page 945.)

Dr. Cockburn, physician of the fleet, remarked, in 1696, with reference to the want of exercise and of fresh air, as causes of scurvy, that those to whom they were the most obnoxious were the so-called idlers, skulkers, and the boatswain's favourites, all being men who spent as much of their time in the lower parts of the ship, and came upon the deck or went in boats as little as they could.

Sir Edward Parry and his surgeon, Mr. Edwards, noted the facts on their first voyage, when the latter wrote: "Of the remote predisposing causes.........a cold and vitiated atmosphere was the most to be dreaded. The external air, during the winter months, which constitutes three-fourths of the year, is pure, clear, and dry: its mean temperature considerably below zero, and rarely undergoing any very sudden change. On board, the state of the air was necessarily very different. To economise and preserve a tolerable degree of heat below, it was necessary to keep the hatchways continually covered; the rarified air, which escaped by the flues, being replaced through the crevices, and by the occasional opening of the hatchways. In this way, though the renewal of the fresh air was abundantly frequent to maintain healthy respiration, the air was seldom of sufficient temperature to carry off the vapours that floated between decks. These were deposited upon the cold sides of the ships, overhead and in the bed-places, in icicles which, by alternately thawing and freezing, kept up a dampness that for some time proved a source of danger, demanding continual attention to obviate its pernicious effects on the health of the crews." Scurvy rendered it necessary to return to England after the first winter. On his second voyage, Parry's ships were lined with cork, as a bad conductor of heat, and fresh air was excluded, as much as possible, by shutters and plugs of cork; while the confined air within was heated by a Sylvester stove, fixed on the lowest deck, by which the air gravitating there was deprived of its moisture and circulated through perforated pipes into the decks and cabins. By this means the decks were dried by a sustained temperature of 61° to 64°, when the external air was at -27° to -30°. In the first winter there was only one—an officer—sick of scurvy; but throughout the second winter the scorbutic diathesis was creeping on, and in February and March there were five mild cases of scurvy among officers, including the captain and the surgeon of the *Hecla*, and in June, after game was provided, three others were more severely attacked, of whom one died; and about that time the disease showed itself in the seamen of the *Fury*, in which the tone of general health had declined much during the last winter. It has never been explained why, in one ship the officers, and in the other the seamen, were the first to present cases of the disease, their dietary and antiscorbutics being similar; and as it would appear, the same means were used in both to purify and to heat the air, and sun-light was never absent in the first winter, and for a few days only in the second. There can be no doubt that a highly scorbutic diathesis was developed among the officers in one ship, and among the men in the other, and in both in their second winter in the ice.

This is a strong point for comparison between this voyage of 1821-23, and that of Nares in 1875-76, in which the diathesis was developed in the first winter, to break out into scurvy in the spring; which may be dependent on the general issues arising from difference of latitude, amounting to 13°, and the many meteorological differences caused by that fact. Of these, the most ostensible are the shorter or longer stage of confinement in the impure air of the ship in the dark season; and, as some believe, the etiolation produced by the absence of the sun's rays; but there are very remarkable instances on record showing that scurvy does not occur, necessarily, in the highest latitudes, notwithstanding their protracted season of darkness, provided that shelter on shore and fresh animal food are available in quantities adequate to the support of life; and so even where vegetable diet and antiscorbutics are impossibilities.

The earliest of such instances is that narrated by Edward Pelham as having happened, in 1630, to himself with seven seamen, who were abandoned on the coast of Spitzbergen, in 77½° north latitude, where they remained from August 2nd until May 28th, nearly nine months, in which the sun was absent 110 days.

The second instance is that of the *Eira* yacht, that sank in a harbour of Franz Josef Land in 80° north latitude on August 21st, 1881, and they remained there until they took to their boats on June 21st, and were rescued by a steam-whaler on August 3rd, being nearly eleven months and a half from the date of their wreck, in which the sun was absent 117 days.

When rescued, the men in both these instances were free from any indication of scurvy, and quite ready to do their ordinary duties of seamen.

Pelham's party landed destitute of everything save the clothes they wore, and the muskets and ammunition they carried. They took possession of two huts, and encased one within the other, which afforded them a covered space outside the room in which they dwelt and slept. For fuel they had the staves of casks, and for lights the fat of the bears they shot. Without any bread or farinaceous food and vegetables of any kind whatever, and with one drink, snow-water, they subsisted on the produce of the chase, of which, when winter came on them, they had stored their hut with 13 reindeer and four bears' carcases, and the flesh of two walruses, beyond which they had no other provisions than the *greaves* left in the past season, after boiling down the blubber of whales. Early in February they killed a bear, which afforded them meat for twenty days; and, in March, they killed seven bears. In the spring the wild fowl came, and the foxes showed, from both of which they got much food, having trapped fifty of them. This was all their provender up to May 28th, when the Muscovy Company's fleet returned, and they were received on board their own ship in good health, after having spent nine months, less five days, on shore.

The other instance is that of the *Eira* yacht, furnished with every luxury for life in Arctic regions, which, after thirty-one days at sea, anchored in a bay in Franz Josef Land, 80° lat., where, on August 21st, becoming nipped by the sea-pack against the ground-ice, she sank in two hours. In that short time they took ashore all they could reach of the ship's provisions and stores, without any lime-juice. Their first necessity was to build a hut for twenty-five persons, of wood, roofed with it, and covered with a ship's sail. By the end of October they had secured for fresh meat through the winter 21 bears, 13 walruses, and 1,200 birds of the size of wild ducks; and they saved, for mixing in their soup, all the blood they could get from the bears. When the sun returned, they shot more bears and captured more walruses. Thus they got through the winter, with a sufficiency of fresh meat, and constant allowance of ship's provisions and comforts.

In the spring they had no fatiguing sledge-work to perform as the Nares expedition had, on which no animals were captured for periods of six-and-a-half, seven, eight-and-a-half, nine and ten weeks, by the various sledge-parties whilst making efforts beyond their strength, until broken down with scurvy, at a period of the year when the *Eira's* men were unemployed. In their retreat by boats and sledges through six weeks, when they were picked up at sea, and brought to England in the very best of health, without having had a trace of scurvy.

Thus it was proved incontestably that Englishmen may subsist themselves, and weather out a winter in very high latitudes, even on nothing save the animal food to be procured as Pelham's party did theirs; and they do not appear to have been less healthy than the *Eira's* crew, with their more varied diet; but both alike were destitute of medicinal antiscorbutics and of lime-juice, and lived in huts on the shore while getting enough of fresh animal food.

These two cases may serve to substantiate the very important fact that the more men are compelled to breath the open air in the Arctic regions in very long periods of darkness, the better it is for them; and that fact was recognised by Parry's surgeon in these words, written in 1820: "The clothing of the men was found adequately warm to protect them from the severest cold, which they were enabled to confront not only with impunity, but with a degree of positive pleasure." And here it must be recollected that Pelham's party made for themselves bedding and extra clothing out of the skins of the animals they shot for food, which served them well.

In 1596-7 Barents, with sixteen others, spent the winter on the north-east point of Nova Zembla, in 76° north latitude, shipwrecked and living in a wooden hut, like the *Eira's* people, when they contracted scurvy, of which Barents and two others died. It is said of them that they would not eat the flesh of bears, and that they were rather sought by the bears than the bears by them, and that they remained lethargically in their hut, during most of the winter.

Sir John Ross has stated that, in 1633-4, seven Russian shipwrecked seamen remained a year in Spitzbergen, as Pelham's party did in 1630-1; but the manner in which they were housed, the food they had, and the results as to scurvy, are not noted by him. And again, he states that in 1743-9, six Russian sailors were left at Spitzbergen, and remained there six years." We may rest assured that the flesh of reindeer, bears, seals, and birds was then as obtainable as it was before and has been since then.

In what then, it may now be asked, did their conditions differ from those of the *Alert* and *Discovery's* crews, kept for an equal period of one winter within decks, breathing an atmosphere, always impure, and the more so while crowded together at night? Else how can it be satisfactorily explained that, in so many instances of the most extreme exposure in Arctic regions, men do escape scurvy, as in the instances of Hayes's party from Kane's ship, in 1854, in Smith's Sound; of Hull's, in 1872, in the same place; of the *Hansa's* crew, on the east coast of Greenland, through the winter of 1871-2, while they were drifting 1,500 miles on the ice through eight months, none of whom had any other shelter than was afforded them by tents or huts, living mostly in the open air, and subsisting chiefly on the animal food they could obtain by exertion of their muscular systems?

Do not these instances indicate, I would ask, that in Arctic regions Europeans are more healthy when they are of necessity assimilated to the natives in their conditions of living, than when they are cooped up and breathing an impure atmosphere generated between the decks of a ship? Even Ross found, so early as 1834, that, after his people had suffered greatly by scurvy through two winters, the last of four, they all improved remarkably in their last four months, while they were living in tents, or travelling on sledges ashore, and in boats afloat, when, in all human probability, another winter passed in a ship would have proved fatal to them all.

And, lastly, where the *Eira's* crew survived a winter, in 1881-2, in huts in health, the crew of the *Tegethoff*, in 1872-4, confined to their ship drifting in the ice, although they were not without the flesh of bears and walruses, suffered in both winters from "scorbutic affections of the mouth and diseases of the lung, sometimes in distressing shapes, and scarcely a day passed without one or two on the sick-list;" although they were not without raw potatoes and lime-juice, in the second winter, as antiscorbutics.

In view of these facts and circumstances, I infer that the higher development of the scorbutic diathesis amongst the crew of the *Alert* than of the *Discovery* of 1875-76, may be ascribed, as Sir George Nares maintains, first, to the smaller amount of fresh animal food obtained by the *Alert's* crew; and, secondly, to the moisture of the heated air in the dwelling-deck, owing to the difficulty of keeping up a steady renewal of it, instead of breathing the same over and over again, laden with an excess of carbonic acid and vapourised excreta from the lungs and skin, when her crew would seem to have taken less of exercise outside the ship in a pure atmosphere, than the *Discovery's* did.

As it was with the *Hecla* and *Fury* from 1822 to 1824, so it was with the *Alert* and *Discovery* in 1875-76, and so it may be expected to continue, until the science of naval engineering shall have devised means of supplying steady currents of warmed air, drawn from outside the ship, heated in a chamber, and equally distributed from it to the interior by fanners, after the manner of ventilation employed in ships of the *Devastation* construction. On the Committee of Inquiry into the outbreak of scurvy in the Nares expedition, Dr. Fouzer put many questions directly bearing on this point (*Vide* Report of Committee, p. 21).

In summary: Prior to Parry's second voyage in 1822-24, no crew passed a winter on the ice without scurvy; but then, and generally since then, a first winter has been passed free from it, with sometimes an isolated case or two; and second winters have been exempt with a moderate supply of fresh animal food. After that, the constitutions of the men will be so predisposed that, notwithstanding present supplies of fresh animal food, the scurvy may be expected to show itself at any time, even in summer, on the impulse of exciting causes, such as prolonged severe labour, or deep disappointments, or other reasons for moral depression. A warm damp atmosphere between decks, assisted by imperfect ventilation from the external purer air, is an effective predisposing and exciting cause. Several instances have shown that castaways on the ice, dwelling in huts, and providing themselves, more or less, with fresh animal food in the winter, have sustained life, and kept free from scurvy, which appears dependent on fresh-meat diet and pure air. To approximate these conditions in ships, it would be desirable to ventilate them with warmed pure air from without, on the fanning system employed in war-ships, which may also be adapted to keep carcasses fresh in cool apartments, as in the Australian trade in meat. In every case a fuller diet on animal food is requisite to maintain health in the regions of ice; and the raw flesh, fat, and blood of indigenous animals have been proved to be highly antiscorbutic and remedial, without vegetables. Lastly, in Arctic, as well as in tropical, regions, it is more healthy to Europeans to assimilate their diet to that of the natives, than to adhere closely to the habits of milder climes.

In conclusion, Dr. Lind, when overthrowing the theories of his day with regard to scurvy in fleets, adopted the maxim of "*Dies docet diem*," which to a certain extent is, I consider, applicable in our own day. I have brought together evidence which seems to me to show that, in the Arctic regions, the compulsory enjoyment of dry fresh air, with the necessity to obtain much of fresh animal food from indigenous animals, is more conducive to health and the avoidance of scurvy, among castaways, than life in ships, where men dwell in a warm, moist, and vitiated atmosphere, and are fed on the best of ships' diet, with lime-juice as an antiscorbutic, but without the advantage of much fresh animal food, which is second only to fresh vegetables in the prevention of scurvy. And to that extent I concur in the principles of the recommendations offered by Dr. W. H. Neale, whose experience was acquired in the voyage of the *Eira*, in a single winter on Franz Josef Land; but how far these would be found efficacious in a second winter in regions of ice still remains to be proved.

In 1772-3-4, Captain Cook proved that, by sanitary measures, especially by ventilation that prevented dampness, with early attention to the sure means of subduing the nascent scorbutic diathesis, by visiting places where fresh animal and vegetable diet was attainable, the fatal type of the disease was not established; but it must be remembered that he sailed in the tropics, and not in the Arctic regions, where the conditions of life are totally different, where fresh fruit and vegetables are unseen, and fresh animal food is at the best an uncertainty.

A CASE OF BLEEDING FROM THE TRACHEA, SIMULATING PULMONARY HÆMORRHAGE.[1]

By EDWARD T. WILSON, M.B.Oxon., F.R.C.P.,
Physician to the Cheltenham General Hospital.

THE subject of this paper is a gentleman, aged 61. The account given of his health is not satisfactory. For years, as far back as he can remember, he has suffered from dyspepsia, flatulent eructations, and habitual constipation; of late years, also, from fits of giddiness, which come on without warning. When about thirty years of age, he strained himself while exercising with dumb-bells, and this was followed by slight hæmoptysis. The hæmorrhage recurred ten years ago, after violent exertion in sawing a tree; and at intervals since it has appeared, accompanied by pain at a spot under the left clavicle, "where," he has been told, "there are adhesions." Ten years ago, there was an attack of left-sided hemiplegia, from which he rapidly and completely recovered. The urine is frequently loaded with lithic acid deposit. A year before he came under my observation, an abscess, or rather a carbuncular swelling, brawny and hard at first, afterwards suppurating, formed on the left side of the neck. Fluctuation is described by his then medical attendant as being very indistinct, while the excessive swelling and œdema threatened asphyxia, until relief came by the spontaneous bursting of the abscess into the trachea. It was also opened externally. Recovery followed, leaving no other results than a huskiness of voice, which remains to the present time. The patient has been much abroad, but has never resided long enough in hot climates to contract disease of any special kind, and there is no history of either struma or syphilis.

I first saw Mr. C. on March 21st, 1882, for an attack of giddiness and dyspepsia. He was very anæmic, and complained much of flatulence and eructations, which interfered with the heart's action. The voice was husky, but there were no remains of his paralytic attack, except, possibly, deafness of the left ear, which is complete, and due to impairment of the nerve. The tongue was loaded, the bowels constipated, the conjunctiva rather yellow. The pulse was weak, with frequent intermissions; heart's action weak. There was dilatation to some extent, and a slight mitral *bruit*. He complained of pain under the left clavicle, and, on examination, a small but well defined spot of dulness was found, with a few moist sounds over the same area. The urine contained a considerable deposit of uric acid and oxalate of lime; its specific gravity was 1017, and there was no trace of albumen. The case seemed one of gouty dyspepsia, with torpid liver and flatulence, impeding a weakened heart, and so causing the giddiness and discomfort of which he complained. Much benefit was derived from the use of the mineral acids and strychnia, combined with a diet restricted to fish and white meats in reasonable quantity. On March 29th, however, a few dark clots were hawked up, together with some tenacious mucus; and, on April 6th, he was suddenly seized in the night with profuse hæmorrhage, which bore all the appearance of coming from the lungs. The blood was frothy and florid; there was frequent cough, and he complained of tenderness over the spot, before described as dull, under the left clavicle. There were moist *râles* at the apex of the left lung, with marked increase in the expiratory sounds. Next day, the bleeding was still going on slightly, but it came up in dark clots. Both diagnosis and prognosis were extremely doubtful; and, as the patient was about purchasing a valuable property, the latter was of some importance. Advantage was taken of a brilliant sun to make a laryngoscopic examination; and I was at once enabled to give my patient reasonable hopes of recovery.

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[1] Read before the Worcester and Hereford and Gloucestershire Branches.

The trachea was well shown down to its bifurcation, and the source of the hæmorrhage was seen to be in an ulcerated surface, about half an inch above that point. Other ulcerations, ragged and dirty in character, extended upwards, partly involving the arytenoid folds, and the surface of the epiglottis. At the same time, the left vocal cord was found to be partially paralysed, while the right came far over the median line in phonation, giving rise to the huskiness before remarked in the voice.

The treatment consisted of lithia, and nux vomica with charcoal for the dyspepsia, and for the throat, a spray of sulphate of zinc, by means of Siegle's machine, and carbolic acid with iodine in an antiseptic respirator. The hæmorrhage soon subsided, and in the course of a week healthy granulations appeared over the ulcerated surfaces, and spray of tincture of iron was substituted for the zinc. By May 12th nothing remained save a white cicatrix, which marked the site of the original opening of the abscess into the trachea, and a nearly complete paralysis of the adductors of the left vocal cord. What the precise cause of this may be is doubtful. The huskiness dates back to the time of the abscess, while the lung-mischief and the cerebral also preceded this by many years. It seems probable, therefore, that some injury may have been done at that time to the recurrent nerve of that side. The paralysis gives little inconvenience, as the compensation by the right cord is so complete. The general health improved gradually under the use of mineral acids and "fer Bravais;" and I had an opportunity of satisfying myself a few weeks ago that the trachea remained sound and healthy. The patient was then suffering, however, from nose-bleeding to a large extent, which proceeded from the point at which a polypus had been removed by operation some years before. There is evidently, therefore, a strong tendency to the re-opening of old wounds under the influence of debility; but I am not aware of any other symptom indicative of a hæmorrhagic diathesis. No direct treatment was addressed to the paralysed vocal cord, as the patient objected to it; and the chances of improvement under faradisation were so small as not to warrant any great insistance.

I have thought that the case might have some interest as showing how the laryngoscope may be the means of clearing up an obscure point in diagnosis, and giving precision to treatment which otherwise might have been hesitating, or even hurtful.

NON-GRAVID HYDRORRHŒA.

By JAMES OLIVER, M.D.Edin.

THE discharge of fluid of a watery character from the gravid uterus is a condition which has frequently been noted; it is rarely, however, that the opportunity is afforded for the careful studying of this somewhat singular affection in the unimpregnated state.

On several occasions, I have had described to me by patients the sequence of events associated with this anomalous condition; and, having closely observed a case, I deem it worth while to bring the subject under the notice of the profession.

The patients suffering from this peculiar affection are usually of a nervous temperament, and are liable to suffer from any of the many states associated with this condition of body.

The fluid discharged is somewhat milky, with a specific gravity about 1003, alkaline in reaction, containing no albumen, but a fair amount of chlorides. Microscopic examination reveals only epithelium and epithelial *débris*. The quantity of the fluid discharged varies; as much, however, as six ounces may be expelled at one gush, and the expulsion of like quantities may be repeated at intervals of four or six hours.

The circumstances attending this watery discharge are variable. In some cases, it is associated with pain in the hypogastric region, similar to the pain which many patients experience prior to the appearance of the menstrual flow. It is frequently followed by a "bearing-down pain," which soon passes off.

The cause and origin of this very anomalous discharge are questions of great interest, and, as the fluid may escape literally by drops or in considerable quantity, it has yet to be determined whether it accumulates in any part of the genital tract before finally being expelled. So far as I have been able to judge, it does not seem to me to accumulate anywhere, but to escape immediately it is secreted.

Many theories have been propounded to account for the like phenomenon occurring in the gravid uterus; and doubtless as many, if not more, may be forthcoming for the explanation of hydrorrhœa in the unimpregnated state.

It is possible that the discharge may come from the Fallopian tubes; this, however, I am inclined to discard. I will, however, venture to suggest that the uterus itself is the medium; and that the change occurring in this organ is comparable with that occurring in the kidneys during the secretion of the so-called hysterical urine. It is, therefore, most probably dependent upon some derangement of innervation—whether through the vaso-motor nervous system, or directly through those nerves which are supposed to preside over secretion, can as yet only be conjectured. I am, however, inclined to believe it is by a direct influence on the nerves of secretion.

CASE OF IDIOPATHIC GANGRENE: RECOVERY.

By WILLIAM PROWSE, M.R.C.S., etc., Clifton.

THE following case of spontaneous mortification in a man, aged 54, apparently healthy, *i.e.*, free from gout or other hereditary disease which might be considered the immediate forerunner, will be read with interest by the profession. The disease is not often seen in one so comparatively young.

From the first, I looked upon the attack as having been induced solely by loss of nervous power, brought on by misfortune in business, producing extreme depression of mind for a prolonged period. This state had reacted on the body, and led to impaired nutrition. Diabetes was the result, and an enfeebled circulation.

In July 1880 I was called to attend W. H., aged 54, a master builder, of a florid complexion, and healthy appearance, but with a settled look of dejection on his countenance, caused doubtless, by the unfavourable prognosis that had been passed upon him. The man had been an in-patient of Addenbrooke's Hospital for three months, and, at the time of his coming under my care, had been made an out-patient. His temperament was sanguine; his habits were strictly temperate; he had always been in good health before this attack. The three outer toes of the right foot were gangrenous, the slough extending to a [illegible] immediately [illegible]. The deeper structures were affected, and the line of demarcation distinct. The terminal phalanges had already [illegible]. The pulse was [illegible], intermittent. His appetite was good, his sleep [illegible], the nights being much disturbed. The urine contained much sugar, five to six pints being voided in the twenty-four hours.

The treatment consisted in the administration of repeated small doses of solid opium, half a grain every eight hours, [illegible] rest, a generous diet, with a moderate allowance of [illegible] port and whisky. The [illegible] was [illegible] with [illegible] for two months, by which time the remaining phalanges had separated, and the wound healed perfectly. [illegible]

The urine became normal in quantity, and free from sugar, at the end of three months.

[illegible]

[illegible]

SURGICAL MEMORANDA.

COMPOUND FRACTURE OF THE TIBIA FROM INDIRECT VIOLENCE.

F. H., a patient in this asylum, is the subject of chronic mania, not inclined to be actively violent, but of a rather irritable disposition. He is very deaf, and, as is frequently the case under such circumstances, is egotistical enough to imagine that he himself must be the subject of the conversation which he cannot hear. As a consequence, he is very sensitive to the behaviour of others in his presence; and especially, if anyone happen to smile, he is wont to think that "there is a laughing devil in his sneer" directed against himself. In the same ward, a short time since, was another patient, S. P., who, from a psychological point of view, so far resembles Hamlet, that he is much given to soliloquy. His self-communings, however, seem to have a more exhilarating effect on his inner consciousness than the adoption of a similar line of conduct had on the soul of the noble Dane, as he may frequently be seen laughing heartily whilst talking to himself.

One morning, shortly after breakfast, and before going into the airing-court, these two patients, each walking alone, were promenading the corridor, when they suddenly met face to face. Unfortunately, just at this moment, S. P. happened to be in the throes of one of his laughing soliloquies. F. H., being in a gloomy, irritable mood, and no doubt being thereby doubly convinced that "a man may smile and smile, and be a villain," resented this ill-timed levity on the part of S. P. by seizing hold of the latter, and trying to throw him. F. H. has the reputation of being an expert wrestler, and is a much taller and stronger man than S. P.; nevertheless, the latter successfully resisted the attempt, and "closed" with his adversary. He was then seen to make a sudden spring to free himself, but, in doing this, his left leg suddenly gave way, and he fell into the arms of an attendant who was hastening to the spot to separate them. When laid on his back, a splinter of bone was seen protruding through the leg of his trousers; and, on my being immediately summoned to see him, I found that he had sustained an exceedingly severe compound oblique fracture of the tibia at the junction of its middle and lower thirds; in all probability, the fibula was also fractured. The upper fragment terminated in a triangular shape, a very sharp apex being formed by the crest of the tibia; and this, as I have before mentioned, actually protruded so sharply, and with such force, as to make its way quite through the leg of the man's trousers. There was so much ragged laceration, and the whole aspect of the limb was so very unfavourable, that it seemed vain to hope to save it. After careful consideration, however, it was decided that amputation could not be resorted to, as the vital force of the patient was so weak, that he must inevitably have succumbed to the shock of the operation. Accordingly, about three-quarters of an inch of the upper fragment having been sawn off, the displacement was reduced, the limb set in poroplastic splints, swung in a Salter's cradle, and the wound dressed with tincture of benzoin and carbolic oil. The patient was, on account of his delusions, occasionally rather intractable, and given to kicking his legs about; but, in spite of this disadvantage, the result has been much more satisfactory than could even have been hoped for, and a capital recovery has been made, with no noticeable deformity, and only a little shortening.

REMARKS.—The most satisfactory, and not the least noteworthy, point in this case was the saving of both the man's life and limb under such very unpromising circumstances. My object in recording it, however, is to draw attention to the cause of the fracture, which was undoubtedly the indirect violence caused by the weight of the body being suddenly and sharply concentrated on the weakest part of the tibia. I am sorry to say that I must confess ignorance as to whether a similar accident has ever previously been recorded, or has been looked upon as amongst the probabilities of surgical practice. An occurrence of this kind, however, cannot but be regarded as corroborative of the idea that disease of the nervous system is frequently accompanied by a depraved nutrition, one of the manifestations of which is "brittleness" of the bones.

W. M. YOUNG, M.D., Suffolk County Asylum.

REMOVAL OF A STEEL PITCHFORK-PRONG, TWELVE INCHES IN LENGTH, FROM THE ABDOMINAL CAVITY OF A MAN: RECOVERY.

ONE evening, in the haymaking time of last year, I was summoned to visit a man some miles distant, who, when sliding down a haycock on his back, was transfixed on a two-pronged steel pitchfork (which was resting against the haycock). One of the prongs, breaking short off from the handle, remained in the man's body.

On arrival at the home of the patient, I found him sitting sideways on a chair, his right arm thrown over its back, his legs drawn up, with his feet resting on a stool, body bent forward, and his left arm resting on his lap. The man was suffering acute pain, which was most intense about two or three inches below the ensiform cartilage, and was aggravated by pressure. His face was bathed in perspiration; he had been vomiting and suffering from hiccough; the general aspect was almost one of entire collapse.

On examination, I found a punctured wound, with a gaping and jagged orifice, about three and a half inches from the spine, just over the crest of the left ilium. About three inches above the wound, I discovered a hard substance beneath the skin and muscles, like the fractured end of a clavicle, which, on the slightest pressure, caused great pain in the epigastrium.

I passed a probe through the wound, which ran upwards and forwards, but did not touch the prong. As the hypodermic syringe I had with me refused to work, I gave a full dose of morphia solution by the mouth, and then cut down on the end of the pitchfork (at a point one inch and a half below the last rib on the left side), and seized it with a polypus-forceps, which, I regret to say, was not sufficiently strong to hold the steel, and slipped off each time I made traction. I enlarged the wound slightly, and insinuated the first finger and thumb of my right hand, and, with some difficulty, withdrew the prong. Its concavity looked backwards, and the convexity forwards towards the abdominal wall. It came right across the epigastrium, from right to left. It measured twelve inches in length, and was bright polished steel. The external hæmorrhage was very slight. The vomiting returned; the vomited matter contained a good deal of blood. The patient now seemed to be sinking, and I had him placed on a bed on the floor, put hot bottles to his feet, a mustard-leaf over his heart, and in about an hour he began to rally. I then put a pad saturated with compound tincture of benzoin over each wound, strapped on with plaster, and gave him twenty drops of Battley's sedative solution in a teaspoonful of milk. He still complained of epigastric pain. The vomiting ceased soon after lying down.

I ordered a light linseed-poultice, generously sprinkled over with laudanum, to be kept on the abdomen during the night, the liquor opii to be given every fourth hour till my visit next morning. No drink larger in quantity than a teaspoonful was to be given at one time, and no stimulants were allowed. For a few days there was pain in the epigastrium with vomiting, and some fever; but afterwards he steadily improved, and on the twelfth day after the injury all feverish symptoms had disappeared, and he was sitting up on the twentieth day, with the wounds nicely healed.

This case I consider interesting from the nature of the wound and the locality from which so formidable an instrument was removed, as it is probably unusual for a man to recover after having twelve inches of cold steel lying in his abdominal cavity. From the symptoms, the stomach and peritoneum seem to have been injured. The fact of the prong passing up so far from the wound of entrance after being broken, may be accounted for by the force of the man's descent down the haycock, and also by his again falling when trying to regain his feet, and the very rough way in which the patient was half carried, half dragged to his home nearly half a mile distant from the scene of accident.

JOHN MOLONY, Physician and Surgeon,
H.M. Coroner, co. Sligo, etc.
Collooney, co. Sligo, May 10th, 1884.

CLINICAL MEMORANDA.

A FATAL CASE OF EARTH-EATING.

MONTURAM, a Hindu woman, aged about 30, was admitted into the River Estate Hospital at 3 P.M. on April 12th, 1884. I had frequently seen her and prescribed for her as an out-patient during my visits to the estate; and she had twice been admitted into the Colonial Hospital, Port of Spain, for earth-eating, but without much result. About midday on April 13th, I received a sudden summons from the manager of the estate, in consequence of a change in her condition. It appeared that, the day before, she had been found in her house, again eating earth; and this led to her admission to hospital. She continued in about her usual state of health during the afternoon and night after admission; but the next morning, about 9, she fell rapidly into a state of collapse, in which she continued till I saw her. On arriving at the estate at 1.15 P.M., I found her lying on her back, quite unconscious, groaning; pupils contracted; pulse 80, feeble; extremities cold. There was no vomiting, nor had there been any. I was also told she had never been in the habit of taking opium. I succeeded in getting her to swallow a few drops of brandy and water; but there was no material change in her condition, and she died quietly at 1.45 P.M.

The rapidity of the symptoms, together with a history of recent quarrels with her husband and another woman, made the case suspicious, apart from its medical interest; and I made a *post mortem* examination about 10 A.M. on April 14th. The body was well nourished, but with an excess of fat. The liver, kidneys, and heart were fatty, but otherwise healthy; other organs were healthy. No evidence of poisoning could be found in the stomach or intestines. In the stomach was about an ounce of a reddish earth, resembling old red sandstone, and mixed with a small quantity of a slaty-looking earth. One mass of this material weighed about five drachms. In the small intestine was a smaller amount of the same material mixed with much mucus; in the large intestine, it was in masses resembling scybala. Altogether, there must have been a quarter of a pound or more in the intestines, which were not ulcerated; they contained a few round worms. The coats of the stomach were slightly abraded in places.

Remarks.—Earth-eating is quite a common habit amongst the Hindu immigrants in Trinidad. Children often take to it. In the case of adults, it is sometimes commenced from economical reasons, with the idea of saving food; and the appetite becomes so depraved, that the habit cannot be given up. The earth chosen is of a particular kind, resembling sandstone. Slate is often mixed with it. The manager of the estate tells me that, several years ago, he had several deaths from the practice, but that of late years it has ceased a good deal. The case in point was especially interesting from the suddenness and rapidly fatal termination of the collapse, leading one to suspect poisoning or perforation. In the absence of these conditions, one must regard the case as one of death from dirt-eating pure and simple. What was the ultimate cause of death seems still a mystery. It might have been simple exhaustion after prolonged dirt-eating and starvation, or it might have been reflex from pressure of the weight of earth in the stomach on the abdominal sympathetic, as in the cases recorded of sudden death from an overloaded stomach. In support of the first theory is the fact that the stomach and intestines contained very little food; but against it must be placed the over-nourished condition of the body. I had to cut through nearly an inch of fat in the abdominal wall. I should rather incline to the theory of reflex pressure acting on a woman weakened by obesity, and further weakened, though not starved, by long continued dirt-eating. But the case still seems obscure.

Beaven Rake, M.D.Lond.,
Government Medical Officer, Trinidad.

BLACK TONGUE.

Cases of black tongue cannot be so rare as is imagined by some; I have seen two during the last four years. One occurred in an old man, since dead, and lasted several weeks; his tongue gradually resumed a natural appearance, and he lived for two years after the occurrence. The other was in an old woman, and it, too, lasted for several weeks, and gradually disappeared. She is still living, though it is quite two years since she had the black tongue. In both instances, the colour was perfectly black on the dorsum of the tongue, and in both cases it was accompanied by great debility. To tonics, such as bark and ammonia, I attributed benefit.

A. R. **Barnes**, M.B.Ed., Boreham Street, near Hastings.

THERAPEUTIC MEMORANDA.

AFFINITY OF CHLOROFORM FOR STRYCHNIA: A CAUTION.

The following prescription was made up for a lady. ℞ Liquoris strychniæ ʒj; spiritus chloroformi ʒiij; aquæ ad ℥iss. M. A teaspoonful to be taken three times a day in water. Upon taking the final dose, which tasted unusually hot, my patient was seized with spasmodic contraction of the extensors of the feet and legs, the limbs being forcibly projected under the table at which she sat. These symptoms soon passed off, but were alarming for the time. On my being shown the bottle which had contained the medicine, a drop or two of water was seen remaining in it, and beneath this a globule of chloroform, which proved to be highly charged with strychnia.

The prescription was faulty. Chloroform is a powerful solvent of sulphate of strychnia, and itself is not very soluble in water. More was ordered than the menstruum could take up; the surplus, therefore, appropriated to itself a large amount of the salt, and fell with it to the bottom of the bottle. **Edward Garraway**, Faversham.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

CHESTER GENERAL INFIRMARY.

COMPOUND COMMINUTED FRACTURE OF THE FRONTAL BONE, WITH LOSS OF BRAIN-SUBSTANCE: COMPLETE RECOVERY.[1]

(Under the care of Mr. Hamilton.)

[Reported by Henry W. King, M.D., late House-Surgeon.]

Henry O., aged 57, a labourer, was admitted at 4 P.M. on August 2nd, 1883, suffering from a wound of his forehead. Upon inquiry, it was ascertained that he was working a crane for the purpose of unloading a vessel, when, at the time that the load of the crane was about half raised, the winch-handle slipped, and, his head being slightly turned to the right, the extremity of the handle, which was rapidly revolving, came in contact with his forehead, and cut it across from left to right. He fell to the ground stunned, and bleeding profusely from a wound on his forehead.

He was at once put into an open cart, and driven to the Infirmary. The bleeding soon became less; and, after the first few minutes, he recovered from his shock, and talked rather excitedly during his drive to Chester.

Upon admission, about two hours after the receipt of the injury, he was quite conscious and rational, and was able to get into bed with assistance. He was found to be suffering from a large jagged wound of his forehead. The deeper part of the wound measured about 3½ inches in length horizontally, 1½ inches in vertical breadth, and was about 1½ inches deep. There was slight tapering of the wound, especially on the right extremity. The edges of the wound were swollen, gaping, and rather cleanly cut; blood and serum were freely oozing from the raw surfaces. In the wound were some small fragments of bone, almost detached from their connections; they were removed without pain or difficulty. Four large fragments, forming the lower segments of the frontal sinuses, moved synchronously with the pulsatory movements of the brain; they were irregularly dovetailed into each other, or into the solid surrounding bone. Mr. Taylor and Mr. Hamilton saw the patient soon after his admission, and decided that it would not be wise to attempt any further removal of bone. Lint, kept moist with carbolic lotion, was applied to the wound, four grains of calomel administered, and light and noise as much as possible excluded. The patient was quite rational, but a little excited; he made light of his injuries, and expressed a wish to go home. On being asked how he felt, answered, "I have a downright good headache." At 4 P.M., his temperature was 98.2°; pulse 74, and respirations 16 per minute. At 7 P.M., the temperature was 100.6°, the pulse 82, and the respirations 20. At 9 P.M., the temperature was 101.4°, the pulse 90, and the respirations 20. He was getting more drowsy, but could still answer "yes" or "no" when roused up. He had taken a little milk and beef-tea since his admission, but swallowing gave him pain, and the large fragments of bone in the wound-cavity were seen to move during the act of deglutition. The oozing was less in amount and less coloured, but it still trickled down when the lint was removed; the edges of the wound were becoming more swollen and raised. Grave apprehensions were felt at this time that the case would rapidly terminate fatally; the temperature since his admission had been rising at the rate of a degree every two hours, the mind was evidently more clouded, and the general condition was more apathetic. At midnight, it was found that the temperature had fallen rather more than a degree since 10 o'clock, but the breathing was stertorous, 16 per minute, rather like the "Cheyne-Stokes breathing," a long inspiration, then a pause of ten or fifteen seconds, during which the tongue fell backwards, then a violent noisy inspiration, and a slight movement as of relief, the chest filling, then a few shorter inspirations, and then the same phenomena were repeated.

At 2 A.M. on August 3rd, the temperature was 101°, the pulse of fairly good volume; taken at different quarters of a minute, it was found to vary in a few seconds between 76 and 90 per minute. He could hardly be roused, was apparently unable to answer questions, and lay on his back with both eyes closed; the pupil of the left eye was normal, the right could not be seen.

At 4 A.M. on August 3rd, the temperature was 100.2°, and the pulse 88; at 8.30 A.M., the temperature was 99.4°, and the pulse 76; at 12 noon, the temperature was 100.2°, and the pulse 76; at 4 P.M., the temperature was 99.6°, and the pulse 76. The following note was then made. "The patient has passed a fairly comfortable day; consciousness and power of speech have returned; takes a little milk and beef-tea; has not been sick; there is much pain felt in head; moves his left arm more than the right, but can move either. No twitching, or other nervous symptom." At 8 P.M., the temperature was 100.2°, and the pulse, more regular in rate, 82 per minute; the tongue was dry at the edges and tip. At 12 midnight, the temperature was 98.2°, and the pulse 76.

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[1] Read before the Chester Medical Society.

On August 4th, at 4 A.M., the temperature was 101.4°, and the pulse 84. At 8 A.M., the temperature was 100.2°, the pulse 84, and the tongue more dry. A small quantity of brain-substance came away from the right half of the wound, and there was still free drainage of slightly coloured serum, and the wound consequently looked deeper. At 4 and at 8 P.M., the temperature was 101.4° and 100° respectively; the pulse was 84. The tongue was still more dry, of a dirty pink colour, glazed and hard. At midnight, the temperature was 101°, and the pulse 84.

At 8 A.M. on August 6th, the temperature was 99.8° the pulse 84, and the patient had passed a restless night, tossing his head about from side to side on the pillow. He was with difficulty kept quiet, and, although there was considerable prostration of strength, was in a more excited condition. Later, the patient became so unreasonable, that he could hardly be kept in bed. One-third of a grain of morphia was administered subcutaneously, and followed in about an hour's time by a drachm of bromide of potash; soon after the latter, the patient fell into a heavy slumber, somewhat disturbed by frequent movements; his temperature rose to 101.2°, and his pulse to 132.

On August 7th, at 7 A.M., the patient was still drowsy and restless, but had taken a little nourishment during the night; the temperature was 101.4°, and the pulse 120. At 10 A.M., 1 P.M., and 3 P.M., the temperature showed a decline of nearly a degree at each observation; the pulse had also improved. At this time, the prostration was so great, that two ounces of brandy, with milk and strong beef-tea, were ordered to be given at intervals in the next twelve hours. There was then a gradual rise of temperature from 98.1° at 3 P.M. to 100° at midnight.

During the whole of August 8th, the patient remained in much the same condition, and the temperature at 9 A.M. was normal, and remained so until midnight of August 11th. There was still great prostration of strength, but the tongue was less dry. It had twice been necessary to draw off his urine.

On the morning of August 8th, a large fragment of the frontal bone forming the inner part of the right orbital arch was removed without pain or difficulty; its attachments had sloughed away. The discharge during the last few days had become sero-purulent.

On the evening of August 11th, the temperature began to rise, and this was found to be due to a small collection of matter below the lower right eyelid. This was evacuated on August 12th, and the temperature gradually went down to normal on August 14th. From this date, the temperature became subnormal, with slight variations at times. The patient lay partly on his side and partly on his back, curled up with the limbs flexed; he was restless, tossing his head about on his pillow, and turning about in bed. For five days, he had to be fed by enemata, alternately of milk and egg, and beef-tea and brandy, every four hours; the latter in small quantities at first, but later, as the prostration increased, he had six ounces of brandy, six eggs, essence of beef, milk, etc.

From August 3rd to September 8th, he did not swallow solid food. After this period, he was persuaded to take some bread and milk or arrowroot occasionally.

On September 18th, he recovered still more from his prostrate irrational condition, and took more food.

He was able to get up on September 22nd, but remained in hospital under treatment until October 30th. There was then a granulating wound, which was treated with carbolised oiled lint. The right eye had disappeared from view, but it could be seen on forcible separation of the eyelids. The wound had not quite healed up at the date—January 4th, 1884—when the case was reported.

REMARKS BY DR. KING.—The above case is interesting in several particulars. It shows how tolerant the brain is of injury, or even of actual loss of brain-substance. It shows how useful it is to note the "direction of the fracturing force" in considering the prognosis of the kind; and this is in accordance with the teachings of Erichsen, Holmes, Spence, and other authors. We also see how undoubtedly beneficent the open nature of the wound was, by allowing free drainage from the deeper parts of the wound; and one can hardly help expressing astonishment that the fragments of bone, almost denuded of nutritive covering, and moving with each pulsation of the brain, should have granulated up, and united with such little loss of osseous tissue. It is an interesting point, too, to note the almost entire absence of nervous symptoms other than those usually found in "cerebral irritation," exhibited, probably sympathetically, in the bodily and mental condition of the patient, namely, the low temperature, the anorexia, and even refusal to take nourishment, the restlessness, the irritability of temper, and the gradual recovery without persistent symptoms. Erichsen put special stress upon such symptoms following blows on the temple or forehead, associated with lacerations of cerebral substances, more especially of the grey matter.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 20TH, 1884.

J. WHITAKER HULKE, F.R.C.S., F.R.S., President, in the Chair.

Reports of the Morbid Growths Committee.—Dr. GOODHART read the reports of the Morbid Growths Committee on three specimens which had been submitted to them. The material ejected from the larynx in a case reported by Dr. Burney Yeo the Committee considered to be certainly of a vegetable nature. With regard to the congenital tumour of orbit shown by Mr. Lawson, the Committee coincided with the views expressed by Mr. Lawson, and reported in the BRITISH MEDICAL JOURNAL for October 20th, 1883, page 773. The Committee had also examined microscopical sections from the case of supposed actinomycosis shown by Mr. Treves; nothing resembling the fungus had been met with; the growths had the structure of large celled sarcoma.

Bromide of Potassium Eruption.—Mr. WAREN TAY showed an excellent drawing of an eruption produced by bromide of potassium. He said that the case resembled so closely the portrait in the atlas of the New Sydenham Society that no doubt had existed in his mind as to its nature. The patient was a child eleven months old; the drug had been given in doses of four grains and a half for eleven days. The spots were first noticed on the ninth day. At one hospital, the eruption appeared to have been mistaken for molluscum contagiosum. At an early stage, its vesicular nature was said to have been marked; but, when the child was brought to the London Hospital, the eruption consisted of large elevated discs with a surrounding zone of partially desiccated vesicles. It was confined to the buttocks and lower extremities. The drug was stopped on the tenth day, and the eruption had disappeared six weeks after the last dose. A careful microscopical examination of portions of the eruption was made by Dr. Stephen Mackenzie, who reported that there was infiltration into all parts of the skin, and that there were pus-cells in the corium, aggregated especially in the vicinity of the hair-follicles and sebaceous glands. The colour of the eruption was due to the hyperæmia of the papillary layer, and the persistence of the colour under pressure was owing to numerous extravasations of varying size into this layer; in the middle layer of the corium were numerous round cells; peculiar changes were also noted in the neighbourhood of the hairs, and in the sebaceous glands; in short, there was active hyperæmia of the corium, of the papillæ and sebaceous glands especially, with corpuscular and fluid exudation. The exudation produced the elevation of the eruption.—The PRESIDENT commented on the value of the microscopic examination as a new contribution to our knowledge of this eruption.

Cerebral Aneurysms in Cerebral Hæmorrhage.—Dr. CHARLEWOOD TURNER exhibited some beautiful specimens of cerebral aneurysms. The first specimen showed disease of the left internal carotid and its branches, enlargement of certain vessels, and several small nodules on the finest ramuscules. These nodules were in some cases miliary aneurysms of definite form, and in others aneurysmal expansions, surrounded by a finely fibrillar network, probably blood-clot, from which the corpuscles had been absorbed. The outer and inner coats of the vessels were generally thickened, and in certain small areas there was intense arteritis. The patient from whom the specimen was obtained died from the effects of an extensive hæmorrhage, which lacerated the optic thalamus, and burst into the ventricles, which were full of blood. The kidneys were granular. In the second case, no nodules were to be seen, but aneurysmal dilatations were found on several arterioles. On one of the penetrating branches of the right middle cerebral artery was a massive blood-clot; from this vessel, the fatal hæmorrhage had occurred. On another branch was an irregular fusiform enlargement, where blood had been effused beneath the sheath; other vessels were in a somewhat similar condition; the arterioles presented areas of arteritis. The patient was a man, aged 59, who died of a sudden apoplectic seizure. At the necropsy, extensive destruction of the corpus striatum and effusion into the ventricles were found. The kidneys were granular. The heart weighed 11 ounces. Dr. Turner said that he had been led by the study of these and other cases which he had previously brought before the Society, to the conclusion that, in the great majority of cases, cerebral hæmorrhage was an accident of an arteritis leading to rupture of the vessels, rather than to the formation of a regular aneurysm and its rupture. He believed that it was uncommon to meet with miliary aneurysms of definite structure, such as were seen in the first case recorded. He showed also two specimens of large aneurysm. In one case, the aneurysm was at the extremity of the basilar artery. In the other specimen, an aneurysm was situated on the anterior communicating artery. In both cases much blood was effused at the base of the brain.

Symmetrical Aneurysm of Middle Cerebral Arteries.—Dr. HADDEN showed a specimen of symmetrical aneurysm of the middle cerebral arteries. The patient, a woman aged 49, was admitted with right hemiplegia and hemianæsthesia. She became comatose; had convulsions, chiefly affecting the right side; and died five hours after admission. At the necropsy, there was hypertrophy of the left side of the heart, but no valvular disease. The kidneys contained a few cysts, but were otherwise healthy. A calcareous bar was seen running lengthwise in the position of the hilum of the spleen. There was much blood effused in the subarachnoid space all over the brain. The hæmorrhage was due to the rupture of an oval aneurysm about an inch long, involving the left middle cerebral artery. The aneurysm was sacculated, and arose from the upper part of the vessel, near the perforating arteries. The sac had ruptured posteriorly, the blood making its way into the white matter of the left hemisphere through the roof of the fissure of Sylvius. There was no extravasation into the lateral ventricles. On the right side, there was an aneurysm, the size of a pea, arising from the middle cerebral at its first bifurcation, and in the position of the perforating arteries. There was no evident degenerative change in the arteries of the circle of Willis. The position of the aneurysms, and their symmetry, had suggested the possibility of emboli as the exciting cause; but there were no vegetations on the valves, and only slight atheroma of the aorta. It was possible that the arterial change was syphilitic; but there was no information on this point.

Unusual Cases of Pulmonary Aneurysm.—Dr. PERCY KIDD said that the specimens he showed were unusual in two respects: the presence of multiple aneurysms, and the development of aneurysms in pulmonary cavities of acute formation. Case I. A woman aged 30, suffering from chronic phthisis, who died of hæmoptysis; her father had died of apoplexy, her mother of phthisis, and one brother suffered from phthisis and spat blood. The right lung was universally adherent, and contained scattered small cavities; twenty-two aneurysms of the pulmonary artery were found; they varied in size from a hempseed to a small pea. The fatal hæmorrhage resulted from rupture of an aneurysm, of the size of a pea, in a cavity at the base, in which there were two other small aneurysms, both unruptured. Another small cavity near the first contained five aneurysms, and another cavity contained two. Single aneurysms were found scattered through the other cavities. The walls of the aneurysms were thickened in all instances, and, with one solitary exception, were unruptured. Most of the aneurysms were situated toward the lower part of the lung. Case II. A case of acute phthisis in a woman aged 26. The left lung was universally adherent. Two aneurysms, one as large as a pea, the other of the size of a small bean, and both of fusiform shape, were found in an irregular basic cavity, with soft caseating walls, evidently of acute formation. The branches of the pulmonary artery affected were quite unsupported on all sides. The walls of the aneurysms were thickened, and had not ruptured. Case III. A case of phthisis in a woman aged 26. Trabeculated excavation of the entire left lung had occurred. Three unruptured aneurysms were found: one at the apex, as large as a hempseed, and two of the size of peas, close to each other at the base. The walls of the aneurysms were thickened. Case IV. A case of chronic phthisis in a man aged 25, who died of hæmoptysis. The left lung was universally adherent, and there were old cavities in the upper lobe; an irregular cavity, with soft caseous walls, was situated at the base. In the latter cavity was a ruptured fusiform aneurysm, which had developed on a large exposed branch of the pulmonary artery running across the cavity. The walls of the aneurysm were rather thin. Rupture had occurred by formation of a small linear slit in the aneurysm. The pathology of pulmonary aneurysms had been, he thought, practically exhausted. There was little to be added to Dr. Douglas Powell's account of the subject in the twenty-second volume of the Society's *Transactions*. The aneurysms usually occurred in chronic cavities as the result of a withdrawal of the support of the surrounding tissues. The aneurysms commenced probably as local thickenings of the intima (endarteritis). The other coats might subsequently participate in the thickening. He exhibited a microscopical section of a small commencing aneurysm projecting into a cavity, in which the above change in the intima was well seen, with rupture of the middle coat, and formation of an organised thrombus between the intima and the expanded and attenuated adventitia. The development of aneurysms in acutely formed cavities, as in Cases II and IV, was probably due to their situation at the base of the lung, where the respiratory movements were most active, and tended to retard thrombosis in the vessels of the cavities. Adhesion of the lung to the diaphragm probably contributed to the formation of aneurysms by interference with the free play of the lung over the diaphragmatic pleura, the result being an unnatural and forcible stretching of the lower part of the lung by the action of the diaphragm. In 230 cases of phthisis he had examined after death, aneurysms of the pulmonary artery were found in 26. In 17 cases, rupture of an aneurysm had occurred; in 9, there was no rupture. Hæmoptysis was the cause of death in 21 cases. In 17, this was due to a ruptured aneurysm, in one case to bronchial ulceration extending into the pulmonary artery, and in another to ulceration of vessels in a large cavity. In 2 cases, the source of the hæmorrhage could not be ascertained, though an unruptured aneurysm was present in one of the cases. The aneurysms were found in cavities in all cases, and their walls were usually thickened, except at the point of rupture. The cavities in question were situated in most cases in the lower two-thirds of the lung, and they were rarely of large size. The cavities mostly varied in size from a walnut to a Tangerine orange. These facts confirmed the generally accepted view that, in the great majority of cases of phthisis in which fatal hæmoptysis occurred, the hæmorrhage was due to rupture of an aneurysm in a pulmonary cavity.—Dr. SAMUEL WILKS said that Dr. Kidd's cases and observations quite coincided with his own experience, namely, that fatal hæmorrhage in phthisis was associated with the reparative, and not with the destructive processes, being due to rupture of an aneurysm. Dr. SAMUEL WEST thought that peculiar interest attached to the fact that Dr. Kidd had found aneurysms in cases where there had not been fatal hæmoptysis.

Multiple Stricture of Small Intestine.—Dr. SHARKEY showed a specimen of a curious and uncommon condition of the small intestine. The patient was a pale emaciated woman, who had suffered from dyspepsia for years, and from pain, diarrhœa, and vomiting, with slight irregular pyrexia, for a few months before her admission to St. Thomas's Hospital. She died of facial erysipelas. It was found, on examination after death, that the great omentum was adherent here and there, and that the kidneys were small, and the capsules slightly adherent. The lower two-thirds of the small intestine contained numerous ulcers, which at first sight appeared to be healed. These ulcers were of two types—small, like typhoid ulcers, and large ulcers encircling the gut, with thickening of the intestinal walls and marked constriction of the gut. The peritoneal surface was generally smooth, and there were no definite signs of tubercular disease of it. The gut at the situations of these thickenings was infiltrated with round cells; but no giant-cells were seen. The process was most intense in the mucous membrane, and became gradually less marked towards the peritoneal surface. The infiltration did not appear to be tubercular, and the bacillus tuberculosis was not seen; but there was an early stage of tubercular infiltration of the Fallopian tubes. Dr. Sharkey considered that the disease of the intestines was not tubercular, because there was no affection of the peritoneum, because the margins of the ulcers were very regular, and because the microscopical appearances were not those of tubercle. The [illegible] of the Fallopian tubes probably occurred long after the commencement of the disease, and could not decide the question one way or the other, as [illegible] disease was a common intercurrent affection in [illegible]. Dr. PAYNE inquired as to the amount of [illegible], and Dr. [illegible] asked if the mesenteric glands were diseased. He had [illegible] on the peritoneal surface of the specimen, which he would be inclined to call tubercular. Mr. [illegible] said that [illegible] had been reported [illegible] no suspicion of typhoid or tubercular [illegible]. [illegible] Kidd [illegible] had [illegible] two [illegible] of the [illegible] most [illegible]. Dr. Percy Kidd [illegible] Dr. SHARKEY, in reply, said that the [illegible] was [illegible]. He did not think the appearances on the [illegible] were tubercular; even if they were, they must have been very recent. The Fallopian tubes were undoubtedly tubercular, and he had not gone to the trouble of looking for bacilli in them.

Tumour of Petrous Portion of Temporal Bone. — Mr. CHAVASSE related the particulars of a case in which a tumour had been present behind the ear for about seven years; pain had only been felt for nine months, and during that period the tumour had grown quickly. When admitted into the General Hospital at Birmingham, the woman was deaf on the side on which the tumour was present, and there was paralysis of the facial nerve. The patient did not improve on anti-syphilitic treatment, and the tumour attained the size of a small apple; it was therefore removed. The patient died of double pneumonia sixteen days after the operation. At the necropsy, the foramen ovale, which had been exposed at the operation, was found to be enlarged, and its margins rough. The growth had been examined by Dr. Windle, the pathologist to the hospital, who reported that it consisted of dense fibrous tissue, and contained a small cyst at the upper part. The parotid was atrophied, and had undergone extensive fibroid degeneration.—At the suggestion of the PRESIDENT, the tumour was referred to the Morbid Growths Committee.

Malformation of the Heart.—Mr. S. G. SHATTOCK exhibited a bilocular heart from a new-born child. The upper and lower cavæ were normally disposed, but the pulmonary veins were confluent on the back of the auricle without having any communication with it. He surmised that the blood from the lungs had been returned through the bronchial or posterior mediastinal veins, communications between which and the pulmonary veins had been shown to exist by Zuckerkandt. The condition tallied with the established embryological fact that the pulmonary venous system was formed independently in the lungs, though the manner in which they came to be connected with the heart was not yet determined. Whether the present specimen represented a stage in this process remained to be shown.

The Pathology of Congenital Club-Foot.—Mr. R. W. PARKER and Mr. SHATTOCK read a paper on this subject in completion of a former communication, in which they advocated a mechanical mode of causation for this deformity. Their opinions rested on a careful dissection of five cases (three varus and two calcaneus), and on a study of specimens in various London museums. The contention was that there was nothing special in this deformity, and nothing which might not be found in other joints. In one of the cases there was histological integrity of the nerve-centres, of the nerve-trunks, and of the muscles of the affected limb, but there was also some extra obliquity in the neck of the astragalus. In another case, however, there was no such malformation in the astragalus. Hence they argued the insufficiency of the usually accepted causes—a nerve-lesion, or a bone-deformity. It was further shown that the conformation of the astragalus which was met with in most cases of talipes was the normal condition in the simiidæ, although these animals were not talipedic. Some other cause had, therefore, to be evoked, and they sought it in malposition of the feet due to environment during intrauterine life. As additional proofs of pressure in new-born children, they related instances of torsion of the bones of the leg and of the astragalus, and also a case in which depressed patches of atrophied skin, with bursæ beneath, were found in the external malleolus, and on the head of the astragalus, comparable with what was found in persons who had walked on an unreduced talipedic foot. The varieties of varus and calcaneus were thought to depend on the date of onset, and to be in both cases exaggerations of positions normal, at some time or other, of fœtal life.—Dr. MAHOMED referred to a case of tetany under his care in which talipes had been produced; and Dr. BERNARD O'CONNOR observed that the inversion described by the authors as present in the newly-born infant disappeared during sleep.—Mr. PARKER briefly replied. He said that he had not intended to maintain that talipes was always produced in the same way.

Congenital Xanthelasma.—Dr. THOMAS BARLOW showed drawings of a case of congenital xanthelasma. The patient was a boy aged 7. The patches in the neighbourhood of the eyelids were very characteristic, and the vaccination-scars had become tinted. The patient had no obvious signs of hepatic disease, but he had suffered from marked symptoms of renal calculus. But few cases in children had been recorded; and, in those cases, the patches did not affect the eyelids, as in this case. Mr. Hutchinson had insisted on the importance of hepatic disease as an element in the causation in adults. It had not hitherto been observed in young children; but, in this case, the renal calculi might perhaps properly be attributed to some hepatic disturbance.

Chyluria.—Surgeon TREVAN, R.N., on the introduction of Mr. C. B. LOCKWOOD, showed a patient suffering from chyluria; filariæ had been found in the blood and urine.

Final Meeting.—Owing to the advanced hour, and to the fact that this was the last meeting of the session, Dr. Silcock's paper on Cancer of the Prostate, and Dr. Handfield Jones's paper on Clots in the Cerebral Arteries, were taken as read.

Card Specimens.

Dr. SHARKEY: 1. Cystic Squamous Epithelioma; 2. Stricture of Œsophagus and Atrophy of Stomach.

Mr. CHAVASSE: Tumour of Skull.

Mr. SHATTOCK: Unusual Condition of Hydrocele Fluid.

Dr. HOBSON: Malignant Disease of Cæcum.

Mr. MORGAN: 1. Extensive Calcareous deposit in Pleura; 2. Perforation of Occipito-atloid Articulation.

Dr. HEBB: 1. A Sponge-like Liver; 2. Muscular Nerves and Spinal Cord in Diphtheritic Paralysis; 3. Tubercle in Wall of Heart; 4. Aneurysm of Aorta.

Mr. ARBUTHNOT LANE: Partial Mollities, Spondylolisthesis, and Charcot's Disease.

Dr. HALE WHITE: Left Inferior Vena Cava.

Mr. J. POLAND: Suppurative Arthritis of Infants.

Mr. R. W. PARKER: Lymphomatous Glands removed from Axilla of a boy aged 9.

Mr. HENRY MORRIS: Keloid of Leg.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 7TH, 1884.

H. GERVIS, M.D., F.R.C.P., President, in the Chair.

The late Duke of Albany.—The PRESIDENT read the addresses of condolence which he had sent on behalf of the Society to Her Majesty the Queen and Her Royal Highness the Duchess of Albany.

Specimens.—The following specimens were shown:

Dr. CLEVELAND: A Fleshy or Deciduous Substance voided after labour by a patient who had already voided similar bodies on two previous occasions. It was probably the decidua from the unimpregnated half of a double uterus.

Dr. MATTHEWS DUNCAN: Microscopical slides of an Angioma of the Labium Majus.

Mr. DORAN: Ruptured Secondary Cyst in the Wall of a Multilocular Ovarian Tumour.

Dr. HORROCKS: Rupture of Uterus and Vagina, longitudinal in direction.

Dr. CHALMERS: Cyst between Tube and Ovary, in the Broad Ligament.

Dr. BANTOCK: Four Fibrous Tumours of the Uterus removed by operation; the uterus in one case was pregnant.

On Strong Mental Emotion affecting Women as a Cause of Idiocy in the Offspring.—Dr. ARTHUR MITCHELL read a paper on this subject. He said that this cause was often assigned by the mother, but in most cases without sufficient reason, especially as more probable causes could usually be discovered occurring after birth. In some cases, however, he had convinced himself that this was the true cause, especially if the mental state had been protracted, and if the rapidity of developmental changes in the fœtus were considered. Such disturbance might act either as arrest or as misdirection, and probably through the bodily health of the mother. Sudden emotions might, in some cases, have had a similar effect; under such conditions, patients had described violent fœtal movements following the shock, and afterwards a cessation of movements for some days. Such movements were probably convulsive, and if so, were quite capable of accounting for permanent mental damage. Mental emotion was known to lead to abortion, sometimes apparently preceded by the death of the fœtus. The paper concluded with an account of six cases, drawn from 443 cases of idiocy or imbecility consecutively examined, with allusion to 22 other cases, making 28 cases observed in a total of 1,500. In the 22 cases, the evidence was less satisfactory.—The PRESIDENT gathered that the effect was presumably produced through the general health of the mother, rather than directly on the fœtus.—Dr. WEST remarked that such statistics could not be trustworthy until compared with a similar series in which no such results had followed from the same causes. The latter class would, in his opinion, prove a large majority.—Dr. FLETCHER BEACH said that, according to statistics collected by him in the Darenth Asylum, fright and other violent mental emotions accounted for about one-tenth of the cases in which histories could be obtained; but, in many of these cases, there was also intemperance, involving worry and anxiety to the mother, ill-usage from the husband, pawning of furniture, and want of food. In a large number of cases, there was a history of insanity, imbecility, epilepsy, or paralysis in the parents.—Dr. CLEVELAND agreed with Dr. West. He related the history of a family of six, three of whom (each alternate child) were idiots. Both parents were sane; there was a history of insanity on the mother's side, but she had never herself been insane.—Dr. AVELING regretted the absence of histories of insanity and consanguinity from the cases related.—Dr. MATTHEWS DUNCAN observed that Dr. Mitchell did not claim to have proved his thesis, but only said he had "convinced himself" of the truth of it. He (Dr. Duncan) thought he had made it highly probable. Dr. Mitchell had already shown that the age of the mother, the number of the pregnancy, and other circumstances, influenced the offspring. Ancell had shown that the injurious or favourable influence of the number of the pregnancy extended over the whole life of the children to adult age, influencing the rate of their mortality. Such facts proved the grave effect of slight causes, and favoured the author's view.—Dr. HEYWOOD SMITH pointed out the omission from the paper of the date in utero-gestation at which the perturbing influence occurred. In physical deformity of the offspring, the mental shock to which the mischief was ascribed by the mother happened, in his experience, generally between the third and fourth months.

Extra-uterine Gestation: Delivery of a Living Child per Vaginam: Removal of Placenta: Recovery.—Dr. J. H. MATHIESON, of St. Mary's, Ontario, described this case. The patient was aged 30, the mother of five children. In November, 1880, menstruation (which had been regular, though scanty, for two months) ceased, and abdominal pain began. In December, 1880, a lump was noticed low down in the left inguinal region. She was first seen by the author in March, 1881, when she had a tumour rising to the level of the navel, filling the left inguinal region, and extending two inches to the right of the middle line. The uterus could not be mapped out. The sound passed three and a half inches, slightly to the right side, and in front of the tumour. There were occasional pain in the tumour, tenderness, and a feeling, "like jelly moving," which made her feel sick, painful micturition, irregularity of bowels. The tumour continued to enlarge, fœtal movements to grow stronger, and the pain more severe. On April 12th she had an attack of pain and nausea, with pulse 146, temperature 103.6°, cold extremities, and cold sweat, relieved by morphia. A similar attack occurred on April 23rd, another on May 2nd, and another about May 18th. On June 2nd a somewhat similar attack was accompanied by pretty regular labour-like pains, independently of fœtal movements, and accompanied by a red discharge. The tumour continued to grow, and its most rapidly growing part was always the most painful. On June 13th occurred another attack like the last, but the pains were bearing-down, though no bulging during them could be felt through the vagina. On June 28th she had a very severe attack during micturition, followed by rapidly following attacks of syncope. The roof of the vagina was filled with a doughy mass, solid on deeper pressure. Vaginal operation was at once decided on, and performed without chloroform at the patient's request, by cutting with a knife and tearing with the finger-nail. The face of the child was found presenting, and was delivered by forceps easily. It was stillborn but soon revived. The placenta was at the posterior and left side of the cavity, its lower border some two inches from the vaginal roof. It was easily peeled off, a sponge soaked in perchloride of iron following it up. There was very little bleeding. The clots were removed from the cavity, its walls were touched with perchloride, and the operation ended. Much exhaustion followed the operation. The child weighed 8 lbs. 7½ oz., and appeared mature. The placenta was three-lobed, but was destroyed before a careful examination could be made. The after-treatment consisted in washing out the cavity antiseptically. The opening healed in three months. Severe pain in the side lasted for nearly two years after the operation. She was seen in August, 1883, in excellent health, had no pain except after great fatigue, had menstruated normally for six months. The child was healthy, the largest, and a great deal the [illegible] of the family. The author debated the treatment pursued (1) as to the vaginal operation, (2) the removal of the placenta.—The PRESIDENT doubted the propriety of the vaginal operation, and of the removal of the placenta. Each case had to be judged on its own peculiarities, but generally he was in favour of primary operation, abdominal section, and leaving the placenta.—Dr. AVELING suggested the possibility of the sac being a secondary uterus.—Dr. PLAYFAIR disapproved of vaginal operation and of removal of the placenta. The case, as related, was most extraordinary, especially in regard to the labour-pains described.—Dr. CHAMPNEYS remarked that such pains were part of the ordinary phenomena of such cases. The cyst seemed to go into a sort of labour on its own account.—Dr. BANTOCK thought the case was one of tubal pregnancy, the tube giving way on its under surface, and that the fœtal sac had grown between the layers of the [illegible].—Dr. CARTER related a case of extra-uterine pregnancy. [illegible] about term, and was removed by abdominal section, though it could easily have been removed by the vagina, abdominal [illegible] indicated by an abscess pointing at the navel. [illegible] frequently observed.—Dr. FOX advocated primary [illegible] operation of election, especially in view of the present position of abdominal surgery.—Mr. GRIFFITH thought that the presence of a contractile cyst-wall necessitated the gestation being either interstitial, or in an undeveloped form of a double uterus.—Dr. CHAMPNEYS observed that the uterine platysma, which extended widely over the pelvic organs, was sufficient to account for contractions, and that these occurred in undoubted extra-uterine pregnancies.—Dr. GODSON alluded to a case under Dr. Duncan, in which unsuccessful attempts had been made to kill the fœtus by morphia-injections.

Case of Cystic Degeneration of the Cervix Uteri.—The PRESIDENT described this case. The patient, aged 45, had had nine children, the youngest five years old. The menopause had occurred three or four years previously to her admission, which was indicated by abdominal enlargement, which turned out to be due to obesity. The cervix was covered with close-set, tense, glistening vesicles, varying in size from a millet to a hemp-seed. There was no other abnormal appearance, and there were no uterine symptoms whatever, the vaginal examination having been indicated by the abdominal enlargement; on puncture, nothing but air escaped with an audible sound, the vesicle so punctured afterwards being indistinguishable, except for slight traces of the marks of the punctures.—Dr. HERMAN referred to the disease of the vagina and cervix described by Winchel as "colpohyperplasia cystica," characterised by cysts containing air or gas.

[The following remarks of Dr. Barnes on Dr. Kilner's paper were accidentally omitted from the report of the last meeting.]

Dr. BARNES had found faradism capable of initiating as well as intensifying uterine contractions, but he had discontinued its use, partly on account of the pain it produced. Its power of lowering arterial tension might relieve the vomiting of pregnancy and other cognate disorders.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MAY 15TH, 1884.

G. P. FIELD, M.R.C.S., President, in the Chair.

Hypospadias.—Mr. EDMUND OWEN showed a coloured drawing of a subject of hypospadias, in which the sex had been originally mistaken. The child had been supposed to be a girl, but when Mr. Owen saw it, when 16 months old, he discovered the testes near the crest of the pubes. He was now 4 years old, and was in every other respect well developed.

Alleged Delay in Scarlet Fever.—Mr. CHARLES LAWRENCE, referring to the report of his opening remarks (on April 3rd) which had appeared in the medical journals, stated that the expression "imperfect volatility," should have been used instead of "volatility" in connection with the poison of scarlet fever, in accordance with the drift of his observations on that subject.—Dr. CHEADLE laid stress upon the specific nature of the virus. Its elaboration required a longer time than that of measles; the latter was contagious almost from its earliest manifestations, whereas the former was much less potent prior to the appearance of the rash than during desquamation. Families and individuals differed widely in their liability to the disease. Again, the same persons showed very different vulnerability at different times. Surgical scarlet fever was probably contracted by contamination of the highly absorbent surface of recent wounds. In strict analogy with what happened in inoculated small-pox, the incubation was much shortened, and the virus attenuated. Propagation by inoculation was not however hitherto known in the case of measles or enteric fever. The influence of race as an etiological moment was open to some doubt. The difference in severity observed in scarlet fever in France and in England respectively was best explained by reference to past history. Formerly scarlet fever had been very mild in this country. Bretonneau, on the other hand, had recorded a severe outbreak, contrasting with his previous experience of the disease in France. The variations were rather between epidemics than between countries. Climate, however, probably exercised an influence, although this was not necessarily based upon mere degree of temperature. In India the disease, although repeatedly introduced, had never obtained a footing, [illegible] most of the agencies which, in this country, brought about contagion from person to person. In France, children were systematically inspected before their admission into school; but in England, too frequently, attendance at school was enforced in the face of sanitary indications. Although the shortened incubation of surgical scarlet fever had been adduced as proof of its inoculation into wounds, this point was far from settled. In respect of treatment, mischief was likely to arise from the indiscriminate use of the warm bath in the premonitory stage. This practice was well calculated to aggravate the pyrexia, and to favour the onset of convulsions.—Dr. Hopwood had collected twelve cases in which the duration of exposure had been limited to half-an-hour or an hour, and the onset had followed in sixty-eight to seventy-eight hours. Surgical scarlet fever was not a distinct variety. The disease had been contracted under the use of every antiseptic precaution, including the spray; and, in cases where the wound had run an aseptic course, diagnosis was often difficult. In German measles, desquamation was generally limited to the head and neck. In this disease, it was possible to distinguish a morbilliform and a scarlatiniform variety; one variety was capable of breeding the other. —Mr. Malcolm Morris deprecated harsh criticisms of the diagnoses of fellow practitioners. In scarlet fever, four prominent indications required consideration—the rash, the throat, the tongue, and the pyrexia; any of these, or several, might fail us. The rash was the most important, for, in its complete absence, diagnosis was at best but a guess. There were two typical varieties of eruption, the hæmorrhagic variety special to severe cases, and the milder punctate form. Urticaria was often most difficult to diagnose from scarlet fever; but where any doubtful rash existed, isolation was the means to adopt, although the event might falsify our apprehensions. An extensive desquamation was an important guide. Of all the means proposed for checking the diffusion of contagious epidermal scales, constant bathing, as suggested by Dr. Jamieson in the *Edinburgh Medical Journal*, was the most promising; yet better results might be expected from continuous immersion during two or three days at the height of desquamation. Continuous immersion was practised in Vienna, with good results, in the case of burns. —Mr. Mason considered the question of the spontaneous development of the disease, and narrated a series of cases occurring in the same house. A child died in four days from the hæmorrhagic form of the fever, the nurse suffered from severe diphtheritic sore-throat, and the father acquired severe erysipelas before the dead body had been removed. Although inspection revealed no unwholesome condition in the house, decaying vegetable refuse was discovered in the vaults opening into the area. In the speaker's experience, most of the parturient women infected by the disease were quite free from all abrasion. Diffuse peritonitis had generally ensued, abrupt in its inception, violent in its course. The desquamation-stage was best treated by carbolised inunctions and warm baths.—Dr. Dawson Nesbitt suggested that the mildness of the disease in France might bear some relation to the lighter diet adopted in that country.—Dr. Alderson had arrived at the conclusion that very rarely could puerperal disorders be traced to scarlatinal infection. He had repeatedly attended parturient women where scarlet fever was in the house. The danger from erysipelas was much more real. In his series of upwards of 1,500 confinements, he had only known one case of real puerperal scarlet fever; on that occasion, he had not attended any case of scarlet fever the same day. Isolation of unattacked persons, when enforced prior to exposure to desquamation, could be looked upon as completely successful after the lapse of ten days.—Mr. Edmund Owen related three cases of surgical scarlet fever. In one case, tracheotomy was performed for the removal of a fish-bone. Scarlet fever ensued after two days, and the nurse took genuine scarlet fever from the patient. An operation for cleft palate in a boy was followed by elevation of temperature, erythematous rash, and albuminuria; scarlet fever was at that moment prevalent in the hospital. The fact that eight days after the operation the wound was found to have healed from end to end showed that no asthenic influence was exercised. The third case was one of amputation of the thigh, for disease of the knee-joint. Sore-throat and regurgitation of food through the nose led to the suspicion of scarlet fever, although the temperature was normal; and the patient was sent to the Fever Hospital, where the wound progressed most favourably. No desquamation was noticed. Mr. Owen also alluded to the experience of Mr. George May, jun., related in the British Medical Journal for 1879, in which several children acquired scarlet fever from a surgical case of the disease, which Mr. May had at first held to be septicæmic, not scarlatinal.—Dr. Meadows regretted that the terms "surgical" and "puerperal scarlet fever" had ever been invented. The disease in every case conveyed itself, and nothing else. Whoever attended any considerable number should not attend pregnant women. As to the mode of infection, an analogy had been drawn between the placental site and an amputation-wound. No such analogy existed; and, in addition, the vagina was closed, and the uterus practically closed. But there did exist a condition of blood causing susceptibility to the poison. Although little could be said in support of carbolised spray during delivery, vaginal injections and uterine injections were of the greatest value in removing the secretions which most frequently were answerable for the puerperal fever. Uterine injections should only be practised according to definite rules, regard to which would preclude the danger of peritonitis from injection. —Mr. Cripps Lawrence was glad that the debate he had introduced had been so fruitful in suggestions. He was thankful to have had an opportunity of discussing the "conscience-clause," to which he had always adhered. Time did not allow a detailed reply to observations made by various speakers.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

Wednesday, April 9th, 1884.

Norman Chevers, M.D., C.I.E., President, in the Chair.

Epidemic Diseases in Polynesia. Mr. Bolton G. Corney read a paper on the behaviour of certain epidemic diseases in natives of Polynesia, with special reference to the Fiji Islands. The first visitation of measles among the natives of the Fiji Islands occurred in the early part of 1875. The disease was introduced from Sydney in the persons of the king's son and an attendant, who were attacked by it while on the voyage home in H.M.S. *Dido*. Two other members of Thakombau's suite fell ill of it on the day after they landed; and, owing to a large tribal gathering having been convened to welcome the chief home and to arrange the formal cession of the Islands to Great Britain, the disease was, on their return to their several districts, rapidly and thoroughly disseminated throughout all parts of the group. It raged during four months with great fatality, no fewer than 40,000 natives dying, out of a population of 150,000, equal to 26 per cent. All ages and both sexes appeared to suffer, without distinction; but there was no doubt that a very large proportion of the deaths was brought about by extraneous causes. Whole families, villages, and districts were affected contemporaneously, so that there were no healthy persons available for collecting food, preparing it, nursing and attending to the sick. This state of things was further aggravated by the callousness and indifference of the sick persons themselves to their own condition; a feature often observable among semi-savage nations, and this evil was greatly intensified by a belief which had gained ground among them, that the disease was purposely introduced by the white man for the extermination of the native race and the alienation of their lands. In consequence of this, they persistently refused all food and medical comforts or care offered them by European settlers and officials. They could not be induced, when parched with fever, or when regaining sufficient strength, to refrain from leaving their houses and lying at night on the cold damp earth, or even bathing in creeks and water-holes. As a consequence of this, dysentery or pneumonia was the most frequent immediate cause of death. On the other hand, in cases where it was possible to enforce discipline and medical treatment, as, for instance, in the Armed Native Constabulary barracks and among many of the planters' indentured labourers, the mortality was very much less, not more than 6 per cent. Since 1875, measles had become endemic in the Fiji Islands, a few cases occurring annually amongst the young children and the immigrant adults from other groups of islands where it had not been known, chiefly the Ellice and Gilbert Islands. Only one death had occurred in Fiji from 1875 to 1883 from measles, in a population of 120,000 of all classes, and that an infant. Small-pox was unknown to the natives of Western Polynesia, but occurred further east, in the Nuka-Niva group, about the year 1862. It was carried thither by a French or American trader, and all the natives about twenty-one years of age were pitted by it. In Fiji, cow-pox was frequently met with in calves and in goats—an occurrence accounted for, in a country where variola was unknown, by the fact that those quadrupeds were not indigenous there, but had been introduced from Australia and New Zealand, chiefly within the present century. Vaccination had been compulsory in Fiji since the islands became a British colony, and the Fijians were now all vaccinated, some a second time. Varicella broke out in Fiji twice or thrice every year, generally among the immigrant Polynesians from further west, and extended from them to the Fijians. About 1,400 cases had been observed, and the majority were among unvaccinated persons, though the vaccinated did not, as a consequence, suffer less severely when attacked. No death had occurred from it. Fourteen days appeared to be the period of incubation, and the rash speedily became in many instances pustular, and had been seen umbilicated. Here and there the true vesicular stage was missed altogether. Fever was severe, of from two to five days' duration. The progress of the vaccine-vesicle was more rapid than in England, changing in native skins from the quasi-papule to the condition of an overmature English vesicle so imperceptibly, as to constantly cheat the vaccinator out of his lymph-supply, at an expense to the colony of forty-eight dozen tubes *per annum*, which were imported from London. One of the commonest epidemic diseases in Western Polynesia was influenza. It might occur twice or thrice in the same year, and was sometimes fatal, generally by engendering capillary bronchitis or pneumonia. In Fiji, the inhabitants appeared to be more prone to it than on the other groups of islands. They were, however, a much more robust people than their neighbours westwards, and suffered far less than they from bowel-disorders, especially a very fatal form of dysentery with gangrenous stomatitis. In Fiji intermittent fever was unknown, though in the New Hebrides, Solomon Islands, and New Britain, both Fijians and Europeans invariably suffered from it. Elephantiasis, dysentery, and a form of simple continued fever, were the only diseases met with in Fiji to which might be applied the term (if it were admissible at all) "malarial." Whooping-cough was said to be of rather frequent occurrence in an epidemic form in Tonga and some parts of Fiji. Records were, however, deficient in detail. Three cases strongly simulating sporadic cholera were observed in Indian coolies who had been about a year in Fiji. One died; but no such cases had reappeared within the last three years. Scarlet fever, yellow fever, and diphtheria were not known to have visited any of the isles of Polynesia, though a few isolated cases of the latter disease had been reported from time to time in Europeans resident there. A subject which was full of the deepest interest was the widely spread prevalence of yaws in Polynesia. There were people to whom it was a stranger, and in their persons special opportunities were occasionally afforded for studying the disease. Its nature and treatment, primary, secondary, and tertiary symptoms, bore a striking analogy to those of syphilis. The Fijian children nearly all had it in infancy, and, should it be late in appearing, the parents thought it necessary to inoculate it, a process generally accomplished by the agency of house-flies. It did not appear to be infectious, but its contagiousness was certain.—In the discussion which followed, the President, Sir Joseph Fayrer, Drs. Lawson, Pringle, and Comyn, and Mr. Shirley Murphy took part.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

ORDINARY MEETING, MAY 2ND, 1884.

W. N. PRICE, M.R.C.S., President, in the Chair.

Eucalyptus Soap.—Mr. Price showed [illegible] soap, which, he said, he had found much superior to ordinary soap in delicate children, in irritable skin, and in cases of eczema.

Excision of Tarsal Bones.—Mr. Mayo Robson showed a patient who had suffered from strumous disease of the tarsus for two years, and on whom he had operated a year ago, removing the [illegible], cuboid, external cuneiform, and base of the fifth metatarsal bone, as well as gouging out the interior of the os calcis. The case had been treated antiseptically, and dressed under the eucalyptus air. The girl had improved wonderfully in health, and could walk well without crutches, the foot being quite sound and the ankle-joint movable.

Strumous Disease of Ankle.—Mr. Robson also showed a case of strumous disease of the ankle, in which he had opened the joint, and scraped away the diseased synovial [illegible]. The wound was treated as in the last case; and now, after eighteen months, the patient was in excellent health, and had an apparently sound ankle, with very fair movement.

Rupture of the Bladder.—Mr. T. P. Teale related a case of rupture of the bladder which he had treated by abdominal section. The full details will be published shortly. Mr. Mayo Robson also related a case of like nature, in which he had also performed abdominal section. His case will also be published. Mr. M[illegible] remarked that the case was of great interest, as proving that [illegible] into the abdominal cavity without inducing peritonitis, a fact which had been doubted by some surgeons. Mr. [illegible] which he had seen [illegible] ago, whilst [illegible] surgeon, where the [illegible] through the rent in the [illegible]. Mr. W[illegible] that the practice of opening the abdomen and stitching up the rent in the bladder would be a growing and [illegible] successful one.

[illegible].—Mr. Mayo Robson [illegible] balls and [illegible] from half [illegible] up [illegible] meter, which he suggested as standard for [illegible] the size of objects by comparison.

First Aid to the Wounded.—Mr. Mayo Robson showed a small box containing iodoform, salicylic wool, and a gauze bandage, to be used as a "First Aid to the Wounded in Civil Life." A description was given in the BRITISH MEDICAL JOURNAL of May 3rd.

[illegible] Round Ligament.—Dr. James Allan related a case of Alexander's operation on the round ligament, in a female aged 32, suffering from prolapsus uteri with mental disturbance at the monthly periods. Both ligaments were operated on, being pulled out over two inches, tied together across the middle line, and fastened with numerous silk-worm gut-sutures to both edges of the skin-wounds. No special antiseptic precautions were adopted. The healing of the wound was delayed by the non-absorption of the sutures. It was now eighteen months since the operation, the woman was much relieved, menstruation was normal and not accompanied by mental disturbance. Dr. Allan remarked that, from a number of operations which he had performed on the dead body, he concluded the operation might fail from: (1) tenuity, (2) fixed condition) or (3) brittleness of the ligament. He had also found that in old females the ligament underwent fatty degeneration.—Mr. T. P. TEALE, Dr. HELLIER, and Mr. MAYO also spoke.

Scarlet Fever and Puerperal [illegible].—Mr. J. C[illegible] related a case of a woman being confined, and passing safely through the puerperal period, during an attack of scarlet fever. At the same time, there were other cases of virulent scarlet fever in the house and neighbourhood. —Dr. DOBSON, Mr. LEE, Dr. YOUNG, Mr. OAKLEY, Dr. HELLIER, and Mr. PRICE related similar cases.

Separation of Lower Epiphysis of Femur.—Mr. M[illegible] showed a case of separation of the lower epiphysis of the femur, in which the usual displacement of the lower fragment forwards had occurred. It was reduced under ether, and the limb placed on a back-splint, the case doing very well.—Mr. WHEELHOUSE mentioned a case of like nature, in which he had amputated the thigh for gangrene of the limb due to pressure of the lower end of the upper fragment on the popliteal vessels.

LIVERPOOL MEDICAL INSTITUTION.

[illegible] Cast of T[illegible].—Dr. Barr showed a [illegible] cast, which had been coughed up after tracheotomy. It was very perfect in character, and extended into the subdivisions of the bronchi. The patient was a girl aged 6. Laryngeal symptoms supervened at an early stage, associated with albuminuria and prostration. Dyspnœa became very urgent; tracheotomy was therefore performed, when the cast was coughed up, with immediate relief. Fresh membrane, however, rapidly formed, and the child died the next day.

Aortic Stenosis.—Dr. BARR also showed the heart of a man affected with aortic stenosis, who died suddenly while sitting up in bed reading a newspaper. He had suffered from aortic obstruction for some time, but had been at his work from December till April in good health. Then he returned to the hospital with the usual symptoms, but rapidly improved, and was quite convalescent when the fatal event occurred. A *post mortem* examination was made soon after death, when the left ventricle was found contracted, but only half closed. It was empty. The left side was greatly hypertrophied, the coronary arteries normal, and the muscle good. The aortic valves were calcareous. The right side remained normal. Dr. Barr attributed death to failure of the right side of the heart.

Tubercular Meningitis.—Dr. G[illegible] showed the organs of a boy, aged 10, who died of tubercular meningitis, with enlargement of the lymphatic glands of the neck, thorax, and abdomen. The symptoms of the meningitis were much less marked than usual, the hydrocephalic cry being the most noticeable. He remained sensible until a few [illegible]. At the *post mortem* examination, the chief mischief was found on the under side of the cerebellum, and not, as usual, in the Sylvian fissures and neighbour[illegible]

[illegible]

tinued for two years, at the end of which time the lump had become reduced to the size of a small walnut. The breathing, which was originally impeded, was now quite natural, and the patient was in every way in good health, though somewhat wasted, Dr. Cameron believed, from the effect of the remedy. The dose first prescribed was fifteen minims, but this was increased to forty-five minims twice a day. It had to be given after meals to avoid producing gastric irritation, and was then well borne in every way, except for the slight tendency to produce loss of flesh.

Wiring of Bone. Mr. DAMER HARRISSON showed three cases of wiring of bone. The first was for ununited fracture of the tibia, in a ship's carpenter, aged 25. The non-union was owing to the severity of the injury, and extensive subsequent necrosis. The bone was drilled, and a stout wire passed through the two ends, and hammered down. The wound healed completely over the wire, which had not been removed, and was now quite sound, and the tibia well united. The second case was a fracture of the patella, untreated for five weeks, in an old woman aged 62. A vertical incision was made, the fractured ends of the patella refreshed, and Malgaigne's hooks applied to draw them together. This, however, could not be done until the rectus tendon was divided, and then not very perfectly. Three stout wires were passed and looped together, and a horse-hair drain passed across the joint, both transversely and vertically. The case did very well; but, as the wires kept up irritation, they had to be removed. The union was not bony, but was short and strong, and the woman walked very well. The operation was done antiseptically. The third case was that of a police-constable, who had his humerus fractured very obliquely by a stab in the arm. Mr. Harrisson passed a stout wire round the ends of the bone, and twisted it tightly. This kept the bone in a very good position, and perfect union resulted. The wire was removed.

Removal of Ovaries and Fallopian Tubes. Dr. IMLACH narrated six cases, in which he had removed both ovaries and Fallopian tubes, at the Liverpool Hospital for Women. These were the only cases in which he had performed the operation, and all of them had been successful. Their symptoms were, in general, menorrhagia recurrent every fortnight; persistent pelvic pain, which grew worse at the menstrual period; frequently a temperature of 102° to 104°; sometimes rigors; and inability to walk, or attend to household duties. In one instance, there was fibroid enlargement of the uterus; in another, double tubal dropsy, with swollen ovaries; and in a third, extreme atrophy of both ovaries and tubes, which were tightly packed in Douglas's pouch, behind an adherent uterus; while, in the remainder, there was pyo-salpingitis, the tubes being enlarged, and filled with blood and pus. All had been treated without avail, as out-patients, for a long period, and in hospital had been assiduously treated with the hot vaginal douche. In four, the symptoms had entirely disappeared; and one of these was shown to the meeting. In one, there had been a return of troublesome constipation. The last case had undergone operation only two days previously; her chart was shown, and a very confident prognosis was expressed. To avoid the appearance of reservation, a case was mentioned in which one small cystic ovary in the pelvis, previously diagnosed as such, was removed, and death from peritonitis ensued. Against this, he set a patient sent in with double ovaritis, in whom extensive acute peritonitis came on without operation, and permanently disabled her. Dr. Imlach dissented from the gonorrhœal theory of salpingitis, and ascribed the disease, in some instances at least, to early tubal abortion.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, APRIL 18TH, 1884.

T. O. DUDFIELD, M.D., President, in the Chair.

Water-Analysis.—A paper was read on the Fallacies of Empirical Standards in Water-Analysis as told by the Story of a Polluted Well, by Mr. Alfred ASHBY, of Grantham. The author had recently analysed some water from a well 35 feet deep, and found, in 100,000 parts, chlorine, 7, nitric acid, 5, sulphuric acid, 5.2, phosphoric acid, very heavy traces; total solids, 51; free ammonia, .0009; albuminoid ammonia, .0055. If he had judged it by Mr. Wanklyn's standards, it would almost have come under his Class 1, "Waters of Extraordinary Organic Purity;" but it only just entered his Class 2, "Waters Safe Organically." Judging by the ordinary sewage-accompaniments in it, he pronounced the water impure. The owner had the well examined, when it was found that the lining of dry laid bricks extended for a depth of 17 feet through clean gravel into the variegated red marl of the trias, which continued to the bottom. Surface-water from the gravel trickled in all round the lower part of the lining; near the bottom of the latter was a black patch in the brickwork; 30 feet off was a recently emptied water-closet cesspool from which sewage had leaked into the gravel. A privy stood 11 feet from another side of the well, and at the back of it filth had evidently soaked into the gravel 17 feet from the well. He found in the surface-drippings opposite the privy, from the black patch, and from the opposite sides of the well, in 100,000 parts, 8.4, 6.4, 5.8, and 5.4 of chlorine respectively. On the previous day the black patch drippings had 7, which showed it was of variable constitution. The gravel-water would naturally have the same composition all round the well, so the relative impurity of the drippings might be judged by the chlorine. It was therefore clear that there was most pollution opposite the privy, next at the black patch. Water from the former spot yielded, per 100,000 parts, chlorine, 8.2; nitric acid, 5.7; phosphoric acid, very large traces; total solids, 56; free ammonia, .0323; albuminoid ammonia, .0282. Water from the black patch yielded chlorine, 6.6; nitric acid, 19.4; phosphoric acid, very heavy traces; total solids, 72.6; free ammonia, .0018; albuminoid ammonia, .0167. To make certain that the privy had allowed impurities to soak into the well, he had rock-salt put into the vault, and had it filled with water. In 28 hours the drippings from the well-lining opposite the privy had 11.3 parts of chlorine, an increase of about three parts per 100,000. The well was then pumped empty, when he descended and took some water as it issued from the red marl, about 2 feet from the bottom, which yielded chlorine, 6.1; nitric acid, 7.5; phosphoric acid, very heavy traces; total solids, 52.4; free ammonia, .0016; albuminoid ammonia, .0079. These results were somewhat inferior to the original analysis, which he considered might be accounted for thus. Fifty yards from the side where the bottom-sample was taken was a stable-well sunk into the same formation, which analysis showed to be very polluted with soakage from a drain, cesspool, privy, and manure-heap. The house-well having been pumped dry, there was a strong inflow from the marl, when some of the impure stable-well water would be drawn into it mixed with the purer intervening water. In order to ascertain, if possible, the natural composition of water from that particular stratum, he analysed some from a well at a house in large grounds 100 yards off, and found, per 100,000 parts, chlorine, 1.6; nitric acid, 4.6; phosphoric acid, very heavy traces; total solid, 31.9; free ammonia, .0013; albuminoid ammonia, .0188. This, although not above suspicion as to its purity, might be taken as showing the composition of the best well-water that could be got in that part; and although its organic matter was higher than in the well-water under consideration, yet the usual sewage-accompaniments in it were less. These analyses and facts had established the assertion that water taken from the well was capable, as occasion arose, of conveying specific infective matter of filth-diseases to any person partaking of it. The author also showed a series of analyses of waters taken from the same and other geological formations, which did not exhibit a large proportion of organic matter, and which would have come within the class styled "safe organically," but in which the sewage-associates were unusually high. He said that, in well-water in more recently inhabited parts, oxidation was often less complete, there being less nitrates; but when the ground had become saturated with sewage, and changed into a nitre-bed, as it were, then oxidation was carried much further; but it could not be argued that water which had passed through such sewage-befouled soil was likely to be the less dangerous on that account, notwithstanding much of the organic nitrogen might appear as nitric acid instead of in its original form. In the series of analyses, the average nitric nitrogen was 8.28, whilst the average nitrogen of albuminoid ammonia was only .0075 per 100,000. It would seem that greater danger lurked in the more stable organic matter than in the more readily oxidisable part. Greater significance, therefore, must attach to minute quantities of organic matter when accompanied by any excess of the usual sewage-accessories, chlorine, and nitric, sulphuric, and phosphoric acids, over the normal standards of the natural water yielded by the geological formation from which a sample might be derived, than when these substances were normal in amount. It was safer to judge a water by the mineral constituents enumerated, than by organic indications, readily changeable as they were. The author had found a dried *daphnia pulex* to weigh rather less than $\frac{1}{200}$th of a grain, which, on distillation with alkaline permanganate, yielded albuminoid ammonia, which would have appeared in a water-analysis as .0005 per 100,000. Each yeast-cell had but a weight of one ten-millionth of a grain, and he would err on the right side if he assumed that a disease-germ weighed as much. It would take 50,000 to equal the daphnia, and to yield the insignificant quantity of albuminoid ammonia mentioned; and, if half a pint of water yielding no more were drunk, about 2,200 yeast-cells, and probably many more disease-germs, might be swallowed;

yet an empirical standard, based upon the organic indication, would declare the water to be absolutely safe. The author had known arsenic in quantities poisonous to beast, and carbolic acid, to pass through the ground into wells fifty yards away. Mr. Jacob and Dr. Thorne Thorne had proved the infected dejections from a single individual to have spread typhoid fever through the Caterham water-supply. How much greater danger, therefore, must there be from the continual soakage of even very small quantities of sewage-impurities into the limited and confined water of a house-well. Experiments made with the analysis of water containing portions of only solid excreta did not correspond with the circumstances actually met with in practice, for there were all the other constituents of sewage to help in forming an opinion. Dr. Dupré's analyses made for Dr. Cory pointed out that the phosphoric acid, the importance of observing which was first insisted upon by Mr. Hehner, was a sure indicator of the presence of excretal matters. An absolute opinion of the relative amounts of pollution in any waters could not be safely founded on the data given by trying to estimate organic matter. The only standard must be the natural water of the locality, and of the geological formation from which each sample was drawn; then the least deviation from that would be a sure indication of pollution. The adoption of empirical standards led to diametrically opposite opinions on the same waters by different chemists. In water-analysis, it was not a question of quantity of sewage-pollution. If a water exhibited the usual accessories of sewage, however small or large the indication of organic matter might be, it must be considered unfit for dietetic use until the natural conditions by which infective material could be rendered inert and harmless became known. The facts the author had given should prevent any analyst from fearlessly pronouncing a confident expression of opinion as to the perfect safety of a water. If there were much indication of organic matter, it was often a help in condemning a water, but the absence of it, *per se*, should not induce an analyst to report favourably. He was convinced that analysis of water might furnish valuable positive but not negative evidence as to pollution.—In the discussion which followed, the President, Mr. Otto Hehner, Mr. Blyth, and Dr. Tripe took part.

Small-pox in the East of London.—Dr. Tripe read a paper giving an account of an outbreak of small-pox which occurred in the East of London in March of the present year. During the latter half of last year there had been an unusual persistence of small-pox near the Homerton Hospital, though the disease was by no means confined to that locality. This he attributed in some measure to the fact that a number of work-people had during that time been engaged on the hospital-premises. The first decided outbreak was on February 22nd, 1884, when fifteen persons were attacked; four were treated at home, and eleven removed to hospital; they were situated in nine houses, five being removed from one house on the 23rd, where they had been infected by a previous case. On March 2nd, a boy in a reformatory was attacked; the building was a quarter of a mile from the hospital, and the boy had not been outside the house for two months; a similar case occurred on March 14th, in the person of a woman who had not been outside the house for a month; both these cases were probably due to aërial infection. A map prepared by Dr. Tripe showed the locality of the cases, and their order of succession. In the areas situated within a quarter of a mile, half a mile, and one mile round the hospital, the number of persons attacked in each 1,000 of the population was as follows: 2.0, 0.5, 0.24. The cases admitted into the hospital [illegible] in the weeks ending March 6th, 13th, 20th, and 27th respectively, Hackney, 10, 5, 2, 72; Islington, 6, 1, 4, 14; Bethnal Green, 3, 1, 2, 15; Shoreditch, 1, 5, 7, 9; total, 20, 14, 15, 110. Into all the Asylums Board Hospitals during March 1884 [illegible] mitted, of which 178 were removed from the four parishes, as follows: 89 from Hackney, 33 from Islington, 23 each from Shoreditch and Bethnal Green, or 89 from Hackney against 79 from the other three parishes. The population of Hackney was about one-third that of the other three parishes together; and, in proportion to population, therefore, Hackney had more than three [illegible] the other parishes, and it suffered in proportion more heavily at the beginning of the outbreak than later. The chief incidence of disease was to the west and south-west of the hospital, out of the line of traffic of the ambulances conveying the sick to hospital. There was no overcrowding of the hospital, seeing that there were only twenty-eight cases in it on an average during the [illegible] The direction of the prevailing winds, the passage of ambulances, and the removal of convalescents, would not explain the outbreak, for the patients were removed on February 5th, and the [illegible] did not correspond with infection received at that date. Meteorological phenomena failed to explain the outbreak. No direct communication could be shown between the persons attacked; the distribution of disease before and after the opening of the hospital was very different. Dr. Tripe believed that small-pox was spread from the hospital by the atmosphere, although an examination of the meteorology of the period did not afford the necessary proof of the mode in which the disease was spread.—In the discussion which followed, the President and Mr. Blyth took part.

REVIEWS AND NOTICES.

PROCEEDINGS OF THE NORTH-WESTERN PROVINCES AND OUDH BRANCH OF THE BRITISH MEDICAL ASSOCIATION. Published in the *Indian Medical Journal.* London: H. K. Lewis. 1884.

WE have before us six numbers of the above named *Proceedings*—viz., from August 1883, to February in the present year. This work is edited under provisions of a General Order, in the Indian Home Department, July 1870—an order, we presume, regulating the conditions under which Government officers can connect themselves with the press in India. With the *Proceedings* is incorporated a Journal of Medical and Sanitary Science, specially devoted to the interests of the medical services.

It is a matter of congratulation to the great Association which our JOURNAL represents to see that, in India, the members of the medical services are rapidly associating themselves with their brethren at home, avowedly out of regard to the energy and success with which their interests have been supported by the BRITISH MEDICAL JOURNAL and the Parliamentary Bills Committee of our Association. Union is strength; and, in past years, want of union was the bane of the medical profession, and, to a great extent, the cause of its helplessness and want of influence. There can be no doubt that the temperate support given to the just claims of the Medical Service in India by the British Medical Association, through the medium of their JOURNAL, has done much to tighten the bond between us and our brethren who are doing a great work in that country.

In the number for August and September 1883, there is a notice of "Palpitation among Soldiers." Some remarks on this subject by Sir Anthony Home, V.C., seem to have been the text for a discussion by members of the Association, which, however, is very meagrely reported, although Sir Anthony's remarks are given in full. The subject is, no doubt, a very important one; for, as long since pointed out by Dr. Parkes, and much insisted on by Professor Maclean, this affection is a very costly one to the State, as well as a source of endless embarrassment to army medical officers. Sir A. Home seems to think that this disease was unknown in the British army until about the end of the Crimean war. The writer of this notice remembers "palpitation" as a common disease among soldiers in India long before the Crimean war; and it was described by Surgeon Hunter, of the Queen's Royal Regiment, in a paper published in the *Transactions* of the Bombay Medical and Philosophical Society, at least twenty years before that war. It was only after the time specified by Sir A. Home, that the term "palpitation" was admitted into the nosology now in use in the army; every case of the affection had to be included under the head of "Morb. Valv. Cordis." What is the cause of this disease? Dr. Maclean, in a lecture, delivered before the United Service Institution, on the effects of the then system of dressing and accoutering the soldier, gave the conclusions arrived at, after a careful inquiry into the subject, by himself and his colleagues in the Army Medical School.

All, or nearly all, diseases of the heart among soldiers were popularly attributed in the service to one of three causes, or a combination of several of them; these were rheumatism, excessive smoking, and intemperance.

In the lecture referred to, Dr. Maclean [illegible] frequently without, some degree of hypertrophy of the left ventricle, existed in a very large number of cases, without any rheumatic history at all. Dr. Maclean, in his lectures on heart-diseases among soldiers, [illegible] at Netley, [illegible] subject.

[illegible]

with a distinct history of acute rheumatism, to which the cardiac disability could be fairly traced. Dr. Parkes subjected this large number of cases to a careful examination, and gave his colleague a memorandum to the effect that, without exception, all were unfit for military service, and that in only five was there a distinct history of rheumatism. By far the majority of those examined were suffering from palpitation. This result was in exact conformity with the investigations carried on in the Army Medical School at Chatham first, and subsequently at Netley. As it was put by Professor Maclean in the lecture already referred to, "a vast number of the young soldiers discharged the service for heart-disease have never suffered from rheumatism at all."

The same is true as to the other alleged causes. There is no evidence to prove that soldiers indulge more in tobacco than the class from which they are taken. The excessive use of tobacco by young lads under age is to be deprecated; but Sir A. Home himself allows that palpitation is not the affection of the heart induced by excessive smoking. As to intemperance, even if it be admitted that the abuse of alcohol exercises a prejudicial effect on the heart, the fact remains, as Dr. Maclean has expressed it, "we have the same difficulty to meet, namely, that a large number of young soldiers are lost to the service from palpitation of the heart who have never contracted the baneful habit of spirit-drinking." In the memorandum before us, Sir A. Home pretty plainly indicates a lurking suspicion in his mind that, by some means not yet known, soldiers bring about this condition for the purpose of obtaining their discharge, although he has no faith in the supposed efficacy of "soap-eating" as the agent, which appears to have been the belief of one or two medical officers, and which is a revival of an opinion long since given by Inspector-General Marshall.

In the present state of knowledge, we must fall back on the conclusions arrived at by Dr. Parkes and his colleagues on this matter, to which expression was given in Dr. Maclean's lecture, viz., "that the soldier, unlike a labouring man or a mechanic, a sportsman, or an Alpine tourist, is obliged to make severe exertions under disadvantages to which the classes named are not exposed, as regards the weight he has to carry, and the arrangement of his dress and equipment." Now, since the above explanation was given, we are quite aware that an immense improvement has taken place in the mode in which the soldier is dressed and accoutered, the effect of which has been largely to diminish the amount of suffering and invaliding from cardiac affections generally. But, so long as an army exists, there will always be a great difference between the conditions under which labouring men and soldiers have to discharge their duties. Spite of the improvements above referred to, there is much still to be desired in the direction of a more rational method of dressing our soldiers. Londoners are familiar with the appearance of the men of the Life and Royal Horse Guards, as they go about, when not on duty, in "stable-jackets," made to fit them almost like their skins; no one can look at these fine specimens of our army without seeing that, while the object is "smartness," the effect is compression of the chest-walls, and interference with the functions of respiration and circulation.

Since the above was in type, we have seen a valuable contribution by Surgeon-Major F. Arthur Davy, on "The Breakdown of Young Soldiers under Training, explained." Dr. Davy follows the young soldier to the drill-ground, and traces much of the mischief to the well meant but injudicious system under which he is "set up." To this paper, we purpose, on a future occasion, to return.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

AN IMPROVED FORM OF LAUDANUM.

THERE is, perhaps, no preparation in the *Pharmacopœia* of more importance, or entitled to a higher place in the estimation of the physician, than laudanum. It possesses the medicinal virtues of opium quite entire and unchanged; and, so far as the physiological properties of the medicine are concerned, it would be impossible to substitute for it a preparation more perfect. We have, however, been long of the opinion that, without taking from it anything entitling it to be considered a true representative, in a liquid form, of opium itself, it could be made much more elegant and less repulsive.

Everyone who has had occasion to take a dose of laudanum knows how repulsive it is to the palate, and to the chemist the unsightly character of the mixtures of which it forms an ingredient must be quite familiar. If these objectionable properties could only be removed at the expense of its medicinal virtues, any attempt at improvement in this direction could not for one moment be thought of, neither in this case would we have entertained the idea of submitting to the readers of the JOURNAL the process which we are now about to describe.

Taking the proportion of opium prescribed by the *Pharmacopœia* for one pint of laudanum, we exhaust it with distilled water, and evaporate the aqueous solution on the water-bath to a syrupy state. The extract is thinned with water as long as any separation is produced, about half-a-pint of water being required for this purpose; the liquid is then filtered, or allowed to settle. The separated matter varies in its nature, but always gives, when burnt, an earthy ash, and, if properly washed, is quite void of any virtues peculiar to the drug. The clear liquid, so far purified, is strongly acid, and contains all the principles of opium which are possessed of any activity. The excess of acid is neutralised, the neutralisation being effected by the addition of dry hydrate of lime, of which about ten grains are found almost invariably to be required for the purpose. The lime is added in the state of very fine powder, and the liquid, after addition of the proper quantity, ought to be, or rather must be, very faintly acid.

The liquid is next filtered, and the powdery precipitate carefully washed. The precipitate, when dry, amounts to about forty-five grains, and consists principally of meconate of lime, narcotine, and papaverine. We have proved upon ourselves that, in the dose of two grains, this precipitate has little appreciable effect.

The clear filtered liquid is now evaporated to the bulk of about two ounces, then mixed with an equal bulk of rectified spirit, and made up to the measure of sixteen ounces with proof spirit of *Pharmacopœia* strength. The liquid is now filtered, and the filter washed with as much proof-spirit as may not increase the bulk of the filtrate to more than one pint.

Lastly, to prevent the possible formation of some basic compound of any of the active principles, and to separate a very small quantity of lime, five minims of strong sulphuric acid are added; a small quantity of sulphate of lime soon settles as an insoluble precipitate at the bottom of the vessel, leaving the finished tincture quite bright.

The tincture as thus prepared has the same strength as the laudanum of the *Pharmacopœia.* This we can affirm from our own experience, having tried it on ourselves. It contains, too, all the principles of the opium that are contained in the laudanum of the *Pharmacopœia*, except a very minute quantity of the meconic acid, the narcotine, and the papaverine. It contains the morphia, the codeia, the cryptopia, and the thebaia, as meconates, thebolactates, and sulphates, equivalent to the sulphuric acid added, so far as unappropriated by the lime, the narceine, the meconine, the papaverine, except a mere trace, and the meconoisine. The narcotine is almost entirely left in the marc, and is certainly in smaller quantity than in officinal laudanum, but its absence is generally considered, and we think rightly, an advantage.

The laudanum prepared by the above method merely requires to be compared with that of the *Pharmacopœia* to convince any one, qualified to judge, of its superiority. Its taste is a pure bitter, and it is entirely free from the repulsive taste and smell attaching to the latter. It forms a clear liquid when mixed with water, in consequence of the absence of the fatty and resinous matters extracted along with the active principles when the tincture is prepared by the direct action of spirit. The colour is paler, in consequence of the separation of inert colouring matter. No one can suppose that the medicinal action can at all be interfered with by the absence of these substances.

We have proved upon ourselves, physiologically as well as by analysis, so far as the narcotic principles are concerned, that the tincture made by the process described above is equal in strength to officinal laudanum.

Whatever effect the matters separated may have in weakening the action of the medicine must be quite insignificant, as proved by the very slight effect upon ourselves of a comparatively large dose, as previously stated. The volatile matters driven off during the evaporations, although very unpleasant to the smell, are void of any narcotic action; and we may add that we never observed the least narcotic effect produced on anyone by the vapours proceeding from opium-liquids, even when hundredweights of opium were under operation.

T. and H. SMITH, Duke Street, Edinburgh.

SEIZURE OF INFECTED CLOTHING.—It is stated that a large consignment of left-off regimentals from the army of occupation in Egypt was seized by Dr. Collingridge, the Medical Officer of Health for the Port of London, a few days since, and ordered to be thoroughly disinfected before being allowed to pass into the English market. The clothes were in use during the cholera epidemic in Egypt.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 24th, 1884.

THE ARMY AND NAVY GAZETTE ON THE MEDICAL DEPARTMENT OF THE ARMY.

OUR military contemporary, in its issue of the 10th inst., to which our attention has just been called, has devoted a leading article to that part of the debate on the Army Estimates which was given to the consideration of the report of Lord Morley's Committee on the work of the Medical Department in Egypt. The writer takes for his text the speech of Mr. Dawnay, which was, in effect, nothing but a repetition of the absurd misstatements and pitiful complaints of newspaper-correspondents and carpet-knights, to whom the trumpery inconveniences of even the brief campaign against the rabble of Egypt, proved more than they could bear with equanimity and fortitude. It is amusing to note that our contemporary gently chides Mr. Dawnay for "allowing his youthful zeal to outrun his discretion, and, led away by an ingenuous love of truth, to formulate charges which were expressive of the convictions of officers rather than of the profession of facts (*sic*) which they could substantiate by direct evidence before a court of justice." In plain English, Mr. Dawnay's "profession of facts," whatever that may mean, was nothing but a puerile repetition of "facts" which the not over-partial tribunal which investigated them had proved to demonstration were not facts at all. We presume the writer of the article cannot plead "youthful indiscretion" in extenuation of the "profession of facts" into which he immediately plunges, and proceeds to "formulate" in the shape of an attack on the Medical Department of the Army, which we can only characterise as unjust and untruthful, and conveyed in language in which abuse struggles with bad English for expression.

We cannot for a moment believe that such an article as the one before us can be otherwise than distasteful reading to officers and gentlemen of age and experience; they can estimate its rabid nonsense without much effort; but a military journal of some standing, like the *Army and Navy Gazette*, is looked upon as a seriously credible authority by young officers who have just "joined," and nine out of ten of them will take for gospel whatever they read in its pages. Be the motive of such writing what it may, the effect of it is to intensify the strained relations existing already between the combatant [illegible] army; relations mainly induced by writers [illegible] condemning, and which, if persisted in, [illegible] matters conducive neither to the good of [illegible] of the sick and wounded [illegible] themselves [illegible] but tell that it the bad [illegible] which pervades [illegible] most conspicuous part of the *Army and Navy Gazette* [illegible] be taken as an index of the relations to exist [illegible] the parties in question, gentlemen in the [illegible] qualifications now exacted for service in the army will [illegible] career. How far the service is to be benefitted by such [illegible] its "profession of facts," we must leave the *Army and Navy Gazette* to ponder over.

What underlies both Mr. Dawnay's foolish speech and the attack in the editorial of our contemporary is plainly the desire to resuscitate the regimental system which is dead and buried, and which can only be called back into life by the impossible policy of once more breaking up the army into single battalions, and scattering them over the face of the kingdom and distant parts of our colonial empire. Under such a system, the medical organisation which finds favour in the eyes of Mr. Dawnay and his supporters was a necessity: under the present military organisation, it would be an indefensible and costly anachronism. Do the advocates of the regimental system know what they are trying, vainly we believe, to galvanise into life again? It is to make possible once more the dreadful scenes and shocking mortality of the first war in Burma, where thousands were sent, by gross military mismanagement, to premature graves; or the, if possible, more terrible loss of life during the first occupation of Chusan under the same kind of care, where, out of the small force of British soldiers landed on that island on July 1st, 1840, 575 men were in their graves between that date and December 31st, hundreds that were left being unfit to bear arms; all this brought about by the open defiance of the military officers in command of every principle governing the health of men, either as individuals or congregated into an army. Of the Crimea, we say nothing. The "profession of facts" relating to that terrible example of military mismanagement is seared into the memory of the British public. Are we, to please Mr. Dawnay, to return in India to a state of things that made possible a mortality oscillating round 70 per 1,000 of British soldiers annually, instead of 13.17 in Bengal, 10.25 in Madras, and 10.37 in Bombay, which the latest records published give us. We think not.

We decline to go into the details of the article so often referred to; we have too much respect for the good taste and common sense of our readers. We have before us the introductory address of Surgeon-General Maclean at the opening of the summer term of the Army Medical School in April of this year. It was printed for private circulation, but we are sure that gentleman will excuse us for quoting its concluding part, adding, by way of corroboration, a few figures drawn from official records, and quoted by Deputy Surgeon-General Veale in his admirable address at the Parkes Museum, some months ago. We commend both extracts to the attention of the writer and the editors of the *Army and Navy Gazette*. In common fairness they should put them before their readers.

"I have brought a few, a very few, traits in the character of this famous military physician under your notice to-day, because I wish from his life and work to draw a lesson for you that may be useful in the time to come. In Jackson's time, which was not only the pre-sanitary, but also the pre-humanitarian, age, the British public were simply indifferent to all that concerned the well-being of the soldier, sick or well. It is not so now, the very reverse is the case. The [illegible] of the people on the subject is almost [illegible]. It took two months before the tidings of the battle of the Nile reached England. During the bombardment of Alexandria, people in our streets almost fancied they heard the guns of the combatants, and from hour to hour they knew every incident of that naval operation. In like manner, the war-correspondent has made people almost eye-witnesses, not only of battles in their picturesque aspects, but also all the ghastly details of the battle-field, which never have a conspicuous place in dispatches, dealing only with the pomp and circumstance of 'glorious war.' They now follow the wounded soldier into the hospital, [illegible] willing [illegible] of all ranks, of operations 'done with carving knives and without chloroform,' immediately dressed up into sensational telegrams for John Bull's morning meal. Seriously, if a transport, over whose movements the Department has no authority, is late in arriving at her destination with needful supplies; if the flour, sent out in bags instead of barrels, gets sour on the passage, and the bread is in consequence bad; if needful articles of equipment are sent to one place, where they are not wanted, instead of where they should be; you must not be surprised if you have to bear, as best you can, the execrations of an enraged and not particularly discriminating public. Do not, under such circumstances, expect that the heads of other departments, who have the control of such matters, will be forward to explain that, in military medical affairs, the responsibility is always in one place, the authority too often in quite another. Sometimes, as I have listened to the howling of the storm, I have called to mind four well known lines of Matthew Prior's, which I could wish were more generally, not to say generously, remembered—

> 'Should I but purpose to embark with thee
> On the smooth surface of a summer sea,
> And would forsake the skiff and make the shore
> When the winds whistle and the tempests roar.'

"'War,' said Thomas Carlyle, 'is not an overkind stepmother, but a sufficiently Spartan one.' You must not be surprised if, in the more luxurious age in which we live, you have to do with some, I hope only a few, to whom it is a surprise to find that the realities of war are unlike a march from London to Windsor, or a day's work, let us say, in the Long Valley at Aldershot, and, above all, that life in a field-hospital does not much resemble that in a club in Pall Mall or Piccadilly. In a late inquiry we heard something, to my mind, not accustomed to the experience or even history of war made easy, very like what I have just stated. Not for the first time in the history of Egypt were men, in this case medical men, expected to make bricks without straw, and I confess I have often been cynical enough to smile at the local appropriateness of the expectation. If this, or anything like this, should be your experience in the time to come, you must call to your aid the *mens conscia recti*, if your conscience accuses you not, and face the storm with something of the calmness and fortitude of Robert Jackson—remembering with him that, after all, *magna est veritas.* Lies, gentlemen, like other unclean creatures, have often the power to sting, but they have little vitality, and, like the unclean creatures aforesaid, they vanish when the sun rises.

"Fortunately for the cause of truth and justice, on the commission to which I have referred, in addition to the chief of the Department, sat a member of our profession who, to knowledge of his art, added experience in the realities of war second to none, and equal to most of his colleagues. Sir William Mac Cormac, in a separate report which will long be memorable in the annals of the department, placed on record the fact that in no war ever waged by this country were the sufferings of the Queen's soldiers who were its victims so small; that, whereas in former wars pyæmia, erysipelas, and secondary hæmorrhage were common, in the Egyptian campaign not a single case of erysipelas, pyæmia, or blood-poisoning was seen, a result, as he emphatically said in a lecture delivered in New York, 'unprecedented in the history of military surgery in any part of the world.' Those who were present in this hall when Sir Galbraith Logan addressed the gentlemen who had just finished their course of study here, will remember another impressive fact derived from Sir William Mac Cormac's report, that, such was the skill with which the form of ophthalmia endemic in Egypt was treated by the medical officers, 'not a man lost his eyesight.'"

"Opinions may differ," said Dr. Veale in his lecture, "regarding the prowess of the army against which our troops had to fight in Egypt in 1882, but there is no room for doubt as to the strength of the enemy against which the medical service had to contend. When it is considered that there were 1,187 cases of fever treated in the military hospitals during that campaign with only 33 deaths, a mortality of 2.77 per cent.; that there were 171 cases of sunstroke with only three deaths; that, with 1,139 cases of ophthalmia, not a man lost his sight; that there were 2,725 cases of dysentery, diarrhœa, hepatitis, and other diseases of the digestive system, with only 31 deaths, or 1.13 per cent.; and that, with 691 cases of injury, including those sustained in action, no man lost his life from pyæmia, erysipelas, or hospital-gangrene, results unprecedented in the history of this or any other nation, and attributable to the exertions of medical officers imbued with the doctrines of Lister, and faithful to the teachings of Parkes and the present distinguished professors of the Army Medical School, we may be sure that justice will, sooner or later, be rendered to those who obtained so signal a victory over so dangerous a foe."

NEW REMEDIES FOR PSORIASIS.

During the last few years, some real progress has been made in the local treatment of skin-diseases. Amongst the new remedies which have come into use, chrysophanic acid holds a conspicuous place. Its effect in curing psoriasis is undoubted; and if it be not universally employed, it is more on account of the inconveniences connected with its use than from any doubt of its real efficacy. Several ingenious methods have been lately introduced with the object of remedying these inconveniences. Amongst them, Pick has recommended a mixture of gelatine and chrysophanic acid in different proportions, and the method has now been introduced to the profession for some time.

Auspitz has lately conceived the idea of using "traumaticin" instead of gelatine as an excipient for chrysophanic acid, traumaticin being a solution of one part of purified gutta-percha in ten parts of chloroform. This preparation adheres closely to the skin, and remains from two to three days without change. Gelatine, on the contrary, becomes detached within several days by the rubbing of the clothes or the movement of the limbs. Traumaticin forms a much thinner and more delicate pellicle than either collodion or gelatine, and is more easily borne; and as applications made with the solution of the strength of ten per cent. have never provoked irritation, even when applied to considerable surfaces, either in children or in adults—the chloroform evaporating slowly and the gutta-percha becoming only gradually hard—it is easy, whilst making an application, to rub it well in upon a considerable number of patches. By means of this rubbing the scales can be removed, and the chrysophanic acid directly applied to the bare and bleeding patches.

The method of Auspitz is carried out in this manner. After the scales have been removed by means of a bath and application of soap, all the patches are dabbed and rubbed with a brush steeped in a mixture of the strength of ten per cent. If the affection be not extensive, the application is renewed each day. If it occupy a large extent of surface, it is renewed only in two or three days. If the scales be in considerable quantity, a soap-bath is prescribed. If the scales be not very plentiful, soap-lotions are sufficient. After one or two rubbings many of the patches appear flat, and in general the scales persist only on the borders of the patches. After two, or at the most a dozen, applications, according to the intensity and extent of the psoriasis, the infiltration and scales disappear, and in their place are found white patches surrounded with a red or violet-brown border. When the disease is limited in extent, one application renewed daily for three to six days is sufficient to cause the patches to disappear, without the necessity of having recourse to lotions or baths.

M. Besnier has experimented with all these methods in the St. Louis Hospital, Paris, and gives a preference to the method of Auspitz, which, however, he has somewhat modified. After removing the scales, he rubs the patches with a common house-painter's brush, soaked in the mixture of chloroform and chrysophanic acid at fifteen per cent. The duration and energy with which the application is made should vary according to the thickness of the patches of psoriasis. The application gives rise to a slight sensation of heat and smarting; in a few seconds the chloroform has evaporated and the patch is literally infiltrated with pure chrysophanic acid, having become of the deep yellow colour of iodoform. It is only then that, with a large flat brush, the patch is covered with a layer of traumaticin, which must be thickly laid on, and which extends beyond the borders of the patch. The result is said to be excellent.

M. Besnier has applied this method even to parts covered with hair, and without any untoward accident, local or general. The method has been found useful chiefly in cases of moderate infiltration; but when the patch is thick, fissured, and desquamating abundantly, the effect is not so striking. In such cases he has used, instead of chrysophanic chloroform, a ten per cent solution of pyrogallic acid in ether, which is then immediately covered with a layer of traumaticin.

In this connection we would, however, remind our readers that pyrogallic acid must be applied to the skin with great caution, several cases having been reported in which fatal results followed its absorption.

THE ETIOLOGY OF HERPES ZOSTER.

WHILE the admirable histological researches of Bärensprung, Wyss, Biesiadecki, and Haight leave no doubt as to the existence and the nature of the local nerve-changes which constitute the immediate pathogenesis of herpes zoster, it is still permissible to ask What are the causes which determine this local trouble? a question which has certainly not yet found a complete and satisfactory answer. In a short note by Mr. Hutchinson, published fifteen or sixteen years ago, he pointed out that herpes zoster is characterised by non-contagiousness and non-symmetry; that it develops by stages, disappears spontaneously, and does not recur; and that, while the first two characters point to its neurotic origin, the others indicate a family relationship with the exanthemata. Mr. Hutchinson was not the first to notice this resemblance, which had attracted the observation of Willan; but he did not state plainly his belief in the infective nature of the affection. He was content to point out that the disease, in spite of its unilateral nature, might be caused by general constitutional conditions, illustrating this by cases showing its occurrence during the administration of arsenic, a fact which has been confirmed by Bulkley, Edge, and others. Bärensprung attributed zoster to atmospheric conditions, and this and the doctrine of cold or chill are about all that is asserted regarding its etiology; but it is remarkable that it should recur so seldom if due to this cause, for diseases owning this mode of origin are specially liable to return, each recurrence apparently increasing the predisposition. Doubtless instances may be quoted of diseases often ascribed to chill in in which this is not the cause, *e.g.*, pneumonia; but it is quite open to doubt whether chill *per se* does cause pneumonia, and the recent researches on its micrococcus have opened up an altogether novel aspect from which we must regard its etiology.

Besides the unsatisfactory nature of the current explanation, and the resemblances pointed out by Hutchinson, there are other characters which increase the likeness to an acute general disorder. Every one who has had the experience of a large hospital must have noticed how cases of herpes zoster occur in groups, and this fact no doubt suggested the explanation of atmospheric influences; a doctrine so often proved to be purely a convenient formula to conceal our ignorance of the true causes at work. Another point is that not seldom the outbreak of the eruption is preceded by a period of malaise, during which the temperature is elevated.

M. H. Barth, in a recent article in *L'Union Médicale*, relates that a woman convalescent from typhoid fever was dismissed in September 22nd completely cured; the next day she had a rigor, followed by fever and violent neuralgic pains in the right side of the face, for which she sought readmission; she was readmitted on the 24th, and that evening her temperature rose to 105.4°. In forty-eight hours the temperature was normal, but the neuralgia persisted; and in the evening of the 26th a a crop of herpes zoster broke out in the region supplied by the inferior branch of the fifth nerve, one patch being between the lobule of the ear and the other near the chin.

Dr. Contagne published a work in 1871, in which he drew attention to certain cases of generalised herpes accompanied by fever, in which the disease followed the course of an exanthematous fever. Erb and Landouzy have permitted these considerations to weigh so far with them that they have definitely adopted the view that herpes zoster is a general disease of specific nature and due to an external cause. Colomiatti has asserted that he has found micrococci in the vesicles of herpes labialis in pneumonia, and therefore regards it as a second local manifestation of the same dyscrasia to which the lung-affection must be ascribed. At present no one has announced the discovery of an organism in herpes zoster, but its existence is implied in the doctrine of its specific nature, and is necessary for the confirmation of that view. The facts we at present possess are that herpes zoster is a non-contagious, and almost invariably unilateral, disease, cases of which occur in groups like small epidemics, and that it has generally a stage preceding the eruption, in which there may be considerable fever; that it tends to disappear spontaneously, and very rarely recurs in the same individual.

While we may admit the many points in which the resemblance to the exanthemata is striking and interesting, and think the stages of this inquiry well worthy of this brief notice and of some public attention, we do not think the time has yet come for accepting the doctrine propounded by Erb and Landouzý, the etiology of herpes zoster being for the present an open question.

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A SANITARY industrial congress will take place at Rouen on July 26th and 27th next.

AT the meeting of the Royal Medical and Chirurgical Society on May 27th, two papers by Dr. Cayley and Dr. Biss on the Treatment of Cavity of the Lung by Paracentesis will be read. Several of those who have experience in this method will attend, and a very interesting discussion is expected.

ANOTHER paper dealing with the outbreak of cholera in Egypt has been presented to Parliament. The purport of this paper will be sufficiently explained by the title, "Further Reports respecting the Cholera Epidemic in Egypt and the Proceedings of the German Scientific Commission." Our readers are already in possession of all the facts contained in this paper which are of medical interest.

THE mixed Commission of medical and naval officers recently despatched to the Archipelago for the purpose of selecting quarantine-stations, returned to Constantinople on Monday. According to their report, the island of Stampalia, one of the outlying Cyclades, was found to have the most eligible position. The island of Loros was selected as the next best position, in case the Porte should decide upon creating two new quarantine-stations in the Levant.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.

THE thirteenth annual dinner was held on Tuesday evening at the Holborn Restaurant, and Mr. Michael Carteighe, President of the Society, occupied the chair. Dr. Atkins, of Salisbury, speaking for the medical profession, dwelt on the high standard which should characterise the motives of its members, and thought the special work of the Pharmaceutical Society had been well directed to restraining the encroachments of quackery. Dr. Tidy proposed "Prosperity to the Society, and the health of the President." This having been acknowledged by the chairman, Mr. Samuel Grant, M.P., Sir T. Abel, and Dr. B. W. Richardson, returned thanks on behalf of the guests.

SAMARITAN FREE HOSPITAL.

A DINNER festival in aid of the funds of this hospital was held on Tuesday evening, May 20th, at Willis's Room. The Right Hon. the Earl of Dalhousie, K.T., was in the chair, and among the guests, who numbered about one hundred and fifty, were Lord Leigh, Sir Richard Wilbraham, K.C.B., Sir H. Selwin-Ibbetson, Bart., M.P., General Sir Orfeur Cavanagh, K.C.B., Sir John H. [illegible], Canon Holland, Generals Bingham, C.B., and Elmhirst, C.B., Admiral Miller, and Surgeon-Major Gouldsbury, C.B. The toast of the evening, "Prosperity to the Samaritan Free Hospital for Women and Children," was given by the noble chairman, who, after tracing the history of the hospital since its establishment, nearly forty years ago, as a general hospital for diseases peculiar to women, proceeded to observe that it was matter for sincere congratulation that diseases with which medical skill was formerly unable to cope were now under the complete control of surgical science. The income for the past year had fallen considerably below the expenditure, and the sum of £2000 was wanted to meet the deficiency. After stating that 260,000 patients had been relieved since the foundation of the hospital, the chairman concluded with an earnest appeal for help to the hospital. Numerous other toasts followed, and a list of subscriptions was read by the Secretary showing a total of £1,612.

GUY'S HOSPITAL.

THE Guy's Hospital Biennial Dinner was held on the 15th inst. at the Holborn Restaurant. It was one of the largest, if not the largest, meeting of old Guy's men that has ever taken place, the large Venetian Room being completely full, whilst upwards of two hundred volunteered to be stewards. Dr. Braxton Hicks, F.R.S., was chairman, and provided a book of songs that was quite an exquisite work of art, the front page having an engraving representing the more familiar and interesting corners in the older parts of the hospital. Dr. Wilks, F.R.S., was enthusiastically received, and made a speech that was repeatedly cheered. The post of honorary secretary was filled by Mr. Davies-Colley, and it is largely owing to the admirable way in which he made the arrangements for the dinner that it is enabled to rank as one of the most successful of these popular biennial gatherings. The company did not separate till a late hour, and everybody seemed to have enjoyed themselves thoroughly, all being glad to meet so many old familiar faces.

UNREGISTERED PRACTITIONERS.

THE rights and liabilities of unregistered practitioners are defined by law, but cases are periodically brought before the courts which show that the application of the law is not always simple. The last of these cases is that of Mr. William Davenport, who was summoned the other day, at the instance of the Medical Defence Association, at the Westminster Police Court for "wilfully and falsely pretending to be a surgeon." The charge was framed under section 40 of the Medical Act 1858, which imposes a penalty upon "any person wilfully and falsely pretending to be, or taking or using the name or title of, a physician, doctor of medicine, licentiate in medicine and surgery, bachelor of medicine, surgeon, general practitioner or apothecary, or any name, title, addition or description implying that he is a registered person, or that he is recognised by law as a physician, or surgeon, or licentiate in medicine and surgery, or a practitioner in medicine, or an apothecary." Mr. Davenport, it appears, has passed the examination in surgery of the Royal College of Surgeons, but has not passed in medicine. His name does not appear in the *Medical Register*, but he carries on a practice as a surgeon in the Vauxhall Bridge Road. Under these circumstances the charge was preferred against him, and Mr. D'Eyncourt, the magistrate, convicted him, but has since granted a case for the opinion of the High Court on the question whether Mr. Davenport had wilfully and falsely pretended to be a surgeon within the meaning of the above section. To untutored minds, it is clear that the law applies to all persons who call themselves by registered medical and surgical titles, without having passed the necessary examination, and received the legal right to use such titles.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE annual general meeting of the Society was held at 53, Berners Street, on Tuesday, the 13th instant, at 5 P.M.; Sir James Paget, Bart., President, in the chair. From the report read and adopted, it appeared that the members of the Society number 370, no increase on the previous year; eleven new members had been elected during the year, six had died, and five resigned. Fifty-seven widows and twenty-five orphans were in receipt of grants, three widows less than in 1882; no fresh applications for assistance had been made during the year. A sum of £2,776 had been distributed, and the expenses of the year amounted to £226. The receipts available for payments of grants and expenses had been £3,160. Two legacies had been paid, which, with a life-subscription of 30 guineas, had been added to the funded property, making an increase of £311 10s. to the amount standing in the names of the trustees. Mr. James T. Ware and Sir Erasmus Wilson were elected Vice-Presidents in the place of Sir James Paget, elected President on the retirement from office of Sir George Burrows, and Mr. Charles Hawkins resigned. Dr. Kempster, Mr. Felce, Mr. Brodhurst, Mr. B. T. Lowne, Dr. Herbert Davies, and Dr. Russell Reynolds, were elected Directors in the place of the six senior, who retired by rotation. A grant of £15 was made under a special by-law to the daughter of a deceased member. The Chairman, Sir James Paget, in moving a vote of thanks to the editors of the medical journals, was pleased to have the opportunity of expressing how much the Society was indebted to the editors for the kindness and readiness they had always shown in forwarding and making known to the medical profession the great benefits the Society was able to confer on the widows and orphans of deceased members. Mr. Charles Hawkins moved a vote of thanks to the Chairman for his kindness in taking the chair at the meeting. This Society, which has now nearly £80,000 of funded property, nearly all the proceeds of which, together with the small subscriptions of two guineas from each member, are distributed to the necessitous widows and orphans of deceased members, should be much more generally patronised than it is at present. Any qualified member of the profession, residing within twenty miles of the City of London, may become a member; but he must, at the time of election, be resident within that radius, although, when once a member, he may reside anywhere without forfeiting his privileges of membership. The subscription is only two guineas a year, and for this small amount he may be quite certain that his widow will be kept from penury. The Secretary is Mr. J. B. Blackett, of whom further information may be obtained at 53, Berners Street, Oxford Street, W.

HOSPITAL SATURDAY IN BIRMINGHAM.

THE total amount of the Birmingham Hospital Saturday collection for this year is £5,786 14s. 7d. Last year's total was £5,439 9s., or £347 5s. 7d. less than this year's, exclusive of the concert. The totals for the preceding four years were—1882, £4,888 18s. 9d.; 1881, £3,968 18s. 7d.; 1880, £3,760 9s.; 1879, £3,421 10s. 2d. The sum realised by the initial collection in 1873 was £4,705 11s. 3d., or less than this year's total by £1,081 3s. 4d.; and there was a decrease each year until 1878, when the collection reached its lowest point, £3,134 5s., or £2,652 9s. 7d. less than this year's total. From that time there has been a steady increase, and there seems every probability of a still further increase in future years, especially if the system of weekly contributions be more generally adopted.

INFLUENCE OF FEEDING ON THE MILK OF COWS.

M. CH. GIRARD has presented to the Société de Médecine Publique et d'Hygiène Professionnelle, in Paris, a memoir on the influence of alimentation on cow's milk. According to M. Girard, the best food for milch cows is green food. A diet of brewers' grains affects the milk injuriously, especially when it is used exclusively, or in too large a proportion, the toxic principle may be absorbed and pass into the milk. All substances containing any noxious principle, germ, micro-organism, or poison hurtful to the blood should be carefully excluded from the food of milch cows. M. Girard suggests that the Administration should organise model stables, where milch cows would be surrounded by the best hygienic conditions, and fed on carefully chosen food. New born infants would thus be supplied with good milk, presenting always the same proportion of its component parts.

THE CAUSE OF CHOLERA: A NEW THEORY.

THE receipt of the *Indian Medical Gazette* enables us to give a correct account of some experiments, made by Mr. Vincent Richards, F.R.C.S.Eng., on the nature of the poison of cholera, an incorrect version of which reached this country by telegram from Calcutta rather more than a month ago. It was then said that Mr. Richards had confirmed Dr. Koch's researches by producing cholera by inoculation of the organism; the truth is very wide from this. Mr. Richards has ascertained, by experiments on pigs, that the choleraic evacuations, at certain stages of the disease, contain a most virulent poison; but that apparently this poison disappears during the process of decomposition, so that evacuations a few hours old are not poisonous. He believes that the poison, if it find its way to the stomach, is absorbed; and that its principal action on the economy is to enfeeble and destroy the function of respiration. He thinks that the poison is not an organism, but a chemical compound, which can be easily destroyed by, for instance, permanganate of potash (by oxidation, therefore); but that it might, if rapidly desiccated, retain its powers for some considerable time, and might thus be transported by fomites. A curious parallel to this view of the nature of the cholera-poison is afforded by the researches referred to in a paragraph, entitled "A Suggestive Result," published in the BRITISH MEDICAL JOURNAL of March 8th, 1884, page 476.

THE EXISTING SMALL-POX EPIDEMIC.

THE prevalence of small-pox in London is a sufficient reason for calling attention to the statistics of the cases that have been admitted into the Asylum Board Hospitals during the past few weeks. In the six weeks ending May 8th, 597 cases of small-pox were admitted, and of these 485 had been vaccinated, 64 were doubtfully vaccinated, and 48 were confessedly unvaccinated; that is to say, of the total cases 81 per cent. had been vaccinated presumably in infancy, 11 per cent. were said to have been vaccinated, but bore no trace of vaccination as evidenced by the presence of vaccination-marks, and 8 per cent. had never been vaccinated. The large proportion that the vaccinated cases bear to the unvaccinated is remarkable; but it is perhaps no more than those conversant with the small-pox statistics of the past fifty years would have expected to find. Since the introduction of the Compulsory Vaccination Act, the number of those who escape vaccination has been steadily diminishing, with the result that the relative proportion of unvaccinated to vaccinated persons attacked by small-pox is decreasing year by year. The following table shows the percentage proportions in three different periods. Between 1836 and 1851, according to Mr. Marson's statistics, the proportion of the vaccinated was 49 per cent., doubtful 5 per cent., and unvaccinated 46 per cent., whilst 5,748 cases of small-pox were under treatment. Between 1871 and 1881, the Asylum Board statistics report 70 per cent. vaccinated, 10 per cent. doubtful, and 20 per cent. unvaccinated, 19,494 cases of small-pox being under treatment; and this may be compared with the statistics given above. Although the numbers during the present outbreak are small compared with those in the two preceding periods, 597 cases may be considered a sufficiently large number to show the relative proportion of vaccinated to unvaccinated cases. The fall, in the proportion of unvaccinated to vaccinated, from 46 per cent. of the total admissions in the period before the introduction of compulsory vaccination, to 20 per cent. in 1871-81, and to 8 per cent. in 1884, is a tribute to the thoroughness with which, in this great city, with its large shifting population, the vaccination of the infant population is carried out. But while we may congratulate ourselves on this, we should bear in mind that, in many instances, more than the vaccination usually performed in infancy will be required if we would check the ravages of small-pox among the adult population. The susceptibility to acute infectious diseases varies much in different persons, and the protective effect of an attack of scarlet fever, typhus fever, or small-pox, against a second attack, varies in different individuals; in most, it protects for life; in some, only for a certain number of years. So the protection against small-pox that is afforded after vaccination has been performed in infancy varies; in some, it protects for life, but in a great many its protection extends only to about the age of puberty. This is the important fact that the experience of successive outbreaks of small-pox has shown us, and it is one not be forgotten if we ever hope to rid ourselves of this disease. As far as we have been able to ascertain, only two of the 485 vaccinated cases had been revaccinated successfully, one twelve years, the other fourteen years, before the attack of small-pox. This may serve to remind us that revaccination does not confer absolute immunity from small-pox. Against small-pox, we cannot in all cases confer absolute immunity by any vaccination or revaccination; but we can justly say that, in the great majority of cases, this immunity may be obtained by successful revaccination. With this we must rest content; and it may safely be affirmed that, if all the adults lately admitted into the hospitals suffering from small-pox had been successfully revaccinated, not more than half a dozen would ever have seen the inside of a small-pox hospital.

CREMATION.

MR. JUSTICE HAWKINS had before him last week at Leeds a case which furnishes an additional argument in favour of Dr. Cameron's Bill, for it shows how dangerous cremation might become if allowed to be practised without proper regulations. Our readers remember that, not long ago, Mr. Price was tried in Wales for the alleged misdemeanour of burning the body of his child, and, under the direction of Mr. Justice Stephen, was acquitted, as there was nothing to show that he had acted in an unlawful way, or was actuated by improper motives. After that decision, a Bill was brought into the House of Commons for the purpose of regulating cremation, and preventing the abuse of a process which had been declared on high authority to be in itself not illegal; but that Bill was thrown out on the second reading, and no provision has been made for ensuring that cremation shall not be practised in an improper manner. One of the chief reasons for imposing regulations on the manner in which the bodies of the dead are disposed of, is the importance of being able to investigate all cases of suspicious death, and, where necessary, of obtaining the circumstantial evidence which may be afforded by a *post mortem* examination of the corpse. The two women, Ann Stephenson and Elizabeth Stephenson, who were tried at Leeds, had burned the body of the illegitimate child of the younger woman; and the charge against them was one of unlawfully disposing of the body. It appears that the child, after being apparently in good health, died suddenly in convulsions. The coroner was communicated with, and he decided that an inquest must be held; but the prisoners got possession of the body, and all that was subsequently found of it was ashes and charred bones in a fireplace. According to the report which we have seen of the case, it was not suggested that the prisoners had killed the child; but one can easily see how cremation to avoid an inquest might properly give rise to the gravest suspicions. The prisoners were convicted, and the law applicable to the case is to be reviewed by the Court of Criminal Appeal. Unless that court is to overrule Mr. Justice Stephen's opinion that cremation is not illegal, the case at Leeds points clearly to the necessity of a law being passed to prevent bodies from being burned in suspicious or improper cases, while providing for cremation being carried out decently in cases where it may properly be practised.

THE DUCT OF GARTNER.

THIS interesting embryonic relic seems to be absorbing the attention [illegible] septum. On the other hand, after examining a large number of human subjects, he has found, in the uterine and vaginal walls, traces of the duct in almost every third case examined. It could be traced, even in old age, either as a tube of epithelium, circular in the uterus and elliptical in the vagina, surrounded by muscular fibres, or as a bundle of muscular tissue without any epithelial lining. It lay laterally and somewhat anteriorly in the muscular substance of the uterus and upper part of the vagina, and was found more frequently on the right than on the left side. The epithelial part of the duct was generally a double, but exceptionally a single layer of cylindrical cells of medium height, surrounded by a stratum of connective tissue; external to this was a muscular tunic, consisting of two layers of longitudinal plain fibres, with a circular layer between them. Herr Rieder considers that the duct represents, in its uppermost part, the vas deferens, in its course through the cervix where dilatations exist, the ampulla and vesicula seminalis, and in the portion lying in the muscular layer of the vaginal walls it is the homologue of the ejaculatory duct in the male. He believes that this relic of Gaertner's duct may reasonably be looked upon as the seat of origin of certain vaginal cysts, the cysts springing from the side of the duct as a process, rather than originating in dilatation of a segment of the duct, as the result of obstruction above and below.

UNWHOLESOME CISTERNS.

A SUMMONS, taken out by the Clerkenwell Vestry against a baker, was lately heard by Mr. Barstow at the Clerkenwell Police Court, under the sixteenth section of the Factory and Workshops Act, for having an underground cistern on his premises for the storage of water used in making bread. The evidence was to the effect that the cistern had not been cleaned out for two years, and that, consequently, the water was unfit for use. On cross-examination, the medical officer of health admitted that he had not analysed the water, and that the water might become impregnated with sewage, but that it was probably flushed daily by the water supplied to the cistern. Mr. Barstow dismissed the summons, with £2 2s. costs, saying that he never heard a weaker case. There can be no doubt that water from a cistern that had not been cleaned out for two years is not fit for making bread, and especially as it was underground. The vestry appear, however, to have taken the summons under the wrong Act, as they might have laid their complaint for a breach of the by-laws issued, under the sanction of the Board of Trade, by the water-companies. Under the sixteenth by-law, it is illegal for anyone to use an underground cistern, except by written authority of the company. It is true that the vestry is not specially authorised to take proceedings; but, doubtless, the water-company would have done so, or the vestry might have directed one of their officers to have acted as a common informer, in the same way as is often done under the Police Acts. Mr. Barstow was a special pleader, and is apt to be impressed with objections which to other minds appear to be too minute. This is unfortunate, and accounts for so many of his decisions being adversely commented upon. The complainants were acting in pursuance of a public duty against a man who was doing what might expose his customers to the risk of eating unwholesome bread; and yet Mr. Barstow was not merely content with dismissing the summons, but gave the largest costs ordinarily awarded to a successful defendant.

M. PASTEUR ON THE PROPHYLAXIS OF RABIES BY VACCINATION.

AT a meeting of the Académie des Sciences on Tuesday last, M. Pasteur read an important communication on Rabies. It contained a detailed account of his experiments, made with the help of his pupils, MM. Rout and Chambellan, in order to arrive at a method of attenuating the virus of rabies. This long looked for result M. Pasteur believes to be realised. If the virus of rabies be taken from a mad dog, and passed through the tissues of a monkey, and afterwards from monkey to monkey, its virulence is much modified. Dogs, rabbits, and guinea-pigs inoculated with this modified or attenuated virus do not contract rabies. Neither does inoculation by trephining provoke the disease. The virulence of the virus of rabies is increased when passed from rabbit to rabbit, or from guinea-pig to guinea-pig. This virus, injected into the veins of dogs, provokes a more violent form of rabies than ordinary virus of rabies (*rage des rues*). In order to communicate this excessive virulence to the virus, it must be passed several times through the tissues of a rabbit or a guinea-pig. This is necessary in both cases, either of attenuation, from successive transmissions from monkey to monkey, or in that of the naturally weaker virus of rabies. M. Pasteur concluded by saying that he has succeeded in considerably simplifying vaccination for rabies, and at the same time rendering the animals exempt from the illness. In a short time hence, he will communicate to the Académie des Sciences a completed and detailed account of his experiments. M. Pasteur has written to M. Faillères, Minister of Instruction, requesting him to appoint a commission to judge of the value of his experiments. The dogs rendered exempt from rabies by his method of vaccination will be placed at the disposal of its members. M. Faillères has appointed the following as members of the commission—M. Béclard, Dean of the Faculty of Medicine; M. Paul Bert, Membre de l' Institut, and Professor of General Physiology at the Science Faculty; M. Bouley, Membre de l'Institut, and Professor of Comparative Pathology at the Natural History Museum; Dr. Villemin, Clinical Professor at the Military and Medical Pharmaceutical School; Dr. Vulpian, Membre de l'Institut, and Professor of Comparative and Experimental Pathology at the Paris Medical Faculty; M. Tisserand, Conseiller d'Etat, State Director of the Agricultural Department.

PHYSIOLOGICAL ALBUMINURIA.

AT a meeting of the Société de Médecine in Paris, M. Coignard reviewed and criticised the theories concerning albuminuria, also the thesis on this subject written under the direction of Professor Bouchard. According to his personal observation, and fifty-five clinical notes collected by Dr. Keller, physiological albuminuria does not exist. M. Coignard admits transitory albuminuria, the same as transitory glycosuria. Albuminuria is very rare among animals, more so among the herbivora than the carnivora. Albuminuria is not produced either by shower-baths or by hydropathy. M. de Rause observed that, according to M. Coignard's statistics, albuminuria ought to be found in the urine of healthy people. M. Coignard maintained that it is never found in persons that are absolutely healthy.

THE ORDER OF THE BATH.

A SUPPLEMENT to the *London Gazette* of Tuesday states that the Queen has been graciously pleased to give orders for the appointment, to be an Ordinary Member of the Military Division of the Third Class, or Companion of the Order, of Brigade-Surgeon Edmund Greswold McDowell, Army Medical Department.

SUSPECTED POISONING BY STRYCHNIA.

ON Friday of last week, an inquiry was opened by Dr. Danford Thomas, the Coroner for Central Middlesex, as to the death of Thomas Cross, aged 72, a road-sweeper, who died somewhat suddenly after taking a powder administered to him by his daughter. Mrs. Cross, the widow, deposed that, on the previous Monday, their daughter, Isabella Todd, arrived on a visit from Herne Bay. The deceased was suffering from bronchitis, and had recently been an out-patient at the North-West London Hospital. He was just going out to see another daughter, who lived close by, when Isabella Todd made him take a powder out of a packet of several she had with her, and she also persuaded witness that one would do her good. The powders were taken in beer, and the cup was washed up immediately afterwards. Deceased then went out, and soon came back with his other daughter. Almost immediately on his return, he was seized with a severe fit of convulsions, and, before medical aid could be obtained, he was dead. She herself, soon after taking the ale with the powder in it, was deprived of all power of motion; her face and neck, and all the muscles, were stiff and rigid; and it was not until Dr. Ogilvie had twice given her medicine, that she began to get better. Isabella Todd, after being duly cautioned, said that the powders contained calomel, and that she had often taken them herself. On being asked where she obtained them, and what she had done with the remainder, she prevaricated, and made statements which were considered by the jury to be unsatisfactory and misleading. Dr. Leslie Ogilvie said that he was Lecturer on Comparative Anatomy at the Westminster Hospital, and one of the physicians to the North-West London Hospital. The deceased was on the point of death when he saw him, but he was struck by the extreme rigidity of the body, and at once suspected strychnia-poisoning. He had made a careful *post mortem* examination, in conjunction with his colleagues, Dr. Allchin and Dr. Murrell, of the Westminster Hospital. The body was remarkably healthy for so old a man, the only signs of disease being atheroma of the large blood-vessels, and some fatty degeneration of the heart. He had carefully examined the brain, but there was no hæmorrhage or effusion of any kind. There was no apparent congestion of either the membranes of the brain or spinal cord. The kidneys were normal in structure. The contents of the stomach, the urine contained in the bladder, and the liver, kidneys, spleen, and other organs had been carefully preserved in chemically clean vessels, and sent to Dr. Dupré for analysis. The spinal cord had been removed, and was being hardened for the purpose of cutting sections. The female patient presented symptoms which were undoubtedly those of commencing tetanus. He at once sent to the hospital for apomorphia, bromide of potassium, chloral, and nitrite of amyl. The treatment consisted in the administration of two one-drachm doses of bromide of potassium. The patient improved so rapidly, that he did not think it necessary to give an emetic. Dr. Ogilvie, in cross-examination, said that strychnia was the active constituent of many vermin-killers and insect-powders. He was not prepared to say that powdered nux vomica might not be mistaken for powdered ipecacuanha. It was hardly conceivable that three grains of calomel would prove fatal to a man, even if suffering from fatty degeneration of the heart. The coroner, after observing that it was essential that they should have the powders as well as the contents of the stomach analysed, adjourned the inquiry for a fortnight, in order that the chemist who supplied the drug might if possible be discovered. This is evidently a case of some importance, and it is to be hoped that, should it prove to be strychnia-poisoning, a full and detailed account of the *post mortem* appearances will be published. Casper states that, out of nearly 1,200 medico-legal inspections made by him up to December 10th, 1863, not a single case of poisoning by strychnia had come under his notice.

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SCOTLAND.

IT has been definitely decided to introduce a new supply of water into St. Andrew's, and the scheme for bringing it from Lochty has been approved of.

HANDSOME legacies have been left to the Aberdeen Royal Infirmary and Dispensary, and the Hospital for Incurables, by the late Mr. John Smith, President of the Aberdeen Society of Advocates.

THE Barony Parochial Board of Glasgow have decided to make considerable additions to the poorhouse-accommodation; and it is evident from the facts brought out that they have not come to this decision too soon, as it is clear they have not at present the means of dealing with the poor in a proper manner.

ROYAL MATERNITY HOSPITAL.

THE directors of the Simpson Memorial and Royal Maternity Hospital, Edinburgh, some time ago determined to strengthen the staff by the addition of two assistant-physicians. On Monday last, having considered the claims of the various candidates, they appointed Dr. Charles E. Underhill and Dr. D. Berry Hart. The institution is to be congratulated on the appointments that have been made.

PUBLIC HEALTH AND HACKNEY CARRIAGES.

As showing the intelligent growth of sanitary science, it is worth noticing that the magistrates of Edinburgh have enacted a by-law to the effect that no owner or driver of a hackney carriage shall convey in the hackney carriage any clothes to a washing-house, laundry, or other premises. Considering how infection can be spread by means of clothing, and by common cabs, the importance of the new regulation is obvious.

ABERDEEN ROYAL INFIRMARY.

FROM the annual report of the managers of the Aberdeen Royal Infirmary, it appears that 2,000 persons were received into the wards and received hospital-treatment; while in the out-door department, 1,800 patients had received advice and medicine. The financial report was not of a reassuring nature, the total income for the year having been £6,951, and the expenditure £7,611. It is intended to extend the hospital-buildings, the extension to cost between £8,000 and £10,000, which will have to be collected; £3,118, however, has already been received.

INTERNATIONAL FORESTRY EXHIBITION.

AN exhibition, called the International Forestry Exhibition, will be opened in Edinburgh next month. It is not directly connected with the profession, but will be of much interest to those members who seek relaxation in Scotland during their holidays, and who favour Edinburgh with their presence. Extensive space has been secured for the exhibition at Donaldson's Hospital grounds, the buildings to be erected are well advanced; and it may be mentioned, as showing the interest taken in the exhibition, that a requisition has been received from the Japanese Legation for about 6,000 square feet of space.

IMPORTANT DAIRY PROSECUTION.

THE sanitary authorities of Glasgow have just obtained a conviction under the Dairies, Cowsheds, and Milkshops Order of 1874, on the grounds that the dairy was not duly registered, and that the drainage and water-supply of the place were not satisfactory; an examination of the former showing several built cesspools, and an analysis of the latter that it was very impure and unfit for use. A modified penalty was inflicted, as the defendant, on being remonstrated with, had at once closed the business; but the judge, in giving his decision, stated that he thought it one of the most necessary prosecutions that had come before him under this order, as it was clear that at any time the place might have become the focus of any amount of disease.

SUSPICIOUS DEATH OF A LUNATIC.

A case which may involve a serious charge against some of the officials at the Southern Counties Asylum, at Dumfries, is being at present investigated by the authorities. It appears that one of the inmates of the asylum, a man forty-seven years of age, made his escape. He was recaptured, and, in bringing him back to the asylum, the keepers asserted that he had made a desperate effort to escape, and that some violence had to be used. On his arrival, he was put to bed, and was thought to be suffering from the severe fatigue consequent on his escape and recapture; but, in the night, he sank rapidly, and died somewhat suddenly. An external examination showed the mark as of a rope round the neck, and the *post mortem* examination revealed fracture of several of the ribs. The attendants were at once suspended, and the suspicious circumstances surrounding the case reported to the authorities. Since then, matters have become still more complicated by the death of one of the attendants, James Middleton, who committed suicide by taking strychnia, and by the disappearance of the other keeper, Watson, for whose apprehension a warrant has been issued.

THE SECRETARY FOR SCOTLAND.

THE text of the Government Bill for appointing a secretary for Scotland has now been made public, and the importance of this new step in legislation, in regard to the administration of national affairs, cannot be over-estimated. The powers and duties of the new secretary include all those at present vested in the Secretaries of State in relation to Scottish Universities, and also of the Privy Council as to the Board of Manufactures, Educational Endowments, and Public Health. In fact, the rights of patronage to offices and appointments in Scotland, except those pertaining to law and justice, and all the duties at present vested in the Home Secretary, the Privy Council, the Local Government Board, or the Treasury, so far as these belong to Scotland, will be in the hands of the new official. It cannot be said that as yet there has been any very marked demonstration of approval in Scotland in reference to the proposed change; but there can be no doubt that the appointment of a Secretary with such powers as mentioned should go a long way to secure better attention towards Scotch affairs than has heretofore been possible under so many different bodies.

SCOTTISH VITAL STATISTICS.

OWING to the existence of the wide-spread feeling that different conclusions can be drawn from the same set of figures, according to the point of view from which they are regarded, there has come into vogue a very general distrust of the deductions drawn from figures of almost every kind. In an interesting paper on Scottish Vital Statistics, read before the Royal Society, Mr. Seton, Secretary to the General Registry Office of Scotland, has drawn attention to this matter; and he believes that the cause of erroneous deductions arises entirely from neglecting to account for what he terms "disturbing influences." To illustrate his views, Mr. Seton has confined himself to the subject of vital statistics, and points out some of the influences which often materially affect the health-statistics of different places, and yet which are not taken into account in dealing with figures on which returns are based. Thus, he instances one town-district, with a population of 20,000 persons, where the mortality was found to be 35 per 1,000; while in another, with the same population, the mortality was only 20 per 1,000. This would seem as if the former was much more unhealthy than the latter; whereas, on inquiry, the difference would be found to be largely accounted for by the former having a large infirmary, drawing cases from many different quarters, and with a very high mortality among its patients. Many other illustrations are given of these disturbing influences, not only in the case of deaths, but also of births and marriages; and it is made clear that considerable modifications ought often to be made in dealing with the subject of vital statistics.

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IRELAND.

AN election for a medical officer for the Dunboyne Dispensary took place last Saturday, when, out of six candidates, Dr. Yourelle was elected by a majority of seven votes.

MATTHIAS O'KEEFFE, A.M., M.D.

THIS gentleman died rather suddenly at his residence, Camden Quay, on Sunday last, the 18th instant. The deceased was Professor of Materia Medica in the Queen's College, Cork, having been appointed to that post on the death of Dr. Purcell O'Leary. He was also connected with the Mercy Hospital, and was an Examiner in Medical Jurisprudence of the Royal University of Ireland. Dr. O'Keeffe was an able practitioner, and his loss will be greatly lamented.

QUEEN'S COLLEGE, CORK.

A SPECIAL visitation was held last week at this College, to inquire into the appeals made by the students who had certain penalties inflicted on them by the Council for attending meetings outside the College walls, which were detrimental to the discipline and management of the institution. The visitors were the Lord Chancellor, the Duke of Leinster, Dr. Moore, and Mr. Wheeler. The following were the students who appealed, with the penalties inflicted: John J. Lynch, rusticated; E. R. Hennessy, fined £30; D. O'Callaghan and John Kearney, fined £2 each; Wm. Murray, admonished and fined £1; Wm. McSweeney, fined £1; and J. P. Gallagher, reprimanded. President Sullivan said that the resolution of the Council rusticated Mr. Lynch for attending and taking an active part in meetings held outside the College, which the Council regarded as a grievous breach of discipline. Persons were intimidated from giving evidence in the inquiry held by the Council, and the difficulties which they had to encounter were enormous, in an institution which was quite new, and where the students were non-resident. Mr. Lynch then read his defence, in which he alleged that the College Council were not justified in inflicting on him the severe penalty of rustication till the end of the session 1885, as the evidence connecting him with the offence was most insufficient, and he believed that they were actuated by an unfavourable impression concerning him. He came before the Visitors with the hope of being reinstated in his privileges as a student of the College. He had to make a name, and the struggle of life was severe enough without being required to overcome unnecessary obstacles. His belief was that he had not a fair trial, owing to an unfavourable prejudice entertained against him by members of the Council. President Sullivan, in stating the case for the Council, contended that the holding of the meeting was a breach of discipline; and if so, they should be sustained in their decision, for they could not carry on an institution of the kind unless they had the power of doing as they had done. The penalties they imposed were exceedingly light, and he had no hesitation in saying they should have expelled or rusticated the students. Professors Jack and Armstrong also gave evidence corroborating the President's statements. The cases of Messrs. Hennessy, Kearney, O'Callaghan, and McSweeny were proceeded with the following day, and the Visitors retired to consider their finding. The Lord Chancellor, in delivering judgment, said they were a court of appeal of the very highest order, inasmuch as the sentence of the court was final. They sat there to adjudicate on the question raised by the students, whether each of them was guilty or not of the offence of which the Council had found them guilty; but he must dissent from the view the President presented, that they were bound to assume and be guided by the decision at which the Council had arrived. He believed there was no prejudice against Mr. Lynch on the part of the Council, but that gentleman had almost defied them, and gave no information, either in his own case or in that of anyone else. They were clearly satisfied that he was chairman of the meeting held on February 22nd, and it was notorious that the students were aware it was illegal to hold the political meeting inside or outside the College; and if such meetings were allowed to go unpunished, no discipline could henceforth be maintained. Mr. Lynch had failed to prove to them that his sentence had been the result of prejudice or want of fair play. They found that the sentence passed by the Council was right and proper, and it was their bounden duty to uphold them in their decision. As regarded Mr. Hennessy's case, they would not deprive him of his scholarship, and thought that the ends of justice would be well satisfied by having a fine of £2 inflicted on him. The sentences on Messrs. O'Callaghan and Kearney would be confirmed, and the £1 fine on Mr. McSweeney might be removed. His Lordship, in conclusion, hoped that out of these proceedings would spring a better system of discipline, and that the students would settle down to their work, maintain the regulations of the College, and advance their own interests.

SUCCESSFUL PROGRESS OF THE MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

AN announcement made at the meeting of the Medical Sickness, Annuity, and Life-Assurance Society, on Wednesday last, showing the large amount of support which has been accorded to this Society, and its successful progress, in so comparatively a short space of time, cannot fail to be gratifying to those gentlemen who came forward to assist the Editor of the JOURNAL in its formation. It was reported, on Wednesday last, that four hundred members have already been enrolled, that the premium income already exceeds £4,000 *per annum*, and that expressions of approval and offers of co-operation continue to be received. The rules have undergone careful revision, and some useful modifications were introduced at the last meeting of the Executive Committee, of which we shall publish the details next week.

THE INTERNATIONAL HEALTH EXHIBITION.

THE LIBRARY DEPARTMENT.

THE Librarian of the International Health Exhibition will be very glad to receive, for the Library, copies of handbooks relating to the health-resorts of England, France, Germany, and Switzerland. He will also be indebted to medical officers of health for any sets of health-publications, or special reports relating to their towns or districts; and will be glad to receive photographs, drawings, or charts, illustrating the site, soil, aspects, vital statistics, or meteorological characters of the principal towns and districts in Great Britain, and in European and other foreign countries. We are glad to learn that upwards of four thousand volumes have already been received for the Library, and considerable accessions are still expected. With a view, however, to the early completeness of this important part of the Exhibition, we would urge all who are interested, either for local reasons, or in the general interests of sanitary progress, in the completeness of this most instructive display, to forward as speedily as possible copies of any publications over which they may have control, or to communicate this request to those who may have the power of fulfilling it. Early intimation by letter of the intention to forward any documents or books will be considered a favour by the Librarian, International Health Exhibition, South Kensington.

THE HOSPITALS ASSOCIATION.

A MEETING of this Association took place in the rooms of the Medical Society of London, on Wednesday evening, [illegible] Sir T. F. Buxton, Bart., occupied the chair. Mr. H. C. [illegible] a long paper on the following question: "How can the Hospital Sunday and Hospital Saturday Funds be [illegible] to the Hospitals?" He gave an historical account of the [illegible] of the two [illegible], showing that the former was largely helped [illegible] Mr. J. E. Wright of Birmingham, and the Rev. Canon [illegible] ley, in London; and that Hospital Saturday [illegible], Manchester, and Birmingham, before it [illegible] He showed that these funds have attracted a [illegible] of public attention to hospitals, without lessening [illegible] given to them. The charities of the country [illegible] comparatively few individuals [illegible] tended to alter. During twenty-five years, [illegible] sterling had been given to the hospitals through [illegible] two funds, and they annually now contributed [illegible] the sum was yearly increasing. These facts [illegible] fully acknowledged. He thought these [illegible] still more useful to hospitals in various ways. [illegible] should be under the control and management of [illegible] in order to lessen the cost of collection, and [illegible] 2. Every grant to each charity should be conditional upon the books of that charity being kept upon a method laid down by the Hospital Sunday and Saturday organisations, with the object of securing [illegible] of account-keeping in all institutions which receive money from these funds. At present, it was often impossible to make accurate comparisons of disbursements between different hospitals and dispensaries; whilst bad book-keeping often meant muddle in management and extravagant expenditure. 3. No grant should be given to any institution in any year until a representative of the council of the funds had inspected the buildings and premises, and reported upon the management, until, in fact, it had been ascertained upon the spot how the affairs of each institution were conducted. 4. The funds should present as large a free gift as possible to the hospitals; and in no case should they receive back more than half the letters to which their contributions, if given by annual subscribers, would entitle them. The greatest sinner in this respect he held to be the Hospital Saturday Fund, which demanded an exact *quid pro quo* for its contributions. 5. The Hospital Sunday Fund should accept the responsibility to distribute in right proportion the legacies of those members of the community who desired to benefit the best managed of these institutions by will. 6. Each Hospital Sunday Fund Council should obtain for patients treated within the hospitals every kind of surgical appliance needed by the patients on their discharge, as was now done by the Metropolitan Hospital Sunday Council, which set aside 5 per cent. of its gross receipts for this purpose. 7. The Hospital Sunday and Hospital Saturday organisations should set an example to the managers of all charities by reducing the cost of collection to the lowest possible minimum. The London Hospital Sunday Fund had been collected at an average cost of 3.42 per cent.; but whilst the cost of collection of the Hospital Saturday Fund in Birmingham for three years had averaged 6.35 per cent. of the amount collected, in Manchester 6.17 per cent., and in Liverpool 3.39 per cent., the proportion of cost in London had been as much as 12.99 per cent. These figures led Mr. Burdett to remark that beyond question there was at the present time something wrong in the way in which the Metropolitan Hospital Saturday organisation was conducted. One reason for this failure, he thought, lay in the fact mentioned by Mr. Lucraft in 1874, that very many members of its council were not working-men at all, and that thus the Council had failed to win the confidence and support of the majority of the working-classes.

These propositions were stoutly contested by several members of the Council of the Hospital Saturday Fund, and others. Mr. Frewer, Secretary to that Fund, said that it was only necessary to examine the accounts of the Fund to show that Mr. Burdett's strictures were too severe. The Fund was established because it was thought desirable that the masses, and not the few only, should contribute to hospitals. As to the advantage of union of the two Hospital Funds, no one could doubt that; but it was in exact opposition to Mr. Burdett's proposition, put forth some years since, of dividing London into districts for the collection, with a separate organisation in each. They had for years fought for representation on the boards of hospitals; how could amalgamation with the Sunday Fund help them in this particular? They issued a form of accounts, with separate columns for all items of expenditure, which they sent to all hospitals and dispensaries which received contributions from their fund. It was not fair that working men should receive less letters for their subscriptions than ladies and gentlemen subscribing the same amount. Criticism on the details of the Fund would be welcome, but not that criticism whose sole object was to crush the Fund. The subscriptions had been doubled since 1874, whilst the expenditure of collection had been reduced from 30 to 10 per cent. Anything which was calculated to advance the interests of the medical charities of London would be welcomed by the Board of the Hospital Saturday Fund.

[illegible] could not work together; they could not blend. Workmen should not, if they fell ill, have to go and beg for letters for hospitals; they [illegible] reducing the expenditure in other ways.

[illegible]

represent the whole of the contributions of the working-men of London to the hospitals. As long as annual subscribers to hospitals received a return in the shape of letters, the Sunday and Saturday funds should also claim such letters. If people who gave the money and received the letters acted as almoners, and saw that the letters were only given to suitable persons, they were doubly doing good. If the expense of raising the Saturday Fund was too high, it should be shown how it could be reduced. The gentleman gave to the fund so as to exercise his bounty and patronage; the poor man, so as to retain his independence.

Mr. **Bousfield** thought the question of funds very important. They were never more needed than at present. The management of hospitals was more expensive than it used to be, as appliances were more intricate, and fashioned with deeper skill. The two Funds might both be far greater; they were not adequate to the wealth and size of London. Hospital committees must look to the co-operative system in the future; and there ought to be the two funds. There was room for both. Working men should not have to beg for hospital-letters from richer neighbours. The principle that members of the Hospital Saturday Fund Council should have a voice in the management of hospitals should be carried out, if it were possible, with due regard to the efficiency of the hospitals themselves.

Mr. **Hamilton Carr** showed that Mr. Brodhurst and Mr. Burt, representative working men, and Mr. Fawcett, who was in thorough sympathy with working men, had all shown their deep sympathy in the Hospital Saturday Fund; this would traverse the statement that the Fund had not gained the sympathy of the working classes.

Mr. **Fuller** said there were certain points in the management of hospitals which could only be discovered by the working classes; for example, the trouble that sick men and women had in attending out-patients' rooms in the morning. It was a great convenience to be able to attend in the evening. Working men and women could speak to people of their own class more freely than to ladies or gentlemen; and if working men were made visitors to hospitals for six months or a year at the time, and could go in and out when they so desired, it would give working men a much greater confidence in the management of the hospitals.

Mr. **Abraham** said there were 200 delegates connected with the Hospital Saturday Fund. They had held 150 meetings, which would show what interest they took in this matter. Vast numbers of workshops were represented on the Committee, and the men in these workshops could now obtain letters for hospitals. As to the expenditure, he thought it wonderful that it was not more; it would grow less as time went on.

Mr. **Dickinson** said that workmen liked direct representation in the management of all funds which they assisted in collecting; and, as hospitals existed for that class of people, they had great sympathy with all that related to those institutions. People did not always receive the treatment at hospitals which they should have. No people could dispense the hospital letters so carefully to the most deserving recipients as the working men themselves. The councils of the two funds might consult each other with advantage on many points.

Mr. **Burdett**, in reply, said that he was in favour of direct subscriptions from the workshops to the hospitals, rather than indirect contributions through an intermediate fund. He thought both classes—the well-to-do and the working men—would greatly benefit by association on a joint committee. The expenses of the Hospital Sunday Fund were low because the agency was voluntary; the same would result if the working men contributed directly to the hospitals. In the workshop the master and foreman should be able to get at the men as the clergymen and churchwardens could get at the congregation in the church. No one doubted that, under the present system of *quid pro quo*, the working men should receive tickets for their contributions in the same proportion as were returned for donations given by rich subscribers; but this advantage could only be obtained by direct subscription to the hospitals from the workshops.

Summing up the debate, the **Chairman** said that funds were wanted by all hospitals, and that the contributions to the Hospital Saturday Fund, in an imperfect way, and to some extent, encouraged thrift.

The Treatment of Lupus by the Galvanic Cautery.—M. Besnier states, in the *Paris Médical*, that the galvanic cautery does not produce more scarring than the other methods, when carefully applied to the diseased parts only. The pain is not very severe, and there is no danger of hæmorrhage. M. Besnier thinks that one great advantage of this method is to prevent the auto-inoculation of micro-organisms, which is said to take place occasionally when scarifications are used. Certain cases show that this operation is sometimes followed by the rapid development of tuberculosis in internal organs; and the fact acquires significance when it is remembered that, according to Cornil and others, true lupus is a local tuberculosis of the skin.

ASSOCIATION INTELLIGENCE.

NOTICE OF EXTRAORDINARY GENERAL MEETING.

Notice is hereby given, that, in accordance with Article 13, an Extraordinary General Meeting of Members of the British Medical Association will be held at the Queen's Hotel, Birmingham, on Wednesday, the 28th instant, at Three o'clock in the afternoon:

To consider Requisition, of which the following is a copy.

> *To the President and Council of the British Medical Association.*
>
> We, the undersigned, Members of the British Medical Association, request the Council of said Association to forthwith convene in London an Extraordinary General Meeting of the Members of said Association for the following purposes:
>
> "1. To consider complaints made by Members of the Association of their being deprived by the Journal Committee and the Reform Committee of their right to communicate through the medium of the Journal with their fellow Members concerning questions affecting the rights and privileges of the general practitioners of the Association.
>
> "2. To consider those provisions of the Government Bill, now in the House of Lords, which are alleged by Members of the Association to be detrimental to the interest and welfare of the general practitioners of the Association.
>
> "3. To devise means to remedy, satisfactorily to the Members of the Association, that for which the meeting is convened as above expressed in paragraphs 1 and 2."

The requisition is signed by 53 Members of the Association.

Left at the office by George Brown,
John P. Hentsch,
R. H. S. Carpenter,
on this 6th day of May, 1884.

Francis Fowke, *General Secretary.*
161A, Strand, London, May 13th, 1884.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

Meetings of the Council will be held on Wednesday, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

Cards for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
IV*a*. Diphtheria, sanitary.
V. Syphilis, acquired.
V*a*. ,, inherited.
VII. Puerperal Pyrexia.
VIII. Paroxysmal hæmoglobinuria.
X. Habits of Aged Persons.
XI. Albuminuria in the Apparently Healthy.

Note.—The further 150 cases of pneumonia asked for by the Committee have now been received, and will be included in the forthcoming issue of the *Record* in July. The Committee hope that cases will still be communicated, as opportunity may occur, with a view to a further report upon the subject in the future.

An inquiry is being now issued concerning the general condition, habits, and circumstances, past and present, and the family history of persons who have attained or passed the age of 80 years.

The replies to this inquiry will be most valuable when given by a medical man; but the questions have been so arranged, that, with the exception of some on the last page, they may be answered by another person. *Partial information will be gladly received.*

Copies of the form and memorandum relating to Aged Persons, printed in last week's Journal, are ready for distribution through the local Secretaries, and will be forwarded to any one who is willing to fill up one or more of the forms, on application by post-card or otherwise to the "Secretary of the Collective Investigation Committee," 161A, Strand, London.

There is also now being issued an inquiry as to the occurrence of Albuminuria in apparently healthy persons.

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
May 1884. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH. Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held in the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 29th, at 3 P.M. In connection with the Collective Investigation Committee, a debate will take place upon Puerperal Pyrexia, and the discussion will be commenced by Dr. J. Braxton Hicks, F.R.S., Consulting Obstetric Physician to Guy's Hospital. After the meeting, the members and their friends will dine together at the Star and Garter Hotel, Victoria Street. Tickets (exclusive of wine), 7s. 6d. each.—VINCENT JACKSON, Secretary, Wolverhampton. May 15th, 1884.

MIDLAND BRANCH.—The annual meeting of this Branch will be held in Nottingham on Thursday, July 3rd. Notice of papers, etc., to be sent to the Secretary, LEWIS W. MARSHALL, M.D.

EAST YORK AND NORTH LINCOLN BRANCH.—The annual meeting will be held at the Infirmary, Hull, on Wednesday, May 28th, 1884, at 1.30 P.M. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the Secretary.—E. P. HARDEY, Honorary Secretary, 17, Brunswick Terrace, Spring Bank, Hull.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—A meeting of the members of the above district will be held at the Castle Hotel, Wellington Square, Hastings, on Tuesday, May 27th, at 3.30 P.M. Dinner at 5.30 P.M.; charge 6s., exclusive of wine. Mr. Kaye Smith of St. Leonard's will take the chair. Dr. Bagshawe will show the following specimens: Tumour of the Cerebellum (Carcinoma); Stricture of the Œsophagus. Dr. R. J. Lee: Eruptions following Vaccination. Henry Juler, Esq.: The Shadow-Test as a means of Diagnosis and Treatment of Errors of Refraction; Specimens of Eyes mounted in Glycerine Jelly. Dr. Moore: Notes of a Case of Spinal Apoplexy. T. Jenner Verrall, Esq.: Notes of a Case of Aphasia following a Blow on the Head. Communications with respect to the reading of papers or cases, or the exhibition of morbid specimens, should be addressed to the Honorary Secretary, T. JENNER VERRALL, 95, Western Road, Brighton.—April 29th, 1884.

BATH AND BRISTOL BRANCH.—The sixth ordinary meeting of the session will be held at the Museum and Library, Bristol, on Wednesday evening, May 28th, at half-past seven o'clock, E. Crossman, Esq., President, in the chair. The following communications are expected. 1. Two Cases of Venesection in Heart-Disease: A. J. Harrison, M.B.—2. The Treatment of Croup: F. G. Stevens.—3. A Case of Cerebral Tumour, with Specimens: J. Taylor.—4. Successful Removal of Uterine Fibroma by Abdominal Section. Exhibition of Specimen: F. Stockwell, M.D.—5. On Glaucoma: F. R. Cross, M.B.—6. Exhibition of an Incubator for Infants: C. Elliott, M.D.—E. MARKHAM SKERRITT and R. J. H. SCOTT, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH.—The thirty-second annual meeting of this Branch will be held at the Holborn Restaurant on Tuesday, June 24th, at [illegible] P.M. President: Charles J. Hare, M.D.; President-elect: Charles Macnamara, Esq. Dinner at 7 P.M.; tickets, 7s. 6d. each, exclusive of wine. Early application for dinner tickets should be made to Dr. Grigg, 6, Curzon Street, Mayfair, W.—ALEXANDER HENRY, M.D., W. CHAPMAN GRIGG, M.D., Honorary Secretaries.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting of this Branch will be held at Cardiff on Thursday, June 26th next, Eben Davies, Esq., President; A. Sheen, M.D., President-elect. Members wishing to bring forward communications, cases, etc., are requested to send titles to either of the undersigned before June 7th, in order that the same may be inserted in the circulars.—ALFRED SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries. May 21st, 1884.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual meeting of this Branch will be held at the Medical Institute on June [illegible]th, at [illegible] P.M.—R. RICHARDS, Secretary, 14, Newhall Street, Birmingham.

NORTH OF IRELAND BRANCH: GENERAL MEETING.

A GENERAL meeting of this Branch was held in the Board Room of the Belfast Royal Hospital on April 24th. Dr. MACCORMAC, Vice-President, occupied the chair, and there were thirty-two other members of the Branch present.

Homœopaths.—A circular letter from the subcommittee appointed by the Council of the Association to ascertain the opinion of the Branches with regard to the admission and retention of homœopaths as members of the Association, was brought before the meeting; and, on the motion of Mr. FAGAN (Belfast), seconded by Dr. GRAY (Castlewellan), the following resolution was adopted: "That, while this Branch considers it very undesirable that professing homœopaths be admitted to the Association, they at the same time think that it would be unwise for the Association to take prominent action in such matters, believing it wiser to leave each case to be dealt with on its merits."

The Medical Act Amendment Bill.—The Honorary Secretary submitted a petition in favour of the Medical Act Amendment Bill, which he had received from the Chairman of the Reform Committee, and a letter requesting him to sign the same as a member of the Council of the Association. It was thereupon moved by Dr. BYERS (Belfast), and seconded by Dr. PALMER (Armagh), and passed: "That, owing to the diversity of opinion in this Branch regarding the Medical Bill, no official action be taken in the matter."

Communications.—The following communications were read.

1. Dr. St. George (Lisburn) showed two cases of Fracture of the Superior Maxilla, and read notes on the treatment.

2. Mr. Fagan read a short paper on the merits of some of the methods for the Removal of the Tongue, with reports of two cases in which he removed that organ by the scissors.

3. Dr. Byers showed a Child with a large Malignant Abdominal Tumour.

4. Dr. Lindsay (Belfast) read a paper on Hysterical Paralysis, with illustrative cases.

5. Dr. J. W. Browne (Belfast) gave a short account of a case of Inguinal Hernia for which he operated successfully by Banks's method.

6. Dr. Browne also exhibited a patient who received a Gunshot Wound of the Abdomen, followed by a pelvic abscess requiring operation.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

A MEETING of the above District was held at the West Kent General Hospital, Maidstone, on May 16th; A. H. HALLOWES, Esq., late Honorary Secretary of the District, in the chair.

Next Meeting.—It was decided unanimously that the next meeting be held at Rochester at the end of November; Dr. J. J. D. Burns, R.N., to preside on the occasion.

Election of Honorary Secretary.—The Honorary Secretary of the District, Mr. A. W. Nankivell, was unanimously re-elected for the ensuing year.

Communications.—The following papers were read and discussed.

1. Dr. E. Ground: A case of Diabetes treated mainly with Skimmed Milk.

2. Dr. S. Monckton: On the Application of Electricity in Medical Practice, with Illustrative Apparatus.

Several interesting cases were exhibited to the meeting, and the members and visitors present were conducted round the hospital by the staff.

Dinner.—Eighteen members and visitors dined at the Star Hotel.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.

THE annual meeting of this district society was held at the Sandown Hotel, Sandown, on Thursday, April 24th; present, JAMES NEAL, M.D., President, in the chair, and seven members.

New Member.—Mr. T. Ormsby Wiley was elected a member of the Branch.

The Balance-Sheet for the last year was presented and passed unanimously, having been previously audited by Dr. Groves.

Officers.—Mr. LLOYD proposed, and Dr. PLETTS seconded, and it was unanimously agreed, that Dr. D. Benton be the president-elect. Mr. LLOYD proposed and Dr. GROVES seconded, that Dr. Williamson be Vice-President elect. This was carried unanimously. Dr. GROVES proposed and Dr. PLETTS seconded, that Mr. Green be re-elected Secretary and Treasurer. This was carried unanimously, and expression was given by the members present to their indebtedness to Mr. Green for the very efficient manner in which he had filled those posts for the previous year.

Representative on the Branch Council.—Mr. GREEN proposed, Mr. [illegible] seconded, and it was resolved: That Dr. Coghill be re-elected.

Next Meeting.—Mr. GREEN proposed, Dr. GROVES seconded, and it was resolved: That the next meeting be at Ryde. Mr. [illegible] kindly said that if he were at home at the time, and it was not against the rules, he would be pleased to entertain the members at dinner.

The PRESIDENT gave a detailed statement of the work of the district during the past year, alluding to the various papers, and thanking the members for their courtesy and kindness during his year of office. He then vacated the chair in favour of the new president, Dr. GROVES.

who gave an address on matters of social, general, and political interest to the profession.

Vote of Thanks. Mr. BARROW proposed a vote of thanks to Dr. Neal for the manner in which he had filled the post of president for the past year. This was seconded by Mr. GREEN, who also thanked Dr. Neal for his assistance and courtesy during his year of office, and carried with acclamation.

Antiseptic Tapping.—Dr. COUSINS made some remarks upon the antiseptic treatment of wounds in general, and in particular on paracentesis by slow evacuation. He described his antiseptic trocar, which is made in several sizes for various kinds of tapping. He condemned rapid evacuation, referring to the dangers connected with it, among which were syncope, and the fear of exciting peritonitis, and exhibited and explained his instrument for tapping by slow evacuation; the operation for which, by his instrument, would occupy three or four hours, with comfort and relief to the patient, and freedom from danger. He advocated the early treatment of these cases by tapping before having recourse to medicines, as valuable time and strength were wasted, and pointed out the ease with which repeated tappings could be done with permanent benefit to the patient.—Mr. BARROW thought, from a long experience of tapping by rapid evacuation, that there were not the dangers attached to the old system which Dr. Cousins dreaded. —Mr. MEERES had not found dangers with rapid evacuation.—Mr. LLOYD thought faintness a frequent effect under the old plan.—A discussion then took place, in which all the members present took part, and the general opinion seemed to be in favour of Dr. Cousins's plan.—Dr. COUSINS replied.—Mr. BARROW proposed a vote of thanks.

EAST ANGLIAN BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Castle, Colchester, on Thursday, May 15th, under the presidency of Mr. ROBERT FRANCIS SYMMONS of Colchester.

Report of Council.—The following report of the Branch Council was read and adopted.

"Since the last annual meeting of the Branch, important changes have taken place in the government of the Association. The Council will henceforth manage the general affairs and business of the Association; and by the 17th By-law, Section (A), it will devolve upon you to-day to elect two representatives of the Branch in the Council of the Association.

"The Branch consisted, at Christmas, of two hundred and five members; and there are thirty-nine members of the Association resident in the district who are not members of the Branch. There have been several deaths among our members: Mr. G. W. Petty of Fressinfield, who had been for many years a most regular attendant at our general meetings; and Dr. H. G. Moore of Ipswich (both these members being cut off prematurely, and both leaving large young families); also of Mr. C. G. Marshall of Woodbridge, and Mr. William Ebden of Haughley, the latter a very regular attendant at our meetings. Notwithstanding these losses and some withdrawals, the Council are pleased to announce a steady accession of members.

"The Council beg to direct the attention of the members of the Branch, particularly the younger ones, to the establishment of the Medical Sickness, Annuity, and Life Assurance Society, which enables any member of the profession in a state of health to make provision for a weekly payment in case of sickness. By small quarterly payments, a sum varying from £1 1s. to £4 4s. weekly during the continuance of illness will be secured to anyone joining the Society.

"The British Medical Benevolent Fund scarcely receives the support it deserves in East Anglia; nevertheless, through the liberality of some eleven members, the sum of £9 3s. was forwarded last year by the Honorary Secretary.

"The following members of the profession have been elected by the Council members of the Association and Branch: Mr. Stanley Stenton Hoyland, M.R.C.S., L.S.A., of Tower Place, Ipswich; Mr. Robert H. Johnston, of Avoca House, Bungay; Mr. J. A. Horsford, L.R.C.P.Ed., M.R.C.S., Long Melford; Mr. James Unsworth Green, of Alderton, Woodbridge; Mr. R. J. Horn, of Attleborough; Mr. H. B. Vincent, East Dereham.

"The Council recommends the re-election of Mr. George Edward Jeaffreson upon the Parliamentary Bills Committee of the Association.

"The Council recommends that the autumnal meeting be held at Stowmarket, on Thursday, October 2nd; and that the annual meeting be held in 1885 at Ipswich, and that Dr. Elliston be President-elect."

Representatives in the Council of the Association.—On the motion of Mr. JEAFFRESON, seconded by Dr. CHEVALLIER, Dr. Elliston (Ipswich) and Mr. T. W. Crosse (Norwich) were elected representatives of the Branch upon the Council of the Association for 1884-85.

Branch Council.—The following were elected, in addition to *ex officio* members: F. Bateman, M.D.; E. Barnes, M.D.; E. Crickmay, Esq.; G. E. Jeaffreson, Esq.; G. C. Edwards, Esq.; H. S. Robinson, Esq.; R. V. Gorham, Esq.

Luncheon.—The members—upwards of eighty—were entertained at an elegant luncheon by the President.

President's Address.—This was listened to with marked attention, and frequently applauded; it inculcated a high moral standard in our relations with the public and in consultation with each other.

Specimens of a very interesting character were exhibited by Messrs. H. Lower, F. Taylor, the President, and Mr. Knowsley Thornton.

Papers.—The following were read.

1. George Johnson, M.D., F.R.S.: Picric Acid as a Test for Albumen and for Sugar in Urine.
2. Professor G. M. Humphry, M.D., F.R.S.: Inquiry as to Aged Persons.
3. J. Knowsley Thornton, M.B., M.C.: On the Surgical Treatment of Renal Calculi, with Notes on two Cases of Nephro-lithotomy.
4. H. R. L. Veale, M.D., Colchester: On the Treatment of Pleuritic Effusions.

Collective Investigation of Disease.—The Honorary Secretaries, Dr. Elliston and Mr. Burton, reported that thirty-two cards had been received in the year, against thirty-four in the previous year.

The Earthquake.—Through the kindness of the President, a visit was paid by a large number of members to the scenes of the recent earthquake, who were surprised at the disastrous effects of the shock. The damage to property is estimated at upwards of £100,000. Mr. Hugh Green, surgeon, of West Mersea, is one of the heaviest sufferers.

Dinner.—About forty members dined at the Cups Hotel, at 7 P.M.

Conversazione.—A very agreeable day was ended by a *conversazione* at the Castle, at 9 P.M., to which the members were invited by the President and members of the Colchester Medical Society.

SPECIAL CORRESPONDENCE.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

The Abattoir Question: the Medical Officer of Health's Report.—Recent Reports on Unsanitary Liverpool.—The Professorship of Medicine in the University College.—The new Society for the Prevention of Cruelty to Children. The new Lying-in Hospital.—Horse-Ambulances.

AT a meeting of the Health Committee of the City Council on March 6th, it was decided that a return be prepared by the medical officer of health, showing the death-rate from all causes within a radius of 500 yards of the immediate vicinity of the Liverpool abattoir for ten years past, as compared with a corresponding area in the several other wards of the city. Dr. Stopford Taylor has completed this investigation, and the return was brought before the Council on May 8th. It was proposed at this meeting, but the motion was negatived, that the report be referred back to the medical officer for amendment, on the ground that in it no comparison of the death-rate with corresponding areas in other parts of the city was made, so that there was no means of drawing a comparison. Dr. Taylor, however, affirms in his report that he was unable to define any areas in other wards corresponding with the one around the abattoir. Still, the results of the investigation are very striking. For each of the past ten years, the death-rate per 1,000 within the abattoir area has been greatly in excess of that for the two wards in which the slaughter-houses are situated, and also that for the city as a whole. For instance, in 1874, the death-rate per 1,000 in the abattoir district was 40.5; in Rodney and Abercromby wards it was 24.7; and in the city taken as a whole, 31.9. For 1883 the figures are 32.2, 21.4, and 26.6 respectively. And the average for ten years runs thus: 34, 21.7, and 27.6. The position taken up by the local medical men in this matter of the removal of the abattoirs from the heart of the city does not, at all events in the opinion of common-sense persons, need strengthening. But the figures quoted are remarkable, and strongly confirmatory of the statements made by members of the deputation of medical men that waited upon the mayor some weeks ago.

Some other reports recently issued have been exciting much interest. Last autumn, the medical officer of health and the city engineer were instructed by the council to furnish reports showing, first, the causes of the prevalence of zymotic disease in Liverpool; and, secondly, the steps which have been taken to improve the sanitary condition of the infected districts. Dr. Taylor's report contains many interesting tables, and also a valuable mortality-map of fever for 1883. Liverpool has been the home of fever for the last twenty years, and in this map one can see at a glance that there are two fever-nests—a large area in the north end of the city, and a much smaller district in the south. The former is inhabited by the lowest class Irish, the latter is frequented by foreign sailors. No new or important facts are brought out in the report, which exclusively deals with the causes of disease. The city engineer, Mr. Dunscombe, has devoted himself in his report to a very searching examination, based on personal observation and inspection, of the remedial work undertaken in the past. It is to be hoped that this report, which almost from beginning to end is a bold indictment of the action of the health authorities, may be productive of good.

The retirement of Dr. Waters from the professorship of medicine in the medical faculty of University College was announced some time ago. Dr. Glynn, one of the physicians to the infirmary, is to be his successor.

Visitors to this city have frequently remarked the numbers of dirty, ragged, half starved-looking children in our streets; and hospital and dispensary doctors have often borne witness to the brutal treatment to which these little ones are subjected, on taking home to drunken parents their scanty earnings as sellers of matches or evening papers. It has been and is now, though less frequently, no uncommon thing to see, in our best residential streets, almost naked children, some of them mere infants, crouching on doorsteps in the rain, afraid to return home and face their parents, because they have not sold their stock of papers. We have many admirable societies by means of which exertions have been made for years to aid our neglected "gutter-children," such as "The Children's Friend Society," "The Home for Destitute Boys," and Mrs. Birt's well known institutions, by the aid of which boys and girls are sent to Canada, where suitable employment and comfortable homes are found for them. But it has been generally felt that some special attempt must be made to deal with the innumerable instances of cruel treatment by parents and others. This question was agitated and widely discussed, medical men adding their valuable testimony to show the urgent need for such an enterprise. Eventually, at a town's meeting in April last year, the "Liverpool Society for the Prevention of Cruelty to Children" was formed. In October a shelter was opened in Nile Street, and active operations commenced. The first annual report of the society has lately been issued. The fact that, in spite of the short time the society has been at work, 211 complaints of cruelty, involving the welfare of no fewer than 378 children, have been dealt with, is sufficient proof of the pressing necessity there was for some effort of this kind being made. Mr. Manifold, consulting surgeon to the Northern Hospital, is the medical officer.

Last year, the Ladies' Charity and Lying-in Hospital in Myrtle Street was sold to the Committee of the Cancer and Skin Hospital, who had long been anxious to obtain more suitable premises than the miserable building in Islington, where they had been located since the foundation of the institution in 1862 by Dr. Smyth. Temporary premises in Daulby Street were taken for the Lying-in Hospital, it having been decided to erect a new building more in accordance with modern views of hospital-requirements. The new hospital is being built in close vicinity to the University College, the Brownlow Hill Workhouse, and the Royal Infirmary. Apparently, there are to be three separate blocks.

It has been proposed that the Watch Committee of the Council should provide horse-ambulances; but the Committee are of opinion that, at present, there are facilities sufficient for the exigencies of the city in this respect. There is a horse-ambulance at both the northern and the southern hospitals; and we shall, doubtless, have a third when the new infirmary is built. There are nineteen police-stations, at each of which a hand-ambulance is stationed. But those who have seen the admirable way in which the horse-ambulance system is carried out in the United States must feel confident that the introduction of horse-ambulances into Liverpool, on the New York plan, would be a boon to the community, and would result in a great saving of life. It is true that good work is done with the ordinary hand-ambulance, more particularly now that the police are instructed in the art of rendering "first aid" to the injured. A large number of the constables have already obtained the certificates of the St. John Ambulance Association, and the work of instruction is being actively carried on. The men display the greatest interest in the subject, and are most of them apt pupils. Almost every day they do good service in attending to injured persons, or those who are attacked in the streets by sudden illness, until the ambulance arrives on the scene. The horse-ambulances are continually of the greatest use; but there is necessarily some delay in bringing up the hand-ambulances, although they are made as light as is consistent with the required strength.

MANCHESTER.

Hospital Sunday and Saturday.—Dr. Angus Smith.

THE Hospital Saturday and Sunday Committee have resolved to divide the sum of £7,200 *pro rata* among the following medical charities: Royal Infirmary, £3,064 5s. 6d.; Children's Hospital, £870 9s.; St. Mary's Hospital, £507 18s.; Hospital for Incurables, £490 17s. 6d.; Salford Hospital, £417 18s.; Clinical Hospital, £398 8s.; Royal Eye Hospital, £376 8s. 6d.; Ardwick and Ancoats Dispensary, £234 18s.; Sick-poor and Private Nursing Institution, £193 17s. 6d.; Southern Hospital, £168 15s.; Lock and Skin Hospital, £135 12s.; Hulme Dispensary, £104 2s.; Chorlton-upon-Medlock Dispensary, £80 2s.; Throat and Consumption Hospital, £61 4s.; Ear Institution, £31 4s.; Homœopathic Institution, £22 7s.; Homœopathic Dispensary, £20. The amount altogether paid is £7,242 1s., against £7,006 13s. 4d. last year. Several collections will be made during the summer in places of business.

Manchester has lost a distinguished citizen, and England a well known chemist, by the death of Dr. Angus Smith. His special inquiries into the quality of the air and water of towns first brought him into repute, and led to his appointment as inspector-general of alkali-works in the United Kingdom. He was elected F.R.S. in 1857. He was the author of a *Life of Dalton*, *Chemical Climatology*, and various memoirs on the arts and sciences.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Death from Hæmorrhage after Tracheotomy.—The late Professor Wurtz.

M. D'HEILLY, at a recent meeting of the Société Médicale des Hôpitaux, showed pathological specimens removed from a child which had died after tracheotomy for diphtheria. The cannula had been kept permanently in position only a short time; a few days before death occurred, it was removed during several hours in the day. Towards the twelfth day, violent hæmorrhage occurred, both tracheal and buccal, and death quickly followed. At the necropsy, it was found that the anterior wall of the trachea was ulcerated, and that the ulceration extended to the innominate artery. The seat of ulceration corresponded to the position of the cannula. M. d'Heilly therefore considers that rubbing caused by the sharp edge of the cannula produced ulceration. He has found on record only two similar cases; these are reported in *Guy's Hospital Reports*.

The sudden death of Professor Wurtz, senator, Member of the Institute, and Grand Officer of the Legion of Honour, has caused widely spread and deeply felt sorrow. If other eminent men who have attained their position by their own personal talents and individual exertions have made as many friends during their career of labour and success, not many have made so few enemies. Wurtz, like Davaine, was loved and esteemed by all. The sympathy and condolence expressed privately and publicly have the true ring of sincerity. The well known set phrases, which say much and mean little, are useless to express the grief felt for the loss of such an eminent and amiable scientist. His funeral took place on May 15th. All lectures at the Faculties of Science and of Medicine were suspended, in order to enable the professors and pupils to pay to their honoured friend and professor the last sad tribute of respect. At half-past eleven, a military detachment took up its position before the dwelling house of the late M. Wurtz, in order to render military honours to the dead. The Government was represented by MM. Jules Ferry, Cochery, Fallières, and Tirard. M. Pelletan (Vice-President), and General [illegible], represented the Senate; MM. Brisson and Spuller the Chamber of Deputies. In addition to numerous wreaths sent as a homage of love and respect, there were a considerable number, with inscriptions, from his pupils. Among these we observed "A Wurtz, ses élèves," "A Wurtz, ses étudiants Roumains," "A Wurtz, l'Association Française pour l'Avancement des Sciences." The pall-bearers were M. Léon Say (representing the Senate), General Faidherbe representing the Legion of Honour, M. Bouley representing the Academy of Sciences, M. Alphonse Guérin for the Academy of Medicine, M. Béclard representing the Faculty of Medicine, and M. Caventou, a friend of the deceased. The funeral procession was headed by groups of M. Wurtz's pupils carrying magnificent wreaths of natural flowers. [illegible] a wreath of [illegible] bearing the inscription "A. Professeur Wurtz, [illegible]." [illegible] Funeral orations were pronounced by the [illegible], M. Brouardel in the name of the Faculty of Medicine, by M. Friedel for the Academy of Sciences, and by M. Fremy for the Faculty of Sciences of Paris.

CORRESPONDENCE.

THE FORTHCOMING EXTRAORDINARY GENERAL MEETING.

SIR,—When I signed the requisition to the Council asking them to convene an extraordinary general meeting to discuss the Medical Bill, etc., it did not occur to me that they would select a provincial town for such meeting. In the exercise of their privileges and discretion, they have selected Birmingham. As far as I am concerned, they might as well have arranged to hold the meeting in the Shetland Islands. Although desirous of promoting in every possible way the interests, not only of the members of the Association, but of the profession at large, I do not feel called upon to make a pilgrimage to Birmingham to discuss questions of such importance to the members of the Association, as those referred to in the requisition, at a meeting which it is probable will be anything but representative.

As my name heads the list of those who left the requisition at the offices of the Association, my absence from the meeting may give rise to comment, unless you oblige me by complying with the request that you publish this letter in next Saturday's JOURNAL.—I remain, sir, yours faithfully, GEORGE BROWN.

6, Gibson Square, N., May 17th, 1884.

⁂ In reference to Mr. Brown's observations, we are officially informed that in summoning this meeting at Birmingham—a most centrally situated provincial city—the precedents of former occasions have been followed, and the ordinary rule and custom of the Association has in no way been departed from. Although, in Mr. Brown's view, Birmingham and Shetland may be roughly convertible terms, so far as their accessibility is concerned, that view is hardly likely to be very general in the Association; and it is by no means likely to be generally conceded that a small body of gentlemen, resident in London, should at pleasure be able to summon the whole mass of members specially to meet them to discuss there, as being most convenient to themselves, their grievances, real or imaginary. The central situation of Birmingham, and its convenience to the great body of members of the Association, have always recommended it for meetings of this kind; and it is not clear why our correspondent should expect the great body of members to come to London to hear repetition grievances of himself and his friends, when he, although he thinks them so urgent as to take a prominent part in summoning a special meeting for the purpose, is unwilling to accept for himself the inconveniences of a journey which he desires to impose upon so many others. It is a special feature of the course which the requisitionists have taken, in summoning such a meeting, that it necessarily imposes a considerable expenditure, both of time and money, upon the general body of members, who otherwise incur the risk of seeing the general affairs of the Association disposed of summarily, out of the regular course, by the conveners of such a meeting. The annual general meetings afford the normal and regular opportunity of discussing the proceedings of the Council and the Medical Reform Committee, who make their reports to that meeting, and offer themselves at that meeting for praise or blame, for re-election or non-election. The Medical Reform Committee submitted their policy fully to the last general meeting, and were then unanimously reappointed, with instructions to continue their labours on the same lines. The Bill is practically the same Bill. Little sympathy, we apprehend, will be felt with those who take the unusual course adopted in this instance, and then complain that a portion of the inconvenience which they inflict on others is found to fall upon themselves.

AN APPEAL.

SIR,—Will you be so good as to open the columns of the JOURNAL to an appeal for assistance on behalf of Mr. D. Kent Jones, of Deri, South Wales. For eighteen years, Mr. Kent Jones was the Honorary Secretary of the North Wales Branch, and, under his active administration, the Branch flourished in numbers, work, and influence. The following pathetic statement of his case—especially as closing a notable career in life—will, it is hoped, meet with a sympathetic response amongst associates.

"I held the appointment of district-surgeon at Fochrhiw in South Wales under the Dowlais Iron Company, of which P. R. Cresswell, Esq., is the chief surgeon, from October 1st, 1874. On the morning of January 24th, 1883, I had occasion to go to Dowlais to see Mr. Cresswell; and, on returning to Cwmbargoed Station, I proceeded to walk home, a distance of about a mile, and, in doing so, I was obliged to cross the branch mineral railway belonging to the Rhymney Railway Company. I was at that moment knocked down, without the slightest warning, by a train of empty coal-trucks, which passed over my right leg, smashing it to pieces. Amputation was performed through the knee-joint by Mr. Cresswell of Dowlais. My recovery was slow and tedious, the wound did not dry up until the end of last November, and there is still a scab over it. I left Fochrhiw last July, as I was unable to resume work there, for this little colliery-village of Deri, where I had, about a year and a half before the accident, established a small private branch-practice. Here I am assisted by my son, who has not finished his course. We do not earn more than £100 a year, out of which we have to pay rent, coals, etc., leaving very little for providing drugs, and the maintenance of myself, wife, son, and daughter. My younger son, aged 21, is an assistant, also unqualified, with a surgeon in Lincolnshire. Owing to great pressure, I was obliged, the latter end of last January, to seek pecuniary assistance from the British Medical Benevolent Fund, and obtained a grant of £18, to be paid in monthly instalments of thirty shillings.

"Before my accident, I was in receipt of between £350 and £400 *per annum* from all sources. I feel my present altered circumstances very keenly, more particularly as I am not in a position to institute proceedings against the Rhymney Railway Company for compensation. I am in my sixty-sixth year of age."

Donations entrusted to me will be duly acknowledged.—I am, sir, your obedient servant, J. LLOYD-ROBERTS,

Vale Street, Denbigh. Hon. Sec. N. Wales Branch.

Donations have been promised from the following: Dr. Eyton-Jones (Wrexham), a former President and Secretary; Dr. Edward Williams (Wrexham), a former President and Secretary; Dr. A. E. Turnour (Denbigh), a former President, £2; A Friend, per Dr. A. E. Turnour, £2; Dr. J. R. Hughes (Denbigh), a former President; Mr. Lloyd-Roberts (Denbigh), Honorary Secretary.

HOW TO PREPARE A 1 IN 1,000 SOLUTION OF CORROSIVE SUBLIMATE.

SIR,—In your issue of February 23rd, at page 365, Sir Joseph Lister is made to say that a solution of the above strength may be made by adding one drachm of a solution of corrosive sublimate (1 in 1½ by weight) to one and a half pints of water. But one drachm of the glycerine-solution would contain 40 grains of the sublimate, while one and a half pints of water will weigh 13,125 grains; therefore the proportion will be, not 1 in 1,000, but 1 in 328.1. Is he correctly reported?—I am, sir, yours faitfully, ENQUIRER.

SIR,—I gladly avail myself of the opportunity afforded by your correspondent's letter for correcting the error to which he refers. One drachm by weight of a solution of one part corrosive sublimate in one and a half part glycerine contains, of course, two-fifths of its weight, or 24 grains, of the sublimate. This multiplied by 1,000 (the proportion of water required) gives 24,000 grains, which is very nearly three pints; not one pint and a half, as erroneously stated in my remarks as reported. It is, however, much more convenient to use fluid measure than weight; and, as is pointed out by Martindale in the third edition of his *Extra-Pharmacopœia*, a fluid drachm of the glycerine-solution referred to requires four pints of water to produce the 1 to 1,000 solution.—I am, sir, yours, etc., JOSEPH LISTER.

May 21st, 1884.

INFECTIOUS DISEASES AND THE UNITED STATES.

SIR,—Infectious disease is the only foreign enemy which threatens, and may one day invade and decimate, the United States.

The danger is not visionary. Small-pox, and other zymotic fevers, are practically endemic in many of the larger European cities, but, being usually confined within narrow bounds, seldom excite public attention; yet there are times, and London seems in danger at this moment, when the pestilence stalks forth from the slums to scatter disfiguration and death among the wealthiest and the highest.

Why may it not do so here? New York sanitation is notoriously defective. Lesser outbreaks are of frequent occurrence throughout the country; and since the conditions, atmospheric or otherwise, which occasionally break down all limitations of infection, are more or less undetermined, who can question the possibility of our finding ourselves face to face with the national disaster of an uncontrollable epidemic?

This much is certain: the present defective sanitary administration on ocean steamships offers an easy ingress to infection, which existing quarantine arrangements are powerless to oppose.

When, as not unfrequently occurs, zymotic fevers appear on shipboard during the transatlantic passage, it is evident that many of the persons in such necessarily close proximity to the sufferer are likely to contract the disease, unless efficient isolation and disinfection are immediately enforced. It is equally certain that, when the period of incubation is unfulfilled at the time of disembarcation, neither will these persons have been any inconvenience to the ship officials while on board, nor can the most careful examination at quarantine distinguish them from the healthy. They are, therefore, permitted to proceed to their various destinations, there to become centres of possibly indefinite dissemination.

That this actually happens, and frequently, is proved by the fact that almost every appearance of zymotic fever, in any part of the United States, is—as the present outbreak of small-pox at Easton, Pennsylvania—directly traceable to the recent advent of immigrants.

The reasons are not far to seek. The medical officers of steamers are appointed by the owners, without due regard to their fitness for the post, and are dependent for the tenure of their office upon persons whose first, if not only care, is to make the voyage with as little expense and inconvenience as possible; they are not allowed a particle of independent administrative authority in even the most purely sanitary matters, nor are they furnished with the means of combatting disease; and, lastly, many of the vessels employed are so constructed that the isolation of infected persons is absolutely impossible.

A recent example is, from many points of view, interesting. A steamer, belonging to one of the reputedly safest transatlantic lines, arrived at this port some months ago, having on board a saloon-passenger suffering from small-pox; and, shortly after arrival, another case was discovered among the steerage passengers. The vessel was granted *pratique*, discharged her passengers, returned to England, and in due course arrived here again, with another consignment of passengers, and another case of small-pox; this time a steward who had served on the ship during the previous voyage, but who only developed symptoms of the disease thirty-two days after the removal of the former cases. There are persons, and in authority, satisfied with the assumption that cases of infectious disease following thus closely one upon another are unfortunate coincidences, for which no one may be held responsible. In the public interest, more careful inquiry would seem to be desirable. The interval of time precludes the possibility of this steward having been directly infected by either of the previous cases, or during his former stay in this city. It seems improbable that he contracted the disease from an independent source at Liverpool, since small-pox was not prevalent there. Remaining, is the choice of two equally unpalatable solutions; either the steamer was inefficiently disinfected after the removal of the first cases, and variolar germs surviving not less than sixteen days after the supposed disinfection (?) infected this man during the latter days of the eastward passage; or there were a succession of small-pox cases on board this vessel which were not recognised, or were intentionally concealed from the health-officer of this port and from the public.

A visit to the ship strongly confirmed the last supposition. The hospitals for infectious disease were situated, not upon the upper deck, but between the decks, in the forward part of the vessel, opening off, and ventilated exclusively into a covered-in passage, running through the first-class saloon the entire length of the vessel. In fact, if the builders had set themselves the task of constructing and locating these hospitals so as to disseminate throughout the inhabited parts of the steamer every germ of infection coming from within, such an end could scarce have been more skilfully attained. And this is not an isolated instance of the total disregard of sanitary law upon ocean steamships.

Within five months, dating from January 11th, 1882, no fewer than twenty vessels infected with small-pox entered the port of New York. Upon four only was even partial quarantine enforced. The remaining sixteen were granted *pratique* as soon as the passengers and crews had been vaccinated. No doubt it was better to vaccinate than do nothing; but, under the circumstances, vaccination cannot be regarded as affording protection, since it is admitted that it does not even modify small-pox previously contracted, unless it has been so timed that the maturation of the vaccine-vessicles shall precede the period of variolous invasion.

The order by which the surgeons of transatlantic steamers are required to vaccinate the steerage-passengers within twenty-four hours after starting is practically ignored, seldom complied with during the period specified, and, when attempted, with what results may be judged from the report of the health-officer. One surgeon reported 200 vaccinations, of which not one proved to be successful, another 250 with but two successes, and so on. But even if this order was carried out to the letter, it would be at best but a choice of evils, and I think the wrong one. That the medical officer of a crowded steamship should neglect other more pressing duties to vaccinate steerage-passengers during the first day, or even days, of the voyage, would be manifestly inexpedient for the general welfare. On other grounds, it would be both cruel and unscientific—cruel, as disturbing unnecessarily persons already miserable, many of whom would be in the throes of sea-sickness, and might claim at least to be let alone; unscientific, and calculated to discredit this most valuable of prophylactics, as challenging an epidemic of erysipelas under conditions combining to favour its development and spread.

Thus is quarantine administered in the United States, and thus is the country sown broadcast with infection which will assuredly one day take root and prosper.

Is it wise to wait until the panic of that day shall call forth extreme precaution in measures repressive of convenient travel and healthful immigration? Surely it were better, since the Board of Trade neglects its manifest duty, that Congress should now, by moderate legislation, guard the country against pestilence, and insure the protection of intending citizens during the ocean transit.

These ends will be attained by (1) requiring all persons coming to the United States to show evidence of having been vaccinated not less than fourteen days previous to embarcation; (2) by insisting that ocean steamships shall provide proper hospital accommodation, and necessary assistance for the care of the sick; (3) by establishing a competent service of marine medical officers who, being independent of interested influences, and responsible to Government alone for the discharge of their duties, and intelligent co-operation with the quarantine authorities, will be a guarantee that the laws should be observed throughout the voyage.—I am, sir, your obedient servant,

J. A. IRWIN, M.A.Cantab., M.D.Dub., etc., late Hon. Physician to the Manchester Southern Hospital for Women and Children.

363, Fifth Avenue, New York.

THE COUNCIL OF THE COLLEGE OF SURGEONS AND REFORM.

SIR,—It is quite impossible that the controversy between the Council and the great body of the Fellows of the Royal College of Surgeons can remain where it is. As the mover of the resolutions which were carried at the late meeting, and which have since been so ignominiously ignored by the Council, I feel bound to take further action. I propose, therefore, at once to place myself in communication with the Fellows, in order that some united action may be decided upon.—Yours faithfully, PAUL SWAIN, F.R.C.S.

17, The Crescent, Plymouth, May 17th, 1884.

INDIA AND THE COLONIES.

WEST AFRICA.

THE WEST AFRICAN COLONIAL SERVICE.—Is this service a sufficiently attractive one in point of present emolument and future pension to attract medical men whose fortunes are not desperate? Are the prospects such as in any adequate degree to counterbalance the notoriously execrable and fatal climate of the West Coast of Africa? What are the inducements offered? The highest rate of pay to which a colonial surgeon, in the worst climate in the world, can hope to attain, is £500 *per annum*; and, before this salary is reached, six years of dreary service must be spent in the dismal region known as the "white man's grave." This is a rate of remuneration below that of all officials in other departments, even of the junior officers in the administrative ranks of the colonial service. As regards pension regulations, all branches of the West African colonial service seem to be on much the same footing. We have often had occasion to comment unfavourably on the deceptive wording of the official memorandum placed in the hands of candidates for Her Majesty's Indian Medical Service, and we take some credit to this JOURNAL for having shamed the authorities of the India Office into withdrawing that document, which deceived so many, and substituting another which does not speak with a double meaning. A trap, similarly baited, seems set for applicants for colonial employment, and many have been caught in it. The announcement of which complaint is made appears to be to the following effect (we quote from a well informed correspondent, himself a sufferer): 1. Officers serving on the West Coast of Africa will be eligible for pensions after a minimum period of service of seven years instead of ten years, inclusive of leave. 2. At the [illegible] officers can claim pensions, or can be compulsorily retired. This [illegible], it appears, has had the effect of tempting men to risk health and life in that deadly climate. It is not stated that a pension at the end of seven years is only given when the applicant's health is so shattered that he is incapable of service there, or elsewhere; but, in practice, this is the meaning of the cunningly worded promise. What the chances are of a man in such a climate surviving to enjoy a pension at the age of 55, is not a difficult calculation. In point of fact, we believe that the Colonial Office has been challenged to name three of its white officials who have enjoyed, or are enjoying, a pension on the fifty-five years of age engagement. The pension-rules of the West of Africa Colonial Office are regarded by those whom they concern as framed with the express intention of being mere traps for the unwary. The demands of colonial servants in that pestiferous climate are modest enough, and are thus formulated. 1. They ask that the Government will make it possible to obtain a pension after a reasonable period of service in these trying climates, and that the possession of irretrievably injured health shall not be a *sine quâ non* thereto. 2. They ask that the age-qualification, which is a cruel mockery, be abolished, and that a fair pension be made a certainty after ten, twelve, or fifteen years' service. The Colonial Office may be well assured that if these modest and just demands are granted, the climate will still sufficiently protect the colonial treasuries against the expenses of an extravagant pension-list.

We cannot promise colonial surgeons who have committed themselves to service in the West Coast of Africa that the Colonial Office will be induced by any representations of ours to do them tardy justice; but the voice of this JOURNAL is far-reaching, and we can and do raise a note of warning to intending candidates for such employment. We can do something to "stop the supplies;" and the Colonial Office should be made aware that other hard taskmasters have been starved into compliance with the claims of right and justice.

MEDICO-LEGAL AND MEDICO-ETHICAL.

HOUSE-DRAINAGE.

THE question of the liability of a landlord for defective drainage to a dwelling-house has recently been occupying the attention of Lord Coleridge and a special jury. As the case is not yet concluded, we abstain from offering any opinion upon the merits; but, leaving them aside, the case appears of public interest on other grounds. The undisputed facts appear to be that, in October, 1880, the plaintiff, Mr. Vassie, became tenant of a new house just erected by the defendant, Mr. Baker, in Sterndale Road, Hammersmith; and that the defendant then told the plaintiff that "the drainage was in perfect condition," that "all the sanitary arrangements were of the most approved character," and that "it was impossible to have a house with better drainage." Mr. Vassie occupied the house up to May, 1883, when his children became ill; and on investigation it was found that sewage-matter had escaped from the drains and saturated the soil under the house, so as, in the opinion of several medical men, to render the house uninhabitable. Mr. Vassie left the house, and brought the action to recover damages caused to himself and his family by reason of the unhealthy condition of the house. The defendant denied that the drains were in any way defective in construction, and attributed the escape of sewage to a breakage for which he was not responsible. Numerous witnesses were called on both sides, and the verdict of the jury as to the cause of the escape, which admittedly existed, has yet to be given.

In the course of the case, it was stated that the drains were laid without any supervision from the local authority or district-surveyor, although a foreman from the local board of works was present at the time when the drains were connected with the sewer. At that time, however, the rest of the drains were covered in, and the foreman could not have seen that they were properly constructed and laid, even if he had been inclined to take the trouble. The Metropolitan Acts provide that the local authority shall not allow houses to be erected except in accordance with plans as to various matters, one of which is drainage. In this case, plans had presumably been deposited as required; but, according to the evidence, no effective superintendence was given by the district-surveyor during the progress of the works. We do not know whether this statement is accurate, or whether the official in question did everything that it was possible for him to do; but we fear that, in many cases, small houses are run up in London suburbs and elsewhere without sufficient care being taken to see that the requirements prescribed by law or by the by-laws of local authorities are properly complied with. In the matter of drainage, even more than in the actual building of a house, these requirements, which are not generally too strict, ought to be carried out. Landlords are in the habit of pointing to deposited plans and to the requirements of local authorities, to satisfy intending tenants that sanitary matters have been properly attended to. The tenant can get his own architect or surveyor to advise as to the general soundness of a building, but without digging them up it is impossible thoroughly to examine drains, and he must, to a considerable extent, judge of them from what he is told. When official surveyors omit to see the way in which drains are laid and jointed, while they have the opportunity of doing so before they are covered in, they incur a very serious moral responsibility. As at whist, the player who allows his partner to revoke is said to be as much to blame as the partner himself; so, in matters like this, the surveyor who passes bad workmanship is as guilty as the builder who scamps his work. In this country, business is conducted on the theory that men in an official position do the work for which they are appointed; and the presumption is generally justified by experience. Where we know that it is the duty of a district-surveyor to see that certain plans have been followed and certain conditions observed, we believe that he has done so; and we take it for granted, until the contrary is shown, that houses newly erected in a given district have been built according to the rules there in force. If evidence similar to that given in the case of Vassie *v.* Baker be often forthcoming, confidence in local authorities will be shaken, and the public will demand a further security against unfit houses being built or inhabited. At present, in case of new houses, we trust in great measure to the local authorities, who can forbid a house being inhabited until it is properly constructed; the owner is under no obligation to his tenant, except on the ground of contract or of misrepresentation. If the powers and responsibility of the local authorities be found to be inefficient, and houses be constructed so as to be poison-traps, without the district-surveyors detecting the fact, this might have to be altered. It would not, however, be easy to impose a general duty of looking after the sanitary conditions of dwelling-houses on any one except the local authorities and their officers; and we must hope that the doubts as to their efficiency, which are called forth by the evidence recently given, will remain the exception and not the rule, and that new houses, built under the sanction of local authorities, may generally be trusted to be fairly well drained.

AN ADVERTISEMENT.

SIR,—The following advertisement was cut out of the *Belfast Evening Telegraph* of the 12th instant. "Medical Notice. Dr. Smith's Registered Cephalotribes, beautifully finished and nickel-plated, can be obtained at the Carlisle Circus Apothecaries' Hall, Belfast." The medical profession of this town naturally look with suspicion upon advertisements such as this, which show prominently forth a local doctor's name without any other reasonable object. Who among the public wants to purchase cephalotribes? And when a medical practitioner requires one (which, I am happy to say, is extremely rare) he knows where to get it. I am, etc., SIGMA.

*** To advertise a cephalotribe, in a newspaper, attaching a medical man's name thereto, is not warranted by either propriety or necessity.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE SALOP AND MONTGOMERY ASYLUM.

IN the annual report of this asylum, which has just been issued, the Committee of Visitors express their high appreciation of the services of Dr. A. Strange, the medical superintendent. The asylum contained at the close of last year 673 patients; the recoveries during 1883 were at the rate of 28.1 per cent. of the admissions, and the deaths at the rate of 8.2 per cent. of the total number under treatment. Dr. Strange in his report refers to a remarkable case of suicide which occurred last year. A female patient, who was convalescent and on the point of discharge, when returning from chapel one evening, drowned herself in the ornamental water in front of the asylum, simply because she lacked courage to face the world again. In commenting on this case, the Commissioners in Lunacy hint that the ornamental water should be abolished; but the wisdom of this recommendation may well be called in question. If the water be really in such a position as to invite suicidal attempts, and to be a constant source of anxiety to the officers, then no doubt, it should be drained away; but if not, why should that which may have been a source of pleasure to thousands be removed because of one misadventure? It is easy to understand that a lake or pond, if suitably constructed and placed in the grounds of an asylum, may, as in a public park, afford much and varied gratification, and it is not difficult to perceive that if all possible sources of danger are to be kept beyond the reach of suicidal patients, they will have to be placed in strait-waistcoats and confined in padded rooms. As regards the grounds of an asylum, all possibly poisonous shrubs or trees, such as yews, laburnums, privets, would have to be cleared away, because the suicidal patients might eat their leaves or fruit. All gravel and peebles would have to be raked up because the suicidal patients might swallow them, all stone walls would have to be pulled down because the suicidal patients might beat their heads against them; and so on until nothing but pure space was left. The true securities against suicide are classification and human vigilance. Equally as regards fire and water, the Commissioners seem to be a little behindhand with their wisdom. This ornamental water at Shrewsbury has, we presume, existed for dozens of years. Why should they have remained unconscious of the dangers which attend it until a patient drowned herself in it?

JOINT COUNTIES ASYLUM, CARMARTHEN.

Dr. Hearder has charge of an asylum where the persons under care during the year 1883 amounted to the unlucky number of 666. Notwithstanding this, however, the institution appears to be in a creditable state, although overcrowded. The tables are well prepared. We are particularly struck with one passage in the report of the commissioners, having reference to the employment of restraint. It shows a marked departure from their usual tone of speaking on this vexed question: "The employment of seclusion or the use of mechanical restraint is not recorded in any case, but we saw two patients in whose case mechanical restraint was only avoided by manual force: one woman was kept in bed by a nurse sitting in the bed, having the patient's head between her knees, and another nurse holding her arms down to her side; whilst another woman was struggling with one nurse who held her arms for a time, but she ultimately broke away, and then was kept down by two nurses holding her arms on each side of a bed." Now what do the very cautious officials of Whitehall Place say? Do they admire the avoidance of the waistcoat? This is how they write: "We give no opinion as to the advisability of mechanical restraint in these cases, but we wish to state that cases must often arise when restraint by means of the jacket would be proper, as tending not only less to irritate the patient, but also as rendering bodily injury to the patient more unlikely." Thus, while nominally declining to give an opinion when no doubt the superintendent would have been very thankful for advice, the Commissioners have in one sentence conceded the whole question at issue between Dr. Conolly and those who dissent from him.

CONVALESCENT HOMES.

Mr. W. M. Wilkinson, Vice-Chairman of the Convalescent Committee of the Charity Organisation Society, writes: You would do a great service to the poor of London by allowing your readers to know the work which is being done by the Convalescent Committee of the Charity Organisation Society. This is, perhaps, the best and truest charity which the public can be asked to support. The committee has tabulated a list of about two hundred and fifty homes in different parts of the country, with many of which it is in connection; and instead of making use of the letter system, it prefers to pay the full cost of each case. By the kindness of friends who subscribe £25 for a free bed, the committee has now twenty-eight beds of its own, suitable for all the classes of convalescents. Averaging three weeks for each visit, one bed accommodates seventeen patients in the year. Owing to the mildness of the winter, however, the committee has been sending about one hundred cases per month, which is more than it sent during the busiest part of last summer and autumn, at a cost of twenty-five shillings each. By the co-operation of the committee with the homes, hardly one of six hundred cases has had to wait more than a week for admission. A much larger number is now [illegible] the committee, and it will greatly increase as the season advances. [illegible] the committee invites the physicians at the hospitals to send it suitable cases from among the out-patients. The committee has [illegible] own funds, and its only limit of usefulness is the amount of its contributions. Mr. C. S. Loch, the secretary of the Charity Organisation Society, will acknowledge any that may be kindly made, from free beds at £25 to any smaller sum.

Queen's College, Belfast.—The following have been awarded prizes in the Faculty of Medicine: *Anatomy and Physiology.*—First year: D. C. Smiley, W. M. Kellen, W. J. Cameron, John Campbell, R. C. McCullagh. *Practical Anatomy.*—Third and fourth year: W. B. McQuitty, N. J. McDonnell, James [illegible], Samuel Moore, John Knox, J. W. Oliver. Second year: John Campbell, W. C. [illegible]. First year: Robert Nelson, D. C. Smiley, [illegible] Moore. *Medicine.*—Second year: [illegible] Marwood, N. J. McDonnell. Third year: John Menary, A. S. Thompson, J. K. Close. *Surgery.*—Samuel Moore, N. J. McDonnell, J. K. Close, John Menary, A. S. Thompson, Andrew Buchanan. *Materia Medica.*—R. J. Ferguson, W. J. McDole, James McMordie. *Practical Chemistry.*—W. J. McDole, C. L. Tate.

MILITARY AND NAVAL MEDICAL SERVICES.

THE ORGANISATION OF FIELD-HOSPITALS.

Sir,—We all owe a debt of gratitude to Deputy Surgeon-General Veale for his interesting and suggestive paper on field-hospitals. It is only by officers of his standing and position giving us their opinions that juniors can learn what is needed.

1. *Detail of Medical Officers.*—Dr. Veale accepts the existing seven officers of a field-hospital, and many will agree with him; but in telling off their duties, he has not made one of the junior surgeons act as adjutant in addition to his duty as sanitary supervisor. It is most urgent that there should be some officer working in complete unison with the chief medical officer, and acting as his secretary, adjutant, sanitary supervisor, and hospital registrar. If you do not do this, correspondence presses unduly on the chief doctor, and adjutants of regiments have no one to address. I think it absolutely essential to have such an officer in every two hundred bed hospital, the officer chosen doing, in addition, a certain amount of ward-work, if needed.

2. To "tell off" your hospital into medical and surgical divisions, and to differentiate your officers into pathologists, aurists, oculists, and diagnostic physicians is, I think, not possible in field-hospitals. In such hospitals there is no surgery before a general action, and there are no medical cases after it. Hence, if you make officers think they are only for special duties, it leads to an idea that they are only to do this special work. The only exception I would suggest is that the most expert operator should, as a rule, operate. This is fair and just to the soldier, but beyond that I would make no distinction. Consultations are always available, but specialisation in detail would not be good. The special pathologist should be attached to the army corps as a whole, and be able to move along the whole line, and not be attached to any hospital. *Post mortem* examinations are rarely possible, except at the base-hospital.

3. As to subordinate staff, Dr. Veale gives us fifty men. This is a distinct gain on our existing thirty-seven; but I think I could show that this fifty is still insufficient. The chief ward-master, or sergeant-major, is essential as the supervisor, under the chief surgeon and his adjutant, of all the subordinate staff. A quartermaster-sergeant is needed under the quartermaster, as "chief steward." It needs a thoroughly good non-commissioned officer for this post. If a two hundred bed hospital is to work at all, it must decentralise into halves and quarters, and a fifty bed hospital is an uncommonly nice unit; but this needs a staff able to break up into groups. Dr. Veale gives us two ward-masters for two hundred sick; it is not, I think, sufficient. We need at least four; that is, one per fifty sick, so that, if fifty beds are sent away, one ward-master can go with it, and if the hospital is together, they can take the night guard without breaking down. I propose, then, four instead of two ward-masters.

I also ask for four compounders, abolishing the surgery-man, or replacing him by a compounder. We must remember that the field-hospital supplies all battalions and regiments with drugs; hence we need a large staff of compounders. And, again, if a hospital breaks up, who is to go with the one hundred bed half?

Dr. Veale gives four storekeepers of sorts, stewards, and storekeepers. This is, I think, enough, if we get what we have already asked for—a quartermaster-sergeant as chief steward. And the pack-store is really a part of the quartermaster-store.

The present regulations give us [illegible] cooks. Dr. Veale reduces them to five. [illegible] for fifty sick. Surely that is barely sufficient. Let us boldly ask for men, for assuredly the country means us to have them.

Dr. Veale gives us a clerk [illegible] for two hundred [illegible]. It is insufficient, I think, if the hospital breaks up. We need four [illegible] instead of two, and let us remember that the army [illegible] know what becomes of its sick men. Clerks alone can tell them. The [illegible]

[illegible] Dr. Veale [illegible] wards [illegible] are often very trivially ill, how on earth can we do with fewer in war? In naval hospitals, one orderly per seven sick is allowed; and we need one per five sick, if the night-duty—the all-important, fatiguing, and most essential night-duty—is to be done. Sir James Hanbury states in his evidence that he considers one orderly per five sick needed. Hence, if we read forty for fourteen, we arrive at the following staff.

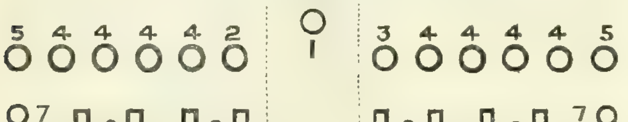
Field-Hospital for 200 Sick.

Officers.		Non-commissioned Officers.		Men.	
Medical Officer in charge	1	Chief wardmaster	1		
Medical officers	5	Chief steward (quartermaster-sergeant)	1		
Medical officer as adjutant	1	Compounders	4		
Quartermaster	1	Storekeepers and pack storekeepers	4		
		Cooks	2	Cooks	6
		Clerks	2	—	2
		Wardmasters	4	-	
		Sick-attendants		-	40
		Laundry	1		7
		Watermen			8
		Conservancy	1		7
		Messengers	—	- -	4
	8	—	20	—	74

The great difference between the fifty of Dr. Veale and the ninety-four here asked for, is in the nursing orderlies. They are of the most vital importance, and they need rest and proper hours of duty. If they had to go on sentry, they would not be put on more than one night in four. Let us do the same, and put on ten for duty every night under a wardmaster, and we can ensure supervision.

With well organised army reserve, militia reserve, and volunteer reserves, we should easily muster such numbers for a campaign. It would be better to diminish the total number of separate hospitals by two or three, and distribute their subordinates amongst the remaining hospitals, thereby raising the number of attendants in each.

As to encampments, every man has a fancy encampment of his own.



Field Hospital Camp for 200 Sick.—1, Quarter and rear-guard; 2, office; 3, dispensary; 4, staff of army hospital corps; 5, latrine-tents for sick; 6, hospital-tents in lines; 7, wash-house tents; 8, wagons of sorts; 9, cooking places; 10, officers' tents and sick officers' tents; 11, officers' latrine and bath-tents; 12, officers' servants; 13, horse-lines; 14, drivers and grooms; 15, senior medical officer; 16, mess-tent; 17, latrines for subordinate hospital-staff and convalescent patients.

I send you a copy of the general plan I have seen used with good effect, and I would say about Dr. Veale's plan—*a*, Latrines should not be placed so that patients have to go through the horse-lines to reach them; *b*, officers would lead an intolerable life in the midst of a hospital camp, and would never get any rest; *c*, horses are out of place in the hospital lines, and should be in the rear of the whole; *d*, sick officers are best in the officers' tent-line; *e*, the office and dispensary should be easily found, and most conspicuous.

In this plan I now send, there is (*a*) space in the centre—a very important matter for convalescent men; *b*, office and dispensary are at the entrance to the camp—these places are always first needed; *c*, the compounders and clerks and storekeepers are in the tents opposite their wagons, and thus have them under their eye perpetually; *d*, the hospital sub-staff use the great latrines at the rear of the camp, but tents with dry earth and means of removing filth are pitched at the angles for the sick—sick men cannot use an open screen; *e*, a wash-house tent is near the latrine-tent; *f*, the sick-tents are in a right and left wing, and form streets, opening towards the centre—the best way for supervision and nursing; *g*, cook-house in open space in centre, and water-carts near it; *h*, officers in a line at bottom of camp, and sick officers' tents in same line; *i*, officers' servants and batmen behind their masters' tents; *j*, horses behind them again, and drivers' tents; *k*, pack-store may be in army hospital corps line; mortuary near the latrine-tents; dispensary-tent to be for operations, if not, use any spare tents.—Yours, etc., I. V. R. C.

BRIGADE-SURGEON E. G. MACDOWELL, of the Army Medical Department, who acted as principal medical officer to the late Soudan field force, has been granted special leave of absence from Cairo to England till September 3rd next. He will, it is stated, be shortly created a Companion of the Order of the Bath for his services in the recent campaign.

OBITUARY.

D. MANSON, M.A., M.D., C.M.Aberd.

ON May 17th, a short notice appeared in the JOURNAL entitled "A New Effervescing Chalybeate Spring at Strathpeffer Spa, N.B.," written by Dr. Manson; and, a few days after its publication, we received the proof which had been forwarded to the deceased. It was, in fact, kindly returned to us by a friend or relative of Dr. Manson, with the painful announcement of his death, which took place on Friday, May 9th, at the early age of 45.

Dr. Manson was the son of the late Mr. Alexander Manson of Kilblean, Old Meldrum. After taking, with highest honours, the degrees of C.M. and M.D. at the University of Aberdeen, he commenced practice in London in 1862. At the age of 26, he was selected by the Duchess of Sutherland as resident physician at Strathpeffer Spa. In 1871, he took a practice at Chesterfield; but early in 1882, on the occasion of a vacancy at the Spa, he returned to Strathpeffer. This time, there were many candidates for the appointment, as, during Dr. Manson's previous residence in its vicinity, he had studied and ably advocated the merits of its waters and climate, publishing his researches and experience in 1869, in a work entitled *The Sulphur and Chalybeate Waters of Strathpeffer*. He wrote another work on the Spa, besides the article on a new spring at that place which we so recently published. At the close of last season, he was attacked by a severe and lingering illness; and, in the performance of his duties a fortnight before his death, his convalescence being by no means complete, he was exposed to cold, and acute pneumonia developed, proving fatal. He was married to Miss Louisa Macswiney of London, who survives him. He was deeply respected in the neighbourhood where he practised; and, on the Sunday after his death, the Rev. W. S. Macdougall observed, in reference to him, in the course of his sermon: "We have lost a valued member of this congregation; the community have lost a most skilful medical adviser; the poor have lost a true friend, whom they shall not soon forget. It is especially gratifying to me, and I doubt not it will be to many, to learn that he expressed a desire to be laid to rest in a place he loved so well, and among a people whose interests and prosperity he had so much at heart."

GEORGE MAY, F.R.C.S.ENG.

THE death of Mr. May occurred at Sidmouth House, Reading, on the 7th instant, after only a very short illness.

Mr. May was born in 1799, and commenced practice in Reading more than sixty years since, and until very recently had continued in the discharge of those professional duties which naturally devolved upon one whose career had been so prolonged and successful. When the Royal Berkshire Hospital was founded, Mr. May was elected Senior Surgeon, his coadjutors appointed at the first election being the late Mr. T. B. Maurice and the late Mr. F. A. Bulley. At the time of his death Mr. May was one of the consulting surgeons of the Royal Berks Hospital, and also consulting surgeon of the Reading Dispensary; the surgical president of the Reading Pathological Society, of which society he had been one of the founders in 1841; and also a member of the British Medical Association, in the formation of which he also took an active part. Until very recently, Mr. May took a very keen interest in horticultural pursuits, his gardens and orchid-houses being to him a source of never failing pleasure.

Mr. May was highly and deservedly esteemed by a large circle of friends, which embraced the entire body of the profession for many miles round Reading. Indeed, it may truly be said that in all his relations of life, public, social, and private, he was truly and thoroughly respected; and he leaves behind him the precious heritage of an honoured name, and a memory associated with all that is pure, true, and of good report.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

UNHEALTHY HOUSE.

Bird v. Greville.—A decision by Mr. Justice Field in the recent case of "Bird v. Lord Greville," is of great interest and importance. The evidence was, for the most part, undisputed, and the judgment, turning mainly upon a point of law, is a precedent and a guide. The material facts, as stated in the *Daily News*, are that in March last year Lady Greville took a furnished house in Montagu Square, the property of the plaintiff, for three months. A few days after the agreement was signed, but before taking possession, Lady Greville came to see the house, and found that one of Mr. Bird's children was ill. She asked what was the matter, and the nurse said it was "only a cold." It was really measles, as Mr. Bird knew before the contract was made. Hearing by accident what the child's complaint was, Lady Greville declined to take the house. Mr. Bird had by that time left for America, but on his return in August he sued Lord Greville for fourteen weeks' rent. The child had been removed a week before the commencement of the term, and it was contended on the plaintiff's behalf that, disinfectants having been used, the premises were in a habitable condition. It was a disagreeable feature in the case that the house had actually been let during a portion of the time for which the plaintiff claimed, but that did not in any way affect the principle of the decision. Mr. Justice Field, while commenting strongly on Mr. Bird's conduct in concealing the nature of his child's illness, said it was unnecessary for him to determine whether there had been fraudulent misrepresentation. In every contract for letting a furnished house, the law implied a covenant that the house should be in a fit state for occupation at the commencement of the tenancy. Here the child had been ill with measles in the house a week before the day on which Lady Greville was to enter, and, though the medical evidence was conflicting, the judge declined to hold that all danger of infection was over. He therefore came to the conclusion that the landlord was not entitled to recover the rent, and gave judgment for Lord Greville with costs.

PORT OF LONDON SANITARY COMMITTEE.

By a recent warrant of the Treasury, the limits of the Port of London have been greatly extended. Commencing above at Teddington Lock, they extend down both sides of the river Thames to an imaginary line drawn from Nanngore Creek on the north side to the land's end at Warden Point in the Isle of Sheppy on the south side, including both sides of the Medway as far as a line drawn from Colemouth Creek to Stangate Creek, from there to Swale Church, and thence to Elmley Chapel in the Isle of Sheppy, with all streams, docks, basins, creeks, islands, etc. The result of this warrant is to place under the jurisdiction of the Port Sanitary Committee of the Corporation of London an additional district of from twenty to thirty miles in length, and to include the important ports of Sheerness, Queenborough, and Port Victoria.

Health of English Towns.—In the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons, 5,863 births and 3,540 deaths were registered during the week ending the 17th instant. The annual rate of mortality per 1,000 persons living in these towns, which had been 22.7 and 21.8 in the two preceding weeks, further declined to 21.1 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow:—Brighton, 16.2; Norwich, 16.2; Sunderland, 16.5; Wolverhampton, 16.6; Bristol, 18.6; Huddersfield, 18.8; Sheffield, 18.9; Birkenhead, 18.9; Newcastle-upon-Tyne, 19.0; Leicester, 19.6; Derby, 19.7; London, 19.9; Salford, 20.1; Blackburn, 20.3; Preston, 21.0; Nottingham, 21.3; Cardiff, 21.8; Hull, 22.2; Bradford, 22.7; Birmingham, 22.8; Bolton, 23.9; Halifax, 23.9; Liverpool, 24.3; Portsmouth, 25.1; Leeds, 25.5; Oldham, 26.4; Plymouth, 27.0; and Manchester, 27.5. In the twenty-seven provincial towns the death-rate last week averaged 22.0 per 1,000, and exceeded by 0.9 the rate recorded in London. The 3,540 deaths in the twenty-eight towns included 182 which resulted from whooping-cough, 151 from measles, 70 from scarlet fever, 43 from small-pox, 35 from "fever" (principally enteric), 35 from diarrhœal diseases, and 23 from diphtheria; in all, 539 deaths were referred to these principal zymotic diseases, against 546 and 553 in the two preceding weeks. These 539 deaths were equal to 15.2 per cent. of the total deaths, and to an annual rate of 3.2 per 1,000. In London the zymotic rate was equal to 3.7 per 1,000, whereas it did not exceed 2.8 in the twenty-seven provincial towns, among which it ranged from 0.5 and 0.7 in Preston and Bradford, to 4.6 in Liverpool, and 5.9 in Portsmouth. The deaths referred to whooping-cough, which had been 173 and 194 in the two preceding weeks, declined to 182, and showed the highest proportional fatality in Liverpool, Huddersfield, and Bolton. The 151 fatal cases of measles showed a decline of 25 from the number in the previous week; this disease caused the highest rates of mortality in Portsmouth, Plymouth, and Oldham. The deaths from scarlet fever, which had been 94 and 66 in the two preceding weeks, were 70 last week, and caused the highest proportional fatality in Leeds, Sheffield, and Cardiff. The 35 fatal cases of fever corresponded with the low number in the previous week, and the 35 deaths referred to diarrhœal diseases were also below the average for the season. The 23 deaths from diphtheria in these towns exceeded the numbers returned in recent weeks, and included 11 in London, 4 in Portsmouth, and 3 in Leeds. The 43 fatal cases of small-pox exceeded the number returned in any week since July 1881; 30 were recorded in London, 5 in Liverpool, 3 in Sheffield, 3 in Hull, and 1 in Sunderland. No less than 735 small-pox patients were under treatment in the Metropolitan Asylum District Hospitals on Saturday last. The death-rate from diseases of the respiratory organs in London was equal to 3.8 per 1,000, and was slightly below the average. The causes of 74, or 2.1 per cent., of the 3,540 deaths registered last week in the twenty-eight towns, were not certified either by medical practitioners or by coroners. The proportion of uncertified deaths did not exceed 0.8 per cent. in London, while it showed a considerable excess in Hull, Sunderland, Halifax, and Derby.

Health of Scotch Towns.—During the week ending the 17th instant, 970 births and 592 deaths were registered in the eight principal Scotch towns, having an estimated aggregate population of 1,254,607 persons. The annual rate of mortality, which had been 23.8 and 24.9 per 1,000 in the two preceding weeks, declined to 24.5 last week, and exceeded by 3.4 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns the death-rate was equal to 17.9 in Greenock, 18.5 in Perth, 21.5 in Aberdeen, 22.3 in Paisley, 22.5 in Dundee, 22.6 in Leith, 24.7 in Edinburgh, and 27.5 in Glasgow. The 592 deaths registered last week in these towns included 93 which were referred to the principal zymotic diseases, against 93 and 94 in the two previous weeks; of these, 43 resulted from whooping-cough, 13 from measles, 12 from scarlet fever, 11 from diarrhœal diseases, 7 from "fever," 7 from diphtheria, and not one from small-pox. These 93 deaths were equal to an annual rate of 3.9 per 1,000, which was 0.7 above the average zymotic death-rate in the large English towns. The zymotic rates in the Scotch towns ranged from 0.0 and 1.4 in Perth and Greenock, to [illegible] in Paisley and 5.9 in Edinburgh. The 43 fatal cases of whooping-cough showed a further increase upon the numbers in recent weeks, and included 18 in Edinburgh, 17 in Glasgow, and 5 in Aberdeen. The deaths from measles, which had risen from 10 to [illegible] in the three preceding weeks, declined to 13, of which 6 were returned in Glasgow, and 3 each in Leith and Paisley. Of the 12 fatal cases of scarlet fever, which showed a further increase upon recent weekly numbers, 9 were recorded in Glasgow, where 4 of the 7 deaths referred to "fever" were also returned. The 7 deaths from diphtheria showed a marked decline from recent weekly numbers, and included [illegible] and 2 in Glasgow. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 4.2 per 1,000. As many as 87, or 14.7 per cent., of the 592 deaths registered last week in these towns were uncertified.

HEALTH OF IRISH TOWNS. In the week ending May 10th the number of deaths registered in the sixteen principal town districts of Ireland was 440. The average annual death-rate was 26.6 per 1,000, the respective rates being as follows, ranging in order from the lowest to the highest: Lisburn, 4.8; Newry, 7.0; Londonderry, 16.0; Drogheda, 16.9; Sligo, 19.2; Belfast, 23.8; Cork, 25.3; Kilkenny, 25.4; Waterford, 25.5; Armagh, 25.8; Dundalk, 26.2; Limerick, 29.7; Galway, 30.3; Dublin, 30.8; Wexford, 34.2; Lurgan, 35.9. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.3 per 1,000, the rates varying from 0.0 in Galway, Newry, Kilkenny, Drogheda, Sligo, Lisburn, and Armagh, to 10.3 in Lurgan; the 7 deaths from all causes tabulated for the last named district comprising 1 from whooping-cough and 1 from diarrhœa. Among the 99 deaths from all causes registered in Belfast, were 1 from measles, 3 from scarlatina, 2 from whooping-cough, 1 from enteric fever, and 2 from diarrhœa. The 39 deaths registered in Cork comprised 1 from scarlatina, 1 from typhus, and 4 from whooping-cough. Among the 22 deaths from all causes in Limerick were 1 from whooping-cough, 1 from enteric fever, and 1 from diarrhœa; and the 11 deaths in Waterford comprised 1 from scarlatina, and 2 from typhus. In the Dublin Registration District, the deaths registered during the week amounted to 214. Eighteen deaths from zymotic diseases were registered, being 11 under the average for the corresponding week of the last ten years, and 2 under the number for the week ended the 3rd instant: among them were 1 from measles, 6 from scarlet fever (scarlatina), 1 from whooping-cough, 2 from cerebro-spinal fever, 2 from enteric fever, 1 from diarrhœa, 2 from erysipelas, etc, The deaths from diseases of the respiratory system amounted to 47 (including 22 from bronchitis and 16 from pneumonia), being 10 under the number for the preceding week, but 7 over the average for the nineteenth week of the last ten years. The deaths of 16 children under 5 years of age (including 13 infants under 1 year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 13 by other diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 31 deaths, mensenteric disease 4, and cancer 3. Three accidental deaths were registered. In 29 instances, there was "no medical attendant" during the last illness.—In the week ending Saturday, May 17th, the number of deaths registered in the sixteen principal town-districts of Ireland was 394. The average annual death-rate represented by the deaths registered was 23.9 per 1,000; the respective rates for the several districts being as follows, ranging in order from the lowest to the highest: Sligo, 9.6; Wexford, 12.8; Galway, 13.4; Newry, 14.0: Lisburn, 14.5; Armagh, 15.5; Drogheda, 16.9; Dundalk, 17.5; Cork, 18.2; Lurgan, 20.5; Londonderry, 21.4; Belfast, 21.8; Dublin, 25.3; Kilkenny, 25.4; Limerick, 44.5; Waterford, 50.9. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.8 per 1,000, the rates varying from 0.0 in Londonderry, Galway, Newry, Kilkenny, Drogheda, Wexford, Sligo, Lisburn, Lurgan, and Armagh, to 13.9 in Waterford: the 22 deaths from all causes registered in the last named district comprising 3 from scarlatina, 1 from typhus, and 2 from diarrhœa. Among the 91 deaths from all causes registered in Belfast were 3 from scarlatina, 2 from whooping-cough, 1 from diphtheria, 5 from enteric fever, and 3 from diarrhœa; and among the 4 deaths in Dundalk were 1 from whooping-cough and 1 from diarrhœa. The 28 deaths in Cork comprised 1 from scarlatina, 1 from enteric fever, and 1 from diarrhœa; and of the 33 deaths in Limerick, 4 were from diarrhœa. In the Dublin Registration District, the deaths registered during the week amounted to 173. Twenty-five deaths from zymotic diseases were registered, being 7 over the number for the preceding week, but 3 under the average for the twentieth week of the last ten years; they comprised 2 from measles, 8 from scarlet fever, 2 from whooping-cough, 3 from enteric fever, 4 from erysipelas, etc. Deaths from diseases of the respiratory system, which had fallen from 57 in the week ended the 3rd instant to 47 in the following week, showed a further decline, the number being 32, or 1 under the average for the corresponding week of the last ten years; 16 of the deaths from these diseases were from bronchitis, 9 from pneumonia or inflammation of the lungs, and 5 from croup. The deaths of 14 children (including 10 infants under 1 year old) were ascribed to convulsions. Four deaths were caused by apoplexy, 11 by other diseases of the brain and nervous system (exclusive of convulsions), and 8 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 20 deaths, mesenteric disease 5, and cancer 4. Three accidental deaths were registered. In 24 instances, there was no "medical attendant" during the last illness. Sixty-two of the persons whose deaths were registered during the week were under 5 years of age (38 being infants under 1 year, of whom 14 were under 1 month old), and 31 were aged 60 years and upwards, including 19 persons aged 70 and upwards, of whom 5 were octogenarians, and 4 (1 man and 3 women) were stated to have been aged 92, 90, 91, and 94 years respectively.

HEALTH OF FOREIGN CITIES. —It appears from statistics published in the Registrar-General's return for the week ending May 10th, that the annual death-rate in Bombay in the second week of April was equal to 27.3 per 1,000; the 434 deaths included 122 from "fever," 28 from measles, and 5 from small-pox. According to the most recent weekly returns, the annual death-rate per 1,000 persons estimated to be living in twenty of the largest European cities averaged 29.8, and exceeded by no less than 8.0 the mean rate during the week ending the 10th inst. in the large English towns. The death-rate in St. Petersburg was 47.3, and showed a considerable increase upon the high rates in previous weeks. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 22.3 (less than half the rate in St. Petersburg), the highest rate being 26.3 in Stockholm, where 3 deaths were referred to "fever," and 3 to diphtheria and croup. In Paris, the death-rate declined to 26.8, but exceeded the rate in London by 6.2; the deaths included 39 from typhoid fever, 49 from diphtheria and croup, and 55 from measles. The 210 deaths in Brussels, of which 19 resulted from small-pox and 4 from "fever," were equal to a rate of 25.5. In Geneva, the recorded rate was 36.8, and 7 of the 50 deaths were referred to "fever." In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 30.7, the highest rate being 35.4 in Rotterdam, where 17 fatal cases of measles were recorded; the 207 deaths in Amsterdam included 20 from diphtheria and croup. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 28.4, and ranged from 23.1 and 24.7 in Dresden and Berlin, to 32.7 in Munich, and 36.8 in Prague. Small-pox caused 31 deaths in Prague, showing a further decline from recent weekly numbers, and the fatal cases of diphtheria were again proportionally numerous in Berlin and Dresden. The death-rate was equal to 32.9 in Turin, and 25.7 in Venice; measles caused 10, and small-pox 3, deaths in Turin, and one fatal case of small-pox occurred in Venice. No return from Lisbon appears to have been received. In four of the largest American cities, the mean death-rate did not exceed 22.5, the highest rate being 24.5 in New York. Typhoid fever caused 12 deaths in Philadelphia, and the mortality from diphtheria showed the largest excess in New York.—The return for the week ending the 17th instant shows that the death-rate was recently equal to 86.5 in Madras and 28.7 in Bombay. Small-pox caused no fewer than 374 deaths in Madras and 6 in Bombay; "fever" fatality showed the usual excess in both these cities. According to the most recently received weekly returns, the average annual death-rate in twenty-one of the largest European cities was equal to 30.4 per 1,000 of their estimated aggregate population, and exceeded by no less than 9.3 the mean rate during last week in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 45.1, but showed a slight decline from the still higher rate in the previous week; the 803 deaths included 53 from measles, 21 from "fever," and 19 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the mean death-rate did not exceed 22.5, the highest rate being 24.2 in Copenhagen; diphtheria caused 3 deaths in Copenhagen, and diphtheria and croup 5 in Stockholm. In Paris, the death-rate was equal to 28.5, was higher than that in the previous week, and exceeded the rate in London by no less than 8.5; the deaths included 51 from diphtheria and croup, 50 from measles, and 43 from typhoid fever. The 226 deaths in Brussels were equal to a rate of 28.1; 27 resulted from small-pox (an increase upon recent weekly numbers), 6 from diphtheria, and 5 from typhoid fever. The rate in Geneva was 28.0, and the 38 deaths included 5 from "fever." In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 27.8, the rates ranging from 21.0 in the Hague to 38.5 in Rotterdam; the 123 deaths in Rotterdam included 20 from measles, and in Amsterdam 6 fatal cases of croup and 4 of scarlet fever were recorded. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 29.5, and ranged from 25.1 and 25.3 in Hamburg and Dresden, to 33.9 in Vienna and 37.2 in Buda-Pesth. Small-pox caused 25 deaths in Prague, showing a further decline from recent weekly numbers; diphtheria and croup caused considerable mortality in most of these German cities, especially in Berlin and Dresden. The death-rate was 25.3 in Venice, and 38.5 in Turin; in the latter city, 11 fatal cases of small-pox and 3 of typhoid fever were reported. The 114 deaths in Lisbon, including 3 from diphtheria and 2 from typhoid fever, were equal to a rate of 29.2. In four of the largest American cities, the rate averaged only 21.9, ranging from 19.8 in Philadelphia to 24.2 in New York. In Philadelphia, 16 fatal cases of scarlet fever and 14 of typhoid fever were reported, although the death-rate, as above stated, did not exceed 19.8 per 1,000.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 17th instant, and, when eligible, will be admitted to the pass-examination.

Messrs. H. D. Mason, N. D. Best, A. W. Thompson, and E. F. Pratt, students of the Birmingham School of Medicine; N. F. S. Aveline, of the Bristol School of Medicine; J. H. Lightbody, of the Liverpool School of Medicine; E. R. Lyth, A. Green, and E. J. Booth, of the Newcastle School of Medicine; J. W. Stanforth, and J. A. Ridal, of the Sheffield School; G. A. Webster, of the Cambridge School; and H. de C. Woodcock, of the Leeds School.

Eleven candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months.

The following gentlemen passed on the 19th instant.

Messrs. W. Aston, A. D. Miller, F. A. P. E. Phillips, J. Westwood, and J. M. Elshardt, of the Birmingham School; S. Roberts, of the Dublin School; J. H. Johnson, and W. B. Slyman, of St. Bartholomew's Hospital; H. B. W. Page, of the Newcastle School of Medicine; R. Dan[illegible], of the Middlesex Hospital; C. G. Jackson, of the Leeds School of Medicine; W. J. Neale, of the Liverpool School of Medicine; and G. W. Case[illegible], of University College.

Ten candidates were referred for three months.

The following gentlemen passed on the 20th instant.

Messrs. H. H. Norton, and P. L. Nettleship, of St. Mary's Hospital; A. A. Howell, of the London Hospital; A. H. Johnston, M. E. A. Wallis, and G. M. Jones, of Guy's Hospital; E. Knight, of University College; E. W. Morris, of St. Thomas's Hospital; C. P. Bullock, of St. Bartholomew's Hospital; and C. W. Edwards, of the Middlesex Hospital.

Thirteen candidates were referred for three months, and one for six months.

The following gentlemen passed on the 21st instant.

Messrs. J. F. Bridgwood, G. F. Rymer, E. Moss, J. L. Roberts, H. J. Vincent, students of Guy's Hospital; C. H. Dixon, of St. Mary's Hospital; [illegible] Holton, and J. Melhuish, of University College; C. H. Heald, and A. D. Scuttit, of St. Bartholomew's Hospital; J. H. [illegible], of the London Hospital.

Twelve candidates were referred for three months, and one for six months.

APOTHECARIES' HALL. The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 15th, 1884.

Docker, Edward Scott, 2, Clarendon Villas, [illegible]
Frye, Joseph Henry, 66, Old Kent Road, S.E.
Gray, John Power William, 21, Barnsbury Park, N.
Jones, Harry Shirley, Oak Hall, Bromsgrove.
Syrée, Anton Hugh, Canterbury.

The following gentlemen also on the same day passed their Primary Professional Examination.

Kearney, James, Queen's College, Galway.
Wallington, William Trafman, Charing Cross Hospital.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND. The following Licentiates in Medicine of the College, having complied with the by-laws relating to membership, pursuant to the provisions of the Supplemental Charter of December 12th, 1878, have been duly enrolled members of the College.

J. B. Ba[illegible], Lic. Med. [illegible] W[illegible], M[illegible] Med. [illegible], Sydney, New South Wales.

At the usual monthly examination for the licences to practise Medicine and Midwifery, held on Monday, Tuesday, Wednesday, and Thursday, May 5th, 6th, 7th, and 8th, the following candidates were successful.

For the Licences to practise Medicine and Midwifery.—[illegible] M. A. [illegible], Crewe; [illegible] Evans, [illegible] Dublin; [illegible] Devon; M. M[illegible].

For the Licence to practise Medicine.—[illegible] E. W. [illegible] Thompson, Kilmallock; P. J. Meehan, [illegible] Wexford.

For the Licence to practise Midwifery.—[illegible] F. A. [illegible], M.R.C.P.I., [illegible] pass, co. Armagh; C. H. Maher, Sydney, New South Wales; [illegible], M.D.R.U.I., Bilston, Staffordshire.

UNIVERSITY OF DURHAM.—*Easter Term*, 1884.—At the First M.B. Examination for Degrees in Medicine and Surgery, the following satisfied the Examiners.

Second Class Honours, in order of Merit.—A. Hardwick, P. P. Manning, F. S. Gooddy.

Pass List, in Alphabetical order.—W. M. A. Anderson, F. Bass, W. Biggart, A. F. Bradbury, H. E. Brodrick, J. W. Edghill, A. C. Dove, A. J. Gregory, F. W. F. Hue, M.R.C.S., E. L. H[illegible], J. L. T. Jones, W. Lin[illegible], E. R. Lyth, A. J. H. Montague, C. P. O'Connor, E. Phillips, A. G. C. Pocock, H. R[illegible]y, J. N. Richardson, M.R.C.S., W. F. Steele, E. S. Sugden, E. G. Sumpter, C. P. Walker, A. White.

Passed in Botany and Chemistry only.—L. Harling, H. B. W. Plummer, C. F. Rumbold, E. B. Sugden.

Passed in Botany and Zoology only.—G. Cr[illegible], H. W. Cross, H. Rayner, M.R.C.S.

The following passed in Anatomy, Physiology, and Chemistry.—W. J. Lasery, R. F. Mitchell.

The following passed in Anatomy, Physiology, and Botany.—H. S. Baumgartner, C. F. L. Dixson.

At the Examination for certificate of proficiency in Sanitary Science, the following satisfied the Examiners.

J. A. Simoens, M.D., F. J. Walker, M.R.C.S.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN. Acting Physician. Applications by June 4th.

BOROUGH HOSPITAL, Birkenhead. Honorary Surgeon. Applications to W. W. St. George, Esq., 11, Holly Bank Road, Oxton Road, Birkenhead, by May 27th.

CHESTER GENERAL INFIRMARY. Visiting Surgeon. Salary, 80l. per annum. Applications by May 30th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST. Resident Clinical Assistant for six months. A gratuity of 25l. [illegible] Applications to the Secretary, 24, Finsbury Circus, E.C., by May 31st.

DENBIGHSHIRE INFIRMARY, Denbigh. House-Surgeon. Salary, [illegible] per annum. Applications by June [illegible]th.

EAST SUSSEX, HASTINGS, AND ST. LEONARDS INFIRMARY. Assistant Physician. Applications by June [illegible]th.

FLINTSHIRE DISPENSARY. House-Surgeon. Salary, 100l. per annum. Applications by June 11th.

GENERAL HOSPITAL, Birmingham. Resident Assistant Surgeon. [illegible] Salary, 70l. per annum. Applications by May 31st.

GENERAL INFIRMARY, Northampton. Surgeon. Applications by June [illegible].

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N. [illegible] Surgeon. Applications by June 2nd.

GUEST HOSPITAL, Dudley. Resident Medical Officer. Salary, [illegible] Applications to Mr. E. Poole, Secretary, by June 4th.

HARTLEPOOL FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Medical Officer. Applications to T. Twaddell, [illegible] Terrace, W[illegible]

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square.—Resident Medical Officer. Salary, 80l. per annum, after one year's service [illegible] 100l. Applications by May 29th.

HOSPITAL FOR SICK CHILDREN, 49, Great Ormond Street, W.C. Resident Medical Officer. Salary, [illegible] Applications [illegible]

LIVERPOOL INFIRMARY FOR CHILDREN, Myrtle Street. Assistant House-Surgeon for six months. Applications to H. E. R[illegible]

NORWICH FRIENDLY SOCIETIES' MEDICAL INSTITUTE. Three Medical Officers. Salary, 200l. per annum each. Applications to H. B. M[illegible], the House, Lady Lane, Norwich, by May 31st.

OWENS COLLEGE, Manchester.—Lecturer in Dental Surgery. Applications by June [illegible].

OWENS COLLEGE, Manchester. Special Lecturer in Dental Mechanics [illegible] Applications by June [illegible].

PARISH OF CANISBAY, Caithness. Medical Officer. Applications to [illegible] Wick, by May [illegible].

PUBLIC DISPENSARY, 59, Stanhope Street, Clare Market. Dispenser. Salary, [illegible] per month. Applications to the Secretary, 48, Chancery Lane, [illegible] May [illegible].

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone Road, N.W. [illegible] Medical Officer. Applications by May [illegible].

QUEEN'S COLLEGE, [illegible] Anatomy. [illegible]

ROYAL COLLEGE OF SURGEONS OF ENGLAND. [illegible]

ROYAL COLLEGE OF SURGEONS OF ENGLAND. [illegible]

ROYAL [illegible] HOSPITAL. [illegible]

SHEFFIELD FRIENDLY SOCIETIES' MEDICAL INSTITUTION. [illegible]

[illegible]

SUNDERLAND INFIRMARY. [illegible] Applications by [illegible].

TOWN [illegible] Applications to the Secretary, [illegible]

TUNBRIDGE WELLS BENEFIT SOCIETIES' MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, 200*l.* per annum. Applications to Mr. J. Wallis, 26, Newcomen Road, Tunbridge Wells, by May 29th.

UNIVERSITY COLLEGE, Liverpool.—Professor of Medicine. Applications to the Dean by Saturday, May 24th.

MEDICAL APPOINTMENTS.

ABERCROMBIE, J., M.D., appointed Assistant-Physician to the Hospital for Sick Children, 49, Great Ormond Street, *vice* O. Sturges, M.D.

BOYD, S., M.B., appointed Surgeon to the Paddington Green Children's Hospital.

COYLE, E., L.F.P.S.G., appointed Superintendent of the Outdoor Visiting Department to the Anderson's College Dispensary, Glasgow, *vice* J. Houston, L.F.P.S., resigned.

ERSKINE, J., M.B., appointed Surgeon for Diseases of the Ear to the Anderson's College Dispensary, Glasgow, *vice* T. Barr, M.D., resigned.

FOXWELL, A., M.B., appointed Resident Registrar and Pathologist to the General Hospital, Birmingham, *vice* B. C. A. Windle, M.D.

GOSTLING, J. H., M.R.C.S., appointed Resident Medical Officer to the Morpeth Dispensary, *vice* J. E. Paten, resigned.

HUGGARD, W. R., M.D., appointed Assistant-Physician to the West End Hospital, 73, Welbeck Street, *vice* H. Tibbits, M.D., resigned.

JONES, H. L., M.R.C.S., appointed Assistant House-Surgeon to the St. Bartholomew's Hospital, Chatham, *vice* G. Welch, L.R.C.P., resigned.

LAURENT, E., M.B., appointed Resident Clinical Assistant to the Hospital for Consumption and Diseases of the Chest, *vice* J. E. Kershaw, M.R.C.S.

MACDONALD, J., M.B., appointed Junior House-Surgeon to the Carlisle Dispensary, *vice* W. M. Storrar, M.B., resigned.

MCNAUGHT, Frederick J., L.R.C.S.I., L.M., L.K.Q.C.P.I., appointed Medical Officer to No. 6 District of the Stow Union, *vice* Sherrington A. Gilder, L.R.C.P.London, L.S.A., resigned.

MAUDE, A., M.R.C.S., appointed Resident Clinical Assistant to the Hospital for Consumption and Diseases of the Chest.

MORRISON, J. T. J., M.B., appointed Resident Surgical Officer to the General Hospital, Birmingham, *vice* H. G. Barling, M.B.

NIAS, J. B., M.B., appointed Honorary Physician to the Western General Dispensary.

PRITCHARD, T., M.D., appointed Resident Medical Officer to the Grantham Friendly and Trade Societies Medical Institute, *vice* G. Cuffe, M.D.

SUTTON, H. M., M.R.C.S., appointed Junior Resident Medical Officer to the Great Northern Central Hospital, *vice* N. B. Gandevia, M.R.C.S.

TATHAM, C. T. W., M.R.C.S., appointed Assistant Medical Officer to the Warneford Asylum, Oxford, *vice* J. F. Mackenzie, L.R.C.P., resigned.

TILLEY, W. J., M.R.C.S., appointed Assistant House-Surgeon to the Devonshire Hospital, Buxton, *vice* A. C. Buist, M.B.

UHTHOFF, John C., M.D.Lond., F.R.C.S.Eng., appointed Assistant-Surgeon to the Sussex County Hospital, *vice* H. Couling, F.R.C.S.Eng., resigned.

VOSS, H. V., M.R.C.S., appointed Resident Assistant Medical Officer to the Whitechapel Union.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

COGHILL.—At Colombo, on April 11th, the wife of J. D. M. Coghill, M.D., Medical Inspector, Ceylon Civil Service, retired, of a daughter.

FRASER.—On April 17th, at 7, Lower Church Road, Weston-super-Mare, the wife of Græme B. Fraser, M.R.C.S.Eng., of a daughter.

LOWTHER.—On the 9th instant, at Fernleigh, Grange-over-Sands, the wife of Richard Lowther, M.D., of a son.

DEATHS.

SMITH.—On the 11th instant, at Ambleside, George Francis Kirby Smith, F.R.C.S., of Northampton, aged 37 years.

SPENCER.—On the 12th instant, at his residence, Whitchurch, Bucks, from an apoplectic seiznre, Charles Spencer, M.R.C.S., in the 73rd year of his age.

UNIVERSITY COLLEGE FACULTY OF MEDICINE.—The Earl of Kimberly presided, on May 22nd, at the distribution of the prizes to the successful students. Entrance exhibitions of £80 each were gained by Mr. E. B. Hastings of Huddersfield, and Mr. G. E. Rennie of Sydney; and an exhibition of £40, by Mr. C. H. Fernau of Buenos Ayres. The Atchison Scholarship (£59 *per annum* for two years), and the Bruce medal, were awarded to Mr. J. H. E. Brock of Madras. Medals and certificates were given to a large number of students in practical surgery, anatomy, physiology, chemistry, medicine, surgery, zoology and comparative anatomy, clinical medicine and surgery, and dental surgery; among those who obtained gold medals being Mr. H. P. Dean, Mr. O. K. Williamson, Mr. E. H. Thane, Mr. H. R. Woolbert, Mr. W. A. Savage, of London; Mr. C. J. Arkle of Liverpool; and Mr. J. R. A. Bennett of Lydford. The report, which was submitted by the Dean, stated that, during the past year, 370 students had attended the classes of the Medical Faculty of the College and the practice of the hospital; 93 of them were new students. The Earl of Kimberley said that, in his capacity of Secretary for India, he had been very glad to hear students from Benares and Madras mentioned with considerable honour.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S. 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........	St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.
TUESDAY	St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.
WEDNESDAY ..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.
THURSDAY	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.
FRIDAY	King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
SATURDAY	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. G. E. Herman: An Average or "Composite" Temperature-chart of Small-pox. Dr. G. W. Cayley and Mr. A. Pearce Gould: Gangrene of the Lung treated by Drainage; Recovery. Dr. Cecil Y. Biss: On the Treatment of Pus-secreting Basic Cavities of the Lung by the Method of Paracentesis and Free Drainage.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

MILK.

SIR,—The question opened up by your correspondent, Mr. Lloyd, last week, is of great interest at the present time, when the system of dry nursing infants so much obtains, and, in my opinion, with disastrous results to the rising generation.

I cannot help thinking that we, as medical men, are a little to blame for this state of things, in that we do not sufficiently impress upon those mothers who are either too indolent, or who are physically unable, to nurse their offspring, the dangers attending the system of dry-nursing, unless it be carefully and efficiently carried out; and how pitiful it is to see the aged, worn expression of many a poor little sufferer worn out with gripes, sickness, diarrhœa, and sleeplessness, when we know that the cause of all the evil is bad management on the part of the mother!

That there must be something radically wrong in the way infants are managed during the period of suckling is patent from the fact that more of them die before they have attained the age of one year than die in the next four years, so that really the first few months of existence are four times more fatal than, say, the same number of months during the fourth year, and that out of a total death-rate of 516.813 in 1882, the appalling number of 125.147 died under the age of one year. I think I may say, without fear of contradiction, that such a mortality will not be found in those animals that suckle their offspring and feed their young by instinct; and what a degrading and deplorable fact that the only animal endowed with reason should be the most ignorant and the most incapable in the rearing of its own young!

That badly constructed feeding-bottles, as Mr. Lloyd suggests, have something to do with this mortality I fully believe, seeing, as I often do, the foul state of the tubing and bottles, and the difficulty there is in teaching people that the sour filth which accumulates about them decomposes the food put in, and thereby causes diarrhœa, indigestion, and the train of evils that end in atrophy and death; but that the custom of giving dry nursed infants bread, pap, gruel, and the thousand and one patent foods that are advertised and puffed into ephemeral notoriety, and are said to be manufactured from malt, maize, etc., in divers and occult ways, by which all deleterious—and, I believe, nearly all nourishing—products are removed, before teething has commenced, has more to do with this horrible mortality, I think, is uncontrovertable.

How long will it be before mothers are taught to learn this simple fact that if they do not suckle their offspring themselves, there is no safe substitute, until the period of teething has commenced, for the natural food of the infant but milk, and that this, given in the proportion of two parts of pure milk to one of water, and to the extent of rather over a pint a day of cow's milk, is healthy sustenance; and, in ninety-nine cases out of a hundred, this diet, with the addition of a little sugar of milk, will make a plump rosy infant. The further addition of ten grains of carbonate of soda to each quart of cow's milk will make it keep longer, and less likely to disagree.

Mr. Lloyd asks one or two questions about "condensed milk" exciting skin-affections. I have found that the sweetened condensed milk usually sold does do so, for the simple reason that it contains forty per cent. of cane-sugar, and no infant's system can get rid of this without constant diarrhœa, sickness, or skin-eruptions; and I may add, parenthetically, here that mothers are apt to dilute this form of infant's food too much. But there is one brand of condensed milk, and only one that I am acquainted with, that is in every way suited for infant's food, that, I believe, is called The Pure First Swiss Condensed Milk, a long name, and difficult to remember, but worth all the trouble of doing so, as it is a perfect substitute for pure cow's milk. It is commonly known, I think, as the unsweetened condensed milk; and though it will not keep as long as the other kinds, it will keep, when opened, about a week anyhow, quite long enough for nursery purposes. This condensed milk, being equable in composition, easy to attain, always of constant strength, free from all adulteration and added sugar, is a real boon in the way of infant's food.

I recommend it to be diluted for the first two or three months of infant life with five times its bulk of warm water, and given to the extent of a tin a day, with the addition of a pinch of sugar of milk to each supply of the food. I also advise two or three feeding-bottles to be kept, and those not in use to be immersed in a basin of cold water until wanted, a clean one being used each time. The simple bottle advised by Mr. Lloyd I consider the best, as there is nothing to harbour decomposed or sour products about it.

These little items may seem trivial in themselves, but it is in little errors of feeding that, I believe, arise so many of the diseases of malnutrition that are so fatal in early life. How often do we see dry nursed infants, overcrammed with indigestible food, crying from pain, having still more thrust down their unwilling throats under the impression that they are crying from hunger. This evil at least cannot occur in those suckled, for when the infant exhibits satiety, he has peace for a couple of hours, and so has the mother.

As I have taken a great interest in this subject, and my name must be familiar to many, I am induced to write at greater length than I otherwise should, for I feel sure the subject altogether merits the deep and earnest attention of all medical men, to whom, as a rule, the public look for evidence in matters of such vital importance to the well-being of the rising generation, and, indeed, I may say of the nation at large. I trust many others may give us in your columns their valuable experience in the matter.—I am, sir, yours faithfully,

NATHANIEL EDWARD DAVIES, L.R.C.P.Lond., etc.

Sherborne, May 18th.

FEEDING BOTTLES.

SIR,—In reference to the letter published in your last issue, written by Mr. Lloyd, pointing out the many advantages of the old form of feeding-bottle, may I be allowed to add an useful suggestion for keeping pure and fit for use any of the many kinds employed, although the old "boat bottle" is [illegible] the best. For some years now it has been my custom to have, [illegible] private work and [illegible] tubes placed after [illegible] in a weak solution [illegible] of soda. I am not aware [illegible], but I have had ample means of proving its value. [illegible] service in [illegible]

[illegible] W. M[illegible], M.D., H[illegible]

[illegible] Hospital, N[illegible]

[illegible] EXAMINATION IN M[illegible]

SIR,—In the [illegible] medical examination [illegible] Portland, or West [illegible] "Provincial [illegible] in preparing [illegible] the subject. [illegible] yours truly,

A MEMBER.

A CAUTION.

SIR,—Would you kindly insert in the BRITISH MEDICAL JOURNAL the following description of a man who goes about the country, calling on medical men and others, soliciting aid.

He falsely represents himself to be "Dr. MacLennan, Widnes, Lancashire." I have had several letters from gentlemen resident in Liverpool, Manchester, and Belfast, and on Saturday last (May 17th) from Sheffield, either kindly putting me on my guard, or asking me to refund money which they were foolish enough to give the rogue.

In the last communication I have had, he is described as "a tallish man, shabbily habited in a loose grey suit, and high hat. He spoke with a slight Scotch accent. He appeared to know something concerning Edinburgh celebrities, running over a list of names and places with parrot-like fluency; said that his mother resided in Inverness, his brother was in a northern bank, and his father-in-law a staff-officer." It is the invariable rule of the rascal to give the above history.—Yours truly,

D. U. MACLENNAN, M.D.Edin.

Widnes, Lancashire, May 19th, 1884.

SIR,—As I understand a few medical neighbours have been visited lately, it is just possible that other practitioners may yet be honoured with a call, from a man about 5 feet 2 inches in height, dark beard, and moustache wirey and badly trimmed, wearing a tall hat and great coat, who called on me yesterday, the 12th (a very warm day), and asked if I were at home; on receiving a negative reply, he said he would walk in and wait. Although I had frequently cautioned my servant not to admit strangers, there was such an air of assurance about him which would take most people off their guard, that he was shown into my consulting-room, and after waiting a short time said he must be going. On my return, I found the lock of my desk picked, and drawers ransacked, and things amounting to about £2 missing; and no thanks to him that I had not been a heavier loser, as fortunately there was no money about.—I am, sir, yours truly,

15, College Crescent, Belsize Park, N.W. CHARLES WELLS, M.D.

*** We have received other letters, which seem to indicate that this person is still at large, seeking plunder.

THE REGULATIONS OF THE UNIVERSITY OF DURHAM.

SIR,—"A Graduate in Medicine," in a letter in the JOURNAL of May 10th, is indignant at the prospect of a memorial being presented to the University of Durham, begging that the M.D. degree be granted to men who have been qualified for ten years. If the University of Durham reserved its M.D. degree only for those who put in residence, I could understand the position of "A Graduate in Medicine," and I would not dare to petition the University to give a degree on any terms to outsiders. But the University does grant its M.D. degree, without residence, to men who have been fifteen years in practice, and who have attained the age of forty years. Why, then, should the proposed change, any more than the existing regulation, detract from the value of the degree? Would the granting of the wishes of the memorialists be derogatory to the honour of an university which grants its M.D. degree to those who, up to forty years of age, "are content with the diplomas of the corporations?" It is true that "A Graduate in Medicine" is against the perpetuation of the forty years of age system; but what surprises one is that he graduated at such an university.

I have often tried to find a reason for the restriction in granting the M.D. to men who are getting to that time of life when they cannot find leisure to brush up their memories for any examination; but I have not found one. I believe, however, that the Senate of the University had a reason for it. I am, sir, yours truly,

F.R.C.S.Edin.

SIR,—I cannot support the proposal of "Thirty-One" with regard to the Durham University, as some of the examiners for the medical degree do not scruple to employ unqualified assistants (non-resident), and thereby countenance an illegal system condemned by the profession at large.—Yours truly,

PRACTITIONER.

SIR,—The letters which have appeared in the BRITISH MEDICAL JOURNAL and other papers during the past few weeks concerning the proposed change in the regulations for the degree of M.D. of the University of Durham for practitioners of fifteen years' standing, have created a very strong feeling among graduates and undergraduates, which culminated in a crowded meeting held at the Infirmary on the 16th inst. (Charles Green, M.D.Durham, Medical Officer of Health for Gateshead, in the chair), at which the following resolutions were unanimously passed:

"1. That this meeting hears with great dissatisfaction that there is in preparation a memorial praying the Senate of the University of Durham to alter existing regulations concerning the degree of M.D. for practitioners of fifteen years' standing.

"2. That this meeting is of opinion that the proposed alterations would greatly detract from the value of the degree, as obtained in the usual course.

"3. That the degree of M.D., obtained by other than the usual course, viz., that of putting in residence, attendance on lectures, and the passing of the usual examinations, is prejudicial alike to the interests of the University of [illegible] and to the status of those who have obtained the degree in the [illegible] manner.

"4. That a humble petition be prepared to present to the Senate, praying not only to reject the [illegible] memorial [illegible] proposed alterations, but also very earnestly praying it to consider the [illegible] ing the degree of M.D. for practitioners of fifteen years' standing.

"5. That a copy of the proceedings of this meeting, and the resolutions passed, be sent to the medical journals for publication."

A smaller committee was formed, of which [illegible] the purpose of drawing up a petition [illegible] A circular letter [illegible] of Durham [illegible] fifteen years' standing [illegible] We shall [illegible]

Yours faithfully, J. A. H. [illegible] M.B. [illegible]

C. [illegible] W[illegible] M.B. [illegible]

University of Durham College of Medicine, Newcastle-on-Tyne.

SIR,—I [illegible] A. H. C[illegible]

[illegible]

The letter of "A Veteran" [illegible] expressed as to be likely to give considerable offence.

Social Purity.

SIR,—In your issue of April 17th, your correspondent "Hirudo" complains that Dr. Hime's essay on "Morality" is too dear. Will you allow me to point out that it deals with the subject in a much clearer and more effectual manner than any leaflet or primer possibly could, and that the lessons it teaches are likely to be much more lasting? As it can be bought for fifteen pence, and contains nearly 200 pages, I think it can hardly be said to be very expensive. Yours, etc.,

MORALITY.

Erratum.

IN the list of gentlemen who passed the Royal College of Surgeons on April 29th (BRITISH MEDICAL JOURNAL, May 10th, p. 951, col. 1) for "Mr. A. J. Dixon, L.S.A., Donington," read "A. Dixon Jollye, L.S.A., Donington."

A Cheap Steamer for Bronchitis, etc.

DR. DUNCAN MACKENZIE, of Glossop, recommends the following expedient for use amongst the sick poor when a steamer is required. A common saucepan (No. 6 to No. 8) is provided by the tinsmith with a tight-fitting lid of tinned iron. From the centre of the lid projects, at an angle of 45°, a tapering tube of the same metals, about two feet long. All this costs about eighteen pence, and does not spoil the saucepan. When the saucepan is filled with water and put on a good fire, the steam is projected with considerable force through the tube into the room. The tube issuing from the top is in a position to receive the steam even when the pan is full, and its tapering form considerably increases the force, and prevents the steam from being drawn back by the draught into the chimney.

When antiseptics are wanted along with the aqueous vapour, the lower border of the free end of the tube may, at the extra cost of a few pence, be prolonged and moulded into the form of a spoon, into which the antiseptic may be dropped. This causes no impediment to the flow of steam, and the drug being volatilised, partly by the heat of the steam passing over it, partly by the heat conducted by the metal, rises in vapour, and is propelled into the room by the current of steam. In this way half a drachm of eucalyptol can be volatilised in an hour. Carbolic acid in crystal evaporates more slowly, but from two to three grains dropped into the spoon are gone in an hour. If larger quantities be required, a bandage, wet with a liquid, may be rolled round the tube, or a solid may be included between the bandage and the tube. In this way a vapour is rapidly formed, but is not propelled into the room so efficiently as by the former method.

On the Importance of Immobilisation in the Treatment of Fractures of the Long Bones, complicated with Insensibility.

SIR,—My object in recording my views (the results of a sad personal experience) on the above subject, is mainly for the purpose of warning inexperienced surgeons of the bad results likely to follow the failure to treat fractures of the long bones by complete immobilisation, when complicated by insensibility of the patient.

In the early part of February, 1883, I was travelling in South Africa in a two-wheeled dog-cart with two horses, and when about fifty miles from Pietermaritzburg, the pole broke close to the body of the carriage, and, in consequence, I was thrown out. I sustained an oblique fracture of the tibia and fibula in the lower third of the leg, also a compound comminunted fracture of the right parietal bone, but which fracture was caused by the wheels and which by the horses' feet I cannot say.

I was rendered insensible immediately, and remained so for more than three weeks. My leg was treated with some primitive wooden splints, which afforded inadequate support to the broken bones, and miserably failed to prevent me from seriously damaging my leg during the state of unconsciousness. On the twenty-third day I became partially sensible, on the following day I became violent, continuing so occasionally for ten days, during which time the splints required to be removed and reapplied five or six times. About six weeks after the accident I was taken by easy stages down to Durban, and came to England, where I was examined by Mr. Jordan Lloyd, of Birmingham, who pronounced me to be suffering from an ununited fracture of the leg. After about two months' further treatment by immobilisation in plaster-of-Paris, it united with an inch of shortening. There is now very impaired use of the limb, and considerable pain on moderate walking.

As regards the injury to the skull, there was no depression of bone at the seat of fracture, but there was, in all probality, some extravasation into the brain, causing modified hemiplegia. The symptoms were a partial loss of sensation in the right arm and leg, with a certain amount of aphasia and amnesia, also total loss of smell and impairment of taste.

Since the accident, I have lost all recollection of starting on the journey; neither do I remember any event that occurred on the day of the accident.

I trust that, in England, such surgical treatment as I received does not exist. I hope that colonial surgeons will profit by this record of experience; for if my leg had only been fixed in some immovable apparatus, as plaster-of-Paris or starch case, I might probably have recovered with an useful limb, and little or no shortening, instead of being, as I fear I must regard myself, more or less of a cripple for life.—I am, etc.,

H. S. REYNOLDS, F.R.C.S.ED.

Medical Men and Life-Assurance.

SIR,—I have for many years examined for a great number of life-offices in England, and must say I fail to see the drift of "Medical Referee's" argument. I am afraid his office, large as it is, must be a very peculiar one which does not pay for unaccepted lives, and allows its agents to appoint whom they can get. I am happy to say that there are comparatively few "black sheep" in our profession, and it is easy for a company to find one or two medical men in a town who act uprightly (without appointing experts who may not always be like Cæsar's wife.)

All medical certificates are confidential. It is easy to reject a life without causing any offence. I find it so. An honest man cannot, in the long run, be disrespected. A man who is insured in an office is not likely to pass a bad life into it. A respectable private medical attendant is invaluable to a life-office, as he knows the weak points of his patient whom he has attended.

Your correspondent who hides his head under the name of "A Member of the British Medical Association," is hardly charitable to his fellows. I trust he is not the only man who is free from "palm-oil." Perhaps he is the gentleman whom Diogenes was so anxious to find.—I am, sir, yours faithfully,

Chatham. WALTER BUCHANAN.

SIR,—The letters which have already appeared in your JOURNAL in reference to the way in which some insurance offices permit their agents to carry on their business will, I am sure, do much good.

In some districts, I am sorry to learn, medical men are in the habit of giving 10 per cent. of the examination-fees to every agent who brings cases; in others, the local superintendent feels himself aggrieved unless he receives gratuitous medical attendance from his company's referee, and not only for himself, but also for his wife and children.

Frequently, bad lives are sent for examination; and, when rejected, agents, on their own responsibility, have discontinued taking their cases to the appointed referee, simply because he has done his duty.

I regret having to admit that there are members of our profession who do not scruple to pass unsound lives, the result of which is that, when such persons die, the agent not unfrequently asks the medical attendant to alter, or in other words cook, the death-certificate. I learn with pleasure that one large company have become alive to this condition of things, and have taken most effectual steps to prevent its recurrence.—I am, sir, yours truly,

A MEMBER.

SIR,—Having been connected with one of the largest insurance companies (the Prudential) for over six years, I think it only fair to the superintendents and agents to state that, while doing their utmost to push forward their business, they never in any way object when I do not pass an applicant; they do not hear this from me, but from the office, as I send on the papers myself. As to what a member calls "palm-oil," it does not exist; so much for the agents. If "A Member's" letter had stopped there, it would not have been so bad, but when he says (BRITISH MEDICAL JOURNAL, May 3rd) "that in a large percentage of cases life-assurance companies fail to obtain what they pay for," I believe he is grossly libelling a large number of brother chips. "It is an ill bird that fouls its own nest." Your obedient servant,

J. B. RICHARDSON, M.B.

The Towers, Torquay, May 13th, 1884.

Infantile Paralysis.

IN reply to "W. M.," who asks us to give some references to works dealing with infantile paralysis, we may say that, in the new edition of the *Traité Clinique et Pratique des Maladies des Enfants*, by Barthez and Sanne, chapter xiv is devoted to "Paralyse Spinale Atrophique," and on page 324 there is a short bibliography. In the *Selections from the Clinical Works of Dr. Duchenne* (de Boulogne), translated, edited, and condensed by Dr. G. V. Poore for the New Sydenham Society, a short bibliography, referring chiefly to the earlier writers, will be found at page 89, and at page 162 a "Note by the Editor," giving an excellent summary of recent pathological investigation. See also BRITISH MEDICAL JOURNAL, February 23rd, pp. 361 and 362.

Practice in the Colonies.

SIR,—Could you or any of your numerous readers inform me how a medical gentleman of middle age, well qualified and well educated, healthy and steady, but without money or friends, could start in Australia or New Zealand?—I remain, sir, yours respectfully,

COLONY.

Fleas.

IN reply to "Scratch's" inquiries in the JOURNAL of May 17th, Mr. G. A. D. MAHON states that in the Egyptian campaign, where fleas proved very troublesome, "Keating's Insect Powder" proved highly efficacious when dusted over the inside of all articles of dress worn next the skin.—J. D. extols the virtues of the same preparation, which a relative has used when in Rome; the powder was sprinkled every night over the bedding. Tobacco, J. D. adds, seems rather to attract than to repel fleas, as in the case of the Italians, who are much troubled by these insects, yet smoke profusely. Mr. F. J. Reilly recommends the application of liquor hydrargyri bichloridi to the outlets and inlets of the wearing apparel.

Menthol.

SIR,—In the notice respecting "menthol," or Japanese oil of peppermint, which appears in the JOURNAL of April 19th, the following statement occurs: "From a circular issued by Messrs. Cocking and Co., of Yokohama, it appears that menthol was first made known in Europe fifteen years ago."

This statement is correct; and allow me to repeat what I found it necessary to state on a previous occasion, when a medical gentleman sought to claim whatever honour may attach to the person who first brought the "antineuralgic" properties of this drug to the notice of the profession here, that to me belongs the credit of having done so, through the pages of the *Lancet*, on my return from the East in 1870 (*Vide* Ringer's *Therapeutics*, tenth edition, p. 408).

It now appears that this same gentleman having, in the course of some experiments, made when a student five years ago, become convinced of the efficacy of "menthol" in neuralgic affections, etc., on this account again claims to be considered the discoverer of that which was brought to notice in Europe by me nine years previously, and what, moreover, has been in similar use in China and Japan for centuries.—I am, sir, yours faithfully,

ALFRED WRIGHT.

22, Old Burlington Street, W., May 19th, 1884.

"Treatment of Obesity."

SIR,—"An Irish Member" will find a capital article on "Corpulence" and its treatment in Ziemssen's *Cyclopædia of Medicine*, vol. xvi., by Immermann.—Yours truly,

W. WILSON, M.D.

80, Broad Street, Pendleton, Manchester, May 17th, 1884.

Physician and Surgeon.

SIR,—"Nemo's" letter on the above has surprised me; as he states "it matters little what a medical man calls himself in a large town." If it be right for a man holding a licence of a college of physicians and a licence of a college of surgeons to call himself a "physician and surgeon" in a large town, it must be right for him to use it anywhere. I think the gentleman attacked by "Nemo" was quite right in refusing to alter his plate.

During the discussion on the title of "doctor," it was suggested that those gentlemen who held the qualifications L.R.C.P. and S., should have on their plates, "John ——, Physician and Surgeon." This plan has been largely adopted, as may be seen by a visit to any of our towns or villages.—Yours, etc.,

A TOWN SURGEON.

Care of a Boy.

SIR,—Do any of your readers know of any medical man who would undertake the care of a boy, aged 17, whose articulation is imperfect, and who, with an outgrowing shoulder, etc., gives some evidence of deficient mental power. The care would be for a limited time, and with a view to sufficient improvement to enable him to earn his living. The expense must be moderate, as the parents are tradespeople. If you will let this appear, I shall be much obliged.—I remain, yours truly,

B. H. DALE.

Craven House, Devizes, May 14th, 1884.

NEW LIFE AND HEALTH ASSURANCE OFFICE.

"DOUBTFUL," "ALPHA." We have had several inquiries addressed to us by medical practitioners who have been requested, by circular, to accept the appointment of [illegible] for a new Life and Health Assurance Office, which it is sought to establish under the auspices of the "House Improvement and Supply Association, Limited. We are asked to express an opinion on the probable soundness or otherwise of the undertaking. It appears, from the explanatory memorandum that accompanied the circular, that one of the main objects of this Assurance Office is to provide funds for promoting the progress of the "House Improvement and Supply Association." Ordinary prudence would suggest careful inquiry as to the management, stability, and prospects of that limited company.

TREATMENT OF CARIES OF THE SPINE.

SIR,—In reply to Dr. Neal's letter, published in the JOURNAL of May [illegible], inquiring as to experience and results of the treatment of caries of the spine by the hammock-method, as advocated by Mr. Davy in a clinical lecture published in the JOURNAL of June 26th, 1880, I have since then treated vertebral caries by that plan alone; and though my cases have been few and far between, being in all only six, they have ended most satisfactorily. I use either an [illegible] or an old hammock (by preference the former, it being [illegible]) if sufficiently strong to bear the weight and continual strain of the patient's body whilst the plaster-of-Paris is drying. I always found it wise to suspend the patient immediately over a bed, in case the sling gave way. If [illegible] be given in closely applying the bandages, I am sure the results are equally as good as are obtained by Sayre's method of suspension, and with far less inconvenience to the patient.—Faithfully yours, F. W. H. DAVIE HARRIS, M.R.C.S.

8, High Level Road, Kensington, W., May 13th, 1884.

THE MEDICAL SERVICE OF ATLANTIC STEAMERS.

SIR,—Having been some time in this service, and having gone with the intention of observing how emigrants were treated, perhaps the following may be useful.

With regard to hospitals, I remember finding that the steward had used one of the six hospitals we had as a store-room, but I do not think he is likely to do it again after I reported the matter to the captain. On one voyage, the captain and myself sacrificed our rooms, but neither of us would have [illegible] deck-hospitals during the voyage, although they were the most comfortable rooms on the ship, so it is not likely that stewards and cooks were in the habit of using them. I have placed a family in hospital on other considerations besides illness, but no other one on the vessel would have dared [illegible] without my consent.

As to food, not one in ten got such a good dinner on shore. I tasted it every day, and often made my lunch from it. The soup was very often the same as we had at the saloon-table. I have not tasted better since I left. I let invalids have what could be got on the ship—wines, porter, beef-tea, arrowroot, apples, oranges, lemonade, and ice, and I was surprised that, with [illegible] passengers, these extras would only cost a few pounds for the voyage. I do not suppose the owners ever thought of the amount, and the steward always supplied them most willingly.

Passengers could easily complain to captains with whom I have been, and I was surprised to find their complaints very carefully considered. Of course, food can never be so good at sea as in an hotel, and [illegible] grumbling there is at the saloon-table, where no expense is spared. If there are so many complaints in the saloon, and these generally from people [illegible] accustomed [illegible], we need not be surprised that [illegible] heard from the steerage. I gave a large amount of my attention to the steerage-passengers, and my cases did better than they would on land, and I had some bad cases to treat.

I always found the officers of the ship very considerate towards passengers. The captain [illegible] the steerages in the morning along [illegible] about the same time with the chief steward to see the sanitary condition of the steerages, and [illegible] required extras for the day. Had there been any difficulty [illegible] of expense, I [illegible] money [illegible] would have [illegible]. I consider that, when [illegible] are well, the food [illegible] they are accustomed to [illegible]; and when they are ill, it is the doctor's fault if they be not properly attended to. During the [illegible] good health. During [illegible] in this service I had not a single [illegible], and I have had two cases of [illegible] pneumonia [illegible] following voyage, and a case of cerebral abscess, from which, on [illegible], the [illegible] escaped [illegible] of pus.

[illegible] My pred[illegible] [illegible] during the voyage [illegible] them [illegible] few passengers [illegible] the vessel, as it was not [illegible] without being seen. [illegible] —Yours, etc., W. M.

[illegible] of the few [illegible] When we were on the Banks of Newfoundland I was [illegible] I was always surprised that [illegible] the passengers. The [illegible] I was [illegible] very poor opinion of [illegible] the general character of [illegible]

SHIP SURGEONS.

SIR,—A good many letters have appeared in the BRITISH MEDICAL JOURNAL speaking of the uncomfortable position of medical officers on board the ships, their having [illegible] and many other grievances.

I occupied the post of surgeon in two lines of steamers, both of known repute, and I can only say that my voyages were the pleasantest experiences of my life; and though I have now settled on shore, yet I can count several friendships made with captains, officers, and passengers, and my recollections of the doctor's cabin are anything but [illegible]. My pay was not [illegible] a month [illegible]. The food was good and plentiful, the [illegible] hotel. [illegible] to the captain [illegible] the weather, though rather damp and watery when [illegible], at which times of distress the skipper used to remind me that [illegible] articles as a seaman, not as a passenger, and that [illegible] was the normal condition of the former.

I [illegible] this fact, because a certain class of passengers are always ready to rebel against the necessary discipline [illegible] the captain; as the [illegible] the surgeon, they like to play him off against the skipper. With the [illegible] surgeon [illegible] the position of the [illegible] himself with both parties [illegible] pleasing to [illegible].

Many men go on board ship with [illegible] nautical, don their uniform, and begin [illegible] before they have got their sea-legs, or have made themselves conversant with the duties of their department. These [illegible] imagine that they are invested with extraordinary powers, and are sure to come to speedy grief. Then they come home, and write to the papers about the hardships of their position, [illegible] they are [illegible] with the steward and [illegible] hole, and snubbed by the officers and crew. I always received the [illegible] consideration from the officers, and was [illegible]. My complaints, and they were not few, were [illegible] on shore; and my position was certainly better than that of [illegible] who occupy public situations, and are [illegible]. I have had several friends, surgeons at sea, and [illegible] with my own. I have met grumblers, but they were men who would be the same anywhere, and, I should think, were [illegible]. Some of the men whom one meets [illegible] and desertion.

I do not know anything about the Atlantic service, and should not care to try it, for I have met [illegible] eastwards, and I am sure that any [illegible] the good companies with pleasure and profit to himself in gaining health and seeing the world, and without one whit lowering his social or professional position.—I inclose my card, and subscribe myself, yours faithfully,

BLUE PETER.

AN AFFECTION OF THE TRACHEA.

SIR,—Will you, or any of your readers [illegible], kindly suggest through your columns, as soon as possible, [illegible] case, where everything has been tried [illegible] useful, but, so far, without much benefit. [illegible] my apology for troubling you for information.

My patient is a young professional gentleman, between twenty and thirty years of age, who for about six or seven weeks past has complained of a sensation of "[illegible]" in the [illegible] between the [illegible] and the sternum. The feeling is [illegible] and at others, it [illegible] not worse, and is always increased [illegible] and relieved by heat, invariably [illegible] through several [illegible]. The [illegible] not constant. For [illegible] place to place along the trachea, and sometimes it is [illegible] the pharynx, [illegible]. The symptoms are [illegible]. He [illegible] cough, [illegible] health is good. He has been under treatment two weeks [illegible]

[illegible] M.R.C.S.

May [illegible]

[illegible]

[illegible]

RESULT OR COINCIDENCE?

SIR,—I wish to know if the following somewhat desirable result of treatment has been observed in other cases where syrupus ferri et quiniæ hydrobromas cum strychniâ (Fletcher) has been prescribed.

Mr. J. H., aged 50, suffering from dyspepsia, loss of appetite, and the symptoms frequently observed in subjects who are often on the verge of delerium tremens, came to me on April 27th last, and asked for some tonic medicine. He said the loss of appetite for food was what he chiefly complained of, and that he felt in a very weak state, a short walk or any slight exertion making him feel tired and (to use his own words) "good for nothing." I prescribed the above medicine in drachm doses, three times a day.

Now comes the unlooked-for result. He had been an habitual smoker of the strongest black tobacco, but since taking the syrup has felt no desire whatever to smoke, and attributes it entirely to the medicine. This case of course is hardly a fair one to judge by, being only a short time under treatment.

It would, however, be very interesting to ascertain if this effect (if it be one) has been noticed in other similar cases.—I remain, yours truly,

Coole Abbey, Fermoy, Ireland. HENRY W. PEARD, M.B.

CHLOROFORM NARCOSIS DURING SLEEP.

SIR,—It is probable that the house-surgeons of hospitals would be able to give a good deal of information on this subject. While acting in that capacity at the Surgical Hospital, Stockton-on-Tees, I have on several occasions induced chloroform narcosis without awakening the patient. I never tried it on adults, as my object was to avoid the struggling and crying usual in children when chloroform is given. I have only distinct recollections of three cases which occurred last year, and as I only did it as a matter of convenience, I should not be surprised if some unsuccessful cases have escaped my memory.

In one case a child, about eight years old, suffering from very extensive burns, I twice chloroformed during sleep previously to dressing the burns.

Case 2 was a child of about four years, in whom I produced anæsthesia previously to lithotomy.

In case 3, where the leg had been amputated at the hip-joint, I administered chloroform before the first dressing without awaking the child, aged 8, who was of an exceedingly nervous disposition. The chloroform was in each case given very gradually, and on a towel. There are two or three remarks to be made on these cases, four in all. 1. The patients were all children. 2. They were all, more or less, out of health, but, on the other hand, from the nature of the ailment, they were none of them sound sleepers, and the anæsthetic was given during daylight, in a large ward. With regard to the time occupied, I do not think that more than ten minutes was required to produce anæsthesia; indeed, I believe it was probably less, but then the subjects were children, and more or less debilitated. I have once or twice given chloroform to an adult previously to an operation who was insensible from shock caused by injury; but this hardly bears on the question, and I quite think that it would probably be found much more easy of accomplishment in the young than in adults.—I am, etc.,

E. GORDON-HULL, M.D.Dubl., Withern, Lincolnshire.

RUS should apply to one of the medical agents for the information he requires. We cannot answer the question.

THE UNION OF WOUNDS AND FRACTURES IN OLD PERSONS.

SIR,—Having seen a letter from Professor Humphry in the BRITISH MEDICAL JOURNAL of the 17th instant, in which he states he is anxious to obtain evidence relative to the "union of wounds from operations or otherwise inflicted," on old persons, probably the following case may be of interest to him.

John Carrol, aged 91, residing in Collooney, fell out of his bed, one night last June, on the edge of a Dutch oven, and received a very serious wound, over four inches long, on the left side of his head. I saw him two hours after the accident in a very weak state from shock and loss of blood. The wound was gaping in its entire extent, the bone stripped of the periosteum, and slightly depressed at one point about the centre of the wound. I drew the edges of the wound together, put on a compress saturated with "Friar's Balsam," and placed a tight bandage over all. On the fourth day the wound looked healthy, healing by granulation, and was dressed with carbolic oil. On the eighth day the old man was "himself again," and able to go out. He gave me a most graphic account of how he saw a gentleman in the yeomanry-service shot down by the French in 1798 at a place some miles distant from this village, and how the "poor young gentleman's' father was 'tuk' prisoner by the 'furiners' when trying to rescue his darlin' son." My old patient was then six years old, and was being carried on his mother's back to an inland village for safety, when they came on the scene. I may mention that three years ago the old man met with some very rough treatment in a fight after a fair, and I then dressed a very nasty scalp-wound for him, the result of a blow from a 'blackthorn.' The old man is still alive, but suffering from senile dementia.—I am, sir, yours faithfully,

JOHN MOLONY, Surgeon and Physician.

Collooney, Co. Sligo, May 19th, 1884.

COMMUNICATIONS, LETTERS, etc., have been received from:

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A CLINICAL LECTURE
ON TROPICAL DIARRHŒA.

Delivered at Charing Cross Hospital.

By Sir JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.

Gentlemen,—As it has been intimated to me that it would be agreeable, and perhaps useful, to you, were I, when occasion offers, to make some practical observations on the clinical aspects of certain diseases which have originated in, or are due to, the influences of a tropical climate, I have much pleasure in complying with the wish, and in placing such information and experience as I possess at your disposal. I can well imagine that clinical instruction of this character may be serviceable in a school of medicine which contributes so largely as this does to the various departments of the public service, the mercantile navy, and the civil medical establishments of our foreign possessions.

The opportunities for clinical instruction about the various, especially the acute, forms of tropical disease which would, doubtless, most interest you, are not so frequent as to give promise of a continuous or complete series of lectures; but still as, from time to time, cases occur, which illustrate some of the more important and characteristic features of tropical disease, I would gladly take advantage of them for your benefit; and I trust that I may be able to direct your attention to certain points of interest which will be of service not only to those among you who look forward to a career in the public service, or in the colonies, but also to those who contemplate professional work at home. As you all know, our rapidly extending intercommunication with India, China, the colonies, and other foreign, tropical, or subtropical countries, whilst bringing us into closer and more rapid intercourse, is also making medical men at home more familiar with, and more directly interested in, various forms, phases, and sequelæ of exotic disease, which are by no means of uncommon occurrence in many parts of our own country.

The subject I have selected for consideration to-day is one of considerable interest, and it is essentially a form of disease due to tropical influences, frequently very grave in its character, and, if not carefully and judiciously dealt with, very prejudicial to health, even to life itself. Through the kindness of Dr. Bruce I am enabled to illustrate clinically, in the case of a person recently returned from India, the symptoms of tropical diarrhœa, the complaint to which I propose to direct your attention to-day; and whilst considering this case, and directing your attention to its clinical history and peculiarities, I shall take advantage of the opportunity it gives me of describing in some detail the disease as it usually presents itself; giving you also some hints as to the method of dealing with it. I do not propose to dwell on the subject of diarrhœa generally, but on that special form of it which has received the designation of tropical, from being so frequently seen in persons who have resided in India, China, Java, Ceylon, or other tropical or subtropical countries. Chronic dysentery, with which it is often complicated, I reserve for a future occasion.

I need hardly remind you that diarrhœa is a symptom of disease rather than a disease itself, and may depend on a variety of causes.

1. On efforts to rid the intestine of peccant matters: poisons, acrid secretions, food, drink, entozoa.
2. On disease of the liver or spleen, derangement of their functions, portal congestion, or on lesions or disturbances of the mucous lining and follicles of the intestines.
3. On efforts at elimination of morbific matter in the blood; as in septicæmia, renal disease, gout, fever, etc.
4. On re-absorption into the blood of excretions and secretions, the suppression of natural discharges.
5. On malarial and climatic influences, miasmata of various kinds, especially of putrescent organic matters, [illegible], foul air and gases, sudden alternations of heat and cold, moist and dry air.
6. On mental emotions, such as fear, anticipation, anxiety.
7. As the result of degeneration and atrophy of the tissues, of the bowel in particular.
8. As a consequence of starvation or of malarial cachexia when it is wasting and chronic in its character. A severe form of [illegible], with dangerous and severe symptoms, is described as caused by bacteria mycosis intestinalis by von Recklinghausen and others, the disease and the consequent diarrhœa being caused by a form of anthrax or malignant pustule in the intestines.

Having regard to these causes, a certain classification of the disease which answers well enough for practical purposes may be stated in the following terms.

Fæculent diarrhœa, the result of the presence of certain irritating matters in the *primæ viæ*, removed with removal of the cause.

Catarrhal or congestive or inflammatory diarrhœa, due to continuance of irritation, or catarrhal conditions thereby induced, or to constitutional causes.

Diarrhœa from checked action of the skin, or from miasmata, when the mucous surface, villi, and follicles of the intestine may be implicated.

There may be inflammation or even ulceration, and serous, mucous, or fibrinous and flaky discharges mixed with fæcal matter, accompanied by pain, griping, and even blood; indeed, it is apt to pass into dysentery, perhaps is dysentery from the commencement. And though these cases are generally amenable to early treatment, they may pass into a chronic stage; and so closely resemble, if they be not identical with dysentery, that they may be called either dysentery or diarrhœa.

Then there is the bilious diarrhœa, the autumnal or summer diarrhœa, the so-called sporadic cholera, which sets in with great violence, and may so exhaust the patient by the loss of serum which accompanies or follows the expulsion of the ingesta, and bilious and other secretions, that symptoms of collapse and other conditions peculiar to true cholera, such as cramp, suppression of urine, great thirst, may occur. It may happen in this country, and often causes great debility. The conditions are indeed very like, if not identical with, those of true cholera, the appearance of which is frequently heralded by cases of this kind; and often a source of anxiety in India, when such an attack of diarrhœa makes its appearance, lest it should pass into the true cholera.

Happily, it is often readily controlled; but those who have been in cholera camps and regions, and have had to deal with outbreaks of cholera, know the vital importance of checking looseness at the outset, feeling well assured that, by so doing, they may in many cases prevent the sufferer from passing into the dangerous condition that is foreshadowed by the diarrhœa.

Doubtless, astringent and sedative remedies are sometimes given, when a dose of castor-oil or Gregory's powder would have been more to the purpose, but that is an error easily rectified; whereas the passing of diarrhœa into cholera is a very serious matter, and may prove fatal.

Lastly, there is the chronic diarrhœa depending on visceral changes due to constitutional causes and defective nutrition.

It is of diarrhœa due to tropical and malarious influences—that which results from the debility and cachexia induced by these conditions—that I am about to speak.

The chronic diarrhœa, diarrhœa alba, or white flux, is one of the most important, as it is one of the most dangerous forms of the disease. All diarrhœas may become chronic, and when they do so they induce exhaustion, anæmia, and ultimately tissue-degeneration; but it is in the peculiar form to which I now allude that the worst symptoms are manifested, and that a dangerous and protracted state of disease is often induced. It is insidious and slow in its progress, but surely wasting in its effects, and when protracted beyond a certain stage is fatal, owing to irreparable degeneration of the intestinal mucous surface and glands, and the consequent inability to absorb nourishment. Death results from slow inanition, simply because the channels for the admission of nutritive material are destroyed.

This form of diarrhœa has been described by Annesley, Twining, Martin, Goodeve, and others, especially by Mr. A. Grant in the *Indian Annals of Medical Science*. It is commonly known in India as "hill-diarrhœa," because it is apt to appear in some of the hill-stations, where atmospheric changes, and probably water, are instrumental in producing it in people who have suffered more or less from the debilitating influences of the plains, though it appears sometimes in recent arrivals in India, and in some who do not seem to have suffered previously from the effects of climate; it must be regarded, nevertheless, I think, as essentially a climatic disease, even though no obvious [illegible] have preceded it. The hill-diarrhœa and the white flux of other parts of India are only [illegible] disease, and, in their pathology and symptoms, so much alike that I regard them as identical. It is frequently seen in this country, for it is so well known that removal from the climate or site where it was contracted is necessary, that those who [illegible] here. [illegible] chronic dysentery.

Sir R. Martin has well remarked, "Although [illegible] generally follows or precedes [illegible] persons on their return to England [illegible] during their residence in India.

had never suffered from any of the diseases of that country. The health of such patients, however, had been enfeebled, and they were thus rendered susceptible to the influence of cold or damp, or (what is always more injurious to the returned Indian) to both conjoined. The returned Indian is often seized with diarrhœa from exposure to cold on board ship, especially if exposed to the spring easterly winds. The cold of the English winter and spring proves very adverse to the cure of this disease; and I have constantly to send patients suffering from it to the sheltered places on the coast, as Hastings, Bournemouth, Ventnor. Fatigue is almost as injurious as cold."

I may add that persons who come home from India suffering from general debility, from climatic cachexia attended with hepatic derangement, and a congested portal system, are liable to be troubled with diarrhœa of an irregular character, generally most troublesome in the morning, rendering the patient unable to go out or undertake anything before eleven or twelve o'clock, or after taking food, fatigue of any kind, any indiscretion in diet or drink, or exposure to cold or damp. Such are benefited by relieving the congested portal system by the aid of saline laxatives, careful well regulated diet, attention to clothing, and, above all, by change of climate. These cases are sometimes obstinate enough in those who have been long in India, and especially if there be any hepatic or splenic complication, or any vestige of former dysentery.

They, however, are not of so grave a nature as the chronic white tropical diarrhœa, and are recovered from more quickly, betokening rather functional disorder and congestion than structural and degenerative changes in the viscera and mucous surface of the bowels. There may, of course, be some atrophic change, which will soon be evident from the character of the excreta.

Let me now say a few words on the symptomatology of this form of chronic diarrhœa. Its origin is often insidious, commencing with simple looseness of the bowels, with little or no pain, and producing rather a feeling of relief than of suffering; and not until the subject of it finds he is losing flesh, strength, and energy, does he realise the serious nature of the complaint. It is due rather to a general derangement of the hepatic, splenic, and gastro-intestinal functions, with atrophy of the mucous membrane, its villi and glands, than to the usual irritant or eliminative causes of diarrhœa. The appearance of the dejections is suggestive of deficient or altered bile; but this probably may be accounted for by the general state of anæmia rather than by any actual disease of the liver itself. It is only as the disease progresses that the pale colour of the excretions becomes so marked; for in the outset they resemble those of ordinary diarrhœa. The balance between exhalation and absorption seems to be disturbed, and much of the fluid which in the natural osmotic circulation of intestinal fluids would be reabsorbed is carried off, whilst wasting and degeneration result, as may be seen in the attenuated and exhausted frames and atrophied bowels of those who have died from the disease.

The appearance of persons suffering from this disease is characteristic. They are pale and emaciated, with loose, dry, flaccid, flabby skin, which in the later stages becomes discoloured, as by chloasma or Addison's disease. The fat disappears; the eyes are pearly; the lips and conjunctivæ are blanched; the tongue is dry and smooth, and in advanced stages it appears contracted and shrunken, its papillæ are obliterated, the surface is red, glazed, and dry, at times its edges are excoriated; and the buccal mucous membrane is the seat of aphthous spots or epithelial proliferation, and so tender and sensitive as to be intolerant of wine or any substance or fluid in the least pungent or stimulating.

The earlier phases are often characterised by some evidence of malarious poisoning, such as fever, neuralgia, or myalgia. Distension of the abdomen immediately after food; dyspepsia; irritability of the bowels, which are provoked by anything taken into the stomach to expel their contents; general langour and debility, mental and physical —all these increase, until all exertion is difficult and distasteful. As the diarrhœa gradually increases, these symptoms may to a certain extent be mitigated, and the patient may think himself better; but as it insidiously progresses the strength fails, and, sooner or later, he finds himself compelled to give up work and seek recovery in change of climate. There is, at last, extreme anæmia, albuminuria; dropsical effusions take place in the areolar tissue of the lower extremities. This chronic white diarrhœa appears to be as much the result of general degeneration of all, as a special disease of certain organs. Anæmia—the result of inanition, imperfect absorption, and waste of the nutrient material —is the most marked symptom during life. Examination of the bodies of those who have succumbed to the disease shows that the wasting which is so marked in the body generally has extended to the viscera themselves. When death has occurred at an early period, from the intercurrence of other disease, the intestines are found contracted, with the mucous lining thickened and congested, even ulcerated; but when death has occurred later, the coats of the bowel are found to be attenuated and diaphanous, the seat of fatty or lardaceous degeneration, frequently with ulceration in both ileum and colon, the glandular structures and the mesenteric glands atrophied and degenerated, the mesentery itself wasted. The liver is shrunken, pale, and contracted (so much so as in life to give rise to the suspicion that it is atrophied); the spleen and kidneys are often in a similar condition. There may be, in certain instances, enlargement of the liver and spleen; but, in ordinary cases of the disease, there is no such complication.

Though chronic diarrhœa is frequently the result of general degeneration of health from malarious cachexia, it is not always so, and other sources of enteric irritation with disease or disordered condition of the liver, spleen, or kidneys, or chronic dysentery, may give rise to it. It is the simpler, though not less serious, form of which I now speak, and for the management of which I shall presently offer a few suggestions.

Pathology and Morbid Anatomy.—The opportunities of studying the morbid changes that take place in ordinary examples of the disease are not frequent, as, in many cases where death occurs, it is under circumstances where *post mortem* examinations are not readily obtained; the invalids who succumb being frequently those who die in their own homes, when there is no opportunity of obtaining permission to make a necropsy. In some cases, however, it does happen that an examinaation can be made; and I will describe the pathological changes which generally may be observed.

It has long been thought that the disease is associated with chronic disease of the liver. Annesley, Twining, and others have described it. Martin, Grant, Goodeve, and others have pointed out its connection with visceral disease, wasting of tissue, and general anæmia. *Post mortem* examinations have demonstrated the attenuated, blanched, and atrophied state of the mucous membrane and follicles of the intestines. E. Goodeve gave an account of the state of the mucous membrane and glands, showing that in some cases they were in a state of amyloid degeneration, as I also pointed out in a paper written some years ago. He says that, "in children dying of the inflammatory form of diarrhœa, there may be some swelling of the follicles and Peyer's patches; but in the chronic forms there may not be much surface-change. There may be traces of redness in patches, ulceration of the glandular structures in various states of repair, greyness of portions of the mucous membrane, black or dark margins to the ulcerated tissues or healed ulcers, and puckering and contraction. In some chronic diarrhœas, especially those with the white flux, in spite of the long duration of the disease, little or no change of the mucous surface is to be found. There is great thinning of all the coats of the small intestines, so that they are quite translucent, and there is doubtless atrophy of the glandular tissues." "When these patients have had dysenteric symptoms towards the close of life, ulceration or sloughing of portions of the colon may be found. The mesenteric glands are generally enlarged and hardened in chronic diarrhœas, and especially in the white flux. The liver is not necessarily altered; but it has been found flaccid, anæmic, and small or of natural size, but without any decided morbid appearance. It occasionally presents patches of fatty degeneration; but this is not peculiar to diarrhœa." (Article "Diarrhœa," in Reynolds's *System of Medicine*, vol. i, pages 96, 97.)

In regard to the question of amyloid or lardaceous degeneration, Dr. McConnell of Calcutta writes: "Amyloid degeneration of the bowel, as far as my experience goes, is very rare among the natives of this country. I think I find about one in one hundred cases of amyloid degeneration of any organ or organs of the body. I really do not think it is commoner than that, and of all parts, the intestines are least frequently affected." He recognises the accuracy of the account given by Dr. D. D. Cunningham, of the morbid anatomy and structure of the intestines of the sufferers from diarrhœa and dysentery in the Indian famines, a condition probably similar to that of other chronic diarrhœas.

Professor Aitken says, "Lardaceous disease of the intestines comes next in frequency to that of liver, spleen, and kidney, and involves the arterial capillaries of the villi, and surrounding networks of mucous and submucous tissues. It progressively involves the villi, mucous, and submucous capillaries; there are infiltration around the solitary glands, and degeneration of the vessels surrounding Peyer's glands." He has repeatedly met with it in the cases of soldiers at Netley, where it involved the whole tract from mouth to anus. Anæmia of the mucous membrane, with a peculiar glistening or shining aspect of its surface, are the most characteristic signs of the lesion, "otherwise there are no outward signs to attract attention." The application of the iodine test is necessary to detect it.

Aitken refers to Virchow's account of this condition, and says: "Virchow has known the villi to drop off, and the intestine to be bare of the villi." Such, I believe, would not unfrequently be found the case when death has resulted from advanced stages of chronic diarrhœa. "Sometimes the villi are changed into lardaceous or albuminoid material."

Ulcers form; Peyer's patches and the solitary glands are enlarged at one time; ultimately they are destroyed by a "granulo-fatty disintegration." The whole tissues, in fact, become degenerate. A very elaborate and careful report by Dr. D. D. Cunningham,[1] on the diarrhœa and dysentery in the famine-districts, shows how the degenerative and structural changes involve the intestines and other viscera; and it is impossible, I think, not to see the bearing of those observations on the pathology and therapeutics of chronic bowel-complaint generally.

The following is an abstract of the observations. The mucous membrane of the stomach, jejunum, and duodenum was white, pulpy, soft, and bloodless; there were some traces of congestion, marks of disintegration in the jejunum; disappearances of the epithelial coat; pigmentation and atrophy of the subepithelial areolar tissue. The mucous membrane of the ileum presented more evident signs of change; it was bloodless generally, but here and there showed patches of congestion; the epithelial coat had become disorganised, or was absent, and the subepithelial tissues were affected. The solitary glands were either very few or almost entirely absent. Peyer's patches were an empty network of elevations surrounded by slightly elevated ridges; the adenoid tissue was virtually absent; the surface was smooth; the villi were almost unrecognisable; the muscular coat, covered only by a thin membranous investment, seemed to form the inner lining of the tube; it was most pronounced over the lower half or two-thirds of the ileum. Microscopic examination showed that the epithelium, where present, contained much fat, the cells including large quantities of oil-granules. In the vicinity of denuded areas, vestiges of cells and free granular matter were present. The subepithelial tissue showed evidence of similar changes; the nuclei were granular and oily. This may, to some extent, have caused the appearance of pigmentation that was observed, but there was a certain proportion of pigment-granules.

It is impossible to say whether this deposit of pigment in the mucous membrane is essentially connected with the morbid processes. It is a phenomenon of other wasting diseases, and is generally ascribed to antecedent minute extravasations of blood; but it may be due to degenerative processes. In the more advanced stages of atrophy of the mucous membrane, the nuclear elements in the villi appeared to be almost entirely absent, and the villi were represented by abortive processes containing granular matter.

The mucous membrane of the large intestine was also generally anæmic, white, but mottled pink here and there, and its texture was very soft. In some cases there was thickening. Besides the general softening there was evidence of loss of substance in some places. These patches, in certain instances, might be called ulcers, in others they seemed to be merely the result of disintegration and atrophy. In such instances, there was no evidence of congestion, and the colic lymphatic glands were pale and inconspicuous. The appearances presented by the mucous membrane were sometimes more like those of dysentery. In one case this was decidedly so. There was great thickening of the gut; the mucous membrane was broken up into hard rough masses of purple and green colour; distinct ulceration had occurred, and there was considerable congestion, whilst the lymphatic glands were turgid and of a deep purple colour.

Fatal cases of the so-called famine-dysentery [illegible] true dysenteric processes, as ordinarily understood, are present. The essential process appears to be the same as that affecting the small intestines, but it may be complicated in various [illegible] the [illegible]vention of true dysenteric changes. Does it not show how nearly the two diseases are allied; perhaps only different [illegible] of the same? The liver was small, pale, yellowish, fatty-looking; in some, the cells were healthy; in others, full of fat granules. The gall-bladder was half-full of bile; it was healthy in those [illegible] healthy; in the fatty it was pale, yellow, and very thick. The spleen was small and firm, in most [illegible] conspicuously [illegible] it appeared to present little [illegible] dense contracted [illegible] white shrivelled capsule. The kidneys [illegible] pale and anæmic; in some there was fatty degeneration of the epithelium. The pancreas was normal in some; in others, [illegible] as though it were opened out, the lobules widely separated. The [illegible] was slightly anæmic. The general result of the [illegible] observations was to show that the diseased conditions were [illegible] characterised by extreme general anæmia, and destructive processes affecting the mucous membrane of the intestinal canal.

Diagnosis.—A word or two on the diagnosis between dysentery and diarrhœa, which is often difficult. Diarrhœas are generally free from mucus and straining in the early stages. In chronic dysentery there is blood and mucus more frequently than in diarrhœa; though where there is ulceration in diarrhœa there may be blood, and it is difficult to determine which to call the disease—diarrhœa or dysentery. It is, after all, not a matter of much practical importance; and, as I have already said, the conditions are so similar that they are often confounded. In the earlier stages there is no difficulty in diagnosis; in the later, the treatment of both is much the same.

A form of chronic diarrhœa known in China and Japan by the name of "sprue," appears to be the same disease as that I have been describing, or a variety of it. Manson describes it as a result of inflammation of the alimentary mucous membrane, with anæmia and general atrophy; and ascribes it to the influences of a tropical climate on the European constitution, especially after long residence in the east.

Treatment.—It is needless to occupy your time by describing the treatment of ordinary diarrhœa. But I would again refer to the importance of checking all forms of diarrhœa during cholera-seasons, or when that disease is prevalent.

The commencement of chronic diarrhœa is insidious, and the disease often gains ground before radical measures are resorted to for its removal. In the cases that come under notice at home, the most essential step towards recovery has been taken by the patient returning to Europe; but there remains much to be done to further the improvement, which may probably have advanced considerably during the sea-voyage.

The successful treatment of chronic diarrhœa depends very much on the patient's resolution and perseverance in carrying out the instructions he receives. Diet is the most important element in it, and this must be strictly regulated; all irritating or indigestible and solid food must be at first entirely prohibited, and only that which is most easily assimilated allowed. Milk, alone or in some cases diluted with about one-fourth or one-third part of lime-water, given in small quantities and at frequent intervals—say, a wineglassful or small tumblerful every hour, or second or third hour, in some cases more frequently—will generally be found to answer, and may be continued for a long time, to the exclusion of all other food, with great advantage. Milk undiluted will not always agree (but I must say that, after considerable experience, I have very rarely found it to disagree), as may be seen by its causing irritation, and the passage of undigested caseine; but it is quite sufficient for nutrition, and by the time the patient finds that he is taking three to four quarts a day, he will have realised that he obtains from it all that is needed to support health and strength. At first, he may lose weight, but soon regains and increases it. Beef-tea, raw beef-juice, or other plain animal broth free from extraneous matters, or finely minced fresh meat; a raw egg beaten up with milk, to which a teaspoonful of brandy may be added, will sometimes, but very rarely, be tolerated (though I seldom find that they agree, and have to be discontinued). Arrow-root, tapioca, or other plain farinaceous food will sometimes, but not always, answer, certainly not at first. Tea and coffee, as a general rule, disagree, and should be avoided. Stimulants, especially for those who have long been habituated to their use, may be needed; the best are a little whisky or brandy diluted with Vals or Vichy or potash-water; but these should be laid aside if they increase the action of the bowels. A little good port wine may be tried; but, as a general rule, I find all wines unsuitable. The return to ordinary diet must be very gradual and tentative. Regularity in the times of administration and in the quantity of nourishment given is most essential. The [illegible] thing at a time, and at once to discontinue whatever appears to disagree.

It is necessary that the patient should be [illegible] flannel or woollen material next the skin, and a flannel-bandage should surround the abdomen. Chills and damp are especially to be avoided. [illegible] cold weather, the patient should not leave the house.

[illegible]

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[1] Fourteenth Annual Report of the Sanitary Commissioner with the Government of India, 1877.

benefit to be gained from such changes as may be derived from removal to different localities in the United Kingdom, where home advantages might be wanting. As the diarrhœa diminishes, the condition of the excreta improves (the dejections diminishing in number, but being copious in quantity, occurring once or twice in the day, semisolid or pultaceous, gradually increasing in consistency, and not unfrequently constipation resulting, which requires enemata or castor-oil for its removal), and strength is regained, the diet may be more varied, and out-of-door exercise more freely taken.

But, long after recovery is apparently complete, the greatest care must be taken to avoid errors in diet, over-fatigue (rest in the recumbent posture is desirable to give rest to the intestines), or exposure to extremes of temperature, or a relapse may take place. It is desirable that the stay in Europe should be prolonged, especially after recovery from severe attacks, beyond one hot season at least, and it may be necessary to defer return to India for another year.

Drugs will do little good if strict dietetic and hygienic rules be not most carefully and continuously observed. Under the impression—derived chiefly from the appearance of the evacuations—that the liver is mainly at fault, it is sometimes deemed expedient to administer cholagogues or alteratives. This, I think, is unnecessary, as there is not sufficient ground for supposing that the liver is specially at fault. The chief indication is to restore the healthy functions of the bowel by giving it rest, to promote absorption, and to delay the expulsion of its contents. This we may hope to effect by introducing only bland, unirritating, and nutrient fluids, by allaying irritation and checking excited action, and by administering such remedies as may tend to improve the general health.

To allay the irritable state of the bowels, the compound ipecacuanha powder, in combination with bismuth, quinine, and alkalies, may sometimes prove useful. Where the motions are fluid, copious, and frequent, tannin or gallic acid may be given in combination with Dover's powder. Sulphate of copper with opium has been recommended. Dilute nitric and hydrochloric acids, in combination with opium, have been found beneficial where other remedies have failed. Nitrate of silver is sometimes given, but I have not found it to produce any satisfactory results. *As a general rule, all drugs are useless.* Counterirritation over the abdomen by sinapisms or turpentine stupes may be useful. Opiates and small demulcent injections are often efficacious in allaying the irritability of the bowel and giving rest. Hypodermic injections of morphia may be tried if opiates do not agree; but I have not found it necessary to resort to them. Opiates are sometimes objected to on account of their interference with the secretions; but this is, I believe, a groundless objection; the colour of the evacuations need not prevent their use, and the rest and quiet that they give may be of importance. Mucilaginous decoctions or infusions, such as those prepared from the fresh bale-fruit, or from the isophgool (*Plantago Isophgoola*), the seeds of which are often given with good effect by the natives of India for the sake of the mucilaginous envelope. Solution of gum, water-arrowroot, etc., may be beneficial for their soothing and nutrient properties.

In the earlier stages of the disease, where there is hepatic and portal congestion, ipecacuanha in large doses, ten to twenty grains, may cut short the state which would have passed into diarrhœa. This, however, is quite inapplicable to the disease in its more developed stages. I have found some cases, which were aggravated by a state of portal congestion, improve rapidly after a few doses of a saline aperient.

As recovery progresses, preparations of quinine, iron, and other tonics are beneficial. A visit to some of the Continental health-resorts may be of advantage in expediting recovery, not so much for the sake of the waters, chalybeate or others, as for that important element in recovery from nearly all chronic diseases, "change," for the regulated and physiologically correct life, and the mental tone imparted by the determination to recover in a congenial place of residence.

The use of drugs will be modified by the peculiar circumstances of each case, but I think that, generally, the plan I have suggested will prove successful in cases that have not advanced too far. Where emaciation has made great progress, where the tongue is always red, smooth, and glazed, the mouth dry or aphthous, the diarrhœa constant, and the exhaustion great, one cannot but feel great anxiety and uncertainty as to the result, though it is seldom necessary to declare a case hopeless. The diarrhœa may disappear in this condition, giving a delusive appearance of improvement, which is not unfrequently the precursor of death. Happily, a number of cases of chronic diarrhœa of the character I have been describing have a favourable termination, and they are so in proportion to the care in which the patient adheres to the plan of treatment laid down for him; and I would emphatically repeat that strict adherence to simple milk for a long period, it may be for months, will generally prove of more value than medication of any kind.

I would only add, in conclusion, that in some cases the fresh bael, taken early in the morning in the form of sherbet, as it is given in India, will sometimes have good effect. A remedy that has often produced good results in India could hardly fail to do so here; but, of course, it, like all other mere drugs, is altogether of secondary importance to dietetic and hygienic measures.

CASE.—J. S., aged 29, enlisted in 1877. In 1880 went on foreign service to Malta and Gibraltar for one year and ten months; was then sent to Bombay, and thence to Deolalee and Benares, where he remained for nearly two years. Up to this period he had enjoyed good health, but just before leaving Benares he had an attack of looseness of the bowels which lasted a few days. He was ordered home; and arrived at Portsmouth in December 1883. Two or three days after landing in England he "caught cold," and diarrhœa came on. He took but little notice of this. On December 24th he was discharged from the service, and he came to London, where he applied to a druggist for the relief of his complaint. About the end of January, after some purgative pills, the looseness came on again, and after applying vainly for relief, he was recommended to come into hospital. He was admitted March 11th. On physical examination of the chest and abdomen, the apices of both lungs were deficient in resonance. There were signs of bronchial catarrh, no moist sounds; no signs of cavity. As far as could be ascertained, his family history was doubtful as to phthisis. The heart was normal. There was no pain or tenderness on the abdomen. Splenic dulness was slightly increased; the edge of the spleen could not be felt. Liver-dulness was normal. The urine was normal.

The evacuations were copious, frequent, clay-coloured and fluid. They gradually diminished in frequency and increased in consistency, until a condition almost of constipation ensued. He had been taking bismuth and other remedies, but with no benefit. His diet was simple.

March 19th. He was placed on milk alone, to be given in small quantities every hour. Under this, the diarrhœa diminished, and on the 28th some bread was given, but it did not agree; diarrhœa returned. The tongue had improved; the papillæ were healthy, and developed less redness. His cough was troublesome; there was some expectoration. The temperature rose to 102° daily.

On April 10th, the diarrhœa was quite gone. He was now eating bread, and had three quarts of milk a day. So far, he was much better, but the daily rise of temperature and the great emaciation and debility made prognosis doubtful. The same diet was continued, and the symptoms carefully watched, in view of some possible tubercular tendency or hepatic mischief. The case, though not a typical one of tropical diarrhœa, sufficiently illustrates the advantage of milk in controlling the diarrhœa.

SANITARY ASSURANCE ASSOCIATION.—At a meeting of the Council of this Association at 5, Argyll Place, Regent Street, W., on Monday, May 12th, Sir Joseph Fayrer, F.R.S., in the chair, a discussion took place on the International Health Exhibition in connection with a letter from Mr. H. Rutherford, of the Temple; and, on the motion of the Chairman, seconded by Lieut.-General Burne, C.B., it was resolved: "That the medical officer, Dr. James Stevenson, and the sanitary surveyor, Mr. Mark H. Judge, A.R.I.B.A., be instructed to visit the various departments of the Health Exhibition connected with the drainage and water-supply of dwelling-houses, for the purpose of reporting on the same to the Council and members of the Association." The following resolution was also passed, on the motion of Mr. Barrington Kennett, seconded by Mr. Mark H. Judge: "That certificates be given to builders and plumbers who, having executed sanitary works under the direction and supervision of the Association, have completed the same to the satisfaction of the medical officer and the sanitary surveyor." At the same meeting, it was decided to inspect and certify the sanitary condition of hotels of moderate size in any part of England on the same terms as private houses.

THE Ormskirk Rural Sanitary Authority, at their last meeting, received a letter from the Local Government Board, enclosing the report of Dr. Parsons, one of their medical officers, upon the inquiry recently held by him as to the manner in which the Poor-law district medical officers had performed their duties as medical officers of health, stating that "the board were unable to avoid the conclusion that the present arrangements for the discharge of the important duties of the office of medical officers of health were unsatisfactory, and that after June 24th next, one efficient officer should be appointed for the whole district at an adequate salary." It was decided to take the letter and the report into consideration at the next meeting.

TWO LECTURES
ON
SCLEROSIS OF THE SPINAL CORD.

By JULIUS ALTHAUS, M.D., M.R.C.P.,
Senior Physician to the Hospital for Epilepsy and Paralysis, Regent's Park.

LECTURE II.—THE CAUSES OF TABES SPINALIS.

(Concluded from page 988.)

4. Another objection which is frequently made to the syphilitic theory of tabes is, that we do not find any special symptoms in syphilitic tabes which would distinguish it at a glance from ordinary tabes. I have just mentioned that it was this circumstance which deterred Duchenne from pronouncing himself more strongly for the syphilitic origin of the disease. If we consider, however, that the description of the symptoms of tabes is in general taken from cases of syphilitic tabes, we can no longer be surprised at that circumstance. Moreover, it is obvious that such an objection, if allowed, must also apply to other forms of tertiary disease, more especially to that which is apt to occur in the brain, and which is by general consent taken to be syphilitic. An attack of hemiplegia from disease of the cerebral blood-vessels may have, and often has, exactly the same symptoms as one arising from embolism or cerebral hæmorrhage, where there is not an atom of syphilis in the case. Some of the visceral complaints induced by syphilis do not produce symptoms which are very different from those owing to idiopathic disease of the same viscera. The symptoms of tabes should be looked upon as the response of the posterior columns of the spinal cord to certain injurious influences; and this view explains why all symptoms which occur in non-syphilitic tabes may occur in the specific form of the disease, and *vice versâ*. The only difference we find in the syphilitic form is, that there are not unfrequently other symptoms of venereal affection not referable to the cord.

5. This leads us to speak of another objection which has been urged to the theory which we are now considering—viz., that in tabes we do not meet with any other of the well known symptoms of syphilis. To this I would reply that, if such symptoms be properly looked for, they are frequently discovered; they were very striking in some of the cases which I have just related, and to which I could add many others. Indeed, it is not at all uncommon to find primary or secondary cicatrices in the skin, loss of substance in the uvula, sarcocele, exostoses, and other notorious symptoms of syphilis, in such patients; while evidence of brain-syphilis, more particularly of the congestive form of it, is likewise frequent. At the same time, no doubt cases occur where such symptoms are absent, more especially in the skin and mucous membranes; but at this we cannot be surprised, if we consider that tabes is in general a tertiary manifestation of the syphilitic distemper. Similarly, we find that, in specific brain-disease, hemiplegia, with late rigidity of the paralysed muscles, may be the only symptom; while the clinical history of the case shows quite plainly that the nature of the affection is syphilitic.

A very marked case of this sort, which occurred some time ago in my practice, is described in the *Transactions* of the Clinical Society of London for 1882. General paralysis of the insane frequently ends the career of the tabid as well as some syphilitic patients.

6. A final objection which is frequently made to the syphilitic theory of tabes is, that the malady is not cured by specific treatment. A cure, however, of any affection which has already destroyed highly specialised structures is impossible under any circumstances. It is quite true that syphilitic patients daily recover their health under specific treatment; yet no amount of mercury and iodide of potassium will restore a large hole that has been made in the palate, or the pristine structure of a testicle which has undergone the process of [illegible]. Now, it is well known that, even in the beginning, tabes is not a functional but a structural disease; and, in general, all we can expect, therefore, is to arrest the further progress of the complaint, and to [illegible] those symptoms which do not depend upon absolute destruction of nervous matter. Specific treatment is mostly useless when the second stage of locomotor ataxy has been well established, and likewise for the amblyopia and amaurosis of the first stage. The more highly specialised the structures affected, the less likely is treatment to act beneficially; and this is no doubt the reason why optic atrophy constitutes such a hopeless subject for therapeutics.

Syphilitic brain-disease is equally rebellious to specific treatment, when it has once proceeded to destruction of specialised structures. No amount of iodide of potassium will ever cure softening of the motor zone of the brain, from thrombosis of the middle cerebral artery; yet the clearest possible connection may exist between the primary venereal disease and the subsequent affection of the cerebral blood-vessels.

Most cases of tabes which come under our care in practice have already lasted a number of years before they are recognised. Only too frequently lightning-pains are put down to rheumatism or gout, and palsies of ocular muscles to exposure to wind. Yet many years ago, Ricord said that the paralysis of an ocular muscle was the signature of syphilis on the eye of a patient! Fortunately we have now in the abolition of the knee-jerk a diagnostic test of the utmost value for the recognition of the earliest beginnings of tabes, and one which will no doubt lead, in course of time, to an immense improvement in the therapeutics of this disease.

While, therefore, confirmed cases of syphilitic tabes, where the disease has to a great extent run its course, cannot be cured by specific treatment, the latter is very useful as long as the irritant morbid process is still actively going on in the spinal cord. The newer a symptom, the more likely it is to yield to mercury or iodide of potassium; yet even old symptoms, if occurring in less highly specialised structures, are often greatly benefited. This is more particularly the case with the lightning-pains, which may yield to the hydrargyric perchloride after having resisted subcutaneous injections of morphia. The further progress of the disease may also be often arrested; and patients, who were fast going down hill, often regain at least some degree of health and comfort by a specific treatment. A patient whose case has just been referred to recovered completely. Rumpf, of Bonn, has cured a man who was in the second stage of tabes by mercurial treatment, continued for eight months consecutively. Hammond reports a similar case. Palsies of ocular muscles are now often in the very beginning treated energetically on a specific plan, with the result that the patients not only recover from such palsies, but never develop other symptoms which may have been on the point of breaking out. Even Leyden, who utterly scouts the idea of any connection between tabes and syphilis, is compelled to acknowledge that, after all, iodide of potassium is the best medicine for this disease!

The time during which the syphilitic germs breed in the system before they can produce tabes varies in different individuals. The most frequent period of its outbreak is between six and ten years after the primary infection. In exceptional cases it is much earlier, and I have now a patient under my care in the hospital, in whom it appeared a twelvemonth after a chancre.

In April 1883, Dr. Shepard, of the Euston Road, asked me to see an artist, aged 40, single, who had contracted syphilis from a model eight years ago. Twelve months afterwards, undoubted symptoms of tabes appeared, as the patient found great difficulty in standing and walking, and showed the characteristic gait of ataxy. He likewise suffered from attacks of lightning-pains, which were, however, not of a severe character, and appeared at long intervals. He was treated by iodide of potassium, which did no good at all; after that, he was subjected to inunction with mercurial ointment, and given blue pill, which did good for a time, but then seemed to lose its effect, as the disease gradually gained upon him. When I saw him, he was just able to walk a few steps on level ground with the aid of two sticks; he showed the classical gait of ataxy, and had lost his patellar reflexes. He could hardly stand with his feet wide apart and his eyes open, and would have gone down at once if the feet had been approached to one another and the eyes closed. Yet he had no difficulty in crossing one leg over another, and showed considerable muscular force in resisting attempted flexion of the knees. The brain and cranial nerves were healthy. He suffered from obstinate constipation, and the sexual power was completely lost. There was some numbness in the soles of the feet, but in all other parts of the body sensibility was perfectly normal. As neither his eyes nor his hands suffered in any way, he was able to paint almost as well as before the beginning of his illness, the only thing which he could not do being to take a perspective of his pictures by walking backwards from his easel.

Another case, in which the symptoms of tabes appeared early after syphilis, was that of a merchant whom Mr. Bader sent to me in February [illegible]. The patient was [illegible] with three children, and had [illegible]. Twelve months afterwards, [illegible] more or less all parts of the body. [illegible] I saw him, his sight began to fail, [illegible] from atrophy of the optic nerves. [illegible] was absent. [illegible] was [illegible] a fortnight ago.

On the other hand, the patient may remain for many years in apparently good health after he has contracted syphilis; so that the appearance of the first symptoms of tabes is believed to be unconnected with the specific taint, and put down to other causes.

Such was the case of a gentleman aged 41, single, whom I saw, at the request of Mr. Bader, in August 1883. He had masturbated heavily at school, and contracted syphilis ten years ago. The symptoms of this illness were slight and of short duration; and the patient had been in thoroughly good health until about three years ago, when his sight commenced to become dim. This was at first believed to be a local affection, and treated as such until Mr. Bader suspected it to be a part and parcel of a general disease. I found, on examination, loss of knee-jerk, Romberg's symptom, constipation, difficulty of micturition, and a history of lightning-pains, rendering the diagnosis of tabes certain.

In the following case, the interval between the occurrence of the primary sore and the appearance of the first symptoms of tabes was seventeen years.

In May 1883, I was consulted by an army surgeon, aged 42, married, with three children, who had had syphilis badly twenty years ago, but had been apparently quite well afterwards. Three years ago, lightning-pains appeared in the legs, arms, and head; and soon afterwards considerable difficulty and awkwardness in walking was experienced. At present, he can walk for about fifteen minutes at a time, after which he is thoroughly done up. There is numbness in the legs, and in the sphere of both ulnar nerves. Romberg's symptom is well marked. "Belt-sensation" is troublesome; and the knee-jerk is absent in both legs, which are much emaciated. The patient has considerable difficulty with his bowels, but none with his bladder. The sexual power is diminished, yet there are not unfrequently nocturnal emissions of semen.

The length of time which intervenes between the outbreak of the two diseases does not speak against their standing in the relation of cause and effect. In other diseases, many years are known to elapse before a cause produces an effect. Sir Benjamin Brodie met with an accident while riding on horseback in 1834, dislocating his right shoulder; and he eventually died of cancer, which had become developed in the same joint, in September 1862, which gives an interval of twenty-eight years between the injury and the consecutive disease. It would not be difficult to multiply such examples. Moreover, no one thinks of denying that manifestly syphilitic symptoms may and do occur in the bones, testicles, and even in the skin, as long as twenty or thirty years after the primary affection.

Some of those observers who are fond of attempting to reconcile contradictory opinions, have started the idea that syphilis acts indirectly in producing tabes, and is what is called a predisposing cause. It is said to lower the system, to deprive it of its power of resistance, and in this way to act like other debilitating influences, such as masturbation, sexual and other excesses, etc. This view, however, is hardly supported by what we see in practice. In many cases, indeed, so far from being debilitated by the germs which are breeding in them, the patients appear to be quite well and strong at the time of the outbreak of tabes, and this more especially where the primary and secondary symptoms have been slight.

A merchant, aged 51, married, and father of six children, consulted me in February 1881. He had had syphilis twenty years ago, and his eldest child had been syphilitic. For many years past, he had been perfectly well; but in March 1880, he suddenly saw everything double. He consulted the late Mr. Critchett, under whose care the affection disappeared within a month. He had a second attack of the same thing in January 1881, and was again subjected to treatment, but this time without any benefit. I examined him carefully for symptoms of tabes and syphilis, and could discover nothing wrong except complete loss of the knee-jerk in both sides and paralysis of the rectus externus muscle. His general health was excellent; yet there could be no doubt that he was in the first stage of tabes.

It is a curious circumstance, and one that is of some moment in the question with which we are now occupied, that both tabes and syphilis are much more frequent in males than in females. Fournier finds that, amongst syphilitic patients, there is one woman to nine men; while the proportion in tabes is about one woman to ten men. Where tabes occurs in women, it is generally in the lower orders of prostitutes, or in poor women who have to work hard in damp shops. Erb has seen thirteen tabid women, of whom four had apparently not had any syphilis. Three others denied having had it; but the first of these latter had had three miscarriages, had suffered from violent headaches, and four of her children had died young. The second of the three had had two miscarriages, and showed cicatrices resulting from extensive ulceration of the skin. The husband of the third person was notoriously syphilitic. Four others had certainly had syphilis; in another this was highly probable; one more had had a chancre. This is rather a heavy indictment, and more particularly so when we remember how difficult it sometimes is to discover syphilis in a woman, and how easy, on the other hand, to overlook it.

While, therefore, an overwhelming amount of evidence speaks for a causal relation between syphilis and tabes, we must acknowledge, on the other hand, that cases are occasionally met with in practice where tabes and syphilis occur together, and where, under the influence of specific treatment, the syphilitic symptoms on the skin and the mucous membranes are improved or cured, while the symptoms of tabes become worse. These may afterwards improve under the influence of electricity and nitrate of silver. Such cases are certainly startling; at the same time they only prove what is already known—viz., that in general an antisyphilitic treatment has only little influence on tabes when this has become firmly established, that is, after the second or ataxic stage has been fairly reached.

In many cases, no other cause but syphilis can be found for the evolution of tabes; while in others, a variety of injurious influences appear to act together with the syphilitic dyscrasia in leading to the outbreak of the complaint. The principal one of these latter is unquestionably the influence of *cold*. Most observers are agreed on this point, and only Fournier appears to attach little importance to it. The influence of cold in the syphilitic appears occasionally to act as the exciting cause, while in the non-syphilitic it is often mentioned as the only cause which can be assigned.

In May 1874, I was consulted by a patient, aged 59, married, who had for a good many years been in business in Canada as a provision-curer. He had there to pass constantly from one extreme of temperature to another, as he had first to go into ice-houses and afterwards into the sun, when the thermometer in the shade was at 90°. He had, however, also had syphilis and gonorrhœa eighteen years ago, and had a stricture of the urethra, which gave him a great deal of trouble. Three or four years ago, he suddenly lost his speech, and became paralysed on the right side. He was unconscious for a fortnight, and then recovered. When I saw him, he had the true gait of ataxy, difficulty in standing, numbness up to the wrist, complete loss of sexual power, but not of desire, and constipation of the bowels. He could generally pass his urine in a small stream, but had occasionally attacks of retention, when the catheter had to be introduced. The symptoms of tabes had become developed within the last three years, and were by the patient and his friends attributed to the chills he was in the habit of receiving by going into ice-houses. Yet we cannot ignore that he had had syphilis, and the fact of his having had temporary aphasia and hemiplegia, in addition to his other troubles, speaks strongly for the specific character of all his nerve-symptoms.

Another case, in which the influence of cold appeared to act as the exciting cause of tabes in a syphilitic subject, was that of a merchant, aged 30, single, who consulted me in January 1873. He had led a very wild life, and had syphilis badly four years ago. He consulted, amongst others, Dr. Lewin of Berlin, and was treated by him with subcutaneous injections of perchloride of mercury for a month; after which all symptoms of syphilis left him. He spent the autumn of 1870 at Brighton, and was advised to take sea-baths very late in the season. After this, he first began to feel shooting-pains in the lower extremities, more particularly the right leg; and had difficulty in walking, with sluggishness of the bladder and constipation of the bowels. Romberg's symptom was present. He remained for some time under my care, and I had the opportunity of satisfying myself that the syphilitic taint was by no means eradicated from his system, as he would occasionally, for weeks together, have specific eruptions on different parts of the body, such as ulceration of the tongue and of the penis.

A singular case in point is that of a Russian officer, who acquired a chancre while serving with the army in the Caucasus, and treated the sore with the application of what he called "snow-poultices!" Soon afterwards, he felt a shooting pain in the groin, scrotum, sacrum, and left leg, which induced him to apply to a surgeon. He now underwent treatment by inunction, which appeared to be successful for the time. Three years afterwards, however, he was obliged to stand in the water for a couple of hours, and then felt almost at once the same pain in the left leg and other parts which he had had on applying the snow. Shortly after this exposure had taken place, double vision, constriction of the chest, and other symptoms of tabes supervened.

The influence of exposure to cold is, no doubt, to a great extent, instrumental in causing the numerous cases of tabes which occur after campaigns. When the Austrians had lost the battle of Sadowa, they had, in their precipitate retreat, to cross the river Elbe; and it is related that, amongst those who had to flee for their lives, and were thoroughly wetted on that occasion, an unusual number of cases of this malady occurred. Romberg mentions that the disease was rife during the great French wars in the commencement of this century. A large number of cases appears also to have occurred in the celebrated free corps commanded by Major von Lutzow in the German war of liberation in 1813, when that troop of irregular horse underwent the most extraordinary fatigues in constantly harassing the outposts of the French armies. After the war in Hungary in 1849, and the French campaign in Mexico, similar results were observed. In campaigns, however, the influence of cold is only one of the factors; syphilis, overexertion by forced marches, and excesses of various kinds, play, probably, quite as important a part in the production of the disease as cold.

In ordinary every-day life, the influence of cold in producing tabes is observed chiefly in persons who sleep in newly built houses, or out of doors, or in damp bedrooms; who work in cold draughty workshops or offices, or as agricultural labourers in the fields. Tabes seems occasionally to spring from frost-bite. Exposure to cold also has a most prejudicial influence after the disease has become developed. It often gives a fresh impetus to the morbid process, and renders the patients more useless and helpless than they were before.

This circumstance was well shown in the case of a merchant, aged 40, a widower, who consulted me in October 1873. He had had gonorrhœa many times, and syphilis twenty years ago. He had infected his wife and only child. About twelve months ago, he had a sudden attack of double vision, and began to suffer from spermatorrhœa and from lightning-pains through the legs. He consulted a quack, who told him that "his blood was too hot," and advised him to walk with his naked feet on the bare floor for half an hour every evening. After the patient had done this a few times, he rapidly lost the use of his legs, and was now totally unable to walk or to stand, but managed, with crutches, to walk a maximum of three hundred yards. He still could, when sitting on a chair, cross one leg over the other, and move the legs in bed quite easily in all directions. The bladder was extremely sluggish, the bowels confined, and the soles of the feet completely benumbed.

The next cause which is of influence, as exciting the development of tabes, is *overexertion*. Experimental overstimulation of the muscles in animals, by long continued faradisation, has led to paralysis of their limbs, as seen by Vulpian, Brown-Séquard, and others; and it is easy to understand how overexertion, either in walking or other ways, should exhaust the vital power of the spinal cord. This is more particularly the case with the syphilitic, while in otherwise healthy persons it is more rare; yet it was the only cause which could be discovered in the following case.

A merchant, aged 50, consulted me in November 1871. He had for a number of years been engaged in mining operations in South America, which entailed a great deal of going down on ladders and crawling on niches in rocks, at a depth of upwards of a thousand feet. He first felt weakness in the legs seventeen years ago, after he had done "an unusually hard job" of this kind. He went on with his work, however, but gradually became worse, and, about four years ago, was recommended to take hot mineral baths in South America, after which the disease appeared to make more rapid progress. When I saw him, symptoms of tabes were marked in both upper and lower extremities, and there was also a considerable amount of wasting in the muscles of the hands. He had never had syphilis.

The following is another case in point.

In June 1874, I was consulted by a young gentleman aged 20, who was then reading for the bar, and was chicken-breasted and hump-backed, but had been pretty well until the summer of 1873, when he went to the Vienna Exhibition, where he was walking and standing about all day long. After some time spent in this manner he began to feel great numbness in the feet and legs, which gradually spread upwards to the waist. He was also very much troubled with a feeling of tightness round the chest. Symptoms of catarrh of the bladder, with great irritability of the viscus, then appeared, and the patient gradually got so weak on his legs that he had to give up walking altogether. At present he was totally unable to walk without assistance, yet had not the least difficulty in moving his legs in bed, and showed considerable muscular force in resisting [illegible] the knees. He had completely lost the power over the bladder, and was obliged to introduce the catheter sometimes every [illegible], especially in the night, when he could never sleep properly on account of constant calls to pass his urine. The urine was ammoniacal and contained a large quantity of muco-pus. There were no symptoms of tabes above the waist. The patient denied having ever suffered from gonorrhœa or syphilis, or been much exposed to cold, and attributed his malady entirely to the overexertion which has been mentioned.

Accidents appear occasionally to lead to tabes, without any [illegible] infection or any other cause having previously occurred. This question has recently been studied by Petit, who has collected forty-seven cases, and concludes that injury to the spine, whether direct or indirect, by falls on the back, the seat, or the feet, may cause a concussion of the cord, and subsequently lesions, which may become the starting point of a chronic myelitis, showing the [illegible]. He thinks that—more especially in persons predisposed to sclerosis in general, such as the gouty, the syphilitic, and the alcoholised—injuries at a distance from the spine may over-excite the cord, and lead to the development of tabes; that they may aggravate the existing disease, or cause a relapse where it has been cured. I am inclined to agree with Petit's views, from having had several cases under my care in which a severe accident was the only cause which could be ascertained.

In June 1882, I had a patient, aged 50, under my care at the hospital, who had been a digger in Australia, and had been [illegible] buried in a mine for several hours. This occurred three years ago. A few days after this accident, the first shocks of lightning-pains appeared in the right leg; and, twelve months before coming under my care, ataxy of gait, with other characteristic symptoms, began to be perceptible. The patient denied any syphilitic infection.

In the following case there was a history of syphilis, excesses in smoking, drinking, and sexual indulgence, two several accidents, and habitual exposure to cold.

A chemist's assistant, aged 36, single, consulted me in November 1881. He had for years led a very wild life, and exceeded greatly in drinking, smoking, and sexual intercourse. Ten years ago he had a sore, which was presently followed by a bubo and roseola, but no other symptoms of infection. Four or five years ago he had, on two several occasions, fallen from his horse. He had also been very much exposed to cold in a shop, where no fire was kept in winter, and draughts were incessant. Three years ago, when at a cricket-match, he felt that he could not run well, and suddenly staggered and fell down. Ever since that time he had had great difficulty in walking. Two years ago he had double vision, but only for a short time. Shooting pains in the legs then came on, which were, however, not severe, and when I saw him he complained more of pain in the left shoulder, which was apt to come and go quite suddenly. Going downstairs was most awkward, while he managed to go upstairs tolerably well. Romberg's, Westphal's, and Argyll-Robertson's symptoms were marked. He suffered from constipation of the bowels and incontinence of urine, and the sexual power was gone. There was considerable diminution of sensibility in the sphere of the right ulnar nerve, but none in the left. The muscles of the balls of both thumbs were greatly wasted, and the patient had, on this account, great difficulty in writing. The interossei were also somewhat wasted. The electric reactions of the wasted muscles were, however, normal. The grasp of the dynamometer was only 60° with the left, and 80° with the right hand.

I saw this patient again in June 1883, when there were, in addition, symptoms of optic atrophy in the right eye. The difficulty of vision had only become perceptible about a fortnight ago, when "a dark cloud seemed to become settled at the top of the field of vision, and he was unable to distinguish with that eye anything above the eyebrow." There was achromatopsia on the right, but not on the left eye. The right eye showed the peculiar white condition of the nerve, but the left appeared normal by ophthalmoscopic investigation, and also had the proper acuity of vision.

[illegible] which "frantic masturbation" appeared to be the cause. Sexual excesses generally coincide with excesses in drinking, smoking, and the [illegible] is to receive those impressions, and that it is more the prolonged and injurious action of a more or less abnormal sexual excitement on the spinal cord than syphilis which produces tabes. I am unable to agree with this opinion. I have seen in hospital-practice cases of tabes in London working-women, who had to use the sewing-machine which is worked with the foot, and have inquired amongst them whether this has the effect on the sexual organs mentioned by Lancereaux. They did not seem to understand the bearing of my inquiry, although they happened to be very intelligent persons, but attributed their illness to having worked in damp workshops and amongst generally unhealthy surroundings. None of them had apparently had syphilis. The French working-girls are probably sexually more excitable than the English, a similar difference being seen in the development and aspects of hysteria in the two countries.

The influence of *drink* alone does not seem to be great. A French army-surgeon, who consulted me in December 1882, for a very painful form of tabes, with severe laryngeal crises, mentioned in his history masturbation early in life; syphilis, sexual excesses, and absinthe-drinking later on. The influence of drink in the parent was the only cause which I could discover in the case of a Swedish gentleman, who was sent to me by Dr. Allan, of Hyde Park Terrace, in January last. He had led an exemplary life, had never had anything to do with women, not met with accidents, nor been subject to exposure or unfavourable influences of any kind. His father, however, had been an inveterate drunkard, and had died in a fit of drunkenness at 39 years of age. It is therefore not at all improbable that this patient may have been conceived while his father was in a state of intoxication—a circumstance which is known to give rise to epilepsy, paralysis, idiocy, and insanity in the offspring, and is probably instrumental in inducing the form of tabes which is known as Friedreich's disease.

The influence of *tobacco-smoking* is probably not great; excessive smoking, however, was mentioned to me as the cause of his illness by a merchant, aged 31, married, and father of three children, who consulted me in March 1874. He said that he had for years smoked all day long without interruption, and habitually consumed as much as two ounces of birdseye in a day. He had never had syphilis, nor been subject to any other unfavourable influence. His present illness dated from three years ago, when his legs became very weak and numb. He now felt "as if he had no legs, but only two sticks." He had the characteristic difficulty in standing, the ataxic gait, loss of sexual power, and of control over the bladder and bowels.

The *acute infectious diseases* appear to have but little influence in producing tabes. I have never seen a case occurring subsequently to typhoid fever, small-pox, erysipelas, measles, etc., and only one after jungle-fever.

This was the case of an officer, aged 35, single, who was sent to me by Dr. Henry Savage, in May 1865; he had been fourteen years in India, and enjoyed good health until about twelve months ago, when he was seized by jungle-fever, which proved most intractable; and he never recovered his health thoroughly afterwards. He suffered much from indigestion and nervousness, but more particularly from difficulty in walking. I found the gait typically ataxic. He was apt to lose his balance, and had frequently fallen down lately; he felt quite helpless in the dark, was very nervous on going downstairs, and had a peculiar feeling in walking, as if the ground rose with him, and he were walking on elastic springs. The right pupil was larger than the left, but there were no ophthalmoscopic signs of optic atrophy. He had had no syphilis, and his illness could only be attributed to the effects of the fever. There was a slight but perceptible swelling of the spleen.

In a few patients, finally, we do not find any other cause except the *neurotic constitution*, as inherited from parents who have been subject to epilepsy, paralysis, insanity, hysteria, chorea, megrim, malformation of the skull, or simply to excessive excitability of the nervous system, as shown by habitually violent manners, outbursts of passion, an odd or eccentric behaviour, etc.

The influence of the neurotic constitution, however, is more particularly seen in that peculiar form of tabes which is known as Friedreich's disease, or hereditary ataxy. In by far the largest majority of cases of ordinary tabes, however, the fault lies more with the individual patient than with the stock from which he came. Hysteria in the mother I have found in several cases, while of other forms of nervous disease in parents I have seen singularly little. Vulpian states that a special predisposition must necessarily exist for the development of tabes, even where there has been syphilis; for why, he asks, should tabes be so rare when syphilis is so frequent? To this question I may answer, first, that tabes is much more frequent than is generally believed; and, secondly, that many persons who have acquired syphilis are subjected to a long course of specific treatment, and therefore escape the tertiary affections which might otherwise have been in store for them. On the whole, therefore, there is only a slight influence of heredity in tabes; on the other hand, the mode of life adopted by the individual plays, no doubt, a considerable part in the production of the disease. Persons who have had syphilis will be more likely to acquire tabes if they commit afterwards excesses in sexual indulgence, the pleasures of the table, drinking and smoking, and lead an irregular and exciting kind of life altogether.

Fournier finds most victims of tabes amongst the votaries of pleasure in large cities. Yet syphilis, drink, and venereal excesses are quite as much at work in small country towns as in Paris and London; and I doubt whether tabes is really more frequent in the "great centres of civilisation." I have seen a considerable number of men who had emptied to the last dregs the cup of what is called "pleasure," and who, having by a lucky chance steered clear of syphilis, had not acquired tabes. Excesses without syphilis appear to lead, in general, more to cerebral than to spinal disease.

Whether any particular profession is more exposed to tabes than another is difficult to ascertain. In hospital-practice, my patients have been firemen, boatmen, cabmen, coachmen, policemen, engine-drivers, workers in drainage, railway-guards, and navvies; and, amongst women, those who had to work hard and long in damp places, more especially upholstresses, waistcoat-makers, laundresses, etc. On the whole, however, tabes appears to be more frequent in the higher than in the lower strata of society; and this is possibly due to the greater mental efforts required of the former, combined with anxiety and depressing emotions of various kinds which affect the rich more than the poor, and which tend to lower the power of resistance of the nervous centres to injurious influences.

Whether acute or subacute muscular rheumatism has any influence in the production of tabes, as has been stated, seems very doubtful. Most patients call the lightning-pains rheumatic, and come with an apparent history of rheumatism, which, however, does not bear critical investigation. The same may be said of our old friend, the "suppression of habitual perspiration." This is rather more likely to be owing to, than productive of, the disease. A patient, who was sent to me by Mr. Bickersteth of Liverpool, in June 1882, ascribed the outbreak of the malady to a bad attack of diarrhœa, which he had had while staying at Madeira; it was then that he first noticed unsteadiness in walking, which the medical man there thought to be owing to the relaxing climate. On inquiry, I found that he had had syphilis very badly fifteen years ago. He then suffered from fearful ulcerations of the skin and subjacent tissues, buboes which would not heal, etc., for about fifteen months after the primary sore, and he acknowledged having been insufficiently treated "from want of time!" He had now occasionally crops of copper-coloured spots appearing on his skin; on the whole, however, the "active" manifestations of the disease had ceased for some years past. At present, he showed absence of knee-jerk in both legs; he had difficulty in holding and expelling the urine, looseness of the bowels, diminished sexual desire and power, Romberg's symptom, ataxic gait, and difficulty in going downstairs. In the upper extremities, the muscular force was considerable, as he squeezed the dynamometer to 160°, yet the fingers were numb. He had never suffered from lightning-pains or from constriction round the waist. While, therefore, the disease was no doubt owing to syphilis, yet the attack of diarrhœa may have aggravated the already existing malady.

We are on much firmer ground in discussing the influence of age and sex in the production of tabes.

With regard to the *age* at which the disease is most likely to break out, the statements of several observers are devoid of value, as they have only given the ages at which the patients came under care, and not those at which the first symptoms of the malady appeared.

In fifty-two cases in which I have been able to ascertain as nearly as possible the date of the outbreak of the disease, it occurred—

At 9 years in 1 case.
Between 20 and 29 years in 9 cases.
,, 30 ,, 39 ,, 18 ,,
,, 40 ,, 49 ,, 13 ,,
,, 50 ,, 59 ,, 10 ,,
At 60 years in 1 case.

My youngest patient was a girl, aged 9, who was sent to me by Dr. Horace Dobell, in July 1881. She had been staying at the seaside, and been paddling a good deal in the cold water with her naked feet, which was the only cause that could be ascertained. After a time, she experienced lightning-pains in different parts of the body, which were short, sharp, and agonising, and caused her to scream whenever a shock passed through her. When she come to see me, these shocks occurred chiefly in the left knee, where a stabbing pain was felt every two or three minutes. The knee-jerk was absent in both sides. There were no other symptoms; and she did not appear to have ever been subject to symptoms of inherited syphilis. The pain resisted the use of nitrate of silver, in doses of one-eighth part of a grain, and the application of the constant current; but yielded completely to the use of ergot, in ten-minim doses of the liquid extract, thrice daily. I have not seen the little patient since, and am therefore unable to say whether the patellar reflex has returned.

The next youngest patient with tabes whom I have seen was an omnibus-conductor, aged 22, who came under my care at the hospital in February 1878. He had had small-pox ten years before, and a primary sore when seventeen years of age. He appeared to have had no secondary symptoms, but had an attack of hemiplegia of the left side two and a half years ago, being then in his twentieth year. He recovered from this completely in three weeks. In June 1877, he had an attack of double vision, which was cured at Moorfields. A week before he came to the hospital, he suddenly felt pain at the back of the head and down the neck, and a curious sensation of numbness in his face, which soon afterwards was drawn to the side. When I examined the patient, there were all the symptoms of paralysis of the left portio dura in the first portion of the Fallopian canal, together with paralysis of the left rectus externus. The knee-jerk was absent in both sides. There could be no doubt that it was a case of commencing tabes; but it was difficult to say when this affection commenced, and whether it was already present when the patient had the stroke of paralysis at nineteen years of age, or whether the attack of double vision at twenty-one was the first symptom of it. An examination of the knee-jerk alone at the earlier period of his illness could have settled this question.

Another case in a very young man was that of a lieutenant in the Indian army, who was sent to me by Mr. Erichsen in April 1872. He was then twenty-three years of age, and had contracted syphilis three years ago. He had had an indurated chancre and bubo, and had subsequently suffered from severe ulceration in the region of the left shoulder, and from iritis. Symptoms of tabes appeared about twelve months ago, that is, at twenty-two years of age, and were more marked in the left than in the right side of the body. He was much troubled with numbness, particularly in the left foot; had difficulty in standing on the left foot, while he could stand tolerably well on the right; staggered when he was requested to close his eyes; and had much difficulty in walking slowly, while he could walk fast better. He then, however, had to manœuvre considerably, and showed the characteristic gait of ataxy in the most unmistakable manner.

From the table which I have just given, it appears that tabes is most prone to break out between thirty and fifty years of age. The ages of the same patients at the time they came under my care were as follows.

At 9 years in 1 case.
From 20 to 29 years in 3 cases.
,, 30 ,, 39 ,, 12 ,,
,, 40 ,, 49 ,, 21 ,,
,, 50 ,, 59 ,, 11 ,,
,, 60 ,, 69 ,, 3 ,,
At 72 years in 1 case.

Tabes is, therefore, in general a disease of the prime of life.

The oldest patient with unmistakable tabes whom I have seen was a gentleman aged 72, who consulted me in June 1881, and who had had syphilis thirty years ago. The first symptoms of tabes appeared in him three years ago. In the same month, I saw another gentleman, aged 66, a widower, who had had syphilis twenty-six years ago. He had remained well for sixteen years, and it was only then that the first symptoms of tabes presented themselves. At present, he shows all the usual symptoms of the disease confined to the lower dorsal and upper lumbar portion of the cord. Such cases, however, are exceptional.

With regard to sex, all observers are agreed that the male is much more liable to tabes than the female. I have never seen this disease in a lady, but a good many cases of it amongst the out-patients of the hospital. These were chiefly women who had to work in damp unwholesome shops, and some of them had had syphilis.

In conclusion, let me for one instant draw your attention to the practical deductions which appear to follow irresistibly from the facts I have brought before you. I hope I may have succeeded in showing that, in the vast majority of cases of locomotor ataxy, syphilis is the cause of the complaint—syphilis which has not been sufficiently treated in the beginning, and which might never have led to such results if it had been more energetically and perseveringly combated at the time of its first appearance. Allow me, therefore, most earnestly to entreat you to take syphilis well in hand at the earliest stage of its appearance, when it is much more under our control than at a later period of its existence; and do not rest in your endeavours until you have good reason to believe that every germ and vestige of that horrible poison has been thoroughly uprooted and destroyed. Examine such of your patients as have had secondary symptoms, from time to time, for the knee-jerk, loss of which I believe to be the first symptom of tabes; and, should you fail to elicit it, take it as a warning that locomotor ataxy has pushed forward its outposts, and is on the point of invading the system. Do, then, your best to obstruct its further progress by every means in your power; and let us thus, by suppressing that terrible and painful malady, tabes, add one more triumph to the victories of preventive medicine.

THE FAMILY-HISTORY OF CANCER-PATIENTS.

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THE following remarks are based on the record of 132 cases of cancer under treatment at the Middlesex Hospital during the year 1882.

With regard to the occurrence of cancer, it was found that, in 34 cases of uterine cancer, there was a history of previous malignant disease in eight families, or in 23.7 per cent.; in 41 cases of breast-cancer, in ten families, or in 24.3 per cent.; in 28 cases of cancer of the tongue, mouth, and lip, in one family, or in 3.5 per cent.; whilst in 18 miscellaneous cancers, including 10 of the rectum, no history of any previous malignant disease could be obtained. Thus, of the whole 121 cases, there was a history of previous malignant disease in nineteen families, or in 15.7 per cent. Of former estimates, Mr. Sibley's was 8.7 per cent., and Mr. Baker's 24.2.

The hereditariness of cancer has been disputed by Mr. Harrison Cripps (*St. Bartholomew's Hospital Reports*, vol. xiv, p. 287, *et seq.*), on the strength of a calculation which, as he says, proves that cancer in the parent in no way increases the liability of the offspring to suffer from the same disease. This conclusion appears to me to be based on fallacious reasoning, and consequently to be erroneous. According to Mr. Cripps, the question is, does the proportion of cancerous parents of the cancerous exceed that of the non-cancerous? It seems to me a more correct statement of the question would be, Does the proportion of cancerous relatives of the cancerous, to those of the non-cancerous, exceed the proportion of the cancerous to the non-cancerous in the whole community?

The final step of the argument, based on these incomplete premisses, exhibits this imperfection—that the conclusion is arrived at by substituting for the latter part of the initial proposition, namely, for the proportion of cancerous relatives belonging to the non-cancerous, the death-rate from cancer among the whole adult population; but these two are not identical, and consequently they are not mutually interchangeable. I have failed to find the data requisite for the solution of this question in Mr. Cripps's paper. Sir James Paget's analysis of the family history of 147 cases of innocent tumours (*Medical Times and Gazette*, August 22nd, 1857) tells against Mr. Cripps's conclusion; for only 6.8 per cent. of them were aware of having had any cancerous relative, whilst 22.4 per cent. of the cancerous had one or more relatives affected with the same disease.

With regard to the occurrence of phthisis, it was found that in 34 cases of uterine cancer there was a history of phthisis in nineteen families, or in nearly 56 per cent.; in 40 cases of breast-cancer, in twenty-four families, or in 60 per cent.; in 27 cases of cancer of the tongue, mouth, and lip, in twelve families, or in 44.4 per cent.; in 10 cases of cancer of the rectum, in four families, or in 40 per cent.; and in 8 cases of miscellaneous cancer, in one family. Thus of the whole 119 cases there was a family history of phthisis in 60, or in about 50 per cent. Mr. Sibley found it in 48 out of 130 cases, or in nearly 37 per cent. In 15 of the above cases there was a history of both phthisis and cancer in the same family.

The relatives thus affected may be classed in this way. On the father's side, phthisis in 16 cases; cancer and phthisis in [illegible] cases. On the mother's side, cancer in 10 cases; cancer and phthisis in 1 case. In the patient's brothers and sisters, phthisis in 2 cases; cancer in two cases.

In [illegible] post-mortem examinations, the lungs were found healthy in 3 only. The following lesions, not due to cancer, were recorded: old general pleuritic adhesions over both lungs in [illegible] cases; localised old adhesions, chiefly over both apices, in [illegible] cases; old tubercular disease, chiefly of both upper lobes, in [illegible] cases. These facts, together with those of the family histories, show plainly how thoroughly saturated with phthisis these cancer-families are, and how erroneous is the common idea of the incompatibility of the two diseases.

For the sake of comparison with the above, I have analysed the family history of 100 cases of phthisis under treatment at the Middlesex Hospital during the years 1882-83, with the following result. There was a history of phthisis in 42 cases; on the father's side in 19, on the mother's in 13, and in both parents in 3. In 25 families, one or more of the patients' brothers or sisters had died of, or were affected with, this disease. There was a history of cancer in 4 families only; but it ought to be stated that inquiries had not been specially directed to this end.

Subjoined is a statement of the facts elicited in the course of this inquiry with regard to each of the chief groups of cancer.

1. UTERINE CANCER.—*The Fathers.* Of 31 cases in which inquiries were made, in 29 the fathers were dead, the causes of death being as follows: phthisis, 8; bronchitis, 2; pleurisy, 1; asthma, 1; lung-disease, 1; heart-dis ase, 1; apoplexy, 3; epilepsy, 1; gout, 1; unknown, 10. In 2 they were still alive and well. Of those who died of phthisis, in 4 cases other members of their families had also died of this disease. There was not a single death from cancer among the fathers. Their average age at the time of death was 59, the youngest being 30 and the oldest 80, two having attained the latter age.

The Mothers.—Of 29 cases in which inquiries were made, 25 had died of the following diseases, and 4 were still alive and well: phthisis, 4; diarrhœa (in a phthisical person), 1; bronchitis, 4; cancer, 4; childbirth, 2; dropsy and paralysis, 1; apoplexy, 1; epilepsy, 1; unknown, 9. Their average age at death was 61; the youngest being 34, the oldest 87.

The Patients' Brothers and Sisters.—In 17 cases, the following causes of death were noted amongst the adults in these families: phthisis, 12; cancer of the uterus, 2; insanity, 1; scarlet fever, 1; apoplexy, 1. Of the families in which phthisis prevailed, more than a single member died of this disease in 7. In only one instance were all the brothers and sisters alive and well.

In 26 cases, the number of members in each family was noted, with the result that the smallest family consisted of 4, the largest of 18, the mean being 8.7.

The Occurrence of Cancer.—Of 34 cases in which this point was specially investigated, there was a history of previous malignant disease in eight families, or in 23.7 per cent. The relatives thus affected and the seats of the disease were: on the mothers' side (6)—mothers (4)—breast in two, uterus and stomach, each one; mothers' sisters (2)—locality not stated. Patients' sisters (2)—uterus in both.

The Occurrence of Phthisis.—Of thirty-four families in which this particular was noted, one or more relatives had died of, or were the subjects of, phthisis in 19, or in nearly 56 per cent. In all but 5 of these cases, more than a single relative had been thus affected. In one case, the father's father, the father, and several of his brothers and sisters, and 4 of the patient's brothers and sisters, had died of this disease.

The relatives thus affected may be classed as follows On the father's side (in 10 families): grandfather, 1; fathers, 6; fathers' brothers and sisters, 6. On the mother's side (in 4 families): mothers, 3; mothers' brothers and sisters, 1. Both parents in 2 cases. One or more of the patients' brothers and sisters in 13 families.

2. BREAST-CANCER.—*The Fathers.*—Of 40 cases in which inquiries were made, 35 had died of the following causes, and 5 were still alive: phthisis, 10; bronchitis, 1; heart-disease, 3; diabetes, 1; cholera, 1; dropsy, 1; fever, 1; diarrhœa, 1; strangulated hernia, 1; hæmorrhage from ulcer of leg, 1; senility, 1; unknown, 13. Of those still alive, 3 were well, and 2 were suffering from heart-disease and dropsy. Three of those who died of phthisis had lost other members of their families from this disease; there were 5 cases in which, though the fathers had not themselves suffered from phthisis, their parents or brothers and sisters had. Hence, out of these 40 fathers, 15 may be said to have been of decidedly phthisical families.

None of the fathers had died of cancer; but, in 3 cases, there was a history of cancer on their side, in each case the person attacked being a sister, who had died of cancer of the breast. The average age of the fathers at death was 64 years; the youngest being 33, and the oldest about 93; 5 having exceeded the age of 80.

The Mothers.—Of 37 cases, 28 had died of the following causes, and 9 were still alive and well: phthisis, 5; bronchitis, 2; chest-disease, 1; dropsy and pneumonia, 1; dropsy, 4; cancer, 2; apoplexy, 3; cholera, 1; liver-disease, 2; diabetes, 1; unknown, 7.

One of those who died of phthisis had lost several other of her relatives of this disease; in 3 cases, though death had not resulted from phthisis, they had lost one or more relatives from it. Thus, of 37 mothers, 8 were of decidedly phthisical families. Among those whose deaths were not due to cancer, 5 had cancerous relatives, and 1 had a sister who died of an "internal tumour."

The average age of the mothers at death was 65 years; the youngest being 26, and the oldest nearly 100, 6 having attained or exceeded the age of 80.

The Patients' Brothers and Sisters. In 17 families the following causes of death amongst the adults were noted: Phthisis, 10; cancer of the breast, 1; diabetes, 1; apoplexy, 1; heart-disease, 5; paralysis, 1; pyæmia, 1; scrofulous joint-disease, 1; childbirth, 1; dropsy, 1.

Of the families in which phthisis prevailed more than a single member had died of this disease in 6 cases.

In 31 cases the number of individuals in each family was noted, with the result that the smallest family consisted of 1, and the largest of 14; the average number being 7.4.

The Occurrence of Cancer.—Of 41 cases there was a history of previous malignant disease in 10, or in 24.3 per cent. The relatives thus affected were: Maternal grandmothers, (2)—1 uterus, 1 breast; paternal grandmother (1)—breast; mothers (2)—1 stomach, and 1 tongue; mother's brother (1)—tongue; patients' sisters (2)—breast in one, in the other, locality not stated; female cousin on mother's side (1)—locality not stated; fathers' sisters (2) breast in both.

In one case more than a single relative was thus affected, viz., the patient's sister and her maternal grandmother, both of whom died of cancer of the breast.

The Occurrence of Phthisis.—Of 40 cases, one or more relatives had died or were the subjects of phthisis in 24, or in 60 per cent.; in 11 instances more than a single relative of the same family had been thus affected. These may be classed thus: On the fathers' side (in 15 families), both grandparents, 1; fathers, 9; fathers' brothers or sisters, 8. On the mothers' side (in 9 families), mothers, 5; mothers' brothers or sisters, 4. Both parents in 1 case; one or more of the patient's brothers or sisters in 10 families.

3. CANCER OF THE TONGUE, MOUTH, AND LIP.—*The Fathers.* Of 20 cases, 18 had died of the following causes, and 2 were still alive and well; phthisis, 6; cancer, 1 (stomach); lock-jaw, 1; "lung-disease," 1; old age, 1; unknown, 8. Their average age at death was 61; the youngest being 30, and the oldest 95.

The Mothers. Of 19 cases, 15 had died of the following causes, and 4 were still alive and well; phthisis, 1; dropsy, 1; apoplexy, 1; childbirth, 2; abdominal tumour, 1; heart-disease, 1; old age, 1; unknown, 7. Their average age at death was 67; the youngest, 42; the oldest, 84.

The Patients' Brothers and Sisters.—In 9 of these families, there had been one or more deaths from phthisis. In 18 cases, the average number of each family was 8, the smallest 1, the largest 16.

The Occurrence of Cancer.—Of the 28 cases, there was history of cancer in 1, a father having died of cancer of the stomach.

The Occurrence of Phthisis.—Of 27 cases, one or more relations had died, or were subjects of phthisis in 12, or in 44.4 per cent. In 4 of these families, more than a single relation had died of this disease; in 1 case both parents had died of it. On the fathers' side (in 6 families), fathers, 6; fathers' brothers or sisters, 2; on the mother's side (in 1 family), the mother's brother; both parents in 1 case; one or more of patients' brothers or sisters in 8 families.

4. MISCELLANEOUS CANCERS (including 10 of the rectum).—*The Fathers.*—Of 17 cases, 14 were dead of the following diseases: phthisis, 2; bronchitis, 2; apoplexy, 1; old age, 1; dropsy, 1; fever, 1; accident, 1; unknown, 4. Three were alive and well. In 1 case, though the father had not died of phthisis, several of his brothers and sisters had. Their average age at death was 62 years, the youngest being 36, the oldest 97.

The Mothers.—Of 16 cases, 11 died of the following diseases, and 5 were still alive and well; bronchitis, 1; childbed, 2; apoplexy, 1; cholera, 1; dropsy, 1; small-pox, 1; rheumatic fever, 1; unknown, 3. Though none had died of phthisis, three had lost several brothers or sisters of this disease. Their average age at death was 51, the youngest being 30, the oldest 84.

The Patients' Brothers and Sisters.—There was no history of phthisis or cancer among them. In 15 cases, the number of individuals in each family was noted; the smallest was 1 (of which there was only a single instance), the largest 18, the average 7.4.

The Occurrence of Phthisis.—Of 18 cases, there was a history of phthisis in 5 families, or in 27.7 per cent. Two of the fathers died thus; two mothers had phthisical sisters. In one case both parents, though not phthisical, had lost several of their brothers and sisters of this disease.

THE EARLY USE OF ANTIMONY IN SURGICAL CASES.

By HENRY PAYNE, M.D., M.R.C.S.,
House-Surgeon to the Ashton Infirmary.

THE only way of ascertaining the real value of any remedy is by watching its effects after being administered; in some cases, it may appear to act like a charm, whilst in others the result is just as disappointing. This, doubtless, is owing to idiosyncrasies of the patients in the majority of cases.

There are drugs, however, that have similar actions upon different persons, suffering from different diseases, whatever may be their constitutional peculiarities; of such, antimony is one; for, whether it be given to children or adults, male or female, suffering from pneumonia, rheumatic fever, or any inflammation, it has one constant effect in all cases, that of lowering the circulation.

In all inflammatory actions, the circulatory system plays a most prominent part; no inflammation can occur without changes first taking place in the blood-vessels, leading in the early stages to a dilatation of the vessels, and an acceleration of the blood-flow; this alteration in the circulation, constituting congestion, is the very first step towards all inflammatory action. If there be no congestion, there will be no inflammation.

Now we have in antimony a drug, the physiological action of which produces just the opposite condition to what we have in the early stages of inflammation, namely, a diminution in the quantity of the blood to the part, and a retardation of its flow. This action of antimony has led me to give it in several cases of injury to the chest and abdomen, especially in those of fractured ribs with wound of the lung, and fractures of the pelvis, where we cannot doubt the peritoneum must at the same time be injured.

I will first, and as concisely as possible, give notes of such cases treated with antimony, and reserve my further comments until the last.

CASE I.—A labourer, aged 30, fell from a scaffolding on to a heap of bricks, causing a depressed fracture of the fifth, sixth, and seventh ribs of the left side—a depression into which the fist could enter; the skin over the seat of injury bulging at each expiration, and receding with an inspiration. The skin of the whole of the chest, abdomen, and neck was emphysematous; the left side was super-resonant; and no breath-sounds could be heard. Severe hæmoptysis commenced two days after admission, and continued for six days. The side was strapped; milk-diet was given; forty minims of Battley's solution were given at bedtime, and fifteen minims of antimonial wine every four hours. He was discharged in five weeks, the depressed portions of the ribs having regained their position, and the patient feeling quite well.

CASE II.—A lad, aged 15, was caught between a hoist and the wall while attempting to enter the former when in motion, causing a fracture of the fourth, fifth, and six ribs of the left side, emphysema of the chest-walls, and hæmoptysis. The side was strapped; milk-diet was ordered; seven minims of antimonial wine and ten minims of tincture of opium were given every four hours. He was quite well after fourteen days, without any inflammatory symptoms.

CASE III.—A collier, aged 39, received a double fracture of the pelvis and a comminuted fracture of both thighs, by the falling of a stone in the pit. He was treated with Bryant's parallel splint for the fractured thighs, and a bandage round the pelvis; fomentations to the abdomen; milk-diet; and ten minims each of antimonial wine and tincture of opium every four hours. He was discharged in fourteen weeks.

In the first two cases, the hæmoptysis and the emphysema indicated that the lung was wounded. A lung wounded by the end of a fractured rib adds greatly to the seriousness of the accident; for, if the complication does not end the case soon, it certainly produces pneumonia in many cases, and so retards the convalescence of the patient. As students, we are taught in such cases to strap the side and watch carefully for the first symptoms of inflammation, so as to treat them accordingly.

My theory is that, by treating the patient, immediately upon seeing him, as if he were already suffering from inflammation, we prevent the actual attack, and recovery is hastened. Hence, in these two cases, I prescribed antimony in small and frequently repeated doses, so as to depress the circulation, thereby preventing the first stage, and so all the stages, of an acute inflammatory attack.

Similarly, in the case of the fractured pelvis, fomentations were applied to the abdomen; antimony and opium administered as if peritonitis were already present; and I thoroughly believe that, if the case had not been so treated, peritonitis would have undoubtedly set in, and the chances of his recovery would have been materially lessened: for about this time I had had two cases of fractured pelvis, and only treated the peritonitis when it showed itself; and they were both fatal, *post mortem* examination revealing extensive peritonitis.

In these cases, too, I prescribed opium largely. It relieves the pain, prevents the patient being restless, and, in chest-injuries, by its action upon the respiratory centre, and, in pelvic injuries, by diminishing the peristaltic action of the intestines, brings the wounded parts into a state of relative, if not of absolute, rest, and so into a condition more favourable for repair.

In none of these cases were there any signs or symptoms of acute inflammatory action, the temperature never rising above 100°; and their termination in recovery was speedy.

The recovery of the fractured pelvis was delayed by the filling up of a large cavity over the sacrum, caused by the sloughing of the part. By the early treatment of these injuries with antimony and opium, many cases might be saved, or their recovery hastened.

THE MORTALITY FROM SMALL-POX IN ENGLAND AND WALES AND IN LONDON.

By MONTAGUE D. MAKUNA, L.R.C.P., M.R.C.S.

THE following table of mortality from small-pox has been prepared for discussion at the International Medical Congress this year. The figures are derived from the three decennial reports of the Registrar-General (the last one, for 1871-80, is not yet published).

A table giving average annual number of deaths of persons from small-pox at certain ages to a million persons living at those ages (1) in England and Wales, and (2) in London during the three decenniads 1851-60, 1861-70, and 1871-80.

	(1.) England and Wales.			(2.) London.		
Decennials.	1851-60	1861-70	1871-80	1851-60	1861-70	1871-80
All Ages.	[illegible]	163	[illegible]	276	[illegible]	[illegible]
Under 5 years	1034	[illegible]	[illegible]	1296	1158	1133
From 5 to 10 years	257	145	[illegible]	[illegible]	290	[illegible]
„ 10 to 15 „	73	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
„ 15 to 20 „	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
„ 20 to 25 „	132	[illegible]	[illegible]	[illegible]	217	469
„ 25 to 35 „	93	[illegible]	[illegible]	121	[illegible]	387
„ 35 to 45 „	53	74	[illegible]	[illegible]	[illegible]	[illegible]
„ 45 to 55 „	38	[illegible]	111	44	[illegible]	[illegible]
„ 55 to 65 „	[illegible]	[illegible]	71	13	[illegible]	110
„ 65 to 75 „	18	26	[illegible]	12	[illegible]	[illegible]
75 years and upwards	19	[illegible]	[illegible]	8	[illegible]	[illegible]

It is evident from these figures that the mortality of infants is uniformly diminishing decade after decade, while at other ages, especially in the third decade, it has increased. The ratio of increase at all ages to children under 5 years, is particularly striking. For England and Wales for the three decades, the ratios of mortality of those under 5 years to all ages are 4.6 to 1, 4 to 1, and 2.2 to 1; and for London, 4.2, 3.8, and 2.5. This diminution of ratios, decade after decade, proves the protective power of vaccination among infants, notwithstanding the increasing rates at all ages. But it is also evident that the rate of mortality for infants is higher than all the several ages, principally because a large number of them die before they are vaccinated during epidemic years. Having devoted considerable attention to the study of this subject, and having made personal observations in many places in the country and town, I can state that a large number are vaccinated before they are three months old, when the human blood has not [illegible] that constitutional change through vaccine-virus that could be looked upon as protective. Vaccination is a question of national importance: and as we vaccinate the population to protect them from small-pox epidemics, it becomes our bounden duty to inquire how far the ground on which an "Act to extend and make compulsory the practice of vaccination" is justified. While going into committee, after the second reading of the Bill, [illegible] [illegible] [illegible] [illegible] [illegible] states where vaccination was compulsory, the mortality from small-pox was taking up a small figure compared with France, England, and other countries where it was not; fourthly, the existing system of voluntary vaccination, although progressive, was attended with serious and important imperfections, exceeding irregularity, uncertainty, and inequality, for various reasons. The figures in the above table give abundance of thought for study, especially for those taking part in State medicine. I can throw out one suggestion, viz., the time of vaccination should be increased from three to six months. This would, in fine, remove the popular prejudice of ascribing many ailments of children and many deaths to vaccination, and, in my opinion, would afford better protection against small-pox.

PNEUMONIA COINCIDENT WITH SURGICAL INJURY.[1]

By R. W. FOSS, M.D.,

Surgeon to the Stockton Hospital.

The numerous varieties and modes of onset of acute pneumonia have induced me to offer details of two cases presenting rather peculiar features, insomuch that, being at first regarded as surgical cases, it was subsequently found that the patients were also suffering from inflammation of the lungs; and the question then naturally arose as to which was the primary affection; whether, in point of fact, the pneumonia followed the injury or preceded it.

Acute diseases frequently attack people who are apparently in robust health; and it has seemed to me that a man, whilst following an outdoor occupation, more particularly during the prevalence of east winds, may be suddenly seized with the initial symptoms of an acute inflammation, and, if he be working at a height above the ground, sudden syncope, causing the person to fall, may lead to more or less serious results.

Traumatic pneumonia, as is well known, is the term applied to that form which is caused by direct injury to the lung, usually from fractured ribs being forced into the lung-substance.

It is well recognised that people may walk about whilst actually suffering from typhoid fever (typhoid ambulans), and many other fevers; but usually these febrile diseases are characterised by an amount of prostration which prevents the patient from assuming or remaining in the upright position, or which, if the attempt be persisted in, may result in fatal syncope.

CASE I.—M. L., labourer, aged 44, was admitted to the hospital on Wednesday, March 29th, 1882. He had fallen from a scaffolding thirty feet high. The wind was blowing at the time very strongly from the east. He complained of great pain in the abdomen. Next day he was delirious, and it was discovered that he had pneumonia. He had no cough. He continued very delirious and prostrate till the morning of Wednesday, April 4th, when he died. On *post mortem* examination, it was found that the right lung was in a complete state of black hepatisation. There were old pleuritic adhesions. There were simple fractures of the third, fourth, fifth, and sixth ribs. The base of the left lung was in a state of red hepatisation. Red frothy mucus exuded on pressure after section. The abdominal cavity was filled with clots of blood. On the upper surface of the right lobe of the liver, near its junction with the left, there was a transverse rupture about an inch in length; on section, communicating with this, there was found a cavity, partly filled with organising clot. The kidneys were healthy.

CASE II.—On Saturday, August 12th, 1882, C. S., aged 49, sailor, a native of Iceland, was admitted to the hospital. That day, on walking from the shore to a ship along a plank, he fell into the water, causing a lacerated wound at the back of the scalp about three inches in length, and penetrating to the bone, in which, however, no fracture could be detected. He was taken on board the ship and kept in his wet clothes some four hours, and afterwards brought to the hospital, where he was found to be in a state of collapse. He was delirious. The hands and feet were cold and blue; the pulse was 72 full; the respiration was rapid. On percussion there was found to be dulness over the lower half of the right lung, and slightly at the base of the left. On auscultation very fine subcrepitant rhonchus was audible over these areas. The tongue was coated with a thick dry fur. Next morning, August 13th, he had abundant rusty sputa; the temperature was 105.3°. On August 14th the temperature was 104.3°. On August 16th he was very delirious. Convulsions came on about 9 A.M., and he died in about an hour. *Post mortem* examination showed that on the surface of the right pleura were a few scattered patches of lymph. The whole of the lung itself was in a state of hepatisation, becoming grey in patches, the middle lobe being entirely so. The whole of the left lung was also hepatised, with the exception of the apex. The heart was normal and the kidneys healthy.

These two cases illustrate the idea which is contained in the title of the paper, namely, that a man, whilst suffering from the initial symptoms of inflammation of the lung, may sustain surgical injury which, for a time, may divert the attention from what is really a serious affection. The first patient was admitted as a case of fractured ribs, and it was not till the next day that it was distinctly evident that he had pneumonia. The second case, though not so clear in demonstrating this hypothesis, still lends support to it; for the patient, after being immersed in the water, was allowed to remain some hours in his wet clothes. He, a foreigner, had been enduring some hardships previously to this, and, in fact, had been discharged from his employment on account of the irregularity of his life. It is open to question whether the immersion and subsequent lying in his wet clothes did not determine the pneumonia, as it is very clear there was, at the time, a constitutional tendency to it. It is quite possible that, when crossing the plank to the ship, he was in the commencing state of the disease which caused the syncope leading to the injury to his scalp, for, when seen, he was in a state of collapse and delirious; at the same time, all the physical signs of pneumonia were manifest.

It is no uncommon occurrence for an epileptic to attribute his fits to the effects of an injury from falling from a height, whereas, in point of fact, an attack of *petit mal* actually caused the fall.

By early directing the attention to the condition of the chest in cases of sudden injury, it is possible that sometimes benefit may accrue to the patient by judicious treatment founded on the aphorism of *obsta principiis*.

SURGICAL MEMORANDA.

LOOSENING OF THE TEETH.

THE disease alluded to by G. C., in his brief note in the JOURNAL of May 17th, 1884, deserves more attention than it has hitherto received from the medical practitioner. The disease—chronic wasting of the alveoli—seems, if not a disease of modern life, to be at least on the increase at the present time. The symptoms commence with inflammation, appearing to affect simultaneously the free edge of the gums and the alveolar periosteum. There is a discharge, usually slight in quantity, of muco-pus from within the border of the gums. The gums and alveoli slowly waste until the teeth are lost; the bone in many cases wasting more rapidly than the gum. The teeth in these cases are commonly of good structure and free from caries. There is, in many cases, deposit of tartar, often in the form of hard black nodules on the denuded surface of the root, and beneath the swollen and loosened margin of the gums. The disease rarely affects one tooth alone, more commonly affecting several at the same time; and subsequently extending to the whole set. The inflammation is usually extremely chronic, with occasional subacute and, in the later stages of the malady, acute exacerbations. The disease, rarely seen earlier than the twenty-fifth year, most commonly shows itself about middle age. It is not known whether this malady be of local or of constitutional origin, and it is not known in which tissue it has locally its starting point. It has been stated, but without any verification of the statement, that the affection is really due to ulceration of the alveoli progressing from their edges to the depths. There is no doubt this disease is often associated with certain cachexiæ. M. Magitot has noted its common appearance in diabetes. I have verified his observation in many cases, but at the same time I have seen more cases in which diabetes was not present. It sometimes is an accompaniment of gout; sometimes of debility and anæmia, and I have never seen a case in which the patient was not in some degree below the standard of health.

I believe that this affection is mostly constitutional in its origin, and is really due to local disorder of nutrition. I have noticed it in many feeble patients just beyond middle age, in whom marked fatty degeneration of the cornea was visible. Extended observations by medical practitioners might lead to an exact knowledge of the value of this affection as a diagnostic sign; at the same time making clear its etiology, and leading to more satisfactory treatment. At present, the treatment is as imperfect as our knowledge of the true nature of the malady. It consists in periodically removing tartar, and in frequently swabbing (say twice a week) the necks of the teeth beneath the loosened and swollen gums with pure carbolic acid; a thin silver probe, having its end bound with a small quantity of cotton-wool, being used to convey the carbolic acid directly to the part, and prevent it from flowing over the gums, and causing unnecessary irritation. Teeth which become so loose as to be a constant source of irritation should be extracted. The utmost cleanliness, by use of detergent lotions, proper dentifrice, and quill toothpick, must be enforced. Where several teeth have been lost, great comfort will often be afforded by the adaptation of a perfectly fitting frame of vulcanite to embrace the necks of all the teeth, and to hold artificial substitutes in the vacant places. The frame, which for the upper jaw should be on the "suction" plan, must closely surround the teeth, without causing any strain upon them.

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[1] Read before the North of England Branch

HENRY SEWILL, 6, Wimpole Street, W.

OPERATION FOR STRANGULATED FEMORAL HERNIA IN A WOMAN EIGHTY-FIVE YEARS OF AGE: RECOVERY.

MRS. F., aged 85, had always enjoyed good health (though the subject of complete procidentia uteri for many years). She suffered from signs of obstruction of the bowels in October 1882, when I discovered a small femoral hernia on the left side, of the existence of which Mrs. F. was up to that time perfectly ignorant, and which, by its strangulation, was the cause of the obstruction. The taxis was sufficient to effect reduction, with the disappearance of all symptoms. On April 23rd, 1883, she was again seized suddenly with symptoms of intestinal obstruction. On the afternoon of the following day, she sent for me, and was seen by my assistant, Mr. D. M. O'Callaghan, who found the hernia strangulated, and employed the taxis unsuccessfully. I saw her in the evening with Mr. O'Callaghan; and, after an ineffectual attempt at reduction by manipulation, with the patient under the combined influence of chloroform and ether, I proceeded to operate by the light of a lamp. The skin was slightly reddened over the tumour, the latter being about the size of an average walnut. The sac was reached in the usual way, and Gimbernat's ligament notched with a hernia-knife, but it was found to be still impossible to reduce the contents of the sac; the latter was therefore opened, when the cause of the strangulation was found to be a band of thickened fibres, which constituted the neck of the sac; this was cautiously divided, and, after examination, the contents, consisting of a knuckle of small intestine, were reduced. The bowel was of a purple colour, but had not lost its polish, and was adherent here and there to the sac through the medium of recent lymph. The wound was sponged out with weak carbolic lotion, and the edges brought together with interrupted wire sutures, and, provision being made at its lower angle for drainage, was dressed with carbolic gauze. There was no sickness after recovery from anæsthesia. One-quarter of a grain of morphia was administered hypodermically, and one grain of opium ordered to be given every four hours. The next day, she appeared to be doing well; and as she was only slightly under the influence of opium, this was ordered to be continued as before. On April 26th, at 10.30 A.M., she was found in a condition of opium narcosis. She could not be roused. The pupils were contracted to a point; the tongue dry; the breathing slow, laboured, and stertorous. Muscular twitchings were present. Pulse 108; temperature 98.4°. No urine had been passed, but, on introducing a catheter, eight ounces were withdrawn, concentrated and very strong smelling. The administration of the opium was stopped, and measures taken to arouse the patient. Blood-stained serum having soaked through the dressings, the wound was exposed, and found to be in great part united by first intention. It was dressed this time with dry boracic lint. She had recovered very much from the effects of the opium by the evening, when she was able to take milk. A small quantity of high-coloured and very offensive urine was withdrawn by the catheter. From this point she did well, and on the 28th, the wound being found entirely united, the sutures were removed. On the 29th, during a fit of restlessness, the old lady had got her finger under the dressing, and torn apart the adherent edges of the wound. The wound was dressed again with boracic lint, and one grain of opium was given to lessen the restlessness. On the 30th, a small bed-sore was noticed over the sacrum. On May 3rd (tenth day), the bowels acted for the first time after the operation—a copious soft formed motion being passed, with no pain. From this point the wound healed slowly. The bowels were opened pretty regularly, and the bed-sore did not get much worse; but, unfortunately, as the result of the long confinement to bed, considerable hypostatic congestion of the lungs occurred, and gave rise to apprehension.

The wound was not soundly healed till May 20th, but I got the patient up in an arm-chair before that event, with the hope of preventing any increase of the hypostatic mischief. The latter did not entirely disappear for some time, and she gained strength very slowly, but she was able to come down stairs at the beginning of July, and is now in the enjoyment of as good health as she experienced before her illness.

REMARKS. Some time ago, several cases were recorded in the BRITISH MEDICAL JOURNAL of successful operations performed on aged persons; and it was remarked, by those who reported them, how very much better old people bear even severe operations than is generally believed. The case that I have just related is an illustration of this fact. An interesting point in this case is the suddenness with which the symptoms of opium-poisoning set in, the patient being apparently scarcely under the influence of the drug at night, whilst on the following morning she was in a condition of narcotism. This sudden access of poisoning must be attributed, I think, to the temporary suppression of urine that existed, occasioning an accumulation of the drug in the system; and, in face of this suppression, I should not have continued the administration of the opium if it had not been for the abdominal pain seeming to demand it, and the slight evidence that there was of the drug's physiological influence.

In conclusion, the fact of the patient tearing open the wound suggests the advisability, in old and fidgety patients, of leaving the sutures untouched for a short time after the wound has healed.

ALBERT E. MAY, L.R.C.P., M.R.C.S., Moreton-Hampstead.

STRANGULATED FEMORAL HERNIA IN A WOMAN, AGED SEVENTY-FIVE. OPERATION: RECOVERY.

I WAS called four miles into the country on a Saturday night to see Mary R., aged 75, widow; she complained of constipation and nausea, and, on inquiry, she stated that she had been ruptured several years; that for the last day or two she had not been able to get the rupture back, and she now had considerable pain in the region.

On examination, I discovered a not very tense femoral hernia. I tried taxis gently without success, and it caused considerable pain. I was unable to persuade her to go to the Yeovil Hospital until the next day. On her arrival there, the symptoms not being urgent, the usual methods of reduction were resorted to without avail, and in the evening, after a consultation with my colleagues, I decided to operate. Ether having been administered, and with a carbolic spray playing, I cut down carefully upon the sac, which I had to open, and discovered a piece of omentum, and behind it a small knuckle of gut of a very dark colour, but in no way gangrenous. Having divided the stricture, I was easily able to return the gut, but not so the omentum, which I decided to ligature and remove *en masse*. In doing this, however, two pieces of carbolised catgut snapped, so I used an ordinary silk ligature. The wound was brought together with wire sutures, and dressed antiseptically. One grain of opium was given every four hours until the next day, and a little beef-tea, brandy, and milk taken in the way of diet.

From the time of the operation there was not a single bad symptom, the temperature never rising above 99°. The wound, when dressed on the fourth day, was quite healed, except a small hole occupied by the silk ligature above mentioned (which did not come away till fourteen weeks afterwards).

She left her bed in about twelve days, and was discharged a month after the operation. The chief points of interest in the case are the perfect immunity from unfavourable circumstances in a person of so advanced an age, and the length of time taken by the silk ligature in separating.

CHARLES J. MARSH, Yeovil.

CLINICAL MEMORANDA.

THE INCUBATION-PERIOD OF MEASLES.

As cases of the eruptive fevers, in which the duration of the incubation-period can be accurately determined, occur rather unfrequently in practice, the following note may prove of interest, [illegible] to show that this stage in measles is somewhat shorter than is generally supposed.

I was sent for on May 8th to see a boy aged [illegible] [illegible] with the characteristic measles-rash, which, the mother informed me, had [illegible] the day before, May 7th, [illegible] May [illegible] [illegible]. The child had been [illegible] village [illegible], when there w[illegible] [illegible] there were [illegible] in the village [illegible]. After going through an ordinary mild attack, the patient rapidly recovered. On May 18th, [illegible] [illegible] quite trustworthy that they [illegible].

According to the dates given above, the duration of incubation could not have exceeded nine days, and may have been a day or two less; while, in the various text-books, we find twelve to fourteen days usually put down to this period.

M. T. YARR, L.K. and Q.C.P.I., etc.,
Langley Park, Durham.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

GUY'S HOSPITAL.

SURGICAL CASES.

(Under the care of Mr. THOMAS BRYANT.)

CASE I.—CARCINOMA OF THE BUTTOCK, GROWING FROM A SEBACEOUS CYST OF TWENTY YEARS' DURATION: CURED BY EXCISION.

[Reported by Mr. RENFOLD.]

ELIZA W., aged 63, was admitted on September 8th, 1882. She was unmarried, and had always enjoyed good health. She first noticed the present growth twenty years earlier; it was in the skin, and was no larger than a marble. Until three years before admission, its growth was very slow, but since then it had increased more rapidly. Six weeks before admission the skin over it broke, and the contents of the tumour were discharged with blood.

On admission there was a tumour about the size of a large orange on the left buttock. It was one inch from the anal aperture and posterior to the vulva. It was slightly pedunculated, and freely movable upon the deeper tissues. Its free surface discharged foul pus. The glands on the corresponding groin were enlarged.

September 12th. The patient having been placed under the influence of chloroform, Mr. Golding-Bird removed the tumour by a circular incision, carried round the margins of the attachment. There was but little bleeding, and this was readily stayed by the use of the torsion forceps. The wound was covered with a sponge, carbolised, and dressed.

The tumour, on examination, appeared to have commenced as a sebaceous tumour which had undergone degeneration, and had become the seat of carcinoma.

The patient was ordered morphia suppositories.

September 14th. She passed a motion without pain.

November 1st. She left the hospital. The wound was about the size of a fourpenny-piece. Her general health was good. Her temperature had never risen above 99° after the operation.

CASE II.—ACUTE GLUTEAL ABSCESS FOLLOWING INJURY: TREATED BY FREE INCISIONS AND IRRIGATION WITH IODINE-WATER.

[Reported by Mr. J. CRISP.]

EDWIN G., aged 48, a labourer, was admitted on June 11th, 1883. Between three and four weeks before admission he had been struck in the back by a weight, of which he did not know the size. For an hour afterwards he was unable to stand. He had continued to work until within a few days, although the tuber ischii had been very painful; he noticed, a week before admission, that his buttock was swollen. On admission, his right buttock was red, swollen, and tender. Pressure caused great pain. He also had bronchitis. Chloroform was administered, and it was then noticed that all the redness over the nates had disappeared. Fluctuation was felt. An incision an inch and a half long was made external to the tuber ischii, and a second incision two inches internal to the first and one inch in length. On the introduction of the finger into the first wound, a large cavity was found beneath the fibres of the gluteus maximus. This cavity did not communicate with the rectum. It was well washed out with iodine-water, and two medium sized drainage-tubes were inserted. The wounds were dressed with lint and terebene oil.

June 14th. The edges of the wound looked sloughy, and there was an erythematous blush over the buttock. It was rather patchy, and disappeared on pressure.

June 17th. The wounds looked better. Some sloughs had come away. He was ordered tinctura lupuli, two drachms; aqua chloroformi, one ounce; to be taken every night.

June 27th. The inner wound had healed; there was hardly any discharge, and tenderness had subsided.

June 28th. He was ordered 10 minims of tincture of perchloride of iron, half a drachm of glycerine, and an ounce of infusion of quassia.

July 11th. The abscess-cavity was still about three-fourths of an inch deep. The wound was nearly closed.

July 16th. He went out, with a small sinus about three-quarters of an inch deep; otherwise he was well.

He returned on August 10th; the sinus had then been closed for three weeks.

The following was the temperature-chart.

	M.	E.		M.	E.		M.	E.
June 12th	—	103.2	June 15th	98.4	99.0	June 18th	97.4	98.0
,, 13th	98.8	100.2	,, 16th	98.4	99.0	,, 19th	97.4	98.2
,, 14th	98.8	100.2	,, 17th	98.6	98.8	,, 20th	98.0	98.6

It is to be noticed that the temperature fell directly after the free evacuation of the matter, and never rose again.

CASE III.—SEPARATION OF THE LOWER EPIPHYSIS OF THE FEMUR, WITH DISPLACEMENT INWARDS: REDUCTION OF THE PARTS, AND RECOVERY, WITH A GOOD LIME.

[Reported by Mr. RHYS.]

WILLIAM B., aged 6, was admitted on August 15th, 1882. The patient was riding behind a brougham, when his leg became entangled in the wheel. When admitted, the right leg was considerably deformed. The lower epiphysis of the femur was wrenched off, and the diaphysis abducted, with the lower end nearly projecting through the skin on the outer side. The epiphysis with the tibia was driven upwards and inwards, and the head projected on the inner side. The limb was shortened about two inches, and the foot was inverted. There was considerable effusion into the knee-joint, with much pain. There was an abrasion of the skin over the right shin, and a small contused wound on the left shin. The leg was put up in sand-bags.

August 16th. The leg was put up in a MacIntyre splint.

August 17th. The limb was found to be in a very good position.

August 19th. The effusion was subsiding.

September 12th. The boy was doing well. The bone had united.

September 19th. The splint was removed. The bone had united well; there was a little thickening on the outer side of the lower end of the femur.

September 20th. There was a quarter of an inch of shortening, and slight callus on the outer side.

October 19th. He stood well, and could walk with the aid of one crutch.

October 22nd. He left the hospital.

CASE IV.—LEG TORN OFF AT THE LOWER EPIPHYSIS OF THE FEMUR: AMPUTATION: SUPPURATIVE MENINGITIS: ACUTE ABSCESS IN THE PSOAS MUSCLE: DEATH.

[Reported by Mr. WALKER.]

HARRIET E. H., aged 4, was admitted on August 14th, 1882. She had been a healthy child. A strap driving a machine had torn off the leg at the junction of the shaft with the lower epiphysis of the femur. There had not been much loss of blood, as a surgeon was soon in attendance, and had controlled the femoral with a tourniquet and put on an Esmarch's bandage. The joint had been opened, and the surrounding tissues much damaged. The leg was amputated at the middle of the thigh. Lateral flaps were made. The arteries were twisted, and the flaps brought together by silk sutures. The wound was washed with hot iodine-lotion, and a drainage-tube inserted. The wound was dressed with terebene, and the leg put up in a Gooch's splint.

August 17th. The leg, being sweet, was not dressed, but a little iodine-water was injected through the drainage-tube.

August 18th. The wound was dressed; there was not much discharge. There was a little union at the corners of the flaps. The silk sutures were left in, as they caused no perceptible irritation.

The wound was dressed on August 19th, 20th, and 21st. On the latter day, the outer parts of the flaps had united by primary union, and the inner part was uniting by secondary union.

August 23rd. The patient felt very poorly. She complained of great thirst. The wound was dressed. All the stitches had cut their way through, and the flaps were not in good position. An ice-bag was applied to the head.

August 24th. The patient had passed a bad night, crying out (hydrocephalic cry) during the greater part of the night. The wound was dressed. There was no extra separation of the flaps.

August 25th. She was still constantly crying out, was very thirsty, and unable to retain her urine. The wound was dressed, and looked better. There was less discharge. Terebene was always used for the dressings.

August 26th. She was still crying out. She tried to bite her hand, scratched, and ground her teeth.

August 27th. The patient had taken three minims of tincture of opium during the previous afternoon, two minims at 2 A.M., and was rather quieter.

August 28th. She was apparently unconscious, and quieter. The stump looked better, and there was scarcely any discharge from it.

August 29th. She was dying. There was twitching of the face, but scarcely any crying. The pulse was 150; the respirations were 80. The left eye was looking upwards and inwards, the right eye upwards and outwards. She died at 11 P.M.

The following are extracts from the temperature-record during the progress of the case.

August 15th.		[illegible]		[illegible]	
1.15 A.M.	.. 99.2	[illegible] A.M.	.. 102.8	[illegible]	.. 101.0
5 ,,	.. 101.0	[illegible] ,,	.. [illegible]	[illegible]	.. 103.2
8 ,,	.. 103.8	10 [illegible]	[illegible]	[illegible]	[illegible]
11 ,,	.. 102.0	10.45 P.M.	[illegible]	[illegible]	.. 102.6
11 P.M.	.. 101.0	August 21st.		[illegible]	
August 16th.		[illegible] A.M.	[illegible]	[illegible]	
1.30 A.M.	[illegible]	[illegible]	[illegible]	1 A.M.	.. 103.2
7.30 ,,	.. 99.8	[illegible]	[illegible]	[illegible]	[illegible]
11 ,,	[illegible]	[illegible]	.. 103.8	[illegible]	.. 103.2
5 P.M.	[illegible]	10 ,,	[illegible]	[illegible]	.. 102.2
10.30 ,,	.. 101.0	[illegible] P.M.			
August 17th.		11 ,,	.. 103.2	[illegible]	
[illegible] A.M.	.. 99.8	August 22nd.		0.30 A.M.	[illegible]
2.0 ,,	[illegible]	[illegible] A.M.	.. 103.0	[illegible]	.. 102.0
8 ,,	99.8	[illegible]	.. 101.8		
11 P.M.	[illegible]	[illegible]	[illegible]	[illegible]	
August 18th.		11 ,,	[illegible]		[illegible]
2 A.M.	.. [illegible]	August 23rd.		11	.. 103.8
7.30 ,,	.. 100.0	[illegible] A.M.	.. 101.8	[illegible]	.. 101.6
11 ,,	.. 100.2	8 ,,	[illegible]		.. 103.2
11 P.M.	... 103.6	[illegible] P.M.	.. 101.8		
August 19th.		11.59 ,,	.. 102.6	[illegible]	
2 A.M.	.. [illegible]	August 24th.		2.30 A.M.	.. [illegible]
8 ,,	.. 100.8	[illegible] A.M.	.. 103.2	[illegible]	[illegible]
5 P.M.	.. 100.4	8 ,,	.. 103.4	[illegible]	.. 104.0
11 ,,	.. [illegible]	10 ,,	[illegible]	[illegible]	.. 103.0
		5 P.M.	.. 103.0		

Post Mortem Examination. In the brain a quantity of yellowish white lymph was found effused into the pia mater and visceral layer of the arachnoid, especially over the frontal and parietal convolutions. The cerebral vessels were injected. Lymph was also effused on the cerebellum. Some yellowish purulent matter [illegible] the brain. There was not much fluid in the ventricles. No fracture of the skull was found. The brain was very soft. The spinal cord and membranes were healthy, as were the heart, spleen, and kidneys. The lungs were healthy, except for a little lymph effused on the outer part of the pleura of the right lung, and a little emphysema. The liver was healthy. A collection of pus was found [illegible] muscle, extending down to the right [illegible]. No apparent cause for it was discovered, [illegible] injured at the time of the accident.

CASE V.—ANGULAR DEFORMITY AFTER [illegible] OF THE KNEE: OSTEOTOMY OF THE FEMUR.

(Reported by Mr. W[illegible]

Wm. B., aged 6, was admitted on June [illegible]. In March 1879, the child had been admitted with disease of the right knee, of ten months' standing. There was no history of [illegible] the knee was swollen, and its outline lost. There was an abscess at the back, discharging freely. A back-splint was put on, but, backward dislocation commencing, Mr. Bryant, on April 18th 1879, [illegible]. After the operation, the knee became bent [illegible], and had to be forcibly straightened.

The child left the hospital in May, with a straight limb, wearing a leathern splint. Twice subsequently, new splints were applied.

In June 1882, the splints having [illegible], the leg was bent at an angle of sixty degrees, [illegible] the knee. There was neither swelling nor tenderness. The measurement round the knee was 9½ inches. From the superior iliac spine to the external malleolus, the [illegible] 20 inches, the right leg only 17 inches. [illegible] irregular epiphysial growth in the tibia, the [illegible]. There was a slight hollow just below the inner [illegible]. The leg was directed somewhat inwards. From the upper end of the great trochanter to the end of the femur [illegible], from the pubic spine to the lower end of the femur, [illegible]

July 18th. Osteotomy was performed. The [illegible] just above the two condyles. The leg was [illegible] a back-splint applied.

July 22nd. The wound was sealed with benzoin.

July 31st. Bryant's double splint was applied.

August 23rd. An abscess had formed just above the condyles. It was opened, and some pus came away.

September 4th. All signs of inflammation had disappeared.

September 13th. The leg was in very good position.

October 7th. The new bone had become quite consolidated. Considerable movement could be obtained in the lower end of the femur.

October 12th. A plaster-of-Paris splint was adjusted.

October 15th. He went out of hospital with his limb in a very good position. His general health was excellent.

The chart of the temperature, taken regularly twice a day from the date of the operation (July 18th), showed that the temperature was only on 11 occasions out of 75 at or over 100°, and never reached 102°. The highest point was on the tenth day, when it was 101.2° in the morning, and 101.6° in the evening.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 27TH, 1884.

GEORGE JOHNSON, M.D., F.R.S., President, in the Chair.

BEFORE proceeding to the business of the evening, a letter was read from Sir W. Vernon Harcourt, expressing the gracious acceptance by the Queen of the address of condolence presented by the Society on the death of the Duke of Albany, and another from Sir Robert Collins, expressing gratitude on the part of the Duchess of Albany.

[illegible] Small-Pox. By G. ERNEST HERMAN, M.B. The charts [illegible] in this paper were constructed from observations made during the small-pox epidemic of 1871, in a temporary hospital at Shoreditch. These charts were made up by adding together the figures indicating the temperatures in the different cases for the same period of the day, and dividing the total by the number of observations. By this method the average temperature of all the patients was shown from day to day, instead of that of each individual patient, as is the case in ordinary temperature-charts. The result of the averaged charts was to show that the average maximum daily point occurred at 6 P.M., and was 103.2°, whilst the minimum was 101 [illegible] A.M.; and that, [illegible] progress of the disease, the average temperature culminated on the third day at 105°, and sank gradually to 100.5° on the seventh day, rising again to 103.2° on the eleventh, twelfth, and thirteenth days, and subsequently gradually sinking to normal.

[illegible] By W. CAYLEY, M.D. The patient was a girl, aged 12, who was admitted into the Middlesex Hospital on January 18th. Four years before she had had scarlet fever, which was followed by otorrhœa. On admission there was an acute abscess over the mastoid process on the left side, and extensive denudation of the bone about the external auditory meatus. The abscess was opened, and Mr. [illegible] removed away [illegible] necrosed bone from the mastoid process. The patient progressed favourably till January 28th, when symptoms of pyæmia developed. She had repeated rigor, with high fever of a strongly remittent type. [illegible] On February 16th, these symptoms having continued, and the child [illegible] to drain the gangrenous cavity. There was now dulness over the left [illegible]

[illegible]

pulmonary disease, had been affected with cough and profuse expectoration for six months. On admission to the hospital, he presented at the right posterior base dulness, reaching as far as the spine of the scapula, with absence of breath-sounds and vocal fremitus. The heart's apex beat half an inch outside the nipple-line. The case was regarded as one of abscess at the base of the lung, with slight effusion into the adjacent pleura. An exploratory puncture failed, however, to detect any fluid. Soon afterwards, obscure friction-sounds developed over the dull area, and then loud cavernous respiration with intensified voice-sounds, the pyrexia and hectic symptoms becoming more marked. About a fortnight later—medicinal means having failed to give relief —a second exploratory puncture was made with negative results, except that the lung was judged to be adherent. The course of the case continuing unsatisfactory, paracentesis was resolved on. Professor Marshall made an incision two inches long along the tenth intercostal space, over the point of maximum intensity of the cavernous sounds, and exposing the pleura; a trocar was then gradually inserted to a depth of four inches, when a cavity was entered, from which whiffs of fœtid air were expelled, and a scanty blood-stained discharge flowed. The wound and cavity were temporarily plugged to staunch hæmorrhage; and next day a drainage-tube was inserted, through which a puriform discharge began freely to escape. The symptoms were considerably, but not wholly, relieved. Ten days later, signs of cerebral abscess appeared, and in another ten days the patient sank. The necropsy revealed a number of bronchiectatic cavities in the right lung, one of the largest of which had been pierced and drained by the operation. The lung was invaded by fibroid change, and much contracted. Two abscesses had formed in the brain. The opposite lung and all the other organs were healthy. No miliary tubercle was perceived anywhere. The following diagnostic points were briefly discussed: (1) The brief history of disease, in comparison with the apparently long-standing morbid conditions; (2) The displacement of the cardiac apex; (3) The remarkable alterations which took place, during the course of the case, in the auscultatory signs; (4) The invariable absence of tubercle-bacilli from the sputa, and the inspissated secretions found after death in the lung-cavities. In conclusion, the drawbacks and advantages of paracentesis of pulmonary cavities (apart from phthisis) were discussed, and a brief recapitulation of some of the literature of the subject was given.—The PRESIDENT moved a vote of thanks, and called for some surgical discussion of these interesting cases.—Mr. GODLEE called attention to some of the points of difficulty which a surgeon would feel in treating such cases. In the first place, there was the difficulty of diagnosing the position of the cavities. That was a part of the fine art of the physician which deserved even more attention than it had received. Dr. Douglas Powell would remember two cases in which no cavity had been reached by the trocar at the point where it was diagnosed. It was certainly, to some extent, true, that no ill came of pushing needles into the lungs; still the surgeon might make a serious error if he mistook a bronchus for a cavity, or a small cavity for a large one. In the second place, it was important to the surgeon to know if the two layers of the pleura were adherent. In the case of a child at Brompton Hospital, in which two large cavities in the lungs showed fairly obvious signs, he had attempted to puncture the lower cavity, and had failed, and in puncturing the upper one, had been annoyed to find the layers of the pleura not adherent to each other, and the subsequent course of the case showed that the exact state of things was very imperfectly understood. In another case of Dr. Bastian's at University College Hospital, of double empyema, after many punctures a little pus was set free; a piece of a rib was excised, so that the finger could be introduced into a ragged pulmonary cavity, which was drained, and a satisfactory reduction of temperature and expectoration followed. He showed two cannulæ appropriate for these operations; one, after a model of Sir J. Fayrer's, consisting of a grooved cannula with grooved trocar, so that, on cautious slow introduction, any pus that was reached could escape without withdrawal of the trocar; and another made after a plan of his own, in which a steel trocar ran in a cannula of celluloid, which could be cut off and left in any cavity where pus was found. —Dr. J. K. FOWLER related a case recently under his care at the Brompton Hospital, of a man, aged 47, who had never had any serious illness, and in November 1882 visited a dentist for the purpose of having a tooth extracted. The dentist, in using an elevator, allowed the tooth to slip. The patient, feeling something at the back of his throat, coughed and took some water. He then asked to see the tooth, but was told that he must either have swallowed it or spat it out into the basin. Immediately afterwards, on rising from the chair, he was seized with intense dyspnœa, and was in great danger. After a few minutes of violent coughing he felt pain just above the right nipple. There were frequent severe paroxysms of coughing for the next fortnight, and his tale of misfortunes was completed by his finding that the wrong tooth had been extracted. He then went to St. Thomas's Hospital, and remained for a fortnight under the care of Dr. Sharkey. Inversion was tried and an emetic given, but there was no sign of movement of the tooth. Two months later he came as out-patient to Brompton Hospital. He was expectorating abundant frothy mucus, and his cough was severe and paroxysmal. He was emaciated, and lost a stone in weight; no hæmoptysis had been noticed; his temperature was 99.2°. There was a little retraction at the right apex, and diminished expansion at right base, and below the angle of the right scapula; the vocal fremitus was diminished, and there was complete dulness to percusssion; at a point two inches below the spine of scapula, there was distinct evidence of a cavity of considerable size. After consultation with Dr. Symes Thompson and Professor Marshall, it was decided to puncture this, with a view to promote contraction by securing drainage, and, at the same time, if possible, to remove the tooth. No doubt was felt of pleural adhesions. Mr. Marshall, on May 2nd, 1882, under strict antiseptic conditions, passed a trocar and cannula into the lung between the eighth and ninth ribs, two inches to the right of the vertebral spines. A gorget was introduced and blood flowed; a probe also was used, and Mr. Marshall thought it possible he might have touched the tooth. The inside of a large bronchus was reached, but no cavity. The cavernous sounds grew less, however, after a fortnight, and the general condition slightly improved. After about five months the drainage-tube was dispensed with, and the opening closed. The patient was in attendance that evening, and showed signs of a small cavity in the base of the right lung, but no signs of affection of the upper lobes. There continued to be muco-purulent expectoration, but no tubercle-bacilli had ever been found. On a retrospect of the year since the operation, the patient seemed to have derived some benefit from it by the contraction of the cavity.—Mr. WALSHAM gave some details of the improvement which had resulted from syringing out, with a solution of carbolic acid, a cavity in the left apex, into which a small open sinus was found to run. It was not an empyema, he thought, but a cavity in the lung-substance.—Dr. BROADBENT said he felt bound to relate the one case of basic cavity which he had seen operated upon. It was a very large cavity in the base of the left lung, from which very fœtid pus was coughed up. After consultation with Sir W. Gull, he agreed to make an opening into it, which was successfully done, and some slight improvement followed. The patient, however, during his temporary absence in the summer, betook himself to the south of France and died there. No further particulars were known. Dr. Biss's case was one in which he could not but regard life as shortened by the operation, but it was undertaken as the work of a pioneer in territory of which very little was known.—Dr. DOUGLAS POWELL considered Dr. Cayley's and Dr. Biss's cases as illustrating very different conditions, in which the indications for operation were very different. In cases of typical gangrenous abscess, such as Dr. Cayley's, he thought operation was certainly indicated, and that the risks were not very serious. In Dr. Biss's case there was much more difficulty; still, he considered that, in such cases of chronic pleurisy or pneumonia, resulting in bronchiectasis, it was right to call in a surgeon. The advantage in draining such cavities, if it could be accomplished, was very great, as they occupied such important positions in the lungs. Mr. Godlee had been gently ironical at the physician's incapacity of making a certain and accurate diagnosis of a cavity in the lungs; but it must be remembered that Mr. Godlee's irony was based on the assumption that a cavity which the surgeons failed to find did not exist at all. The best way of finding a passage into a cavity was sometimes by leaving, as Mr. Gould had most judiciously left, a drainage-tube in the lung, which found its own way into the lung-cavity. Mr. Godlee's difficulty in diagnosing pleural adhesions was certainly justified, for there were no certain signs whatever of such adhesions.—Dr. B. O'CONNOR asked how bronchiectatic cavities were to be diagnosed from basic vomicæ.—Dr. CAYLEY thought that the fear of free operation on the lung was at present too great, and that of the methods proposed, that by a large trocar and cannula was safer than by incision, as causing less hæmorrhage. In Dr. Biss's case there had been abscess of the brain, and it was suggested that that had resulted from the operation, but he was disinclined to agree to this, as he had quite sufficient experience of the alliance of bronchiectasis and cerebral abscess in cases which had not been operated upon.—Mr. PEARCE GOULD thought it remarkable how much was correct in the prediction of Richter, a hundred years ago, that surgical treatment would be needed for abscesses of the lung when there was a single cavity and no phthisis. He did not consider the determination of the adhesion of the layers of the pleura important, and narrated a case of excision of a sarcoma of a rib where their want of adhesion did not seem to have had any bad effect. Dr. Biss considered the very accurate determination of the position of an abscess not more important in the lung than in the liver. In neither was it easily found, but that was mainly due to want of experience, and when it was found, he could not allow that its surgical treatment was ineffective. In his own case, it was somewhat of an assumption that the patient died of the operation. The condition was dangerous before, so he would probably have died anyhow.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

April 4th, 1884.

The Treatment of Talipes.—Mr. Noble Smith read a paper on this subject. He endeavoured to make his remarks as practical as possible, and to avoid discussing all the various possible plans of treatment. He was convinced that when a surgeon met with a case in which the tendons were tense and resistant, the sooner tenotomy was performed the better. He referred to the important subject of the position in which the foot should be placed after tenotomy. If it were placed too near the original position of deformity, leaving the elongation of the tendon to the process of stretching, a great risk was run of contraction; a condition which was much more difficult to cure than when the deformity was treated for the first time. Upon the other hand, if the cut ends of the tendon were separated too much, and pressure were applied on the part between the ends, then there was danger of non-union, and that was, of course, a serious misfortune. Mr. Noble Smith described a case which he had seen in which the tendo Achillis had been divided some time before he saw it for talipes equinus; the foot had been fully extended and encased in a plaster-of-Paris bandage, and kept there for several weeks. The tendon had not united, and a severe form of talipes calcaneus had resulted. He found it advisable, in the majority of cases, to place the foot in a nearly normal position, leaving very little to be done by stretching. Many cases could be cured without operation, and plaster-of-Paris bandages could be used with benefit in some instances. Mr. Smith advocated simplicity in instruments for club-feet, and urged surgeons to pay personal attention to the details of their construction.—Dr. Sinclair Thomson recommended the removal of a V-shaped piece of bone in varus, and the tying of the bones together with catgut.—Dr. Thudichum had noticed many cases of contraction of the plantar fascia to yield to antisyphilitic treatment without operation.—Mr. Benham considered it a settled point in orthopaedic surgery that, in cases of talipes equino-varus, the varus should be first cured.—In reply, Mr. Noble Smith said he would rather not perform osteotomy if the cases could be otherwise cured. When all the tendons were cut at once in equino-varus, the result was generally bad. Where nervous symptoms, such as spasms, were present, they should be arrested before operating.

Diseased Kidneys.—Dr. H. Campbell Pope showed specimens of diseased kidneys. The patient was said to have had no kidney-symptoms during life, except frequency of micturition, and she suffered from violent headaches. She died suddenly, and at the *post mortem* examination it was found that the pelvis of the right kidney was very largely dilated, while the left kidney had several large abscesses, which contained nearly a pint of curdy pus, with a small stone. However, the cause of death was found to be hæmorrhage into the brain.

Pus in the Left Knee-joint.—Mr. J. R. Lunn showed a case which he had opened antiseptically, with a good result. J. E., aged [illegible], a shoeblack by trade, was admitted into St. Marylebone Infirmary, on November 1st, 1883. He stated that he had never had any serious illness, except that, when a child, he had something the matter with his right hip. He had been ill seven days with intense pain in the left knee, which, on admission, was swollen, and very hot distinct fluctuation was felt. It was treated with a back splint, leeches, etc. On the 7th, it was aspirated, and three ounces of pus withdrawn. On the 8th, the joint was opened under the spray, and a large sized drainage-tube passed from the highest point of the joint and a counter opening made on its outer side. The joint was washed out with carbolic lotion, 1 in 40, and dressed antiseptically, and the leg was put on a McIntyre's splint. On the evening of the operation, the temperature was 99.8° Fahr. The patient had slight rise of temperature every evening; and on the 22nd it went up to 101°, when an abscess was opened on the outside of the joint. From this date the patient made uninterrupted recovery. The antiseptic dressings were left off five weeks and four days from the time of operation, and the patient wore a plaster-of-Paris splint for two months, when he was discharged cured, with a very fairly movable joint.

EPIDEMIOLOGICAL SOCIETY.

Wednesday, May 14th, 1884.

Norman Chevers, M.D., C.I.E., President, in the Chair.

On the Colonisation of the Sub-Himalayan Hills, with Remarks on the Management of European Children in India.—Dr. Joseph Ewart pointed out that, in the sanitary and ethnological history of the plains of British India, there was one fact which stood forth with conspicuous prominence—namely, the absolute powerlessness of Europeans to thrive and continue their race through many successive generations. Twining declared that there was no known instance, in his time, of a pure European descent in the country, extending beyond the third remove; and Sir Joseph Fayrer's observation prolonged it to the fourth generation only, and no further. Although the effects of climate could be much mitigated by hygiene and sanitation for adults and children, anything like colonisation, such as we had seen and now saw going on in other lands, was totally impracticable. This truth was noted in the degeneracy of our race wherever it had been attempted in the plains. Hence, the wisdom of frequent change to the hills, or Europe, or both, for adults, and early transfer of children to England for physical training and intellectual education, was evident. Hence, the necessity for frequent change of the European troops to this country was imperative; for, although the effects of prolonged residence might be alleviated by increasing knowledge of the means to be used to withstand the climate and its ailments, there was no such thing as real or substantial acclimatisation for the European. But was it so in those hill-climates sufficiently elevated to be free from the generation of malaria, and temperate enough to render out-door labour on the part of the European tolerable, healthy, and pleasant? The evidence in favour consisted in the advantages which were derived by adults who periodically visited the hills—and in most, who were not the subjects of visceral disease, these were signal and decisive—and by children, who received great benefit, if kept long enough there. Moreover, the experience of the results of residence of the children at the Lawrence Asylums at Ootacamund, Abu, Sanawar, and Murree, were not really unfavourable. Hitherto, the hills had been mainly used for temporary resort to preserve health, or overcome the ills and enervating effects of residence in the comparatively unhealthy and malarious provinces of the plains, and, in a few cases, by retired officers. As far as a judgment could be formed from the temperate character of their climates; their freedom from malaria and epidemics; their marked beneficial influence in preserving the health of European men, women, and children; and in contributing to its restoration in those suffering from functional disorders of climatic origin; the inference was that, if undertaken in suitable places, the colonisation of the hills was probably not impracticable. The second division of the paper was devoted to a practical review of the best means for the management of infants and young children in India. That most of the high mortality was preventable was clearly demonstrated. But in spite of all that science and art could do, the best nursing and medical care, and immunity from several of the infantile maladies so fatal in temperate climates, it was painful to note, even among the children of the well-to-do in the plains, notwithstanding the advantages of an open-air life—for they were reared in roomy mansions always pervaded by constant relays of fresh air—that they seldom presented the general physiological tone, physical robustness, "muscular rotundity, hardness, plumpness, and rosy complexions" of children similarly circumstanced in this country. For all who could afford it, children should not be kept in the plains beyond the fifth or sixth year. A question of some moment was often presented for solution. Should European children born in England be taken to India? If suckling, they might be for a time; but it would be better to have the process completed at home, and then to leave them in England under proper custody, unless provision could be made for their passing the hot, rainy, and autumnal seasons, or, what was still better, the whole of the ante-educational period of childhood, in the hills.—In the discussion which followed, the President, Surgeon-General Murray, Drs. [illegible], Moore, Mapp, Pringle, and White, and Mr. Long, took part.

ACADEMY OF MEDICINE IN IRELAND: PATHOLOGICAL SECTION.

Friday, May 2nd, 1884.

A. H. Corley, M.D., President, in the Chair.

The Nature of Sympathetic Inflammation.—Mr. Arthur Benson read a paper recounting a series of experiments on the character of sympathetic inflammation. He concluded that the [illegible] had nothing whatever to do with the [illegible], but had not yet satisfied himself as to its real nature. He could produce the characteristic membranous ophthalmia with jequirity-powder, with freshly made cold infusion, with infusion in which the bacilli had developed, with the same, after they had died, and with an infusion over eight weeks old, but still swarming with micro-organisms of various kinds, while he had failed to produce any results by inoculation of the discharge or membrane caused by jequirity. Nor could he in the membrane or discharge find any bacilli, though he had made numerous observations at all stages of the affection. In these respects his observations were confirmed by those of Neisser, Klein, Solomonsen, and Holmfield. He had latterly tried the effects of powdered jequirity dusted on callous ulcers of the leg, and found that a similar membranous inflammation was produced on them as in the conjunctiva, the membrane being easily detached from the ulcerated surface. The stimulation caused by the application seemed decidedly beneficial in a certain class of ulcers; and even in vascular ulcers the application of the powder produced hardly any pain. In this respect there was a striking contrast between its effect on the conjunctiva and on ulcers of the skin. He hoped that surgeons would give the drug a trial in such cases, as he believed it would prove of real value in the treatment of chronic ulcers. He was at present engaged on a series of experiments with a view to discovering the real nature of jequirity inflammation, and hoped, by working on ulcers of the leg and arm, to arrive at more satisfactory results than were attainable when working on the conjunctiva, where it was quite impossible to avoid the irritating effects of external influences.—Mr. STORY for a long time believed that bacilli were the cause of the ophthalmia, but since Mr. Benson's experiments he had modified his opinion and did not regard that theory as proved. The fact that when portion of the dense membrane formed by the action of the drug was put into a healthy conjunctiva it produced no effect, was remarkable, and almost demonstrated that the bacilli could not be the cause of the inflammation. No bacilli were found in the membrane in one case, and when the same membrane was put into the person's other eye, it produced no effect, and no bacilli were found in the discharges.—Dr. JOSEPH KENNY believed that Mr. Benson's observations were at all events coeval with those of Klein. In the North Dublin Union Workhouse, the drug was tried on ulcers, with strongly marked improvement as the result. An ulcer of many years' standing near the tendo Achillis of a man's foot was exceedingly intractable, and had been a couple of years under his own observation. For eighteen months there had been no improvement, yet within twenty-four hours after the application of jequirity red granules appeared, and the ulcer began to fill; but from that time, in consequence of illness, he had himself lost sight of the case. In another case, not so typical, a fair amount of granulation took place, and the tendency to bleeding was arrested on the application of the jequirity without delaying the process of granulation. Indeed, the tendency to granulation increased, while the tendency to bleed decreased, and the little pain caused by the application was remarkable; thereby contrasting favourably with other stimulating applications, especially the blister. It was difficult to limit the area of influence of the blister, but that of jequirity extended only a small distance outside the area powdered with it. On the whole, he was encouraged to proceed with the investigation of the effects of the drug in cases of ulcer.

Scapulo-humeral Dislocation in the Horse.—Mr. P. S. ABRAHAM, in this communication, stated that dislocation of the shoulder-joint was very inconvenient to the horse. Most writers on veterinary surgery did not allude to such a lesion; others denied its possibility, and only one or two mentioned cases in which the accident had happened. The principal of the Royal College of Veterinary Surgeons of London informed the author that, in thirty years, he had met with three cases. No description had been found of an actual specimen, and probably the example before the Academy was unique. The humerus was dislocated on to the dorsum of the scapula, the head being three inches and a half from the glenoid surface. The outer edge of the latter was broken off and forced up. The capsular ligament was ruptured, but none of the muscles or their tendons, that of the "flexor brachii" being only much stretched and changed in direction. Ankylosis had commenced between the humerus and the scapula in their new position. The horse took a fence intemperately, and fell across a narrow bank at the other side of the ditch, with his off fore-leg under him. When he was raised up the deformity was observed; but he was able to put the foot to the ground, and was led a distance of three miles and a half to the nearest station, and brought up to Dublin. The veterinary surgeons were confident that some muscle or muscles were ruptured, and that the joint was not dislocated. They ridiculed any attempt at reduction. A severe blister was applied, and subsequently a leather shield was fastened tightly on. The strap caused a sore on the withers, and, ten weeks after the injury, lock-jaw set in.—Dr. BENNETT asked whether veterinary surgeons regarded this dislocation as an impossibility in the cow. The anatomy was similar to that in the horse, but the conditions for the occurrence were somewhat less favourable. Many years ago, in the south of Ireland, he saw a dislocation of the shoulder of a cow. A local bone-setter, who appeared to be perfectly familiar with occurrences of the kind, treated it by hobbling the cow's two fore-legs, and driving her with the utmost violence, so as to make her weight reduce the dislocation.—Mr. ABRAHAM said that, in the cow, the top of the humerus was not so large, and the whole shoulder was not so movable as in the horse. One method of reduction in the case of the cow, was by putting the hoof of the leg over the horns, and driving the animal until the dislocation was reduced of its own accord.

Rare Tumour of Orbit.—Mr. STORY exhibited a tumour about the size of a small pea, which he had removed from the orbit of a girl, aged 20. It had existed from earliest childhood, and had lately increased in size. The tumour lay beneath the lower lid towards the inner canthus, was freely movable in all directions, strong and hard to the touch, and was covered by slightly discoloured skin. When the patient stooped, laughed, cried, or took violent exercise, this patch of bluish dislocated skin swelled. When the superjacent soft parts were divided, the little tumour came out without farther interference. On section it was found solid, and formed of a series of irregularly concentric cancellæ, which microscopic examination showed to consist of fibrous tissue and calcified matter of an unknown origin, together with cellular conglomerations of an indefinite character. Nothing resembling either bone or cartilage existed in the tumour, its stony hardness being due to new calcification. He considered the tumour to be a phlebolith, the history of the case and the pathological appearances agreeing with that view as to its nature. The only tumour at all resembling it hitherto described was one removed by Fano, and described by that author as an osteo-fibro-cartilaginous growth. He criticised Fano's description of the tumour, which, he said, must have been also a phlebolith.—Mr. ABRAHAM had examined the section prepared by Mr. Story, and believed that he had come to a correct conclusion as to the tumour being of the nature of a phlebolith. There was nothing bearing the form of cartilage-cells in the growth. It seemed to consist of a kind of low fibroid tissue which had become calcified. The inside consisted of an irregular amorphous mass of material, and it was impossible to say what that was.—The specimen was sent to the committee of reference.

Multiple Diverticula of Large Intestine.—Dr. LENTAIGNE, having submitted the specimen, said it was wonderful that no evil effects had resulted. According to the opinion of Dr. Habershon, the formations in such cases were the result of constipation and the attempts of the intestine to expel the fæces. In the specimen, the longitudinal fibres were very much hypertrophied.

Fracture of the Head and Articular Surface of the Tibia.—Mr. THOMSON showed a case of fracture of the head and articular surface of the tibia. The patient had fallen from a height, reaching the ground on his feet, and the bone was fractured by the weight of the body communicated by the condyles of the femur. He observed that this fracture was not described in the ordinary books of reference. Heydenreich, in 1877, referred to four cases in the continental museums. Professor Gordon of Belfast had mentioned that there were three specimens in the museum there, and Professor Bennett of Dublin had secured an excellent specimen from the dissecting-room, the injury in that case having been followed by recovery.—Dr. BENNETT said the plate given by Heydenreich was identical with that before the Section. The fracture was most commonly produced by the vertical force generated by the fall of the individual from a height; but in the plate the fracture was produced by the fall of a weight on a flexed knee. He had had under observation a case of that kind. A woman carrying a bag of sand fell off a wall in a half-sitting posture. One of her heels was buried in the gravel, and the bag of sand came on one of her knees, which was flexed, producing the fracture.—Dr. STOKER said a much smaller amount of force would produce fracture of the tibia when the knee was flexed than when it was in a straight position, because there was a much smaller amount of curvature of the condyles.

BEQUESTS.—Mr. Foster, late head of the firm of John Foster and Sons, worsted spinners and manufacturers, Queensbury, Bradford, has bequeathed to the Bradford Infirmary £1,000 for its endowment fund, and £500 for its building fund; to the Bradford Fever Hospital £750; to the Bradford Eye and Ear Hospital £250; to the Bradford Hospital for the Sick Children of the Poor £500; and to the Halifax Infirmary £1,000.

REVIEWS AND NOTICES.

MEMOIRS OF LIFE AND WORK. By CHARLES J. B. WILLIAMS, M.D., F.R.S., Physician-Extraordinary to H.M. the Queen. Pp. 522. London: Smith, Elder, and Co. 1884.

[FIRST NOTICE.]

WHEN some future historian of the Victorian era shall seek to infuse life into the dry bones of historical fact by imparting those vivid and lifelike touches only to be supplied by men who have themselves helped to make history, he will find, in the many volumes of personal recollections and memoirs which have seen the light in recent years, no lack of the necessary material. The church, the army, literature, law, and politics have each and all, in the persons of some of their most distinguished members, contributed volumes of curious interest; and the work before us is a valuable addition to the somewhat scanty contributions as yet made by medicine. From his well-earned retirement at Cannes, Dr. C. J. B. WILLIAMS has given to the world this account of how he bore the burden and heat of the day throughout a long and honourable professional career, which covered a period of medical history marked by swift transition and progress.

Dr. Williams's life commenced in the very earliest years of the present century; and his memory carries him back to a time when the great achievement of Laennec, which was to revolutionise medical practice in one of its most important departments, was as yet little known beyond his immediate pupils, and when, even in Paris, students "were attracted more by the impetuous Broussais, who captivated them by a grand idea—a sweeping hypothesis—without troubling them with the details of objective facts or careful observation;" when, in a word, treatment consisted, chiefly, of "different modes of blood-letting and starvation." It was one of the great merits of the young Dr. Williams to have appreciated the vast superiority of Laennec's method of patient observation, and to have made the clinical practice of that great physician, and the study of auscultation under him, his foremost object during his time of study in Paris, whither he was, in fact, led in great measure by the fame of this master. A four years' course of systematic study in Edinburgh, followed by a winter session in London not so profitably spent, had prepared Dr. Williams to make the best use of his opportunities in Paris. Among other young Englishmen who had been at that time attracted to Paris by the fame of Laennec, were Dr. Charles Morehead, afterwards Professor of Medicine in Grant College, Bombay; Mr. George Tatum of St. George's Hospital; Dr. Thomas Hodgkin; Dr. Barham of Truro; and Dr. Frederick Leighton, the father of the present President of the Royal Academy. Dr. Williams, who has no small skill with the pencil, has preserved for us a sketch of the great auscultator, made about a year before his death; it represents a curious spectacled face, with a high and broad forehead and fine-cut intelligent features, evidently the face of a man of keen mind and sensitive fibre, well qualified to bring "another sense—the sense of hearing—to aid us in investigating the organs in health and disease." Another teacher from whom much was to be learned was M. G. Andral, at that time *Professeur-Agrégé*, who first systematically applied observations made in the *post mortem* room to the explanation of the phenomena observed on physical examination during life, thus supplying a link left weak by Laennec himself.

In 1827, Dr. Williams returned to England; but though now in the seventh year of his tutelage, he was not yet prepared to settle down. After a flying visit to Madeira, as the medical attendant on a gentleman who was supposed by two eminent physicians of the day to be suffering from chronic inflammation of the trachea, but who was found by Dr. Williams to be suffering from advanced phthisis, he retired into the country, and there composed the work, better known by the title given to the third edition, *The Pathology and Diagnosis of Diseases of the Chest, illustrated especially by a Rational Exposition of their Physical Signs*—a work of great importance, and one which had, we believe, a powerful influence for good at the time of its publication, and for many years after, until, finally, much of what was put forward as novel in it has now become the common property of every text-book and of every teacher. The reason for this success is not far to seek; for the aim of the book was, according to its author, "to explain the physical signs of diseases of the chest, so as to make them useful in pathology, as well as in diagnosis." Laennec's teaching had been very dogmatic; and his knowledge, though extensive, was, according to Dr. Williams, largely empirical. Laennec's knowledge of acoustics was, Dr. Williams says, by no means profound; and it was by applying scientific principles that the pupil sought to improve and render more useful the teaching of the master.

It will thus be seen that, when he came to settle in London a couple of years later, Dr. Williams had already the reputation of being a proficient in what was then a new art; in addition, he had the advantage of the friendship of his relative, Mr. (afterwards Sir) David Davies, the personal physician of King William IV and Queen Adelaide; and was also on friendly terms with Dr. (afterwards Sir) James Clark, and Dr. (afterwards Sir) J. Forbes. The position and methods of the profession in London at that period (1830) did not escape the criticism of these physicians, who agreed that "the predominant evil in the medical practice of that day lay in the system of over-drugging and over-feeding which generally prevailed." The profession was then in reality made up of three classes—physicians, surgeons, and apothecaries. Of this latter class, Dr. Williams has given us a favourable picture, in his account of Mr. H. P. Fuller of Piccadilly, one of the "visiting apothecaries" of St. George's Hospital. "From sixty to fifty years ago," he says, "there was no more familiar equipage at the West End than that of Mr. Fuller, driving about in his white horsed, dark green chariot; out of which, letting down steps with a cord (before broughams were known), he would bustle out, in his dark blue coat with gilt buttons, buff waistcoat, and always a glove in his hand. To match, there was his excellent partner, Thomas Hammerton, also with his metal-buttoned blue coat, cheery countenance, and pleasant Yorkshire brogue, bearing a very high repute for practical skill; and, between them, they doctored half the nobility of the West End." The physicians were of two classes—Fellows of the College of Physicians, and "*Permissi* or Licentiates, a term of degradation," says Dr. Williams, "which the College never had the right to apply, and which it soon after was obliged to change for the present title of Member." Ten years later, when, on the occasion of his appointment as Professor of Medicine at University College, he was offered the Fellowship, Dr. Williams says that he felt so strongly on this point, that he hesitated to accept the honour, because he believed that the College had not acted with justice; its charters incorporated into one body all physicians in London and seven miles round, without any division or distinction; but, by by-laws subsequently enacted, a division was made, among those admitted, into Fellows *(Socii)* and Licentiates *(Permissi)*. "The effect of this enactment was," in Dr. Williams's opinion, "to degrade the Licentiates into an inferior order of physicians, and to monopolise to the Fellows the honours and government of the College. The distinction and exclusion was carried further, by restricting the Fellowship chiefly to graduates of Oxford and Cambridge, and placing those from other universities in the lower order of Licentiates." To this question, Dr. Williams tells us that he recurred again, more than thirty years later, when the College had been deprived of its executive and compulsory powers, and had dignified its Licentiates with the name of Members, and created the new order of Licentiates, in order to compete with the Apothecaries' Hall.

To return, however, to the history of Dr. Williams's life, we find him, in 1831, married, and living in Half Moon Street. He was at work for the *Cyclopædia of Practical Medicine*, to which he contributed articles on Bronchitis, Catarrh, Coryza (for which he recommended total abstention from all fluids), Counter-irritation, Irritation, Pneumonia, and several others. He was constantly in attendance at St. George's Hospital, and became Consulting-Physician to the North-West London Self-Supporting Dispensary, which was the first of the kind in London. The second edition of his work on *Physical Signs* contained an appendix on the sounds of the heart, founded on experiments which appear to have been commenced by Dr. Hope but abandoned, and then taken up, and carried to a successful termination, by Dr. Williams. However this may be, the matter led to a bitter misunderstanding with Dr. Hope. Dr. Williams was exonerated by Sir Benjamin Brodie, but the breach was never healed.

In 1836, Dr. Williams delivered his first course of lectures at the Kinnerton Street School (connected with St. George's Hospital) on the "Physiology and Diseases of the Chest"; and, two years later, on the downfall of Dr. Elliotson, who too early began the study of a subject which has since made Professor Charcot famous, Dr. Williams was suddenly elevated to the great position of Professor of the Principles and Practice of Medicine, and Professor of Clinical Medicine, in University College, at that time the largest school in London, as well as Physician to University College Hospital.

Feeling ran rather high at the time; but Dr. Williams threw himself with such enthusiasm into his new work, that he quickly gained the confidence of the students. He did, indeed, well deserve to gain it; for he devoted himself with an [illegible] to the work of preparation, giving up every kind of [illegible] [illegible]. "All my time and [illegible]," he says, "was devoted to [illegible] work." The [illegible] 300 [illegible] in the first year, and 181 in the last year of his tenure of office. Among the students who attended these lectures, Dr. Williams recalls many names now well known; among others, Dr. C. J. Hare, now President of the Metropolitan Counties Branch of the British Medical Association; the late Dr. E. A. Parkes, F.R.S., Dr. W. C. Williamson, F.R.S., the well known geologist; Dr. J. C. Bucknill, F.R.S.; Mr. John Marshall, F.R.S., now President of the College of Surgeons; Dr. E. H. Sieveking; Dr. A. B. Garrod, F.R.S.; the late Mr. Clover; Dr. J. Russell Reynolds, F.R.S.; Dr. Graily Hewitt; and Mr. J. Sampson Gamgee. Another pupil who earned Dr. Williams's good opinion was Dr. Alexander Henry, who has for many years acted as subeditor of this JOURNAL. Speaking of Sir John Rose Cormack, who at one time edited the *Provincial Medical Journal*, Dr. Williams takes occasion to write as follows: "One of the modes in which I gave him efficient aid was by introducing to him as assistant my former diligent pupil and clinical assistant, Dr. Alexander Henry, whose unflagging intelligence and industry has been ever since most serviceable in co-operating in the publication of the BRITISH MEDICAL JOURNAL, now become a gigantic national institution, under the able editorship of Mr. Ernest Hart."

[*To be continued.*]

A YEAR-BOOK OF THERAPEUTICS FOR 1883. Edited by ROYAL W. AMIDON, M.D. London and New York: G. P. Putnam's Sons. 1884.

IN a work of about 250 pages, the editor endeavours to give some account of the progress made in pharmacology and therapeutics during the year 1883. In his introductory chapter or "General Review," he pleads that there is really little to record. "Apparently," he says, "there has been little of genuine value added to our knowledge by workers in the field of experimental therapeutics. Scores of new drugs have been forced on our attention; but the presentations have been made, not by the painstaking experimenter, but by our somewhat too enterprising wholesale druggists, whose multifarious pharmaceutical preparations and shotgun formulæ are gradually pushing extempore prescribing and the doctor's individuality to the wall."

The editor refers at some length to the attempts which have been made of late to improve the treatment of the phthisical; but the only conclusion at which he arrives is, "that perhaps the internal administration of arsenic, with tonics, stimulants, and good food, holds out the greatest inducements." The value of corrosive sublimate in antiseptic surgery is very fully discussed. In many cases, the papers might have been condensed with advantage; for example, we find nearly fifty pages devoted to a single research on iodoform. The work, on the whole, has been fairly well done, but many valuable and interesting papers have been unaccountably passed over. There is no index of authors' names, so that it is not easy to find any particular article which may be required; but as yet we have met with no mention of Dr. Warden's excellent paper on *Abrus precatorius*, nor with any of Matthew Hay's recent contribution to pharmacology.

NOTES ON BOOKS.

The Student's Guide to Systematic Botany, including the Classification of Plants and Descriptive Botany. By ROBERT BENTLEY, F.L.S., M.R.C.S.Eng.—This is a valuable and compact little elementary manual, concise in style, and published in a very convenient form for the pocket. Its chief merit, however, is its authorship, since it is written by a most distinguished botanist, already known as the author of the larger *Manual of Botany*—a text-book that has been popular among students for many years. The *Guide* includes a description of all the natural orders required of the candidate for study by British and Irish examining boards; and the characters of each order are demonstrated by excellent woodcuts, as well as by verbal descriptions. It forms a supplement to the same author's *Student's Guide to Structural, Morphological, and Physiological Botany*, published last year. On account of its style and authorship, it will be an agreeable and a trustworthy guide to the amateur, as well as to the medical student and practitioner.

Regional Surgery, including Surgical Diagnosis: A Manual for the Use of Students. Part II. The Upper Extremity and Thorax. By F. A. SOUTHAM, M.A., M.B.Oxon., F.R.C.S., Assistant-Surgeon to the Manchester Royal Infirmary, Surgeon to the Clinical Hospital for Women and Children (London: Churchill).—We had occasion to speak favourably, a year since, of the first instalment of this work, and are gratified to find that the second part is in many respects superior. The chapters on the hand are highly satisfactory; the results of paralysis of the different nerves of the brachial plexus are admirably summarised; and the notes on spasmodic affections, and the local effects of gouty, rheumatic, and allied disorders, will prove of great service to the practitioner and student. The chapters on injuries and diseases of the thorax are also of great value, as are those portions of *Regional Surgery* which are devoted to affections of the breast and nipple, although analytical and comparative summaries of diseases of the mammary glands are already very familiar to readers of surgical works. This second part has been prepared by Mr. Southam with the assistance of Mr. G. A. Wright, Assistant-Surgeon to the Manchester Royal Infirmary, and Surgeon to the Hospital for Children, Pendlebury. The third and last volume of *Regional Surgery* will include injuries and diseases of the abdomen and lower extremity; and it is to be hoped that it will be issued as soon as possible, as perhaps the only defect in this valuable publication is the fact that it is dealt out piecemeal to the medical public. When complete, it will be a standard work of reference of the highest merit and utility.

REPORTS AND ANALYSES

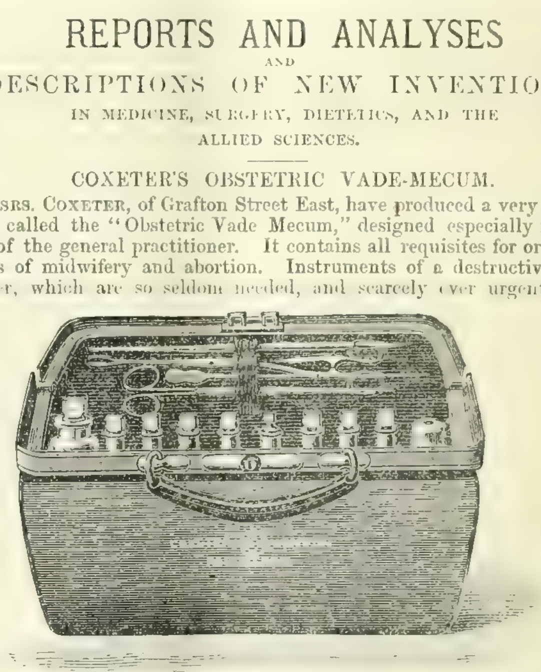
AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

COXETER'S OBSTETRIC VADE-MECUM.

MESSRS. COXETER, of Grafton Street East, have produced a very handy bag, called the "Obstetric Vade Mecum," designed especially for the use of the general practitioner. It contains all requisites for ordinary cases of midwifery and abortion. Instruments of a destructive character, which are so seldom needed, and scarcely ever urgently required, are omitted. The bag has been submitted by Dr. Charles Read to various obstetric authorities, who have given it their approval. The whole bag, complete, costs three guineas. Dr. Read, at whose suggestion the bag has been arranged, seems to have thought of everything which is now required in the labour-room. The compact manner in which so many articles are fitted into one bag is remarkable. The bag is the best of its kind we have seen.



SAVORY AND MOORE'S SOLIDIFIED LINIMENTS.

THE solidified liniments made by Messrs. Savory and Moore are certainly worthy of attention. They have many advantages over the ordinary fluid preparations. They are more easily applied; they can be carried about without difficulty; they are less wasteful; there is no necessity for an elaborate collection of bottles, brushes, and saucers; and, above all, they cannot be taken in mistake for a medicine intended for internal administration. We have tried them, and they have not been found wanting. The cantharides liniment is certainly active, raising a good blister very quickly. Applied to the chest and back, it is most efficacious as a counter-irritant in cases of phthisis and bronchitis. The belladonna liniment produces an effect which is curiously persistent. We are inclined to think that it is not made in accordance with the directions of the *British Pharmacopœia*, but that it contains menthol, or some body having analogous properties. The solidified liniments are certainly an improvement in pharmacy, and deserve a trial.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 31st, 1884.

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ABATEMENT OF SMOKE.

THE smoke-abatement movement is being persistently and quietly carried on, and is evidently making steady advance in public estimation throughout the kingdom, as well as in London.

Since the beginning of the year, we have noticed considerable comment and correspondence in the press of Sheffield, Liverpool, Birmingham, Manchester, Edinburgh, Dumfries, York, Huddersfield, Brighton, and other places, and in each of the towns named the agitation takes the shape of a demand for more efficient measures for restraining the nuisance. The general press and the technical journals alike afford evidence, by their frequent reference to new inventions and the numerous announcements of tradesmen, of a healthy activity having been so far stimulated that the demand for improved methods of obtaining heat, without the baneful concomitant of smoke, is at least in process of being supplied. The reports of the gas-companies show greatly increased use of the smokeless fuels, gas and coke, for heating purposes; and the announcements of the Council of the Smoke Abatement Institution, which appear from time to time, clearly indicate that encouraging progress is actually being made both in the knowledge and application of other means of smoke-prevention. Encouraging as these evidences of progress may be, we must not, however, overrate them. Voluntary efforts, and the beneficial influences which they are capable of creating, can never suffice to check the increase, far less secure the abolition of smoke in our towns. The force of compulsion must not be one whit behind the force of voluntaryism if we are to indulge any reasonable anticipation of our town atmosphere becoming better, or, indeed, of its not getting materially worse. Hitherto the provisions of the law on the subject have been either before or behind the age in which they were enacted. At one period the law was doubtless far in excess of the general wishes, and the ability of the community to prevent the evil by reasonable means. Since that time, however, it has lagged behind both. Within the current week, the prospect of a more rational state of things seems to have opened to us, and from an unexpected quarter. A Bill for the amendment of the law relating to smoke-abatement was introduced into the House of Lords on the 26th instant by Lord Stratheden and Campbell, and passed its first reading. We have not yet the text of the Bill before us, but from the information in our possession, we gather that its provisions are of a practical character, and such as to meet specially the defects in former legislation to which we have alluded. Its main object is to deal with the smoke from domestic chimneys, and however much the proposition may tend to produce [illegible] in the public mind at the first thought, it is impossible to withhold general assent to it, or to doubt that it will ultimately receive thoughtful and earnest public consideration.

That the domestic fires produce an enormous aggregate quantity of smoke, which might reasonably be prevented, and that this is being added to continuously in all our great cities at a rate entirely without precedent in the history of the world, are facts which cannot be disputed, nor can the deadly influences of the evil upon the vital powers and social interests of the community be considered in any other light than subjects of the gravest national concern. It is, no doubt, substantially true that we are adding to our enormous metropolis about 75,000 smoking chimneys annually, and even this is not all, for various adjacent places are extending at almost as great a proportionate rate in London, and their smoke adds to the darkening and pollution of its atmosphere. It is wholly unnecessary for a medical journal to enlarge upon the effects of a smoky atmosphere upon the life and physical health of the people, for the evidences are abundant and the opinion of the medical profession is virtually unanimous. It is equally needless to treat of the economical or social aspects of the question, which may be more appropriately dealt with elsewhere. We therefore propose only briefly to call the attention of our readers to the character of the proposed measure, which in a general sense appears especially worthy of notice and support. It proposes—

1. To give to the Metropolitan Board of Works and the City authorities, in their respective jurisdiction, powers of supervision and control of the heating arrangements of all new buildings, including dwelling-houses, in order to insure the adoption of such heating systems as are best calculated to minimise the production of smoke; these powers to be analogous to the powers now exercised by the bodies in respect of the construction and sanitary arrangements of new buildings.

2. To give the City authorities and local bodies powers to create, subject to the approval of the Home Secretary, by-laws for the restraint of smoke in their respective districts.

3. To extend the provisions of the Sanitary Act, 1866, to the suppression of the excessive emission of smoke from dwelling-houses.

4. To extend the provisions of the Smoke Abatement (Metropolis) Acts, 1853-56, to the whole of the Metropolitan Police area, and to include under the provisions of these Acts all the trades and furnaces which are not at present included.

We are informed that, with the exception of Clause 3, as to which much reserve is obviously called for, the proposed measure has the cordial support of some of the most prominent members and the largest owners of metropolitan property in the House of Lords. The Bill, we believe, has some special clauses for the better enforcement of the law in the case of bakeries, potteries, steam-vessels on the river, and locomotives on the metropolitan lines.

THE PREVENTION OF ANTHRAX.

WE are rather in want of a good distinctive term to apply to the disease which has been known in this country under the name of malignant pustule, splenic fever, and more recently anthrax, in France in recent times as charbon, and in Germany as milzbrand. Malignant pustule is unsatisfactory, as it refers only to the external lesion, which is not always present; splenic fever is objectionable for an analogous reason, and charbon appears to be a merely trivial name, applied also on account of the rapid sloughing which gives a black colour to the centre of the external lesion. Anthrax is on the whole the most convenient term, especially as the bacillus which is found in [illegible] name, the only objection to it appears to be that it [illegible] appropriated for carbuncle. [illegible] appears to be, on the whole, the term [illegible] the [illegible] to the Local Government Board [illegible] for the year [illegible] two important contributions [illegible] the one by Mr. John [illegible] the other by Dr. Klein [illegible]

Mr. Spear's report shows that [illegible] sons engaged in handling foreign hides; the large majority of the cases which he has been able to investigate at home occurred in wharf-labourers, in men engaged in sorting the hides, or in tanners. The experience in London has, however, differed from that of Bradford in that "internal anthrax," that is to say, anthrax without external lesion, is relatively very rare; thus, out of thirty-two cases of malignant pustule, the external lesion of anthrax was present in twenty-three; the disease also seems to be less fatal and more amenable to treatment. Mr. Spear recommends that the men engaged in the trade should be instructed as to the existence of the danger, and as to the precautionary measures which may individually be taken. It is satisfactory to learn that one of the largest firms of hide-brokers have already issued to their work-people a description of the disease, with plain instructions. As to the prevention of the disease by regulation of the trade, it must first be noticed that, in the classification of hides at the port of export, for trade-purposes, the "dead" hides could easily—and apparently ought now, if traders were honest—to be kept apart. The danger of infection chiefly lies in these "dead" hides; if, further, an organisation could be established by which this country could be warned of the existence of the disease amongst the cattle in countries from which hides are imported, Mr. Spear thinks that the importation of diseased hides might either be prohibited, or placed under such stringent regulations as would minimise the dangers which now exist.

Dr. Klein's "Further report on the relation of Pathogenic to Septic Bacteria, as illustrated by observations on bacillus anthracis," will be read with a great deal of interest. It contains a somewhat severe criticism of the views first put forward by M. Pasteur in 1881, and embodied in his address before the International Medical Congress in that year. The fact that M. Pasteur had succeeded in preparing a "vaccine" is not questioned, but it is shown that what is now issued under that name falls very short of a true vaccine. In his last report Dr. Klein had published some observations, the full significance of which can now be better perceived. He described last year, it may be remembered, the degeneration which the bacillus anthracis undergoes in liquid artificial cultivations; after a time, that is to say, after the whole of the pabulum suitable to the needs of the particular bacillus was exhausted, and he found that, when this degeneration was far advanced, but not complete, the fluid, though capable of producing the disease in a fatal form in guinea-pigs and rabbits, was incapable of infecting white mice. It seemed, in fact, that the white mice were able to resist a small dose of the poison, or we may perhaps say, to be able to kill the bacilli if only introduced in small numbers. M. Pasteur had been able to obtain a "vaccine" by cultivating the bacillus at a high temperature under certain conditions; these condi- have not been made public, and it might have been supposed that the mice had been, to use M. Pasteur's term, "vaccinated" by the fluid used by Dr. Klein; such, however, was not the case, as these mice were at once killed when inoculated with fresh cultivations. In his present report Dr. Klein has extended his investigation to sheep, and has found that an animal of that species can resist a small dose of an old degenerating cultivation of the bacillus, but succumbs to a larger dose. This is explained on the supposition that, when a small quantity of the fluid is injected, the chances are great against any still active bacilli being present, while with a large quantity of the fluid the reverse holds good, a few active bacilli remaining among the much large number of degenerated bacilli. A number of experiments directed to the discovery of the conditions under which a "vaccine" fluid could be produced, into the details of which we need not enter, having failed; some "vaccin charboneux" was obtained by purchase from M. Pasteur's business-agent in Paris. "This 'vaccin charboneux' is manufactured in large quantities in the laboratory of M. Pasteur, and is sold by his agent M. Bontroux in Paris. It is sold for twenty francs per two tubes, 'vaccin premier' and 'vaccin deuxième,' each containing a clear fluid with a minute quantity of a powdery precipitate; the fluid is said to be sufficient for the inoculation of one hundred sheep or fifty cattle. According to the printed directions, the premier vaccin is inoculated first; after the lapse of about a fortnight, the deuxième vaccin is used, and then the animals are supposed to be immune against any further inoculation with anthrax. No constitutional disturbance is said to be observable in the animals during or after the experiment." It was found that neither of these statements applied to the fluid obtained from the agent M. Bontroux; the animals used were mice, guinea-pigs, and sheep; upon none was immunity conferred, some were unaffected by the inoculation, some were killed, and a few were slightly indisposed: it was also ascertained that the "vaccin" was contaminated by micrococci and by foreign bacilli, and it is not unnatural to conclude that it had been carelessly prepared. It is very much to be regretted that M. Pasteur has not made public the method by which the vaccine-fluid ought to be prepared, and it is surely contrary to the true spirit of scientific inquiry to reduce so beneficent a discovery to the rank of a secret remedy; this regret is intensified when we find that two separate and consecutive specimens of M. Pasteur's "vaccin charboneux," obtained from his accredited commercial agent, entirely failed to produce the results claimed for them; "it cannot but be inferred," writes Dr. Buchanan, in his report to the President of the Local Government Board, "that the substances issued from M. Pasteur's laboratory are extremely uncertain in quality. Probably the conditions for the manufacture of a true attenuated anthrax-virus are numerous, and are not all understood, even by M. Pasteur himself."

The general result arrived at by Dr. Klein, in his experiments on sheep, was the same as in the rodents—with, however, one remarkable exception, the full significance of which it is as yet impossible to gauge. He found that sheep, inoculated with the fresh blood of a mouse which had died of anthrax, showed a rise of temperature for three days, but did not go off their feed, and quite recovered; these sheep were not in the least affected when subsequently inoculated with a cultivation of the bacillus, which contained spores, and was therefore most virulent. "Thus, we see that mouse's anthrax blood, while affecting constitutionally the sheep, did not produce fatal effects, and, at the same time, furnished them with immunity against further inoculation with virulent material."

This very interesting observation will, no doubt, be followed up; and, if it should be found to hold good generally, it cannot fail to be of great importance, as affording a ready means of obtaining a trustworthy vaccine-fluid.

Upon another point, Dr. Klein has arrived at results of very considerable interest, if of less novelty; he has fully confirmed the statement of Gerlach and Bollinger, that putrefaction destroyed the infective power of the blood and organs of an animal dead of anthrax. This fact seems to depend upon the inability of the bacillus to go on to the development of spores, except when growing in situations to which air had free access. For instance, Dr. Klein found that, when cultivated in pork broth, in test-tubes, the bacillus did not, as a rule, form spores; but, after flourishing for a time, underwent degeneration, so that the fluid eventually became sterile; where exceptionally the bacillus, in its growth, reached the surface of the fluid, spores would form; in cultivations made not in the depths of a fluid, but on the surface of gelatine, the formation of spores went on. Dr. Klein finds that, if the body of an animal dead of anthrax be not opened after death, the changes which take place in the bacillus are purely degenerative, and the body speedily loses the power of communicating the disease; if the body be opened, and access then afforded to the air, the infective power is longer retained, owing to the production of spores. Dr. Klein, therefore, concludes that M. Pasteur was mistaken in supposing that, in animals dead of anthrax and buried, the bacillus retained its infective powers for years; and believes, on the contrary, that this power is quickly lost, owing to the complete degeneration of the bacillus. This view of Dr. Klein is in accord with the observations of Koch.

DR. CORY'S VACCINO-SYPHILIS EXPERIMENTS.

THE Local Government Board have, we believe, a set form of words in which to chide unsystematic health-officers who are dilatory in the making of their annual reports. These procrastinating officers are reminded that the usefulness of a report is materially diminished when too long an interval elapses between the period to which it refers and the date of its presentation. It is not out of place to note in this connection that we were favoured, on May 24th, 1884, with a report, dated December 31st, 1883, chronicling the proceedings of the Medical Department of the Local Government Board during the year 1882. This is the more noticeable, because the volume contains a long antedated report of much importance: that of the committee of eminent practitioners appointed to investigate Dr. Cory's experiments in vaccinating himself with lymph from the arms of syphilitic children. With a desire to settle for himself the vexed question whether vaccine-lymph taken from a syphilitic person, if unmixed with the blood of the vaccinifer, does not contain the syphilitic virus, and is incapable of imparting syphilis by its inoculation, Dr. Cory made at intervals four separate experiments on himself with lymph derived from obviously syphilitic children. The fourth experiment was successful; and Dr. Cory had to endure, in the cause of science, all the pains and penalties of syphilitic inoculation. His experiences conclusively prove, in the opinion of the committee, which consisted of Dr. Bristowe, Dr. Humphry, Mr. Hutchinson, and Dr. Ballard, "that it is possible for syphilis to be communicated in vaccination from a vaccine-vesicle on a syphilitic person, notwithstanding that the operation be performed with the utmost care to avoid the admixture of blood." This, it will be observed, is an absolutely new departure from the hitherto accepted view of English writers that vaccine-lymph could by itself propagate nothing but vaccinia, from however diseased a subject the lymph might be derived.

It is right to state that the infants from whom Dr. Cory took lymph for his personal vaccination were, in all cases but one, which was unsuccessful, not suffering from hereditary disease in a latent form, but were infants in whom active symptoms were unmistakably present, as shown by cutaneous eruption, snuffles, mucous tubercles, and ulcerations. Out of the four children in question, one only was proved to have been capable of imparting syphilis by the lymph taken from its vaccine-vesicle. These infants were all in such a condition of obvious syphilitic disease as would certainly have precluded their use as vaccinifers by even an inconsiderate and reckless vaccinator; indeed, they were selected by Dr. Cory for his self-vaccination, because they were unquestionable syphilitic cases.

Probably it is unnecessary to say, concerning this history, that its counterpart is not likely to be found in the annals of any vaccination-station or surgery in this country. But abroad, where vaccination is more carelessly performed, and is apt to degenerate into an affair of midwives, its warnings may, perhaps, be not altogether unneeded. The lymph of a vaccine-vesicle upon an actively syphilitic child may, it would appear (though under limited conditions that remain obscure), contain the virus of syphilis, even where there is no recognised admixture with the lymph of matters foreign to it. But, as we have indicated, it was needful for the purpose of Dr. Cory's experiments that he should deliberately infringe rules which habitually guide him, as they guide other people, in the practice of vaccination. He had to take, and he did take, intentionally, lymph from children with strongly marked manifestations of syphilis, one of which manifestations was a pronounced skin-disease; and this abandonment of rules would seem to have been of the essence of his success in transmitting syphilis.

Irrespectively altogether of the question whether there was any risk of the transmission of syphilis in the act of vaccination, except through the most culpable incompetence or misconduct of the vaccinator, it has in this country always been laid down as a fundamental rule not to use the lymph of an unhealthy person, whatever the nature of the ill health, for the vaccination of others. The instructions of the Local Government Board require the vaccinator to "take lymph only from subjects who are in good health, and to always carefully examine the subject as to any existing skin-disease, and especially as to any signs of hereditary syphilis." Dr. Cory's result does not, therefore, give any new rule for the guidance of the practitioner. The existing obligations on the vaccinator will remain neither weakened nor strengthened; and the result of Dr. Cory's experiment, in which the ordinary rules of practice were necessarily disregarded, does not in the least affect the conclusion, derived from long continued experience of properly conducted vaccination, that the observance of the recognised rules is, in practice, a sufficient safeguard against the transmission of syphilis.

NEW RESEARCHES ON INFECTION AND DISINFECTION.

THE advances which have been made during the last ten or twelve years in our knowledge of the communicable class of diseases have brought the problem of disinfection—using this term to signify the destruction of a virus or contagium outside the living body—within measurable distance of solution. For, on the one hand, we are daily growing better acquainted with the intimate nature of the infective principle of several important maladies, while, on the other, the methods of cultivation introduced by Koch have furnished us with the means, not only of isolating specific germs and studying their natural history, but of ascertaining, in a more simple way than by introducing them into the body of healthy animals, whether they are or are not deprived of vitality. The economy of time and material thus achieved enables the number of trials with a given contagium, *e.g.*, with the bacilli and spores of anthrax, to be indefinitely multiplied and varied. Koch and his fellow-workers have not neglected to avail themselves of these increased facilities, and have made some valuable additions to our understanding of the process of disinfection both on its theoretical and its practical side; additions whose tendency has been, in the main, to confirm, and even to accentuate the unfavourable judgment arrived at by previous inquirers in regard to the usefulness of much of the so-called "disinfection" which is practised and recommended at the present time.

To the newly published Report of the Medical Officer of the Local Government Board, the Waynflete Professor of Physiology at Oxford contributes a highly suggestive memorandum, in which he points out certain lines of investigation concerning infection and disinfection, which he believes to be full of promise. He extends the problem of disinfection far beyond the limits within which it has hitherto been confined. Not content with dealing with contagia as they exist in the external environment, he proposes to follow them up in the living organism itself, thus linking together two sets of questions which have hitherto fallen under the separate heads of preventive and curative medicine. Among the practical aims of disinfection, he includes not merely the action of the disinfectant on contagia before their entrance into and after their exit from the body, but the arrest or inhibition of their morbific action within the body itself. That our knowledge of the preventive action of chemical agents within the organism is still most imperfect, may be freely admitted. But is it not going too far to say that "there is no instance in which the contagium of any disease communicable from person to person can, after its introduction into the organism, be controlled or inhibited in its morbific action by introducing along with it an antagonistic drug?" There are unquestionably strong reasons for thinking that syphilis may afford an instance of the kind; and that the remedial action of mercury upon its constitutional manifestations does really depend on a specific preventive influence exerted by the drug upon the virus of the disease. The hope that specific antagonists to the activity of poisonous contagia within the body, as well as outside of it, may be discovered, is thoroughly reasonable, and is supported by a variety of considerations. Indeed, some such discovery would probably have been hit upon empirically before now, were it not for the comparatively rapid course of the majority of communicable diseases, which allows but little scope for the operation of specific remedies requiring time to develop their action.

To direct systematic inquiry on this subject into a fruitful channel, Dr. Burdon Sanderson, comparing the spontaneous determination of the morbid process in acute contagious diseases with the spontaneous subsidence of septic fermentations, most ingeniously suggests that the phenomena in both cases may be governed by a similar law. Just as the self-arrest of septic fermentations has been shown to depend on the development in the fermenting medium of chemical compounds belonging to the aromatic group, which are hostile to any further manifestation of the vital activity of septic microphytes, so the terminable character of communicable disorders may possibly be due to causes of a like order acting on the media (blood, tissues, or both together), in which pathogenic contagia subsist and multiply. Should this hypothesis turn out to be correct, it is clear that we shall have some prospect of being able to check an acute contagious disease by hastening or by imitating the process of self-arrest.

It is satisfactory to learn, from Dr. Buchanan's introductory report, that sustained researches, on the lines just indicated, are about to be undertaken under Dr. Sanderson's auspices.

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DR. ROY has been elected to the Professorship of Pathology in the University of Cambridge. Further particulars will be found in our University Intelligence column.

A NEW recreation ground for East London has been secured by the Metropolitan Public Garden, Boulevard, and Playground Association to the public, for their use and enjoyment, by the throwing open of the extensive churchyard surrounding St. Dunstan's, Stepney, from five to six acres in extent.

AT a meeting of the House Committee of the Westminster Hospital, held on May 27th, a Building Committee was appointed for the purpose of making arrangements for the erection of a medical school on the site already purchased in Caxton Street.

AT a Court of Assistants of the Worshipful Company of Grocers, held on Wednesday, May 21st, the following candidates were elected to the Company's scholarships for research into the causes of important diseases, viz.: 1. W. North (renewal), subject, Etiology of Ague. 2. Leonard C. Wooldridge, D.Sc., M.B., subject, Hæmorrhagic Disease, Pernicious Anæmia, and Blood-clotting. 3. Alfred Lingard, M.R.C.S., subject, Intimate Etiology of Enteric Fever.

DEBATE ON ANTIPYRETICS.

IN connection with the new Section of Pharmacology and Therapeutics of the British Medical Association, arrangements are being made for holding a debate on antipyretics. The subject was discussed at the International Medical Congress, in London, in 1881; but, so many antifebrile remedies have been introduced during the last two or three years, that it is felt that an investigation into their claims for support is imperative. The discussion will, in all probability, be opened by Dr. Alexander Collie of the Homerton Fever Hospital, and Professor Quinlan of Dublin. Communications have been promised by some of the most distinguished Continental observers; and Dr. Dujardin-Beaumetz of Paris will read a paper on a new antipyretic, on which he and his pupils have been for some time engaged.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

A MEETING of the above Association was held on Wednesday, the 28th instant, when a further list of members willing to act as local secretaries was submitted. A resolution was passed recording the protest of the Association at the manner in which the resolutions of the last general meeting of the Members and Fellows were ignored by the Council of the College. Other resolutions carried were to the effect that no revision of the charter of the College will be satisfactory unless it has received the general assent of the Members and Fellows, and that another meeting of the Members and Fellows should be called to consider such alterations in the charter as may be proposed by the Council. It was determined to immediately prepare a petition for presentation to the Privy Council, praying that a new charter may not be granted to the Royal College of Surgeons until due effect be given to the suggestions made at the late general meeting of Members and Fellows, and further praying that the privileges originally and justly belonging to the Members may be restored to them.

HELP FOR THE WOUNDED.

THE Société Française de Secours aux Blessés Militaires held a meeting, a few days ago, to re-elect the Duc de Nemours as President. The funds already amount to 3,500,000 francs (£140,000). Eighty thousand francs were expended on Tonquin; 300,000 francs (£12,000) on French territory.

THE SUBSOIL OF LONDON.

A VERY satisfactory improvement has taken place in the drainage of the subsoil of London, and one highly conducive to health. A large storm-sewer has been constructed at Deptford, 1,000 yards long, 13½ feet wide, and 11 feet high, to carry off the storm-overflows of the district. It is reported that "a remarkable fact was brought to light in making the necessary cuttings for this sewer, namely, that, since the installation of the scheme of metropolitan drainage in 1859, the level of the water in the soil has been lowered 30 feet. It is seldom, at the present time, an engineering difficulty to get rid of the water in making excavations: and the basements of the houses, and even the foundations, in the lowest parts of London are now generally surrounded by a comparatively dry soil—a condition of things the very reverse of what was previously the case, and wholly in favour of the public health."

ANTHROPOMETRY.

ONE of the latest additions to the Health Exhibition is an anthropometrical laboratory, which has been organised by Mr. Francis Galton, and has been fitted with a set of instruments for the measurement of certain personal facts. A small fee will be charged for admission, and, in return for this, the visitors will be furnished with a pamphlet, explanatory of the objects of anthropometry, and a carefully filled up schedule, of which a duplicate will be kept for statistical purposes. This record will contain name (or initials), age, sex, profession, colour of hair and eyes, place of birth and residence, height (standing and sitting), weight, chest-capacity as measured by a spirometer, strength of squeeze and pulse, swiftness of blow, acuity of sight and hearing, and the conditions of the colour-sense.

THE TREATMENT OF PULMONARY CAVITIES BY DRAINAGE.

THE discussion on Tuesday last at the Royal Medical and Chirurgical Society, on the treatment of cavities in the lungs by drainage, was interesting, but somewhat inconclusive. In the first place, most pulmonary cavities are associated with tubercle, and no one attempted to justify any application of surgical drainage to these; and even of the treatment of pulmonary abscesses of other origin, there had been very little experience. Dr. Cayley narrated a striking case of the complete cure of gangrene of the base of the lung, beginning with pyæmic abscess, due originally to suppuration in the mastoid cells after scarlet fever. Fœtid pus, and even a sequestrum of the lung, were removed through the chest-walls; and six weeks after the operation the child could leave the hospital cured. Dr. J. Kingston Fowler had a case which we can only hope is rare, and will be rarer, of the accidental slipping of an extracted molar tooth from a dentist's grasp into the lung, and the gradual formation of an abscess round it there. Repeated operations had done a little good, but the tooth was not recovered, and the abscess not completely healed. The treatment of bronchiectasis by drainage offers the largest field for the surgeon; but the accurate diagnosis before operation taxes the physician's highest art; and the methods of operation give the surgeon much to consider, for he has had little to do with operations under the physical conditions offered by the lungs. So long as the patient breathes anything but an artificial atmosphere, antisepticism will have special difficulties. However, a beginning has been made, and cases like Dr. Cayley's offer welcome encouragement.

FUNCTIONAL ALBUMINURIA.

We would draw the attention of our readers to the short note and form of inquiry which appeared in our issue of May 10th on "Albuminuria in apparently Healthy Persons." There is no subject which better deserves the attention of the profession, or more urgently demands elucidation than this question of the occurrence of albuminuria in apparent health. There is no available existing material on which to form any trustworthy opinion concerning its diagnostic or prognostic import, yet such cases are not very rare; one or more falls within the knowledge of most medical practitioners. No one person may see a sufficient number to enable him to form any sound generalisation, but if everyone who has one case within his knowledge would send a short account of it on the form issued by the Collective Investigation Committee, there would be at once a most valuable mass of material from which deductions of very great importance might be readily and safely drawn. Additional copies of the form can be had by application to the secretary of the committee at the offices of the Association.

ABERDEEN UNIVERSITY CLUB.

The inaugural dinner of the Aberdeen University Club was held on May 21st, in the Venetian Saloon of the Holborn Restaurant. The chair was occupied by the President of the Club, his Grace the Duke of Richmond and Gordon. There was a large muster of members, as many as 160 of whom sat down to dinner, including the Vice-Presidents, Sir Andrew Clark, Professor A. Bain, LL.D. (Lord Rector), Mr. J. A. Campbell, M.P., Sir Guyer Hunter, Dr. Matthews Duncan, and Mr. Farley Leith, Q.C. Among the guests were present Lord Walton, Sir Herbert Maxwell, Sir William Mac Cormac, Dr. Gavin, Dr. Lauder Brunton, and others. An interesting feature of the evening was an exhaustive speech by Professor Bain on the subject of University Reform and Education. The dinner was enlivened throughout by the finished and careful playing of the Bijou Drawing-Room Orchestra. The club is to be congratulated on the start it has made, and it will evidently fulfil the object of its promoters, which is the cultivation of good fellowship and social intercourse between the members of the Aberdeen University.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The Secretary has announced the following lecture arrangements for June. Professor E. A. Schäfer, F.R.S., will deliver three lectures, on Wednesday, Friday, and Monday, June 4th, 6th, and 9th: 1, The Functions of the Marginal Convolution; 2, The Analysis of Voluntary Muscular Action; 3 The Mechanism of Absorption. Six lectures on some important points in connection with the Surgery of the Urinary Organs will be delivered Sir Henry Thompson, F.R.C.S., Professor of Surgery and Pathology to the College, in the theatre of the College, on Wednesdays, Fridays, and Mondays, commencing on Wednesday, June 11th, 1884. The following will be the subjects of these lectures: Wednesday, June 11th.—Lecture I. Introductory. On the Treatment of Stricture of the Urethra by Internal Urethrotomy. Friday, June 13th. Lecture II. On the Diagnosis of Urinary Diseases. Digital Exploration of the Bladder. Monday, June 16th. Lecture III. On Tumours of the Bladder: their nature, diagnosis, and treatment. Wednesday, June 18th.—Lecture IV. Impaired Vesical Function; its various forms and consequences. Friday, June 20th. Lecture V. The Progress of Operative Surgery for Stone during the present century: with the most recent improvements in Lithotrity, and their results. Monday, June 23rd.—Lecture VI. The results obtained by Lithotomy and Lithotrity in Great Britain during the present century; with an analysis of more than 800 cases by the author, presented therewith.—Professor Schäfer's and Sir H. Thompson's lectures will, in every case, be delivered at 4 o'clock in the afternoon.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS AND THE FELLOWS AND MEMBERS.

At the annual meeting of the South-Western Branch recently held, the following resolution was unanimously passed: "That the South-Western Branch of the British Medical Association has heard with regret that the resolutions passed at the meeting held at the College of Surgeons on March 29th have been rejected by the Council, and that they cordially agree with the spirit of those resolutions." This is the first shot fired in the campaign. We have no doubt that the subject will be renewed at most of the Branch meetings, and that the powerful influence of the profession organised in the Branches of the British Medical Association will be brought to bear in aid of that of the Fellows and Members, who justly demand a larger share in the management of their College. As Mr. Paul Swain remarked in a letter which appeared in our columns last week, it is impossible that the position of affairs between the Council and the Fellows can rest where it is. With a slight exception—so slight, indeed, as almost to add insult to injury, the Council have rejected the resolutions passed at a representative meeting of the Fellows and Members. We regret this action of the Council. It seems to point to the fact that they are ignorant of what is the real feeling of the profession outside, and we are disposed to think that that ignorance will be soon and somewhat rudely dispelled. We are glad to see that Mr. Paul Swain, in some remarks he made at Exeter, dwelt on the necessity for united action between the Fellows and Members. The resolutions proposed by Mr. Swain at the College meeting, if accepted by the Council, largely recognise the right of the Members to take their share in the management of the College. To accord to them the right of being present at meetings within the College, and also the right of speech, if not all that the Members may think themselves justly entitled to, is yet a certain concession to their demands. The Fellows are evidently desirous to act in no grudging spirit towards the Members; and we think that not only the interests of the Members, but of the College itself, will be best served at this juncture if the Members can see their way to support the Fellows in their crusade against the monopoly of power by the Council.

THE SMALL-POX EPIDEMIC IN LONDON.

The proceedings at the last meeting of the Metropolitan Asylums Board, when Mr. Galsworthy presided, showed that the small-pox epidemic still held large proportions in London. All the acute cases which came under the officers of the Asylums Board in East London were sent to the Eastern Asylum at Homerton, and, in the [illegible] up to last Saturday, 219 cases were received, and [illegible] of these were transferred to the hospital-ships. The Western Asylum had been cleared of fever-cases, disinfected, and, with the consent of the Local Government Board, converted into a small-pox asylum, [illegible] cases having been received there in the fortnight. At the South-Western Asylum, [illegible] cases had been received, in the South-Eastern [illegible] cases, in the North-Western [illegible], in [illegible] cases. [illegible] had died, and there remained on Saturday [illegible] under treatment, the highest number yet reached. The patients are thus distributed: in the Eastern Asylum, [illegible]; in the South-Western Asylum, [illegible]; in the hospital-ships, [illegible]; in the South-

Eastern Asylum, 27; in the North-Western Asylum, 31; in the Western Asylum, 5; and in the Darenth Camp, 663. The ambulance-system is very complete, so far as it goes; and to the completeness of this branch of the work may be attributed the checks the disease has received. The patients are taken in the managers' own ambulances, which are conducted with all precautions, to the acute asylums; the cases to be removed are taken by the vehicles, and attended by nurses, to the managers' private wharves, where they are put on board the steamer *Red Cross*, and then conveyed to the hospital-ships, or landed at the wharf at Long Reach for transference to the camp at Darenth, being taken from the wharf to the camp in an ambulance. When discharged from the camp, the patients are bathed at the place of exit, and are dressed in clothes which have had no contact with infection, and are then delivered, in an omnibus which has carried no infected case, to the pier at Long Reach, where they are put on the steamer *Albert Victor*, which has been purchased for the purpose, and then are brought to London. After all these precautions, the patients are discharged near their homes, and, in the case of children, at their homes.

TRANSACTIONS OF THE EPIDEMIOLOGICAL SOCIETY.

A NEW series of the *Transactions* of the Epidemiological Society have recently appeared. The first two volumes, relating to the years 1881-82 and 1882-83, are now before us, and each contains papers valuable in their bearing upon epidemiology. The first volume, in addition to the admirable address of the late President of the Society, Dr. G. Buchanan, F.R.S., contains three most interesting papers concerning the life-history of the *Filaria sanguinis hominis*, by Drs. Spencer Cobbold, F.R.S., Wykeham Myers, and Prospero Sonsino, respectively. Dr. Myers's paper is especially valuable, in that it contains very careful descriptions of his experiments conducted upon a willing assistant—To-ah, a native of Amoy; and that these, in their important details, corroborate the well known observations of Dr. Manson. Dr. Myers points out that very great care is required in the mounting of microscopic slides with filarial blood, which he always drew from a finger. He found that, if the part were squeezed or rubbed, so as to force out more blood, this caused the separation of the serum in the drop before it was large enough for transfer to the slide; and that, as the filariæ remained in the serum, they were invariably rendered feeble in proportion to the distance they were removed from the blood-corpuscles. His observations upon the decline of life in the filariæ showed that the primary symptom of debility appeared in their tendency to pass from the oval to the elongated form, and that their movements then became more isolated. Later on, their action became undulatory; and, at the last, it gradually ceased from the centre outwards, until the feeble motions of the head or back were all that remained to denote vitality. When dead, their integuments put on a somewhat shrivelled appearance. The paper is, moreover, furnished with described experiments, by which he estimated the length of life in the filariæ. The same volume contains other papers of considerable interest, among which may be noted those on Malaria, by Sir Joseph Fayrer; on the Form of he Epidemic Wave, by Dr. A. Ransome; and on the Transportation of Diphtheria-Infection by the Wind, by Dr. Hubert Airy. The second volume is very extensively illustrated. It contains not only an abundance of charts and drawings, illustrating the papers of Dr. de Renzy, on the Sanitary State of the British Troops in Northern India; of Dr. Longstaff, on the question of the Epidemicity of Phthisis, Bronchitis, and Pneumonia; of Dr. Seaton, on his Investigations of the Influence of Small-pox Hospitals carried out in Nottingham; and of Mr. P. Gordon Smith, on the best Plans for Constructing Infectious Diseases Hospitals; but also a series of well executed photographs, explanatory of Dr. Murray's admirable paper on the Delhi or Oriental Sore. This latter commences with a short history of the peculiar cutaneous eruption which Surgeon-General John Murray, and his colleagues on the Commission appointed some years ago to investigate this disease, believe to be of parasitic origin, although as yet it has not been certainly demonstrated by means of the microscope. According to Dr. Murray, the habitat of this parasite would appear to be foul water in tropical climates. The volume is, however, specially interesting for the views of Surgeon-General Cunningham on Cholera which it contains, and for a memorandum on the same disease, embodying somewhat opposite opinions, by Dr. G. Buchanan. The former, in common with many Indian medical men, does not believe that cholera is a special product; or that it is spread by means of a specific contagium developed in the bodies of the sick, and communicated either directly or indirectly by human intercourse. Dr. Buchanan, on the other hand, expresses in his memorandum the belief generally entertained by medical men in this country, that cholera is influenced in its spread by human intercourse. When authorities such as these differ, we may be sure that we are still far from finality of knowledge as to the causes and effects of cholera. The new series of the *Transactions* of the Society has been well brought out, and contains important additions to our knowledge of epidemiology. We confidently look forward, therefore, to the steady increase and development of the Society, and the further extension of its labours.

MILK AND SCARLET FEVER.

MR. W. H. POWER's report on an outbreak of scarlatina in certain districts of London, published in the newly issued twelfth report of the Local Government Board, contains a remarkable and somewhat alarming hypothesis. The outbreak in question was distinctly connected with milk obtained from a farm near Farnham, in Surrey; but no scarlet fever, nor any illness in the remotest degree resembling it, had occurred at this farm; yet the evidence is pretty conclusive that the milk was contaminated with the contagion of scarlet fever before it reached Charing Cross Station. Mr. Power was thus led to start the theory that the milk was infected by the cow itself, and, as a corollary of this, that a cow may be able to transmit the poison of scarlet fever without herself manifesting any signs of disease. This theory has been, to some extent, supported by some experiments made by Dr. Klein, who has found that, if a cow who has recently calved be inoculated with human scarlatina, she is affected by an ailment not accompanied by fever, or by any alteration in the quantity or visible qualities of the milk; this ailment was, in Dr. Klein's opinion, transmissible by inoculation of an infinitesimal quantity of pus to the dog, and there was evidence that the induced disease in the dog could be transmitted to other dogs. The line of research suggested is undoubtedly of great importance, but the facts at present in our possession are hardly sufficient to allow us to come to a decision.

OUTBREAK OF SMALL-POX IN HULL.

ON May 2nd, from information received from the borough coroner, the medical officer of health (Dr. Mason) visited a house situated in a populous part of the town where an infant, aged 18 months and unvaccinated, had died on the previous evening from small-pox. The mother stated that the child had been ill about ten days, and had been treated by a local druggist for measles. The other children of the family had been attending some Roman Catholic schools on the day on which the child died; and they and their mother, who had been hawking goods from door to door, have been admitted into the Borough Hospital suffering from small-pox. Since that time, seventeen children (fifteen girls and two boys, varying in ages from six to eleven years) attending these schools have been admitted into the hospital, suffering from small-pox. They had all been taken ill on or about the same day, and had been in the same classes as the family mentioned above. Three of the children were unvaccinated. The vaccinated children have had comparatively mild attacks, and it is remarkable that the younger children have more or less escaped the infection, although similarly exposed. Immediately the outbreak became known, the schools were closed, and they and the chapel in connection with them were thoroughly fumigated. Other cases of small-pox are directly traceable to this source. A young man, engaged in a pawnbroker's shop, contracted the disease in the pursuit of his ordinary business. Parcels of clothing, etc., deposited from infected houses, have been carefully isolated, the whole premises have been fumigated, and every precaution has been taken against the spread of the disease. It has been decided to erect a hospital-tent for the better treatment of small-pox; and with this accommodation, there is little fear but that the disease will be quickly stamped out, especially if the public will avail themselves of the protection insured by revaccination.

QUEEN'S COLLEGE, BIRMINGHAM.

THE Council of Queen's College have recently resolved upon a complete rearrangement of the anatomical department of the medical faculty. The main feature of the change consists in the appointment of a professor of anatomy, who will devote the whole of his time to the work of the department, and will not engage in private practice. The new professor will be personally responsible, under the Warden of the College, for the entire direction of the anatomical teaching, and will be *ex officio* curator of the museum. The appointment will probably be filled up at the meeting of the Council in July.

OXFORD GRADUATES' MEDICAL CLUB.

THE inaugural dinner of this club was held at Limmer's Hotel on Thursday, May 22nd. The need of such a club has long been felt, as was evident from the ready response to the invitations issued to the graduates to become members. Forty-eight members sat down to dinner; among whom were Professors Acland and Burdon Sanderson, Drs. Fincham, Andrew, Monro, Blandford, Church, Whipham, and Mr. T. Pridgin Teale. At the general meeting which took place before the dinner, the club was formally established, the officers for the ensuing year elected, and the rules which had been drawn up by the Committee proposed and ratified. Dr. Fincham, the president, in proposing the toast of "the Prosperity of the Club," gave a short history of the origin of the club, which he said was intended to be purely social in its aims. Within six weeks, the number of members had reached nearly to ninety. Professor Acland, in proposing the health of the chairman, spoke of the meeting as marking an era in the history of medicine at Oxford; and drew attention to the number of graduates present at the table, young as well as old, who held important posts at many of the leading metropolitan and provincial hospitals. He mentioned with satisfaction the fact that forty-four candidates were to present themselves for examination in the two M.B. examinations in June. This growth in number had been steadily maintained for some years, and would doubtless continue, now that the addition to the teaching power of the University for which they had been so long labouring had at last been accomplished. Oxford was to be congratulated that it had been able to attract from London so distinguished a physiologist and teacher as Professor Burdon Sanderson, to whose powers and enthusiasm he paid high tribute. The next dinner of this club, that has been inaugurated under such favourable auspices, will be held next November.

ARTISANS' DWELLINGS: INQUIRY IN BIRMINGHAM.

THE special committee appointed by the Town Council of Birmingham to inquire how far the dwelling house accommodation for the artisan and labouring classes in the borough is sanitary and adequate, and the amelioration, if any, that it is in the power of the council to effect, have published their report. The points to which the committee were specially enjoined to direct their attention were, first, as to the sufficiency of the existing dwelling-house accommodation for the classes in question; secondly, as to its sanitary condition; and, thirdly, the amelioration which it was in the power of the Town Council to effect. As the result of their labours, in the course of which forty-one persons were examined, and many houses and localities personally inspected by the committee, they are able to make so favourable a report on the first two points, that it is not very surprising that their answer to the third, which suggests the remedies, should savour somewhat of commonplace and weakness. With regard, in the first place, to the sufficiency of the accommodation, they find that there is at present an average of nearly 8 per cent. of suitable houses void, and that these are pretty evenly distributed through all the wards; and they have, therefore, come to the conclusion that there is adequate dwelling-house accommodation for the artisan and labouring classes within the borough. The sanitary condition of the houses proved to be a more difficult problem; but, although the committee were convinced of the existence still of a good many delapidated, unsound, and unsanitary dwellings, the general sanitary condition of the houses appeared to be satisfactory, and the "overcrowding does not exist to any great extent." As to the amelioration which it is in the power of the Town Council to effect, the committee have agreed on the following recommendations: 1. That all new houses should be certified by some competent official before the same are allowed to be inhabited: 2. That extreme care should be exercised by the building surveyor in the supervision of the materials used in the construction of houses: 3. That the staircases of new houses should be better constructed: 4. That the Corporation should employ scavengers and whitewashers to cleanse the worst courts occasionally: 5. That it is very desirable that all courts should be lighted: 6. That more suitable closet-accommodation should be provided for children: 7. That single houses should be thoroughly stripped, papered, and limewashed, at least once in two years, and others once in three years: 8. That cheap trains and tramcars should be run to and from the suburbs: 9. That it is desirable that some model dwellings for the working-classes should be erected by private enterprise.

POISONING FROM PORK-BRAWN.

THE local papers report the death of an aged man at Scarborough, which appears to have been due to eating tinned meat. About twenty people living in the same town are stated to be suffering more or less severely from a similar cause. According to the account received, which is a very meagre one, the deceased, Newby, purchased some pork-brawn at an eating-house, the keeper of which obtained it from a respectable dealer in Sheffield. Shortly after partaking of it, he was seized with cramp in the stomach, vomiting, coldness of surface, and other symptoms indicative of irritant poisoning, under which he succumbed. The time from the seizure to the fatal termination is not given. Other sufferers, manifesting symptoms in all respects identical, except in degree, had eaten portions of the same lot of brawn. All but three of these are now progressing favourably. What remains of the meat has been seized by the police, and is to be submitted to an expert for microscopical examination and analysis. We shall look forward to the inquest with interest. Pork-brawn is, or should be, the head, or head and feet, well boiled down; and the cooking is generally so thorough as to destroy the germs of animal disease. When toxic effects follow the ingestion of tinned brawn, it is therefore reasonable to infer that it is either due to the meat having undergone incipient putrefaction, or to its being tainted from the chlorides of tin, which are decomposed by nearly all animal fluids. In most instances on record in which tinned soups, meat, or fish, have acted as poisons, it has been probably owing to putrefactive changes, the amount of stannous compounds found being inconsiderable. There is a case of poisoning from pork-brawn of fourteen persons in the BRITISH MEDICAL JOURNAL of May 10th, 1873.

ANÆSTHETISATION OF CATTLE BEFORE SLAUGHTER.

At the request of the Jewish "Board of Shechita," Dr. Henry Behrend recently induced Mr. Waldemar Boeckel to undertake a research with the view of ascertaining how far it was practicable to anæsthetise animals before slaughtering. The late Mr. James [illegible] became associated with Mr. Boeckel, and these two investigators, as a first experiment, twice administered nitrous oxide gas to a sheep that was about to be killed. Complete anæsthesia, as evidenced by the abolition of the conjunctival reflex, was attained in eight minutes in the first case, and in seven in the second. It was found also that this process of anæsthetisation had not depreciated the market-value of the sheep. As, however, this was not a practical solution of the difficulty, Mr. Roeckel made a few experiments with carbonic acid gas, and found that anæsthesia could be produced in the dog in seven and a half minutes by fixing an India-rubber bag, of the capacity of a litre, to its muzzle. In this way the animal soon began to breathe an atmosphere of carbonic acid gas. Mr. Roeckel does not believe that the dog suffers much during the process ; the struggling, which is so distressing to witness, occurring at a period when the animal is already unconscious. This view certainly finds support in what we know with regard to the struggling witnessed in man when nitrous oxide gas or chloroform is administered, the patient being quite unconscious of struggles which appear distressing to a bystander. Carbonic acid gas, therefore, appeared to Mr. Roeckel to be an agent which fulfils the requirements in certain respects. It is cheap, effectual, and fairly rapid ; that is to say, when administered pure, it produces the full effect in about four minutes. But he points out that there are difficulties in the way of bringing the method into use, inasmuch as some skill is required to decide when anæsthesia is produced, and the maintenance of the apparatus in an efficient condition would be a matter of difficulty and expense. These objections have the more weight, as the method employed in Jewish slaughter-houses cannot be considered cruel. The animal is "cast," and its head is extended by means of a chain passed under the chin. In this way the neck is made tense, and then, by one powerful incision, the operator divides all the structures, arteries, veins, trachea, and œsophagus, down to the vertebral column. As Mr. Roeckel justly observes, by the severance of the large blood-vessels, the brain must be rendered almost instantaneously, if not quite instantaneously, so anæmic, as to be no longer capable of receiving an impression of pain ; unconsciousness must so closely follow this sweeping incision, that the animal can have little or no sensation. We shall be glad to hear the result of Mr. Roeckel's investigation, should he pursue it further ; but we very much question whether any method of anæsthetisation can be devised which would not, in its practical application, be open to far graver objections.

THE MUSEUMS AT CAMBRIDGE.

In the eighteenth annual report of the Museums and Lecture-rooms Syndicate at Cambridge, Professor Foster and Mr. Sedgwick have stated that the need for additional accommodation for physiology and morphology was exceedingly pressing ; and Professor Macalister made the same statement with regard to the Anatomical Museum. It is reported that additional buildings are, in consequence, about to be erected for the departments of comparative anatomy and physiology, at a cost of about £7,500. A bust of the late Professor Balfour, executed in bronze, by Hildebrant, of Florence, has been presented to the Morphological Laboratory by Mr. J. W. Clark, M.A., of Trinity, and Professor Darwin.

REVACCINATION.

Sir Charles Dilke, in his answer to Dr. Cameron in the House of Commons on May 23rd, gave an account of the arrangements which exist in the metropolis for revaccination in houses where cases of small-pox occur. The majority of cases of small-pox are removed to the hospitals of the Metropolitan Asylums Board, and for this purpose are brought to the knowledge of the Poor-law authorities, and are visited by the district medical officer, who has to certify to their disease before the removal is effected. Under these circumstances, the district medical officer may charge for the vaccination of unvaccinated persons, and, under limitation of age, for the revaccination of others resident in the same house as the individual suffering from small-pox. Again, under some circumstances, the public vaccinator may charge for vaccinations and revaccinations performed at other places than the usual vaccination-station. These arrangements doubtless have much value when they are carried into effect, and especially in those cases where the district medical officer is a public vaccinator, and has not only the necessary skill, but an abundant supply of recent lymph for the vaccination of the inmates of the house. It will be seen, however, that these opportunities for vaccination and revaccination are only available under certain limiting conditions. In cases where the small-pox patient remains at home, perhaps attended by a doctor from a neighbouring dispensary, and where vaccination throughout the house is most urgently needed, there is practically no legal provision for this to be done. There are again but too many persons so badly vaccinated in infancy that they become susceptible to small-pox before attaining the age at which either the district medical officer or the public vaccinator may charge for their revaccination. It is to meet such charges as these that provision should be made.

THE CONFLICT OF JURISDICTION AS TO VACCINATION.

The delegation to boards of poor-law guardians of the duty of the supervision of vaccination at the public cost, and of the compulsory enforcement of that operation upon the community at large, is a relic of bygone legislation of a period long anterior to the creation of local sanitary authorities. Why one authority should have the duty of preventing the occurrence of an outbreak of small-pox, whilst another is responsible for stamping it out when it arises, is one of those administrative puzzles the solution of which it is wisest to give up as hopeless. All things considered, the vaccination-laws are well and effectively administered ; but occasionally there arises a conflict of jurisdiction. Thus, at their last meeting, the Lambeth guardians refused to instruct their vaccination-officer to take proceedings against the friends of two unvaccinated children who were living in a place where small-pox had broken out. Mr. Hedley, one of the inspectors of the Local Government Board, happened to be present at the meeting, and intimated that he would not fail to bring the matter before the central board, who, it is to be hoped, will insist on the guardians giving proper instructions in future. It happens that the sanitary authority of this particular district have been busy issuing notices urging upon the inhabitants the importance of vaccination and revaccination ; whilst, as we have indicated, the poor-law authority have been equally busy discounting their efforts by refusing to allow the law to take its proper course.

RESECTION OF MUSCLES IN INFANTILE PARALYSIS.

Mr. Keetley has recently undertaken the resection of part of the quadriceps extensor femoris in a case of infantile paralysis, causing inability to extend the right knee. By shortening the weak, relaxed, and partly atrophied muscle, the operator hoped to increase its strength, with the aid of electricity during recovery from the operation. Mr. Willett has already resected the tendo Achillis in paralytic talipes calcaneus, with good results, finding that the shortening of the abnormally elongated tendon enables the muscles of the calf to regain some portion of their lost functions, especially when the muscular wasting has been chiefly due to disease, and has not advanced too far. Mr. Keetley's patient was a boy aged 6, who had suffered from paralysis of the right lower extremity for four years, and the muscular atrophy was not complete, yet sufficient to prevent thorough extension of the knee. A longitudinal incision was made in front of the thigh, about three inches in length, ending an inch above the patella ; the skin was held apart by retractors, and one inch of the entire substance of the quadriceps was cut away with scissors, about two inches above the patella. The separated ends were united by means of about one dozen carbolised catgut-ligatures. Esmarch's bandage had been applied before operation, and only one small artery required ligature. The wound was dressed with a small iodoform-pad and carbolic gauze, and the limb placed on a back-splint at an angle of sixty degrees with the bed. The operation was performed on May 5th. The wound healed rapidly and perfectly, and, when a sufficient time has elapsed, the results will be made known.

THE CORONERSHIP OF THE CITY OF LONDON.

THE Council of the Corporation met on Thursday to receive the report of their Committee. It is believed that the Committee have reported that there should, as before, be only one coroner; that the salary should not be altered; and that the appointment should not be limited to any one profession. The day was fixed for election. We understand that there are about sixteen candidates. We can only once more express the hope that the electors will be of opinion that an officer, whose work it is to decide, on his own responsibility, whether or not the death reported to him is one which is likely to be natural, or to call for inquiry as to its cause, and who is called upon habitually in this court to investigate the cause of death, to appreciate the importance of medical evidence, frequently without any legal assistance, should himself possess medical knowledge, and, in fact, be a medical man. It seems to us common sense decides that medical knowledge is, or ought to be, an essential requirement for the thoroughly efficient performance of the duties of a coroner; and that a medical qualification ought to be a *sine quâ non* for the appointment.

ALLEGED OVERPRESSURE IN SCHOOLS.

WE reported that, a short time ago, a memorial was drawn up by a majority of the medical men of Bradford to the effect that the study of home-lessons by children under ten years of age caused very great injury to their health, and urging that such lessons should be abolished for scholars under that age. The Bradford School Board appointed a committee, including the mayor of the town and several ministers of religion and solicitors, to consider the proposal; and, at the monthly meeting of the board held a few days ago, the Committee, at the conclusion of an elaborate report, summed up as follows. 1. The small amount of evening brain-work required from the children as home-lessons is in no degree detrimental to the health of the scholars, save, possibly, in very exceptional instances of delicate or unhealthy children. 2. While thinking the medical men entitled to all credit for their anxious desire to prevent the health of the children being impaired, the subcommittee are convinced the medical men hardly realise the small amount of evening brain-work required from children as home-lessons. Fair samples of the home-lessons given to children under ten years of age have been added to this report. 3. Though there are no doubt children who are so delicate as to be unable to bear the ordinary strain of school-work to be found in almost any school, the regulations of the board and the conditions of the new Code of the Education Department are sufficient, if observed, to prevent any child from being overstrained in its mental powers, and the subcommittee have every reason to believe that the wishes of the board and the Education Department in this matter are carefully observed by the head teachers. 4. The subcommittee, on looking at all the circumstances of the case, and having regard to the replies of the medical men, the evidence of teachers, the specimens of the home-lessons done by the several grades of children, and the board's regulations, etc., do not feel called upon to recommend the board to discontinue home-lessons. The report of the Committee, after a discussion, was adopted, nine votes being given in favour of, and two against it.

THE MEASUREMENT OF HUMAN FACULTY.

THE "Rede" lecture was delivered on Wednesday in the Cambridge University Senate House by Mr. Francis Galton, M.A., F.R.S. There was a tolerably large audience, but as many members of the university are now engaged in the work of examinations, the attendance was, from that cause, not so large as is customary at this annual lecture. An effort had been made to induce the Vice-Chancellor to alter the day for the delivery of the lecture, but the request could not be complied with. The Vice-Chancellor, who was most warmly applauded on entering the Senate House, briefly introduced the lecturer. Mr. Galton, who had selected as the subject for the lecture "The Measurement of Human Faculty," commenced by stating that, although it had been a matter of controversy whether a more complete measurement of man's capacity could be attained than was already discovered by means of examinations which measured intellectual capacity, yet he would endeavour to demonstrate that as the capacity of man, taken in its widest sense, including character and physique, was finite, therefore it was measurable. The art of measuring human faculties was now occupying attention, and in it he perceived the dawn of a new and interesting science. It would be impossible for him, with the limited time at his disposal, to compress in one lecture even an enumeration of the means to be adopted to arrive at correct *data* whereby rules could be laid down for the measurement of the human faculty. In order to arrive at any conclusions, it was necessary that contrasts of men extending over a wide range should be made, but he would confine his remarks to contrasts of two kinds—first, temperament and character; and, secondly, other qualities, as height, weight, strength, and the like. Temperament and character formed landmarks as bases for survey, and the first question to be solved and which arose was whether temperament and character were liable to spontaneous changes, or whether men were constituted so differently that any measurement was based upon a fallacy when we treated man as a mere conscious machine, and endeavoured to measure his capabilities as we would those of an engine. He had taken some pains to obtain new kind of evidence, and the result of that evidence was that the actions of men were governed by cause and effect; but, on the other hand, if the conduct of man were the result of some external influence, then such knowledge as he had obtained was of little service. His earlier inquiries, which were embodied in his work on *Hereditary Genius*, led him to the conclusion that the son conducted himself in life in much the same way as the father, was influenced by similar motives, possessed similar talents and similar failings; that man was not like a ship drifting, but arrived in due course, by certain sure stages, at a predestined port. The result of a long habit of introspective inquiry into one's actions in daily life demonstrated to him that the occasion when free will was exercised was uncommonly rare, less than one instance in a day; and the general result of an extended habit of introspective inquiry was that man is little more than a conscious machine. The problem to be solved was, what common incidents occurred in the lives of a given number of people? to select them, and briefly describe how the various persons acted when they occurred. One notable incident to all was emotional temperament, another temper. Taking a number of men, and comparing their conduct when emotional temperament or temper was excited, one would obtain statistics of each man's character in ordinary everyday affairs, and this would enable the scientist to accurately gauge and measure human faculty. But this measurement would be assisted and rendered more complete if at the same time records were obtainable containing particulars regarding eyesight, colour, sense, hearing, breathing capability, height, span of arms, etc. At the Johns Hopkins University in America, physical education and hygiene were compulsory on all students; and although the physical measurements taken were not compulsory, yet few objected, and the result was that the most valuable statistics were collected, and in many instances good advice was given to the students in what way to counteract the effects of any abnormal condition observed, such as irregularity of muscular development. The colour of the hair and of the eyes also gave valuable data for measurement of human faculty. The colour of the hair indicated immunity from and susceptibility to disease. At the time of the American Civil War it was found, out of between [illegible] and [illegible], that those who had light hair were more susceptible to disease than those with dark hair; in fact, those with light hair were susceptible to all kinds of diseases except chronic rheumatism. The lecturer concluded by suggesting that a laboratory should be opened at Cambridge to investigate [illegible]. The cost would be small, the [illegible], he contured to predict, would be large and beneficial, for, by compiling continuous records of health, growth, and disease, much useful knowledge would be acquired, and by a long series of observations on the lines he had indicated it would be possible to measure the human faculty as accurately, if not more so, than our system of examinations measured the intellectual faculty of man. At the conclusion of the lecture Mr. Galton was awarded a vote of thanks by acclamation.

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SCOTLAND.

THE authorities of St. Andrew's University have decided to apply to Government for further funds in aid of the extension of the museum and the establishment of biological laboratories, the situation of the place rendering it specially suitable for the latter.

AN unusual case of poisoning is reported from Glasgow, where a whole family, numbering six persons, were taken seriously ill with all the symptoms of irritant poisoning after partaking of some curds and cream. The authorities are investigating the matter.

THE great mental strain and anxiety connected with the necessary qualifying examinations for professional degrees has received another painful illustration in the death, last week, of a medical student, who committed suicide on the Greenock Railway. He was to have undergone his final examination this summer, but had been for some time in a state of nervous excitement from excessive study.

AMBULANCE-WORK AMONG THE POLICE.

THE importance of giving our police instruction in ambulance-work has been freely admitted on all sides, and considerable progress has been made in London in that direction, thanks to the St. John Ambulance Association. In Scotland, the authorities have not as yet moved with much vigour in the matter; but we are pleased to see that, with the assistance of the St. Andrew's Ambulance Association, the burgh of Govan has recognised the value of ambulance-instruction, and has made arrangements by which the whole of its police-force, numbering about seventy men, have undergone a complete training at the hands of the police-surgeon in the right kind of assistance to be rendered to persons meeting with accidents or taken suddenly ill in the streets, until medical aid can be obtained. Govan thus has obtained the distinction of being the first town in Scotland to possess a police-force all the members of which have undergone such training, and we hope that other towns will see their way to follow the example thus set them.

THE DUNOON CONVALESCENT HOMES.

EVER since their establishment, fourteen years ago, these Homes have proved themselves most useful adjuncts to the hospital-accommodation of the West of Scotland, in providing the means of regaining health and strength for those who had been in illness and who were in humble circumstances. At present, one hundred and fifty convalescents can be received; but the applications for admission far exceed this number; and efforts are being made to erect a separate home for females, apart from the present establishment. Meanwhile, with the view of improving the existing accommodation, the directors have added a new wing to the building, the addition consisting of a series of sitting-rooms, and a glass-covered promenade for the use of patients when the weather outside makes open-air exercise impossible. This will materially relieve the overcrowding that at present exists inside, especially in wet weather, and should materially add to the comfort and health of the patients.

GLASGOW DISTRICT LUNACY BOARD.

THE first meeting of the members of the new Board was held on May 21st, and the chief business was the granting of powers to the Committee of Management to deal with the whole subject of the erection of the new asylum. The quarterly report on Bothwell Asylum was brought up for consideration; and the chief point in it was, that recent experience had not been favourable to the boarding-out system, a larger proportion than formerly being returned to the asylum. This seems to be due to the fact that, at first, the least doubtful cases are removed, and do well; but that, as the attempt is made to effect further removals to private dwellings, it is necessary to fall back on more doubtful cases, with the result that a larger proportion require to be brought back to the asylum. This only shows the necessity of careful selection of cases for a system which possesses many advantages.

TOBACCO AND ITS ADULTERATIONS.

MANY investigations have from time to time been carried out as to the nature of the compounds which give rise to the peculiar properties of tobacco, and as to the best means for the cultivation and improvement of the plant. In a recent paper, read before the Glasgow Branch of the Society of Chemical Industry, Dr. Clark brought forward some facts as to the composition of the tobacco in ordinary use among the general public, which cannot but be of interest to the many lovers of the fragrant weed, and should engage the attention of those connected with the trade. After pointing out the national importance of the tobacco-trade, as shown by the revenue-returns for last year, when no fewer than 50,557,215 lbs. were imported, on which £8,892,000 was paid as duty, Dr. Clark gave his analysis of different samples of tobacco purchased from manufacturers in Glasgow. In five of these, sold at 3½d. per ounce, there was an average of 28.79 per cent of water; while in five others, sold at 3d. per ounce, it amounted to 41.66 per cent. of water. The lowest quality of cut tobacco, which is largely manufactured and sold in England, gave very similar results, and some of the cheapest kinds showed as much as 50 per cent. of water. The conclusion come to by Dr. Clark is, that this large amount of watery ingredient, introduced by the manufacturers of the different varieties of tobacco, is the result of the keen competition which exists in the trade and the low price of the article; and he thinks it very desirable that there should be some limit placed on the amount of water which may be sold as tobacco. The result of inquiries into the composition of cigars, even the cheapest varieties, showed they were comparatively dry, containing only, as a rule, from 10 to 12 per cent. of water; but with regard to snuff, the analysis made by Dr. Clark reveals a state of matters anything but satisfactory. The chief adulteration seemed to be sand, the average quantity being about 5 per cent., while in many samples the quantity exceeded 10 per cent., and, in one case, he found as much as 30.94 per cent. in dry snuff. Seeing that many of these sand-particles are very sharp, it is easy to understand, as he points out, that they may be the exciting cause of inflammatory conditions of the mucous membrane of the nose. Basing his calculation on the quantity of tobacco on which duty was paid, Dr. Clark gives the average of the consumption, for the United Kingdom of Great Britain and Ireland, as 1 lb. 6¾ oz. per head during last year; but, as the tobacco was diluted to a considerable extent with water in the process of manufacture, the actual amount of the article manufactured would be increased by about 25 per cent., which would increase the consumption to an average of nearly 1 lb. 12¼ oz. per head of the population.

THE CLIMATE OF SCOTLAND.

ALTHOUGH in this fickle climate of ours the weather forms a never-failing subject of interest and discussion, it cannot be said that the study of climates has as yet made much progress amongst us. We know what are the main agents in determining the climate of a district, but we are not so conversant with the different influences which may materially modify it. Perhaps, as the science of meteorology advances, we may have a better insight into the question. Of late years, there has sprung up a strong feeling that the great uncertainty attending our Scottish seasons, as shown by their great extremes of heat and cold, seems to point to a return to the glacial epoch, with a corresponding deterioration of climate. As bearing on this subject, there has just been issued a very interesting pamphlet by Mr. William Thomson, of Clovenfords. He thinks that the effects of climate on vegetation are the best indication of the nature of the weather and its tendencies; and he has gathered together from trustworthy sources a great deal of evidence on this point, in which he shows that trees now refuse to grow where they once flourished vigorously, while so much have fruit-crops depreciated, during the last ten years at least, that in many places the same fruits cannot be grown now, under similar conditions, as forty years ago. The general conclusion seems to be that the seasons are not so favourable for vegetation as they were some years ago, and to this view Mr. Thomson himself inclines, summing up in his pamphlet his opinion of our variable climate as follows. "It seems to the writer that the weather has got curiously mixed of late—such a succession of severe storms in Great Britain as no living person can remember; this, accompanied by very mild temperatures, while frost and snow are stopping the trains in some of the Southern States of America, where snow is seldom seen; sunsets of the most gorgeous description, and earthquakes on the most gigantic scale—all pointing to some disturbance within, at least, the atmosphere of our planet. Whether this is the result of stellar influence or not, some of our scientific men may be able to determine. In the meantime, the ungenial weather we have had for some years has been in large measure the cause of the depression of the great interest of agriculture, and through it all other interests have suffered, and will suffer still more, if the average temperature sinks but a degree lower than it has been of late years."

HOUSING OF THE POOR IN SCOTLAND.

It was announced by Mr. Trevelyan, in the course of a debate of the 21st instant, on an Irish Bill, that the labours of the Royal Commission on the Housing of the Poor would be extended to Scotland and Ireland, and that steps would be taken to add to the Commission gentlemen specially conversant with the state of the question in those parts of the kingdom. In these circumstances it may be of interest to draw attention to the sanitary surroundings of the poor in a large Scotch town, as reflected in a thoroughly practical report, made by Dr. Simpson, on the sanitary condition of Aberdeen during the past year. In 1883, a systematic inspection of over 10,000 houses revealed a terrible state of things. There were houses damp, dark, ill-ventilated, and dirty, requiring light, ventilation, repair, and cleaning; some uninhabitable, and others overcrowded. In several instances, so aggravated was this dampness, that the mattress and clothes on the bed were wet. A number of the worst of these, together with cellar-dwellings, were shut up; and since August, 1881, forty houses have been closed as unfit for habitation. Much can be done with old property by systematic inspection and insisting on repairs. In Aberdeen, many of the dreary and unhealthy houses of the poor have been quite transformed, and, by securing dryness, light, and ventilation, have been made more healthy and comfortable. But it is very uphill work, for it is rare that the proprietor, or, indeed, the occupier, appreciates the boon conferred by these alterations. The habits of the people in the courts, and in most dilapidated and ruinous houses, are much on a par with the houses and surroundings. As the courts, closes, and narrow streets, are usually in a state of filth, so the inhabitants are very far from being clean; an exception is now and then discovered. but the general condition is dirty bodies, dirty beds, dirty houses, and extreme poverty. In the course of his investigations, Dr. Simpson was greatly struck with the large number of deaf people in the unhealthy districts. Acuteness of hearing is rare among these inhabitants, just as acuteness of smell or of intellect. This blunting of the senses is, there can be no question, undoubtedly due to the surroundings, and such people are the frequentors of the dispensary, infirmary, poor-house, police-station, and gaol. As ascertained by the last census, there are 24,383 families in Aberdeen, and 80 per cent. of them live in not more than three rooms. But it is not the smallest families that have the smallest accommodation, or the smallest rooms; for the inhabitants of one and two rooms represent a population of 54,553, out of 105,050, or, in other words, more than half the population are housed in two rooms. One area has been declared unhealthy, and other parts of the town are in need of similar treatment, but, for obvious reasons, Dr. Simpson advises that the work should not be proceeded with in too hasty a fashion. In the meantime he urges the active enforcement of the regulations for "Houses Let in Lodgings," which will materially help to lessen the taking in of lodgers and the consequent overcrowding of the family. Dr. Simpson does not view with satisfaction the erection of large tenement-dwellings, and he thinks that, if they are to be permitted, the only way in which there is any likelihood of their being kept in a proper state, is for the proprietor to have one man living in each, whose business would be to see to its cleanliness.

THE BURGH POLICE AND HEALTH (SCOTLAND) BILL.

From the reply made by the Lord Advocate to a recent deputation that waited on him in reference to one of the clauses of the above Bill, it seems doubtful if, in the present state of business, a second reading can be got for it. Should it be read a second time, it is proposed to send it to a large Select Committee, who would go through the clauses. Whatever be the ultimate fate of the Bill, there can be no doubt that, as it stands at present, it is not favourably viewed by many of those who are good judges in the matter, and who are best alive as to what is really needed in the way of fresh sanitary legislation. There is a very general feeling that, as far as it deals with health-matters, this new Bill is not satisfactory, in that it does not recognise many of the advances that have been made in sanitary matters of late years, and does not supply many of the well known deficiencies of previous Acts. It will be necessary for the Board of Supervision, which is at present by Act of Parliament the supreme health-authority in Scotland, to exercise a watchful vigilance over the progress of the measure if it is to retain its present powers unimpaired; and it is incumbent also on the local authorities of all the large towns, who have been striving heretofore to meet the defects of the existing law by various additional local Acts, to see that their interests are not sacrificed in this new attempt to consolidate sanitary law in Scotland, which, from its too permissive character, is apt to prove in many ways a source of weakness, especially in dealing with the health of rural districts. It is understood that the Chairman of the Parliamentary Bills Committee has intimated to the Lord Advocate the opposition of the British Medical Association to the Notification Clauses of the Bill, and that the Lord Advocate has expressed his willingness to refer the Bill to a Select Committee.

THE GLASGOW DEAF AND DUMB INSTITUTION.

A very satisfactory report of the work being done at this institution was given at the last annual meeting on May 29th, and this was borne out by the public examination of the children at present under instruction. These number 143, and in all the different subjects in which they were taken they showed, compared with what is found in ordinary schools, a state of advancement fairly in keeping with the ages of the pupils. The chief feature of the report is the strong view expressed by the directorate in favour of the "old English" or "combined" system of instruction, which employs reading from the movements of the lips with signs of all kinds, natural and artificial. This opinion is not in harmony with that of the Milan International Congress of 1880, which met to consider the best methods of educating the deaf, and pronounced in favour of the "German" or pure oral method; but as the results obtained seem good, and by the combined method the pupils are more rapidly fitted for undertaking some means of gaining their own livelihood, it is not likely the present system will be readily relinquished.

IRELAND.

THE recent death of Dr. Riggs, medical officer to the Armagh workhouse, caused a vacancy, which was filled up last week by the selection of Dr. Frazer of Armagh, who was unopposed.

THE LATE DR. O'KEEFE, OF CORK.

THE funeral of this gentleman, who was Professor of Materia Medica in the Queen's College, took place last week. The students of that institution walked in procession, and were accompanied by the professorial staff of the College, while a very large number of the citizens were present as a mark of respect to the deceased.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

AT the late examination for the "letters testimonial," or licence, of this College, thirty-nine candidates passed, and thirteen were stopped. Seventy-one gentlemen passed the first half of their examination for the licence, and thirty-six were stopped.

THE ROYAL UNIVERSITY OF IRELAND.

THE following dates have been fixed for the summer medical examinations of this University: Degrees, Monday, June 23rd; Second Medicine, Tuesday, June 24th; First Medicine, Tuesday, July 1st. The first arts examination begins this year on September 2nd, nine days earlier than in 1883. The several examinations in the different faculties commence on September 15th; the medical is fixed for October 1st.

THE IRISH MEDICAL ASSOCIATION.

THE next, the forty-fifth, annual general meeting of this Association will be held on Monday next, when the report of the Council for the past year, and a statement of the financial condition of the Association, will be submitted, and the Council and officers for the ensuing year elected by ballot. The annual breakfast will take place as usual in the morning at the Shelbourne Hotel at 9 A.M., and the annual dinner at 7 P.M., in the Albert Hall of the Royal College of Surgeons. Among the resolutions which will be considered by the general meeting will be: 1. Poor-law medical superannuation as a matter of right; 2, The remuneration of medical officers of health for functions performed under the Labourers' (Ireland) Act; 3, The Medical Acts' Amendment Bill; 4, Proposed remedies for the abuses of dispensary-relief; 5, The exclusion of dispensary medical officers from the Irish magistracy; and 6, The prospects of legislation on the notification of infectious diseases.

BRITISH MEDICAL TEMPERANCE ASSOCIATION: IRISH BRANCH.

The following officers have been elected for 1884-85:—*President:* Deputy Surgeon-General Gunn. *Council, Dublin Members:* J. Graham Burne, M.R.C.S.E.; Alex. E. Carte, M.B.; O'Connell J. Delahoyde, M.K.Q.C.P.I.; R. Henry, M.B.; S. M. Thompson, L.R.C.S.I.; James W. Young, M.D.; *Country Members:* Ringrose Atkins, M.D.; J. W. Boyce, M.B.; John Eustace, M.D.; Robert Morton, F.R.C.S.I.; J. A. Scott, L.R.C.S.I.; Brice Smyth, M.B. *Honorary Secretary and Treasurer:* E. MacDowel Cosgrave, M.D.

THE MEATH HOSPITAL.

FROM a statement that has been published and circulated by the governors of the "Old Meath"—an institution which the reputation of its staff in the last generation has invested with a celebrity all Irishmen are proud of—we regret to find that its financial position is very unsatisfactory. During the past few years, £3,700 of the invested funds of the hospital have been sold to meet the expenses of necessary sanitary and other improvements, as well as the excess of expenditure over income. At present, the bank-account is overdrawn to the extent of about £1,500—a sum upon which interest at 5 per cent. has to be paid. It would be unwise, we think, on the part of the governors, to sell out more of the small amount of stock they still possess; and they must face the painful necessity of reducing the number of beds in the hospital, as has been done in other Dublin hospitals, if the appeal that is now made for aid be not promptly and generously met. Could not some old Meath men give a helping hand to their Alma Mater?

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AN extraordinary meeting of the College was held on Thursday, May 29th, at which there was a large attendance of Fellows.

The minutes of the previous meeting were read and confirmed.

The President announced that, in consequence of difficulties which had occurred in the arrangements for the proposed banquet, it was thought advisable to postpone it until next year. This was sanctioned by the Fellows.

The Registrar read the replies which had been received to the addresses of condolence presented by the College to the Queen and the Duchess of Albany.

A letter from the Poor-law Medical Officers' Association, with reference to the injustice at present suffered by many Poor-law medical officers, was read. It pointed out that, in consequence of the Poor-law Medical Officers' Superannuation Act being a permissive, instead of a compulsory one, many such officers have been unable to obtain any superannuation allowance, even after a period of service of from twenty to forty years. The President expressed the sympathy felt by the College with those thus harshly treated, and the letter was referred to the Council for consideration.

Permission was given to the Medico-Psychological Association to hold its annual meeting at the College.

A letter from the authorities of the University of Adelaide, requesting the recognition by the College of lectures on various medical subjects, was referred to the Council.

An application was received from Mr. Wherry, of Cambridge, for the recognition by the College of his course of lectures on Surgery, which are already recognised by the University of Cambridge. This request was granted.

The next business was the election of new Fellows. Considerable dissatisfaction, however, was evinced by the majority of those present with the list of names submitted by the Council. Dr. Andrew moved, and Dr. Sieveking seconded, a motion referring the list back to the Council for reconsideration, with full power either to omit names or to insert fresh ones, with the proviso that the total number should not exceed twelve. An animated discussion followed; but finally this motion was carried by a large majority, an amendment to proceed to ballot for the names in the list one by one being defeated.

Dr. Dyce Duckworth was unanimously elected Treasurer of the College in place of the late Dr. Barclay, and was formally admitted to that office by the President.

A report from the Committee on Nomenclature of Diseases was read. Sir Risdon Bennett moved its adoption; and in addition, that the thanks of the College be given to the gentlemen named in the report who had given assistance in its preparation. He made special reference to the services of Dr. Greenhill, who had revised the nomenclature from a classical point of view, and moved that an honorarium of thirty guineas, with the thanks of the College, be presented to that gentleman. This was seconded by Sir Andrew Clark, and carried unanimously.

Three new by-laws, regulating the appointment and duties of the Vice-Presidents, were, on the motion of the Registrar, enacted for the first time.

POTT'S DISEASE OF THE SPINE IN VERY YOUNG CHILDREN. As a substitute for the plaster-of-Paris jacket, Professor H. C. Wyman (*Medical Age*) has devised a method of treatment which is briefly as follows. The child being placed in such position that the spine is extended to nearly the normal limit, a piece of Canton flannel, large enough to cover one-third of the circumference of the trunk, is laid on the back. A sheet of absorbent cotton having been placed over this, a cheese-cloth bandage six inches wide and several yards long, with the meshes carefully filled with plaster-of-Paris, is dipped in water and folded lengthwise over the whole. When rubbed smooth with the hand, so that it is perfectly adapted to the contour of the parts, a bandage is applied around the trunk, with figure-of-8 turns about the shoulders and pelvis, and the plaster allowed to set. The jacket thus constructed is in the form of a splint, and can be removed every night.

THE INTERNATIONAL HEALTH EXHIBITION.

CLASS I.—FOOD.

NOTES OF OUR ANALYTICAL CORRESPONDENT.

FOOD has been recognised by the Executive Council of the Health Exhibition as the first and most important class of exhibits. In this respect, they have unquestionably shown a wise judgment, and they justify their selection by a statement in the official prefix to the catalogue that, "the physical well being is more effected by meat and drink than by any other essential of existence;" while, therefore, we purpose treating, as space will allow, of the different classes of exhibits, it is but natural we should take food first.

The food-exhibits here differ materially, both in character and in object, from the much smaller so-called food-exhibitions which were held about two or three years ago. These exhibitions were the result of endeavours on the part of enterprising firms to bring their goods into greater prominence; and they served their purpose, and led the way to the important position which food occupies in this International Health Exhibition.

Food is here to be dealt with as part of a whole, and it is to be dealt with on public, and not on private, grounds. The articles shown must, therefore, comprise not only those which are commercially accessible, but those which it is desirable should be introduced into commerce on the ground of their special food-values for dietetic purposes; and it must also afford information of a reliable character, both in the selection of proper foods and their arrangement for dietetic purposes. To put it in another way, this International Exhibition must not only show the public whatever can be shown from the best selections in the best shops, but it must also go further, and teach the public something which cannot be gained from mere inspection of articles exposed for sale. The very reason of the Exhibition itself is that it must be educational as well as interesting.

The more education and interest are blended, the more likely it is that the public will be attracted by it; and, therefore, two different classes of exhibits have been necessary, which may be roughly considered as public and private exhibits. Public exhibits have to be provided by the Executive Council of the Health Exhibition itself; they include everything designed solely to teach the public—for instance, cookery-lectures and illustrations of public dietaries; the latter, private exhibits, must show not only the goods that can be supplied from the ordinary shops, but valuable, though less common, foods, which certain exhibitors are ready to supply if the public will have them.

It would, of course, have been quite impossible for the Executive Council to have adopted such a classification as this, either in the arrangement of the Exhibition or in the catalogue; but it is no less the fundamental principle upon which the examination of the Exhibition as a whole is most easily made. We propose, therefore, to deal shortly and in a general view with these two classes, in order that afterwards each separate exhibit which merits it may be more fully and systematically described.

The southern gallery, which is the best and most important building of the Exhibition, has been allotted to food-display, and the large annexes on the southern side are used entirely as model dining-rooms, refreshment-rooms, dairies, and cookery-school, while a very large portion of the western annex, where machinery is in motion, has also been devoted to the manufacture of food-products.

Every visitor will, on entering the Exhibition, be attracted at once by the appearance of the food-department, while a large portion of the interest of casual visitors naturally passes to the machinery in motion. Whatever else may be attractive, the actual manufacture of sweets, the grinding of mustard, roasting of coffee, and other similar operations, will keep up a more continuous interest than any display of specimens, however rare and curious. We will rapidly mention the different things to be seen, without reference to the part of the building in which they are placed, and without detailed description of the exhibits.

In a conspicuous position, immediately on entering the Exhibition, are several cases of stuffed animals and birds, intended to indicate the animal food used for the London market. Almost equally conspicuous are the cases of several of the larger seedsmen, among whom we notice Messrs. Sutton, Carter, and Webb's. If these displays had stopped short at seeds, there would, perhaps, have been little information to be gained by them as regards food-supply; but the specimens of produce exhibited must be of value in the selection of suitable strains of seed.

It is natural to pass from seeds to cereals of all kinds prepared for food. There are a large number of different exhibits in this class, some of them of very considerable interest, but they lack systematic arrangement. The different species of flour, such as would be desirable in any ordinary house, are not sufficiently shown, and out of the whole lot we could not select one exhibit comprehensive enough to cover all the kinds of flour which might with advantage be in daily use. Maize has been brought more prominently forward as a human food than in previous exhibitions. It is shown now in five or six different forms, in some of which, when mixed with other ingredients, it is suitable for the manufacture of bread. Anything which increases bread-making material must be a public gain.

There are some quite new substances, however, in this class, as, for instance, flour from bananas, with biscuits, bread, and cake made from them. These are new to this country. Dried and compressed vegetables, adapted for soup and army and workhouse dietaries, are shown, but although good in quality, there does not seem to be any special advance in their character worth notice.

We find it is no longer necessary to be limited to a few varieties of teas and coffees, one firm alone showing more than one hundred varieties.

There is a good show of jams; and in this class, as in most of the others, it is noticeable that almost, if not all, that are shown are of high class quality, we should expect that no second-class makers would be likely to compete in an exhibition of this kind, but we should have expected that some cheaper goods would have been shown in comparison with those which are at present on view. One or two of the large makers, whose names are well known for their high quality, do not enter the competition. Chocolate-makers show every kind of cocoa-preparation. On the whole, however, there appears to be a movement in favour of the genuine cocoa instead of the cocoa which has been thickened by means of starch or flour.

The Vegetarian Society have a very important exhibit in this class in the shape of dining-rooms where various vegetarian dishes are served at low prices. If this experiment is carefully conducted, it will go a long way to prove the practicability or otherwise of producing attractive vegetarian dishes on a sound commercial scale. Some of the soups and porridges which have been served are of excellent quality, but at present we have found them lack variety.

Of course the Bread Reform League are represented; but, more important still, as tending towards the object they have in view, is the display of different kinds of whole meals made by several of the other exhibitors, such as Messrs. Carwardines. Baking powders are there; but it is almost like the survival of the fittest, for less than half a dozen remain out of the numerous kinds which used to compete for public favour.

The baking of bread and biscuits will attract much attention. There are three or four model bakeries fitted up, where the kneading of bread will be performed, as it ought always to be, by machinery, instead of by hand. Of course, machine-work on a large scale in a public bakery must of necessity be more regular in its character and more satisfactory in its results than hand-labour. These bakers show, and we believe will sell, their finished bread. Biscuit-baking is represented on a small scale in actual work, but the larger makers have contented themselves with show-cases. It would take some pages of this book to even make a list of the varieties of plain and fancy biscuits that they show. This is a case in which the public will have variety, and certainly they have the most ample choice here. The class of infants' and invalids' foods shows a marked advance during the last ten years, by the scientific opinion brought to bear upon the different goods that have been offered to the public. The arrowroot class, packed in packages and labelled "require no milk," appears to have absolutely disappeared; and, in the place of the semi-starvation diet which these "foods" (?) represented, we have two or three different classes of prepared foods, mainly represented by those which are partially cooked and those which are partially malted; in both cases, the object has been to increase the digestibility without decreasing the nutritive value. Concentrated food for invalids, such as beef-tea, turtle-soup jelly, are also well represented, but we cannot at present individualise any of the exhibitors.

The model dairies may well be referred to in this connection, as they thoroughly illustrate what the ideal perfection of a dairy should be, if expense were no object. The beauty and even elegance of their fittings will not be expected to be found in a dairy for everyday use; but, if the companies who have exhibited carry out the same degree of cleanliness in their home-practice, they certainly deserve to be held up as models of what dairymen ought to be. The milk trade, however, needs another amendment of a radical kind, and that is the wholesale suppression of the so-called dairymen who keep no cows, unless it be a cow with an iron tail, and supply secondhand milk, watered in order to make a profit.

Among the beverages shown, essence of coffee, cocoa, etc., naturally should be mentioned first. We have not had time yet to test any of these exhibits, but are curious to know whether there is any truth in an assertion recently made, that the basis of these essences is broken tea, which, after extraction and considerable concentration, is flavoured to represent either tea, coffee, or cocoa, according to the requirements of the trade. Non-alcoholic beverages and aerated waters are shown in considerable numbers, and the force of chemical and medical opinion is made evident here also, in the great decrease in the number of medicated drinks and tonic waters. Beverages containing iron or bitters, while good enough in their place for medicinal remedies, are essentially out of place for regular consumption, and this fact seems to have been recognised by the principal exhibitors, who have limited themselves in the main to aerated waters pure and simple, with mild and useful anti-acids, such as soda and potash, and the very palatable, and certainly non-injurious, limejuice. In this gallery, Apollinaris reigns alone among natural dietetic table-waters. Its numerous competitors appear to have one after another fallen away; while it has steadily secured increasing popular and professional favour, as a pure and agreeable table-water, which has acquired a leading place in public esteem throughout the world.

What we have classed as the public exhibits, namely, cookery, and the chemistry and physiology of food and drink, must be more rapidly dealt with for the present. The cookery-lectures will have to speak for themselves; every endeavour has been made to ensure their being of a satisfactory character, and arrangements for the demonstration to large classes are as complete as any that have yet been made. The dishes that will be prepared in the classes will be passed through into the restaurants for use in the daily dinners. Thus those who attend the lessons will be able afterwards to test the dishes cooked, and form their own opinions as to the success or adaptability of the cooking recipe.

The cases of specimens illustrating the chemistry and physiology of food and drink are yet incomplete, because they do not contain any illustrations of adulteration, a hiatus which will soon be filled.

In the class relating to diseases produced by unwholesome and improper food, great difficulty has naturally arisen in procuring suitable exhibits. The drawings and models which alone would be suitable for illustrating this class are not easily accessible, and the Council have had some difficulty in procuring even the very indifferent display which there is. There is a probability, however, that in all these respects additional illustrations will be put into place before many days have elapsed.

MESSRS. BEECH AND SONS, Brentford, show a most excellent collection of pure jams, mostly prepared in such a way that the fruit is almost unbroken; such jams as these are obviously so pure as to need no recommendation. They ought to sell well, as they have been before the public for several years now.

MESSRS. BURNS AND CO., Upper Thames Street, show a very good collection of fruits preserved in syrup, and jams, marmalades, jellies, pickles, and other minor exhibits. As a whole, these goods are well prepared and of good quality.

MR. THOMAS CARWARDINE, 84, City Road, E.C., shows a very large assortment of all kinds of produce from wheat and other grains. The ordinary kinds of flour need no special notice, but there is some attempt here, and that a fairly successful one, to show preparations of the more nutritious lentil class, put up in such a way as to be used easily in ordinary cookery. Lentil flour, haricot beans, and crushed wheat appear to be well prepared.

MESSRS. DICKSON AND RENWICK, 39, Lombard Street, show a good collection of some of the best tinned meats, and a small collection of tinned fish and fruits. They have adopted a course which may, in some few cases, be adopted by other English firms, of not altering their original labels, and leaving the packers' names still on the tins. This puts the responsibility of the contents where it should be, namely, on the shoulders of the original packer, and not on the importer. This course, we think, will do good.

MR. JOSEPH EDMUNDS, Stonefield Terrace, Liverpool Road.—The medals which Mr. Edmunds obtained in former exhibitions form a conspicuous part of the stand. The speciality appears to be curry-powders and chutnee of various kinds, in which a large number of different spices are used, specimens of most of which are exhibited. The public will have an opportunity of testing some of these preparations, as they are being used in the cookery classes, and the dishes made with them will be served up in the dining-rooms.

MESSRS. FREEMAN AND HILLYARD, Great Dover Street, Borough. Baking-powder, in all its variety, makes up this exhibit; but there are very many varieties. There are custard-powders with all sorts of flavours, and pudding-powders with almost all suitable flavours. Baking-powders have been brought forward in so many ways, that it is difficult to say what there can be novel in them; but in some way the exhibitors have managed to secure not only a satisfactory character as regards cookery purposes, but they have introduced some new flavours, and specially some new pudding and custard powders which may be worth attention.

MESSRS. LOW AND CO., 23, 24, and 25, Billiter Street, E.C. Tinned meats, which are shown by this firm, are of Australian and New Zealand produce; they are well canned and tinned from the best parts of the meat. It does not appear that they have introduced any new brand.

MESSRS. PHILLIPS AND CO., King William Street, show, among a good collection of tea, coffee, and cocoa, rather an unique collection of cocoa and Paraguay tea. We are very glad to see they endeavour to push both of these into English sale. If they can offer them, as they appear to be doing, at a moderate price, their consumption will soon increase.

MESSRS. R. AND N. POTT, 22, Southwark Bridge Road.—What specially attracted our attention on this stand was the distilled vinegar. For many cooking purposes, the beautiful purity and colour of this would render it very desirable; but, in addition to this speciality, the firm are exhibiting ordinary vinegars which are of good quality.

MESSRS. SABINE AND RICHARDSON, Dunster House, Mincing Lane, have a capital collection of different varieties of Indian teas and coffees, and they have taken a great deal of trouble with the exhibit in order to show the processes of cultivation and manufacture.

MESSRS. W. TULLOCH AND SON, 26 and 27, Bury Street, E.C.—One thing on this stand, namely, Tulloch's pure Dutch cocoa, is excellent. They have made a judicious mixture, and prepared it in a careful way. It seems almost a pity that such a cocoa as this should have been sweetened or flavoured in order to produce chocolate. But if the public will have it, of course it is the manufacturer's duty to provide it.

MESSRS. YEATMAN AND CO., 119, New Bond Street, W., show their well known baking-powders and self-raising flour. It is clear from the custards made at the stand that these are of the same quality as they have been selling, which is most satisfactory. They also show lime-juice cordial, which we know is a good preparation, and calisayine bitters. It is a curious thing, however, that they should show disinfecting-powders and insect-powders; we should fancy they would do better not to mix up the manufacture of different things.

INTERNATIONAL HEALTH EXHIBITION.

THE following conferences will be held under the auspices of the Mansion House Council on the Dwellings of the Poor, at the International Health Exhibition, on June 4th, 5th, and 6th, 1884.

June 4th.—President: The Right Hon. the Lord Mayor, M.P. The Population of London and its Migrations, by G. B. Longstaff, M.A., M.B. The Treatment of the London Poor, by Miss Gertrude Toynbee. Overcrowding, by the Rev. A. Mearns.

June 5th.—President: His Grace the Archbishop of Canterbury. Suburban Dwellings and Cheap Railway Fares, by Mr. James Hole. The Treatment of the London Poor, by Miss Lidgett. The Creation of a Building Fund, by Mr. H. D. Harrod.

June 6th.—President: His Eminence Cardinal Manning. Some Difficulties of Sanitary Administration in the Metropolis, by Mr. Shirley Murphy and B. C. Whitelegge, M.D. Suggestions to the Royal Commissioners, by Mr. C. M. Sawell.

The time allowed for each paper is fifteen minutes; for each speaker, ten minutes; the whole time for each subject, one hour; and the duration of each conference will be from 2 P.M. to 5 P.M.

The following is the programme of the International Conference on School Hygiene to be convened by the National Health Society in connection with the Health Exhibition.

Monday, July 28th.—Afternoon at 3 o'clock. Opening address.

Tuesday, July 29th.—Morning, 10 to 1. School construction and arrangement.—1. Building arrangements, cubic and floor-space, etc.; 2, ventilation and warming; 3, lighting, natural and artificial; 4, furniture; 5, sanitary arrangements, lavatories, baths, closets, etc. —Afternoon, 2 to 5. Dietaries in, 1, boarding higher schools; 2, asylums and orphanages; 3, day-schools for the children of the poor where dinners are given.

Wednesday, July 30th.—Morning, 10 to 1. Recreation, including, 1, hours of study and of play; 2, playgrounds and games for children of either sex, with the benefits and dangers attending particular games; 2, holidays, school treats, boarding poor town children in the country, "Ferien-colonien," or holiday colonies.—Afternoon, 3 to 5. Gymnastics and drill as adapted for, 1, boys; 2, girls; 3, infants; and 4, as curative measures in the treatment of constitutional disease and deformities.

Thursday, July 31st. Morning, 10 to 1. Overwork and pressure. 1. Its physical, mental, and moral effects on teachers and scholars; 2, compulsory education, and grounds of exemption in individual cases; 3, tendencies of competitive examinations from the standpoint of physical and mental hygiene. Afternoon, 3 to 5. 1. The pupil teacher and monitorial systems, from a medical and hygienic point of view; 2, home lessons; 3, punishments, physically and mentally considered; (*a*) corporal punishment, (*b*) detention, (*c*) impositions, (*d*) extra drill.

Friday, August 1st.—Morning, 10 to 1. Prevention and treatment of outbreaks of infectious diseases in, 1, boarding-schools; 2, asylums and orphanages; 3, elementary and other day-schools.—Afternoon, 3 to 5. Special institutions for the education of, 1, idiots and imbecile children; 2, foundlings and orphans; 3, rickety and scrofulous children.

MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

A MEETING of the Provisional Executive Committee of this Society was held at 38, Wimpole Street, on Wednesday, May 21st; present: Mr. Sibley; Mr. E. Noble Smith; Surgeon-Major Evatt, M.D.; Mr. Major Greenwood, jun.; Mr. Brindley James; Dr. Clibborn; Mr. R. Wallace; and Mr. Radley (Secretary): Mr. Ernest Hart in the chair. The minutes of the last meeting were read by the Secretary, and confirmed.

It was reported that the receipts from entrance-fees, etc., amounted to £327 19s. 11d.; that, during the last three weeks, forty new members had been enrolled—making a total up to date of four hundred members; that the Society had already secured a widespread support, and the premium income already exceeded £1,000 [illegible]; while expressions of approval and offers of co-operation continued to be received. Up to the end of July, the declaration of health will be accepted as the basis of membership from gentlemen desirous of joining, in lieu of the medical certificate provided for in the rules.

The following modifications in the rules of the Society were submitted to the meeting, and approved for recommendation to the first members' meeting.

In Rule I, the address of the registered office was [illegible] in order to avoid [illegible] that this should continue [illegible] Road, Brixton, S.W.

In Rule [illegible], provision was [illegible] for the admission [illegible] dental surgery (England, Scotland, or Ireland).

Rule [illegible] was amended [illegible] separately (without [illegible]) separately.

In Rule [illegible] [illegible] shall be made for any sickness arising from the intemperance, immorality, or misconduct of a member.

In Rule [illegible] [illegible] struck out.

In Rule XI, which provides that the pay shall [illegible] the words [illegible] may be [illegible].

In Rule XIV [illegible] must be [illegible] of the [illegible].

Rule [illegible] providing for [illegible] cover the [illegible].

An alteration [illegible] from one to "six or more."

By an alteration of Rule XXII, the number of the Executive Committee was enlarged. [illegible]

In Rule [illegible] the [illegible] the twelve [illegible].

In Rule XXIV [illegible] the Society [illegible] of the Society.

A letter was read from Mr. Francis Rawle, of [illegible], who, though beyond the limit of age eligible for election, expressed his desire to contribute to the preliminary expenses of the Society, which he highly approved.

A communication was also read from Mr. G. W. Crowe, the Honorary Secretary of the Worcestershire and Herefordshire Branch of the British Medical Association, inviting the Society to send a delegate to attend the next meeting of the Branch to explain the objects and benefits of the Society to its members. It was decided that the Secretary, Mr. Radley, be asked to attend for the purpose.

THE AMERICAN MEDICAL ASSOCIATION.

THE thirty-fifth annual meeting of this Association was held in Washington on May 6th, and following three days, under the presidency of Dr. AUSTIN FLINT, of New York. The President, in his address, took as his subject the objects of the Association as defined at its formation.

In the course of his address, Dr. Flint suggested that steps should be taken to secure the meeting of the International Medical Congress in the United States in 1887. This had been, he said, proposed by Dr. S. D. Gross, of whom he spoke as "the Nestor of American Surgery, and the most honoured of any member of the medical profession in the country." Subsequently, it was decided to appoint a committee to forward an invitation to the Congress at Copenhagen to meet in Washington three years hence.

A standing committee was appointed, to be known as the "Committee on Medical Research of the American Medical Association," for the purpose of opposing by all legitimate means any proposed legal interference with the progress of medical science. Afterwards, on the proposal of Dr. Dalton, of New York, a resolution was passed expressing the earnest conviction of the Association that experimentation on animals is a most useful source of knowledge in medical science, and can be entrusted only to members of the medical profession.

With regard to medical education, the Association adopted a resolution, urging on all American medical colleges the necessity of elevating the standard of education, at least so far as to require preliminary examination and a three years' course, a registry of attendance, and practical demonstration of diagnostic skill.

A committee was appointed to petition congress to make special appropriation of money for the prosecution of scientific researches on the causes and prevention of infectious diseases.

The newly established journal of the Association was the subject of a report from the Board of Trustees, in which it was stated that the total income of the Journal for the year was 18,547 dollars, and that there was a balance of about 500 dollars. The editor, Dr. Davis of Chicago, had resigned, but had withdrawn his resignation until the end of next year. The Journal, the report said, had been edited with economy, ability, and judgment, and the best interests of the Association had been kept steadily in view. The report was adopted. Dr. Packard, one of the trustees, presented a minority report signed by himself, expressing the opinion that the Journal was not what the organ of the Association should be, and recommending that the resignation of the editor should be accepted, and the place of publication transferred to Washington, Philadelphia, or New York.

Dr. N. S. Davis reported that he had received communications from the British Medical Association regarding the Collective Investigation of Disease. He had received, and had distributed, a large number of cards and forms, and the results justified him in recommending that the American Medical Association should co-operate with the British Medical Association. A recommendation was also made that a sum, not exceeding 300 dollars, should be appropriated to the purpose of collective investigation during the coming year.

It was decided to hold the next meeting in New Orleans on the last Tuesday in April, 1885, under the presidency of Dr. H. F. Campbell.

The death of Dr. Samuel D. Gross, which occurred on the first day of the meeting, caused an universal feeling of regret among the members. When the news reached the Surgical Section of the Association, during its first day's sitting, a committee was appointed to draw up a suitable resolution, and the section at once adjourned as a mark of respect. On the following day, the committee proposed the following resolutions, which were unanimously adopted.

"That the members of the Surgical Section of the American Medical Association have received, with a sense of profound regret, the intelligence of the death of Professor Samuel D. Gross, one of the [illegible] of this Association, and one of the [illegible] in the medical profession [illegible] the United States. That the memory of the deceased [illegible] with love and veneration by the members of the medical profession, as that of a man profoundly versed in medical science, and worthy to be ranked with the greatest [illegible]. He had mastered the vast learning of his profession; and the natural kindness of his great and generous heart [illegible] long and successful career, he was continually experiencing the most intense satisfaction and pleasure in relieving, by his science, the sufferings of humanity."

A Committee, consisting of [illegible] Drs. T. G. Richardson, Lewis A. Sayre, J. H. Packard, F. H. Hamilton, Moses Gunn, W. T. Briggs, and I. Minis Hays, was also appointed [illegible] general meeting of the Association to prepare [illegible] on the death of Dr. Gross.

A report was presented from a committee appointed last year, on the medical and sanitary service of transatlantic passenger vessels. It was stated in the report that the rate of mortality for the four years ending 1883 was much greater than in the four years ending 1873; and that this was due to negligence and filth. The Bill now before Congress was read and discussed; and Dr. Keyser of Philadelphia and Dr. J. A. Irwin of New York called attention to some of its defects, especially the omission to require the medical officers to report to some independent body. The report was accepted, and the committee reappointed; and it was resolved to urge upon Congress the necessity of suitable and efficient legislation to promote the well-being of immigrants to the United States, and to protect the public health of the country.

The scientific work of the Association was transacted in seven sections, namely: Practice of Medicine; Obstetrics and Diseases of Women; Surgery and Anatomy, Ophthalmology, Otology, and Laryngology; Diseases of Children; Oral and Dental Surgery; and State Medicine.

SIR H. W. ACLAND, K.C.B.

The last *Gazette* contains the announcement that the Queen has been pleased to confer the dignity of K.C.B. upon Dr. Acland, who was recently created C.B. This distinction is one which is undoubtedly well merited by many years of active public service, in which Dr. Acland has, at the sacrifice of more vulgar personal interests, devoted himself to the carrying on of the work which he has considered most useful to his profession, to his university, and to the cause of sanitary science. No one can omit to note with gratitude the great services which Dr. Acland has rendered in his university to the cultivation of physical and biological science, and to the sciences accessory to medicine. Much as we regret the view which he has taken of the proper relation of an university to the faculty of medicine, and deeply as we deplore that he has not used his great influence in the university towards securing such a practical development of medical studies proper, and especially of preliminary medical studies, as we, and with us the profession at large, consider due and necessary for the honour and welfare both of the university and of the profession, yet we are far from ignoring the earnestness and success with which Dr. Acland has laboured to develop science-teaching and science-research in his university on the lines which have commended themselves to his mind. We are even hopeful that the noble foundations which exist at Oxford, and in respect to some of which the modern development has been largely due to his advocacy and support, will, before many years have passed, yet be moulded into such form as to make them not less useful in respect to the curriculum of the first two years at least of the training of the ordinary medical student seeking for an university degree, than is now the case at Cambridge; a model on which Oxford is sure, sooner or later, to mould its medical arrangements. In any case, Dr. Acland's name will always be honourably remembered in connection with the great museums of which he is practically the father. In the advancement of sanitary science as a whole, and in the development especially of rural sanitation, Dr. Acland has won a well founded and enduring reputation. As president of the Medical Council, he has presided for a long series of years over the somewhat tedious deliberations of that august body with courtesy, patience, and kindness worthy of his academic reputation, and suitable to the dignity of a body in which the culture of the profession ought always to be fully represented. The precedent here set of recognising eminent medical services to the State, and labours in the field of sanitary science, by nomination to the honour of Knight Commandership of the Bath, is one which will be hailed with satisfaction. Hereditary dignities, such as baronetcy, are not always acceptable, and do not always constitute the most suitable recognition of the labours of professional men; and knighthoods of the ordinary kind are somewhat too lavishly bestowed upon civic dignitaries of little culture or social standing to make them an object of ambition to many professional men, whose social standing is not enhanced by a secondary dignity of the kind. The most suitable honour, in our opinion, by which to recognise such services as those of Dr. Acland, would be that he should be enrolled with the Privy Council, to the heads of which body he has often been able to tender much useful advice on subjects of national interest. We congratulate Sir Henry Wentworth Acland on receiving a dignity from the Crown, which is worthy of his position, and only a fair recognition of his long and arduous public services.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

Meetings of the Council will be held on Wednesday, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

Cards for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
IV*a*. Diphtheria, sanitary.
V. Syphilis, acquired.
V*a*. ,, inherited.
VII. Puerperal Pyrexia.
VIII. Paroxysmal hæmoglobinuria.
X. Habits of Aged Persons.
XI. Albuminuria in the Apparently Healthy.

Note.—The further 150 cases of pneumonia asked for by the Committee have now been received, and will be included in the forthcoming issue of the *Record* in July. The Committee hope that cases will still be communicated, as opportunity may occur, with a view to a further report upon the subject in the future.

An inquiry is being now issued concerning the general condition, habits, and circumstances, past and present, and the family history of persons who have attained or passed the age of 80 years.

The replies to this inquiry will be most valuable when given by a medical man; but the questions have been so arranged, that, with the exception of some on the last page, they may be answered by another person. *Partial information will be gladly received.*

Copies of the form and memorandum relating to Aged Persons, recently printed in the Journal, are ready for distribution through the local Secretaries, and will be forwarded to any one who is willing to fill up one or more of the forms, on application by post-card or otherwise to the "Secretary of the Collective Investigation Committee," 161a, Strand, London.

There is also now being issued an inquiry as to the occurrence of Albuminuria in apparently healthy persons.

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
May 1884. 161a, Strand, W.C.

Notice.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

The North-Western Provinces and Oudh Branch.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons **Shirley Deakin** and **W. A. Morris**, 8, City Road, Allahabad.

Midland Branch.—The annual meeting of this Branch will be held in Nottingham on Thursday, July 3rd. Notice of papers, etc., to be sent to the Secretary, **Lewis W. Marshall, M.D.**

Metropolitan Counties Branch. The thirty-second annual meeting of this Branch will be held at the Holborn Restaurant on Tuesday, June 24th, at 5.30 P.M. President: Charles J. Hare, M.D.; President-elect: Charles Macnamara, Esq. Dinner at 7 P.M.; tickets, 7s. 6d. each, exclusive of wine. Early application for dinner-tickets should be made to Dr. Grigg, 1, Curzon Street, Mayfair, W.—**Alexander Henry, M.D.**, **W. Chapman Grigg, M.D.**, Honorary Secretaries.

Lancashire and Cheshire Branch.—The annual meeting of this Branch will be held in the Town Hall, Chester, on Wednesday, June 18th, at 2 P.M. Dinner at the Town Hall at 6.30 P.M.; tickets, 7s. each, exclusive of wine. Luncheon will be provided by the members of the Chester Medical Society on the day of meeting, from 12 to 2 o'clock. Gentlemen desirous of reading papers, or of giving notices of motions, are requested to communicate at once to the Honorary Secretary, **Chas. Ed. Glascott, M.D.**, 23, Saint John Street, Manchester.—A Council meeting will be held at 1 P.M., for the election of members and other business, before the annual meeting.

South Wales and Monmouthshire Branch. The annual meeting of this Branch will be held at Cardiff on Thursday, June 26th next; Eben. Davies, Esq., President; A. Sheen, M.D., President-elect. Members wishing to bring forward communications, cases, etc., are requested to send titles to either of the undersigned before June 7th, in order that the same may be inserted in the circulars.—**Alfred Sheen**, M.D., Cardiff; **D. Arthur Davies**, M.B., Swansea, Honorary Secretaries.—May 21st, 1884.

Birmingham and Midland Counties Branch. The annual meeting of this Branch will be held at the Medical Institute on June 19th, at 3.30 P.M.—**R. Richards**, Secretary, 14, Newhall Street, Birmingham.

North of Ireland Branch. The annual meeting of this Branch will be held in the Belfast Royal Hospital, on Thursday, June 19th, at 12 o'clock. Notice of papers and other business to be sent to Dr. **Dempsey**, Honorary Secretary, Clifton Street, Belfast.

South Midland Branch. The annual meeting will be held at the Infirmary, Northampton, on Thursday, June 26th, at 2.30 P.M. Members wishing to send papers, cases, etc., are requested to send the titles of the same to the secretary, with as little delay as possible. The dinner will take place at Franklin's Restaurant, Guildhall Road, at 6 P.M. Tickets (exclusive of wine) 6s. 6d. each. Gentlemen intending to be present are requested to communicate with the undersigned not later than June 23rd.—C. J. **Evans**, Honorary Secretary, *pro tem.*

LANCASHIRE AND CHESHIRE BRANCH.

At a special general meeting of the Branch, held at the Memorial Hall, Manchester, on May 7th, 1884, Dr. Leslie Jones, Vice-President, in the chair, to consider the questions as to the admission of homœopaths to the Association, and as to the retention as members of those homœopaths who are already members, the following resolution was carried unanimously.

"That this Branch is of opinion that the admission of homœopaths as members of the Association is not desirable, but that it would be unwise to take steps for the ejection of any member on the grounds of belief in, or practice of, homœopathy."

BRITISH MEDICAL ASSOCIATION.

FIFTY-SECOND ANNUAL MEETING.

The Fifty-second Annual Meeting of the British Medical Association will be held at Belfast, on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1884.

President: A. T. H. **Waters**, M.D., F.R.C.P., Senior Physician to the Royal Infirmary, Liverpool.

President-elect: **James Cuming**, M.D., F.K.Q.C.P., Professor of Medicine in Queen's College, and Physician to the Royal Hospital, Belfast.

An Address in Medicine will be delivered by **William M. Ord**, M.D., Physician and Lecturer on Medicine to St. Thomas's Hospital, London.

An Address in Physiology will be delivered by **Peter Redfern**, M.D., Professor of Anatomy and Physiology in Queen's College, Belfast.

An Address in Obstetric Medicine will be delivered by **George H. Kidd**, M.D., Consulting Obstetric Surgeon to the Richmond and Hardwick Hospitals, Dublin.

Section A. Medicine.—*President:* J. W. T. Smith, M.D., Belfast. *Vice-Presidents:* G. F. Duffey, M.D., Dublin; Alexander Davidson, M.D., Liverpool. *Secretaries:* Richard Ross, M.D., 7, Wellington Place, Belfast; Thomas Barlow, M.D., 10, Montague Street, Russell Square, London.

Section B. Surgery.—*President:* Sir William MacCormac, F.R.C.S., London. *Vice-Presidents:* J. K. Maconchy, M.B., Downpatrick; J. W. Browne, M.D., Belfast; John Chiene, F.R.C.S.Ed., Edinburgh. *Secretaries:* John Fagan, F.R.C.S.I., 1, Glengall Place, Belfast; Bennett May, F.R.C.S.Eng., 16, Temple Row, Birmingham.

Section C. Obstetric Medicine.—*President:* Clement Godson, M.D., London. *Vice-Presidents:* Sir William Miller, M.B., Londonderry; William Stephenson, M.D., Aberdeen. *Secretaries:* W. Walter, M.D., 20, St. John Street, Manchester; Brice Smyth, M.B., 13, College Square East, Belfast.

Section D. Public Medicine.—*President:* Charles Cameron, M.D., M.P., Glasgow. *Vice-Presidents:* John F. Hodges, M.D., Belfast; David Davies, M.R.C.S.Eng., Bristol. *Secretaries:* H. S. Purdon, M.D., 60, Pakenham Place, Belfast; Shirley Murphy, M.R.C.S.Eng., 158, Camden Road, London, N.W.

Section E. Ophthalmology.—*President:* W. A. McKeown, M.D., Belfast. *Vice-Presidents:* W. A. Brailey, M.D., London; Edgar Browne, M.R.C.S.Eng., Liverpool. *Secretaries:* Joseph Nelson, M.D., Glengall Place, Belfast; R. N. Hartley, M.B., 38, Cookridge Street, Leeds.

Section F. Physiology and Pathology.—*President:* W. S. Greenfield, M.D., Edinburgh; *Vice-Presidents:* J. J. Charles, M.D., Cork; D. C. McVail, M.B., Glasgow. *Secretaries:* A. H. Young, F.R.C.S., 96, Mosley Street, Manchester; T. Sinclair, M.D., 15, College Square East, Belfast; R. J. Anderson, M.D., Galway.

Section G. Therapeutics.—*President:* Thomas John Maclagan, M.D., London. *Vice-Presidents:* Matthew Hay, M.D., Aberdeen; W. Whitla, M.D., Belfast; Walter G. Smith, M.D., Dublin. *Secretaries:* George Gray, M.D., Castlewellan, County Down; W. Murrell, M.D., 38, Weymouth Street, London.

Section H. Psychology.—*President:* G. H. Savage, M.D., London. *Vice-Presidents:* Daniel Hack Tuke, M.D., London; Isaac Ashe, M.D., Dundrum. *Secretaries:* A. S. Merrick, M.D., District Hospital for Insane, Belfast; S. Rees Philipps, M.D., Wonford House, Exeter.

Local Secretaries: John Moore, M.D., 2, Carlisle Terrace, Belfast; Alexander Dempsey, M.D., 26, Clifton Street, Belfast; John W. Byers, M.D., Lower Crescent, Belfast.

Treasurer: William Whitla, M.D., Belfast.

TUESDAY, JULY 29TH, 1884.

2 P.M.—Meeting of Council.
3 P.M.—General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M.—General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock. Tea and coffee after the meeting.

WEDNESDAY, JULY 30TH, 1884.

9.30 A.M.—Meeting of Council.
11.0 A.M.—Second General Meeting. Address in Medicine.
2 to 5 P.M.—Sectional Meetings.
8 P.M.—A *Conversazione* will be given in Queen's College, by the President of the Association, and the Executive Committee.

THURSDAY, JULY 31ST, 1884.

9.30 A.M.—Meeting of Council.
11 A.M.—Third General Meeting. Address in Physiology.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M.—Public Dinner, which will be held in the Examination Hall, Queen's College.

FRIDAY, AUGUST 1ST, 1884.

10 A.M.—Address in Obstetric Medicine.
11 A.M.—Sectional Meetings.
2 P.M.—Concluding General Meeting.
5 P.M.—Reception by the Mayor of Belfast, in the Ulster Hall.

SATURDAY, AUGUST 2ND, 1884.

Excursions.

EXCURSIONS.

The following excursions will take place on Saturday, August 2nd. 1. An excursion to the Giant's Causeway, by special train to Portrush, thence by electric tramway to Bushmills (a distance of six miles), calling at Dunluce Castle on the way. Carriages will convey the visitors from Bushmills to the Causeway, where luncheon will be provided at the hotel. On the return journey, there will be tea at the Northern Counties' Hotel, Portrush. 2. An excursion to Larne and Garron Tower. By train from Belfast to Larne, thence by conveyances to Garron Tower (a distance of eighteen miles), along the most picturesque scenery of the northern coast, passing through the villages of Glenarm and Carnlough. Luncheon will be provided at Garron Tower, and on the return journey there will be tea at the Olderfleet Hotel, Larne. 3. An excursion to Newcastle, County Down. By train from Belfast to Newcastle, where visitors will have an opportunity of visiting this celebrated seaside resort, and the magnificent scenery around; including Donard Lodge, Slieve Donard (the highest of the Mourne mountains), Tollymore Park, and Castlewellan. Luncheon and tea will be provided. 4. Circular trip to Warrenpoint *viâ* Newcastle and Rostrevor. By train from Belfast to Newcastle, thence by cars to Rostrevor, a drive of twenty miles along the sea-coast of County Down. From Rostrevor, tramcars convey visitors to Warrenpoint, thence by train to Belfast or Dublin.

On the mornings of Wednesday and Thursday, there will be short excursions, by which members will have an opportunity of visiting places of interest in the immediate neighbourhood of Belfast. Trip to the Dominion steamship [illegible]. By invitation of Messrs. Flinn, Main, and Montgomery, a steamer will leave the Queen's Quay, Belfast, at 7 A.M., on Friday, August 1st, and proceed down the Lough to Carrickfergus Roads to the steamship [illegible], where breakfast will be provided for 150 members, and an opportunity will be given to visit the newest ship of the Dominion fleet.

The Secretary of the Excursion Committee is Robert Esler, M.D., Pakenham Place, Belfast.

ANNUAL MUSEUM.

The annual exhibition of objects of interest in connection with medicine, surgery, and their allied sciences, will be held in the College buildings. Communications, objects intended for exhibition, etc., to be addressed to Henry O'Neill, M.D., College Square North, Belfast, Honorary Secretary of the Museum Committee.

FRANCIS FOWKE, *General Secretary.*

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paul Bert on the Origin of Sugar of Milk.—De Sinéty on the Relation between Sugar in Urine and the Mammary Secretion.—Hysteria in Male Patients.—The Académie des Sciences.—Cruelty of a Male Nurse.—Poisonous Cider.—The Names of the Paris Hospitals.—Distribution of Urea in the Blood.

M. PAUL BERT read, before a recent meeting of the Académie des Sciences, his memoir entitled "Recherches sur l'origine de la lactose du sucre de lait." During lactation, a considerable quantity of lactose is present in milk. There are two hypotheses to explain its origin. According to one of these, lactose is formed in the mammary gland. The other supposes that it is brought by the blood and is excreted by the gland. M. Bert's experiments teach that milk-sugar is pre-existent in the blood, and is not formed in the mammary gland. The origin of this sugar is not yet determined. M. Bert suggests probably the liver.

M. de Sinéty communicates to the Société de Biologie recent observations "on the relation existing between the sugar present in urine and the mammary secretion." M. de Sinéty states that, according to his experiments, frequently repeated, sugar is not present in urine during the secretion of the mammary gland. This statement concurs with those made by the same investigator in 1873, when he communicated to the Société de Biologie his "Recherches sur l'urine pendant la lactation," in which he said that, when the mammary secretion is slight, or when the mammary secretion and excretion are well balanced, sugar is not present in urine. When the mammary secretion is abundant, and the elimination of milk impeded, sugar is abundant in the urine.

M. Paul Bert's experiments, and those of M. de Sinéty, lead to the same conclusion concerning the absence of sugar in urine, after normal parturition. M. Bert removed the teats from two bitches, and immediately after parturition sugar was present in the urine. M. de Sinéty performed the same operation on guinea-pigs, and testified to an absence of sugar. M. Bert attributes this contradictory result to the small size of the animal experimented on, also its feeble lactogenic function. M. Sinéty observes that this function would be equally rudimentary on guinea-pigs intact. In the urine of these animals, during normal lactation, sugar is easily detected, whereas when ablation of the teats was practised, sugar was absent in the urine. When the operation was performed close upon delivery, and the ablation was not complete, one of two animals presented sugar in the urine. When the ablation was thoroughly effected, sugar was not present in the urine, either before or after delivery. The experimental results of M. de Sinéty agree with his clinical experience. The proportion of sugar in urine is always greater at the moment that there is an afflux of milk; or when suckling is discontinued. The relation between the quantity of sugar contained in the urine, and the richness of the mammary secretion, has been carefully proved by Hempel. Sugar is not present in urine immediately after parturition, but on the third or fourth day. M. de Sinéty made some researches in 1873 and 1876, in Claude Bernard's laboratory, to ascertain the quantity of sugar present in blood during animal lactation. The results he obtained indicate that the quantity of sugar in the blood is normal, if it be not present in the urine, and the animals suckle their young. It is increased if suckling be discontinued and the function of the gland continue; then also sugar appears in the urine. The proportion of sugar present in the arterial and venous mammary blood was about equal. M. de Sinéty questions the probability of M. Bert's hypothesis, attributing to the liver the property of forming milk-sugar. It implies a constant equilibrium between the function of the liver and that of the lacteal glands.

M. Debove, at a meeting of the Société des Hôpitaux, showed a male patient, subject to attacks attributed to hysteria. His health had always been excellent until 1881, when he began to suffer from constant headache, which was succeeded by sudden loss of consciousness and hemiplegia of the left side; anæsthesia was absent. This condition suggested syphilitic origin, and specific treatment was immediately adopted. After two months' treatment, a complete cure was effected. M. Debove nevertheless rejected the diagnosis of cerebral syphilis, for the following reasons. The cure was absolute, which was not compatible with a cerebral lesion. In addition to hemiplegia, there was contracture, which appeared suddenly, and after six weeks' duration disappeared as suddenly. This last symptom indicates hysteria as the origin of the patient's condition. Subsequently, the headaches reappeared, and were followed, as in the first attack, by left hemiplegia, accompanied by hæmianæsthesia and contracture of the same side. The hemiplegia disappeared, but anæsthesia persisted. There was entire cutaneous insensibility, likewise corneal palpebral and nasal insensibility. Pressure on the iliac fossa produced pain. M. Debove admitted that these symptoms suggested simulation, but rejected this explanation with regard to his patient. He also made a careful inquiry to ascertain if syphilis were in the question, and the result was contrary to such a belief.

M. Chauveau, of Lyons, has forwarded to the Académie des Sciences a note concerning the attenuation of artificial cultivation of virus by compressed oxygen. Dr. Brémond has presented to the same Society a work entitled, *Entretiens familiers sur la Santé: Hygiène usuelle.* (Familiar Conversations about Health and Everyday Sanitation.)

A rather serious charge has been brought against a male nurse at the Lariboisière Hospital. His case was tried at the 11th Chambre Correctionnelle. He was judged guilty, and sentenced to two months' imprisonment. It appears that the duty of the nurse in question was to go round the wards of the hospital at 4.30 A.M. to collect the empty wine-bottles, on the bed-boards of the patients. One of the patients, a man 50 years of age, had a bottle full of Banyuls, a wine constantly prescribed in this hospital, which he prevented the nurse from taking. The latter immediately struck him. The patient then sprang from his bed, and tried to overtake his aggressor. A few minutes later, the nurse returned with a brush, and violently struck the patient on the head with the handle, which was broken in two by the force of the blow. A fight between the two men ensued. The patient, exhausted, called for help, and the patients separated them. The nurse gave a very different version of his inexcusable conduct, but fortunately the judge was a clear-sighted man, and found him guilty.

A whole family has been poisoned at Arcueil by drinking cider that was kept in a glazed jar. About an hour after drinking it, the father, mother, and two children were in agonies of pain. A medical man was called in. The mother and two children may perhaps be saved, but the father is in a hopeless state.

It was proposed at the Conseil Municipal last session, to change the name of the hospitals, and that the Charité, Pitié, Hotel Dieu, Saint Antoine, and Saint Louis, should be called, Boerhaave Hospital, Ambroise Paré Hospital, Solidarité Hospital, and Hospital of the Rights of Man and the Citizen. The proposition is now definitely rejected by the Conseil Municipal, which declares that the present titles are time-honoured, and that *laicisation* is more important as a principle than as a form of expression.

MM. Gréhaut and Quinquaud, in a communication to the Biological Society, on the distribution of urea in the blood, make the following statements. In the arteries and veins of the head and limbs, the quantity of urea is equal. More urea was found in the lymph and chyle than in the blood. A larger quantity of urea was found in the splenic and hepatic veins than in the arteries. The blood brought to the spleen and liver contains less urea than the return blood; therefore it is formed in the parenchyma of these organs. The visceral veins contain more urea than the arteries; the reverse is the case with the renal vessels.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

Carruthers Fund.—Medico-Ethical Association.—Hospital for Incurables.—Bequest to the Hospital Saturday and Sunday Fund.—New Hospital for Burnley.

THE net amount available for the benefit of Mrs. Carruthers, the widow of Mr. R. B. Carruthers, surgeon, of Moss Side (who was killed during the great storm of December last, whilst attending a patient), amounts to about £2,500. The committee of the fund have appointed six trustees, and two of these, with the ex-mayor of Manchester (Alderman Hopkinson), have been entrusted with the duty of finding a suitable investment for the money. The death of Mrs. Unsworth, the patient attended by Mr. Carruthers on the fatal night, is announced.

As the result of the interview of a deputation from the Medico-Ethical Association with the Town Council of Manchester, the new medical certificate of infectious disease just issued contains a special question as to whether the case is fit to be removed or not.

A bazaar and a sale of work, on behalf of the Hospital for Incurables, was held last week, in a large tent on the lawn of Mauldeth Hall. The articles were made by the inmates, and the proceeds are to be devoted to the personal uses of the patients. Mr. Jardine, who opened the bazaar, stated that twenty beds in the institution were unoccupied from want of funds. It was estimated that the cost of each bed was £50, so that additional income to the extent of £1,000 would be necessary if the home was to be fully occupied. He suggested, as a means of meeting the case, that an independent committee of twenty members should be formed, each member to undertake the raising of £50. At present, there are eighty inmates in the institution—fifty-eight women, and twenty-two men. This is an increase of about ten since last year.

The late Richard Haworth, Esq., J.P., has bequeathed £500 to the Manchester and Salford Hospital Saturday and Sunday Fund. During his lifetime, Mr. Haworth was one of the chief promoters of the fund.

Last week, the foundation-stone of a new hospital for Burnley was laid by Mr. Coltharsby, J.P. The town was [illegible] occasion. It is proposed to spend at the outset about £12,000 on a building, to contain at first forty-four beds. Towards this there is about £9,000 on hand, including £3,000 collected by workpeople; in addition to which there are promises, amounting to about £3,000, towards the endowment-fund. Over £1,700 have been raised or promised.

BERLIN.

[FROM A CORRESPONDENT.]

Trichinosis.—Death of Professor Göbbert.—Banquet to Dr. Koch.

THE danger of trichinosis does not spring only from American pork imported into Germany. In Berlin, during the month of April, there were 154 pigs destroyed, by order of the Inspectors, as unfit for human food; 14 of them had trichinæ, and 140 measles.

On May 18th, Professor Heinrich Robert Göbbert, well known as Professor of Botany and Palæontology, died at Breslau, aged 85.

A grand banquet was given to Dr. Koch, on May 13th, by the members of the medical profession of Berlin. Before the banquet, an address was handed to Dr. Koch, who expressed his regret, in his reply, that he had not been successful in finding a remedy against cholera, or the means for stopping the development of the germs in the human frame. In replying to the speeches at the banquet, he modestly waived all claim to special praise for having exposed himself to danger. The discovery of the cholera bacillus, he said, had not influenced the etiology of cholera, so that the Commission had tried to arrive at results which would be of some practical use. The results at which they had arrived would enable us to adopt proper measures, should Europe be again threatened by an invasion of cholera; indeed, it might be possible to confine it to India, its home. He rejoiced that a German Commission had been able to arrive at these results, and referred to the problems connected with the poison of yellow fever, the investigation of malarial diseases, leprosy, and rinderpest, hoping that discoveries in these fields might be reserved for Germans.

CORRESPONDENCE.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS AND REFORM.

SIR,—As the Council of the College of Surgeons have given the cold shoulder to their associates, whether Fellows or Members, it will be well to consider what further action should be taken by the Fellows to get their views introduced into the new Charter.

I hope Mr. Swain will be heartily supported in his attempt to secure some of the many improvements that are required in the present constitution, both of the Council and of the College; and that Mr. Hawkins and Mr. Pollock will both give their valuable aid in this direction.

It is reasonable to conclude that, whoever the authority may be (and I believe it is the Home Secretary to whom application must be made before any alteration can be effected in the Charter), he would be willing to listen to the opinions of the large body of Fellows who are dissatisfied with the present order of things, as well as with some of the proposed changes.

If the Council had manifested more consideration and less assurance, it would not have become imperative, as it now is, to fight the question to its end; and combined action on our part, directed with caution and judgment, cannot fail, I think, to be attended with good results.—Yours always truly, THOS. W. CROSSE, F.R.C.S.

Norwich, May 27th, 1884.

SIR,—As the Council of the College are clearly at variance with a large proportion of their constituents, I think it most important that some combined action on the part of the Fellows should at once be taken, to prevent alterations being made in the Charter which are distinctly retrograde and unconstitutional in their character.

I trust that a meeting of the Fellows may be summoned in London for the purpose of taking further action, before the election of Councillors in July next.—I am, sir, yours very truly,

REGINALD HARRISON.

38, Rodney Street, Liverpool, May 27th, 1884.

HOW TO PREPARE A FORTY PER CENT. SOLUTION OF CORROSIVE SUBLIMATE IN GLYCERINE.

SIR,—If I understand Sir Joseph Lister aright in your issue of February 23rd, 1 part of corrosive sublimate can be dissolved in 1½ parts of glycerine. How this solution is effected I am puzzled to discover. Having put together 1 ounce by weight of the salt and 1½ fluid ounces (which would weigh more than 1½ ounces) of glycerine, and agitated frequently, I found, after several hours, that there was a large amount of the salt undissolved. I then heated the mixture over a gas-flame several hours; but this did not effect solution. I next added a fluid ounce of glycerine and water to make the whole measure 4 fluid ounces, and heated several hours; and, even so diluted, I find a sediment of the salt. Perhaps the glycerine and salt should be rubbed together in a mortar, or subjected to a higher temperature than they were by me.

Will anyone who has been more fortunate in preparing this concentrated solution oblige by stating how he succeeded? I may say that the glycerine used was of specific gravity 1.250, and the corrosive sublimate entirely soluble in sulphuric ether.—I am, sir, yours faithfully,

M.R.C.S.

⁂ Our correspondent will find no difficulty if the corrosive sublimate be used in powder, placed with the glycerine in a bottle in a moderately warm situation near the fire, and shaken occasionally. If a more rapid method be desired, the sublimate powder may be stirred in successive portions in glycerine heated over a spirit-lamp.

THE LATE DEAN OF BANGOR.

SIR,—I have read, with much pain, a statement in yesterday's *Western Mail*, which refers to myself and my advice to the much lamented Dean of Bangor.

I cannot, however, even in defence of my reputation for skill in nervous maladies, break faith with those who have once consulted me. It is quite sufficient for my purpose to state that I recommended several courses, all of which I have found most successful in similar cases; and the one course I most strongly opposed was his returning into Wales, receiving and answering letters, reading newspapers, and being hourly reminded of his beloved work. During the whole time that I have made nervous troubles my special study, it has always been my opinion, which I still see no reason to alter, that they cannot be successfully treated amidst surroundings like those in which they originate. The day before the Dean of Bangor left Ben Rhydding, he declared himself to be better than he had been for months, and his many friends here were greatly pleased at his improved appearance and spirits.—Yours faithfully, JOHN FLETCHER LITTLE.

Ben Rhydding, Leeds, May 28th, 1884.

THE "KENT-JONES" APPEAL FUND.

SIR,—In response to the appeal made in Saturday's JOURNAL, I am enabled to announce the following donations and promises. Dr. Eyton-Jones (Wrexham); Dr. Edward Williams (Wrexham); Dr. A. E. Turnour (Denbigh), £2; A Friend, per A. E. T., £2; Dr. J. R. Hughes (Denbigh); James Williams, Esq. (Holywell), £1 1s.; Dr. J. R. Jenkins (Ruthin), £1 1s. (All the above are former presidents of the Branch); J. Lloyd Roberts, M.B. (Denbigh); Wm. [illegible], Esq. (Harrow Road, London), £1; [illegible] (Somersetshire), £2; Dr. W. H. Taylor (Anerley), £1 1s.; G. G. Stopford Taylor, Esq. (Liverpool), £1 1s.—Your obedient servant, J. LLOYD-ROBERTS.

Denbigh, May 28th, 1884.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

Examinations for Medical and Surgical Degrees.—It is officially notified that the examinations for the degree of Bachelor of Medicine in the Easter Term, 1884, will be held as follows, and not as originally announced. The examinations will be held, except as mentioned below, in the Philosophical Library, New Museums. *First Examination.* Friday, June 6th, 9 A.M. to 12 M., Elementary Biology; 1.30 P.M., Oral and Practical Examination in Elementary Biology. Saturday, June 7th, 9 A.M., Oral and Practical Examination in Elementary Biology. Monday, June 9th, 9 A.M. to 12 M., Chemistry; 1.30 to 4 P.M., Mechanics and Hydrostatics. Tuesday, June 10th, 9 A.M. to 12 M., Heat, Electricity, and Optics; 1.30 P.M., Practical Chemistry (in the University Laboratory) and Oral Examination. Wednesday, June 11th, 9 A.M., Practical Chemistry (in the University Laboratory) and Oral Examination.—*Second Examination.* Tuesday, June 10th, 9 A.M. to 12 M., Physiology (in the Physiological Laboratory); 2 to 4 P.M., Pharmacy and Pharmaceutical Chemistry. Wednesday, June 11th, 9 A.M. to 12 M., Human Anatomy; 2 P.M., Oral Examination in Pharmacy. Thursday, June 12th, 9 A.M., Oral and Practical Examination in Physiology (in the Physiological Laboratory). Friday, June 13th, 9 A.M., Oral Examination and Dissection (in the Anatomical School). Saturday, June 14th, 9 A.M., Oral Examination and Dissection (in the Anatomical School).

The Professorship of Pathology.—The board of electors to the Professorship of Pathology met on Saturday, May 24th, at Gonville and Caius College Lodge, for the purpose of electing a person to fill this newly founded chair, when the choice of the electors fell upon Dr. C. S. Roy, Professor Superintendent of the Brown Animal Sanatory Institution. The Professorship, which was founded by the University under the provisions of the new statutes, is of the value of £800 *per annum*, subject to the condition that the Professor is not allowed to practise. The new Professor graduated at the University of Edinburgh in 1875, proceeding to the degrees of Bachelor in Medicine and Master in Surgery. At the close of that year he held the post of resident physician in the Edinburgh Royal Infirmary, and at the conclusion of his term of office commenced residence in London, being engaged in original pathological research at the Brown Institution. His study in that institution was chiefly directed to an inquiry on the pathological anatomy of epizootic pleuropneumonia. On the breaking out of the Turko-Servian war he accepted a commission in the medical service of the Turkish army, and was stationed at Yanina, in Epirus, where he was chief medical officer. At the conclusion of the war with Servia he returned to England, resuming for a time pathological work at the Brown Institution, and next proceeded to prosecute physiological and pathological studies on the Continent. After working nearly a year in Professor E. du Bois Reymond's laboratory at Berlin, and attending Professor Virchow's practical course, he was appointed assistant at the Physiological Laboratory at Strasburg, which he held for a year. He subsequently proceeded to Leipsic, where he studied in the Pathological Institute with Professor Cohnheim, and, in conjunction with that gentleman, assisted in demonstrations. Again returning to England, he was elected the first George Henry Lewes student, and worked for some time at Cambridge in Professor Michael Foster's laboratory, being occupied with researches on the physiology and pathology of the heart, spleen, and kidney. While at Cambridge he delivered a course of lectures on advanced physiology. He was deputed by the Argentine Republic to make investigations on a widespread and fatal disease whose nature was unknown, but which was found to be anthrax. On the conclusion of that commission, he resumed work at the Brown Institution, of which he is now Professor Superintendent. He is author of numerous contributions to the *Journal of Physiology*, and other scientific periodical publications, while some of his investigations have been published in a separate form.

The first open Surgical Scholarship of the Society of Apothecaries of London has been awarded by the Society, on the recommendation of the examiners (Thomas Bryant, Esq., and Sir William Mac Cormac), to Sidney Plowman, St. Thomas's Hospital.

Alleged Deaths from Poisoning by Tinned Salmon.—A young man, aged 25, and his mother, aged 51, have died this week in Wolverhampton, after presenting for a few hours the usual symptoms of irritant poisoning, accompanied with dilatation of the pupils, immediately following a meal of cheap tinned salmon. An inquest has been held in these cases, and the inquiry has been adjourned, to give opportunity for complete scientific investigation of the causes of death.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Tuesday, May 27th.

Abatement of Smoke.—Lord Stratheden and Campbell, in laying on the table and moving the first reading of a Bill for abating smoke in the metropolis, cited statistics to prove the evils arising from the smoke nuisance; and explained that his Bill would place in the hands of local authorities powers in this matter which they did not at present possess.—After some remarks from Lord Mount-Temple in favour of some additional means of suppressing the evil complained of, the Bill was read a first time.

HOUSE OF COMMONS.—Friday, May 23rd.

Revaccination.—Replying to Dr. Cameron, Sir C. Dilke said: We are aware of the large increase in the number of small-pox cases in the metropolis during the last eight weeks. The revaccination of persons exposed to infection is regarded by the medical adviser of the board as constituting a most effective mode of preventing the spread of the disease. The question does not accurately set forth the duties of the medical officers of health and the public vaccinators. What is or should be done on the occurrence of small-pox is that the vaccination-officer, with such assistance as the guardians may give him for the occasion, should make detailed visits to the houses in infected streets, for the purpose of detecting any children who may not have been vaccinated, and of urging revaccination on adults and adolescents who have not already been revaccinated, and who are exposed to danger of small-pox infection. The object of this special visiting is to urge people to apply without loss of time for vaccination and revaccination, and to apply at the place where it is provided in the best form, and will be practised with the best success. Special places for revaccination in this form are frequently provided by guardians to meet the convenience of special classes of people. These measures have repeatedly been carried into effect through a union with excellent results, and the board loses no opportunity of commending them to guardians. It may further be mentioned, with regard to the metropolis, that in the case of persons who are removed to asylums of the managers—and these constitute a very large proportion of the cases of small-pox occurring in London—the patients are, as a rule, in the first instance attended by the district medical officer, and the Vaccination Acts contemplate that where a medical officer attends a person suffering from small-pox he may at once vaccinate or revaccinate any of the inmates of the house where such operation is required, and be paid for the vaccination or revaccination the same fee as the public vaccinator would have been entitled to receive. Under similar circumstances, the public vaccinator might revaccinate other than at the usual station, and the vaccination-officer would doubtless, where necessary, give notice for the purpose. As the board understand, revaccination at Glasgow under circumstances of hazard is then and there performed by the medical officer of health. As already stated, in exceptional cases the vaccination may be performed at once in England also, although it is not part of the general system on which English vaccination proceeds. The last part of the question raises the point whether, as indeed was advised by the Royal Commission on Hospitals, the vaccination-arrangements should not be transferred from boards of guardians in the metropolis to the sanitary authorities. This is a question which at the present moment, when material changes are proposed in the constitution of the metropolitan sanitary authorities, cannot well be determined, but it is a matter which must receive full consideration as soon as such changes have been made.

Monday, May 26th.

Irish Lunatic Asylums.—In answer to Mr. Small, Mr. Trevelyan said: Recommendations are from time to time made to the Government in favour of increase of salary to individual officers and attendants in lunatic asylums by the respective boards of governors, and such recommendations always receive the most careful consideration; but no representation has been made to the Government, nor, so far as the Government are aware, to the inspectors, which would establish the contention that the salaries in these institutions are generally inadequate; nor are the Government aware that there is such a difficulty in obtaining suitable persons to fill vacancies therein as would require them to make inquiries on the subject. As regards pensions, they are awarded according to the regulations in force for the Civil Service, which receive a liberal construction in their application to the cases of officers and attendants in lunatic asylums.

MEDICO-LEGAL AND MEDICO-ETHICAL.

CONSULTATION WITH HOMŒOPATHS.

SIR,—Will you please submit the following to the ethical assessor :

1. Can an ordinary medical man meet a homœopathic practitioner in consultation at a purely surgical case ; *e.g.*, accident, question of a fracture ?

2. R., who is a homœopathic practitioner, is sent for to a regular patient of his who meets with a severe accident. R. tells his patient that he does not now attend surgical cases, and advises him to send for S., who is an ordinary medical man. The case, after some time not doing well, a consultation is necessary ; and the patient wishes S. to meet R., what should S. do ?—Yours very truly, S.

⁂ To our correspondent's first question, a simple but emphatic negative is the only reply that can honestly be given.

To his further inquiry, "What should S. do?" we would, by way of reply, simply pointedly ask, if it can possibly be consistent with his duty to the patient, and to the profession at large, that he, a legitimate medical practitioner, should meet, and by nominal consultation with the (so to speak) illegitimate homœopath, disingenuously cover, and, so far, professionally ignore, the all important fact that their respective principles in regard to the treatment of disease are so diametrically opposite as to render a consultation, with real advantage to the patient, utterly out of the question. To such an interrogatory we feel that any other reply than an emphatic No, cannot justly be recorded. We would, therefore, counsel S. to courteously but firmly decline the suggested consultative meeting ; and, if need be, to retire from the case, rather than act disingenuously to the patient, collusively with the homœopath, and dishonestly toward his legitimate professional brethren. Be it our duty, moreover, to fully endorse the principle enunciated in "Thrasyllus a Thrasyllo consilium petat," which, freely translated, may be rendered thus: Like should consult with Like.

MEDICAL ETIQUETTE.

SIR,—Will you kindly give your opinion of the conduct of A. in the following case, and what action, if any, B. should take?

A. and B. are two medical men residing in the same town, and on friendly terms. B. has a patient who is under treatment by him for the abuse of morphia, which she uses every dodge to obtain unknown to her husband and medical attendant. Notwithstanding that it is in the knowledge of A. that great trouble is taken by all concerned, he has supplied her with morphia, and allowed himself to be used as an agent to whom preparations of [illegible] and hypodermic syringes are sent for her use from chemists at a distance on her order.—Faithfully yours, M.D.

⁂ It is difficult to suppose that A. really possesses the knowledge which "M.D." believes him to have, or that, having it, he would act in the manner described.

MILITARY AND NAVAL MEDICAL SERVICES.

PROMOTION IN THE ARMY MEDICAL DEPARTMENT.

SIR,—It is not without a feeling of uneasiness for the pension which, at a future time, I hope to enjoy, that I read the letters which are constantly appearing in your JOURNAL and others, clamouring for promotion in the Army Medical Department. This agitation, to my mind, is being far overdone, and, if attended to, may help to bring about very unpleasant results.

There is no [illegible] for any one entering the Army Medical Department to expect promotion to the administrative ranks, [illegible]. Why should [illegible] expect, as a right, promotion which should only be given for capacity? Every lawyer does not expect to become a judge, [illegible]. Would it be advisable to be constantly [illegible] admitting [illegible] time to learn their work, [illegible] the purpose [illegible] number of men, many of whom perhaps are without [illegible] capacity, [illegible] to enable them, after a short time in office, to [illegible]?

By referring to the last estimates, it will be seen [illegible] the non-effective pay reaches, and the question is, how much more will the country stand? Already [illegible] that the money [illegible] of the officers, and for the benefit of the army.

If the system of rapid promotion and high pensions [illegible] exaggeration, the last straw will have been laid on the camel's back, and we shall all have [illegible]. A man is not very badly off who has a certainty of [illegible] the prime of life on a pension of £365 a year [illegible]. But would even the certainty of becoming Director-General [illegible] the man in our department?—I am, etc., [illegible].

YEOMANRY SURGEONS.

WEST KENT MEMBER asks: What steps is it necessary to take in order to obtain the appointment of surgeon to the West Kent Yeomanry [illegible]? Is there any emolument attached to the appointment? About [illegible] expenses? Is personal attendance absolutely required? Who is the present holder of the appointment, or is it in abeyance for want of a [illegible]?

PRESENTATION.—Mr. John Oke Horden, Resident Medical Officer of York Dispensary, on his leaving York, has been presented with an illuminated address and a purse of money by the patients of the Nunnery Lane and Holgate Districts in York. The patients in the Walmgate district have also presented him with a beautifully illuminated address.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS. During the week ending the 24th instant, 5,959 births and 3,343 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 8,762,354 persons. The annual rate of mortality per 1,000 persons living in these towns, which in the three preceding weeks had been 22.7, 21.8, and 21.1, further declined to 19.9 during the week ending Saturday last, and was lower than in any week since October 1883. The rates in the several towns, ranged in order from the lowest, were as follow:—Birkenhead, 10.9 ; Bristol, 14.8; Salford, 16.7 ; Leicester, 16.9 ; Huddersfield, 17.0; London, 18.5 ; Wolverhampton, 18.6 ; Bradford, 18.9 ; Sheffield, 19.3 ; Hull, 19.3 ; Derby, 19.7 ; Bolton, 20.1 ; Birmingham, 20.6 ; Sunderland, 20.8; Liverpool, 21.2; Brighton, 21.2 ; Portsmouth, 21.6 ; Leeds, 22.0; Nottingham, 22.4 ; Norwich, 22.5 ; Cardiff, 22.9 ; Manchester, 25.1 ; Newcastle-upon-Tyne, 25.2 ; Blackburn, 25.5 ; Plymouth, 27.6 ; Preston, 27.8 ; Halifax, 28.0 ; and Oldham, 28.1. The average death-rate last week in the twenty-seven provincial towns was 21.1 per 1,000, and therefore exceeded by 2.6 the rate recorded in London. The 3,343 deaths registered last week in the twenty-eight towns included 497 which were referred to the principal zymotic diseases, against 553 and 539 in the two preceding weeks ; of these, 156 resulted from measles, 138 from whooping-cough, 68 from scarlet fever, 46 from diarrhœa, 37 from "fever" (principally enteric), 28 from diphtheria, and 24 from small-pox. The 497 deaths were equal to 14.9 per cent. of the total deaths, and to an annual rate of 3.0 per 1,000. The zymotic rate was equal to 3.5 in London, whereas it did not exceed 2.5 in the twenty-seven provincial towns, among which it ranged from 0.0 in Halifax, and 0.6 in Birkenhead and in Huddersfield, to 5.5 in Plymouth and 6.8 in Oldham. The fatal cases of measles, which had been 176 and 151 in the two previous weeks, rose again last week to 156, and showed the largest proportional fatality in Wolverhampton, Plymouth, and Oldham. The 138 deaths referred to whooping-cough showed a considerable decline from recent weekly numbers, and caused the highest rates of mortality in London and Liverpool. The 68 fatal cases of scarlet fever were within 2 of the number in the preceding week, and showed the largest proportional fatality in Cardiff and Newcastle-upon-Tyne. The 37 deaths from "fever" slightly exceeded the numbers recorded in recent weeks, and caused the highest death-rates in Blackburn and Norwich. The 28 deaths from diphtheria in these towns showed a further increase upon those returned in the two preceding weeks, and included 19 in London, and 4 in Nottingham. The fatal cases of small-pox in the twenty-towns, which had risen from 17 to 43 in the five previous weeks, declined to 24, of which 17 occurred in London, 3 in Sheffield, 2 in Liverpool, 1 in Derby, and 1 in Sunderland. The number of small-pox patients in the Metropolitan Asylum Hospitals, which in the nine previous weeks had risen from 148 to 735, further increased to 924 on Saturday last ; no fewer than 232 new cases were admitted to these hospitals during the week ending the 24th instant. The death-rate from diseases of the respiratory organs in London was equal to 3.4 per 1,000, and was slightly below the average. The causes of 86, or 2.6 per cent., of the 3,343 deaths registered last week in the twenty-eight towns, were not certified either by medical practitioners or by coroners. The proportion of uncertified deaths did not exceed 2.0 in London, while it showed an excess in Wolverhampton, Huddersfield, and Bradford.

HEALTH OF SCOTCH TOWNS.—In the eight principal Scotch towns, having an estimated aggregate population of [illegible] persons, 940 births and 542 deaths were registered during the week ending the 24th instant. The annual rate of mortality, which in the two preceding weeks had been 24.9 and 24.5 per 1,000, further declined to 22.3 last week, but exceeded by 2.4 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns the rate was equal to 16.5 in Greenock, 18.3 in Dundee, 18.8 in Edinburgh, 21.1 in Leith, 22.4 in Aberdeen, 23.5 in Perth, 25.7 in Glasgow, and 25.9 in Paisley. The [illegible] deaths registered last week in these towns included 33 which were referred to whooping-cough, 13 to "fever," 13 to diarrhœal diseases, 9 to diphtheria, 7 to scarlet fever, and 1 to small-pox ; in all, [illegible] deaths resulted from these principal zymotic diseases, against 94 and 93 in the two previous weeks, equal to an annual rate of 3.6 per 1,000. The zymotic rates last week in these eight Scotch towns ranged from 1.7 and 2.1 in Perth and Greenock, to 5.1 in Aberdeen, and 7.8 in Leith. The fatal cases of whooping-cough, which had increased from 29 to 43 in the five preceding weeks, declined to 33, of which 18 occurred in Glasgow, and 6 in Aberdeen. The 13 deaths referred to fever showed a considerable increase upon recent weekly numbers, and included 4 in Edinburgh, and 4 in Leith. The 13 fatal cases of measles corresponded with the number in the preceding week; 4 were returned in Leith, and 3 in Dundee. Of the 9 deaths referred to diphtheria, 4 occurred in Glasgow, 2 in Edinburgh, and 2 in Aberdeen. The 7 fatal cases of scarlet fever included 5 in Glasgow, where a death from chicken-pox (classed in Scotland as small-pox) was also recorded. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 4.1 per 1,000. As many as 89, or 16.5 per cent. of the 539 deaths registered last week in these towns were uncertified.

Health of Foreign Cities.—It appears from statistics published in the Registrar-General's return for the week ending May 24th, that the death-rate was recently equal to 28.5 in Bombay, and 84.2 in Madras; small-pox caused 307 deaths in Madras (67 fewer than the number in the previous week), and 12 in Bombay. Fever showed the greatest mortality in Madras. According to the most recently received weekly returns, the average annual death-rate per 1,000 persons estimated to be living in twenty-one of the largest European cities was 29.8, and was no less than 9.9 above the mean rate during the week in the twenty-eight English towns. The death-rate in St. Petersburg was 38.5, and showed a further decline from still higher rates in previous weeks; the 685 deaths included 22 from "fever," 15 from diphtheria, and 52 from measles. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 23.4, the highest rate being 27.4 in Stockholm; scarlet-fever caused 3 deaths, both in Stockholm and in Christiania, whooping-cough 5 in Copenhagen, and diphtheria and croup 3 in Stockholm. In Paris, the death-rate was equal to 28.1, and showed a slight decline from the rate in the previous week, but was 9.6 above the rate in London; the deaths included 39 from typhoid fever, 48 from measles, and 43 from diphtheria and croup. The 191 deaths in Brussels, of which 16 resulted from small-pox and 9 from "fever," were equal to a rate of 23.5. The rate in Geneva was 29.5, and 5 of the 40 deaths resulted from "fever." In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 26.9, the highest rate being 34.8 in Rotterdam, where 11 fatal cases of measles and 3 of scarlet-fever were reported; diphtheria and croup caused 7 more deaths in Amsterdam, and measles 5 in the Hague. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 31.7, and ranged from 24.4 in Berlin and 29.7 in Dresden to 38.7 in Buda-Pesth, and 40.4 in Prague. Small-pox caused 35 deaths in Prague, showing an increase upon the numbers in the two previous weeks; the mortality from diphtheria showed a marked excess in Berlin and Dresden, and measles showed a fatal prevalence in Breslau and Buda-Pesth. The death-rate was equal to 28.0 in Turin, while it did not exceed 13.4 in Venice; 3 deaths from small-pox were reported in Turin. The 114 deaths in Lisbon gave a rate of 29.2, 3 deaths being referred both to small-pox and to diphtheria. In four of the largest American cities, the mean recorded death-rate did not exceed 22.6, the rates ranging from 20.5 in Philadelphia to 24.9 in New York. Scarlet-fever and diphtheria showed more or less fatal prevalence in New York, Brooklyn, and Philadelphia; measles caused 11 deaths in Baltimore, and typhoid fever 16 in Philadelphia.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Tendring Rural District.—Not the least important sanitary work accomplished in this district during 1882, was the improvement of the drainage system of the town of Manningtree and the adjoining village of Mistley. It says much for the manner in which the work was carried out, that Dr. Cook should be enabled to state that the new and amended drains work well, and are sufficient for the present requirements of the town and village. In the Clacton-on-Sea district, the drainage works were pushed on with every possible speed; and of these, as well as of the new water-supply, the medical officer speaks in high terms. As regards vital statistics, Dr. Cook has to rely almost exclusively upon his own exertions in getting information, and, as he points out, too much importance must not be attached to his figures. The death-rate during 1882 was approximately 16.9 per 1,000 inhabitants. Of the zymotic diseases, measles and scarlet fever were the most fatal. Ten cases of small-pox occurred during the year. There were outbreaks of this disease at Great and Little Holland and at Bradfield. In the former district the disease was introduced by a tramp, who had been staying in an infected union house, and in the latter district the first case was that of an unvaccinated child, who had been exposed to the disease while in London. The infantile mortality showed an increase on the record for the previous year, 116 deaths occurring in children under five years of age, compared with 96 in 1881.

Whitechapel.—There is nothing of exceptional interest in Mr. Liddle's vital statistics for 1883. Deducting the deaths of non-residents, the rate of mortality during the year was 25.3 per 1,000 of the population. If the number of deaths which occurred in the London Hospital be excluded from the calculations, the rate becomes 21.9. Four hundred deaths, or 22 per cent of the total mortality, were those of children under one year of age, being equivalent to a rate of 5.6 per 1,000 persons living. Zymotic diseases accounted for slightly more than a tenth of the total number of deaths, the majority of which were referable to measles, diarrhœa, and fever. The remarkable diminution in the number of out-door sick paupers in this district, from 17,000 in 1867 and 1868 to 2,060 in 1877 and 3,455 in the year under notice, is especially worthy of notice.

Wandsworth.—With one exception, and that the previous year, the standard of health in this district during 1882 was the highest on record. The general death-rate was 17.42 per 1,000, or, including the deaths of inhabitants in hospitals outside the district, 17.48. Compared with the preceding rate, this latter proportion showed an increase of 0.32 per 1,000, but, compared with the mean of the ten years 1872-81, a decrease of 1.62. The individual rate in each subdistrict was higher than in the previous year, except in Battersea, where it was 0.55 per 1,000 lower. It was to zymotic diseases that the increased mortality was attributable. The seven chief diseases of this class accounted for 15.9 per cent. of the total mortality, or 2.79 deaths per 1,000 of population. Whooping-cough was at once the most prevalent and the most fatal of these diseases, and accounted for 163 deaths, against an average of 137. Scarlatina caused 119 deaths, diarrhœa 117, and measles 115. The deaths from scarlatina and measles were respectively 5 and 23 above the average; those from diarrhœa, on the other hand, were 68 below the average. Diphtheria, which was exceptionally destructive in Putney, caused 51 deaths, or 30 in excess of the average. The infantile mortality compared favourably with past records, the proportion being 137 deaths to every 1,000 births, against a mean of 146 in the previous decennium. The deaths among children under ten, however, represented 51.3 per cent. of all deaths, or 1.6 per cent. more than the average. The uncertified deaths declined from 125 in 1881 to 96 in the year under notice.

Birkenhead.—A very complete description of the sanitary condition of this borough in 1882 is given in Mr. Vacher's annual report. Neither the general, nor the infantile, mortality was so low as in 1881—a statement which, as Mr. Vacher points out, "is true, not only of Birkenhead, but of the whole country." However, the death-rate both for Birkenhead and for the whole country, in 1882, compared favourably with the average of previous years. The infantile deaths were 144 to every 1,000 births, and the deaths of children under five comprised 42 per cent. of the gross mortality. Zymotic diseases accounted for 3.68 deaths per 1,000 living. This rate was the lowest recorded for four years, if we except that for 1881. Of the 319 deaths due to all the zymotics, 252, or 2.9 per 1,000, were referable to the principal diseases of the class. The mortality from measles, scarlatina, and diphtheria, respectively 0.39, 0.19, and 0.03 per 1,000, was, as regards each disorder, exceptionally low—lower even than in 1881—yet statistics show that measles and scarlatina were present throughout the year, and that measles was extremely prevalent in October and November. The deaths from diarrhœa, 0.72 per 1,000, were in excess of those for the previous year, but less than the average for the period 1878-80. From whooping-cough, the death-rate was 1.02, from fever 0.53, and from other zymotics 0.77. In each instance, the rate was above, not only that for 1881, but also the mean of recent years. The birth-rate was 36.45 per 1,000. Mr. Vacher discusses the various occurrences of the year with his usual ability; indeed, were it not for their late appearance, the Birkenhead reports might be fairly quoted as models.

The Shakespearean Show, organised by the Managing Committee of the Chelsea Hospital for Women to assist in paying off a mortgage of £5,000 on the building, was opened at the Albert Hall on Thursday last by Lord Cadogan. The arrangements have been made with much ingenuity and artistic taste. In addition to the representation of Shakespearean scenes, with tableaux and purchase-stalls, there are abundant other attractions, which will, it is hoped, ensure a large measure of success for the desirable object with which it has been arranged.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 22nd instant, and, when eligible, will be admitted to the pass-examination for the membership.

Messrs. E. B. Ormerod, C. P. White, and A. R. D[illegible], [illegible] of St. Bartholomew's Hospital; A. Crossley, P. Paget, and A. E. [illegible], of Guy's Hospital; W. J. Olivey, and S. G. Moores, of St. [illegible] Hospital; G. H. Seagrave, and A. E. Paul, of University College; H. P. [illegible], of the Westminster Hospital; B. Eyton, of the London Hospital; and W. G. Bower, of King's College.

Thirteen candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months, and two for six months.

The following gentlemen passed on the 23rd instant.

Messrs. W. J. Rogers, P. G. Gilmore, and G. A. [illegible], of St. Bartholomew's Hospital; W. T. Rayne, of the Westminster Hospital; W. T. Wyatt, of the Middlesex Hospital; A. F. Brown, of Guy's Hospital; W. H. M[illegible], and T. C. Summers, of the London Hospital; A. C. Lewis, of University College; and W. B. W[illegible], of King's College.

Ten candidates were referred for three months, and four for six months. One hundred and forty-eight candidates presented themselves for the examination just completed, as compared with 169 at the corresponding period of last year; of this number, 69 having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months, and eight for six months, making a total of 77 referred candidates.

At the primary examination for the fellowship, on the 24th and 26th instant, the following gentlemen were reported to have acquitted themselves to the satisfaction of the Board of Examiners, and, when eligible, will be admitted to the pass-examination.

Messrs. T. Sinclair, of the Belfast School of Medicine; W. G. Richardson, of the Newcastle School of Medicine; H. Lund[illegible] W. [illegible], of the Cambridge School; H. Herbert, of the Leeds School of Medicine; [illegible] C. Leith, of the Edinburgh School; P. M. O'Brien, of the Liverpool School; P. B. Conolly, of the Charing Cross Hospital; [illegible], of University College; A. Hardwick, of the Westminster Hospital; [illegible], of St. Bartholomew's Hospital; H. Hyde, of King's College; and H. C. Bowman, of the Manchester School of Medicine.

Nineteen candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for six months.

The following gentlemen passed on the 27th instant.

J. Richards, F. C. Berry, and A. H. Smith, of the Manchester School of Medicine; W. W. C[illegible], and R. Nairn, of St. [illegible] Hospital; J. W. Barrett, of the University of Melbourne; [illegible] Hospital; J. R. Bradford, of University College; and E. F. White, of King's College.

Eleven candidates were referred for six months.

University of Cambridge.—The following have passed the examination for the degree of Bachelor of Surgery.

Dowson, M.A., Christ's; G. E. Johnson, M.A., [illegible]; J. [illegible] Bateman, B.A., Gonville and Caius; Pigeon, B.A., Christ's; Roberts, B.A., Christ's.

The following have passed Part I of the third examination for the degree of Bachelor of Medicine.

Aldred, B.A., Gonville and Caius; Bryceson, M.A., Christ's; R. T. Finch, B.A., Pembroke; [illegible] Bateman, B.A., Gonville and Caius; M[illegible], M.A., Emmanuel; M[illegible], B.A., Downing; [illegible], M.A., [illegible] B.A., Gonville and Caius; Shaw, B.A., Sidney Sussex; Slater, B.A., St. John's; E. S. Whelpton, M.A., Emmanuel; White-Cooper, B.A., Trinity.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 22nd, 1884.

East, Charles Henry, The [illegible], Kettering, N[illegible]

[illegible], [illegible], Clarendon R[illegible]

Robert[illegible]

T[illegible], [illegible] Street, H[illegible]

W[illegible]

The following gentleman also on the same day passed the Primary Professional Examination.

Shaw, Arthur [illegible] Hospital.

MEDICAL VACANCIES.

The following vacancies are announced.

BURTON-ON-TRENT INFIRMARY.—H[illegible]. Applications by June [illegible]th.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.—Acting Physician. Applications by J[illegible].

CUMBERLAND AND WESTMORLAND ASYLUM.—Assistant Medical Officer. Salary, 80*l* per annum. Applications to Dr. Campbell, Garlands, Carlisle.

CUMBERLAND INFIRMARY, Carlisle.—House Surgeon. Applications by June 10th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—Resident Clinical Assistant for six months. A gratuity of 20*l.* is usually awarded. Applications to the Secretary, 24, Finsbury Circus, E.C., by May 31st.

DENBIGHSHIRE INFIRMARY, Denbigh.—House-Surgeon. Salary, 85*l.* per annum. Applications by June [illegible]th.

EAST SUSSEX, HASTINGS, AND ST. LEONARD'S INFIRMARY.—Assistant-Physician. Applications by June 10th.

ESSEX LUNATIC ASYLUM, Brentwood. Third Assistant Medical Officer for three months.—Salary for the three months, 30*l.* Applications by June 3rd.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, 100*l.* per annum. Applications by June 11th.

GENERAL HOSPITAL, Birmingham.—Resident Assistant Surgical Officer. Salary, 70*l.* per annum. Applications by May 31st.

GENERAL INFIRMARY, Northampton.—Surgeon. Applications by June 10th.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Ophthalmic Surgeon. Applications by June 2nd.

GUEST HOSPITAL, Dudley.—Resident Medical Officer. Salary, 120*l.* per annum. Applications to Mr. E. Poole, Secretary, by June 4th.

GLAMORGAN AND MONMOUTHSHIRE INFIRMANY AND DISPENSARY, Cardiff.—House Surgeon. Salary, 100*l.* per annum. Applications by May 31st.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by June 14th.

HAVERSTOCK HILL AND MALDEN ROAD PROVIDENT DISPENSARY.—Registered Practitioner. Application by June 14th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Assistant Resident Medical Officer. Salary, [illegible]0*l.* per annum. Applications by June 11th.

MANCHESTER SOUTHERN HOSPITAL, Clifford Street.—Honorary Medical Practitioner. Applications by June 9th.

NORWICH FRIENDLY SOCIETIES' MEDICAL INSTITUTE.—Three Medical Officers. Salary, 200*l.* per annum each. Applications to H. B. Mitchell, Ivy House, Lady Lane, Norwich, by May 31st.

OWENS COLLEGE, Manchester.—Lecturer in Dental Surgery. Applications by June 16th.

OWENS COLLEGE, Manchester.—Special Lecturer in Dental Mechanics and Dental Metallurgy. Applications by June 16th.

PARISH OF CANISBAY, Caithness.—Medical Officer. Applications to Peter Keith, Esq., Barrogill Castle by Wick, by May 31st.

QUEEN'S COLLEGE, Birmingham.—Professor of Anatomy. Salary, 262*l.* 10*s.* per annum. Applications by June 30th.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Four Examiners in Medicine from the Fellows of the Royal College of Physicians of London. Applications by May 31st.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Two Examiners in Midwifery, either from the Fellows of the College or from the Fellows of the Royal College of Physicians of London. Applications by May 31st.

SUNDERLAND INFIRMARY.—Senior House-Surgeon. Salary, 100*l.* per annum. Applications by June 2nd.

ST. MARY'S HOSPITAL, W.—Medical Superintendent. Salary, 150*l.* per annum. Applications by June 10th.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN.—Administrator of Anæsthetics. Applications to be addressed to S. V. M[illegible], Esq., Secretary, St. John's Hospital, Leicester Square.

TOWNSHIP OF TOXTETH PARK.—Assistant Medical Officer. Salary, 100*l.* per annum. Applications by June 11th.

TOWN OF CALCUTTA.—Health Officer. Salary, Rs. 1,250 per month. Applications to the Secretary to the Municipality, Calcutta, by July 15th.

MEDICAL APPOINTMENTS.

Acland, T. D., M.B., appointed Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, *vice* D. Kir[illegible], M.B., resigned.

Barling, G. M. B., appointed Honorary Assistant-Surgeon to the Birmingham and Midland Counties Orthopædic and Spinal Hospital, *vice* E. L. Freer M.R.C.S., resigned.

Finlay, T., L.R.C.S.I., appointed Medical Officer of the Gweedore Dispensary District to the Dunfanaghy Union, *vice* D. J. Cullen, L.K.Q.C.P.I., resigned.

Glassington, C. W., M.R.C.S., L.D.S.Ed., appointed anæsthetist to the National Dental Hospital.

Grant, Henry J., M.B., appointed Assistant Medical Officer to [illegible] County Asylum, Stone, near Aylesbury.

H[illegible], C. A., M.R.C.P. London, appointed [illegible] to Westminster Hospital Medical School.

Hewitt, F. W., B.A., M.B., appointed anæsthetist to the National Dental Hospital.

[illegible], M.B., appointed Medical Officer [illegible] District of the Braintree Union [illegible]

[illegible], M.R.C.P., appointed Physician [illegible]

[illegible], M.R.C.S., appointed [illegible] M.R.C.S., resigned.

M[illegible], M.B., [illegible]

M[illegible], M.D., [illegible] County [illegible]

N[illegible], M.R.C.S., appointed [illegible] to the M[illegible]field [illegible], *vice* R. W. [illegible], M.R.C.S., resigned.

Patterson, W. T., L.D.S.Eng., appointed House-Surgeon to the National Dental Hospital.

Powell, J. A., M.B., appointed House-Surgeon to the Worcester General Infirmary, *vice* M. B. Shirley, L.R.C.P., resigned.

Phillips, F. Leslie, M.D.Brux., appointed Medical Officer of Health to the Balsall Heath Local Board.

Robertson, T. M., M.R.C.S., appointed House-Surgeon to the Durham County Hospital, *vice* C. H. Milburn, M.B., resigned.

Sheldon, Thomas Steel, M.B.Lond., M.R.C.S., appointed Medical Superintendent of the Chester County Asylum, Parkside, Macclesfield, *vice* P. Maury Deas, M.B., M.S.Lond., appointed Medical Superintendent of the Wonford House Hospital for the Insane, Exeter.

Sparrow, W. W. B., M.R.C.S.E., appointed Medical Officer to the Burton-on-Trent Amalgamated Friendly Societies Medical Association, *vice* W. R. S. Jefferiss, M.D., resigned.

Sturges, O., M.D., appointed Physician to the Hospital for Sick Children, 49, Great Ormond Street.

Sinclair, W. J. H., M.B., appointed Medical Officer to the parish of Bracadale, *vice* G. Robertson, M.B., resigned.

Tyrrell, Walter, L.R.C.P., M.R.C.S., appointed anæsthetist to the National Dental Hospital.

Wright, J. F., M.R.C.S., appointed Medical Officer of Health to the Alton Rural Sanitary Authority.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

Bookless.—On May 21st, at 26, Wimbledon Hill Road, the wife of J. Pitcairn Bookless, Esq., M.D., of a daughter.

Fleming.—On May 27th, at 155, Bath Street, Glasgow, the wife of William James Fleming, M.D., of a son.

Hewitt.—On May 27th, at Huntley Lodge, Montpellier, Cheltenham, the wife of Tom Hewitt, M.D., etc., of a son.

MARRIAGE.

Duke—Rucker.—On the 27th instant, at St. James's, Clapham Park, by the Revd. W. H. Barlow, vicar, assisted by the Revd. G. Forrester, vicar of St. Paul's Clapham, Edgar Duke, M.R.C.S., of Freshwater, I. W., youngest son of the late T. O. Duke, Esq., of Clapham, to Adela, youngest daughter of D. H. Rucker, Esq., of Errington, Clapham Park.

DEATHS.

Muriel.—On Monday, May 26th, at Palace Green, Ely, Cambridgeshire, John Muriel, F.R.C.S., J.P. and D.L., aged 84.

Bequests and Donations.—Mr. Oxley English, of Pall Mall, bequeathed £1,000 to the Charing Cross Hospital, £500 to the Middlesex Hospital, £500 to the West Norfolk and Lynn Hospital, and £200 to the City of London Truss Society; the Middlesex Hospital has received £300 further, making £1,300, from the residuary estate of the late Mr. John Bizo.—Mr. Joseph Gurney Barclay has given £250 to the North-Eastern Hospital for Children.—Captain Thurlow has given £200 to the Home and Infirmary for Sick Children, Sydenham Park.—The Lincoln County Hospital has received £200 under the will of Mr. William Parker, of Hanthorpe House.—The Royal Hospital for Children and Women, Waterloo Road, has received £190 from Mr. G. F. Chester, the proceeds of a ball at Kensington Town Hall, on Monday, April 28th.—Colonel Sir R. Loyd Lindsay, V.C., K.C.B., has given one hundred guineas as an annual subscription to the Charing Cross Hospital.—Mr. Marcus T. Moses has given £100 to the City of Dublin Hospital.—Messrs. Coombe and Co. have given fifty guineas, additional, to the Charing Cross Hospital.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens will be shown by Dr. Godson, Dr. Galabin, Dr. Aveling, Dr. Walters, Dr. Malins, Dr. John Williams, and Dr. R. Barnes. Dr. Playfair: Note on the Absorption, with Ultimate Recovery, of Thrombosis of the Pulmonary Artery in the Puerperal State. Dr. Matthews Duncan: On Fœtal Revolutions. Dr. Lediard: Fibro-cystic Myoma of Uterus.—Royal College of Surgeons of England, 4 P.M. Mr. Edward Albert Schafer: The Functions of the Marginal Convolution.

THURSDAY.—Ophthalmological Society of the United Kingdom. Living and Card Specimens at 8 P.M. Dr. P. H. Mules: Drawing of Fundus with Choroidal Tubercles; Stained Sections of Tuberculous Choroid. Dr. Brailey: 1. Paralysis of External Rectus and Mydriasis, with a Recent History of Uniocular Diplopia; 2. Sympathetic Papillitis. Messrs. Critchett and Juler: Case of Choroiditis Disseminata. Messrs. Cowell and Juler: Mounted Specimens of Intra-ocular Sarcoma. Communications at 8.30 P.M. Dr. Sharkey and Mr. J. B. Lawford: Optic Neuritis associated with Acute Myelitis. Mr. Nettleship: 1. Cases of Recovery from Amaurosis in Infants; 2. Cases of Retro-ocular Neuritis. Dr. C. E. Fitzgerald: An Instrument for showing the Action of the Accommodation. Mr. J. B. Lawford: Amblyopia, with Contraction of Visual Fields and Central Scotoma, ending in Recovery. Mr. Adams Frost: Ciliary Staphyloma following Iridochoroiditis, Sympathetic Ophthalmitis subsequent to Excision. Mr. Simeon Snell: Case of Uniocular Diplopia.

FRIDAY.—Royal College of Surgeons of England, 4 P.M. The Analysis of Voluntary Muscular Action.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

Charing Cross.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

Guy's.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

King's College.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

London.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

Middlesex.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S. 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

St. Bartholomew's.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

St. George's.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

St. Mary's.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

St. Thomas's.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

University College.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

Westminster.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY ......St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications respecting editorial matters should be addressed to the Editor. 161A, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal should be addressed to the Editor at the office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

Correspondents who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered, are requested to look to the Notices to Correspondents of the following week.

Public Health Department. We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

We cannot undertake to return manuscripts not used.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following questions in anatomy and physiology were submitted to the candidates at the last primary examinations for the membership of the Royal College of Surgeons. [illegible] questions to be answered). 1. Describe the course and distribution of the cutaneous branches of the three divisions of the fifth cranial nerve on the face. 2. Describe the origin, course, and relations of the portal vein. Mention the situations in which it communicates with the systemic circulation. 3. Mention the structures in contact with the interosseous membranes of the [illegible] and leg. 4. Describe the mesentery; its attachments, length, structure, and the parts contained therein. 5. Describe the dissection required to [illegible] the flexor longus pollicis in the forearm. 6. Trace from the commencement to the termination the various constituents of the spermatic cord. *Physiology*: 1. Describe the functions of the grey and white substances of the spinal cord. 2. Describe the structure of a Graafian follicle, and the maturation and [illegible] of an ovum. 3. What is meant by the partial pressure of a gas? [illegible] partial pressure [illegible] air? How does expired [illegible] 4. [illegible] the innervation of the intrinsic and extrinsic muscles of the eye. State what would be the effect of the division of each of the nerves you mention. 5. Follow the successive stages of digestion which milk undergoes in the alimentary canal. 6. Describe the coloured corpuscles of the blood, and how they are affected by various re-agents.

THE MEDICAL ACT AMENDMENT BILL AND EXISTING QUALIFICATIONS.

L. M. enquires, under date April 22nd, 1884, "Can M.R.C.S. and L.M. England, a registered medical practitioner, retain the appointments he now holds, if the Medical Act Amendment Bill passes?"

*** As a registered medical practitioner, under the new Act, all the privileges he at present enjoys will be preserved.

TUBERCULAR MENINGITIS.

SIR,—Having lost three out of four of my children from tubercular meningitis, I read Dr. Bristowe's excellent paper with a melancholy interest. The first two (boys) died at the age of one year; the history of the commencement of the disease in the second boy being traced to his having been thrown out of his perambulator by a careless nurse, only three weeks before his death, but whether this accident had anything to do with developing or aggravating the disease, was a question neither I nor my medical brethren could decide. The third case occurred in my youngest daughter, who was attacked with the disease when she was two years and three months old. In all the cases, the usual train of symptoms existed, except in the one which was preceded by [illegible], in this, diagnosis was difficult in the early stage. The ordinary treatment was adopted, without any benefit. The mother of these children died of phthisis pulmonalis nearly three years ago. My chief anxiety now is to save my only remaining child, a daughter of nearly ten years old. She is not strong, cannot bear much fatigue, nervous, very excitable, exceedingly quick, intelligent, and tall for her age. Can the disease referred to be prevented? if so, by what means? Little or nothing has been written upon the subject. Are gymnastics injurious in children who have a tendency to it? Of course, I am aware of the importance of attending to the general health. If Dr. Bristowe would kindly give a few hints as to any special form of preventative treatment, I am sure he would be conferring a great boon [illegible] others.

Dr. West states, most emphatically, tubercular meningitis cannot be cured. Having the charge of large industrial schools, I am brought in contact with the disease frequently, but cannot recall even one case where treatment was of the slightest use.—I remain, yours faithfully, A MEMBER.

FLUSHING OF THE FACE.

SIR,—Can any of your readers suggest a plan of treatment that may be of use in the following case?

A gentleman, aged about 50, engaged in active business, enjoying excellent health, and free from organic and, as far as I can judge, functional disease, consulted me some time since for flushing of the face, which had become a source of much distress and annoyance to him. He tells me that frequently, in the pur[illegible] the slightest cause, flushes [illegible] his face and neck. Moderately active exercise causes him to perspire profusely. Believing the [illegible] patient, [illegible] travelled widely, and mixed freely in society. He has taken without benefit a course of [illegible]—I am, sir, yours truly, MEMBER.

THE [illegible] LIGHT.

SIR,—[illegible]

JUNIOR MEMBER.

MEDICAL TITLES AND DEGREES.

SIR,—[illegible]

[illegible]

SIR,—[illegible] the year 1870. I have before me a copy of the opinion of counsel, given at the request of the London College of Physicians, and dated, Lincoln's Inn, February 25th, 1870, which reads as follows.

"We are clearly of opinion that the licentiates of the Royal College of Physicians who have obtained their licence to practise physic subsequently to December 22nd, 1860, are entitled to call themselves Physicians, and to hold appointments as such under 21 and 22 Vict. C. 90, S. 36, if duly registered as licentiates of the College, according to S. 27, and Schedule D of the same Act. Roundell Palmer (now Lord Selborne). George Denman (now Justice Denman)."

I may add that I was indebted to the courtesy of Dr. Pitman for the foregoing copy of counsel's opinion in reply to a letter I addressed to him on the subject in the year 1875.—Yours faithfully, JOHN MARSHALL, L.R.C.P.Lond.

Dover.

P.S. The 21st and 22nd Victoria, [illegible] the "Medical Act" of 1858.

SIR,—I see in the JOURNAL of May 17th, that an effort is being made to induce the University of Durham to act with more liberality towards the profession. I [illegible]. Our universities are too narrow-minded and too self-important, as yet, to listen to reason. Would those gentlemen who wish to see British medical men placed in a position not inferior to their foreign brethren, join with me in impressing on their parliamentary representatives, the desirability of adding to the "Medical Bill" an addition such as this?

"On and after the passing of this Act it shall be lawful for evey legally qualified physician and surgeon, being a diplomate in medicine of one of the Royal Colleges of Physicians, or of the King and Queen's College of Physicians of Ireland, and in surgery of one of the Royal Colleges (England, Ireland, or Edinburgh), to take and use the title of Doctor of Medicine."

It is in the power of the profession to obtain this, and if they will impress this wish strongly on their several M.P.'s, they will no doubt settle the long threshed [illegible].—I am, sir, yours, etc., WILLIAM DONOVAN.

Wellow, Romsey.

THE MEDICAL ACTS AMENDMENT BILL AND THE TITLE OF DOCTOR.

SIR,—Under Clause 27, it is stated that any person using a title which is by this Act not permitted to be entered on the *Register*, will be liable to a penalty not exceeding £20. Now, the title of Doctor is freely used by many of those who have no further claim to it than the possession of the L.R.C.P., and they cannot place this title on the *Register*; therefore, they will be liable to the penalty.

Saving Clause 69 states that "This Act shall not make illegal the use by any person, after the passing thereof, of any medical title which he was actually using and was entitled to use at the date of the passing of this Act." By this clause, it seems that all those who are thus using the title of Doctor will have it undoubtedly conferred legally upon them, unless some other clause be inserted to prevent this use of the title.

In the late proceedings by the Liverpool Medical Defence Association, it will be observed that the defendant was prosecuted for using the title of Doctor; this, it was contended by Mr. Segar, prosecuting counsel, was clearly a representation that the defendant was either a physician or a doctor of medicine. Now, this case seems to give a legal expression to the fact that a physician is entitled to the distinction of Doctor.

I have written these few lines, hoping that they will call attention to the above facts, in time to have a clause inserted either to prevent or clearly establish the right.—I am, yours truly, M.R.C.S.

A CAUTION.

SIR,—I wish to further caution your readers against the man who was going about last week [illegible] under the name of Dr. M[illegible], as he called upon me last Monday morning with the usual pitiful tale, when I told him that his description was appearing in the medical journals, and consequently the game would not answer any longer, also that if there had been any specific charge made against him, I should have had him locked up. Upon hearing this he very speedily took himself off, though he will most probably be heard of under a different name further south, as he told me that he was going to walk to Derby.

Hoping this may be the means of putting others on their guard. I remain, yours truly, H. B. FLETCHER.

The Grange, Dronfield, near Sheffield.

MEDICAL SOCIETY OF LONDON. [illegible]

SIR,—A year or two ago there was in the "Answers to Correspondents," [illegible] of the Society, and to the cocked hat worn at the meetings by the president. Can any of your readers [illegible]?—Yours faithfully, A [illegible].

ROYAL MEDICAL BENEVOLENT COLLEGE.

SIR,—In reply to Dr. Winslow's letter of the 17th instant; I wish, as a subscriber, [illegible] to express my humble opinion, that the term "Benevolent" is rather a recommendation than otherwise.

As to the eleemosynary nature of the establishment having any subsequent ill [illegible]—I am, sir, yours [illegible] A SUBSCRIBER.

A MEMBER [illegible]

THE [illegible]

[illegible]

[illegible]

A[illegible]

SIR,—[illegible]

1. The mode of preparation and formula for administration.
2. The quantity, (*a*) for adults, (*b*) for children.
3. Its actions and effects. As an emetic is it stimulating or depressing?
4. Under what conditions is it counter-indicated.
5. Can it be used with safety for the production of emesis in young children?

I am, sir, yours faithfully, A MEMBER.

1. The solution employed is a one in fifty solution of the hydrochlorate of apomorphia in water. It is not impaired by keeping, and the change in colour is of no importance.

2. The dose for an adult is five minims of the above solution, given hypodermically. For children, a proportionately smaller dose must be given, according to the age of the patient.

3. It rapidly evacuates the stomach and, as a rule, produces very little depression.

MR. WM. HICKMAN, F.R.C.S.Eng., has withdrawn his name from the Association of Members of the Royal College of Surgeons of England, which he joined under the impression that other Fellows of the College had consented to act on it, and that the Association would be representative of the Fellows and Members generally.

MEDICAL MEN AND LIFE-ASSURANCE.

SIR,—Some years ago, I received a letter from the secretary of what is, I believe, a sound life-assurance company, requesting me to examine Mrs. ——, who would call upon me at any time I might appoint. She accordingly called, and brought a form to be filled up, concerning which I can only remember that it struck me as bearing a very remarkable resemblance to certain clinical note-books in vogue in my student-days, in which every possible thing that could be put down was entered in a separate column. There were queries concerning lungs, liver, uterus, urine, general appearance, etc. The lady asked me to fill it up and sign it forthwith; and, on my explaining to her that I never signed certificates of that sort without proper examination, she told me that she had never been examined before; that this was a proposal for a further insurance; and, waxing more persistent, not to say abusive, declared that she was not going to submit to any stethoscopic examination; and that, if I did not sign, someone else would, so there was no use in making a fuss about it. I then told her that, if she chose to submit to the stethoscopic examination, I would report as to that, and that only, otherwise I should have nothing whatever to do with the business. Thereupon she left in high dudgeon. I wrote to the secretary, stating what had passed, and received a polite reply, regretting the trouble I had been put to, etc., and informing me that her proposal had been accepted after examination by ——. I wonder if the lady changed her mind in the meantime, or if she really did pass a medical examination; or if my letter is carefully kept, to be brought up by-and-bye when the policy falls due, as a reason for not paying it. But the whole thing was an utter absurdity from beginning to end; and I cannot imagine how anyone could fill up conscientiously such a string of absurd queries. How could a medical man, an utter stranger, certify that there was no albumen in Mrs. ——'s urine? Knowing it to contain albumen, she might easily substitute her husband's, or her maid's, or her child's. To have performed the examination thoroughly as laid down, stethoscope and speculum, not to speak of microscope and chemical analysis, must have been called into requisition. Of course a larger fee than a guinea would have been objected to.—Yours faithfully, M.D.

SIR,—Allow me to strongly protest against the answer given in the JOURNAL of April 16th, to your correspondent "G.S.," even though said answer be given by an "eminent authority."

Till a week or two ago, I was medical referee in this town and district for the Liverpool Victoria Legal Friendly Society. Our arrangement was, that the minimum fee was to be four shillings, but the directors now wish even those insuring for small amounts to be previously examined; and I was expected to take these cases at one shilling a head. I, of course, declined. Understand that it is not usually a case of examining the candidates at one's surgery, but, on the contrary, they have to be sought out at their own homes all over the town and suburbs, and that, too, generally in the evening, when one ought to be in the consulting-room, because they are at their work in the mills and workshops all day.

If this examination be of such trifling import in the eyes of the company, that they only value it at a shilling or half-a-crown, why trouble about it at all? Why not accept the signed declaration of the candidate that he is, and has been for so many years, in good health; and perhaps, in addition, get it signed by an acquaintance? If, however, the company go in for a luxury, they should be prepared to pay for it. Now, I consider that 2s. 6d. might be accepted in cases of insurance for small amounts, if the candidates were brought to the examiner during surgery hours; but when he (the examiner) has to go after them, 4s. will not, I think, be considered by any means a too liberal fee.

I may mention that the Liverpool company above alluded to now require the surgeon to witness the candidate's signature, thus shielding themselves behind the doctor from the chances of personation. Thus is the willing horse worked to death, and thus is it demonstrated that the more cheap labour we give the public, the more will they endeavour to extort from us.—I am sir, yours, etc.,

Preston. J. J. BYRNE.

SIR,—Referring to the letter signed "G. S." in your JOURNAL of the 26th April, while thanking you for inserting the remarks thereupon of the authority to whom you submitted it, permit me to say that the proposal to pay a fee of half-a-crown for examination for such policies as those to which your correspondent alludes, has not originated with this company. We have followed the rules of other companies in the matter. Out of some hundreds of members of the medical profession, with whom we have communicated as to their willingness to undertake the duty, in only a very few instances has there been any reluctance shown or objection raised. I enclose one of each of our medical examination forms, from which you will see that we are not asking for as much from our examiners for these small policies as for the ordinary assurances for £100 and upwards.—I remain, yours truly, W. H. GREENING.

Managing Director of the Blue Ribbon Life, Accident,
Mutual and Industrial Insurance Company, Limited.

TRAUMATIC IDIOCY.

T. J. asks what can be done for a child, five years old, who was severely injured through a fall at birth by striking her forehead between her eyes against the sharp edge of a piece of furniture. A small quantity of blood and matter flowed through her nostrils for nearly a month after the accident. She has not been unwell since. She is big for her age, understands all that is said to her, but speaks only a few words; is full of mischief requiring someone always in charge of her. She cannot be taught to be cleanly; in fact, is quite a little animal in this respect. Had this accident not occurred, T. J. believes she would be as well as her two brothers and two sisters are. If nothing can be done to cure her, is there any institution for children to which she can be sent?

*** The case is very interesting from a pathological point of view, as probably some damage was inflicted on the frontal convolutions, which has arrested mental development. Education by persons skilled in instructing children afflicted with the slighter degrees of idiocy is the only measure that can be adopted. It ought to be possible to obtain admission for her into an asylum for idiots.

TREATMENT OF CARIES OF THE SPINE.

SIR,—Referring to Dr. Neale's note on this subject in the JOURNAL of May 10th, I beg to inform him that he will find the fullest information, both as to Mr. Davy's, Dr. Sayre's, and Mr. Walker's methods of treatment in the above disease, and in curvatures of the spine generally, in an essay recently published by Dr. H. Macnaughton Jones (J. and A. Churchill) on *Spinal Curvatures*. The subject is therein most clearly and ably treated, and numerous illustrative cases given.—I am, sir, yours truly, P. KEELAN, M.D., F.R.C.S.I.

Clevedale, Warwick.

THE REGULATIONS OF THE UNIVERSITY OF DURHAM.

SIR,—The M.D. of the University of Durham is a respected English degree, notwithstanding an occasional expression of "sour grapes." The anxious war on the subject at present is a test of esteem.

The conditions for the practitioner's degree of M.D. are held to be severe by those who have passed, and the prospectus is not considered otherwise by those who seek to obtain it. Objection is taken to the limit of age, but it seems the Senate has wisely taken a centre; forty being about the midway in the extremes of active practice, viz., twenty-five and fifty-five respectively.

I can understand the conservatism of the youthful graduate opposing any concession, it is the essence of self to do so, but if character and ability are the characteristics of a community, then the Durham measure is at least a tentative appreciation of these, and its act is a premium on mental culture and integrity, possible to the hard worker, who has breasted respectably the trials of fifteen years' practice, and in crediting this to the practitioner as equivalent to the M.B., from which he proceeds to M.D., whilst it is an act of grace, it is demanding a guarantee of dignity and worth, and the practitioner here gives a pledge of status, a possession beyond price, and of which the youthful graduate is not possessed.

Durham has done a gracious act in admitting to this practitioner's degree; it would be well if the sister universities would recognise this, and I venture to predict they will, as now the university recognises humanity in its youth only, it is blank, sterile and forbidden to mature manhood. Why should it be so? The option of taking an university degree in mid-life will be regarded as a bright spot in life to work and look for. We claim, therefore, full dignity for the practitioner's degree of M.D.

The desideratum of residence seems to be at full premium in the argument, seeing that graduates of the University of London do pretty well without residence.

Hoping to take the M.D. degree, we trust that the petition for in any way lowering or altering the standard, and thus lessening its value, will not be entertained, nor the petition of the younger graduates, asking the Senate to take a retrograde step, to inflict a great wrong, and annul itself by suppressing the practitioner's degree.—Yours truly, JUSTITIA.

SIR,—As a graduate in medicine of this University who has kept his terms and gone through all the extra work necessary for this degree, I have read with interest the recent correspondence in this JOURNAL on the regulations relating to the practitioner's degree.

It is high time, before any alterations are made, as those proposed, that the University should know the feeling which I am certain exists, without any exception, in the heart of every graduate of the University. I therefore read with pleasure the letter from "A Graduate in Medicine" in last week's JOURNAL, and I beg to say that on every point I emphatically uphold what he says, and more than that, I know his letter would be most cordially supported by every one of us. The real facts of the case are these, that we, as graduates who have kept our extra terms and passed through the extra curriculum, think it unjust that men at any time of their life can go up and obtain so easily what we have had to work so hard for, and that it would be for the *prestige* of the University if such an easy admittance to the degree of M.D. were abolished. Such a memorial would be signed, I feel certain, by every graduate of this "respected English University."—Yours truly, M.B.Durham, M.R.C.S.Eng.

FEEDING OF INFANTS.

SIR,—I have read the letters of Messrs. Lloyd and Davies on the above subject with much interest, and I quite agree with them that the boat-bottle is the safest for feeding purposes.

Wherever it is impossible for the mother to nurse her infant, I recommend this bottle, as it is very easily kept clean. In my opinion one of the great faults in dry nursing is giving the infant its food too strong, and here I must beg to disagree with Dr. Davies' valuable letter, not as to the kind of food, but its strength. He recommends two parts of milk to one of water. Surely this is too strong for a newly born babe. Again, with regard to condensed milk, he recommends it to be adulterated with only five times its bulk of warm water, and given to the extent of "one tin a day." I think there must be some error here, as an infant never ought to consume a tin of condensed milk in twenty-four hours. When the mother is unable to nurse her child, I recommend one cow's milk, well adulterated at first (1 to 3). If this agrees with the child, I have it gradually strengthened, so that when the child is six months' old it is getting two parts of milk to one of water.

With regard to condensed milk, I order half a teaspoonful to half a gill of water, and gradually increased to a teaspoonful. This is the strength I have ordered for some years, and the healthy appearance of the children convinces me that milk mixed in the above proportions is strong enough for the first few months.

In a controversy last year on the feeding of infants, I strongly recommended the unsweetened condensed milk, where the cow's milk was not suitable. Sugar of milk ought always to be used for sweetening purposes, and I quite agree with Dr. Davies, that a little soda should be added to the cow's milk, not only to preserve it, but to correct acidity. Infants, like other individuals, ought to be fed (when awake) at fixed periods. At first they ought to be nursed every two hours.—Yours truly, W. J. BEATTY, L.R.C.P., etc.

Stockton-on-Tees.

THE GILBERT SCOTT INQUISITION.

SIR,—I quote from your leading article on April 19th the following remarks upon the above case.

"It was given in evidence that Bethlem was selected for Mr. Scott's care and treatment because a larger proportion of patients are cured in that institution than in others.

"Alienist, in his letter in your issue of May 3rd, commenting thereon, very properly points out that, if this be so, it is because Bethlem Hospital admits to its wards curable cases almost wholly, whereas other asylums and hospitals for the insane receive incurable as well as curable cases. That the proportion of cures in curable cases is at least as large in other asylums and hospitals, I am sure no one would more readily admit than the distinguished physician who at present superintends Bethlem Hospital.

It seems a pity, and I notice it with regret, that an able writer, and one apparently so well cognisant of the facts as the contributor of the article in question, should have thought it necessary to make an indirect attack, and to cast a slur, upon members of the medical profession and upon certain establishments for the care and treatment of the insane which hold a time-honoured and useful place among the institutions of the country, which supply an acknowledged want, and the value of which is so very fully recognised by those requiring skilled care and treatment for their insane relatives, with some approach to domestic surroundings and comfort similar to those to which they have been accustomed.

His words immediately following the paragraph already quoted, to which exception is taken, are these, "and because it might have been added that no official or other person at Bethlem has the slightest pecuniary interest in the detention of a patient, but that every one's interest is engaged in promoting recovery and discharge." This, of course, implies that there are officials or persons in other institutions who are so lost to all sense of professional or common honour and honesty, that they will endeavour to retard the recovery of patients committed to their charge, or who will detain them after they are cured for their own pecuniary gain.

If this be true of asylum-physicians, the same imputation may, with equal truth, be applied to any physician who undertakes the medical care of a patient in private practice, for he has [illegible] a pecuniary interest in the detention of his patient on the sick-list as long as possible; he knows that, when his patient recovers, his visits and his fees cease. But suppose that any degraded and notoriously dishonest member of the profession could be found willing to combine with his degradation the impolicy of pursuing such a course, it would not be difficult to foretell the result of his efforts. The flimsy designs and excuses by which alone such a system could be carried out would soon be apparent to all interested, and certain well merited dismissal and loss of patients would ensue.

The writer of the article, so well informed as to Mr. Gilbert Scott's case in other respects, might have gone on to state what was also in evidence, viz., that, after being under care at Bethlem Hospital, Mr. Scott was, by his own desire and that of his friends, placed under care in a private asylum; that he was happy, contented, and derived very great benefit from his residence there, is also in evidence; and Mr. Justice Denman remarked, in his most able and painstaking summing-up of the case, that, while there, the letters written by Mr. Scott appeared to indicate that some improvement was taking place, that he improved mentally and bodily, "and, had he remained there a reasonable time, probably subsequent events would have assumed a different character."

Medical superintendents of lunatic hospitals and the other officials connected with them are, no doubt, salaried as a rule, and have no direct interest in the patients received under care and treatment; but every one of those officials who has his own and the welfare of his institution at heart, and the desire of standing well with his governing body, wishes as much as any proprietor of a private asylum can possibly do to see his institution prosper, and prosperity can only be attained by [illegible] keeping up the number of patients who are able to contribute largely to its funds. Although the officers have no direct pecuniary or personal interest in the patients, it will be admitted that so-called prosperity and salary very often keep pace, and go hand in hand.

It would prove an interesting subject of inquiry, what use is made of the surplus funds of several lunatic hospitals which are very flourishing; it is often remarked that these hospitals have in many instances departed wholly from the objects for which they were originally instituted, that of charities for the insane, and that few patients are received into them at low or moderate rates of board; instead of performing this charitable and useful work, the profits appear too often to be expended upon accommodation calculated to attract the wealthy classes, who are in no strait for suitable asylum care and treatment elsewhere.—I am, sir, yours faithfully,

ONE, TWENTY YEARS MEDICAL OFFICER AND SUPERINTENDENT OF PUBLIC ASYLUMS.

THE BRUSSELS DEGREE.

SIR,—As one of the few fortunate candidates who obtained the above degree at the last examination, I hasten to give "M.D." and those who are interested the information desired. In the first place, I must distinctly state that the examination is [illegible], and I must confess [illegible] before the examination took place, and when [illegible] candidates [illegible] presented themselves [illegible] only [illegible] satisfying the examiners, you will infer that the requirements are not sufficiently appreciated. The [illegible] examination in November [illegible] [illegible] Brussels [illegible] [illegible] who address him at the University of Brussels. I wish it to be distinctly understood that I do not [illegible] but I wish emphatically to [illegible] [illegible] the rejected candidates [illegible], in fact, they [illegible] had they known how difficult an examination it was, they would not have come without being thoroughly prepared, and I am certain the same fate [illegible] any other candidate who will risk presenting himself without being thoroughly worked up both in theoretical and in practical work.—I am, etc.,

M.D. BRUXELLES.

HOUR-GLASS CONTRACTION, AND THE TREATMENT OF THE THIRD STAGE OF LABOUR.

SIR,—I should have thought that my explanatory letter in the BRITISH MEDICAL JOURNAL of April 5th (page 702) would have satisfied any ordinary mind; but apparently Mr. J. Robertson Day's is of such vast extent, that it cannot comprehend simple facts. Once and for all, then, let me say that, in cases of retained placenta, neither do I always, nor [illegible] I practise, forcible extraction of the placenta by pulling at the funis [illegible]. I have yet to learn that such a proceeding would necessarily cause spasmodic (or "hour-glass") contraction of the uterus. A [illegible] thing would happen; the funis would [illegible] asunder, and the placenta remain [illegible] a very serious thing might in some instances take place, viz., inversion of the uterus.

Mr. Day is in fact arguing on wrong premises altogether; but the words in my communication of March 1st, "slight traction of the cord," seem to have acted on his nerves to a remarkable extent! He likewise seems to think much of "astonishing junior students," and of "not soiling his fingers." The first is perhaps not a very difficult thing to do, but the latter is a thing of which the practitioner ought not to be too much afraid. He is very apt in his quotations, and evidently possesses a good amount of knowledge; but let me remind him that in midwifery practice especially is it true that [illegible]. Now, to my mind, after the birth of the child, *cœteris paribus*, the first two things to do are: 1, to see whether the uterus is contracted or not; 2, to pass a finger into the vagina to see if you can feel the presence of the [illegible] placenta. I would call Mr. Day's attention to the fact that many so-called cases of retained placenta are in reality cases of detached placenta, the placenta lying in the upper part of the vagina; and, if these cases be left to nature, the placenta may remain several hours before the vagina has regained sufficient contractility to expel it."

I have myself been repeatedly called to such cases by midwives and others—"the after-birth had not come away;" and I have found, on examination *per vaginam*, having first satisfied myself that the uterus was contracted, the placenta lying as above described, and have easily extracted it. Now, in cases of this sort, no amount of grasping or kneading the fundus of the uterus would do one atom of good; on the contrary, it would cause unnecessary pain and annoyance to the patient; the rational treatment being (to quote Swayne's *Obstetric Aphorisms*, fourth edition, page 27), "to pass the fore and middle fingers of the left hand up to the insertion of the cord, and to use them as a pulley, with *steady traction on the cord* (the italics are my own) with the right hand, first in the direction of the inlet, and then of the outlet of the pelvis." At the same time, I invariably tell the patient to blow on the back of her hand, and thus cause strong expiratory and inspiratory efforts, which greatly aid in the extrusion of the placenta.

Then, again, the placenta may be in the vagina, and the uterus still remain dilated, as sometimes happens in consequence of the cavity of that organ becoming filled with large clots of blood; in such a case, it is manifest that the sooner the placenta is extracted the better, and the clots of blood cleared out.

In conclusion, I would merely say that each and every case of midwifery requires to be treated on its own merits, and it is experience alone which will enable one to do this.—Yours faithfully, W. L'HEUREUX BLENKARNE.

Buckingham, May 1[illegible]th, 1884.

CHLOROFORM NARCOSIS DURING SLEEP.

SIR,—Some years ago I was consulted by the parents of an excessively nervous girl, 7 years of age, who was suffering from [illegible] and double convergent squint. The agitation of the child and consequent distress of the parents at the idea of any surgical interference were so great, that I thought it would be better to operate during sleep; and, after dismissing the patient with some reassuring remarks, arranged that this should be done the same night. Accordingly, about ten o'clock, when the child was fast asleep, I administered chloroform without disturbing her, and performed the operation on both eyes, replacing her in bed while still insensible. The anæsthetic sleep gradually merged into the natural sleep, which had never been broken; there was no vomiting, and the child did not wake until the following morning at the usual hour. There was no pain; and her alarm on finding that her eyeballs were bloodshot when looking in the glass, was allayed by suggesting that she had caught cold. She made an excellent recovery. The deformity was quite removed; and she never suspected that she had undergone any operation at all. We all know how readily sleeping persons pass into a state of [illegible] when exposed to escaping coal-gas, carbonic oxide, or carbonic acid; and it is difficult to understand how the inhalation of an atmosphere impregnated with chloroform-vapour should rouse them, when the more pungent fœtid and disagreeable coal-gas fails to do so. I suspect, with you, that Dr. Girdner's patients were roused by the noise, the light, and the forcible application of the anæsthetic; and that, if the bedclothes had been gently saturated with chloroform, without noise or the glare of light, the results would have been the opposite of those recorded in the journal. I may mention that on another occasion my colleague, Mr. Worth, administered chloroform to a patient under similar circumstances, and with a like result.—I am, sir, your obedient servant, CHARLES BELL TAYLOR, M.D., F.R.C.S.E., Surgeon to the Nottingham and Midland Eye Infirmary.

OBSCURE TARSAL INJURY.

SIR,—Will you allow me space to ask the advice of some member as to the following case?

Two months ago, a woman, about forty years of age, called me to see her foot, which she said she had sprained [illegible] [illegible] be very grateful for any enlightenment on the subject.—Yours faithfully,

G.

ANNUAL MEETING.

SIR,—I wish to call attention to the fact that for some years back one of the principal objects of our annual gatherings has been to afford an opportunity to some of the leading members of the profession to hold forth on one or other of their favourite hobbies. A discussion is invited, and the names of a certain number of writers and teachers, all experts, are published, as likely to take part in the debate; whole days are occupied in this palaver, about which the busy practitioner knows little and cares less. Hundreds of associates who have come to read or hear some practical paper on matters of great interest to them and importance to their clients, wait till the time shall arrive for their cases to be called, but they wait in vain; now I would ask, is the object for which our Association exists fulfilled by this line of action? I think not; such large and highly scientific questions as those brought before us last year aphasia and arterial tension—are not fit and proper matters to introduce at our sectional meetings, however suitable they may be, and are, to lay before the meetings of our truly learned societies; theirs are the halls where the voice of science should be heard. I put it to the members of Council as well as the general body, whether this is the case or not—not only are the short useful papers, which have been prepared for the section, passed over, but when consigned to the secretary with, I suppose, a view to their publication in the JOURNAL, they are never more heard of. All the space in the JOURNAL is required for addresses, lectures, and discussions—some of them of little value.

The second point I shall mention is the presidential addresses; why each president of a section should find it necessary to lecture his fellow associates in the way he does, and at the length he does, is incomprehensible. Besides, the addresses are all printed long before they are read at the meeting, and copies of them might be as easily furnished to each member, as to the president, and he could read it at his leisure.

The last point is, that the presidents of sections should rigorously enforce the rule which limits the time which each paper and each speaker shall be allowed to occupy. I see no use in having rules unless they are adhered to. Now, what happens? One of our eminent physicians or surgeons reads a paper which should terminate in twenty minutes, but on he goes for half an hour or three quarters; then follows an equally eminent speaker, he should be allowed ten minutes, but that would never do, so on he goes for twice or thrice as long, telling men, often as experienced as himself, what they have known and practised for ages—after this, one of the smaller brethren's paper comes on, and the secretary of the section very politely says to him, "Dr. or Mr. ——, our time is very limited; I hope your paper won't take long."—Yours, etc,

Harrogate. A. S. MYRTLE, M.D.

A MEDICAL PRACTITIONER (Portsmouth).—The circular you forward is based upon the clauses of the Portsmouth Corporation Act of 1883—a local Act, promoted by the Corporation of Portsmouth, which received the Royal assent last year. It has all the force of Statute Law within the Borough, and clothes the Town Council with the powers which they are now exercising.

FLEAS.

IN reply to "Scratch's" enquiries in the JOURNAL of May 17th, Dr. Cordes, of Geneva, recommends decoction of quassia as a lotion. It is odourless and not irritating. For horses, at least, it has proved very successful.—I. O. advises "Scratch" to try tincture of pyrethrum, either alone or with a little glycerine, this preparation allays the irritation, and acts as a parasiticide.—Dr. M. D. O'Connell has found, in the course of forty-three years of workhouse practice, that a free sprinkling of liquor ammoniæ fortior over the clothes is very efficacious when the practitioner has just come from a place where the vermin abound. Carbonate of ammonia carried in the pocket is a good preventive.

CHLOROFORM AND ETHER.

ALFRED CLARKE.—Chloroform usually produces anæsthesia more rapidly than ether, particularly when no special apparatus is employed, or when the anæsthetic is given by a person not very experienced in the use of either of these compounds. Of course we refer to rapidity of action alone. There remains the highly important question of relative safety.

F. C. W. Any respectable physician is competent to treat the symptoms described, to which an exaggerated importance is obviously attached by our correspondent.

EXAMINATIONS IN SANITARY SCIENCE.

A CANDIDATE asks what text-books are necessary to be read for the examination for the certificate in "sanitary science of any colleges" (the King and Queen's College of Physicians, for example), and would also be glad to know if any book is published which embraces all five subjects of the examination. He would further like to know where he could get instruction in the reading of engineer's plans, sections, and seales.

EDUCATION OF DAUGHTERS OF MEDICAL MEN.

SIR,—The wife of a medical man (who, through chronic illness, is unable to follow his profession) is anxious to know if there be any good schools for daughters of medical men, where they get in by vote and receive their education free; or for the daughters of professional men generally. Any information on the above will be thankfully received by M. F. H.

NUMBNESS OF THE FINGERS.

SIR,—Will any of your readers kindly give an opinion on the following case? I have been, for the last two years, more or less troubled with numbness of the fingers of one or both hands, coming on almost every morning, after having had a good night, during my second sleep and not at any other time.

I believe I am in perfect health, in every respect, having nothing whatever else to trouble me, except a slight sensation, not amounting to pain or tenderness, on the right side of the neck, in the situation of the cervical plexus.

Having tried a variety of internal remedies without effect, I shall feel thankful for an opinion as to the cause, as well as the best means of getting rid of this unpleasant affection.—Yours truly, ENQUIRER.

PRACTICE IN THE COLONIES.

SIR,—In reply to the enquiry of "Colony," in the JOURNAL of May 24th, I beg to recommend Hardwicke's *Medical Education and Practice in all Parts of the World*, for information respecting means of practice in Australia and New Zealand.—Yours truly, MEDICUS.

THOMAS BELL.—The correspondence of only one side is given, and we are adverse to passing judgment except after the facts are argued by both parties.

COMMUNICATIONS, LETTERS, etc., have been received from:

Our Dublin Correspondent; Mr. J. Fletcher Little, Ben Rhydding; Dr. H. Campbell Pope, London; Our Belfast Correspondent; Mr. Shirley Murphy, London; Mr. C. M. Jessop, London; Our Birmingham Correspondent; Mr. F. Vacher, Birkenhead; Mr. T. Murray Robertson, Darlington, Durham; Our Edinburgh Correspondent; Dr. Styrap, Shrewsbury; Dr. Lees, London; Dr. T. F. Pearse, Haslemere; Dr. Packer, Shrewsbury; Dr. Buchanan, Chatham; Mr. Arthur Cooper, London; Dr. L. Phillips, Birmingham; Mr. J. C. Andrew, Manchester; Mr. A. Teevan, London; Dr. E. F. Vardon, Sorrento; Mr. David H. Hadden, Dublin; Mr. Thomas W. Crosse, Norwich; Mr. James McLintock, Marsden; Mr. J. Lloyd Roberts, Denbigh; Dr. Cameron, Dublin; Dr. Poore, London; Mr. J. L. Bushford, Berlin; Dr. R. Wade Savage, London; Mr. J. W. Fry, Wateringbury; Mr. T. M. Stone, London; Mr. Reginald Harrison, Liverpool; Mr. Joseph Smith, Rickmansworth; Mr. E. E. Muriel, Norwich; Dr. F. Simms, London; Dr. G. C. Millar, London; Mr. John Marshall, Dover; Mr. A. D. Stewart, Greenock; Dr. Hack Tuke, London; Dr. Waters, Chester; Dr. W. T. Mullally, Gowran, co. Kilkenny; Mr. J. F. Herring, Builth, South Wales; Dr. F. de Havilland Hall, London; The Secretary of the Collective Investigation Committee; Mr. E. Trimmer, London; Our Glasgow Correspondent; Mr. J. C. Grinling, Burton-on-Trent; Dr. Samuel West, London; Mr. J. Gibson, West Vale, near Halifax; Dr. Graham, Holmwood, Weybridge; Mr. Paul Swain, Plymouth; Mr. Horace Sworder, Luton; Dr. Willoughby, London; The Secretary of St. John's Hospital for Diseases of the Skin; Mr. M. G. Biggs, London; Mr. Alex. Cook, Cannock; Dr. G. B. Fowler, New York; M.D.; Dr. H. Sauer, Kimberley, South Africa; The Secretary of the Hospitals Association, London; Dr. C. J. Hare, London; Mr. C. T. Kingzett, London; Mr. J. Moulding, Liverpool; Mr. W. Ruck, London; Mr. J. W. Mason, Hull; Cato; Our Manchester Correspondent; Mr. George Rendle, London; Mr. W. J. Beatty, Stockton-on-Tees; Dr. S. R. Macphail, Carlisle; Mr. F. W. Porter, London; Mr. F. C. White, Bath; Justitia; Mr. Mellin, London; Dr. R. E. Carrington, London; Mr. R. Jennings, Bruton; Mr. W. J. Robins, Chesterfield; Messrs. Thomas Cook and Son, London; Dr. T. More Madden, Dublin; Dr. Furnell, Madras; Mr. Thomas Bell, Uppingham; Mr. T. W. C. Jones, London; Dr. Ireland, Prestonpans; The Secretary of the National Dental Hospital; Dr. M. D. O'Connell, Kilmallock; The Secretary of the Local Government Board; Mr. W. H. Bennett, Omagh; Dr. John Thompson, Bideford; Mr. M. Hoff, London; Mr. Warwick C. Steele, Ealing; Mr. H. J. Hibberd, Ipswich; Dr. MacDowel Cosgrave, Dublin; Dr. W. H. Tayler, London; Mr. G. F. J. Worthington, Sidcup; Mr. Forster, Darlington; Mr. F. H. Weekes, York; Mr. Wyndham Dunstan, London; Dr. A. D. Macdonald, Liverpool; Dr. Rundle, Southsea; Mr. H. P. Potter, London; Dr. Cordes, Geneva; Our Paris Correspondent; Our Aberdeen Correspondent; Mr. R. J. W. Orton, Newcastle-under-Lyme; Mr. N. W. Allt, London; Mrs. E. A. Williams, Manchester; Mr. H. Hemsted, Whitchurch; Mr. James Wagstaff, London; Dr. Alfred Tucker Wise, London, etc.

BOOKS, ETC., RECEIVED.

Surgical Emergencies. By Dr. L. Von Lesser. Translated and Revised by F. A. Lyons, A.M., M.D. London and New York: Bermingham and Co. 1883.

The Hip and Its Diseases. By F. P. Gibney, A.M., M.D. London and New York: Bermingham and Co. 1883.

A Manual of Medical Jurisprudence. By A. M. L. Hamilton, M.D. London and New York: Bermingham and Co. 1883.

Excessive Venery, Masturbation, and Continence. By J. W. Howe, M.D. London and New York: Bermingham and Co. 1883.

Manual of Pathological Anatomy. By Cornil and Ranvier. Second Edition. Re-Edited, Enlarged and Translated, with approval of the Authors, by A. M. Hart. London: Smith, Elder, and Co. 1884.

Eczema and Its Management; A Practical Treatise, Based on the Study of Three Thousand Cases of the Disease. By L. Duncan Bulkley. London: G. P. Putnam's Sons, and J. and A. Churchill. 1884.

The Treatment of Backward Displacements of the Uterus and of Prolapsus Uteri, by the New Method of Shortening the Round Ligaments. By W. Alexander, M.D. London: J. and A. Churchill. 1884.

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REMARKS
ON
FIVE CASES OF AMPUTATION OF THE HIP-JOINT.

Read before the Edinburgh Medico-Chirurgical Society.

By RODERICK MACLAREN, M.D.,
Senior Surgeon to the Cumberland Infirmary.

FOUR of the five cases which I desire to bring under the notice of the Society have been already published; three in the *Edinburgh Medical Journal*, and one in the BRITISH MEDICAL JOURNAL; so that I will only detain you with a very short *résume* of these. The fifth case is as yet unpublished, and of it I may have a little more to say. The cases were all treated in the Cumberland Infirmary.

CASE I.—N. R., male, aged 10, was admitted April 2nd, 1880. The boy had been ill for three weeks. His first symptoms were acute pains in his joints, and fever. The pains gradually became localised in the left lower limb.

On admission, the whole of the left lower limb was swollen, white, and tense. Touching or moving it caused acute agony. In a fortnight an abscess opened at the back and also at the inner side of the thigh, and a probe reached the upper part of the femur, bare to a considerable extent. The boy's parents decidedly declined to sanction any operation. His condition in every way became steadily worse.

Seven weeks after his admission, his parents asked me to do what I thought best; and as there seemed some prospect of recovery if the cause of the discharge of pus were removed, although the boy's general condition was most unfavourable for operation, I amputated at the hip-joint. For a week all went well; the wound healed except where the drainage-tube came out, the boy gained in flesh, and felt so well that he wished to get up, but from this time he retroceded; his appetite failed, he complained of pain in the left iliac region, and pus collected in the iliac fossa. Three weeks after the operation, an abscess burst just internally to the left anterior superior spine of the ilium. Two days afterwards I explored the cavity, and found the ilium extensively bare. The boy's general condition became so reduced that the skin ulcerated over his other anterior superior iliac spine; and five days after the opening of the abscess, and twenty-six after the operation, he died from exhaustion.

CASE II.—A. P., male, aged 17, was admitted September 24th, 1879. He had been ill for eight months, and had a sinus in the lower part of the right thigh. Three days after admission the boy was chloroformed, and a sequestrum, amounting to about a third of the right femur, was removed by an incision at the inner side of the thigh, a little above the condyle. For a few weeks the patient improved, and the cavity from which the bone had been removed became less. In the middle of October he had an attack of erysipelas, lasting nearly a fortnight, and soon after this improvement ceased. In January he was again chloroformed, the cavity cleared out, and a counter opening made at the outer side. For a time improvement followed, then a period of no progress, and then occasional attacks of pyrexia. In the end of February he was again chloroformed, all soft bone gouged away, and most effective drainage established by two large openings, one on each side of the limb. Again improvement occurred for a time; then he had a recurrence of the attacks of pyrexia, with deep swelling of the whole limb, profuse discharge, and general exhaustion. Towards the end of May his condition was evidently becoming critical; he was much emaciated, and suffered much pain; and there was reason to believe that subperiosteal suppuration was progressing. On May 25th the limb was removed. He made a good recovery, and two and a half months after the operation he was discharged, with the wound healed, except a small superficial sore. He is now well. The femur, when examined, was found hollowed out at the lower end into a large cavity, and there were some small abscesses in the cancellous tissue. The whole shaft close up to the trochanters was very much thickened by deposit of new bone, in which also were several little pockets of pus.

CASE III.—J. L., male, aged 20, was admitted June 9th, 1880. He had been ill for six years with disease of the left hip-joint, and during the last four years various abscesses had formed and burst. In 1878-79 he was in the Cumberland Infirmary for five months, and was treated by extension and drainage, without any improvement. He declined operation, and was discharged in March 1879. For a time after this he improved in health, was able to get out of bed, and even occasionally out of the house; but when winter returned he was reduced to a condition of extreme weakness. At last he made up his mind to run the risk of having the limb removed. When admitted to the Infirmary he was bloodless, and emaciated. Four sinuses discharged in the neighbourhood of the hip, and the head of the femur was ascertained to be bare. The limb was amputated on June 14th. The cartilage and a good deal of carious bone were removed from the acetabulum. The most of the wound healed well, but profuse discharge continued from two of the old sinuses and from the inner angle of the incisions. On October 21st I removed a considerable portion of the pelvis, which was bare, soft, and semi-detached. It comprised the whole tuberosity of the ischium, the ramus, and a good deal of bone from the neighbourhood of the acetabulum. On February 23rd, 1881, he was discharged, so far improved that he could get about the ward. He has since made steady though slow progress to recovery, and is now well, and works regularly at his trade as a watchmaker.

CASE IV.—T. B., male, aged 6, admitted June 21st, 1882. He had been ill for four months, and an examination showed the femur to be dead throughout the whole extent of its shaft, the lower epiphysis alone remaining healthy. There was a large discharge of pus from the thigh, and the boy was exceedingly thin. Five days after admission, I amputated the limb at the hip-joint. He made a rapid recovery. The stump was entirely healed in about five weeks. In another week, he was put on crutches. Bone formed in the stump, which he was able to move with some power, flexing, extending, adducting, and abducting it. He is now in vigorous health.

CASE V.—M. A. S., female, aged 12, was admitted June 20th, 1883. Her history, as recorded in the case-book, was, that, three years before admission, she was walking through a field, and fell into a ditch. She felt nothing amiss at the time; but, a few days afterwards, she became lame, and had pain at the right knee. She walked about for a month, gradually becoming worse, and then began to suffer from pain in the right hip. Six months after the accident, she was admitted to the Cumberland Infirmary, with the signs and symptoms of disease of the hip-joint. She was treated for nine weeks by rest, extension, and the long splint, without any improvement occurring. I then, on May 17th, excised the head of the femur, removing at the same time a good deal of loose and carious bone from the pelvis. The operation was done under spray, and the wound dressed with gauze; but the next day it was found to be smelling badly, and the antiseptic dressings were discontinued. The patient continued to suffer a great deal of pain, and to have a large amount of discharge. She had usually a morning temperature nearly normal, and an evening one of 103°. Seven weeks after the excision, a large surface of the pelvis was found bare, and as much as possible was gouged away. Her condition, however, became steadily worse. Fresh abscesses formed, one of them inside the pelvis. The hectic state remained and she became more and more emaciated. Not the least effort at repair was made. She was so bloodless and feeble that it seemed unjustifiable to submit her to the risk of removal of the limb; and arrangements were made by some kind friends, who had taken an interest in her, to have her admitted into the Home for Incurables—to linger out, it was supposed, the little of life which remained to her with somewhat more comfort than in the wards of a general hospital. She left the infirmary five and a half months after the excision. During her residence in the Home, I had repeated opportunities of seeing her, owing to the courtesy of my friend Dr. Barnes; and her case was frequently under the consideration of the staff of that institution. When she had been there a little while, albumen appeared in her urine, and was present for many months. Her liver enlarged, and diarrhœa appeared. When she had been there for about a year, the albumen began to diminish, and presently disappeared; but the diarrhœa continued, and neither the general nor local condition improved. For some months her state remained with little change, and it was determined to give her such chance of life as an amputation of the limb would afford. She was accordingly readmitted to the Cumberland Infirmary eighteen months after she left it. Her condition was as follows. She was very attenuated and feeble, looking literally like skin and bone—I think the thinnest human being I ever saw. The right leg was from four to five inches shorter than the left. There were large irregular sinuses over the position of the great trochanter. The head of the shaft of the femur could be felt for a couple of inches covered with granulations, and separated from the soft tissues. There was another sinus over Scarpa's triangle, and a third close to the superior spine of the ilium; all of these discharged a large quantity of pus. There were superficial bed-sores over the sacrum. There was no albumen in the urine. The liver was normal in size. The patient was kept in bed for a month, until the bed-sores healed, and then, on July 10th, 1883, I removed

Table of twenty-five cases of Amputation at the Hip-joint by the Furneaux Jordan Method.

Surgeon.	Age	Sex.	Disease.	Date.	Journal.	Result.	Remarks.
Dr. Reeves, Carlisle	6	M	Acute necrosis of femur	1867	Unpublished	Recovery	Now alive and well.
,, ,,	16	M	,, ,,	1876	,,	,,	,, ,,
Mr. Furneaux Jordan, Birmingham	16	M	Necrosis of femur	1879	*Lancet*, March 22, 1879	,,	
,, ,, ,,	19	M	Hip-disease, excision	1879	Unpublished	Death	
,, ,, ,,	17	F	,,	1880	,,	,,	
,, ,, ,,	11	M	,,	1881	,,	Recovery	
Mr. J. F. West, Birmingham	46	F	Epithelioma of stump	1879	*Lancet*, October 4, 1879	,,	
Mr. Beddard, Nottingham	24	M	Hip-disease, excision	1879	Unpublished	,,	
Mr. Littlewood, Nottingham	5	M	,, ,,	1879	,,	,,	
Dr. Marshall, Nottingham	6	M	,, ,,	1879	*Lancet*, January 10, 1880	,,	Died three months after, from visceral disease.
,, ,,	7	F	,, ,,	1879	,, ,, ,,	,,	
,, ,,	2½	M	Hip-disease	1879	BRITISH MEDICAL JOURNAL, October 7, 1882	,,	
,, ,,	5	M	,,	1880	Unpublished	,,	
,, ,,	11	M	,,	1881	,,	Death	
Mr. Pilcher, Boston	12	M	Hip-disease, caries of ilium	1880	,,	Recovery	
Dr. Maclaren, Carlisle	10	M	Acute necrosis of femur	1880	*Edinburgh Medical Journal*, December, 1881	Death	
,, ,,	17	M	Chronic suppurative ostitis of femur	1880	,, ,, ,, ,,	Recovery	Now alive and well.
,, ,,	20	M	Hip-disease	1880	,, ,, ,, ,,	,,	,, ,,
,, ,,	6	M	Acute necrosis of femur	1882	BRITISH MEDICAL JOURNAL, January 27, 1883	,,	,, ,,
,, ,,	12	F	Hip-disease, excision	1883	Unpublished	,,	Has still sinuses going to pelvis.
Mr. Spolforth, Kidderminster	20	M	Hip-disease	1882	*Lancet*, May 6, 1883, by Mr. Jordan Lloyd	,,	
Mr. Jordan Lloyd, Birmingham	10	M	,, excision	1882	,, ,, ,, ,,	,,	Died seven months after, of acute tuberculosis, stump solid.
Mr. Bennett May, Birmingham	5	M	Acute periostitis of femur, osteomyelitis, septicæmia	1882	Unpublished	Death	
,, ,,	13	F	Hip-disease, necrosis of femur and ilium, excision	1883	,,	Recovery	Still has unhealed sinuses.
Dr. Lediard, Carlisle	4	F	Hip-disease, excision	1883	,,	,,	Has one unhealed sinus.

the limb. Since then she has made slow but steady progress to recovery. She can now walk a little on crutches; she sits up most of the day; her diarrhœa has ceased; and she has gained largely in flesh. Sinuses still lead down to her pelvis; but the amount of purulent discharge is not considerable, and I have no doubt she will ultimately get perfectly well.

Her case is of interest in many ways, to which time permits me only to allude. It illustrates the wonderful power which children often have of recovering from most grave conditions. It is probably an instance of recovery, not the only one I have seen, from what used to be considered an absolutely fatal condition, albuminoid degeneration.

My principal object in bringing these five cases before you is to ask your attention to the method of operation, which is that proposed by Mr. Furneaux Jordan. The essential peculiarity of his operation is division of the soft parts low down. Mr. Jordan makes an incision along the femur from above the great trochanter to one third or half way down the bone; he then disarticulates the femur, and finally divides the soft parts of the thigh transversely, at the lower end of the vertical incision. I very much prefer to make a circular incision, somewhat above the middle of the thigh, getting down to the bone in two sweeps of the knife, and then an incision along the femur, clearing it and disarticulating. I believe the operation can be more quickly done in this way, and everything cut is exposed at once, so that the vessels are easily got at if the control of the circulation be at all inefficient. But the exact method of performance is a matter of comparatively small detail, so long as the transverse division of the soft parts is at, or close to, the middle of the thigh.

For controlling hæmorrhage during the operation, in three cases I have used Davy's lever, in one case Lister's abdominal tourniquet, aided by digital pressure on the femoral artery, and in one case digital pressure on the femoral alone. Of these, I much prefer the lever. I daresay you all know it; a small wooden rod to be introduced into the rectum, and placed on either common iliac. Pressure with it easily and absolutely stops the circulation in the vessel. In the cases where I used the lever, two of the limbs were left ones, and the other a right one. In another amputation, a right one, I tried to use it, but quite failed to place it on the right common iliac, and substituted the abdominal tourniquet, as above mentioned. In my last amputation, my patient was so feeble and wasted that I did not venture to risk the introduction of the lever into the rectum, for fear of injury to the bowel, and trusted to digital pressure on the common femoral at the groin; it was not so satisfactory as the lever; there was more loss of blood than I liked, and I had to use great expedition in tying all vessels. There is yet another method of controlling hæmorrhage which is well spoken of by some surgeons; the proposal is that of Mr. Jordan Lloyd to use elastic pressure with a rubber-bandage. He first empties the limb of blood, then takes two yards of Martin's rubber-bandage, doubles it, and passes it between the thighs; he next places a common roller-bandage over the external iliac artery; and then "the ends of the rubber are firmly and steadily drawn by an assistant upwards and outwards, one in front and one behind, to a point above the centre of the iliac crest of the same side." The front part of the band, passing across the compress, occludes the external iliac; the back half prevents bleeding from the branches of the internal iliac. In my last case, I tried a spica of Martin's bandage, but, as it threatened to slip over the tuber ischii, I preferred digital compression. In another case, if there were any difficulty about, or objection to, the use of Davy's lever, I would certainly try Mr. Jordan Lloyd's plan.

After removing the limb, I secure the principal blood-vessels, but do not delay to tie every little bleeding point. I then suture the lower edges of the stump, but not the upper. I next firmly plug the interior with sponges which have been soaked in carbolic lotion, and enclosed in gauze. The object of the gauze is to allow the sponges to be easily removed. They can be slipped out from the inside of it, and then the gauze can be rolled into a wisp, and also withdrawn. If the sponges be put in unprotected, the tissues adhere to them, and the removal is very troublesome. The stump and pelvis are then somewhat firmly bandaged; and I have never had the least trouble from after-hæmorrhage. Generally, on the day after the operation, the patient is chloroformed, and the sponges removed.

My second case was operated on under spray, and dressed with gauze dressings. In the other cases, the stump has either been simply laid on a pad of oakum, or, in addition, covered with a single layer of lint soaked in carbolic oil, and frequently changed. In my last two cases, I had the cavity of the stump quite into the acetabulum packed with lint dipped in carbolised oil, with the object of getting the wound to heal by granulation and contraction from the bottom outwards. With all the cases except the second, it seemed to me that the chances of rendering the wound aseptic were very small, and that I did the best for the patient by adopting a method of treatment which involved little disturbance of the patient or the wound, and which, with the help of frequent washing and syringing with carbolic lotion, prevented any considerable degree of putrefaction.

The stumps have all been good, and comfortable for the one use to which they have been put, that is, to sit upon.

In my fourth case, some reproduction of the femur occurred, giving a movable stump; whether this will be sufficient to allow an artificial leg to be adapted, I am not able to say.

Before stating my reasons for preferring this operation, I will read you a few quotations about the flap-operation.

Cooper's *Surgical Dictionary* traces the history of the operation from the first successful case in 1773. The article commences with the following remark: "The very idea of this formidable operation for a long while checked the hand of the most hardy advocate for the use of the amputating knife, and every mind shuddered at so extensive a mutilation." In 1864, Erichsen had collected forty-two cases for chronic disease, of which twenty-four recovered and eighteen died, while, for injury, of forty-seven cases thirty-five proved fatal.

One of the most recent books on surgery (Bryant) says: "Amputation of the thigh at the hip-joint is a formidable operation, and is only justifiable under desperate conditions, when a limb is irreparably crushed or diseased, and resection of the head of the femur with more or less of its shaft is out of the question. When performed for accident, it is almost always fatal, not 10 per cent. recovering; for disease, however, it is more successful, the risk being about equal, though after resection of the head of the femur which has failed it is somewhat better."

For amputation at the hip-joint on account of accident, the low method will, I conceive, be always inadmissable; no injury is likely to require disarticulation at the hip-joint which does not also destroy the soft parts so high up as to necessitate the flap-amputation.

What are the advantages we may expect from the low operation compared with the ordinary double flap? First, much less shock; less of the body is removed, the nerves and vessels are divided further from the trunk, where they are smaller. Secondly, less hæmorrhage; the vessels divided are all branches of the femorals, and, though the anastomosis of branches of the deep femoral artery with branches of the internal iliac makes it advisable to control the circulation in the common iliac, there are certainly fewer vessels to tie, and these are smaller. Thirdly, the form of the flaps gives better drainage than the old method, in which the posterior flap formed a cup where discharges collected.

I made a comparison of the two operations in the dead body, with these results. A limb can be removed by either, without any hurry, in about three quarters of a minute. The flap-operation takes eleven seconds less than Furneaux Jordan's. The length of the edge of the skin-incisions in the former was twenty-nine inches, in the latter twenty-six inches. The area exposed by the flaps was forty square inches, by the other sixty-four square inches. I have endeavoured to ascertain how far these considerations are borne out by actual experience.

Our Carlisle cases give a result so exceptionally good, that I could not hope that a wider experience would bear it out. Of eight amputations, two by Dr. Reeves, one by Dr. Lediard, and five by myself, in seven the patients are now alive, five thoroughly well and vigorous, two convalescing. I have, therefore, collected all the cases I could find, and have to gratefully acknowledge the courteous way in which my inquiries were answered by all the surgeons to whom I wrote. I have placed them in your hands in the form of a Table. They amount to twenty-five cases with five deaths, or some may choose to consider them six deaths: you will see that I have noted one as dying three months after the operation. But, in computing the mortality of an operation, I think we should, to some extent, separate between deaths due to the distant effects of the disease for which the operation is done, and the deaths which are clearly and immediately due to the surgical interference.

Taking the mortality as I have estimated it, we have a rate of twenty per cent. instead of forty or fifty per cent. This, it must be remembered, is in a first series, while the operation is a tentative one, with the conditions of success imperfectly known, and with the weight of the tradition of a heavy mortality hanging over it, tending to induce delay to the last possible moment. I have little doubt that one fatal case would have lived had the parents agreed to the operation when I proposed it, and possibly they might have done so had I been able to give them an assurance that the chances of success were greater than I felt justified in [illegible]; and I now think that, with some others, the limb might have been removed earlier with advantage. Many of the other cases included in the Table were operated on under most unfavourable conditions. Mr. Bennett May says about his two cases: "No. 1, patient reduced to the lowest ebb by profuse suppuration, acetabulum perforated, pus in the pelvis, amputation, immediate improvement. No. 2. Acute periostitis of the femur (shaft), with osteomyelitis and septicæmia. Operation performed in the face of extreme exhaustion; died in six hours; cause of death independent of any method of operation." Mr. Pilcher sends this note about his case: "Caries of the femur and ilium; sinking with hectic and suppuration through several sinuses. The conditions seemed almost hopeless, but the lad made a splendid recovery."

As experience increases, I believe the ideas of surgeons will become more definite as to the conditions which justify the operation, and there will be a clearer recognition of the circumstances which preclude natural recovery or excision. The important point is to recognise, as early as possible, when a case ceases to be amenable to other treatment, and to amputate before the patient is reduced to the verge of exhaustion. I hold that we should amputate when there is acute necrosis of the head and any considerable portion of the shaft of the femur; when there is extensive disease of the head of the femur, and also of the pelvis; when there is old standing hip-disease, with great exhaustion from long continued discharge; when excision has been done, and has failed; and, lastly, when there is malignant disease of the femur low down. Amputation after excision should, I think, become an infrequent occurrence; and, if the above indications for amputation be accepted, it would. My views on the subject of excision of the hip, I hope to bring before the Society at some future time. At present, I would only say, very briefly, that, in my opinion, for success, few operations require a more careful selection of cases; and that extensive pelvic disease, or much general exhaustion, should be looked upon as distinct contra-indications.

How is it that amputation may succeed in cases where excision would fail? When the femur and pelvis are both much diseased, amputation removes something like half the disease—perhaps more. It avoids the risk of pus collecting in pockets, and infiltrating the muscular planes. The after-treatment is much less painful, and it directs a larger blood-supply, and consequently, a greater power of overcoming disease, to the pelvis and its surroundings.

I have elsewhere stated that my old friend, the late Dr. Reeves of Carlisle, twice removed limbs in this way—first in 1867, and again in 1876; both cases recovered. With the first, he had planned to do an amputation of the thigh; but, finding the bone diseased above, he ran his knife up the femur, and disarticulated. He was so struck with the advantages, that he read an account of the case to our local Society in 1869, and urged the adoption of the low instead of the high operation. His second case he arranged to do by the low method. I cannot, however, claim for him that he introduced this operation into surgery. He did not publish his cases; a short summary only of the first appeared in the report of the meeting, not conveying any distinct idea of its essential features. For anything that I know to the contrary, many another may be in a like position; but, as the adoption of the operation by surgeons dates from Mr. Furneaux Jordan's account of his first case, it is justly associated with his name.

ABSTRACT OF REMARKS

ON

SOME POINTS IN THE ETIOLOGY, SYMPTOMS, AND TREATMENT OF PNEUMONIA.

By J. B. BRADBURY, M.D.,
Physician to Addenbrooke's Hospital, and Linacre Lecturer in Physic, Cambridge.

In opening a discussion on this subject at a meeting of the Cambridgeshire and South Midland Branches, Dr. Bradbury said that Dr. Anningson had pressed him to open a discussion on pneumonia, and, as he (Dr. Bradbury) had recently suffered from this disease, the President thought it would be interesting to hear what could be said on the subject from a patient's as well as from a medical man's point of view. At the outset, Dr. Bradbury wished it to be distinctly understood that he had nothing novel to say on the subject; and, as regarded the etiology, he thought the points upon which information was required were those ably put forward by the Collective Investigation Committee in the memorandum [illegible] He [illegible] wet, either singly or combined, [illegible] of the so-called idiopathic [illegible] rheumatism, typhoid fever, [illegible] At present, he was attending a patient with pneumonia, who, on the very day he was attacked, felt quite well, out of bed, [illegible] bed, and gone to see a sick friend [illegible]. This was clearly a case of pneumonia from a chill. There were other cases, however, in which the cause was by no means so clear. For instance, in February, he himself had an attack of pneumonia, and, lying in bed recovering from his illness, he one day asked himself the question, "Why should he have pneumonia at all; and, having it, why should it not run a natural course?" He had not exposed himself to cold more than he had done on former occasions, although he had, on the day of seizure, walked to the hospital, about two hundred yards, on a cold day, without an overcoat, and had also sat in an undergraduate's room, for a short time, unknowingly, between an open window and the fire. His health at the time of the attack was fairly good. When convalescent from the attack, he noticed on several occasions in the house, especially towards evening, when the doors and windows of his house were shut, a disagreeable smell of sewer-gas. On questioning the servants, he was informed that, for weeks, they had noticed a very bad smell in one of the rooms in the basement of the house. He asked Dr. Anningson to investigate the matter, and he found a considerable leakage of sewer-gas from a drain which was under the house. All the family had, about three months previously, suffered from sore-throats (tonsillitis); and two members of the family had bad eyes (conjunctivitis) during the time he (Dr. Bradbury) was ill with pneumonia. Dr. Anningson thought this all pointed to the sewer-gas being the cause of the pneumonia; and he was disposed to agree with him, especially because, as he would presently point out, the attack of pneumonia was peculiar in several features. Dr. Bradbury could not help thinking that cases of so-called "infectious" or "contagious" pneumonia were cases where some septic influence, such as sewer-gas, was at work, either depressing the health of members of a household or of a locality, and thus rendering them more vulnerable to atmospheric influences, such as cold, wet, etc., or poisoning the air with some septic agent, which, on being introduced into the system, set up the constitutional disturbance, and the local mischief in the lung, in this affection. Dr. Bradbury regarded pneumonia as a disease partly of the general system, and partly local. He would class it with enteric fever, erysipelas, etc., and he thought too much importance should not be given to the lung-affection, as the pyrexia and the lung-changes did not run *pari passu*—the lung-mischief frequently not declaring itself for days after the illness commenced by any physical signs, and progressing for days after the normal temperature had been reached. Moreover, the intensity of the fever and of the pulmonary inflammation, in many cases, was very unequal. Cases of so-called infective pneumonia he then regarded as due to the unwholesome state of a house or locality; and, on examining the records of such cases in the medical journals, he found most, if not all of them, explicable on this view. Dr. Bradbury did not believe in the contagiousness of pneumonia. He should not hesitate, nor did he think any of the medical men present would, to allow healthy persons to frequent the sick-room of a patient suffering from pneumonia, for fear of their "catching" the complaint.

With regard to the influence of the weather in the causation of pneumonia, there was still much obscurity. Pneumonia appeared to be most prevalent in temperate climates. It was rare in the tropics and at the poles. Intense cold did not seem to be so potent a factor as in bronchitis. East and north-east winds in rapid motion, with a low, but not necessarily very low, temperature, seemed most prevalent at the times of its most frequent occurrence. He should be glad to hear from members whether they had found common colds and bronchitis to prevail extensively at periods when pneumonia was common.

Dr. Bradbury felt sure that many people who said they were well at the onset of an attack of pneumonia, were not really so. He had particularly investigated this point in numerous cases; and on cross-examination it came out that, for some time previously, in most cases, the health had been depressed. Some patients had had gouty, others rheumatic, pains about them. One of his patients had suffered from indigestion; others had taken too much alcohol and too little food. Frequently there was a history of a cough for two or three weeks preceding an attack. In others, there was a history of renal inadequacy. Persons in whose blood some morbid material was circulating were more prone than others to pneumonia. This might account for the liability of lying-in women to pneumonia, of which Dr. Bradbury had seen two cases during the past year.

It might be possible, then, in many cases, to discover the provoking cause or causes of pneumonia; but the state of health of persons attacked was a factor in the causation of the disease to which sufficient attention was not paid. It was of the highest importance to discover, if possible, these antecedent states of the bodily health.

To sum up, the points in the etiology of pneumonia upon which he wished the discussion to proceed were (1) exposure, (2) infection or contagion, (3) atmospheric influences, (4) previous states of health of persons attacked.

Dr. Bradbury said pneumonia ran a different course and presented different symptoms in different cases. There were several forms or varieties of croupous pneumonia, and it would be interesting to know whether these forms depended upon the constitution of the individual attacked, or on the provoking cause, septic or otherwise. His own case, which was probably due to poisoning by sewer-gas, was peculiar in several respects; he had no eruption of herpes, but one bulla of pemphigus over the right knee, and two or three smaller ones just above the left ankle-joint. He had much delirium and very little local lung-mischief, and the delirium persisted for two days after the temperature had fallen after the crisis. During convalescence, he had a troublesome pleuritic stitch, dry pleurisy of the affected side. He had no diarrhœa, and no rusty sputa.

It was worthy of investigation why, in some cases of lobar pneumonia, there was no rusty or any other expectoration, and why there should be delirium much more frequently in apex than in basic pneumonia; why, in some cases, there should be albuminuria and not in others.

In pneumonia, Dr. Bradbury treated the patient, not the disease. Some cases ran a certain definite course, like a fever, and terminated favourably, little influenced by treatment. They only required placing under proper hygienic conditions, and carefully nursing and feeding. Others were attended with much pain and urgent dyspnœa, and died in a few days, suffocated. A timely bleeding, to relieve the right side of the heart, was useful in these cases, and might save life. Others, again, early assumed a typhoid condition; and, notwithstanding careful feeding and stimulants, died of exhaustion and heart-failure. The intense burning heat of pneumonia was peculiar, and most distressing; and, in his own case, Dr. Bradbury had found hot poultices aggravate the pungent feeling very much. He also found that a hot poultice intensified the pleuritic stitch.

There were two points of treatment especially upon which he should be glad to have the experience of his professional brethren, namely, 1, when to give stimulants in pneumonia; and 2, under what circumstances it was justifiable to give hypnotics.

As a rule, unless there were great prostration and much busy delirium, and a history of intemperance, he thought it bad practice to give stimulants until the crisis was passed; if they reduced the frequency of the pulse, he felt sure they did good.

With regard to remedies for the sleeplessness, he had found, when there was much pain at the onset of an attack, and no great dyspnœa, an opiate useful, such as ten grains of Dover's powder; when there was much delirium, and there had been no sleep for days, a full dose of chloral often acted well; but it was not advisable to give chloral when there was any indication of heart-failure. Bromide of potassium, even in large doses, and henbane, had disappointed him. Stimulants, administered at the proper time, often induced sleep where hypnotics had failed.

PARALDEHYDE.—M. Quinquaud has made a series of experiments on the action of paraldehyde. Under the influence of paraldehyde, the lungs exhale less carbonic acid. Before this substance was injected into the veins of a dog, the animal exhaled two grammes of carbonic acid in eight minutes; after the injection, he exhaled one gramme in ten minutes. During somnolence produced by paraldehyde, the quantity of carbonic acid exhaled becomes less and less. The quantity of oxygen is almost normal. Thus, it is evident paraldehyde acts on the process of nutrition, and almost, if not completely, arrests it. Death is explained by the impeded nutrition; also by the gradual and progressive alteration of hæmoglobin, which is transformed into methæmoglobin. Whilst the animal lives, this alteration is not so marked. The ultimate cause of death is cessation of respiratory movements. The respiratory power of the blood remains normal a considerable time, and diminishes just before death.

PROFESSOR BARTHOLOW, a leading therapeutical authority in America, has been giving some useful clinical hints on the subject of the use of iodide of potassium separately. He said to the students, "I shall give this patient twenty grains of iodide of potassium three times a day, and also one-twentieth of a grain of bichloride of mercury, with one grain of extract of cinchona three times a day, in the form of a pill. As you see, I do not give iodide and mercury together. I direct a simple solution of the iodide to be made, and the patient to take twenty grains in four ounces of water, three times a day, before meals, so as to secure its diffusion through the system before the mercury is administered. I think that it is always an error to combine these two remedies, for in such a combination you do not, as is commonly supposed, obtain the beneficial effect of both drugs."

ON RECURRENT FIBROMATA OF THE NECK, AND THEIR RELATION TO THE BRANCHIAL ARCHES.[1]

By HENRY W FREEMAN, F.R.C.S.I.,
Surgeon to the Royal United Hospital, Bath.

I PROPOSE to deal shortly with this subject under the following heads:

1. The history of a typical case of recurrent fibromata of the neck;
2. The pathology of these growths;
3. The morphology of the branchial arches, and their probable relation to these fibromas.

G. B., a labourer, was first admitted into the Bath United Hospital on March 1st, 1882, with a lump on the left side of the neck under the lower jaw, of six months' duration. The tumour was hard, rounded, freely movable, and about the size of a hen's egg, deeply situated in the anterior triangle of the neck, posterior to, but on a line with, the body of the hyoid bone and thyroid cartilage, lying on the deep vessels of the neck, and moving up and down during deglutition. It was removed without difficulty, and, after dividing the layers of the deep cervical fascia over a director, it shelled out easily. To the naked eye, the growth looked like a young rapidly developing fibroid. The man, after a sharp attack of quinsy, made a good recovery, and left the hospital a fortnight after the operation.

On August 25th, 1883, eighteen months after his discharge, he reapplied for admission, this time for a much larger growth under the jaw of the same side, situate on a higher plane, and involving the cicatrix of the previous tumour. It had been growing for six months, the interval of freedom being only a year. It was now lobulated anteriorly, hard to the feel, moved easily about on the underlying structures, placed obliquely to, and overlapping the carotid vessels in front, attached sparingly to the body of the lower jaw, and reaching upwards and backwards to the mastoid process of the temporal bone, but not involving the parotid gland in its course. Its longest diameter measured five inches and three quarters, its shortest three inches and a half. It occupied, therefore, the upper portion of both triangles, and the sterno-mastoid muscle was thinned and stretched over it. There were no enlarged cervical glands, no pain or tenderness; and he complained of but little inconvenience, except the weight. No family history bearing on the man's condition could be made out.

The growth was removed under ether. After division of the skin, all the structures were divided carefully over a director. The sterno-mastoid and digastric muscles were expanded over its surface, the external jugular vein was made out, tied, and cut through, and the facial vessels were treated in like manner. By the aid of a blunt dissector and the finger, the growth was slowly separated. It was found adherent somewhat to the body of the lower jaw for about an inch, and a portion of the submaxillary gland being involved was removed. It was bound down everywhere, apparently, by the deep cervical fascia, strongly to the hyoid bone and its cornua below, and to the mastoid process above and behind; but it shelled out in the end, leaving a deep chasm, at the bottom of which could be seen the hyoid arches, the constrictors of the pharynx, and, deeper still, the tip of the styloid process of the temporal bone. The hæmorrhage was inconsiderable and chiefly venous. The wound was swabbed with a thirty-grain to the ounce solution of chloride of zinc, plugged, drained with horsehair, and bandaged firmly.

From the nature of the operation, much subsequent cellulitis followed, with superficial emphysema extending over the clavicle of the same side and upper part of the chest. Suppuration became very free, the pus passing down between the two layers of the deep cervical fascia between the first rib and the clavicle; and, fortunately, not entering the thorax, it presented in the first and second intercostal spaces between the skin and muscles. Small and numerous punctures were then made by Mr. Gardiner, the house-surgeon, and frequent syringing with Barff's boroglyceride carried the man to a happy termination. Besides remarking that his temperature never rose over 100°, and that only for two days, there is but little to record; and he left the hospital well, a month after the operation.

To the naked eye, there was a hard fibrous growth, of the size of a man's fist, cutting through like tough fibrous tissue until the centre was reached, where it was softer, mucoid, and resembling a myxomatous infiltration. Mr. H. G. Terry, on microscopic examination, reported the tumour to be composed of wavy bundles of young fibrous tissue, with small spindle-cells seen on transverse and longitudinal section, the former having the appearance of small round or oval cells, but which, on closer examination, were found of different sizes depending on the spot cut. The soft mucoid centre had a looser arrangement. The first tumour resembled the second, excepting that it had no soft spots. We concluded, therefore, that we had to do with an undoubted specimen of the small spindle-celled sarcoma, or the old recurring fibroid of Paget. This view has since been confirmed by Mr. H. Butlin. There is no room to doubt that the growth was malignant, and will recur again in a short time. The softened mucoid centre was probably altered connective tissue; but at any time it would, I take it, be difficult to determine whether a tumour be sarcoma with mucoid degeneration, or a myxoma with spots of embryonic tissue. The myxoma, however, would show elastic fibres or true adipose cells.

Rokitansky and Billroth would have called this growth a fibro-sarcoma; but Paget has shown that these recurrent fibromata show incomplete development of rudimental or embryonic tissue, with undue preponderance of cell-elements; and points out, further, their tendency to recur *in loco*, not merely in the same tissue or organ, but adjacent to the scar of the first operation-wound (as in this case), yet distinguished from malignant growths by non-recurrence in distant organs. Their tendency, therefore, to recur *in loco*, their excessive cell-growth, and embryonic structural characters, make these growths correspond with Virchow's sarcomata.

Parenthetically, Ziegler remarks that all fibrous basis-substance has a certain innate predisposition to develop cancer, and that arrest of process may transform an osteoblast to develop an enchondroma; that a fibroblast, in arrest, may transform itself into a spindle-cell of sarcoma. This is most interesting.

Morphologically, we find that the head and neck in man are laid down, as in all other vertebrates, in segments or visceral arches, from his earliest embryonic condition. In the human embryo, well developed arches are seen at the end of the fourth week, which have disappeared by the eighth week; in the dog, they are well seen on the fourth week, disappearing on the sixth week; and, in the chick, they are well seen on the fourth day, disappearing on the eighth day. Two of these arches are præ-oral, five postoral—the branchial or gill-arches of Rathke.

The first postoral or mandibular arch is formed of connective tissue-membrane surrounding Meckel's cartilage, its upper end articulating secondarily with the squamosal bone; its primitive connection, as in all mammalia, being first with the auditory ossicle, the malleus; and this explains how, in man, the "processus gracilis" is found lying in the Glasserian fissure, an embryonic relic of evolution. In birds and reptiles, this process is known as the quadrate bone, or ramus of the lower jaw.

In the second postoral or anterior hyoid arch, we have in man the lesser cornu, the stylo-hyoid ligament, and the styloid and tympanic processes of the periotic bone, making up this arch.

In the third postoral or posterior hyoid arch in man, we have the body of the hyoid bone and its greater cornu composing the arch, this being equivalent to the third branchial arch, which, in fish, bears gills The other two arches below abort after arranging the arterial aortic arches in the neck. The ear develops in connection with the second branchial arch.

Recent morphology, and the comparative embryology of the late Professor Balfour, have brought to light much that was long obscure and contradictory. Few of us could have believed that the little tympanic malleus constituted, in primitive forms, what is equivalent now to the ramus of our lower jaw; that the little incus, also in the middle ear, is in reality the extreme summit of the hyoid bone in the lower animals; and that, when linked with the still more minute stapes of the middle ear, it forms the columellar bone of reptiles; that the incus in the cod and other fishes forms that huge hyo-mandibular bone; that the minute stapes, although now claimed for the inner wall of the tympanum, was also secondarily connected with the upper part of the hyoidean brachial arch; and that the familiar stirrup-hole in its centre probably carried through the mandibular artery. Obviously, therefore, the auditory ossicles are difficult to interpret in man himself, when taken alone.

Again, the hyoidean apparatus is a fragile structure in man; a complex structure, with many joints, in the dog; long in the horse, rudimentary in the sheep, and [illegible] and enormously expanded in the howling monkey; connected above with the tongue, posteriorly with the ear, below with the larynx. We cannot fail to be struck with its diminutive value in man, when compared with its large and important bearings in the lowest vertebrates.

These arches have other bearings. [illegible] first pointed out that

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[1] [illegible]

[illegible] Nerves: their Segmental Value. By Professor Milnes Marshall.

the development of the segmental spinal-like cranial nerves was determined, not by the number of the skull-vertebræ, but by the visceral arches of the head and neck; and Gegenbauer has gone still further, and, starting with the segmental nerves and visceral arches, determined from them the number of head-segments. Further, Balfour, in his *Elasmobranchs*, has shown that the two halves of the body-cavity extend forward on each side of the neck; and that, on the appearance of the cleft of the visceral arches, each of these halves cuts up into a series of isolated compartments, one in each arch.

Milnes Marshall, quoting Stannius, shows how each visceral arch is supplied by two branches belonging to different cranial nerves- one running along its anterior, one along its posterior border. He points out how the first branchial arch is supplied along its anterior border by the glosso-pharyngeal nerve, along its posterior by the vagus; how the remaining branchial arches are supplied by the vagus, each arch by branches from separate stems; how the hyoid arch is supplied in front by the hyoidean branch of the facial, behind by the anterior branch of the glosso-pharyngeal; how the mandibular arch has the mandibular branch of the fifth nerve along its anterior, and the anterior branch of the facial along its posterior border, the latter being identified as the chorda tympani of birds and mammals. Finally, we must bear in mind how, in all vertebrates, the aortic arches of blood-vessels are formed by dividing over these branchial arches in the same manner as the segmental nerves.

I have dwelt at some length on the anatomical relations of these structures, in order to show that the guiding framework of the neck is the three postoral arches, and that the mandibular and hyoidean arches are highly specialised in regard to special functions; but the literature on this subject seems of the scantiest description: Ziegler and Virchow abroad, and Paget and Treves at home, seem to give us all we at present know. Yet there must be some close connection. If not, why do morbid growths occur so commonly in the neighbourhood of the lower jaw rather than in connection with the clavicle and first rib? The remains of the three first postoral arches persist, the lower ones aborting entirely, will, I think, explain this.

It has been asked whether the types that have been established for physiological tissues will be found to hold good, also, for pathological ones. Virchow says, "Yes;" and adds that every pathological structure has its physiological prototype, and that no form of morbid growth arises which cannot, in its elements, be traced back to some model which had previously maintained at some time an independent existence in the economy.

Johannes Müller showed the law of correspondence between embryonic and pathological development; and Keimstock stated that connective tissue with its equivalents, as the common stock of germs of the body, could be shown as the general source of development of new formations. Reichert first noted that the body was made up of a more or less continuous mass of connective tissue-like constituents, in which muscles and nerves were imbedded.

Therefore, we say, in this connected framework of the branchial arches new growths develop; and in accordance with the same physiological law which regulates embryonic development *in utero*.

Again, Cohnheim has laid down that all tumours are the direct product of pre-existing cellular elements, and that these cells originate, not from mature tissue, but from embryonic cells, rudimentary relics of early embryo-life; and may not we ask if these fibromata of the neck are not of this origin, starting from the abortive, wasted, fibro-connective tissue of the gill-arches of early embryo-life?

Connective tissue is similar to embryonic tissue. Protoplasm increases, nuclei divide, without subsequent division of the cell; in this way the *myelo-plaxes* of Robin are formed in the medulla of young developing bone, and the giant-cells of sarcoma. Embryonic cells follow embryonic tissues (the grade is easy) which are not utilised during the period of physiological development; and Virchow has shown that many of the enchondromata, common in the parotid region, have their origin in the islets of cartilage left in the neighbourhood of the gland after the atrophy of the branchial arches.

Finally, indifferent embryonic tissues may give a sarcoma, a lipoma, an enchondroma, a myxoma; but we know nothing which determines the growth of young cells into various forms of morbid tissue. Tumours occurring in early life, and referable to the embryonic state, are numerous enough, such as sarcoma or myo-sarcoma of the kidney and spleen, and it is extremely probable—aye, certain now—that some ovarian adenomata, the tumours of a certain size which start from the broad ligament of the ovary, from the parovarium or organ of Rosenmüller (the aborted Wolffian body of the female) date back in their origin to the embryonic period.

A WORD ABOUT ONE PHASE OF FEVER.

BY J. MORTIMER GRANVILLE, M.D., M.R.C.P.

WHATEVER may be the nature of the materies morbi of Typhoid or Continued Fever, it cannot be doubted that its first attack on the previously healthy but now infected organism, is directly upon the nervous centres. We may infer the precise *locale* of the onslaught from the symptoms. Particularly those centres, whether cerebro-spinal or ganglionic, which preside over and, in truth, perform the functions of alimentation, comprising digestion, absorption, circulation, assimilation, disassimilation, and excretion, are affected. One of the first objective symptoms is acceleration of the heart's action, which, I take it, is due to the suspension or partial arrest of the inhibitory control of the vagus, a property it owes to the filaments it receives from the spinal accessory. The respiratory centre is also set free, and the movements of the lungs became more rapid, not merely in consequence of the heart's quick movement, but from the same cause which accelerates the speed of the central organ of the circulation, namely, *defect of control*. The heat of the body increases, and diarrhœa occurs, both presumably due to the arrest of function in the sympathetic, and local congestions occur from the same cause. Not to go into detail, which would only be to waste space, it may be briefly asserted that the phenomena of fever are, at the outset at least, those which we should expect to be produced by any force or influence which gave, as it were, a staggering blow to the principal nerve-centres of organic life. As a rule, the first effects of the accession or attack of fever pass off within a few hours, though not until they have been replaced by other results of the malady, which serve to perpetuate some of the earlier symptoms, notably the quickness of the pulse and the high temperature. Sometimes, however, it happens that the nerval or primary nerve-stage, or phase, of fever is prolonged, placing the life of the patient in imminent peril in the first few days, or even hours, of the illness, and throwing the practitioner on his beam ends as to treatment. What is to be done when we find ourselves face to face with this formidable danger and difficulty?

The patients who are placed in jeopardy, and too often die, in the accession-stage of fever, are, not unfrequently the very last we should have expected to succumb. They are often young and vigorous, and apparently have had nothing previously the matter with them. They are, however, nearly always *neurotic*, in the received acceptation of this term, and often constitutionally excitable, to the extent of exhibiting hysterical phenomena; but their general strength is not impaired, and it is all too early in the disease to think seriously of a fatal termination, yet they are gone like the flame of a candle before a puff of wind, to the horror of their friends, though not necessarily to the discredit of the practitioner. When a patient who has just been attacked by fever suddenly sinks almost without warning, there is no time to cast about for modes of treatment; we need to be prepared and able to act at once. It is useless to rely on alcoholic stimulants. I believe these not only fail in such an emergency, but often do mischief by exhausting the nervous energy, presumably by overstimulation of the nerve-centres, just as a fainting horse may be done to death by a careless driver with a persuasive whip. An effort is made, but the life is pumped out in making it. As to food, the digestive and assimilative functions are in abeyance, or nearly so; and if we hunt the materia medica through, it is doubtful whether we shall find any remedy which will act precisely in the manner required and with needful celerity. If the vital force be not sufficient to resist the "nervous shock" of the poisoning, the patient must die, not of the disease, but of the great nerve-depression produced by its onslaught.

The suggestion I have to make may be made in a few words, and it will, I think, at once strike the practitioner as both rational and practicable. I recommend that, in the face of this instant peril of death from nervous depression in the first days of fever, recourse should be had to the *bain électrique*, or electric bath, the bed being insulated, which is readily effected by moving the bedstead a few inches away from the wall, and, in doing so, without in the least degree disturbing or distressing the patient, placing the castors on small pieces of plate glass. The prime conductor of an electric machine is then to be brought into contact with the patient, preferably over the solar plexus as the centre of the sympathetic system, and the body charged with static electricity. The effect will be to *neutralise the depressing effects of the poison*, and to enable the patient to tide over the premature crisis, which, if life can be prolonged, will be found to pass in a very brief period.

I must content myself on the present occasion with a simple statement of the plan of treatment, only adding that I believe the way static electricity acts is to conserve the nerve-force, which is the strength of life, in the centres; at the same time sensibly relieving that most distressing feeling of exhaustion, which is, in itself, a fruitful source of mischief in the emergency—by the mental depression it produces, and the consequent loss of the aid of the cerebral centres in prolonging life. It is probably needless to point out that the patient can be fed with a wooden spoon or porcelain feeder, ordinary care being taken not to make contact, by any conductor, with the ground. Obviously, this suggestion only relates to an adjunct to the treatment of fever, in an emergency which arises in no small proportion of cases, and which is most embarrassing to the practitioner, as well as perilous to the patient. It is, however, of more than sufficient promise to warrant a trial.

ON A CASE OF GASTROSTOMY: WITH REMARKS ON THE OPERATION.[1]

By THOMAS F. CHAVASSE, M.D.Edin.,
Surgeon to the Birmingham General Hospital.

JAMES F., aged 52, was admitted into the General Hospital, Birmingham, on July 8th, 1883. There was no family history of malignant disease. He had always appeared a healthy man until six weeks before admission; it was then noted that difficulty attended the swallowing of solid food; a month later, solids could not be made to reach the stomach.

On admission, the patient was somewhat haggard and worn-looking. On attempting to swallow milk, there was an evident œsophageal obstruction. A sound passed into the gullet was arrested eight inches from the teeth. Gentle manipulation, with sounds of various sizes, failed to pass through the stricture. After the attempts so made, swallowing greatly improved; so much so, that a slop-diet and very finely minced meat could be taken with a little difficulty. The patient thereupon declined any operative measures.

In October, the man was readmitted to the hospital, the œsophageal obstruction being complete, and no solid food passing to the stomach. The sound failed to relieve. The patient's weight was 6 st. 10¾ lbs.

On October 30th, the first stage of the operation of gastrostomy was performed, the soft parts of the abdominal wall being divided by an incision four inches long, commencing opposite the ninth rib, and drawn parallel to the edge of the left rectus muscle. The peritoneum was opened half an inch externally to the linea semilunaris, and the anterior wall of the stomach at once exposed. A silver wire-suture was passed in a longitudinal direction through the outer coats of the stomach, cut long, and its ends left projecting about the middle of the parietal incision. This suture had for its object the drawing forwards of the stomach-wall. Silk-sutures, threaded and used as in ovariotomy, were then passed transversely through the peritoneal and muscular walls of the viscus, and through the whole thickness of the abdominal parietes, three-quarters of an inch beyond the edges of the primary incision. Two were passed above, and two below, the wire-suture. These four silk-sutures being tightened, the stomach was kept in contact with the abdominal wall, and the edges of the parietal incision were brought into direct apposition, as though union by first intention were required. The silver wire-suture was left projecting considerably beyond the abdominal wall. The operation was conducted antiseptically, without the spray. Ether and chloroform were used as anæsthetics. The patient was ordered to be fed by peptonised enemata every four hours.

On October 31st, marked bronchitis was developed. Teaspoonfuls of egg-flip, and of milk and lime-water, were ordered to be given alternately by the mouth every second hour. The pulmonary condition subsequently improved, but never got quite well.

On November 2nd, the wound was dressed, and the second suture removed. Two days later, the third suture was removed, and the day after, the remaining silk stitches were taken away.

On November 8th, the second stage of operation was done. The stomach was opened by a very small oblique incision, just internally to the wire-suture. Two ounces of warm milk were injected into the viscus, through a piece of catheter which was left in situ. The whole proceeding caused no pain. The next day, the patient complained of severe pain in his stomach, and the bronchial irritation was much increased. Gastric juice was abundantly poured out into the dressings.

On November 10th, he had severe coughing all night, and in the morning, a small piece of omentum was found to have been forced through the lower part of the wound.

The day following, the permanent wearing of the tube in the stomach was discontinued, and the wire-suture was removed. The withdrawal of the tube considerably diminished the bronchial irritation. The patient was now fed four times daily, through the gastric fistula, thrice with an egg and four ounces of milk, and once with the finely minced meat from a chicken's breast. His weight on November 14th was 5 st. 10¾ lbs. The patient at this date got up regularly, and went about the ward. Both appetite and digestion were good. A week later, his weight was 5 st. 8½ lbs.

On November 26th, the report says that, owing to the patient having gone into a cold passage, he had coughed all night, and in the morning his expectoration was bloody, and pneumonia of the right lung existed. Late in the afternoon of the same day, death took place quite suddenly.

Post mortem examination, sixteen hours after death. The body was much emaciated. There was hepatisation of the upper lobe of the right lung. The trachea was adherent behind to the œsophagus, but there was no direct communication between the canals. Immediately above the aortic arch, a very tight stricture of the œsophagus, caused by a new growth, commenced; and the remainder of the tube, as far as the stomach, was implicated by this neoplasm. Microscopically, the growth was found to be epitheliomatous. The stomach was attached to the abdominal wall by firm adhesions, surrounding for three-fourths of an inch an artificial opening in its anterior wall. A small piece of omentum passed between the stomach and the anterior abdominal wall, and appeared externally as a granulating surface. A mass of invaded glands existed near the cardiac orifice, one of which was suppurating in the centre.

REMARKS.—In the record of this case, I would direct attention to the mode of securing the stomach. Four silk-sutures only were used; and the organ was drawn up, as it were, to the surface, and the edges of the wound then approximated by the same stitches. Adhesion readily took place, while the wire-suture was a sufficient guide for making the necessary opening into the viscus.

The exact method of fixing the stomach in this operation is variously advocated. With some surgeons, a tedious method of inserting a double row of sutures is preferred; this plan is probably most serviceable when it is necessary to speedily undertake the second step of the operation; but if five days, or a week or more, are to be allowed to pass before the opening is made, it would appear to be an unnecessarily tedious procedure.

In a case in which one of my colleagues completed only the first portion of the operation, the stomach was secured to the edges of the skin-incisions on each side by short silk-sutures. Pneumonia proved fatal on the fifth day, and yet, at the *post mortem* examination, even in a weakly, worn-out patient, adhesions were found which would have been sufficient for practical usage.

Mr. Howse, whose name will always be associated with this operation, has of late endeavoured, and with success, to obtain the necessary adhesions without using any sutures at all. In answer to a letter, Mr. Howse, with great kindness and courtesy, has given his consent to my publishing his present method. I cannot do better than use his own words in reference to his last case. "The plan I adopted was the outcome of many experiments in colotomy and other abdominal operations. In colotomy, I never make use of a suture now. In this case of gastrostomy, I simply used two forceps, clamping the stomach, but not so tightly as to cause sloughing. The two forceps had each of their blades sheathed in thick rubber, and were put on the stomach at different levels, so that an interval was left between them, by which the blood-supply might pass as freely as possible. [illegible] the forceps were taken off on the sixth and eighth days, and the stomach not opened until the tenth day." Mr. Howse goes on to say that the length of time allowed to elapse between the first and second steps of the operation was unnecessarily long, but was thought advisable in a first case performed after the manner detailed. The incision through the soft parts, Mr. Howse writes, "was [illegible] through the skin parallel with the costal cartilages, through the rectus muscle vertically, separating but not cutting the fibres, so as to make a kind of [illegible]." It seems, therefore, that for the present at all events, the exact mode of securing the stomach must be decided by the condition of the patient and the rate at which [illegible] must be [illegible].

Between the first and second steps of the operation, [illegible] the mouth [illegible] tendency to [illegible] the [illegible] that the swallowing of the [illegible]. The [illegible] exercised a marked benefit, by diminishing the sensations of thirst and hunger. The opening into the stomach was an oblique one, a few lines long, made from above downwards. The object was to endeavour to form a valve-shaped orifice; for, during feeding in these cases, food is very apt to regurgitate by the side of the introduced tube, and the gastric juice escapes freely. The attempt made to remedy this evil proved futile.

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[1] Read before the Birmingham and Midland Counties Branch.

During an operation for gastrostomy, when the peritoneal cavity has been opened, it is somewhat surprising to find how easy it is to be deceived with regard to the part of the stomach seized and drawn forwards. In the instance under notice, it was most certainly thought that the organ was secured and the opening made much nearer the splenic than the pyloric end; but, after death, the orifice of the fistula was found to be nearly equidistant from the two ends. By drawing the stomach partly out through the wound, the question could doubtless be more properly decided; but the prolonged manipulation of the contents of the abdomen is to be avoided, especially when it does not seem to make much material difference where the anterior wall of the stomach is incised.

The operation of gastrostomy may be said to have two objects in view: 1, to diminish the sufferings of the patient; 2, to endeavour to prolong life. Practically, the first is more important. Those affected with malignant disease of the œsophagus, do not, as a rule, suffer materially until the growth is sufficiently advanced to cause difficulty in swallowing food. Doubtless the passage of the more solid particles of nourishment down the gullet induces more or less irritation, and a consequent increase in the rate of growth and the size of the neoplasm. Laryngeal irritation, followed by ulceration of the trachea, supervenes, and septic pneumonia generally terminates existence. By the performance of this operation early in the disease, the patient is in a condition in which operative interference is more readily borne; the food being introduced directly into the stomach, the irritation and the rate of the growth are lessened, and the symptoms generally are less severe. It is upon these facts that the utility of the operation exists. With regard to its prolongation of life, statistics do not offer much encouragement. In the *Archives Générales de Médecine*, for November, 1883, M. Blum has collected and tabulated 106 cases in which the operation was undertaken for malignant disease of the œsophagus; of these, 50 lived for more than one week. In 13 instances the duration of life was as follows: 3 patients lived for three months; 4 for four months; 3 for six months; 1 for seven months; 2 for eight months. The remaining 37 cases proved fatal between the beginning of the second and the end of the eleventh weeks.

Probably, with the growth of knowledge and increased experience, the results of this operation in cancer will soon be of a much more favourable character. Blum's tables of the last few years afford sufficient evidence on this point; and eventually it may be the recognised practice to advise the formation of a gastric fistula much earlier in the disease than is now the custom with the majority of surgeons.

THE CAUSATION OF TROPICAL HEPATITIS: WITH NOTES OF FOUR CASES OF ABSCESS OF THE LIVER.

By E. O. MILWARD, M.A., L.R.C.P. & S.Ed.,
Surgeon Army Medical Department.

THE commonness of liver-affections amongst British soldiers serving in India may be attributed to over-stimulation by food and drink, aided by the effects of climate; the latter including sudden changes of temperature, malaria, and excessive long continued heat. They are much less frequent amongst natives, presumably in consequence of the light unstimulating nature of their diet, and because in them, probably from acclimatisation, intense heat produces less visceral congestion.

That heat, chills, and malaria are not, however, the sole factors in the production of this class of diseases, may be inferred from a comparison with the case of other residents in India of a different European nationality.

Dr. Jules Rochaud (Art. "Climate," in the *Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques)* has recently stated that inflammation of the liver is scarcely known in the Indian possessions of the French; and other observers (Friedel, for example, in his work on *China*) have made similar statements on the comparative immunity from liver-disease enjoyed by non-English residents.

During the hottest months of the year, the young unseasoned soldier lives on a liberal ration: far more liberal, in many cases, than that to which he was accustomed in the days before his enlistment in his native land, and he drinks freely of the strong heady beer of Indian manufacture.

Languor and the fierce heat of summer prevent him from indulging in out-door exercise, except to a very limited extent; the result being that the ingestion of a large quantity of meat and drink tends to plethora, disorder of the digestive organs, and faulty assimilation. Thus, increased labour is thrown on the liver, already congested from climate, and working at full pressure in eliminating waste products, and in compensating for the diminished excretion of carbonic acid through the lungs, the consequences of breathing a less oxygenated atmosphere, of slower respiration, and of lessened vital capacity.

Confined in the close heated atmosphere of barrack-rooms nearly the whole day, mentally and bodily inactive, eating and drinking more than he can assimilate, or than is needed for nutrition, the sum total of the conditions under which he passes his existence in the plains, in the hot weather, resemble in many points the process which the Strasburg geese undergo, when their livers are prepared by disease for *pâtés de foie gras*.

It is not argued that animal food is unnecessary at this season, but that it should be consumed more sparingly than in the cold weather. There are many vegetable foods in India which contain as much nitrogenous principles as lean meat, such as dalls, beans, peas, wheat, etc.; and it would be advisable to take the nitrogenous portion of our food chiefly from these, because they are less stimulating, and can be assimilated with less excitement to the economy. If food be intended as a balance between work and waste, the amount and nature of the soldier's ration call for modification in the period of the greatest heat, as compared with that which is necessary in the season of the opposite extreme. The amount should be enough to balance the work done, and calculated on the knowledge that the process of digestion and assimilation is slower in the hot weather, because of the lethargy of the vital functions; and as for the kinds of food, they should be such as would most readily fit in with the conditions entailed by tropical life.

Nutrition would not be likely to suffer by the change; habit, however, in most things becomes a second nature; the soldier is very tenacious of his rights, and very probably would be slow to recognise the soundness of the principle involved. Accepting, then, that hepatitis is caused by a chill in a person whose liver has been congested by residence in a hot climate, aided by intemperance, irritating ingesta, and exposure to malaria, the most hopeful measures of reducing its mortality appear to be such as would tend to counteract these injurious influences.

If the British troops, wholly or in good part, were withdrawn every year to the hills at the end of March, and sent back to the plains in the middle of October, it is fair to assume that hepatitis, and the other diseases to which they are incident by reason of their residence in an unnatural climate, would disappear in time; but in this, as in many other cases, it is easier to point out than to apply the remedy. The question of military expediency arises, and the measure would be pretty certain to meet with disapproval, because of the expense it would entail.

The following are notes on four cases of suppurative inflammation of the liver which occurred amongst the British troops in garrison at Umballa during the year 1883. Of these, three cannot be attributed to dysentery, to pyæmic origin, or to mechanical injury. One of them proved fatal, but no traces could be found in the intestines of cicatrices or of recent ulceration. In the remaining case, pyæmic deposits were found in the liver, and ulceration of the ascending colon close to the cæcum coexisted. With this exception, they were all probably the result of climate, aggravated by injudicious eating and drinking. Two of the four cases proved fatal; the remaining two recovered, one by spontaneous evacuation, the other by surgical interference.

CASE I.—The first of these (Private J. T., Leinster Regiment, aged 40, service 21 years and 1 month, Indian service 3 years and 11 months), was multiple and secondarily pyæmic, resulting from the absorption of septic matter from an ulcerated colon. Diagnosis during life was beset with many difficulties. There were undoubted symptoms of hepatitis and bulging below the costal margins, with great pain extending below the umbilicus, the most prominent part being situated between the mammary and axillary lines. A free incision was made into this swelling, a large quantity of pus was evacuated, and two lower openings were made later on, so as to allow free exit of discharge. It was believed during life that these openings led directly into a large liver-abscess; but, on the *post mortem* examination being made, they were found to pass into an artificial cavity formed by the right lobe of the liver, the colon, and the walls of the abdomen; all these, with the adjacent structures, being matted together. The ascending colon presented a ragged opening about two inches from the cæcum, opposite to and corresponding with the gangrenous infiltration of the abdominal walls. The disease thus was most likely typhlitis, or inflammation of the colon, in the first instance, leading to ulceration of the coats, rupture, and perforation. This perforation took place into the surrounding cellular tissue, setting up inflammation in this structure (perityphlitis), terminating in the formation of an abscess, which burst between the liver and the colon on the one hand, and the abdominal walls on the other. About ten days before death, gangrene set in, the discharge ceased, the wounds became dry and glazed, covered with ashy-grey sloughs, and the patient rapidly succumbed to exhaustion on the forty-third day of the disease. *Post mortem*, the liver was found to be firmly adherent to all the surrounding structures; it weighed 5 pounds 7 ounces; it was uniformly enlarged and very hard to the touch. A small superficial abscess, about the size of a walnut, was situated anteriorly between the right and left lobes. On section, numerous pyæmic deposits were found, the cut surfaces appearing pale and nutmeg-like. The intestinal lesion has been already described.

CASE II.—Gunner T. S., R.H.A., aged 28, service 9 years and 8 months, Indian service 2 years and 9 months, was admitted to hospital on September 9th, 1883, with diarrhœa. On September 12th, hepatic symptoms were first noticed, and the diagnosis was accordingly changed to hepatitis. The patient had a sallow cachectic look, with a semi-jaundiced skin. The early symptoms were those of congestion: pain and tenderness in the right hypochondrium, rigors, sweats, heightened temperature, cough, nausea, fixation of the right side, and increased area of hepatic dulness. These symptoms continued much the same, except that the evening temperature and dyspnœa increased, until the night of October 11th, when the abscess burst into the right lung, and a copious expectoration of shreds of liver-tissue mixed with pus took place. Pneumonic complications set in, and the disease ran a very rapid course, marked by great prostration, profuse sweats, hectic, high temperature, and intense thirst, death taking place on October 19th. The *post mortem* appearances were as follows. The liver was much enlarged, weighing 84 ounces. It was adherent to the diaphragm and colon; its upper surface was also adherent to the lower portion of the lung, the diaphragm at this part being ulcerated through. Thirty-five ounces of pus were removed from the pleural cavity. The right lung weighed 44 ounces; its upper third was healthy, but the lower two-thirds were softened and infiltrated with pus, breaking down on the slightest pressure. The lower portion of the lung was adherent to the upper surface of the liver, forming an intervening cavity filled with pus and disintegrated liver-tissue. The other abdominal organs were healthy.

CASE III.—Private C. S., 9th Lancers, aged 29, service 10 years, Indian service 8 years, was admitted on December 14th, 1882, for acute hepatitis, in a state akin to collapse. His habits were said to be temperate. His appearance was anæmic; his tongue coated; pulse quickened and intermittent. He complained of nausea, cough, chills, impaired appetite, failing health, pain in the right side, inability to lie at full length, and hepatic uneasiness. Percussion showed that the upper boundary of the liver was abnormally high, anteriorly and posteriorly, but there was no distinct bulging or enlargement of the side. Any attempt to lie in the recumbent position brought on an immediate and most distressing feeling of suffocative dyspnœa. All these inflammatory symptoms gradually subsided, but he still complained of some pain posteriorly below the scapula, and of shortness of breath on exertion. He was discharged from hospital on January 19th, 1883, but had to be re-admitted a month later, owing to his condition having become worse. The same night an abscess of the liver burst through the right lung, the discharge (a bowlful) consisting of reddish-brown pus, mixed with salivary and bronchial secretion. The temperature rose to 102.6°, but fell to 100° the following morning, and to normal the third day, since which, up to the date of his leaving the hospital three weeks later, the thermometer did not register above 99°. No signs of serious lung-mischief developed themselves, and the case is interesting as illustrating how insidiously the liver may suppurate, as well as how resolution may take place after rupture, with little or no constitutional disturbance. Under a course of tonics and careful dieting he gradually got better, and was invalided to England on March 16th, 1883. From a letter subsequently received from him after his arrival at Netley, it appeared that he was greatly improved by the voyage home, and was rapidly regaining his strength under the influence of change of climate and sea-air.

CASE IV.—Farrier-Sergeant J. P., 9th Lancers, aged 33, service 13 years 7 months, in India 8 years 8 months, was admitted on October 20th, 1883. He acknowledged being a free liver. He served in the late Afghan war, and stated that he suffered from irregularity of the bowels ever since. He had never had dysentery. He went to Simla last September on a month's furlough, and then, for the first time, began to complain of pain in the right side. After being under treatment a short time, he was sent to Umballa, and admitted to the station hospital. On admission, he complained of pain in the hepatic region, rigors, nausea, and vomiting; in general appearance he was prematurely aged; his face was anæmic and slightly jaundiced. There was uniform enlargement of the liver, with well marked bulging in front, below the costal cartilages; tenderness on pressure also existed, and percussion gave rise to giddiness and faintness. An abscess was diagnosed, and was aspirated, on October 26th, with Dieulafoy's instrument, 41 ounces of thick, sanious, bile-stained pus being evacuated with temporary relief to his sufferings. Five days afterwards, his temperature began to rise again, and the swelling re-appeared; persistent vomiting also came on, probably from pressure, and his general condition indicated great exhaustion. It was then decided to make a free opening under Listerian precautions. Accordingly, under chloroform, an incision about one inch and a half long was made into the most prominent part of the tumour, just below the ribs, in front, beside the epigastrium; and the dissection was carefully carried through the abdominal wall. When the knife divided the capsule and a thin layer of liver-tissue, a large quantity of pus mixed with bile gushed forth immediately. The cavity of the abscess was then washed out with a tepid carbolic solution of 1 in 80, a large drainage-tube introduced, and several layers of carbolised dressing placed over all; the greatest care being taken to prevent the entrance of atmospheric air by fixing strips of adhesive plaster along the borders of the dressing. The whole operation was conducted under strict Listerian precautions, with the spray-apparatus in full working order. Treatment was subsequently directed to supporting the patient's strength, and obviating decomposition in the abscess-cavity and extension of the mischief. His condition steadily improved, the edges of the wound remained healthy, no signs of gangrene or sloughing appeared, temperature fell, vomiting ceased, appetite returned, and the cavity is now completely healed up and cicatrised over. He feels quite well, walks about daily, and is rapidly recovering his strength.

The abscess was single, and must have been of the size of a cocoa-nut, or larger; it was in every way suitable for operation, especially as adhesion was assumed to have taken place, so that there was no danger of extravasation into the peritoneum. Further recourse to aspiration would have been to wait upon death; it might have put off the fatal termination for a few days, but the ultimate issue would never have been in doubt. All the circumstances of the case were very instructive, and afford strong evidence of the benefits to be derived from, and the greater prospects of recovery under, antiseptic treatment.

ON SOME CLINICAL AND PATHOLOGICAL POINTS IN CEREBELLAR DISEASE.[1]

By W. B. HADDEN, M.D., M.R.C.P.,
Demonstrator of Morbid Anatomy, and Medical Registrar to
St. Thomas's Hospital.

THE points to which I shall call your attention are mainly pathological. At the same time, I venture to hope that the clinical details, to which I must allude, may not be without their value. The affections of the cerebellum with which I shall deal are (1) simple cysts, and (2) abscesses.

1. C. S., aged 23, was admitted into St. Thomas's Hospital, under the care of Dr. Bristowe, on April 10th, 1883. She had been married three years, but had had no child and no miscarriage, and her catamenia had continued regular but scanty. She had been subject to much ill-treatment ever since her marriage, and had been much bruised about the head.

Her present illness came on nine months before admission, with pains all over her head, but mainly in the occipital region, which she likened to having her head taken to pieces, and sickness, which occurred independent of meals. The headache and sickness had continued ever since, and had been associated at times with noises in the ears. About three weeks before admission, the right hand and arm suddenly became useless, and a feeling of pins and needles was felt in the hand and forearm. These symptoms only lasted for two or three hours, but they recurred many times since, and, accompanying them there had been weakness and numbness in the right leg. At about the same time as the paralysis the eyes became painful, and her sight impaired. The affection of sight increased; she was troubled with muscæ, the outline of objects had become indistinct, and occasionally she had had temporary attacks of blindness. For two or three months she had suffered from giddiness.

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[1] Read before the South London District of the Metropolitan Counties Branch

The patient was somewhat dull and slow to answer, but sensible, and free from delirium. She complained mainly of paroxysmal pain in the occipital region. She had no recognisable paralysis of any of her limbs, or of any of the muscles of the face or eyes; but she walked with a staggering gait, and had to be supported in order to protect her from falling. The pupils were equal, and not weak to light. There was a little nystagmus. The sight was dim, but she had no colour-blindness. There was intense neuro-retinitis; the discs were much swollen, the vessels blurred, and around the discs was a zone of radiating hæmorrhages. She complained of tinnitus, but seemed to hear well. There was no impairment of smell or taste. The tongue was flabby, red, tremulous, and was protruded straight. There was no vomiting, rigidity, or tremulousness in the extremities. The patellar tendon-reflex, however, was exaggerated. Pulse 66, full, regular; the temperature was normal; respiration 16. There were no signs of thoracic or abdominal disease. The urine was of specific gravity 1020, free from albumen. The bowels were constipated.

During the next few days she remained in the state above described, suffering from occipital headache, which was liable to paroxysmal agravation, and at times was so severe, that she could hardly lay her head on the pillow, vomiting occasionally without any obvious cause, but in association at times with pain between the shoulders, and with no sign of paralysis on the right side.

On the 15th, Dr. Bristowe remarked that there was no nystagmus, no paralysis of the ocular muscles, no relative weakness of the right arm or leg, and no complaint of giddiness, but that she staggered in walking, like a drunken person. Pulse 66; temperature normal.

The symptoms still continued without marked change. The headache was severe; there was occasional vomiting; she slept badly; but her eyesight became so imperfect, that she could not recognise the number of fingers held up at a foot from her face.

On the 18th, eight leeches were applied, two to each temple, and two over each mastoid process.

On the 19th, the patient had slept well in the night, and the pain in the head was much better this morning than it had been. She complained, however, that her eyes were sore, and that she could not see anything. On careful examination, it was concluded that she really was absolutely blind, and her eyes were constantly oscillating when opened. She answered questions rationally, but talked to herself a good deal. There was no sickness. Pulse 108.

On the 20th, it was reported that the patient screamed out frequently during the night, and this morning seemed much worse. She was in great pain, would not answer questions, and was quite blind. There had been no more vomiting. Pulse 90, slightly irregular; respiration irregular. Between 11 o'clock and noon she again screamed out a good deal; then she suddenly became quiet, and was found to be comatose and livid. She died a little after one. She had no convulsion at any time, and her temperature, which was occasionally subnormal, never exceeded 98.4°.

Necropsy.—The body was somewhat emaciated. The calvaria was thick, otherwise healthy. The convolutions on the convexity of the cerebral hemispheres were flattened; the sulci were obliterated, the surface dry. There was a great deal of subarachnoid fluid, however, at the base of the brain. The pia mater and arachnoid were generally healthy, but the smaller vessels and the larger veins were congested. The brain-tissue, for the most part, was healthy, but the lateral ventricles were somewhat dilated, and the fornix was softened. Imbedded in the left lobe of the cerebellum was a globular cyst, about an inch in diameter. The walls were thin, fibrous, and colourless, and continuous by their deep surfaces with the neuroglia. The contents were a limpid colourless fluid, which escaped on removing the brain. There was no congestion, induration, or morbid growth around the cyst; there were no traces of old hæmorrhages in its walls, and no fibrous tissue occupied the cyst, as is usually the case with cysts due to hæmorrhage. There was no hydatid membrane. The cyst was surrounded on all sides by white matter, which was somewhat softened, and it approached the posterior surface of the lobe. There were several small hæmorrhages around both optic discs. All other organs, including the spinal cord, were healthy.

As to the origin of this cyst I can say nothing. Dr. Sharkey, my colleague in morbid anatomy at St. Thomas's Hospital, exhibited a similar case at the Pathological Society two years ago. It is published in vol. xxxiii of the *Transactions*. In this instance there was a large cavity occupying the upper half of the right lobe of the cerebellum, extending a little way into the left lobe. The internal surface was quite smooth, and appeared to consist simply of condensed nerve-substance, there being no sign of a special cyst-wall. The cavity contained an opaque, white, membranous mass, which was found, on microscopical examination, to consist of fibrin. It is highly probable, as Dr. Sharkey remarks, that it was a simple cyst, and neither hydatid, nor the result of previous hæmorrhage.

2. I will next speak of the association of ear-disease with abscess of the cerebellum. On the causal relation between these conditions I need not dwell; it is a matter of everyday knowledge. There are, however, two points—one pathological, the other relative to diagnosis—to which I wish specially to call your attention.

On January 2nd, of the present year, a boy, aged 12, was admitted into St. Thomas's Hospital under the care of Dr. Bristowe. His family history was bad. Five of his brothers and sisters had died of phthisis. Four months ago a discharge from the ears came on, without evident cause, and persisted until a fortnight before admission. It then ceased, and he began to complain of headache, especially in the occipital region. Very shortly he became unable to walk properly, and had constant vomiting. He lay in bed with his eyes shut, and feared the light. The pupils were dilated, equal, but rather sluggish. There was marked double optic neuritis. He had a double convergent squint, seemingly due to weakness of the external recti, of which the left was the more affected. An abscess was found behind the right ear; this was opened, and about three ounces of healthy pus came away. Some bare bone was then discovered in this situation. Shortly before death, Dr. Bristowe noted that the respiration occasionally ceased for a few seconds, that the squint still continued, and that the left pupil was much smaller than the right. Now and then he uttered a loud cry, not unlike that often observed in acute hydrocephalus.

Towards the end he had a series of fits, in which the body became arched backwards and the head retracted. His temperature was normal throughout. He died on the second day after admission.

At the *post mortem* examination, I found an abscess in the right lobe of the cerebellum, extending about a third of the way across the left lobe. The abscess was near the upper surface, separated only by the cortex and a little of the subjacent white matter. The cavity had a distinct lining membrane, and contained about an ounce of pus. There was no meningitis at the base, and no tubercles were visible. The third and sixth nerves were healthy in appearance, and were not pressed upon. The dura mater in the posterior fossa, and over the right petrous bone, appeared quite healthy. There was no caries of the temporal bone visible on removing the dura mater. The venous sinuses were natural, and contained only *post mortem* clot. The membrana tympani, on the right side, was partially detached. In the middle ear there was some soft reddish material, probably inflammatory. There was a streak of carious bone-tissue extending from the posterior wall of the tympanum through the mastoid cells. The malleus, incus, and stapes were not diseased.

The diagnosis of this case, during life, was by no means certain. The family history of phthisis, the squint, the optic neuritis, suggested the possibility of tubercular meningitis. The ear-disease, prominent and significant as it was, was not altogether in favour of abscess.

It is more than probable that caries of the temporal bone is sometimes due to tubercular disease, and that tubercular meningitis may occur secondarily, just as it does in the case of a tubercular tumour of the brain.

In a paper read before this Branch a few months ago, Dr. Bristowe gave some striking examples of the difficulty in diagnosing between abscess and tubercular meningitis. It is worth mentioning that, in the case just described, there was absolutely no fever. In tubercular meningitis, also, it sometimes happens that the temperature varies little from the normal.

An interesting pathological problem is suggested by this case. How did the ear-disease give rise to the cerebellar abscess? The caries was deep-seated and comparatively insignificant; the surface of the bone at the base of the skull was perfectly sound; the dura mater and venous sinuses were natural. Was the inflammation transmitted by a phlebitis of the small veins; or did the suppuration extend along the facial and auditory nerves, and so reach the cerebellum? I confess I am not in a position either to deny or to affirm the truth of these hypotheses. Although a satisfactory explanation may not be forthcoming, there is no doubt that the ear-disease and the abscess were cause and effect.

Last year, a young man came under the care of Dr. Ord at St. Thomas's Hospital suffering from severe headache, pain at the back of the neck, delirium, and smart fever. He had had discharge from the ear and deafness for two years. During the previous fortnight, he had felt languid, and had been sick and chilly. Two days before he came into the hospital, he took to his bed, with headache, vomiting, and shivering. On admission, his arms, chest, and abdomen were covered with bluish blotches of an uniform tint. They seemed to be subcutaneous, and did not fade on pressure. Their nature was not apparent, even at the *post mortem* examination. They were possibly due to local stagnation of blood, but no sign of hæmorrhage was made out. There was a large abscess, involving chiefly the right lobe of the cerebellum, containing fœtid pus. There was also simple meningitis at the base of the brain. The temporal bone on the right side was extensively diseased, and there was a little adherent clot in the right lateral sinus. The organs generally were in a septicæmic condition.

The discoloured patches of the skin were probably connected with this septic state. During life, they tended in no slight degree to obscure the true nature of the case.

I had originally intended to say something of tumours of the cerebellum, but I will not venture to trespass further on your time.

Finally, I must express my thanks to Dr. Bristowe and Dr. Ord, to whom I am indebted for the use of the cases which have served to illustrate my paper.

CASE OF SCLERODERMA AFFECTING THE LEFT LOWER EXTREMITY.[1]

By T. SYMPSON, F.R.C.S.,

Surgeon to the Lincoln County Hospital.

A FEEBLE, ill-nourished girl, aged 5, with light brown hair and blue eyes, was admitted under my care into the Lincoln County Hospital on August 14th, 1882, on account of distortion of the left foot.

Inspection showed that the skin along the inner and anterior aspect of the limb, for a breadth of three inches at the groin and one inch on the dorsum of the foot, was pallid, glossy, and irregularly mottled with yellowish-brown spots. To the touch, the skin was very tense, resistent, and elastic. The margins of the patch were irregular and of a pink hue. Sensibility appeared to be unimpaired. The tendon of the tibialis anticus was rigidly contracted, and the foot was drawn up to an angle of 30° with the leg. The second toe was bent, so that its tip rested on the dorsum of the first phalanx of the great toe. The ankle-joint admitted of slight movement, but the knee was almost perfectly fixed. The left leg was half an inch shorter than the right. In walking, the girl bore her weight upon the left heel. The urine was non-albuminous, acid, of specific gravity 1025.

The maternal aunt of the girl stated that, three years before admission, the girl was kicked on the knee by the child of a neighbour, after which the joint became stiff. A few months subsequent to this, she fell on the causeway and bruised her knee; this was followed by hardening of the skin over the patella, which condition gradually extended to the thigh and leg. She has one sister, who is healthy. Her father, aged 28, enjoys good health. Her mother died at the age of 26, from "having caught cold" soon after her confinement.

The girl was put upon half diet, was ordered to take three minims of liquor arsenicalis thrice daily, and to have the affected part of the limb well anointed with vaseline. Under this treatment, the patient slowly improved, the knee becoming more movable, and the induration of the skin less marked, until September 10th, when she had an attack of subacute bronchitis, from which she speedily recovered.

On September 18th, the tendon of the tibialis anticus was divided subcutaneously. After a severe rigor on October 20th, the whole limb became erythematous; two sloughs, each of the size of a shilling, formed over the patella, and there was considerable constitutional disturbance. The patient was ordered milk-diet, a dose of castor-oil, and frequent doses of salines, under which treatment the symptoms subsided in four days; but the knee was left perfectly stiff, and the skin resumed its former denseness.

Subsequently, by degrees, the skin became more pliable and more easily pinched up; a well marked band of pigment appeared along the inner aspect of the limb, the foot was held at a greater angle to the leg (about 45°); the movement of the ankle was more free, and the child gained flesh and strength. She was discharged on January 8th, 1883.

When she was readmitted on January 29th, the limb was found to be smaller in all its dimensions, the induration of the skin had lessened, and the brown discoloration had become deeper in tint. The tibia was bent with a concavity forward in its upper third. The child was placed upon the same treatment as before, with the addition, on March 27th, of a drachm of cod-liver oil twice a day.

One evening the night-nurse, when coming upon duty, was greatly horrified to find the child lying with the affected limb so turned up alongside of the trunk that the foot was placed behind the back of the neck, but was reassured on learning from the other nurses this was a by no means uncommon position for the patient to assume.

The measurements of both lower limbs on May 15th were as follows: Right femur, 9 inches; right tibia, 9 inches; circumference of upper part of right thigh, 12 inches; above patella, 8½ inches; middle of calf, 8 inches; left femur, 9 inches; left tibia, 7½ inches; circumference of upper part of left thigh, 9½ inches; above patella, 6½ inches; middle of calf, 6 inches. Thus the left limb was one inch and a half shorter than the right.

As it was thought best for the girl to return to her home in the country, she again left the hospital on May 21st.

I have brought this case forward as an instance in which some of the phases that occur in the course of scleroderma were extremely well marked. Although this disease is considered a rare one, those of our members who attended the International Medical Congress held in London in 1881, will recollect that, in the department for exhibition of living patients, a good many examples were shown illustrating its different stages. These stages admitted division into an active one, during which deposition of morbid material took place; a contractile stage, in which various deformities were occasioned by the process of shrinking undergone by that material; and a stage of recovery, in which the skin and other tissues that were affected resumed, more or less, their normal condition; these different stages varying in their duration from a few months to many years.

Hebra was of opinion that those cases in which the diseased patches resemble the integument of a frozen corpse, run their course more rapidly than those in which the integument is tightly stretched, thinned, and pigmented, and he suggested that some intrinsic difference might exist between them.

With regard to my patient, it was clear that, when she first came under observation, the malady, as shown by the pink tint of the irregular margins, the small amount of pigmentation, and the slight degree of contraction of the patch, had barely emerged from its first stage; whereas, when she last left the hospital, the greater portion of the skin previously affected had become so supple, that it could be easily pinched up, and a long band of pigment had made its appearance on the inner aspect of the limb. There seems reason to hope, from what is known of the history of similar cases, that the girl will continue to make favourable progress, and that the affected tissues may ultimately recover to a considerable extent their former condition, although the limb must remain distorted, and more or less atrophied.

As it rarely happens that death occurs during the course of scleroderma, we seldom are favoured with an opportunity of investigating minutely the changes undergone by the skin in that complaint. The members may therefore be interested to examine a double-stained microscopic section of skin from a case of that disease, which has been kindly prepared for me by Dr. Palmer. In it are well displayed increase in the number of cells in the rete Malpighii, enormous increase in the amount of connective tissue, and atrophy of the hair-bulbs, and of the subcutaneous fat. The section was obtained from the skin of the abdomen of a gentleman, [illegible], whom I saw in consultation three years ago, and in whom, with the exception of the head and neck, the disease was universal. The case lasted thirteen months, and followed exposure to draughts after a hot bath. Death occurred from phlegmonous erysipelas, due to a chill consequent on the patient having sat in a room without a fire for two hours on a very cold day.

BEQUESTS AND DONATIONS.—Mr. Joseph [illegible], of Halifax, has bequeathed £1,000 to the Halifax Infirmary; £1,[illegible] to the Bradford Infirmary; £500 to the Bradford Eye [illegible] Hospital; £[illegible] to the Ripley Convalescent Home; £500 to the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties [illegible] the Bradford Eye and Ear Infirmary; and £[illegible] [illegible] Hospital. Mr. Richard Haworth, of Mersey Bank, [illegible], has bequeathed £[illegible] to the Manchester and Salford Hospital Sunday Fund. Mr. [illegible] Hargrave, of Harrogate, has bequeathed [illegible] Hospital for Women and Children.—The British Home for Incurables [illegible] £500, under the will of Miss C. S. Le Mar[illegible].—The [illegible] Company have given [illegible] the reception [illegible] Convalescent Home [illegible] received [illegible] from the Whitehall Cricket Club.—The Victoria Hospital for Children has received £50 from Miss [illegible] the support of the "[illegible]" cot.

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[1] Read before the Midland Branch.

OBSTETRIC MEMORANDA.

A CASE OF PLACENTA PRÆVIA, FOLLOWED BY PYÆMIA.

A case of the above in a Mrs. R. has, unfortunately, just fallen to my lot. About sixteen days ago, from the time of writing, I was called in to see this woman, who was losing large quantities of blood in the seventh month of pregnancy; the hæmorrhage accompanied the uterine contractions. Digital examination revealed a contracted os uteri, through which I could detect, what I anticipated, placenta-prævia; plugging was resorted to, with rest and opium; the hæmorrhage abated, but recurred the day following, when the old plug was withdrawn, and a new one introduced; the following day there was another copious outburst of blood; the patient had by this time become considerably blanched and was very weak; on withdrawing this plug, there was found sufficient dilatation to turn and deliver, this was easily and successfully done, under chloroform, the membranes being entire. An offensive lochial discharge was smelt, on entering the room, the second day after delivery, with an elevated temperature. Condy and quinine were resorted to, which corrected both odour and temperature.

The third day after delivery a rigor and 107° temperature took place; the rigors recurred with an almost exact periodicity every twenty-four hours, for five or six days, and there were all the symptoms of general pyæmia; there were no local manifestations of the disease; this condition of affairs continued till the thirteenth day, when delirium supervened, closely followed by death. At the time of delivery, the cervix was doubtlessly and unavoidably torn; the lochial discharge would be only too readily sucked up by the thirsty blood-vessels, and thus diffused rapidly over the whole system. My regret was that I did not commence immediately after delivery with disinfectant injections; the blood-poisoning might in this way have been prevented, and a recovery have taken place. It is with the object of recommending this, as an invariable rule in the after-treatment of placenta prævia, that I record this case.

John Ferguson, L.R.C.P.Lond., M.R.C.S.Eng.

SURGICAL MEMORANDA.

SUCCESSFUL OPERATIONS FOR HERNIA IN AGED PERSONS.

On April 28th, 1884, Mr. F. W. Way of Southsea was summoned to an old lady, aged 86, labouring under strangulated femoral hernia of three days' duration. The patient was suffering distressing pain and constant vomiting, and, during the last few hours, stercoraceous matter had been ejected. Her friends attributed her sudden illness "to cramp and bile." An unsuccessful effort was made to reduce the rupture.

I saw the patient in consultation with Mr. Way, and herniotomy was performed without delay. The tumour was very tense, and about the size of a small egg. The patient appeared much exhausted by the incessant vomiting. Mr. Way administered chloroform. No spray was at hand, but all other antiseptic precautions were employed. The operation was completed in four or five minutes, and the vomiting ceased at once. In a few hours, fluid nourishment and stimulants were judiciously administered in small quantities. The bowels acted spontaneously within forty-eight hours, and the wound healed in ten days. The aged patient is now in her usual health.

Remarks.—Herniotomy at the age of 86 years is not a common surgical necessity. Several cases of strangulated hernia in advanced life have been recently reported, but I think the age of my patient is greater than any yet recorded. With an experience of fifty-six herniotomies, I have never witnessed a more satisfactory result, and this can fairly be attributed to early operation, and the adoption of Listerian treatment. J. Ward Cousins, M.D.Lond., F.R.C.S.,

Surgeon to the Royal Portsmouth Hospital.

I send brief notes of two cases of strangulated femoral hernia, as they are not only interesting, from the advanced age of the patients, but also show the advantage and importance of early operative interference.

Miss C., aged 85 years, had suffered from rupture, for which she had worn a truss for many years; she had disused her truss, and, having a severe cough, forced the rupture, so that she could not reduce it. I was desired by my partner, Dr. Huthwaite, to see the patient on July 6th, 1877, he having seen her on the previous evening, and ordered ice to be applied. I found her extremely feeble, with a small, quick pulse, restless and vomiting incessantly. There was a hard tumour in the right groin, very tense, and about the size of a walnut. Taxis under chloroform failing to reduce it, I proceeded to operate; having exposed the neck of the sac, I divided the edge of Gimbernat's ligament, without difficulty, and so returned the bowel to its position. I brought the edges of the wound together. All severe symptoms ceased, the wound healed by first intention, and she made a rapid recovery.

Mrs. C., aged 79 years, exhibited almost identical symptoms on June 18th, 1878. In this case, also, Dr. Huthwaite solicited my aid. The symptoms were the same, except that the rupture "had been down" for a longer time, and the vomiting was fæcal. Chloroform was administered, and in this case I opened the sac; the bowel, which, though discoloured, was still glistening, was carefully returned after the stricture had been divided. Vomiting ceased; the bowels acted on the fourth day without medicine, and the wound in this case also healed by first intention. Joseph Thompson,

Consulting Surgeon to the Nottingham Dispensary.

CLINICAL MEMORANDA.

THE RELATIONSHIP BETWEEN SCARLATINA AND DIPHTHERIA.

I have read in the British Medical Journal of April 12th a very interesting and instructive editorial concerning the relationship between scarlatina and diphtheria. The cases reported interest me particularly, because in my own practice I have met with similar cases. During the past winter, I had under my care a little girl about ten years of age, suffering with a severe attack of diphtheria. After the most careful investigation, the only accountable source for the infection was a visit made at a relative's house one afternoon, where she met a child just recovering from scarlet fever. I have never known of a case where scarlet fever has followed exposure to the diphtheritic poison; but several times I have been able to trace severe attacks of diphtheria to no other source than that of exposure to some patient suffering with scarlet fever. The relationship existing between these two diseases is indisputable, and the facts presented in the editorial referred to must excite general interest. I shall hope to see this subject carefully investigated and presented in the Journal.

W. Thornton Parker, Acting Assistant Surgeon U.S. Army,
Fort Union, New Mexico.

THERAPEUTIC MEMORANDA.

THE TREATMENT OF HAY-FEVER.

As the time is again at hand for the annual epidemic of summer catarrh, I wish to direct attention to its treatment by belladonna, which succeeded so well in the case reported by me in the Journal for July 14th, 1883.

In contradistinction to most other means employed in the treatment of this malady, it is a rational remedy, and its success in the case referred to was certainly striking. For the convenience of those who may find it difficult to make use of the above reference, I may just repeat that the dose I gave was a minim and a quarter of the succus every hour till relieved (half a drachm to three ounces of water), and that the same medicine was used, and in the same form, as a lotion for the eyes on one occasion when they were especially tender.

I hope that those gentlemen who may give this remedy a trial during the ensuing summer will report the results in the Journal.

W. F. Phillips, St. Mary Bourne, Andover.

Progressive Atrophic Myopathy.—Landouzy and Déjerine (*Jour. des Con. Méd.*, February 1884) have given this name to a form of progressive muscular atrophy which occurs in children, and is almost always hereditary. It begins in the face, and then attacks the upper extremities, trunk, and lower extremities. In Messrs. Landouzy and Déjerine's case, the diaphragm, intercostal and subscapular muscles, and the muscles of the eye, pharynx, and larynx, had alone remained healthy. After death, the nerves and central nervous system were found perfectly normal, while the atrophy of the muscles was extreme. The disease, therefore, differs pathologically and clinically from the progressive muscular atrophy observed in adults.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

ROYAL FREE HOSPITAL.

CHRONIC OTORRHŒA: SUDDEN SUPERVENTION OF CEREBRAL SYMPTOMS, RAPIDLY FATAL BY THROMBOSIS OF LATERAL SINUS.

(Under the care of Dr. COCKLE.)

[Reported by Mr. C. LANE SANSOM, M.R.C.S., House-Physician.]

ARTHUR F., aged 15, was admitted on March 17th, 1884. He had been treated in the out-patient department during the previous three weeks, for otorrhœa of some years' standing; otherwise he had always enjoyed fairly good health. When admitted, he was pale and thin, but fairly well developed. His face had rather a dusky hue; and the expression was very anxious, and of marked "cerebral type." The skin was hot and dry; the temperature was 104°; the pulse 130, and peculiarly hard; the tongue was dry and cracked; the urine was of specific gravity 1020, and no sugar nor albumen was present. The heart-sounds were normal, and the respirations 48, very rapid and shallow. There was a thin purulent discharge escaping from the right ear, but no swelling or tenderness over the mastoid process of the temporal bone. He complained of headache, with, he said, the feeling of a tight band round his head. Ophthalmoscopic examination showed the retinal vessels of the right eye to be congested. There was no tenderness of the scalp.

Four hours after admission, there had been sudden increase of the headache, which was now very intense. He screamed out when any part of the body was touched or moved. He preferred lying on the right side. His face was contorted by general spasmodic twitchings, and his look was peculiarly fixed and staring, with slight and variable internal strabismus of the left eye, and sudden contraction and dilatation of the pupils at irregular intervals. Marked intolerance of light prevented all furthur ophthalmoscopic observation. He seemed to understand a question, but a short interval elapsed before an answer was given. He refused food, but complained of great thirst. There was no difficulty in swallowing. This condition lasted nearly an hour, when a remission of all the symptoms took place, and a short rest was obtained.

March 18th. The temperature, which had sunk to 101° during the night, had risen to 104° Fahr.; the pulse was 146, and was still hard; the respirations were 48, and very shallow. He was restless and delirious at times, especially after several attacks of headache similar to that described above; but he had slept at intervals during the night. The headache was now more severe, several exacerbations occurring during the day; twitchings of the face were more marked, especially of the corrugatores superciliorum. The fixed look of the eyes and strabismus were still present; the condition of the pupils remained the same; the photophobia was increased. The peculiar "hydrocephalic cry" was very marked. He screamed out if touched or moved, complained that "someone was tying up his head too tight," and seemed to try to remove something from his forehead. The mental faculties remained the same. *Tache cérébrale* and ankle-clonus were well developed, but no exaggeration of the other reflexes existed. Small petechiæ had appeared all over the body except the face and neck. He was ordered two grains of hydrargyrum cum cretâ twice a day, three leeches to be placed behind the right ear, and ice to the head.

March 19th. He had scarcely any sleep during the night, attacks of intense headache occurring very frequently, and the following delirium being more violent. He now appeared perfectly indifferent to surrounding objects, but swallowed a little nourishment when it was put into his mouth. The occasional screams had now changed into a low, continuous moan. The twitchings of the face and strabismus remained the same as on the previous day. The temperature was 103°; the respirations 56; and the pulse 190, as nearly as could be counted, but it was scarcely perceptible. The muscles of the limbs were flaccid, but those of the abdomen rigid. He no longer understood what was said to him. The evacuations were passed into the bed. Half-an-hour later coma rapidly supervened, and he died, whilst in this condition, in ten minutes. At no period of the case did vomiting occur.

The necropsy was made twenty-six hours after death by Dr. Harrington Sainsbury. There were numerous small petechiæ on the surface of the body, but no other discolorations. There were a few scattered and recent adhesions between both pleuræ; there was also six ounces of discoloured semi-purulent fluid in the left cavity. Scattered over the lungs, numerous small infarctions, varyiug in size from a pea to a walnut, were seen; in the boundary-walls were small patches of gangrene. The heart and pericardium were healthy. Nothing of pathological importance was found in the abdomen. The pia mater and the arachnoid were healthy. There was some discoloration present on that part of the right lobe of the cerebellum which corresponds to the lateral sinus; the brain-substance here was softened and pulpy, but normal elsewhere. There was no excess of fluid in the ventricles. The brain being removed, the dura mater was found softened, and a greenish discoloration was seen over that portion which invested the right temporal bone; on stripping this off from the bone, a discolored clot was found, adherent to, and occupying, the lateral sinus, and extending some way into the jugular vein; the sinus was softened. The greater part of the temporal bone was smooth and firm, but at one spot, in the groove for the lateral sinus, it was discoloured, soft, and readily broke down, disclosing a carious cavity, barely a trace of the structures of the middle ear remaining.

REMARKS BY DR. COCKLE.—This case possesses interest not only as illustrative of the admitted difficulty—indeed, at times utter impossibility—of arriving at a precise diagnosis of thombosis of a lateral sinus; but also from the nature and extent of the chest-lesions. I was disposed to regard the case as one of inflammation of the meninges from extension of disease in the temporal bone, with possible abscess of either cerebrum or cerebellum imminent or actual. Death followed too soon to allow the symptoms of pyæmia full development. But there seems reason to believe that, had no thrombosis occurred, abscess of the cerebellum would speedily have followed.

BRISTOL GENERAL HOSPITAL.

TWO CASES OF AMPUTATION AT SHOULDER-JOINT FOR SARCOMA OF BICEPS.[1]

(Under the care of Mr. NELSON C. DOBSON.)

CASE I.—A. G., aged 34, a dressmaker, living at Bitton, came under my care at the Bristol General Hospital, in November 1879, for a large tumour growing from the inner side of her upper arm. She had been for some time under the care of Mr. Henry Grace. Unfortunately, the notes of this case which refer to the history of the patient have been lost, though all the subsequent notes I have in full. I am, therefore, unable to give an account of how long she had noticed the original tumour, and also whether her family was healthy. The young woman was of rather slight build, but looked healthy, and complained of nothing but the swelling on the inner side of her left upper arm; this swelling was as large as the two fists, the skin over it was healthy, there was a moderate sized vein on the surface of the tumour, but there was no œdema of the skin or of the limb; no axillary or cervical glands could be found enlarged. The tumour was firm but not hard to the touch, movable to some extent, but appeared to have deep seated attachments to the brachial vessels and nerves. It gave one the idea of not being accurately defined in outline; and from its position, and the amount of movement it had, it seemed extremely probable that the vessels and nerves would be found incorporated with the growth, and inseparable from it. A grooved needle inserted gave negative results. My diagnosis (which proved to be correct) was a sarcoma growing from the inner border of the biceps muscle.

I determined to try and remove the tumour, and if this should be impossible, from its connection with the vessels and nerves, to amputate the arm. On looking at the tumour it seemed extremely likely that I should not be able to remove it. As I proceeded with the operation I found the tumour was encapsuled, and I readily removed it, without injury to any large vessel or nerve; though in the dissection the brachial vessels were exposed for three or four inches. The patient made a fairly rapid recovery from the operation. The tumour proved to be a small round-celled sarcoma. The patient again presented herself at the end of the next March, about four and a half months after the removal of the tumour. There was now a large well marked swelling on the front of the upper arm, somewhat diffused, and elongated; evidently involving the biceps, and reaching rather high up the front of the upper arm. There was still no enlargement of glands in the neighbourhood, and no sign of deposit in any internal organ. According to her statement, the swelling first began about six weeks before I saw her, and grew to its present size (as large as the original tumour) in that period. It was fixed when the arm was extended, but flexing the arm allowed the tumour to be slightly moved from side to side, but evidently with the biceps muscle, the short head of which could be distinctly felt thickened. It was evident that the only chance for the patient was in amputation at the shoulder-joint; there was no reasonable probability of dissecting out the tumour, and it was growing rapidly.

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[1] Abstract of paper read before the Bath and Bristol Branch.

Accordingly, on April 1st, I amputated at the shoulder by a skin-flap from the outer side, and a posterior axillary flap; there was only one remark to make respecting the operation, and that is that, in addition to the ordinary amputation, I dissected out the long head of the biceps, and the origin of the short head of the biceps and coracobrachialis. The patient speedily recovered from the operation, and left the Hospital on the 14th day.

The growth was found to be on the anterior and outer surface of the biceps, of a whitish colour, and very soft, so much so that the finger readily broke it down. It was softer than the original tumour. Microscopically, the original tumour, and also the recurrent growth which necessitated the amputation, were characteristic round-celled sarcomata.

I saw this patient again on July 30th, 1880. There was evidently a recurrence near the region of the coracoid process. No further operation was possible, and I learned from Mr. H. Grace that she died with a most enormous development of the sarcoma. In spite of what I was able to do for her by operation, the course was that of the fiercest malignancy.

Mr. Grace has kindly informed me that there were no signs of deposit in any internal organ, the growth being confined to the stump and cervical lymphatic glands.

Case II.—J. L., aged 41, a blacksmith, living at Trowbridge, in Wiltshire, was admitted on January 16th, 1884. He was anæmic looking, but otherwise a healthy and large made man, weighing 18 stones. His family-history was singularly good. He said that the present swelling in his arm began ten months earlier, though he had continued to work up to the last month. He attributed his present condition to a blow from a piece of iron. He was under the care of Dr. Sylvester of Trowbridge; he also was in the Bath Hospital. He came to Clifton, and consulted several surgeons there; among others, my friend Dr. Marshall, who sent him to me. When I saw him at my house, he had a swelling on the front of his upper arm, as large as a cocoa-nut. The skin was slightly œdematous over the growth. The growth was not well defined at its attachments, and was not very movable. I had no doubt it was intimately connected with the biceps muscles, and with the vessels and nerves. There was a smaller growth, about the size of a small apple, deeply placed under the muscles at the upper and outer part of the forearm. I had no doubt that both growths were sarcomatous. I told him he had better come into the hospital, that possibly I might be able to remove the tumour; but I thought it very doubtful, and would not attempt it unless I had permission to amputate at his shoulder-joint, if necessary. He then told me Dr. Sylvester had made arrangements for him to go to St. Bartholomew's Hospital. He, however, said to me, "If the surgeons in London give me the same opinion as you have done, I will return, and you shall do it." They gave him the same advice; he returned, and I amputated at his shoulder-joint. In the ten days that elapsed whilst he was in London, the circumference of the arm had increased 1½ inches, and now measured 17½ inches around the tumour. The upper part of the forearm had become somewhat œdematous, and the tumour was more diffused; and I came to the conclusion, on various grounds, that to try and remove the growth was futile. There was no glandular enlargement; no signs of deposits in any organ.

On January 17th, I removed his arm at the shoulder-joint. The limb was large, and somewhat difficult to manipulate. I made a skin-flap from the outer deltoid region, and a short posterior flap, thus avoiding the disease as far as possible. The only point about the operation was that (as in the former case) I dissected out both heads of biceps and the origin of the coracobrachialis. Just before the operation I put in a trocar and drew off about an ounce of bloody fluid. The tumour was not encapsuled, was growing apparently from the posterior aspect of the belly of the biceps, was soft in consistence, dark and mottled in colour, and had a small blood-clot in its centre.

The lower tumour was situated under the origins of the extensors of the wrist on the radial side, and was somewhat whiter in colour than the upper one. The patient made a good recovery from the operation. What his subsequent history will be is, to some extent, a matter of doubt, but, looking at the nature of his tumour, I have grave fears of a speedy recurrence.

Microscopically, the growth appeared to be one of that somewhat rare class of sarcomata known as the alveolar. The tissue was, in places, very distinctly alveolar, the cells of the alveoli being large, but the fibrous tissue surrounding these alveoli was not so perfect as that which is frequently seen in carcinomata. At some parts of the section, the gradual conversion, so to speak, of spindle-shaped cells into fibrous tissue could be seen, and in other places the sections showed much more plainly the ordinary form of a mixed-celled sarcoma, and having no alveolar structure whatever. At first sight, in places, the tissue certainly resembled in many respects carcinoma. I am further strengthened in the belief that the growth was a sarcoma by the fact that alveolar sarcoma is said to spring most commonly from muscle, or rather, the connective tissue of muscle. The lower tumour had precisely the same microscopical appearances. Mr. Butlin, of St. Bartholomew's Hospital, who saw this case before operation, and who had also seen a section, gave it as his opinion that clinically and microscopically it was alveolar sarcoma.

(We may add that a report of the consultation held on this case at St. Bartholomew's Hospital will be found in the British Medical Journal for January 19th, 1884, page 104.)

Remarks by Mr. Nelson C. Dobson.—These two cases, especially if you see only the pathological specimens which are before you, seem exactly similar, but when you examine them in detail, there are differences. Thus, in the case of the man, there was a history of accident, which suggested to Mr. Harrison Cripps the idea of traumatic malignancy. I am not myself disposed to attach much importance to the reported accident. In both cases the left limb was the one affected; one occurred in a man, the other in a woman. In one, the primary tumour was encapsuled, and was removed by operation antecedent to the amputation. In the other, the tumour was not encapsuled, and amputation was the primary operation. In one, the tumour was solitary; in the other, there were two distinct tumours; indeed, I might say that, in the case of the man, there were three, because in carefully examining the limb after removal, a third small growth was discovered in the brachialis anticus. In neither case was there any glandular or other secondary affection discoverable at the time of operation. One was a round-celled sarcoma, and the other an alveolar sarcoma. In one, the history is complete; the patient died of a local recurrence of enormous extent. Of the other, I can only say he has recovered from the operation; the days are yet few, and I would rather not anticipate evils; but alveolar sarcoma is said to be one of the most malignant varieties of such diseases.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

Friday, May 23rd, 1884.

Sir Andrew Clark, Bart., M.D., F.R.C.P., President, in the Chair.

A Case of Pyelo-lithotomy.—Mr. W. Anderson recorded this case. The patient, a joiner, aged 20, was admitted into St. Thomas's Hospital in July 1883. The symptoms, of nine months' standing, were characterised by the presence of hæmaturia and pain in the left loin, aggravated by exertion, and relieved by rest. The urine deposited crystals of uric acid, but contained no admixture of pus. Some fulness and tenderness in the loin, with increase of the area of percussion-dulness, appeared about a week before the operation. An operation was performed on September 10th, 1883, under strict antiseptic precautions. The kidney was reached by an oblique incision three and a half inches in length, parallel to, and three fingers' breadths below, the eleventh rib (the twelfth rib was not to be felt externally). On exposure of the organ, a stone was detected by digital exploration in the pelvis renalis, and was reached by incision of the membranous wall of the duct. An attempt was made to extract the calculus by means of the forceps, but failed in consequence of its firm fixation. It was then dislodged by the finger. No hæmorrhage occurred after the completion of the parietal incision. After the insertion of a drainage-tube, the wound was closed with silk sutures, and dressed antiseptically. The progress was uninterruptedly good, except for the appearance of slight toxic symptoms, due to absorption of carbolic acid on the second and third days after the operation. The urine escaped through the wound in small quantity during the first twelve or eighteen hours, after which the whole of the secretion was passed *per vias naturales*. The discharge remained aseptic throughout. The temperature rose to its highest point (102.2°) on the second day, and sank to the normal level at the end of ten days. The drainage-tube was removed on the seventh day, and the antiseptics were abandoned after the end of the second week. By the middle of October, about five weeks after the operation, the wound had become reduced to a superficial sore, and the patient was able to get up and walk about the ward without pain.

The urine presented only a trace of albumen and a few cell-forms. The patient was discharged cured on November 1st. The calculus weighed sixty grains when entire, and consisted chiefly of calcium-oxalate, with about 10 per cent. of uric acid and traces of magnesium-phosphate. It was shaped like a molar tooth, with a rough crown and two fang-like processes, between which was a circular sharply marginated depression. A piece of renal substance had become embedded in the depression, and was so firmly adherent that it was torn away from the organ during the extraction of the stone. The case was referred to as the eighth of the published examples of operation for removal of a stone from the kidney by incision through the healthy parietes. Of the eight cases, seven were successful, one ended fatally. The main element of the calculi was uric acid in two instances, calcium-oxalate in four, and calcium-phosphate in two; and the weight ranged between twenty-six grains and one ounce. The operative procedures differed principally in the treatment of the kidney; in six cases the stone was reached by section of the renal substance; in two by incision of the pelvis renalis; severe hæmorrhage resulted in two of the former group, but was checked by pressure. The cure was perfect in the cases of recovery, and in no instance was permanent urinary fistula a sequel; the secretion ceasing to flow through the wound after an interval ranging from eighteen hours to eighty-one days. The name of pyelo-lithotomy was proposed, to distinguish cases in which the stone was extracted through an aperture in the pelvis renalis from cases of nephro-lithotomy in which the renal parenchyma was incised for the same purpose. It was suggested that the former procedure, when practicable, was preferable to the latter, on account of the removal of the danger of wounding the large vessels in the neighbourhood of the ileum, while in the two cases in which the plan had been adopted, the flow of urine through the wound speedily ceased, before the end of eighteen hours in one instance, on the sixteenth day in the other. As incidental points for notice in the case recorded, mention was made, first, of the absence of the enlargement or displacement of the kidney that might have been anticipated from the lumbar fulness, dulness, and tenderness observed before the operation; and secondly, of the impossibility of distinguishing the twelfth rib by external examination, the lowest palpable rib being the eleventh, a peculiarity which, if undetected, might bring the pleural sac into danger. Mr. GODLEE thought the kidney should be removed in cases where it might be supposed to be extensively diseased, in consequence of the passage of such calculi as had been now shown to the Society. The hæmorrhage in nephro-lithotomy was not usually alarming, and was easily controllable by pressure. Complications were to be anticipated in such cases, if cystic lithotomy were done. He had operated on a kidney, the structure of which was very much torn during the proceeding, and no evil results ensued. The PRESIDENT thought the paper offered suggestions to the effect that the diseased condition might have been associated with improper feeding, or produced by a constitutional defect influencing nutrition; and he inquired whether this had occurred to Mr. Anderson.—Mr. H. MORRIS considered that it was still too early to decide definitely whether it was better to select the kidney or its pelvis as the site of incision; a greater number of cases was required for comparison, and it would most likely be found desirable to choose that part of the organ at which the enclosed calculus projected most prominently. Often, however, it was discovered that the pelvis was almost entirely destroyed, the stone presenting at the surface of the kidney. He thought unnecessary complications of nomenclature would be introduced by applying a new name to every modification of operation in this connection. The question of hæmorrhage need not concern the surgeon, for it could always be readily controlled, after the first gush, by compression. In a recent case he had, after incising the kidney by aid of the knife, the fingers were employed to tear down the tissue of the organ until the stone was reached and removed, the finger itself serving to arrest the bleeding by acting as a temporary tampon. The question of fistula must not be allowed to affect the choice of site, and he was not convinced that a preference could be awarded to the pelvis on this account. Two weeks ago he removed a stone weighing [illegible] grains, and the following day the patient passed 60 ounces of urine *per diem* [illegible]; and although Mr. Morris fully expected that some would escape through the wound, none had since passed in this direction. He considered it quite justifiable to make even a large incision in search of a stone, when the symptoms of a stone rendered its existence in the kidney certain, and when the calculus could not be otherwise discovered. He had performed nephrectomy in one instance where exploration failed to expose the stone, and in which, after removal, the organ was found to be in a healthy state; had sufficient exploration been resorted to, the kidney might have been preserved to the patient. He would advise exploration of the bladder in cases of suspected stone, prior to extirpation of a kidney, in both sexes, by a median lithotomy-incision in the male. He was led to this conclusion by recent experience of a case, in which a calculus was discovered buried in the bladder-wall at the entrance of the ureter. Symptoms of stone had extended over six months.—Mr. ANDERSON said he had made full inquiries into his patient's history, and could find nothing to account for the condition in which he was. The fact that all the calculi came from the left side was proved by the site of the pain experienced during their passage. He did not advocate the pelvic operation, save under certain circumstances, in which it might prove of service.

The Sequel of a Case of Aortic Aneurysm.—The Secretary read for Dr. FINLAY notes of this case. It was first brought forward, and the patient, a female aged 32, shown at a meeting of the Society on February 10th, 1882. A full report appeared in the *Transactions*, vol. xv, page 151. She presented well-marked signs of a sacculated aneurysm of the first part of the aorta, with aortic and mitral incompetence, and had been treated for six months, in the Middlesex Hospital, on Mr. Tufnell's plan of restricted diet in the recumbent position, with increasing doses of iodide of potassium. For two years and a-half subsequently, she had attended as an out-patient, having taken almost continuously iodide of potassium in considerable doses. The question proposed for discussion, when the patient was shown, was the propriety or otherwise of operative treatment by electrolysis, or the distal ligature, the arguments for and against which were stated in the paper then read. As, independently of other considerations, she was unwilling to be again laid up in the hospital, it was resolved merely to continue the treatment with iodide of potassium, and she attended regularly at the out-patient department, once a fortnight, until her death, which took place on March 26th, 1884. On the last occasion on which she was examined (viz., January 18th, 1884), she stated that she felt better in her general health than she had done when first shown at the Society's meeting in 1882. As to her physical condition, the notes then made were practically the same as those read on the former occasion. On March 22nd, however, she was seized with shortness of breath, cough, and pain in the chest, and she died on the 26th with symptoms of bronchitis and congestion of the base of the left lung. At the *post mortem* examination, the aneurysm was found to be adherent to the cartilages of the second, third, and fourth ribs on the right side, and to the adjacent part of the sternum. The sac, which was divided into two parts by a calcareous ridge, sprang from the aorta immediately above the aortic valve, and contained some loose soft decolorised clot. It was roughened and thickened by patches of atheroma, which had proceeded in many parts to calcification. Part of the sternum and of the cartilages of the third and fourth ribs was eroded. The cusps of the aortic valve were thickened, puckered, coherent, and obviously incompetent. The muscular substance of the heart was pale and soft; and, under the microscope, showed advanced granular degeneration. The lungs were œdematous, and the base of the left was congested and pliable, breaking down under pressure with the finger. The results of the *post mortem* examination bore out the conclusions arrived at when the case was first brought forward. In particular, the condition of the aortic valve established the fact of the aortic regurgitation, regarding which doubts had been expressed when the patient was shown. As to the effect of treatment, there was no deposit of fibrin or consolidation of the sac. Probably all the methods of treatment used acted in the same way by lowering the blood-pressure. It was worthy of note that the aneurysm was not directly the cause of death, which was due rather to the degeneration of the heart's substance, consequent upon the incompetence of the aortic valve.

Two Cases of Hernia [illegible].—Mr. GOLDING-BIRD contributed these cases. The first was a woman, aged 47, on whom he had operated in 1878 for right femoral hernia, opening the sac and removing omentum. In December 1883, he again operated for fresh strangulation, and then found the [illegible] described, but of which there was no mention in the notes of the first operation; presumably, therefore, it had developed subsequently. Now, besides the usual and large femoral sac, there was, lying at right angles, a process of sac [illegible] passing down [illegible] the pubic spine. The hernia was, at the close of the operation, [illegible] position, [illegible] the [illegible] with twenty years' history of [illegible] femoral hernia. After wearing a truss the first ten years, it disappeared until two years ago, when, in addition to the inguinal protrusion, there developed a large and subcutaneous tumour, lying above Poupart's ligament, and between the crest of the ilium and the external abdominal ring. Twice it had appeared and then in a few days nearly subsided, but failed to do so on a third occasion, in the beginning of this year. Kelotomy was performed; and it was then found that, whilst the original hernial protrusion existed at the external ring, a large and laterally connected sac had burst through the front part of the inguinal canal, leaving only a broad external pillar, and lay in the aponeurosis of the external oblique muscle. The bowel was relieved, after division of the internal ring, without opening the sac; this was then opened, and much inflamed omentum removed. The patient sank from exhaustion on the third day. Mr. Golding-Bird referred to a case of Mr. Luke's, published thirty years ago, almost identical with his own; but the great peculiarity of this case he considered to be in the double sac; the absence of taxis or any violence ever having been employed to induce its formation; its bursting through the external oblique fibres in front of the canal; and its subcutaneous position, that of intraparietal herniæ being always inter- or sub-muscular.

Impaction of a Bone in the Larynx.—Dr. F. **Taylor** read notes of this case, which was contributed by himself and Mr. Golding-Bird. A man, aged 63, came among Dr. Taylor's out-patients for a cough which he had had more than five months. Though he did not complain of his throat, a slight stridor led to an examination of the larynx, when a foreign body, resembling bone, was seen lying below the cords, and extending from front to back of the larynx. It appeared to be about a quarter of an inch broad, but there was breathing-space on each side of it, and on phonation the cords closed easily over it. On being questioned, he remembered that four months previously he had taken some sheep's head broth, and half swallowed with it a piece of bone. This stuck in the back of his throat, and he was unable to move it with his finger; but his wife with the tablespoon pushed the bone down his throat, and he thought it was safely disposed of. For a week his throat was sore, and for two or three days he spat some blood, but since then he had not had any inconvenience from it. He was admitted into the hospital, and was found to have the physical signs of emphysema, with expectoration of much frothy mucus, and metallic cough, preceded by stridulous inspiration. After a few days he was transferred to a surgical ward, and Mr. Golding-Bird proceeded to remove the bone by laryngotomy. On dividing horizontally the crico-thyroid membrane, and putting in a tracheal dilator, the bone was at once seen, and removed with Toynbee's ear-forceps. A second smaller piece, of the size of a pea, was seen impacted in the mucous membrane covering the cricoid, and was also removed. The patient made a rapid recovery, and when seen again, two years later, the larynx appeared normal; the cords moved freely, but were slightly pinker than usual. The larger piece of bone removed measured three quarters of an inch in length, five-eighths of an inch broad, and a quarter of an inch thick. Attention was called to the large size of the foreign body, the curious way in which it became impacted, its long retention without inconvenience to, and, indeed, without the knowledge of, the patient. Its large size, and the apparently firm impaction below the cords, led to the adoption of the external operation rather than its removal by the mouth. —Dr. **De Havilland Hall** asked if any attempts had been made to remove the foreign body by means of forceps prior to operation.—Dr. **Coupland** instanced two cases of obstruction of the larynx by foreign bodies. In one, a portion of necrosed bone had become detached from the base of the skull in a syphilitic patient, and was found, after death, in the glottis. In the other, a man, pleurisy and pneumonia were diagnosed, but, after a week or two, the patient expectorated a large fragment of mutton-bone, which had been swallowed some time before with some broth. The lung cleared, and good recovery ensued. —Mr. **Golding-Bird** explained that removal by forceps had not been tried, because the bone had been *in situ* three months, was firmly impacted, and presented "broadside on," so that its removal by such means must have been difficult or impossible without great injury to surrounding parts.—Dr. **Taylor** agreed with Mr. Golding-Bird's remarks.

Living specimens were exhibited by Mr. Bernard Roth (a remarkable Case of Lateral Spinal Curvature), and by Mr. Howard Marsh (Removal of Dislocated Astragalus; and Cases of Hernia).

Sir Spencer Wells.—Sir Spencer Wells has received the decoration of Commander of the Royal Norwegian Order of St. Olaf, forwarded by direction of His Majesty the King of Sweden and Norway.

News has been received in Belfast of the death of Dr. Hunter, the first medical missionary to China of the Irish Presbyterian Church. He died on board the steamer coming from China to this country. Dr. Hunter was 51 years of age.

REVIEWS AND NOTICES.

The Treatment of Backward Displacements of the Uterus and of Prolapsus Uteri by the New Method of Shortening the Round Ligaments. By William Alexander, M.D., M.Ch.Q.U.I., F.R.C.S.Eng., Visiting Surgeon to the Liverpool Parish Infirmary. London: J. and A. Churchill. 1884.

Although this work is of small dimensions, it is of considerable importance, advocating, as it does, a new method for the radical cure of backward displacements of the uterus. The author first published his experience two years ago, in the pages of the *Medical Times and Gazette*; and a paper by Dr. Adams of Glasgow, advocating the same operation, appeared two months later in the *Glasgow Medical Journal* (June 1882). Dr. **Alexander** published further experiences in the *Liverpool Medical and Chirurgical Journal* in January 1883; whilst in the same year, at the meeting of the British Medical Association in Liverpool, Dr. Lediard of Carlisle read a communication on Alexander and Adams's Operation on the Round Ligaments, which will be found in the Journal for February 23rd of this year, page 354. The work now under consideration is an important addition to the literature on the subject.

The value and justifiability of an operation for the shortening of the broad ligaments depends on a very great number of considerations, which must be familiar to every reader of gynæcological literature, and there is no space in our columns for the discussion of these questions. The very title of the operation, and of this work that recommends it, sufficiently explains Dr. Alexander's opinions as to some of the agencies that naturally support the uterus. It must be borne in mind, however, that he believes in the retentive power of the abdomen and the natural support which the pelvic organs afford one another. He observes that the uterus never hangs suspended in the pelvis by the round ligaments as a man hangs suspended from the ceiling by his two arms. It is, he believes, always supported by the adjacent tissues, and, consequently, the strain on the ligaments is scarcely ever sufficient to stretch them. They "are rarely of any use in a healthy person, but we can make them of use in cases of uterine displacement."

The operation essentially consists in making an incision, from one to two inches in length, from the pubic spine outwards and upwards in the direction of the inguinal canal. The oblique fibres crossing between the pillars of the external abdominal ring are divided, and then the anterior extremity of the round ligament is exposed. It is reddish, and mixed with fat. It is then raised by an aneurysm-needle, grasped by the fingers, and gently torn from its inguinal connections. This is done on both sides. "The ligaments pull out with the greatest ease, and appear as white, strong, substantial cords." The uterus is then placed in its natural position by the sound, and held in place by an assistant; then the ligaments are pulled out till they are felt to control the position of the uterus. Each ligament is fixed by two or three sutures of silver wire or catgut passed through it and the pillars of the external abdominal ring. Dr. Lediard, it will be remembered by those who have read the article already quoted, winds the ligament round a piece of stick and leaves it like a pedicle projecting through the wound. At the conclusion of the operation, a Hodge's pessary, or, in some aggravated cases of retroflexion, a stem-pessary, is introduced into the vagina. The necessity for the latter instrument in certain cases is illustrated by the author by means of diagrams.

Dr. Alexander gives an account of twenty-two cases under his own care where this operation was performed. Many of the patients were in comfort and good health two years after operation; in some, the reflex symptoms—including, in several cases, epilepsy—disappeared; in others, they remained unimproved. In two cases, Dr. Alexander attempted oöphorectomy by pulling the ovary through the inguinal canal. In the first case, a woman, aged 38, with prolapse of the uterus and tender enlarged left ovary, this proceeding was easy, but the ligature of its pedicle was difficult, and the wound suppurated. In the second case, a woman, aged 35, with prolapse of the uterus and chronic ovaritis, the ovary could not be drawn out through the inguinal canal. The author concludes by an account of similar operations performed by Drs. Macfie Campbell, Lediard, Imlach, and Burton.

It is clear that many objections may be raised against the performance of this operation, and those who disbelieve in the possibility of maintaining a prolapsed or retroverted uterus in place after reduction will certainly trace the successful results to the rest which followed the operation. The author has, however, advocated the claims of the operation with great judgment and moderation.

A TEXT-BOOK OF PATHOLOGICAL ANATOMY AND PATHOGENESIS.—By ERNST ZIEGLER, Professor of Pathological Anatomy in the University of Tubingen. Translated and edited for English students by Donald Macalister, M.A., M.B., Member of the Royal College of Physicians, Fellow and Medical Lecturer of St. John's College, Cambridge. Part II Special Pathological Anatomy, Sections I–VIII. London: Macmillan and Co. 1884.

THE sections of the second volume of this standard work include the pathology of blood and lymph; the vascular mechanism; the spleen and lymphatic glands; the serous membranes; the skin; the mucous membranes; the alimentary tract; and the liver and pancreas. This includes a very wide range of pathological science, far beyond the limits of literary criticism. The high authority of the author and translator is, in itself, a sufficient recommendation, a proof that the *Text-book* is essentially a standard work.

Perhaps the most valuable portion of the first volume was that department which treated of micro-organisms, describing their nature and habitat as though they were botanical organisms of a higher, more familiar, and more agreeable kind, a natural history of bacteria, in fact, which taught the student the nature of causes before instructing him in the nature of effects. As in a new work we seek for what is wanting or imperfect in older publications of the same class, so we approved of the passages relating to bacteria in the first volume, and for the same reason are of opinion that the section on skin is the most valuable part of the second. As a rule, the pathology of the skin has been too much specialised, and kept more or less out of works professing to include a sketch of the entire science of pathology. ZIEGLER and MACALISTER include in this general work all the special details that are to be found in the monographs of eminent dermatologists. A reference to the illustrations of this section is alone sufficient to show its value. Previous English manuals abound in good drawings of tumours, so that the student is never at a loss, when examining a specimen that is undoubtedly a tumour, for want of reference, but in the case of skin-diseases it has hitherto been otherwise; and the beginner, or even the advanced student, has been forced to search through the archives of medical libraries, which detracts from the utility of a manual or text-book. In the work under consideration, we find the following useful woodcuts, executed with the highest accuracy: senile atrophy of the skin; section through a syphilitic mucous patch; section through the margin of a blister due to a burn; section of the skin in erysipelas bullosum; section through a vesicle of herpes; a small-pox vesicle passing into the pustular stage; blister from a burn in process of healing; patch of lupus vulgaris; infantile syphilitic pemphigus; ichthyosis hystrix; and drawings illustrating the pathology of warts, acne, and parasitic affections. The text accompanying these illustrations is very complete, so that we find a complete treasury of dermatological knowledge within a work on general and special pathology.

Another novelty of a kind that should be made known to all beyond the range of specialism is actinomycosis, a disease still mysterious, as proved by the fact that, when a patient was exhibited by Mr. Treves, at a recent meeting of a well known London society, many of its members candidly avowed that they had not previously been aware of its existence. On reference to the index of the first volume of the JOURNAL for 1882, a leader will be found giving a full account of Bollinger and Ponfick's researches on actinomycosis and its occurrence in man. In the *Text-book*, this remarkable disease has not been overlooked; it is described, not only as a fungus in the first part, but also under the heading of parasitic affections of the alimentary tract in the second volume; where the authors note that, though Israel was the first to observe and describe the ray-fungus in the human subject, it was Ponfick who first recognised the true nature of the disease, and declared it to be identical with the cattle-disease previously described by Bollinger. Ponfick, the authors further observe, was also the first to demonstrate the genesis of the disease by means of his inoculation-experiments.

The section on the pathology of the mucous membranes is of the highest value; want of space forbids us from reviewing it at length, and from making more than a mere reference to the excellent chapters on the pathological conditions of viscera, more thoroughly considered in previous works on pathology than some of the other subjects included in Ziegler and Macalister's *Text-book*.

ON THE VARIOUS MODES OF TESTING FOR ALBUMEN AND SUGAR IN THE URINE. By GEORGE JOHNSON, M.D., F.R.S., President of the Royal Medical and Chirurgical Society; Professor of Clinical Medicine in King's College; etc. London: Smith, Elder, and Co. 1884.

IN this admirable little book, the substance of which has already appeared in the form of lectures in the pages of this JOURNAL, the author gives us, in a very able and lucid form, full directions for facilitating the detection and estimation of albumen and sugar in the urine; and he does so, as he states in his preface, in the hope that the practice of testing for these products in every case of disease will be, in some degree, promoted. We heartily echo his wish.

The nitric and picric acid tests for albumen are discussed in considerable detail, the advantage, according to Dr. JOHNSON, being in favour of the picric acid. A saturated watery solution of the acid is used, or it is added to the urine in the form of a fine powder. A test-tube six inches long is taken, and into it is poured a four-inch column of urine; then into the tube, held in a slanting position, an inch of the picric acid solution is gently poured on the surface of the urine, upon which it floats, mixing only with the upper layer of the urine. The presence of albumen will be indicated by the cloudy turbidity above the junction of the two fluids, and the turbidity is increased by the application of heat.

The precipitate given by peptones in urine is distinguished from that given by albumen by its ready solubility when heated. "In fact," as Dr. Johnson observes, "there is no known substance, occurring in either normal or abnormal urine, except albumen, which gives a precipitate with picric acid insoluble by the subsequent application of heat."

This picric acid precipitate, soluble on boiling, he also regards as a more delicate test for peptones than the rose-red colour given by them with Fehling's solution.

As the author is no believer in physiological albuminuria, he insists on the detection of the smallest trace of albumen in the urine, whether with or without tube-casts, as always abnormal and indicative of some pathological change, and, therefore, prognostic of danger. And this is to be specially borne in mind in the convalescence from acute nephritis with albuminuria; for, as Dr. Johnson points out, by allowing the patient to pass from medical supervision, and to return to his usual habits, while a trace of albumen remains in the urine, he may run the risk of establishing permanent renal mischief. In making this examination for albumen, care must also be taken to test the urine that is secreted after food and exercise, and not merely that passed after resting in bed and before breakfast—from which, even in permanent albuminuria, all albumen may be absent. "It will generally be found that the amount of albumen in the urine secreted after food and exercise is twice as great as that passed after some hours of abstinence and rest in bed."

In dealing with the tests for sugar, Dr. Johnson dwells chiefly upon the advantages possessed by the picric acid and potash test. When these bodies are boiled with saccharine urine, claret-red colour is developed; and upon the intensity of the tint he founds his method for the quantitative estimation of the sugar present. This last is to be recommended, not only for its general accuracy for practical purposes, but also for its ready applicability. The method is both easy, and easily learnt.

In conclusion, Dr. Johnson insists upon the importance of testing the urine in all cases of disease for both albumen and sugar, for, as he remarks, if this method became general, many otherwise essentially incurable cases of albuminuria and glycosuria might be saved by their early detection. His practical remarks, also, on the subject of glycosuria are worthy of repetition. The conditions of glycosuria and diabetes, as he points out, are by no means synonymous; and he instances cases of glycosuria with three or four to fifteen or twenty grains of glucose per ounce, the urine being normal in quantity and specific gravity, and no complaint made of thirst, etc., frequently occurring in patients past middle age, who are troubled with dyspeptic symptoms, and who probably indulge too freely for their failing assimilative powers in saccharine food: curable cases of saccharine dyspepsia, which differ essentially from the intractable diabetes often met with in young subjects.

NOTES ON BOOKS.

Nineteen Centuries of Drink in England. By RICHARD VALPY FRENCH, D.C.L., LL.D., F.S.A. London: Longmans, Green, and Co. 1884.—This is an erudite and elaborate inquiry into the intoxicating beverages which have been favoured by the English people, and into the drinking usages, supplemented by a summary of the innumerable repressive measures which have been tried, though with comparatively little success, both by the Church and by the State. The author, after noting the rule of abstinence among the early Britons, varied with an occasional and pugnacious drinking bout, has arrived at the conclusion that mead was our earliest national intoxicant. The Romans introduced wine to these shores, along with vegeboards and the custom of toasting or health-drinking. Cider was known to our ancestors at an early date. The habits of intemperance and luxury introduced by the Romans were intensified during the Saxon, Danish, and Norman periods, though William the Conqueror from the superior temperance of his forces won the battle of Hastings. During the reign of the Plantagenets, light wines were brought over from Bordeaux and other French ports, and distilled liquors were used for the first time. The clergy were then as inveterate topers as the laity, well known ecclesiastical dignitaries indulging in open drunkenness. Dr. French follows the national habit through the Tudor, Stuart, and Hanoverian periods, finding no marked improvement till lately, when no inconsiderable diminution of revenue from strong drink awoke the people to the progress of temperance principles. The author combats the hypothesis that we learned to drink from the Dutch, and states that, for at least one thousand years before the Netherland wars, Britain had been stigmatised for intemperance. In the sixth century, laymen and clergymen are said to have slumbered away their time in drunkenness. In the eighth century, Boniface declared that only the pagans and the British were addicted to excess; the Franks, Gauls, Lombards, Romans, and Greeks being comparatively temperate. Dr. French accounts for the prevalent intemperance of the seventeenth century by the operation of the Act to encourage distillation, the exhaustion of light wines, the influence of the Court, the development of toasting, and club-life. Though the book abounds with undeniable proofs of the indulgence of the clergy of all grades at almost every period, it is remarkable that few instances are given of excess among members of the medical profession, the presumption being that these last were, on the whole, of temperate habits. The book, which is well brought out, closes with the prediction that moderation and temperance will multiply in our midst, till a time arrives when intoxicating beverages shall be used and no longer abused, and when man need not scruple to enjoy the gracious gift of Heaven. It would be interesting to know what the teetotal world thinks of this remarkable prophecy.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

HINTON'S PLASTER-OF-PARIS BANDAGE-MACHINE.

THIS invention of Mr. Hinton is for the purpose of impregnating bandages with dry plaster-of-Paris, and rolling them at the same time, and is a very much cleaner method than at present employed, namely, rolling them by hand; besides, the plaster-of-Paris is more evenly spread in the meshes of the bandage.

The machine, which has been patented, consists of a suitable framework, on which is mounted a box, or hopper, for containing the plaster-of-Paris. At the bottom of the hopper, there is an elongated slit; within this is placed a fluted roller. On the end of the spindle on which the roller is placed, there is a pulley mounted, driven by means of a belt or strap from another pulley mounted on the end of a horizontal shaft of small diameter, supported by the framework, and provided with a crank-arm or handle on which the bandage is wound.

The bandage to be impregnated with the dry plaster-of-Paris is passed under the machine, and brought round the roller at the back of the hopper; it then passes under the hopper, and under a stretcher which is placed there for the purpose of spreading the plaster evenly in the meshes of the bandage.

The bandage is rolled up whilst the plaster is being incorporated with it, just in the same manner as it is wound up by an ordinary bandage-machine. The bandage, after being rolled, is removed, and only requires soaking in water a few minutes, when it is ready for use, or a number can be made at once, placed in a dry tin, and kept for use when required.

By this machine, the plaster is more equally distributed in the bandage, and the bandages are more easily made. It has been used largely at the Royal Albert Edward Infirmary, Wigan, for some time, and it is found to answer the purpose for which it is intended.

Mr. Hinton will be glad to supply the machine, or furnish testimonials and particulars respecting it, if communications be addressed to him at the above Infirmary at Wigan.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 7th, 1884.

THE ORDER-BOOK OF THE HOUSE OF COMMONS.

ALTHOUGH, by the time these lines are in print, Parliament will be again in full swing, the week or so of breathing-time from the buzz of questions and roar of debate has made it possible to take stock, as it were, of the position in which medical affairs find themselves in the House of Commons at the present moment. Much interest attaches to the resolution as to the recrudescence of small-pox in the metropolis, for which Dr. Cameron has obtained a good place for July 1st. There is no other motion of general medical interest on the paper; and it so happens that, although there is quite a considerable number of Bills now before Parliament that affect the interests of the medical profession more or less indirectly, as, for example, the Dwelling Houses Inspection Bill, the Smoke Abatement Bill of Lord Stratheden and Campbell, and the London Government Bill, there is not, with the exception of the Medical Acts Amendment Bill and the Burgh Police and Health (Scotland) Bill, any public Bill immediately before either House in which the profession is primarily concerned. For on Dr. Cameron's Cremation Bill the House of Commons has already expressed its judgment, and Mr. Warton's Patent Medicine Bill has been thrown out on a promise, as yet unfulfilled, that the Government will take up the question. On the other hand, Mr. Peter Taylor's Bill for the Repeal of the Compulsory Clauses of the Vaccination Acts, down for second reading on July 16th, will probably be regarded by the House as sufficiently dealt with by their decisive action of last year; and Mr. Reid's hardy annual, the Vivisection Prohibition Bill, need not be seriously considered, even if it occupied a more favourable position than the thirty-fourth Order of the Day on the date that the House resumes.

The Medical Acts Amendment Bill has passed through all its stages in the House of Lords, and now awaits consideration by the Commons. It will probably be found necessary to bring pressure upon the Government to take this Bill seriously in hand, if it is not to share the fate of its predecessor of last year. The proposals of the Act, and the debates thereon, have been given so fully in the JOURNAL, that any detailed reference to them at this moment is probably unnecessary. The Burgh Police and Health (Scotland) Bill is a somewhat unwieldy measure of 558 clauses, introduced for the second year in succession by the Lord Advocate; but its chances are regarded, even by him, as somewhat dubious. There is hope, however, that it may get as far as a second reading, in which case it will be referred to a select committee to mould into shape. The Bill contains, amongst a great variety of sanitary clauses, sections proposing to make compulsory, throughout Scotland, the notifications of cases of infectious disease by the medical attendant. This principle, which, it is needless to observe, has been condemned by the Association at Worcester and elsewhere, has been directly challenged by the Parliamentary Bills Committee; and arrangements have been made with the Lord Advocate by which the whole question will, as regards

Scotland at any rate, be threshed out before the Select Committee. This is the more important because the committee of the House of Commons to whom the local Bills of this session dealing with medico-sanitary matters have been referred, regard themselves as absolutely bound by the decisions of Mr. Sclater Booth's Committee of 1882, though the fallacy and imperfection of these have been often pointed out in our columns.

PROSPECTS OF THE LONDON GOVERNMENT BILL.

THE papers, especially the advertising columns, are full of resolutions passed by this or that "representative" meeting of ratepayers, assembled in public meeting to discuss the London Government Bill.

There is, customarily, much disturbance at these meetings, and not unfrequently a free fight; but it is safe to say of all of them, that not one subsequently escaped being branded by the opposition as a packed meeting. We have gone, with some degree of care, through the published reports of these assemblies, but fail to find, in the speeches of most of the orators, any arguments addressed to the merits of the Home Secretary's proposals. Either they are condemned root and branch, as subversive of all principles of local self-government—a fine sounding phrase which just now is made to do yeoman's service—or the inborn virtue of any Bill which emanates from the present cabinet is expounded in glowing periods. We shall not follow either of the parties in their recriminations about office-seeking on the one hand, or office-keeping on the other. Outside altogether the noisy partisans who spout at local meetings, there can be no manner of doubt that a strong feeling exists amongst the more thoughtful section of the community for some less wasteful and more efficient system of governing the metropolis. This feeling may not make itself heard in public meetings; for Londoners of the wealthier and more cultured sort have, greatly to their shame, come to look upon local government as an affair so much outside their own life, that they do not care to descend into the noisy arena of vestry meetings in order to secure the reforms which they feel to be necessary.

It may be justly argued that this holding aloof is very selfish of them, and that, if they do not make their wants felt and express their solicitude for the welfare of their poorer and less powerful fellow citizens, they can hardly expect that attention shall be paid to them. There is no doubt much in this, but it has to be remembered that we have, in London, nothing corresponding to the town councils of other great cities, which attract men of the better class to municipal duties. We have nothing between the City Corporation, elected in a hole and corner fashion by a very restricted constituency, and the local vestries, which appear to be the chosen habitat of all the smallnesses of life. The citizen of finer instincts has to undergo much mortification of the flesh and of the spirit, if he aspires to do his duty as a faithful guardian of his district; and the natural result is that the vestries are mostly recruited from the party or the class whose feelings take without hurt a good deal of injury.

We have set out these considerations, lest it should appear to the superficial observer that the adherents of the London Government Bill are few in number and insignificant in influence, and that its opponents are many and strong. The resolutions of wardmotes and public meetings, held in the billiard-rooms of inns, are being industriously advertised at enormous expense in all the daily papers. Some one must find the money for these advertisements. Mr. Firth more than hints the source of the cash, and cheerfully promises a thorough audit and surcharge of the accounts so soon as the new corporation has got to work. Mr. Firth is more sanguine about the passing of the Bill this Session than we confess ourselves able to be. We have before indicated the difficulties which lie in the path of its progress through the Houses. These difficulties are mainly two: the pressure of other legislative business, particularly the Franchise Bill, and the opposition of the Common Council, with its ample funds and faithful aldermen who sit in the House and are pledged to fight the Bill "line by line." This last appears, indeed, to be an allegorical phrase more picturesque than accurate; since, the main principle of the Bill being admitted, the city fathers' criticism of details will not avail to save their cherished institution from improvement off the face of the earth.

The Metropolitan Board of Works are, as might be expected of them, more reasonable than the Guildhall authorities. The latter have passed resolutions glowing with rhetoric, and condemning the Bill in uncompromising language. The former address their complaint chiefly to the proposed effacement of the local sanitary authorities as independent bodies; and we believe it will be generally admitted that this is the weakest part of the Bill. What the Home Secretary no doubt felt, was the hopelessness, with the materials at his disposal, of mapping out London into districts sufficiently uniform in size and population to ensure reasonable consistency of action on the part of the local authorities. At present, the thirty-nine vestries and district boards who lord it over the metropolis supervise districts of every variety of size, shape, and density of population, and they have all kinds of different notions as to their responsibilities and the way of carrying them into effect. Hence the Home Secretary, with a view to secure uniformity of action, brings them all under the immediate supervision of the central authority, upon which, moreover, he devolves the task of making any re-arrangements of districts that may be thought necessary. The resolution of the Board of Works, passed at its meeting on Friday last, sets out excellently well the opinions of those who contend that, to make the district councils mere appanages of the central council, will destroy local responsibility, and we therefore reproduce it in full. The resolution sets out:

> "That this Board is of the same opinion as was expressed in the resolution of the Board of the 29th of April, 1870, 'That it is desirable there should be one central municipal government, with jurisdiction over the whole metropolis, and that there should be a re-adjustment of the districts into which the metropolis is at present divided for the purposes of local government.' This Board regrets that Her Majesty's Government should have brought in a Bill which, if passed, would, while creating an unified central governing body, be utterly subversive of that local government of the several parishes and districts of the metropolis which has been of essential service in improving the health and comfort of its inhabitants. That this Board is of opinion that the proposed district councillors, having no independent powers, but acting only under delegated authority, would fail to command the confidence of the ratepayers, and would be quite unable satisfactorily to fulfil the duties cast by existing statute upon the elected representatives of the ratepayers. That this Board is of opinion that no measure for reforming the government of the metropolis will be satisfactory and effective which does not provide for the retention of local self-government in the several parishes or districts into which the metropolitan area, after revision of its boundaries, may be divided, the duties of such local authorities being duly defined by statute, each local authority being in federal connection with a central authority having jurisdiction over all those matters of municipal government which pertain to the metropolis as a whole."

Here we must for the present leave the subject.

THE COLLEGE OF PHYSICIANS.

THE College of Physicians of London holds its meeting under a shade of quasi-secresy; and, in proportion, and so long as it does so, it suffers both in dignity and in importance. The older Universities of Oxford and Cambridge have long ago learnt the lesson that on public and professional opinion they must place their reliance; that they have nothing to fear, nothing to lose, and everything to gain, by the free and unrestricted interchange of opinion which is obtained by the publication of their more important proceedings, and the public criticism of the grounds on which they are taken. In the absence of such means of estimating professional opinion and keeping touch with the outer world, many [illegible] public bodies. There is the danger of relative in[illegible] [illegible] the College of Physicians escapes this by [illegible] [illegible] [illegible] and importance of its [illegible] [illegible] [illegible] and is the less useful to the profession than it [illegible] By reason of the incompleteness and defects of its method of communication with the profession. The short reports which we publish are really unworthy of the College, and little in accordance with the most dignified traditions of such a body, or with its public duties and relations. They are of the nature of roughly drawn minutes, with such unofficial explanations as, in the fear of violating the dread *secreta collegii*, it may be thought proper to publish. This arbitrary and uncertain mode of making known the mind of the College is feeble and ineffective in the extreme, and, sooner or later, some more effective substitute must be found. The College suffers; for it is obviously rendered incapable of leading, as it might do, professional opinion on a great number of topics of national and professional importance, which are submitted to and discussed by it without any adequate means of making known its decisions, or, what is more important, its reasons for them. In the case of questions of principle, such as that involved in the recent case of Ringer, Murrell and Donkin, the only result of any such public and important matter being submitted appears to be, that it is hushed up and entombed, and all questions of principle left publicly unsettled.

Another inevitable disadvantage of such an organisation is the formation of cabals and cliques, the prevalence of intriguing, the intermittent occurrence of teapot-storms of an undignified character, and often working great injustice. Only under such a constitution could the little succession of domestic calamities which have lately befallen the College have occurred; the failure of its dinner, the omission to prepare its list of Fellows in time, and the occurrence last week of a little insurrection, in the course of which the whole list of proposed Fellows was referred back—such proceedings are undignified in the extreme, and show radical defects of organisation. The College had never a more energetic, commanding, and trusted president; its Board of Censors is unusually strong; and the fault is evidently not in individuals, for the College was never better officered. The constitutional practice of a superstitious secrecy in the nomination of lists, as in the general proceedings, taints the whole atmosphere, and inevitably mildews the product even of great minds. As to the grounds on which the list was objected to, we confess to having very imperfect sympathy. It is the mode of making the lists which is at fault. That some means should be taken to introduce into the College elements representative of the general practitioner class, is, we take it, an undeniable and axiomatic truth. Whether this is the best means, or only a very dubious experiment, is a question which may be very gravely considered with much advantage. The order of precedence in which young physicians are to be taken into the Fellowship, the relative claims of provincial candidates; all these are questions which become each year matters of consideration and compromise. Sir Andrew Clark, Dr. Fincham, Dr. Wilson Fox, and Dr. Pavy, with the President, Sir William Jenner, might reasonably be considered as able, independent, and widely sympathetic with the complex interests of metropolitan schools, and provincial and London practitioners, as any five men who could be named. We, at least, shall not find fault with them for taking means to show a broader sympathy and a less aristocratic spirit than was agreeable to the majority of the Fellows assembled. The sending back the list as a whole, appears to us to be a very unwise and uncautious proceeding; one destitute of principle, and chiefly pettish. The revised list when it comes back will still be a compromise, and the result of individual judgments guided by no stable principle.

If the affairs of the College are to proceed in a thoroughly efficient and dignified manner, and so as to secure its due place in professional guidance and enlightenment, proceedings such as those of last week had better be avoided, and arrangements promptly made for a wider, more popular, and more representative constitution and form of proceeding. At present, the College is a pyramid which rests on its apex; a very insecure and undignified form of structure. Its licentiates and members are left very much out in the cold, and allowed to go their own way—the licentiates especially—for good or for ill. The College seems to consider that its dignity and greatness are concentrated in its Fellows, and that these attributes are greatly heightened by secrecy, and insured by a system of oligarchy tempered by revolution. From all such propositions and methods we profoundly differ.

MEDICAL SELF-RESPECT.

THERE is a certain sense in which the members of any profession will be established in the long run in the esteem in which they hold themselves; they will be respected in proportion to their self-respect. But self-respect, in order to gain acknowledgment from others, must be genuine respect, and must show no tendency to slip down through self-sufficiency into selfishness; for "self-sufficiency," says Addison, "is as inexperienced as selfishness is blind;" and in respect is implied not only the approval of the judgment, but also of the virtuous impulses. To insure respect, there must be many good qualities, and a high tone of life. It often happens to a medical man to feel himself deserving of some more respect than the world grants him, and he sometimes forgets that his surest way to gain it is through showing self-respect. For the self that can be respected must have too much self-control for a quarrel, too much generosity for mere money-getting, too much highmindedness for vulgarity. And what obvious meaning there is in a medical man's life, even for such high sounding words as these, is sometimes excellently explained by senior to junior, as by Mr. Annandale in his recently published address to his pupils in Edinburgh. In many cases, where the patient and his surroundings may be sources of great trial, and the medical man may be met by what seems like insult, but is really only ignorance, the laurels may be attainable not by therapeutics, but by self-control; or, again, at times when such faults as professional differences or professional jealousies might become manifest, the world will respect those most who, in true self-respect, can act as Knights of the Round Table in poetic phrase, "self-reverent each, and reverencing each." And, after duties to patients and duties to colleagues, there must remain in all medical men with true self-respect duties to themselves which are neither false nor contemptible.

They must treat themselves as they would have others treat them, and, in so doing, they do not lessen but increase their usefulness. If a man keep himself too absolutely to a narrow groove, he is cramping his judgment, and endangering the sound quality of his advice, by paying too little respect to his capacity of wider observation and truer estimate of proportion; if he allow himself to be made a slave to the public, either from assumed necessity or heedless negligence, he is diminishing his self-respect, and with it his position in the world's esteem; and, partly that he may show himself not a slave in his own opinion, and partly that, by giving fair exercise to his faculties, he may make himself both more comfortable and more competent, it is all the better for him that he should have some employments that are not professional, some interests that are not technical, and claim some time that is not at his neighbour's disposal.

It may sound very unwise to suggest or even hint at any such frame of mind or habit of action, instead of the unlimited subserviency and untiring toil which is the usual professional prescription; and certainly, we must freely admit that it is not the best fitted for the lower ranks of the profession to begin with. But the highest ranks are apt, from very various reasons, to permit themselves too little liberty, or rather, as perhaps we may be allowed to phrase it, to show to themselves too little self-respect. Compared with the successful barrister, their attention to business is most prolonged and most monotonous. They rarely stray into literature or art; and, from the great domain of the government of the country, they are practically shut out—not altogether, perhaps, to the country's advantage. For adjustment to such second occupations, it cannot be denied that some of the rates for the highest professional services must be raised, and the exclusive allotment to the public of the most valuable professional time must be reconsidered. No one can consider the adjustment easy, but it may be worth making. The thoroughly dispassionate onlooker seldom denies that, for the medical profession, owing to their inheritance of some lower social functions which they are now fit to have outgrown, there is still something to be gained in social status; and, granted that some extra-professional interests were more readily recognised as natural in their leaders, there is no reason why this should not spread downwards to the general leavening of the mass, and the public esteem of the profession rise with its rising self-respect.

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THE next inaugural address of the Midland Medical Society will be delivered by Sir Spencer Wells, Bart.

A MEETING of the Executive Committee of the Medical Sickness, Annuity, and Life-Assurance Society will be held at 38, Wimpole Street, on Wednesday, June 11th, at 4.30 P.M.

DR. PHILIPSON, Newcastle-upon-Tyne, Professor of Medicine in the University of Durham, has been appointed to deliver the Bradshawe Lecture at the Royal College of Physicians, London, on August 18th.

MR. LAWSON TAIT has, we learn, accepted an invitation from the Canadian Medical Association to give an address in abdominal surgery at their meeting in Montreal on August 25th and 26th.

PROFESSOR and Mrs. Flower's reception in the Museum of the Royal College of Surgeons, postponed from March 22nd, will take place, by permission of the Council, on Saturday next, June 7th, from 4 to 7 o'clock.

THE first of Sir Henry Thompson's lectures on Some Important Points in connection with the Surgery of the Urinary Organs, will be delivered at the Royal College of Surgeons on Wednesday next, June 11th, at 4 P.M.

THE *Temps* publishes a telegram from Tunis, stating that an epidemic of typhoid fever is raging at Sfax, and that several Europeans have been attacked. The Spanish Vice-Consul has succumbed to the disease. The outbreak is attributed to the dirty condition of the streets.

A YOUNG medical student has offered himself to M. Pasteur as a subject for his experiments with rabies, which are to be made before a Government Commission. The student desires to be inoculated with the virus, and insists upon being given the preference in this distinction, expressing a heroic willingness to die, if need be, in the interests of science. Such a sacrifice is, however, obviously foolish and uncalled for, in France at least, where frogs and rabbits are not protected by law.

AT a meeting of the Executive of the Newcastle-under-Lyme Liberal Association this week, it was resolved to invite Dr. Foster, of Birmingham, to become the second Liberal candidate for the borough at the next election. There is thus a prospect of the addition to the thin ranks of medical members of Parliament of a very vigorous and able man, and a public spirited Fellow of the Royal College of Physicians.

DR. S. REES PHILIPPS has been appointed Medical Superintendent of the Asylum erected at St. Ann's Heath, Chertsey, through the munificence of the late Mr. Holloway. Dr. Philipps, who has up to the present time occupied a similar position at Wonford House Hospital for the Insane, Exeter, takes up his duties at St. Ann's Heath on the 16th instant.

THE second dinner of the London Branch of the Durham University Association took place at the Holborn Restaurant on Wednesday, the 29th ult.; the Rev. the Hon. G. W. Bourke in the chair. The medical graduates of the university were fairly represented, but it is hoped that at the next meeting in November the number may be largely increased. Dr. Pyle, one of the honorary secretaries, will be glad to furnish any information to medical graduates.

THE annual dinner of the Cambridge Medical Graduates' Club will take place on Tuesday, July 1st, at the Marlborough Rooms, 307, Regent Street; Professor Humphry in the chair. Graduates who have received an invitation to join the Club, and have not yet done so, are requested to communicate with either of the Honorary Secretaries: Dr. Fowler, 35, Clarges Street, Mayfair, W.; or Dr. Steavenson, 15, Henrietta Street, Cavendish Square, W.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

THERE will be five vacancies to be filled on the Council at the coming election in July. The retiring members are Professor Humphry, Mr. Luther Holden, Sir Erasmus Wilson, Mr. Gay, and Mr. T. Smith; the last named member will seek re-election. Among the candidates to fill the vacancies are, we understand, Messrs. Barwell, Cowell, Durham, Gant, Berkeley Hill, Lawson, and Pemberton.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.

THE annual meeting of this Association was held on the 27th ultimo, and was followed by a *conversazione* given by the President, Dr. B. W. Richardson. The report stated that the total number of members is exactly three hundred, thirty-two having joined during the year. There are also twenty-three associates, who are abstaining medical students. An Irish Branch has lately been formed, of which Deputy Surgeon-General Gunn is President, and Dr. Cosgrave Honorary Secretary.

THE WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

IT has been arranged that an annual lecture shall be delivered before this new but flourishing Society. With the consent of His Grace the Duke of Devonshire, the members of the Society have agreed to give to this yearly discourse the title of "The Cavendish Lecture," in memory of Henry Cavendish, the illustrious chemist, and one of the fathers of the modern system of chemistry, who lived and worked in the neighbourhood where the Society meets. The first Cavendish Lecture will be delivered by Mr. Timothy Holmes on July 11th, at 8 P.M., the subject being "Medical Attendance on the Poor of London."

HOSPITAL SATURDAY FUND.

AT a special meeting, held on May 31st, of the Board of Delegates of the Hospital Saturday Fund, it was decided to alter the constitution, by omitting the word "non-political" from the constitutional rules. This question was brought before the attention of the delegates a few months since by a deputation of three members of a political working men's club, when it was urged that the movement, although by no means a party organisation, was essentially political in the widest and best sense of the term. It is an exceedingly happy sign to see working men beginning to take a real interest in the maintenance and working of our hospitals; and we are confident that hospital-managers will do wisely and well to solicit, not only the support, but the counsel and advice, of this class of our fellow-citizens.

A NOVEL CRÈCHE.

AN encouraging account of the efforts which have been made by certain manufacturers to benefit their workpeople, appears in the last report of the chief inspector of factories and workshops. At a large clothing-factory in Staffordshire, the operatives, seven hundred in number, are provided with dining, tea, and club-rooms, a kitchen, a savings-bank, and a surgery. A crèche, or nursery department, has also been established. The crèche consists of two apartments, one for a playroom and the other a cot-room, the latter being fitted with cradles, which are gently rocked by steam-machinery. This, perhaps, is a use of steam never before contemplated in this country, but it is one that answers remarkably well. The mothers are charged one shilling a week for each baby sent to the crèche, and a matron is in charge of the department, and attends to the little ones during the day. The mothers are allowed to visit the crèche for ten minutes in the middle of the morning and of the afternoon. The owner of the establishment has also provided perambulators, which he hires out to the mothers at a moderate rate, to prevent the arm-aching and tiring business of carrying the babies to and from the mill.

WORKMEN'S TRAINS.

OF the many schemes which are on foot to relieve the overcrowding of central London, none have proved themselves more practical and sound than the extensive operations of the Artisans', Labourers', and General Dwellings Company, which has covered several estates in the suburbs with cottages for the working-classes. Noel Park, near Hornsey, has been the most recent site of the company's labours; and on an estate of 100 acres, 2,600 houses are being erected. The success of the undertaking is, however, endangered, or, at least, diminished, owing to the mistaken policy of the Great Northern Railway Company, who will not issue third-class season-tickets, so that workmen have to pay eightpence a day for their journey of four miles each way; as a good house can be got on the estate for six shillings a week, the expenditure on travelling would thus seem to be out of proportion, amounting to two-thirds of the house-rent. The Midland Railway Company can carry passengers from a neighbouring station at the rate of threepence a day, and we may be permitted to express the hope that other railway-companies will not be found to put any obstruction in the way of artisans who seek in the suburbs healthier homes for their children.

A STAGE-STUDY OF MADNESS.

WHAT all medical men will at once recognise as a singularly vivid and truthful representation of a distinct variety of insanity, is afforded by Miss Lingard's rendering of the character of Pauline in the new play of "Called Back" at the Prince's Theatre. This representation, it is at once obvious, has not been excogitated from the inner consciousness of the actress, nor drawn from poetical pictures or conventional notions of mental derangement. It is a delicately idealised but still veritable reproduction of the clinical features of that form of madness which most commonly results from sudden and terrible mental shock in young women of fine and sensitive nervous organisation. If an infinite capacity of taking trouble be the essential constituent of genius, Miss Lingard has certainly vindicated her claim to some share of that divine gift; for, while studying the part of Pauline, she has visited a number of asylums, public and private, in London and its neighbourhood, and has carefully observed for herself the facial expression, attitude, and gestures of the patients who were pointed out to her as being in morbid mental states analogous to that which she desired to depict. Having gathered up the physiognomical traits which were suitable for reproduction on the stage, and woven them into a typical representation, she obtained introductions to one or two of the leading alienists of the day, and submitted to their judgment her conception of the mental trouble which she desired to body forth. The result of this painstaking research, and guidance by skilled criticism, is that she has succeeded in producing a portraiture of madness in one of its most interesting and least repulsive phases, which is equally artistic and faithful to nature. Pauline's madness is not, as stage-madness often is, an impossibility or bundle of inconsistencies provocative of laughter or disgust, but genuine melancholia attonita, such as may be seen any day in the wards of our lunatic hospitals. It is melancholia attonita of the first degree, shorn of its coarser manifestations, and lifted into the region of poetry, by the grace, beauty, and pathos that are mingled with it.' In her pained and bewildered look, her passive mood, her rhythmic movements, her statuesque attitudes, her echo-answers, Miss Lingard presents to us an accurate delineation of the symptoms of that semi-cataleptic stupor, which sometimes falls all at once like a curtain over the mind that has been shaken by a swift and appalling emotion, and that rises again with equal celerity when the thrill of the cataclysm has subsided, and when some stirring chord of memory or feeling has been touched. Pauline's condition, from the moment when she drops unconscious at the sight of her brother's murder, admits of accurate diagnosis and prognosis, and her recovery is just what might have been predicted. Miss Lingard is to be congratulated on having produced a most able and impressive study of madness.

OCEAN-GOING STEAMERS AS DISSEMINATORS OF DISEASE.

THE letter from Dr. Irwin, formerly of Manchester, and now of New York, which we published on May 24th, calls renewed attention to a subject often discussed in these columns. At the present time, if protection governs the commercial policy of the United States, we have at least free trade with them in disease; and there can be little doubt that small-pox and other infectious diseases have been carried on several recent occasions from the Old World to the New. Dr. F. H. Blaxall's report on the "Sanitary Aspects of Emigration and Immigration from and into the United Kingdom" throws some light on the question. It would appear from this report that, even in the best lines, the accommodation is insufficient. Hospitals for infectious cases were only found in a few ships on the weather-deck, and even then in many cases they were situated on a part of the deck much frequented by the steerage-passengers, and were very ill ventilated. Dr. Blaxall reports that the hospitals for ordinary cases were usually situated on the upper passenger-deck, and were generally well lighted and ventilated, but that, unfortunately, the key of the hospital was in the hands of the steward. There is, too, good reason for believing that first-class passengers, ship's stewards, and other members of the crew, are frequently accommodated in the hospital. This is a distinct contravention of the provisions of the Passengers' Act (s. 24), and is also an index of the little authority left in the hands of the surgeon. This important officer is generally overworked and underpaid; he is the mere nominee of the owners, with no rights or privileges beyond those which they choose to confer upon him, and with no claims beyond those contained in a contract carefully worded in the owners' interest; he is treated, indeed, with but little consideration, and is provided with very inferior accommodation, "not calculated," says Dr. Blaxall, "to invite the services of desirable men, being altogether out of keeping with the responsible position the surgeon holds in the ship as entrusted with the care of the health of hundreds of men, women, and children. In some cases, he has to stow himself away in the dispensary, surrounded by medicines and drugs, having no other place to sleep in. In other ships, the cabin allotted to him is small, dark, and badly situated;" so that it is a matter of great difficulty for him to keep proper records of cases of sickness occurring on board, records which are of the utmost importance, especially to the people of the United States. We have transcribed the above words from the report to the Local Government Board, because the deliberate report of an unimpassioned official contains expressions as strong as any which have been used, and comes with an authority which other utterances must lack. It seems to have been abundantly proved that the time has come when England and America ought to combine together to form a marine medical service of competent men, responsible, not to the owners, but to the Governments of the two countries. The carrying trade is largely in the hands of England, and it behoves her to stir herself to remedy this glaring evil; otherwise, the United States will be fully justified in taking the matter out of her hands altogether, and that shortly.

BRITISH MEDICAL ASSOCIATION: BELFAST MEETING: SECTION OF PUBLIC MEDICINE.

THE following topics for papers have been suggested as likely to lead to useful and interesting discussions:—1. Prevention of Epidemics; 2. Inspection of Meat-Markets, with special Reference to the Causation of Disease in Man by the Consumption of Diseased Meat; 3. Overpressure in Schools, with special Reference to the Record of Clinically

Observed Facts. Communications from intending readers should be addressed to Mr. Shirley F. Murphy, 158, Camden Road, London, N.W., one of the Honorary Secretaries of the Section.

FRENCH AND BRITISH SURGEONS.

MR. SAMPSON GAMGEE, of Birmingham, was present by appointment, at the meeting of the Société de Chirurgie in Paris, on the 28th ult., to give a demonstration of his new sponge and wound-pads. When called upon by the President (M. Marc Sée), Mr. Gamgee went to the Tribune, and delivered his address extempore. Many of the leading surgeons of Paris were present, and evinced marked interest in the novel combination of absorbent and antiseptic dressings, which were looked upon as very ingenious and full of promise of practical utility. On behalf of the Society, the President thanked Mr. Gamgee, who has accepted the invitation of the secretaries to draw up his address for publication in full in the proceedings* of the Parisian Society.

THE EXTRAORDINARY CASE OF STRYCHNIA-POISONING.

THE adjourned inquest on the body of Thomas Cross, aged 72, a road-sweeper, who was supposed to have died from the effects of the administration of strychnia, was resumed by Dr. Danford Thomas, the Coroner for Central Middlesex, on May 30th. It will be remembered that the deceased suffered from chronic bronchitis, and died suddenly after taking a powder, given him by a married daughter named Isabella Todd, who had recently arrived on a visit from Herne Bay. The jury considered that the attendance of the druggist from whom the powders were purchased was most desirable. Mr. W. Neville Wheeler, druggist, of the Hackney Road, said the powders in question were sold by him. They contained nothing but calomel, and it was not possible that a mistake of any kind could have occurred. The poisons were kept apart from the other medicines, and he had not supplied strychnia or nux vomica in any shape or form. Mr. Augustus Joseph Pepper, Examiner in Forensic Medicine in the University of London, and Surgeon to St. Mary's Hospital, stated that he had received the contents of the stomach for analysis, and had handed them on to Mr. Luff. Mr. Arthur Pearson Luff, of the Marylebone Road, said that he had made the required analysis, and had detected the presence of strychnia. Neither he nor Mr. Pepper could say how much poison the stomach contained, but it was more than sufficient to kill the deceased. Mr. Josiah Haynes, who described himself as an auctioneer, said that Mrs. Isabella Todd had formerly lived with him as his housekeeper. She was in the habit of taking calomel powders. He had some strychnia in his possession, which he had purchased to kill a dog, and this he gave to Mrs. Todd by mistake. They had been out together one day; and, at the Victoria Park Station, she not being very well, he took from his pocket what he thought was a calomel powder, telling her to take it at bedtime, as it would do her good. The Coroner remarked that it was highly dangerous to carry about deadly poisons in one's pocket, and asked how it was that witness had it with him. Mr. Haynes replied that about four years ago, wishing to kill a dog, he purchased from a friend, a druggist in Somersetshire, some strychnia, some of which he gave to the dog and killed it, whilst the remainder was put away in a box. A few days ago, whilst turning over some papers, he accidentally came across it, and put it in his waistcoat-pocket for safety. On reading an account of the case in the papers, he felt in his pocket for the strychnia and found it gone, whilst the calomel powders were still there. Mrs. Todd, on being recalled, said that Mr. Haynes had at different times given her calomel powders [illegible], and she remembered his giving her one a fortnight ago, telling her it would do her good. The Coroner said, if the jury believed the evidence of Haynes, the whole matter was explained as to how Mrs. Todd became possessed of the poison, and there could be no doubt that she divided it into two parts and gave it to her parents. The jury returned a verdict to the effect, that death had resulted from strychnia, administered by Isabella Todd in mistake for calomel; and censured the witness Haynes for his "careless and inexcusable conduct" in carrying about poisonous powders.

SCARLATINA AT WIGAN.

DURING the past eight or nine months, an epidemic of scarlatina has prevailed at Wigan, causing 162 deaths. Recently it has shown signs of abating, but the past fortnight witnessed a fresh outburst, together with an unusual prevalence of measles. In the week ending May 24th, the deaths from zymotic disease numbered 14, out of a total of 31 cases. The matter has been prominently brought before the town council by the health-officer, Mr. Barnish, who advocates the closing of the schools in the borough. This course might profitably have been carried out before now, and doubtless would have been, had the authority been aware of and urged to employ their powers in this respect. Judging from the various reports which have come before us, it is by no means so uncommon as it ought to be to find a health-officer expressing doubt as to the ability of his authority to insist on the closing of a certain school which has been instrumental in spreading infection; and it may be useful to repeat now, what we announced in these columns more than two years ago, that it is competent to any sanitary authority to require either the total closure of a school, or the exclusion of any scholar from attendance, subject to an appeal to the Education Department by the local school-board if the demand is held to be unreasonable.

THE INCREASE OF SMALL-POX IN THE METROPOLIS.

EVEN if we had not already directed attention to the subject, the proceedings of the Metropolitan Asylums Board at its special meeting, held on May 30th, could leave no doubt upon the mind that the beginning of a new epidemic of small-pox is upon us. The epidemic has spread from the east to the south of London, and to other parts of the metropolis, and the ambulances of the Board are now removing cases, at the rate of a hundred a day. Hampered as they are in their work in a variety of ways, the Asylums Board may well feel anxiety as to the future. In accordance with the views of the Royal Commission, the small-pox hospitals of the managers have been adapted to contain not more than 50 patients each. The ships in the Thames provide for 400 cases, and at the Darenth camp, where there are beds for 572, about 700 cases had been accommodated by placing two children in a bed. But, with this provision, the resources of the managers are exhausted. Hence Sir Edmund Currie proposed that they should make a second camp at Darenth, and should hire the hospital belonging to the Poplar Board of Works, at a rent of £1,200 a year. This Poplar hospital is, we believe, the solitary example of an infectious hospital built by a metropolitan sanitary authority under its statutory power of providing means of isolation; though, to all intents and purposes, the money spent on its erection has hitherto been wasted, since the local board of works have never put the building to use. No doubt, however, the Asylums Board will soon find some work for it to do in the isolation of small-pox cases from the East End. The opening of a camp at Finchley for North London cases was also mooted, though no definite action on this point has yet been resolved upon. The hiring of the Poplar Hospital and the purchase of further land at Darenth were both approved by the managers, and will, no doubt, receive the sanction of the Local Government Board. With these additions, the Asylums Board will have 1,800 beds at their disposal, and it may be hoped [illegible] [illegible] type. The deaths [illegible] It [illegible] At the same time, [illegible] [illegible] In the hurry to spend money over hospital-ships, and camps, and convalescent institutions, the most effectual preventitive of the spread of small-pox appears to have been overlooked. Probably this is due to a large extent to the fact that the enforcement of vaccination in the metropolis is not under one control, but is in the hands of no fewer than thirty separate boards of guardians, with no coordination and very little sympathy with each other. This is an anomaly of which Sir William Harcourt might well take account in revising his Municipality Bill. Indeed, Sir Charles Dilke, in his recent answer to Dr. Cameron, has admitted the necessity of some change in the present system.

OVARIOTOMY IN ST. PETERSBURG.

DR. KRASSOVSKY has recently published in the *St. Petersburger Medicinische Wochenschrift* the results of his experience as an ovariotomist from December 1862, when he performed the first ovariotomy ever undertaken in Russia, to January 1883. Within that space of time, he operated 128 times; 70 of the cases recovered, and 58 died—a mortality of 45 per cent. One hundred and thirteen were complete operations; 15 incomplete, including 6 where double cystic disease existed, and only one tumour could be removed. Twenty-four of the operations were performed in private, all in or near St. Petersburg; of these, 11 died. One hundred and four were undertaken in hospitals in that city; of these, 47 died. The hygienic conditions in one of these institutions at least were very unfavourable. Chloroform was invariably employed as an anæsthetic. In two cases, where dyspnœa was urgent and the heart's action very weak, as the result of the pressure of a large cyst, a small incision was first made, and the cyst was tapped before the administration was commenced by the chloroformist. Two cases died of tetanus, one on the fourth day after operation, and one on the third. In fifty-six operations for the removal of cysts of one ovary, the pedicle was secured by Baker Brown's cautery; in eight of these, the ligature had also to be applied; the mortality of the cautery-cases was 37.5 per cent. The thermo-cautery was applied in four of these cases; the hot iron in all the remainder. In twenty-six cases, the pedicle was secured by ligatures, the ends of which were cut short; fourteen of these died. In two, the ends of the ligature were brought out of the abdominal wound; one of these died. In three, the clamp was used; two of these died. In three cases, the pedicle was held by a suture between the lips of the abdominal wound; one of these cases died. In double and incomplete operations, Dr. Krassovsky also varied the method of securing the pedicle in the same manner as in the single cases. For the abdominal wound, metallic sutures were nearly always used, and the peritoneum was not always included. Listerian precautions and dressings were employed in seven cases; three of these ended fatally. As a rule, the abdominal wound was dressed with charpie, either dry or soaked in pure water, glycerine, glycerine and carbolised oil, oil of almonds, or collodion. Drainage was required in twenty-one cases, of which fourteen died. Dr. Krassovsky has drawn up his statistical tables with great precision, and summarised them in a straightforward and scientific manner, convenient for reference, and neither omitting nor extenuating anything. By simplifying the operation, as has been done in Great Britain, Ireland, and America, discarding obsolete processes, and, above all, insisting on reforms in the sanitation and nursing in Russian hospitals, the distinguished Russian surgeon will most certainly find a much lower percentage of mortality in his next series.

NERVE-STRETCHING IN TABES DORSALIS.

IN a recent number of the *Archiv für Psychiatrie*, Dr. Rosenstein, of Breslau, describes a case where the great sciatic nerve was stretched for the relief of tabes dorsalis, but death followed a few days after the operation, owing to the dressings having become soaked with urine. Some immediate results were, however, observed and recorded. The extreme degree of analgesia which had become established shortly before the operation became distinctly diminished. Muscular perception also became improved, so that passive movements of the toes were distinctly recognised by the patient. The impairment of the sense of touch was unaltered, patellar tendon-reflex was not restored. Soon after the operation, the patient suffered from constant and very severe pains, quite different to what he felt before the operation, and also noticed a peculiar sensation, as though his legs were shortened; and when lying flat and supine on his bed, he felt as though he were sitting on a hard chair. No paralytic symptoms appeared, but the weakness of the bladder increased. On account of the unfavourable result, there was no time to test the degree of relief from ataxy. At the necropsy, very distinct degeneration of the posterior columns of the cord could be detected. No effects of the stretching could be discovered, even after the most careful preparation of sections and subsequent microscopic examination, although extreme distension of the vessels in the anterior roots of the spinal nerves might have been a result of the operation. Nothing was found on or in the tissue of the great sciatic nerve that could be distinctly attributed to stretching. Dr. Rosenstein noted one instructive point, detected by the microscope. The pia mater covering the affected part of the cord, was entirely free from disease. The influence of a meningitic process in the development of the degeneration of the posterior columns may, therefore, be set aside, at least in this case. The morbid change is most probably a diffuse myelitis. The experiments of Mr. Horsley have shown that when the great sciatic nerve is stretched, the stretching is observed to affect the sacral plexus, and passes to the roots of the nerves, where it must disturb the spinal ganglia on the posterior roots, and it also disturbs the dura mater; this may shake the cord a little through the ligamentum denticulatum on either side; but no change of tension can be detected in the intra-spinal or intra-meningeal part of the nerve, and no movement of the cord. On the other hand, as Mr. Marshall asserted in the Bradshawe Lecture delivered last December, where Mr. Horsley's experiments were described at length, the stretching probably affects the ganglia of the cord, and produces an excitation of the vaso-motor centres or trophic centres; and to the reaction that takes place, and the consequent changes induced in the nerve-elements, we must look for the benefit obtained by nerve-stretching in tabes dorsalis.

DR. DUDFIELD ON SMALL-POX INFECTION.

A CORRESPONDENT writes: On this subject Dr. Dudfield says in his last report, "My colleague, the medical officer of health for Hackney, has published his opinion that the outbreak, so far as that parish is concerned, was in some way connected with the North-Eastern Hospital (Homerton); and yet the cases of small-pox in that hospital at the time barely exceeded a score, while the cases had been more numerous at a previous time in the current year without any ill results upon the district. Referring to previous epidemics, the same authority has stated that there had been no ground for suspecting aerial dissemination of small-pox at 200 yards' distance, however overcrowded the hospital may have been (and it has received as many as 150 patients at one time), although there was ground for suspicion that infection had spread to a distance of 110 yards when more than 50 patients had been in the hospital. In March, as already stated, the number of patients scarcely exceeded 20, and yet the hospital is supposed to have been connected in some occult way with the spread of infection, more particularly within a quarter mile, although the cases were spread over a very much larger area in Hackney and adjoining parishes." From this it would appear that the hospital becomes a danger to its neighbourhood, not as the cases increase, but as they diminish; so that the hospital would be most dangerous when it was empty, and least dangerous when it was full. It would appear, further, that the hospital is a danger to the neighbourhood "although the cases were spread over a very much larger area in Hackney and adjoining parishes." In other words, it is evidenced that the hospital spread small-pox although there was no special evidence of small-pox in its vicinity, and notwithstanding the fact that other districts in

Hackney, and even adjoining parishes, were similarly affected. The statement may be true, but then there is no apparent way of ascertaining its truth, except by some mysterious form of inspection.

DISPENSARY PRACTICE.

AT an inquest held in Birmingham on the 2nd inst. upon the body of an infant which died in convulsions, it appeared that the mother had taken the child to a medical dispensary. There was a plate on the door with the words "Doctor Fleming, physician and surgeon," and upon the door was also painted "Medical Dispensary; advice and medical attendance, 6d.; medical certificate, 1s.; calf-lymph, 2s.; visit and medicine, 1s. 6d." The child was seen by Mr. Townson, who prescribed for it. At night another person called and gave medical directions. The child died during the night. It appeared that Dr. Fleming was in China, that Mr. Townson was not a licensed practitioner, and that the person who signed the death-certificate had only seen the child, if at all, just before it died. The jury returned a verdict of death from natural causes, and added that they "desired to express their censure upon Dr. Fleming, for allowing his name to remain on the place called a medical dispensary, as misleading to the public, and also upon Dr. Nottley for giving a certificate upon so slight an acquaintance with the case."

THE DEBATE ON INDIAN DRUGS.

IT is stated that in the debate on Indian drugs to be held in connection with the Section of Pharmacology and Therapeutics of the Belfast meeting of the British Medical Association, special attention will be paid to the subject of abrus precatorius and "sui" poisoning. The following notes will be of interest to members who think of taking part in the discussion. The abrus precatorius belongs to the natural order *Leguminoseæ*, and is familiarly known as Indian liquorice-plant, or, in Bengalee, as *Koonch* or *Goontch*. The seeds are of a bright red colour, and have a black patch round the hilum. They are called jequirity-seeds, prayer-beads, or jumble-beads. The plant is mentioned by Susruta and other Sanskrit writers, and must, therefore, have long been in use among the Hindoos. Ainslie says, "The root, when dried, coincides so exactly with the liquorice-root of the shops, that it is often sold for it in the bazaars in Bengal. The seeds are employed by goldsmiths and druggists on account of their uniform weight. This weight, known as the ruttee or ruti, was found by Flückinger to be about $2\frac{3}{16}$ grains. In the Hindoo system of materia medica, ruttee seeds are classed among the seven minor poisons, which are: opium, seeds of abrus precatorius, dhatura, root of gloriosa superba, root of nerium odorum, juice of calotropis gigantea, and euphorbia neriifolia. Dr. Center of Lahore was the first to draw attention to the fact that the ruti seeds are used for poisoning cattle. For this purpose they are pounded, moistened with fluid, and shaped into needles, called "suis," which, when dry, are forced beneath the skin of cattle. The Chamar, or Skinner caste, largely adopt the practice, probably with the view of obtaining the skins of the animals. In some cases "suis" are made with the juice of the calotropis gigantea; and sometimes metallic mercury, dhatura, aconite, and arsenic are incorporated in the mass. At one time it was thought that dried snake-poison might be the active principle, but, on investigation, Dr. Ewart found that this theory was untenable. In the Bengal police reports for 1880, cases will be found recorded in which the "suis" were undoubtedly used for the purpose of assassination. The whole subject is of such importance, that it is probable that a royal commission will be appointed to inquire into the matter. Of late, the abrus seeds have been largely used in the form of infusion for the production of artificial ophthalmia, it being thought that the ophthalmia so produced would be advantageous in intractable cases of trachoma with pannus. The nature of jequirity-ophthalmia has been investigated and discussed by De Wecker, Sattler, Gunn, and others. The infusion is known to swarm with a bacillus, and it was thought that it was probably to this that the inflammation excited was due. Klein, however, after a careful examination, determined that the activity of fresh jequirity-infusion had nothing to do with a bacillus or its spores. The whole subject is replete with interest, and is likely to excite considerable discussion.

A MINISTER AND A SURGEON.

AT the Manchester City Police-court, the Rev. Edward James Silverton, of 17, St. Bride Street, Ludgate Circus, London, and Mr. Charles Calthrop Mitchinson, a surgeon, were charged before the stipendary magistrate (Mr. Headlam), with conspiracy to defraud. Detective-inspector Caminada said that on May 17th, having seen Mr. Silverton's advertisement that he had effected wonderful cures in different diseases, he visited the rooms which he had taken at the Free Trade Hall, Manchester. He saw Mitchinson, and told him that he suffered from a pain in the foot. Mitchinson examined his pulse and tongue, and gave him some pills and medicine, saying that he suffered from rheumatism. For this he was asked to pay 25s., and he gave the defendant 12s. 1½d. on account. He subsequently got further medicine from Mr. Silverton, who was formerly a Baptist minister at Nottingham. He took the medicine and pills to the city analyst, who found the pills to be common rhubarb pills, and the medicine to be a combination of chloride of iron and nitrate of ammonia. Two women who also gave evidence said they had paid Mr. Silverton money for medicine, pills, and his "food of foods." The medicine given to one of the women, intended for something else, was harmless cough-mixture. A medical man who was called, said he examined Caminada's foot soon after Mr. Mitchinson saw it, and found nothing at all the matter with it. The medicine given the woman was of no value at all. The Bench held that the charge of fraud had not been made out, and reserved until a future day their decision as to whether the charge of conspiracy was proved at common law. Mr. Silverton's advertisements have long been prominent features, especially in certain religious newspapers.

TYPHUS FEVER AT LIVERPOOL.

THE report which Dr. Stopford Taylor has prepared, in response to a resolution of the Liverpool Town Council, on the causes of the fatal prevalence of typhus and other zymotic diseases in that city, is a very interesting document. It would be difficult to produce evidence setting forth more clearly the evils of overcrowding, especially its influence in the production and dissemination of disease. The deaths from typhus at Liverpool amounted in 1879 to 248, which was a smaller number than any ever recorded in one year during the last half century. In 1880 the number of deaths had slightly increased to 256, and in 1881 they had risen to 292. In 1882 the death-roll from typhus reached 593, exclusive of 55 deaths which happened in the Toxteth Park workhouse. In considering the causes that have been at work in the production of this disease, Dr. Taylor first discusses the influence of overcrowding. The present population of the borough is estimated at 573,202 persons, or 110 persons per acre. There is no town in the United Kingdom which contains an area of 5,210 acres with a density of population equal to that of Liverpool, where there are only 44 yards of space for each individual. The population of the parish of Liverpool—the central part of the borough—reached its maximum at the census of 1861, when the returns gave the number 269,742. There was a decrease to 238,411 at the census of 1871, and a further decrease to 210,164 at the census of 1881. This decrease was principally in the central wards; and whilst the population of the notoriously unhealthy streets has diminished much in the same proportion, there has not been that reduction in the general mortality that might have been expected. Nor has the decrease in the density of the population had the effect of lowering the death-rate; for in the year 1861 the deaths were 8,716, giving a death-rate of 32.3 per 1,000, while the average of the previous ten years, from 1851 to 1860, was 33. The percentage of zymotic deaths was 22, and there were

246 deaths of children under one year of age to every 1,000 births. In 1882 the deaths were 6,813, equal to a rate of 33 per 1,000, against an average of 32.8 for the previous ten years; the zymotic death-rate was 19 per cent. of total deaths, and 224 children under one year of age died out of 1,000 born. It is not necessary to follow Dr. Taylor in his account of the distressing cases of poverty which are instanced by him, or to discuss the causes from which this poverty arises. It is a long and painful history of semi-starvation, of squalor, filth, and intemperance. As in previous epidemics of typhus, there was a special incidence of the disease upon people whose constitutions were enfeebled by want, insufficient clothing, filthy habits and surroundings, and drink. Personal intercourse played an important part in the spread of the fever, and in one street alone the introduction of the disease resulted in the infection, by visiting, of 40 or 50 persons living there. Now that the Town Council have the report of their health-officer before them, there can be no excuse for delay in the adoption of remedial measures. First and foremost among these should be the provision of an infectious hospital capable of meeting the requirements of the city. The report abounds in instances in which the progress of the disease could have been stopped by isolation, and Dr. Taylor urges his authority to lose no time in providing sufficient hospital accommodation for infectious cases. Whatever steps may be taken to improve the homes and habits of the people, there will certainly be epidemic visitations, and consequent suffering and loss of life, unless the earliest cases be properly isolated by removal from homes which are likely to act as centres of infection.

THE BIRMINGHAM MEDICAL BENEVOLENT SOCIETY.

THE sixty-second annual general meeting of the Birmingham Medical Benevolent Society was held on May 30th. Mr. William Smith, of Redditch, president, was in the chair, and there was a large attendance of members. The annual report stated that the directors could again point with unalloyed satisfaction to the continued activity, prosperity, and usefulness of the Society. The invested funds amounted, at the end of the year 1883, to upwards of £10,515, as compared with £10,136 at the end of the previous year. During the year sixteen annuitants had received grants, varying in annual value from £10 to £40; these same annuitants had jointly received from the Society a total sum of £4,326. The roll of benefit-members now contained 265 names, as compared with 246 at the end of the previous year. With 15 honorary members the total number of members is now 280. The honorary secretary, Dr. Sawyer, who had held office for the last four years, did not again offer himself for re-election, finding that his professional engagements no longer left him leisure for his share of the administrative work of the Society. The directors expressed great regret at his resignation, and pressed him to accept the office of honorary treasurer, so that the Society might not altogether lose his valuable assistance. The financial statement showed that the total receipts during the year were £800 8s. 7d., and comprised the following items: Donations, £224 3s.; subscriptions, £176 8s.; interest on investments, £399 17s. 7d. Mr. Gamgee, in proposing the adoption of the report, pointed out that the prosperous financial position of the Society enabled the directors to render prompt and liberal assistance in urgent cases of need. Mr. Gamgee was appointed president for the ensuing year. Mr. Newnham, of Wolverhampton, was chosen as president-elect. Mr. Bullock, of Warwick, and Dr. Malins, of Birmingham, were elected vice-presidents. Mr. Chesshire, Mr. Garner, and Mr. Oakes, were added to the directorate. Mr. Bartleet and Dr. Sawyer were appointed treasurers, and Dr. Savage was elected honorary secretary. The members afterwards dined together at the Grand Hotel, under the chairmanship of the new president, Mr. Gamgee.

INFANTILE MORTALITY AT WORCESTER.

DR. STRANGE, whose name is honourably associated with some very praiseworthy efforts to reduce to reasonable limits the waste of infant life that is constantly going on at Worcester, does not appear to have met with much reward for his painstaking labours. During 1883 the rate of infantile mortality, measured by the number of deaths under one year to every 1,000 births, was 146. In the same period, the rate at Colchester was equivalent to 80 per 1,000, and at Portsmouth, 114; the average of the twenty-eight large towns being 159. Dr. Strange pertinently asks why the infants of a small town like Worcester should die at a rate double that of Colchester; nearly half as much more than that of Portsmouth; and very nearly reaching that of the twenty-eight great cities of the kingdom. It is, as he well observes, a black spot upon the sanitary history of the town, and to explain it he has to go to the rookeries, slums, and crowded dwellings of the poorest of the poor; whilst to grapple with it and ameliorate it, a machinery of teaching, admonishing, and assisting the authors of this mortality, much more effective than any which now exists, will be found to be necessary. Dr. Strange does not say that no improvement has taken place in this respect. In the year 1878 (see JOURNAL, vol. i., 1879, p. 745), when an effort was made to grapple with this evil by lectures, and tracts distributed amongst the poor, the rate was not less than 189 deaths for every 1,000 births. At that time the domestic circumstances of the parents who thus lost their infants in such numbers were carefully investigated, but no clear line could be drawn. Poverty and ignorance of the proper way of bringing up infants, of course, were abundant. Workers in factories, glove-makers at home, mothers of illegitimate children, travelling and destitute poor, and unconscionably rapid childbearing, were some of the elements that made up the sad account. Dr. Strange expresses the hope that, along with the improvement of the dwellings of the poor, an improvement in the dwellers themselves will form one of the objects of the new movement to abate a social evil of which so much has been heard.

THE JAFFRAY SUBURBAN HOSPITAL, BIRMINGHAM.

THE foundation-stone of the new suburban hospital at Birmingham, which is to be erected at the sole cost of Mr. Jaffray, as an extension of the General Hospital, was laid on June 4th, with masonic ceremonies, by Lord Leigh, the Lord-Lieutenant of Warwickshire. The site of the hospital is a nearly square plot of land at Gravelly Hill, about four acres in extent. It is intended that the hospital shall occupy about the centre of the ground. The buildings will consist of a central portion, with two boldly projected wings, and will afford accommodation for fifty patients. If it should be required, extension may be made for fifty more patients by adding wings to the rear, without interfering with the harmony of the internal arrangements, or affecting the architectural symmetry of the buildings. The central block is to be devoted to administrative purposes, and the wards occupy the two wings; and, as the whole group of buildings fronts towards the south, the wards will have the sun falling upon one or other of their sides throughout the day. The hospital will be two stories high, and the entrance to it will be by a central porch, facing a curvilinear carriage-drive and lawn. Upon the ground-floor there is an entrance-hall 17 feet by 13 feet; and beyond it, running right and left, is a spacious main corridor leading to the wings. To the left of the entrance-hall, and communicating with it by wide folding doors, is the waiting and receiving room; and close to this are the dispensary and dispensary-stores. The three apartments communicate with one another *en suite;* but they have each of them separate doors into the corridor. Upon the right of the entrance-hall there are, similarly placed, the house-surgeon's sitting-room and the officers' dining-room, the latter measuring 20 feet by 15 feet. Beyond the transverse corridor, a subcorridor conducts to the kitchen, serving-room, housekeeper's room, and other domestic offices, where a back entrance is also provided. At each end of the main corridor is a staircase-hall with stairs to the upper floor, and a subcorridor leading to the wards. The west wing is intended for male, and the east for female patients; two wards—one on the ground-floor, the other on the first floor—being allotted to each class. A description of the ground-floor male ward answers for them all. It is entered from the end, and is 54 feet 6 inches long by 24 feet wide, with a height of 14 feet. As it is arranged for twelve beds, there will be a cubic space for each patient of nearly 1,500 feet. It is planned in such a manner that a window is arranged between every two beds, securing abundance both of ventilation and of light. The ward has five windows overlooking the front lawn, four upon the opposite side, and three at the end. The floor will be of oak, and the walls will be plastered for painting. In addition to the ventilation furnished by the windows, fresh air will be introduced by Tobin's tubes, and circulation maintained by Boyle's extractors, in connection with which will be air-passages between the ceiling and floor above, communicating with vertical shafts. Two open fireplaces in the ward will assist both the heating and ventilation, and hot water-pipes will also be laid on. Near the entrance to the ward are a ward-room for the accommodation of special cases requiring separation from the rest of the patients, and a kitchen or nurses' room. A small projecting building near the junction of the wing with the main building furnishes the various sanitary offices for each ward. The eastern or female wing exactly corresponds with that just described. In each case, the first floor repeats most of the features of the ground-floor plan; it gives a second ward to each wing, similar in dimensions and accommodation to those below. In the central block, there are in front the matron's sitting-room, and bedrooms for other officers; and at the rear, over the kitchen and stores, are four bedrooms for the night-nurses. A third story in the roof of the central section affords sleeping-accommodation for the servants and day-nurses. Altogether, there is room for an administrative staff of about twenty persons. The ground-floor corridor will be paved with tiles, and the upper one will be boarded, while the interior doors and other joinery-work will be of varnished pine. Two lifts are provided near the centre of the main corridor—one of them for patients, and the other for culinary uses. There will be a basement only at the rear portion of the premises, where there is a considerable fall in the land; so that the boiler-house, coal-stores, and other conveniences, will open upon a yard which will be of use in many ways. The external elevation of the hospital is in the Queen Anne style, and composed of red brick, with handsome terra-cotta mouldings. The arrangements of the institution will be rendered complete by a porter's lodge entrance, with gates of elegant design, an ambulance-shed, and other useful offices. The funds which are being collected in Birmingham for the purpose of financial provision for the maintenance of the new hospital are making fair progress. The donations to the endowment-fund amount to £23,133, while special annual subscriptions have reached the sum of £359.

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SCOTLAND.

THE epidemic of measles at Coupar-Angus still continues, and it has very properly been decided to keep the schools closed for a further period.

WE regret to observe that the financial result of the lectures delivered last winter under the auspices of the Glasgow Science Lectures Association has not been satisfactory, and that the further continuance of the lectures seems doubtful.

AN open conference was held in Glasgow on the 3rd instant, for the discussion of subjects relating to the administration of the Poor-laws, a number of papers being read by members of the medical profession, Dr. Russell contributing one on Public Health and Pauperism, and Dr. Yellowlees one on Lunacy and Pauperism.

BEQUESTS TO MEDICAL CHARITIES.

By the will of the late Mr. John Smith, President of the Aberdeen Society of Advocates, the following medical charities will each receive a legacy of £200—The Aberdeen Royal Infirmary, Aberdeen Convalescent Hospital, and Aberdeen Dispensary.

FIRE AT THE EDINBURGH ROYAL INFIRMARY.

RECENTLY, the arrangements in the Royal Infirmary, Edinburgh, for coping with any fire, should such unfortunately occur, have been overhauled and improved. Curiously enough, on Saturday last, the east pavilion in the Medical Hospital was seriously menaced by fire. Immediately above Ward 74, on Saturday night, fire broke out between that ward and the dormitories above. Attention was soon directed to the fire; the patients were removed, and the fire soon extinguished. It appears to have arisen from the ignition of a beam, or of beams of wood, which were in too close proximity to a flue—a cause which, simple enough in itself, must give rise to grave reflections on the construction of any building (especially one occupied by the sick and disabled) containing within itself the easy means of its own destruction.

EDINBURGH UNIVERSITY STUDENT'S UNION.

AT an influential meeting of the General Committee of the Edinburgh University Student's Association, held on Monday, under the presidency of Lord Chancellor Inglis, various speeches were made in favour of the proposed Edinburgh students' Union. The Executive Committee of the Association have been working vigorously for some time raising funds, and have, we believe, already succeeded to the extent of £2,000. As a result of the meeting, a thoroughly representative Acting Committee was appointed to ascertain what sites for buildings for the Union are available, and at what estimated cost these could be erected, and to take such steps as they may think advisable for obtaining subscriptions, and to report to the General Committee early in the winter session.

THE UNIVERSITIES (SCOTLAND) BILL.

THE text of this Bill has now been made public, and the measure has been read a first time in the House of Commons. A consideration of the different clauses of the Bill shows that some attention has been paid to the criticism freely bestowed on the previous Bill, and that there has been a modification in those details which gave rise to so much hostility. These, it will be remembered, were three in number: the financial arrangements, the theological chair-tests, and the continuance of St. Andrew's University. As regards the first, it was formerly proposed that a sum of £40,000 should be appropriated from the Consolidated Fund for the benefit of the universities, each of them receiving a certain proportion. It has now been decided that the amount shall be £43,000, and that the treasury may be drawn upon for pension-claims. In the delicate question of the theological tests, power is not conferred on the Commissioners to absolve the professors of theology from the usual tests, but they are required to take evidence as to what change is required in the subscription of tests, and make a report thereon. As to St. Andrew's University, this old seat of learning is no longer threatened with extinction, as in last year's measure, but an effort is to be made to infuse new life into it by extending its sphere of active usefulness. Speaking generally, it may be said that the present Bill has been very favourably received; and, though some of its details are of rather a sweeping character, and may require modification, most of its provisions will be satisfactory to those who earnestly desire some reform in the endowment and administration of the Scotch universities.

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IRELAND.

THE DR. HENRY HUTCHINSON STEWART SCHOLARSHIPS.

As mentioned recently in the JOURNAL (p. [illegible]), the Master of the Rolls has settled a scheme for the management of the trust funds left by the late Dr. Stewart of Dublin, under the provisions of which a sum of about [illegible] was divided equally between the University of Dublin and the Royal University, in founding literary and medical scholarships. With regard to these scholarships in the Royal University, its Senate has adopted the following regulations. One scholarship of the annual value of £50, tenable for three years, will be offered in the autumn of 1885 for competition among medical graduates of not more than two years' standing, for proficiency in mental diseases. A second medical scholarship, of the annual value of £10, tenable for three years, will also be offered in the autumn of 1885, for competition in the subjects of the second examination in medicine. In order to be eligible, candidates must present themselves after the lapse of not more than one academical year from the time of passing the first examination in medicine. A scholarship in arts, of the annual value of £30, tenable for three years, will be awarded at the autumn examinations of 1885 to the candidate who will be found to have obtained the highest aggregate of marks, upon taking into account the marks obtained at the honor examinations in English and in a modern language at the first university examination in the present year (1884), and at the second university examination in arts in the year 1885.

NATIONAL ORTHOPÆDIC AND CHILDREN'S HOSPITAL, DUBLIN.

DR. WILLIAM MOORE, President of the King and Queen's College of Physicians, Ireland, and Dr. James Little, ex-Vice-President of the King and Queen's College of Physicians, have been appointed consulting physicians to this Hospital.

THE ROYAL UNIVERSITY OF IRELAND.

AT a meeting of the senate of this University last week, Dr. Robert O. Cunningham, Professor of Natural History in Queen's College, Belfast, and Dr. George Sigerson, Professor of Botany and Zoology in the Catholic University College, Dublin, were elected Fellows in the Department of the Natural Sciences. The following examiners were reappointed for one year:—in medicine, Stephen M. MacSwiney, M.D.; in midwifery, John A. Byrne, M.D.; H. Macnaughton Jones, M.D.; in medical jurisprudence, E. W. Davy, M.D.; in materia medica, F. J. B. Quinlan, M.D.; J. Seaton Reid, M.D. And the Senate appointed Dr. Michael M'Hugh one of the examiners in medical jurisprudence, in succession to the late Dr. Matthias O'Keeffe, of Cork.

ULSTER EYE, EAR, AND THROAT HOSPITAL.

THE committee of the above hospital, at the last quarterly meeting, paid a high compliment to Dr. David McKeown, who for two years acted as assistant to his brother in the hospital. A resolution was adopted expressive of regret at his departure, and of their high appreciation of the assiduity, zeal, and ability with which he discharged the duties of his office. Dr. McKeown, who has now settled in Manchester, is a gold medallist of the Queen's University in both arts and medicine.

DR. JOHN STANNUS HUGHES.

WE regret to announce the sudden death of this much esteemed gentleman on Sunday morning last. Although not in good health for the past year or two, there was nothing to indicate so sad and sudden a termination of his life. He was at the meeting of the Fellows of the Royal College of Surgeons the previous day. By his death, several important posts become vacant, namely, a Professorship of Surgery in the School of the Royal College of Surgeons; a surgeoncy to Jervis Street Hospital; the Secretaryship of the Council of the Royal College of Surgeons; the post of Surgeon to the Household of the Lord-Lieutenant; and a Visitorship of Lunacy under the Court of Chancery in Ireland.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE annual meeting of the Fellows of this College, to receive the report of the outgoing council, and for the transaction of other business, was held last Saturday. The report showed that, during the past year, 11 candidates were admitted to the Fellowship, 122 received letters testimonial, 12 obtained the diploma in midwifery, and 11 the dental diploma. Honorary Fellowships were conferred on the Director-General of the Army Medical Department, Dr. T. Crawford, and upon Surgeon-General Sir J. A. Hanbury, K.C.B. Although the income of the College fell below that of previous years, its debt incurred by the enlargement of its school-building has been reduced. Other subjects referred to in the report were discussed at the meeting, those attracting most attention being the Medical Act Amendment Bill; the action of the council with regard to the expressed wishes of the College that the Fellows should have the right of voting *in absentiâ* by means of voting papers; and the publication and circulation among the Fellows of the proceedings of the council. A resolution directly opposed to the Medical Acts Amendment Bill, as being "wrong in principle" and "injurious to the public welfare," as well as an amendment expressing approval of the proposed measure, were, upon the suggestion of a distinguished Fellow, both withdrawn in favour of the following resolution, which was unanimously adopted: "That this College thoroughly disapproves of the proposed Medical Bill as it now stands before Parliament, and hereby recommends its incoming council to oppose it by every constitutional means at their command, unless its provisions be amended in such manner as the council may consider necessary to maintain the interests of the College." With regard to the matter of voting by paper, the meeting resolved: "That it is to be regretted that the resolution of the College, passed without a division on the 4th of June, 1883, recommending that the Fellows shall in future have the right of voting *in absentiâ* by means of voting papers, for the president, vice-president, and members of the council, has not yet been put into force, and that the incoming council be requested to take immediate steps to have such alterations made in the charter of the Royal College of Surgeons of Ireland as will enable the provincial and other Fellows of the College to vote at the election of the president, vice-president, and council by voting papers, or otherwise." The meeting of the Fellows on Monday, for the election of officers and council, was attended with considerable interest, as it was an open secret that coalitions had been formed to elect certain Fellows on the council, and against the re-election of certain outgoing councillors. In addition, there were two vacancies in consequence of Dr. Denham and Mr. Butcher not seeking re-election. One hundred and twenty Fellows voted, of whom probably about forty were provincial Fellows, and the following gentlemen were elected: *President*, Edward Halloran Bennett; *Vice-President*, Anthony H. Corley; *Secretary*, of the College, William Colles; *Council*, William Colles, Sir George H. Porter, James H. Wharton, William A. Elliott, George H. Kidd, T. Jolliffe Tufnell, Edward Hamilton, Robert M'Donnell, J. Kellock Barton, Edward D. Mapother, Archibald H. Jacob, Philip Crampton Smyly, W. Stokes, W. Stoker, W. I. Wheeler, Samuel Chaplin, William Carte, Charles A. Cameron, and Henry Fitzgibbon. The most remarkable and significant result of this election is that the representative of the College on the General Medical Council, Mr. Rawdon Macnamara, has not been re-elected on the council of the College. The loss of the other councillor who failed to secure his re-election, Mr. Thornley Stoker, is to be regretted, as he was a most active and useful member. With these two exceptions, the outgoing council was re-elected, the additional new members being Messrs. Elliott, Carte, and Fitzgibbon.

TANNATE OF MERCURY.—Herr Sigmund Lustgarten has made a communication to a medical society in Vienna on a new mercurial preparation, tannic oxide of mercury. It was prepared the first time in Professor Ludwig's laboratory at Vienna. It contains about 50 per cent. of mercury. It is a dark green powder, and has neither flavour nor odour; it is insoluble in water and in acid solutions, but soluble in alkaline solutions, and precipitates small delicate particles of mercury, which, examined with the microscope, present Brownian movements. The antisyphilitic value of this new remedy has been tested in Professor Kaposi's wards. The administration of a decigramme (two grains) two or three times a day was quickly followed by the disappearance of syphilitic symptoms at different periods. There was neither salivation, nor stomatitis, nor disturbance of the digestive functions. This remedy is quickly absorbed. Twenty-four hours after it has been administered mercury is detected in the urine.

BRITISH MEDICAL ASSOCIATION.

EXTRAORDINARY GENERAL MEETING.

An extraordinary general meeting of the British Medical Association was held on Wednesday, May 28th, at the Queen's Hotel, Birmingham. The chair was taken by Mr. **Wheelhouse**, President of Council, in the absence of Dr. Waters, President of the Association. The following members were present at the meeting ;

Dr. W. F. Wade (Treasurer), Birmingham ; Mr. Alfred Baker, Birmingham ; Mr. J. Wright Baker, Derby ; Mr. T. H. Bartleet, Birmingham ; Dr. M. M. de Bartolomé, Sheffield ; Dr. G. F. Bodington, Kingswinford ; Dr. Alfred H. Carter, Birmingham ; Dr. C. Chadwick, Tunbridge Wells ; Mr. James Cornwall, Fairford; Dr. G. W. Crowe, Worcester ; Dr. B. Foster, Birmingham ; Mr. Ernest Hart, London ; Mr. T. V. Jackson, Wolverhampton ; Dr. P. Keelan, Clevedale ; Mr. F. Mason, Bath ; Mr. J. V. Solomon, Birmingham ; Mr. R. Wilson Moore, Wednesbury ; Mr. J. J. Nason, Stratford-upon-Avon ; Dr. Bernard O'Connor, London ; Dr. A. Strange, Shrewsbury ; Dr. W. Strange, Worcester ; Mr. T. Sympson, Lincoln ; Mr. James Taylor, Chester ; Dr. A. S. Underhill, Tipton ; Dr. E. Waters, Chester.

The **Secretary** (Mr. F. Fowke) read the notice, which had been inserted twice in the **Journal**, convening the meeting, and the requisition, of which a copy is as follows, in accordance with which the meeting had been summoned.

Notice is hereby given, that, in accordance with Article 13, an **Extraordinary General Meeting** of Members of the British Medical Association will be held at the Queen's Hotel, Birmingham, on Wednesday, the 28th instant, at Three o'clock in the afternoon :

To consider Requisition, of which the following is a copy.

To the President and Council of the British Medical Association.

We, the undersigned, Members of the British Medical Association, request the Council of said Association to forthwith convene in London an Extraordinary General Meeting of the Members of said Association for the following purposes :—

"1. To consider complaints made by Members of the Association of their being deprived by the Journal Committee and the Reform Committee of their right to communicate through the medium of the Journal with their fellow Members concerning questions affecting the rights and privileges of the general practitioners of the Association.

"2. To consider those provisions of the Government Bill, now in the House of Lords, which are alleged by Members of the Association to be detrimental to the interest and welfare of the general practitioners of the Association.

"3. To devise means to remedy, satisfactorily to the Members of the Association, that for which the meeting is convened as above expressed in paragraphs 1 and 2."

The requisition is signed by 53 Members of the Association.

Left at the office by George Brown,
John P. Hentsch,
R. H. S. Carpenter,

on this 6th day of May, 1884.

Francis Fowke, *General Secretary.*

161a, Strand, London, May 13th, 1884.

The **Chairman** : Gentlemen,—In accordance with the requisition that has been read, signed by 53 members of the Association, your Council have called you together, and I will now call upon any one of the requisitionists who may be present, to move a resolution and submit it to this general meeting which has been called at their request. I may say that I have received a letter from the President of the Association regretting his inability to be present to-day. He is in Italy, and of course he could not be with us ; he has requested me to act in his absence, in accordance with the by-law.

The **Chairman** : Has any gentleman any motion to bring forward having reference to the business for which we are specially called together? That, of course, is the only business which can be entertained at this meeting ; and if any gentleman has any resolution to propose in connection with that business, I am ready to hear him.

Dr. **Bernard O'Connor** : I am reminded that I am the only member present from London outside the Council. I may as well state at once that I am not one of the fifty-three requisitionists. The first intimation that I had of any requisition to hold a meeting was conveyed to me through the medium of the Journal last week. As far as I can understand, a requisition by certain members of the Association has been presented in due form, calling upon the Council to convene forthwith in London an extraordinary general meeting. Now, I take it that the Council, and not the members, have convened this meeting in Birmingham to-day, and I find that Article 13 of the Association clearly entitles them to do so. The article says that the Council may, whenever they think fit, convene an extraordinary meeting ; but it further says, if I recollect rightly, that they must, at the requisition of fifty or more members, convene such a meeting.

The **Chairman** : Are you going to conclude with a motion ?

Dr. **O'Connor** : I am going to say something in connection with the requisition, and I want to make a few remarks in connection with the business that we are called upon to consider. I take it that it is the requisition that we have to consider, not any particular business arising at the meeting in response to the requisition. The Council have summoned this meeting in Birmingham, and perhaps they will now tell us whether they intend to comply with the requisition by convening a meeting in London.

The **Chairman** : I can answer Dr. O'Connor at once definitely. The meeting is called for to-day, and it is called here in Birmingham. The requisitionists have a right to call an extraordinary general meeting through the Council. The Council, in response to that requisition, have called the meeting. In fixing the place the Council have been guided by custom. Extraordinary general meetings have hitherto been held in Birmingham. First of all then, custom required that this meeting should be held in Birmingham ; and, secondly, impartiality demanded that it should be held at some place other than London, because, seeing that the requisitionists are all, or nearly all, London men, and the body of the Association is scattered all over the kingdom, it is hardly likely that a fair discussion could take place where the fifty-three men all or chiefly live ; and, thirdly, if the requisitionists have a grievance sufficiently weighty to justify them in calling the whole Association together, they ought not to object to take the same inconvenience as they lay upon others in coming to a central point of meeting. As our members live in Scotland, Ireland, and all parts of the provinces, and as Birmingham is the most central spot in England, the meeting has been called here. We have a quorum, and the meeting is in actual session, and ready to hear any resolution that may be proposed in accordance with the requisition, in response to which we are here to-day, I believe, at extreme inconvenience. I can certainly speak for myself, for I do not know anything that could be more inconvenient to me than to come here on this occasion. The law, however, is very definite, and states that, when fifty members desire a meeting, the Council shall call it, and that they shall give notice of its being so called within twenty-one days. All that the law requires has been strictly fulfilled.

No one having come forward to respond to the Chairman's call,

Mr. **Ernest Hart** said : I should like to say a few words. These gentlemen have made certain statements ; I have come here, at much inconvenience, at the Chairman's request, as Editor of the Journal, to answer them ; and I do not think it would be right that the meeting should be dissolved without receiving any sort of information. I therefore, for the purposes of order, beg to move a resolution expressing the previous history of the case :

"That the matters treated of in paragraph 1 of the requisition have already been under the consideration of the General Council, and have been investigated ; and that the Council have decided that there is no ground of complaint."

These complaints of inadequate expression of the views of the requisitionists in the Journal are not new ; they were made at Exeter Hall, and they were brought before the Journal Committee and discussed by them and by the Council ; but I think the members generally are not sufficiently aware that there is really no just foundation for the complaints which were then made, and which have been repeated in the circular issued to obtain the signatures for this requisition. As a matter of fact, instead of members having been prevented from communicating with each other through the Journal on the subject of the Medical Acts Amendment Bill, there is no subject in the whole history of the Association as to which they have been allowed to communicate with each other so freely and so constantly ; and there are no members of the Association who have used that privilege more extensively than some of the gentlemen whose names are most prominent in connection with the requisition. Anyone who will look at the Journal for May and June, 1883, will see that it was literally flooded with letters, reports, and speeches, by gentlemen representing every kind of view upon this Bill ; and that, instead of their being repressed, they were allowed an ample expression of opinion on every branch of the subject. This will be evident from the following analysis. A list of the letters dealt with by the Medical Reform Committee, and in respect to which this complaint has been urged, and also an analysis of them, was printed and circulated in the minutes of the Medical Reform Committee ; they are thirty in number. On examining them, I find that eight are private letters to Dr Waters, and ten are letters as to the changes which the Bill proposes to make in the privileges of foreign graduates. These ten letters were all dealt with, and a considerable number of letters treating of the same subject were published in the JOURNAL, and notably communications from the official representatives of a committee of the foreign graduates established for the purpose; and in the JOURNAL will be found letters from the secretary of that committee, and a final letter explaining that the matter had been satisfactorily settled, so that here at least there can be no question of suppression. This deals with eighteen of the number. As to the rest, I find that letters numbered three and five are both from the same person, and that the second letter (number five) expresses the thanks of the writer for the information he has received from Dr. Waters, and a statement that he has petitioned in favour of the Bill. Letters number one and two are also from the same writer, and the second letter is also a letter of thanks, and contains the observation that the whole Association ought to be thankful that there is one man, such as Dr. Waters, who takes so much trouble in examining all the questions submitted to him. Letters number seven and eight are letters also relating to foreign degrees, and are from the same person; the second letter is a letter expressing warm thanks. Letters number twelve and twenty-one are simply letters asking questions as to the interpretation of clauses, which information was given. Out of the letters referred to as being suppressed, twenty-six, it will be observed, were never intended for publication, and the rest were dealt with in a manner completely satisfactory to the writers. There remain one or two other letters. There is a letter from Dr. McNaught, complaining that the provisions against quackery are not sufficiently stringent. On turning to the JOURNAL of June 23rd will be found a letter from Dr. McNaught dealing with that question, so that he at least was not suppressed. Letter number thirty was a letter from Mr. John Broom, and in the JOURNAL of June 23rd will be found a letter of three and a half columns from this gentleman dealing with a number of objections to the Bill, which was printed in full, with observations thereon. Another letter is from Dr. Thomson of Harcourt Street, Dublin, with reference to the standard of examination, and on page 638 of the JOURNAL will be found a long letter from that gentleman on the same subject. It will be seen that, year after year, Mr. Brown, Mr. R. H. S. Carpenter, Mr. Hentsch, Mr. Broom, Dr. McNaught, and every one of these gentlemen, have had ample opportunities of expressing their opinions in the JOURNAL. I find, for instance, letters from Mr. R. H. S. Carpenter, and from Mr. George Brown, on the question of unqualified practitioners on page 655. I find a letter from Dr. A. H. Jacob, the President of the Medical Alliance Association, on page 275 (Feb. 1883). I find, in September 1882, a letter from Mr. R. H. S. Carpenter, attacking the Medical Reform Committee, in language which it certainly required great allowance for warmth of feeling to allow to appear in the JOURNAL. He charged the Medical Reform Committee with publishing a report "remarkable for its untruthfulness;" he complains of the "reprehensible idleness," and of "the silly tall talk" of the Committee; and he speaks of their "palming off other people's work on the credulity of the members as their own work;" and he complains of their "abandoning ignominiously the principles of reform." Then, again, on February 17th, 1883, at the very time when we are charged with having suppressed this gentleman's views, is a similar letter of one and a half columns, in which again he expresses the opinion that the Medical Reform Committee have "betrayed their trust, and palmed off upon the Lord President untruth as truth." He speaks of the "impeached and incompetent Reform Committee," and attacks the members of the Committee in very unsparing language. On March 31st, 1883, page 639, will be found another letter, signed by Mr. Carpenter, as chairman of this association, by Dr. Chaple as treasurer, and by Mr. Hentsch its honorary secretary, in which the Bill is again attacked in very unsparing language. It is described as "a quack's emancipation Bill," and "a herbalist's emancipation Bill." On June 9th, 1883, is another letter from Dr. Chaple, who is, I believe, now chairman (and not treasurer) in lieu of Mr. Carpenter, attacking the policy of the Bill. On June 30th another letter from the same gentleman, maintaining his views and giving further expression to them. On page 1247 is a resolution passed at a meeting of Mr. Brown's association, the Medical Defence Association. At the meeting of the British Medical Association in August 1883, the report of the Medical Reform Committee was brought before the annual meeting; and at that meeting Dr. Jacob of Dublin, the past president of the Medical Alliance Association, which is now convening this meeting, was present. The first words of Dr. Jacob's speech were, that it had been a pleasure to him, as representing Ireland, to work hand in hand with Dr. Waters and the other members, in promoting legislation. It will be wearisome to go through anything like the list of letters which have been published, from various members, on the Medical Acts Amendment Bill during the years that it has been under discussion, but if I take only the months of May and June of last year, when this particular allegation of suppression arises, I find, on having the JOURNAL examined, that in those two months only the following letters were published, and the following further reports, statements, and summaries of the views of all parties to the discussion.

List of Letters on the Medical Acts Amendment Bill, published in the BRITISH MEDICAL JOURNAL *in May and June* 1883.

From:
- Dr. F. E. Pocock, May, 5th, p. 891.
- "Surgeon," May 12th, p. 944.
- Perthshire Medical Association to Mr. Mundella, May 19th, p. 979.
- Dr. Sheen (Cardiff), May 19th, p. 994.
- Dr. Myle, May 26th, p. 1051.
- Dr. J. Brown (3½ cols.), June 2nd, pp. 1090-1.
- "L.R.C.P.Edin., R.N., June 2nd, p. 1101.
- "A Member," June 9th, p. 1159.

From:
- D. Durham, June, 9th, p. 1161.
- Dr. Chaple, June, 9th, p. 1162.
- J. Pale, June 23rd, p. 1264.
- "M.R.C.S.," June 23rd, p. 1262.
- Dr. J. McNaught, June 23rd, p. 1263.
- "A Member," June 23rd, p. 1263.
- "Vigilans," June 30th, p. 1314.
- Dr. Chaple, June 30th, p. 1315.
- Dr. J. G. Parsons, June 30th, p. 1315.
- "House-Surgeon," June 30th, p. 1315.
- "A Member," June 30th, p. 1315.

Medical Acts Amendment Bill.

Deputation to the Lord President of the Privy Council from the British Medical Association (see BRITISH MEDICAL JOURNAL, December 2nd, 1882, p. 1114.

Deputations to the Right Hon. A. J. Mundella from:
- The Scotch Medical Corporation, May 12th, p. 930.
- The Society of Apothecaries, June 9th, p. 1151.
- The Metropolitan Counties Branch, June 9th, p. 1151.
- The Medical Union Society, June 9th, p. 1151.
- The University of Cambridge, June 9th, p. 1151.
- The Apothecaries' Hall (Ireland), June 23rd, p. 1247.
- The Royal College of Surgeons (Ireland), June 30th, p. 1298.
- The Medical Herbalist, June 9th, p. 1191.
- The Medical Alliance Association, August 4th, p. 285.

Action of Branches in respect to Medical Acts Amendment Bill, reported in the BRITISH MEDICAL JOURNAL *during May and June* 1883.

South Wales and Monmouthshire Branch, May 12th, p. 932.
Southern Branch, Isle of Wight District, May 12th, p. 932.
West Somerset Branch, May 19th, p. 983.
South-Eastern Branch.
North of Ireland Branch, June 23rd, p. 1265.
East Anglian Branch.

The Medical Acts Amendment Bill, BRITISH MEDICAL JOURNAL, *May and June* 1883.

A statement showing the exact nature of alterations made in the Bill, May 12th, p. 927.
Students and the Medical Bill: Discussion of the Medical Union Society at the Society of Arts, May 12th, p. 928.
Report of a meeting held in the Faculty Hall, Glasgow, May 26th, p. 1016.
Report of a special meeting of the Council of the British Medical Association at Birmingham on May 17th, May 26th, p. 1028.
A subcommittee appointed by the Metropolitan Counties Branch to examine the Medical Acts Amendment Bill, May 26th, p. 1028.
A petition from the King's and Queen's College of Physicians in Ireland to the House of Commons, June 2nd, p. 1088.
A meeting of the Corporation of the Apothecaries' Hall in Ireland, protesting against the injustice that had been done to their body by removing it from representation in the Medical Acts Amendment Bill, June 2nd, p. 1088.
An address on the Medical Acts Amendment Bill by W. M. Crowfoot (Beccles), June 16th, pp. 1164-5.
Report of meeting of the Royal College of Surgeons in Ireland on the Medical Acts Amendment Bill, June 23rd, p. 1247.
Report of meeting of the Scotch Corporations, June 23rd, p. 1247.
Report of the meeting of Medical Defence Association, Scotland, June 23rd, p. 1247.
Report of meeting of the Irish Medical Association, with report on Medical Acts Amendment Bill.
And leaders.

You will see that, year after year, there have been letters in the JOURNAL from these gentlemen belonging to small associations, the Medical Defence and Medical Alliance Associations, which hold extremely strong views as to one particular clause. They have had the opportunity of stating their opinions at all the Branches, and at every successive general meeting; they have had the opportunity, at the known and stated times and places, if they pleased, of objecting to the report of the Medical Reform Committee, and to the election of the members of that Committee. They have used their opportunities freely in the JOURNAL, and occasionally in language much stronger than is usually allowed; they have done it frequently and persistently. They did not appear at the last annual meeting to oppose the report, or to oppose the re-election of the committee. The report was carried, and the committee was re-elected unanimously. Under those circumstances, it is clear that, if the BRITISH MEDICAL JOURNAL is to be conducted as the organ of the British Medical Association, it must be conducted in accordance with the decisions which the Association adopts at its annual meetings, as being those which are in harmony with the wishes of the Association, and in concert with the committees which it appoints to carry out those decisions, and to control the conduct of the JOURNAL. The legitimate opportunity of these gentlemen is in the Branches at their general meetings, or at the Association meetings; that opportunity they have neglected; they have not appeared at those meetings, or, when they have appeared, they have failed to convince the members that their views are correct. I must say that the calling of this meeting has been a very severe strain on the constitutional forms of the Association; and has entailed considerable inconvenience upon a large number of the leading members of the Association. The whole complaint, that the views of these gentlemen have not been adequately expressed, I believe to be unfounded; and the proceedings that have been taken in bringing it about are the least reasonable of any that I remember to have occurred in the history of this Association.

Dr. EDWARD WATERS (Chester): I second the resolution. I am among the members of the Council of the Association who have been brought here at considerable inconvenience in order to be prepared for this attack. I really had to look up the JOURNAL, and I sat up a considerable part of last night in order to be prepared on the present occasion. As there is no real assault made upon me, I will not trouble the meeting with any defence; but I think it may be as well to place before the meeting what Mr. Upton says with regard to one point which has been contended for with regard to medical reform. I allude to the operation of the penal clauses of the Government Medical Bill. The Association has never gone for more than certain grand principles. One is the realisation of the direct representation of the profession in the General Medical Council. I think it must be admitted that the Government has done more in the proposed reconstitution of the Medical Council than our most sanguine hopes could have led us to expect; they have given us all that the Association has ever asked, that is, that we should have one half of the number of representatives on the Medical Council which is allotted to the universities and corporations. But the representation of those medical authorities has been very distinctly modified in favour of the profession. There is no direct representation of those bodies on the General Medical Council in the proposed plan of the Government, but all the bodies in each division of the kingdom are thrown together, so as to elect conjointly their representatives on the General Medical Council. In addition to having one-half of the number of representatives accorded to the universities and corporations, we have in the Crown nominees an independent body of six; and the six Crown nominees, with the four direct representatives of the profession, will constitute a clear working majority of ten to eight, which will quite render impossible any action especially favouring any individual corporation; on the contrary, the Crown and the profession will dominate the Medical Council in the future, instead of its being dominated by the representatives of the corporations. The conjoint scheme also has been proposed in the Medical Bill; and that is one other point for which we have contended. The third point was that the penal clauses against illegal assumption of professional titles should be strengthened; and, if the Bill be carefully read, it will be found that such is the case. There was a prosecution attempted in Liverpool the other day, which failed entirely, because, though the man assumed a title which is not registrable, or alleged that he was a graduate in medicine of some unknown university, the judge decided that it could not be shown that he had wilfully assumed that title; and upon that point the man got off, and the prosecution, which was conducted at considerable expense by the Medical Defence Association, failed. That clause in the present Act is altered, and the mere assumption of the title without anything [illegible] wilfully and falsely, as in the Act of 1858, is quite sufficient [illegible] under the operation of the Act. Much has been said about the repeal of the Apothecaries' Act, and the consequent greater freedom which druggists and chemists will have of practising. On that point, the Medical Reform Committee thought it necessary, as there was a good deal of agitation with regard to it, to obtain the opinion of the Solicitor of the Association, who, I believe, has a great deal to do with the Apothecaries' Company (being their clerk). I asked him for the grounds upon which he asserted that the Act in no way weakened the powers of any person prosecuting for illegal practice; and he wrote:

[illegible] Association [illegible]

[illegible] Medical Act Amendment Bill, 1883 [illegible]

[illegible]

[illegible] the twenty-eighth section of the Apothecaries' Act [illegible] the date of that Act [illegible] apothecary without a qualification [illegible] the licence or diploma of the Society of Apothecaries [illegible]

The twenty-eighth section of the Act [illegible] Oxford and Cambridge, the Royal College [illegible] the Society of Apothecaries [illegible] person actually practising as an apothecary before 1815 (there are scarcely [illegible] practising as such now left).

[illegible] by the Medical Act Amendment Bill, 1883 [illegible] the other hand the Bill proposes to enact that prosecutions under the Act (which are to be placed in the hands of the bodies and officials therein [illegible]) can be instituted in respect

(a) Of any person who, not being [illegible] practitioner, represents himself [illegible].

(b) Of any person who, not being a registered medical practitioner, practises, or pretends to practise, [illegible] or who receives payment for so [illegible] of apothecary.

The twenty-eighth section of the Apothecaries' Act, 1815, saves the rights of chemists and druggists as regards [illegible] dispensing, and vending drugs and medicines. This also is said to be repealed by the Bill of 1883, and the place taken by the sixty-fourth section of that Bill, the language of which I will presently refer to.

I [illegible] the Bill of 1883 [illegible] or attempt to [illegible] compound, or dispense [illegible] without overstepping the lines which would make them [illegible].

In the case of the Society of Apothecaries v. Shepperley, which was tried before Mr. Baron Pollock, that learned judge [illegible] the twenty-eighth section of the Apothecaries' Act of 1815, "To my mind, as at present advised, I think this section is intended, in the latter portion of it, to apply to the trade or business of a chemist and druggist, [illegible] generally, but to the trade or business of a chemist and druggist limited by the words 'in the buying, preparing, compounding, dispensing, and vending drugs' [illegible] that this was the view of another learned judge.

The sixty-fourth section of the Medical Act Amendment Bill, 1883, saves "the lawful occupation [illegible]."

It is clear to my mind, on the authority of the decision of the judge which I have quoted in the above case, that such lawful occupation is limited to buying, preparing, compounding, dispensing, and vending drugs; and that no chemist or druggist, as the law now stands, and [illegible] Bill becomes an Act, could hold [illegible] that his "lawful occupation" [illegible] beyond these duties.

J. Leake, Esq. Yours faithfully, JAMES R. UPTON.

I think that letter makes it perfectly clear that the powers of prosecuting unregistered persons who like to prey upon the public are in no way weakened by the Government Bill. I second the motion that has been proposed.

The motion was put, and unanimously adopted.

Mr. ALFRED BAKER proposed a vote of thanks to the Chairman.

Dr. WADE seconded the motion, which was unanimously agreed to.

The proceedings then terminated.

THE IRISH MEDICAL ASSOCIATION.

THE forty-fifth annual meeting of this Association was held last Monday in the Royal College of Surgeons, Dr. A. H. JACOB, President, in the chair.

Report of Council. The report of the Council for the past year was read by the honorary secretary, Dr. Chapman, and gave a clear and comprehensive account of the work that had been done during this period. Naturally the first subject referred to in it was the Medical Acts Amendment Bill. With regard to this, the amendments urged upon the Government by the Association were: (*a*) That the Student should be attached to a licensing body during his period of study, and that this affiliation should be necessary to registration. (*b*) That the curriculum and period of study should be uniform throughout the kingdom. (*c*) That the direct representative and the Crown nominee should have seats on the divisional board for each division of the kingdom. (*d*) That University matriculants should not be admitted to the final examination at a reduced fee, unless they had fulfilled, at least, three years' study in arts. (*e*) That the surplus funds in the hands of the Medical Council and divisional board should be divided between the licensing bodies in proportion to the educational and examinational work done by each respectively. (*f*) That the representation of the Irish College of Physicians on the divisional board should be increased. The last of these amendments, however, has since been accepted. Pending the decision of Government regarding the introduction of the [illegible] Bill the Council had not taken any steps to [illegible] the [illegible] and [illegible] of these amendments, or the greater part of them, be accepted in the Bill, the [illegible] should not receive any support from the Association.

[illegible] the *Poor Law* [illegible] of the Council [illegible] officers of health for their services in connection with the *Labourers* [illegible]

[illegible] Mr. [illegible] the House of Commons [illegible]

As regards *Prison-Surgeons*, the Council had pleasure in reporting that a very important precedent has been recently established relative to the payment of substitutes for prison-surgeons during their temporary absence from duty on Crown or official business. At the instance of the Association, a test-case was brought before the Recorder of Galway, who gave judgment against the gentleman whose case the Association took up. The Council was not satisfied that the facts of the case had been fully submitted; and, acting under legal advice, notice of appeal was lodged against the Recorder's decision. When the case was heard at assizes, the judge gave a decree for the amount claimed, with costs; and ruled that, under the circumstances, the authorities were liable to pay for the services of the prison-surgeon's substitute. No notice of further appeal was lodged. The Council considered that this decision was very noteworthy; and they would recommend medical gentlemen holding public appointments, when compelled to be absent from duty in such instances as Crown summonses or official requirements, merely to nominate, but not appoint, or make any arrangement as to the payment of, their substitutes; leaving it to the latter to take the steps necessary to recover from the proper source the amount of their claims for services rendered. The medical officers would thus most effectually resist the imposition of unfair deductions from their salaries.

The refusal of payment to a *Dispensary Medical Officer's Substitute* by a board of guardians, during the illness of the medical officer, also furnished a case concerning which legal proceedings were successfully instituted by the Association. A decree for the amount claimed, with costs, was given. The decision was further of importance, inasmuch as it ruled that a dispensary committee, by appointing a dispensary medical officer's substitute subsequently to the time he entered upon the duties, entitled him to claim remuneration for his services by such substitute, not merely from the date of his appointment, but from the day he, with the sanction of the committee, commenced to discharge the duties. It thus appeared that the right of a board of guardians to "determine the amount of remuneration, if any," in such cases, did not relieve them of liability to pay reasonable claims for services rendered and accepted.

As regards the *Establishment of Branches*, the report stated that the Council had taken steps to ascertain the opinions of the members of the Association individually concerning the advisability of forming local branches of the Association throughout the provinces, and also the result of the voting, which was—in favour of the proposal, 38; against it, 206; adverse majority, 168. Only 303 members voted on the question, of whom 57 were doubtful, and two voting-papers were spoiled. With an adverse majority of more than five to one, the Council considered this question settled in the negative.

The anxious attention of the Council has been directed to the exclusion of dispensary medical officers from the commission of the peace in Ireland, which was brought recently under the notice of the House of Commons by Mr. Sexton, M.P.; and Dr. Lyons, M.P., had given notice that he would call the attention of the House to the subject after the Whitsuntide recess; and the Council, in order to strengthen his hands, had prepared a memorial for signature by each dispensary medical officer. The Council, upon inquiry, and upon consideration of the arguments adduced, had not been able to discover any valid reason whatever for the exclusion of dispensary medical officers from the magistracy, and, being aware that the duties had been discharged with perfect propriety and without the least inconvenience to the public service by those medical officers who had held Her Majesty's commission, they were determined to use every influence to cause this most unnecessary, unwise, and derogatory exclusion to cease.

The statement of accounts showed that the balance in hand, at the close of last account, was about £100; received since for subscriptions, £280, making a total to credit of £387 8s. 6d. The expenditure amounted to £246 16s. 9d., leaving a balance to credit of £140 11s. 9d.

Resolutions.—After the report had been adopted, and the usual votes of thanks passed, Mr. CORLEY moved:

"That the Council be instructed to continue to urge Government to adopt the amendments of the Medical Act Amendment Bill approved of by this Association; and that, in the event of such amendments as seem to them necessary not being introduced into the Bill, the support of this Association shall not be given to that measure."

Mr. STOKER suggested that it would be desirable to add to the resolution the proposal that the fee should be uniform throughout the United Kingdom, as well as the curriculum and period of study, as urged in the amendments approved by the Association.

The resolution, with the addition suggested by Mr. Stoker, was adopted. The following resolutions were also adopted:

"That the Association, having observed with much regret that, in consequence of the persistent opposition given to it by certain members for Irish constituencies, the Union Officers Superannuation Bill has not been pressed upon the attention of Parliament, re-asserts its opinion that the Poor Law medical officer is entitled, in equity, to receive a pension, as a matter of right, whenever he shall be incapacitated from the discharge of his duty; and therefore respectfully urges the Government and Mr. Herbert Gladstone to exercise with determination their influence in Parliament so as to pass in the present session a measure so generally approved and so just in principle. That a copy of this resolution be forwarded to the Chief Secretary, Mr. Herbert Gladstone, and the Vice-President of the Local Government Board for Ireland."

"That this Association approves of Mr. Meldon's 'Notification of Infectious Diseases (Ireland) Bill,' and hereby directs the Council to exercise the influence of the Association in its favour, and to oppose any Bill which proposes that the duty of notifying infectious diseases to the sanitary authorities shall be made obligatory upon the medical attendant."

"That the indiscriminate issue of dispensary tickets to persons whose circumstances do not entitle them to charitable relief is a practice grossly unjust to the medical officer, and to the ratepayers, at whose expense such relief is given, and its prevalence in Ireland demands the earnest attention of the Government authorities. That the legal precedents established by the Association, by the recovery of fees for services rendered on these tickets, are eminently satisfactory, and that the Council be requested to consider the propriety of testing the question whether the cancelling of the ticket is an indispensable precedent to the recovery of such fees."

"That the action of Council in instituting a suit to establish the right of medical officers of health to payment for inspections under the Labourers (Ireland) Act is approved, such functions not being, in the opinion of the Association, a legitimate part of the duty of the medical officer under the Public Health Act."

"That the Association regards the exclusion of dispensary medical officers from the commission of the peace in Ireland as derogatory to the social and professional position of those officers, and entirely unjustified by experience as to the manner in which the magisterial functions have been heretofore discharged by those officers who have held Her Majesty's commission; that the Council be requested to use their utmost influence to cause any understanding which may exist as to the exclusion of dispensary medical officers to be abrogated."

Officers and Council.—The following gentlemen were elected officers and members of the Council for the year ending May 31st next: *President:* Dr. W. D. Hemphill, Oakville, Clonmel. *Vice-Presidents:* Leinster—Dr. Edward Hamilton, 120, Stephen's Green, Dublin. Ulster—Dr. W. Malcomson, Cavan. Munster—Dr. John Russell, Thurles. Connaught—Dr. Heily, Roscommon. *Council:* Dr. C. Bent Ball, Dr. J. W. Boyce, Dr. Brown, Dr. William Carte, J.P.; Dr. Chaplin, Dr. A. H. Corley, Dr. H. G. Croly, Dr. T. Darby, Dr. R. V. Fletcher, J. R. Harvey, W. J. Hepburn, A. H. Jacob, David Jacob, J. B. Kelly, Richard John Kinkead, James Martin, A. Meldon, G. J. Mackesy, R. M'Donnell, F. V. M'Dowell, G. Morrogh, J. Molony, A. O'K. Nolan, J. F. Pollock, Sir G. H. Porter, T. Purcell, J. Ridley, J. M. Tabuteau, R. M. Tagert, Wm. Thomson, J. W. Usher, J. L. Walshe. *Auditor:* Dr. Albert Croly, Rathfarnham.

Vote of Thanks.—Dr. HEMPHILL of Clonmel having taken the chair as president, Dr. MARTIN of Portlaw moved the following resolution:

"That the warmest thanks of this Association are hereby given to our late president, Dr. Jacob, for the dignified manner in which he has filled that office, as well as for the zealous interest he has ever evinced in the welfare and objects of the Association."

Dr. CHAPMAN seconded the resolution, which was adopted.

Dinner.—In the evening the annual dinner took place in the Albert Hall of the College of Surgeons. Dr. Hemphill, president, occupied the chair, and he was supported by a large attendance of members and guests of the Association.

UNIVERSITY OF DURHAM: EXAMINATION FOR THE M.D. DEGREE WITHOUT RESIDENCE.

AT a meeting held at the Trevelyan Hotel, Manchester, on May 28th —Mr. T. J. Monaghan, (Accrington), in the chair—the following motions were carried unanimously.

1. "That the resolutions passed at the London meeting be adopted by this committee." Moved by Mr. J. Brown, Bacup; seconded by Mr. G. G. Hodgson, Liverpool.

2. "That an additional reason for the alteration is, that certain hospital appointments can only be held by graduates of a British uni-

versity; and that no other qualifications, whatever worth they may have in the profession, will stand in place of a degree." Moved by Mr. A. R. Hopper, Liverpool; seconded by Mr. J. S. Withers, Sale.

3. "That this committee will use every means in its power to promote the desired change." Moved by Mr. Thomas Cooke, Ashton; seconded by Mr. B. Jones, Leigh.

A form of memorial was likewise agreed upon, which will be sent for signature to all those who have sent their names to the Honorary Secretary, who will be glad to receive additional names for the memorial.

MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

FORMATION OF A BIRMINGHAM BRANCH.

A MEETING of the members of the above Society, residing in Birmingham and neighbourhood, was held on Friday, May 30th, at the Medical Institute, Birmingham, for the purpose of electing a local committee, and of considering what steps should be taken to bring the advantages of membership before those who have not yet joined the Society.

A committee of ten members was elected, with power to add to their number; and Mr. Ravenhill, one of the vice-presidents of the Society, was elected Chairman, and Dr. Richards, Honorary Secretary. The members of the committee were selected as practitioners residing in different centres of the district; and it was decided that each member of the committee should take his own district, and endeavour to secure adherents by laying before the medical men in his neighbourhood the great advantages which this Society offers to both senior and junior members of the medical profession.

Letters were read from members, expressing regret at their inability to be present, and expressing in high terms their pleasure at the formation and successful progress of the Society.

Communications should be addressed to Mr. Ravenhill, 113, High Street, Bordesley, Birmingham; or Dr. Richards, Temple House, Bath Row, Birmingham.

INTERNATIONAL HEALTH EXHIBITION CONFERENCES.

THE first of three conferences arranged to be held in connection with the International Health Exhibition, under the auspices of the Mansion House Council on the Dwellings of the Poor, was held on June 4th, in the arena of the Albert Hall. The Lord Mayor, who presided, dwelt upon the importance of the subject treated in the three papers to be read that day; and remarked that the third had the greatest interest for them, because overcrowding was inimical to the health and morality of the inhabitants of any town. Dr. G. B. Longstaffe, in a paper on "The Population of London and its Migration," quoted the restriction placed on an extension of the metropolis in 1580, when the erection of new buildings in London was forbidden as "likely to increase the plague; to create trouble in governing such multitudes; a dearth of victuals; the multiplying of beggars; the assemblage of more artisans than could live together; and as likely to impoverish other cities for lack of inhabitants." The reader of the paper wished that something could be done, if not to diminish the number of the inhabitants of the metropolis, at least to prevent their increase. Emigration was the only practicable remedy; but emigration should not be promoted merely from London itself, because, for every family sent away from the metropolis, two would rush in from the provinces and from Ireland. Moreover, country people made far better emigrants than townsmen. A discussion followed, in which Canon Gregory, the Rev. Styleman Herring, and others, took part on this and the following papers: "The Treatment of the London Poor," written by Miss Gertrude Toynbee; and "Overcrowding," by the Rev. A. Mearns. Thursday's Conference was opened at 3 o'clock, under the presidency of the Archbishop of Canterbury, when papers were read on "Suburban Dwellings and Cheap Railway Fares," and on "The Creation of a Building Fund."

A CONFERENCE, organised by a committee appointed by the Society of Medical Officers of Health, the Sanitary Institute, and the Parkes Museum, of which committee Dr. Dudfield and Dr. Louis Parkes are respectively chairman and honorary secretary, will be held in the arena of the Royal Albert Hall from June 9th to June 14th. The following papers will be read.—On Monday, June 9th, at 2 P.M., by John W. Tripe, M.D., on Domestic Sanitary Arrangements of the Metropolitan Poor; by Ernest Turner, F.R.I.B.A., on The Improvement of the Sanitary Arrangements of Metropolitan Houses. Tuesday, June 10th, 2 P.M., George Wilson, M.D., on Domestic Sanitation in Rural Districts; by H. Percy Boulnois, M. Inst. C.E., on Sanitary Houses for the Working Classes in Urban Districts. Wednesday, June 11th, 2 P.M., John Syer Bristowe, M.D., F.R.S., on Industrial Diseases. Thursday, June 12th, 2 P.M., W. N. Thursfield, M.D., on Spread of Infectious Diseases through the Agency of Milk; by W. H. Corfield, M.D., Through Other Agencies. Friday, June 13th, 2 P.M., Alfred Hill, M.D., on Notification of Infectious Diseases, Its Importance and Its Difficulties; by Alfred Carpenter, M.D., J.P., on The Right and the Duty of the State to Enforce it. Saturday, June 14th, 2 P.M., A. Wynter Blyth, M.R.C.S., Disposal of the Dead; and Wm. Eassie, C.E., on Cremation. We would especially remind members of the Association interested in the question of Notification of Infectious Disease, of the importance of attending the Conference of Friday afternoon.

THE PRELIMINARY REPORT OF THE COLLECTIVE INVESTIGATION COMMITTEE ON DIPHTHERIA.

"IN tracking the principle of heat," said Lord Bacon, "make as large a list as possible of those bodies in which, however widely they differ from each other in appearance, we perceive heat; and as large a list as possible of those which, while they bear a general resemblance to hot bodies, are nevertheless not hot. Observe the different degrees of heat in different hot bodies, and then, if there be something which is found in all hot bodies, and of which the increase or diminution is always accompanied by an increase or diminution of heat, we may hope that we have really discovered the object of our search." The directions of the great author of inductive philosophy here given are more than equally applicable to an investigation into the nature of infectious diseases. They indicate the true lines on which such an investigation should proceed; and in the admirable memorandum on Diphtheria, by Mr. Shirley Murphy, issued by the Collective Investigation Committee at the time of their first appeal to the profession for information, this principle was recognised. "Anyone studying the etiology of diphtheria must endeavour to learn accurately the conditions associated with the existence of the disease amongst those attacked, and compare them with the conditions associated with those who escape. By means of this comparison it becomes possible to eliminate those conditions which are common to both groups of individuals, viz., those who are attacked and those who escape: perhaps to identify some condition as specially co-existent with the disease, and, finally, to accumulate sufficient evidence to enable it to be regarded, in its relation to the disease, as cause is related to effect." Such were the words of the memorandum, and they contained a guarantee of a logical method of research.

"The inquisition by induction," continued Lord Bacon, "is wonderfully hard, for the things reported are full of fables." Thanks, however, to the class of workers who have lent their assistance, this does not seem to have been the special difficulty with which the Collective Investigation Committee have had to contend. The difficulty, it seems, has rather been in the paucity of information, and especially of information of a certain kind. The "list of bodies" attacked, although probably insufficient to justify the putting forward of any single inference, is considerable; but the circumstances attending different "degrees" of attack, and those associated with escapes in the face of exposure, have scarcely received illustration. No doubt, time and patience, and insistance upon what is required, will supply this deficiency.

Meanwhile, a preliminary report, purporting "to do no more than indicate the directions in which the communications already received appear to lead, and leaving to a later date a more precise statement," has been issued. We may believe that considerations of expediency—the necessity of making the investigation popular—have weighed with the Committee; excluding such considerations, we think the profession would have been content to wait, so long as sources of information proved fruitful, for their more matured deliberations. Tentative inferences are not favourable to the inductive method. The temptation to accept them as a basis for synthetical argument is rarely altogether resisted—the report before us is not without instance of this truth—and the result in that case is often disastrous; moreover, they are apt to influence the direction of subsequent observations. The postponement, again, of that "precise statement" spoken of, apparent both in the relation of fact and the advancement of argument, we account a disadvantage. It tends to debar effective criticism; and we feel assured that, next to a desire for observed facts, the Committee themselves most wish that their interpretation of those facts should, step by step, be submitted to a searching scrutiny.

Altogether 138 communications were received by the Committee, 90 giving information upon sanitary, and 112 upon clinical, points. The actual number of cases is not recorded; but we infer, from various proportions given, that it must be represented by some figure between 160 and 175. We may suppose that 168 cases were reported. 126

singly, and 42 in twelve different groups. Three-fourths were described as sporadic, originating without known exposure to any antecedent case, "and by far the greater number, whether sporadic or epidemic, occurred in sparsely inhabited districts, a point particularly noticeable among the former class." The report goes on to speak of the general opinion that diphtheria is a disease especially of rural districts, and refers to a paper that has been prepared for the Committee by Dr. G. B. Longstaff as affording "satisfactory evidence of the relation of its prevalence to population." It is intended hereafter to publish this contribution; meanwhile the statement is deemed sufficient that, "while 62 per cent. of the total districts of England and Wales had a mortality from diphtheria above the average in the decades 1851-60 or 1861-70, or in both periods, of the densely populated districts only 36 per cent. were above the average." Now, it is quite clear that no inference as regards the relative frequency of sporadic attacks, or as to the preponderance either of such attacks or of the disease as a whole, in sparsely inhabited areas, can be drawn from the individual observations reported to the Committee. Many of the cases were no doubt reported because of the mystery surrounding their origin—a mystery which is not recognised in a town where hidden sources of infection are expected to operate; and the cases are therefore to be regarded as selected and not as representative ones. The words of the memorandum already quoted, in effect suggested this selection: "Rural places more than others," it says, "best promise to reward the investigator for his labours."

Dr. Longstaff's paper is said to "prove conclusively that the greatest mortality from diphtheria occurs in thinly inhabited areas," and, allowing apparently no doubt as to the significance the Committee wish to attach to these words, it is referred to more than once as "showing the relation of diphtheria to density of population;" and an attempt is afterwards made, in submitting certain hypotheses, to use this conclusion syllogistically. From the glimpse we have of the paper, proof, to our minds, is far short of this. That 62 per cent. of the total districts of England and Wales show a mortality above the average of that of England and Wales, while only 36 per cent. of the densely populated districts are above that average, proves no more than that the mortality is comparatively low in several large centres of population. Relative excess in other parts, as compared with the average rate thus depreciated, follows of course of necessity. To render our criticism clear, we might say, for example, that the converse of what is here proved might be alleged with far more emphasis of summer diarrhœa; but even of that disease it would be considered, with our present knowledge, a misuse of terms to speak of "the relation of its prevalence to density of population;" and wholly inadmissible to accept such supposed relation as a premiss for synthetical deduction. We need not here stop to discuss all that, in our opinion, it will be needful to show in order to establish such a relation by means of statistics; it will be sufficient to do that when Dr. Longstaff's paper appears. It is obvious, however, that some very elaborate combinations of figures and groupings of districts will be necessary; and if we are right in believing that the inquiry will have to be greatly localised, with comparisons of small areas and small populations, it seems doubtful whether it admits of being carried to a successful issue in the case of a disease with an average mortality not much above 1 per 10,000 of the population.

The Committee see reason for attaching special importance to the statistical data Dr. Longstaff affords, from the consideration that, "in thickly populated areas, diphtheria must have, through personal communication, special opportunities of extension." We think that too much might easily be made of this argument in the case of diphtheria. That disease, of the common infective diseases, holds, we are perhaps justified in assuming, the lowest place in the scale of infectivity. Inquiries have usually shown that its epidemic extension has been due to intercourse of a very close and personal kind; it has spread among the members of the several branches of one family, amongst the children of one school and of one class. The wider opportunities for personal intercourse which town life affords do not, therefore, so much concern us; the question is, rather, whether in town, as compared with country, an individual is likely to have more intimate personal friends, more kissing acquaintances.

Again, the bulk of the mortality in these rural places is, we conceive, notwithstanding the preponderance of sporadic cases reported to the Committee, made up of small circumscribed epidemics. Of these, reports have generally shown that there has been some considerable antecedent smouldering of the disease; and that, meagre precautions often appearing sufficient, as soon as the danger is fairly recognised, the visitation is controlled. The inhabitants of towns, with medical aid close at hand, may not, perhaps, be so much exposed to this danger of unrecognised disease. The Government of Russia has found the importation of medical assistance into infected districts a prime necessity.

The Committee comments upon the opposite behaviour, in this respect, of scarlatina, saying that a continuance of Dr. Longstaff's inquiry shows that the "the relation of this disease, scarlatina, to population is almost exactly the converse of that of diphtheria." In the case of scarlatina, with the much wider reaching potency of its infection, we are justified in attaching more importance to the aggregation of susceptible individuals; but we believe that Dr. Longstaff will find that even its prevalence is more closely related to the character, especially the age, of a population than to mere density. Taking, for example, the county of Durham, which, with a rate twice the average, heads the list of English counties in the order of scarlatinal fatality, it will be found that the proportion of children below the age of fifteen years (*i.e.*, of persons most susceptible to scarlatina) to the whole population, is higher by three per cent. than the corresponding proportion in England; in other words, more than 19,000 children, amongst whom, according to the mortality of that age, there would be some 80 deaths from scarlatina annually, are living in this county over and above what may be termed the normal number. The direct arithmetical effect of these 80 deaths on the mortality-rate would not be considerable, reducing it only about 1.2 per 10,000; but who shall say what the influence of some 800 additional cases of sickness may not have been in keeping alive and spreading the infection? These considerations apply, to some extent, also in the case of diphtheria; and, in so far as they do apply, they tend to enhance the significance of Dr. Longstaff's observations. The immunity of adults from the infection of diphtheria appears, however, to be much less complete than from that of scarlet-fever. Not only is the proportion of adult deaths to the total number three times as great in the one case as in the other, but experience would seem to show that, with diphtheria, such immunity is rather from fatal attacks than from infection. If this be so, adults, although supplying relatively few deaths, nevertheless bear their share in propagating the disease.

The ages in the cases reported to the Committee are not given; and other personal data we may hope, in a future report, to see noticed—social condition, habit, complexion (*vide* Dr. Airy's observations), acclimation, etc. The food-supply is worthy of attention, not only from the probability of its affording an occasional vehicle for the contagium (a point insisted upon in Mr. Murphy's memorandum), but as a possible influence on individual susceptibility. It has been suggested, for example, that the comparative insusceptibility of infants to scarlatinal attacks may be due to their alimentation; and a similar, if less marked, immunity is enjoyed by them in the case of diphtheria, whether or not croup be included under that name. Again, the question of water as a vehicle of infection is only slightly touched by the mere fact that the simultaneous occurrence of a number of attacks has not been reported to the Committee. Even in its most favourable medium, a contagium may have a low diffusible power; and, furthermore, in many rural districts, almost each family obtains its water-supply from a separate source. It may not be considered inconsequent to remark here that in just those districts where diphtheria is apt to prevail, sufferers from intestinal worms are often found in excessive numbers, for we know the medium of infection in the case of the large round worm to be almost certainly the drinking-water; whilst the eggs of the thread-worm are conveyed directly from person to person—a mode of infection that, in the view of the Committee, should operate more completely in towns.

Adverting to a suggestion that scarlatina and diphtheria may be clinical varieties of one and the same disease, the Committee adduce the fact that, in one-half the cases reported to them, in which this information was given, the sufferers from diphtheria had previously passed through an attack of scarlatina. If the numbers were considerable, and especially if the sufferers from the two attacks were in any considerable proportion still at the time of childhood, strong evidence is hereby afforded against a suggestion that would, indeed, appear to have little in its favour. We fail, however, to see how the evidence is in any way applicable to the conclusion that, assuming the two diseases identical, "the persons who may suffer from more than one attack number 50 per cent. of the community." That 50 per cent. of the diphtheritic patients, at all ages, were found to have suffered previously from an attack of scarlatina, in districts where the latter disease is not immoderately prevalent, would rather suggest to us, before making any mathematical estimate of probabilities, some abnormal incidence of the one disease upon previous sufferers from the other. And, besides, if the supposition is that the two diseases are identical, on what ground are those who suffer from the two attacks, but in the reverse sequence, omitted from the computation? On this very point, the immunity from subsequent infection conferred by one attack, there would seem to be a distinct difference between the two diseases in question; and a difference that must probably be regarded as fundamental.

Upon the important question of the relation of apparently simple sore-throat to diphtheria, the Committee desire to extend their inquiries. So far, in about one-fourth of the cases reported to them, antecedent sore-throat is spoken of; and in a smaller number of cases the two affections were co-existent in the same household. The connection between croup and diphtheria receives comparatively slight illustration. Definite contact with croup preceded two attacks of diphtheria; in two cases croup is mentioned as having prevailed in the neighbourhood, and two others are spoken of as "croup and diphtheria." Perhaps more information would be obtained from an inquiry concerning the occurrence of croup (or of the disease which, did it occur sporadically, would be called croup) after exposure to the infection of diphtheria.

The evidence obtained as to concurrent disease amongst the lower animals is almost entirely negative. As to local sanitary conditions likewise, as causative agencies, nothing determinate can be said. One half the houses invaded are stated to have been absolutely free from defect, but we are not told whether cases in which the disease obviously spread by infection are included in this computation. It is considered of importance that in less than one tenth of the cases was the disease attributed to a defective drain or sewer; but here again the caution must be borne in mind that the great bulk of this evidence comes from rural districts—that is to say where sewers and drains are very frequently absent.

Of the clinical phenomena that receive illustration, perhaps the invariable occurrence of glandular swellings and the all but invariable occurrence of false membranes are the most noticeable. These observations, however, must by no means be taken as definitive. It may be remembered, for example, that in the inquiry undertaken by the Royal Medical and Chirurgical Society into the relation between membranous croup and diphtheria, it was shown that glandular enlargement was often absent. Of twenty-five cases of diphtheritic paralysis reported to the Committee, the muscles of deglutition or of the soft palate were affected in nineteen; in one there was paralysis of the larynx, in another of the diaphragm, and in three there was loss of sensation and taste. Disturbances of vision were not apparently noted. The duration of the paralytic symptoms lasted from three days to five months.

Albuminuria was present in 88 per cent. of the cases (about one-third of the total number) in which its presence or absence was noted. The condition appeared as early as the first day, and as late as the sixteenth, and its duration ranged from two to sixty-three days.

Upon the results of various methods of treatment, a discussion is promised in a future report. On every ground, but mainly perhaps in the hope that important etiological problems may be elucidated, that report will be looked for with much interest.

COLLECTIVE INVESTIGATION OF DISEASE.

LIST OF RETURNS RECEIVED IN MAY, 1884.

I.—Pneumonia (31).

C. E. Abbott, Esq.; F. J. Allan, M.D.; J. M. Booth, Esq. (2); R. L. Bowles, Esq. (2); D. G. [illegible], M.D.; C. Elliott, M.D. (4); J. [illegible], M.D.; A. P. Hillier, M.B.; W. G. [illegible], M.D.; J. A. Mac[illegible], M.B. (2); H. M. [illegible], Esq.; J. F. [illegible], Esq.; F. [illegible], Esq. (2); [illegible], Esq.; [illegible] Redwood, M.D.; J. W. Reid, Esq.; W. D. Shepherd, Esq.; E. G. A. Walker, Esq.; T. J. Webster, Esq. (2).

II.—Chorea (4).

W. H. Day, M.D.; [illegible], Esq.; S. A. H[illegible], Esq.; [illegible], M.D.

III.—Acute Rheumatism (4).

P. B. [illegible], Esq.; W. M. Clarke, Esq.; G. A. M[illegible], M.D.; [illegible], Esq.

IV.—Diphtheria (Clinical) (3).

E. G. Gilbert, Esq.; [illegible], M.D. (2).

IVa.—Diphtheria (Sanitary) (1).

E. G. Gilbert, Esq.

VI.—Acute Gout (2).

R. L. Bowles, Esq.; W. G. [illegible], M.D.

VII.—Puerperal Pyrexia Forms (5).

Surgeon-Major [illegible], M.D. (2); J. Henderson, M.D.; [illegible] W[illegible], M.D.

X.—Aged Persons (3).

T. L. Gilmour, Esq.; C. E. Jennings, Esq.; J. W[illegible], M.B.

XI.—Albuminuria in the Apparently Healthy (17).

J. C. Clarke, Esq.; J. Ferguson, Esq.; F. B. Fisher, Esq.; J. E. Glascott, Esq.; C. A. Greaves, M.B.; G. Jackson, Esq.; S. Johnson, M.D.; W. Keleter, M.D.; H. P. Marsham, Esq.; J. H. Morgan, Esq.; J. W. N[illegible]gan, M.B.; T. M. Rooke, M.D.; T. Smith, M.B.; W. H. Taylor, M.D.; H. E. Trestrail, Esq.; T. A. Vesey, M.B.; C. H. Webb, Esq.

Total number of returns received during May, 76.

The Committee beg also to acknowledge with thanks a communication from G. M. Giles, M.B., 4th Native Infantry, Peshawur; and a report of cases of pneumonia from Evan Jones, Esq.

ASSOCIATION INTELLIGENCE.

PROCEEDINGS OF THE COUNCIL.

At a meeting of the Council, called specially to receive a requisition signed by fifty-three members of the Association, held at the Queen's Hotel, Birmingham, on Wednesday, May 28th, 1884; present, Mr. C. G. Wheelhouse, President of the Council, in the chair; Dr. Wade, Treasurer; Mr. Alfred Baker, Dr. Bartolomé, Dr. C. Chadwick, Dr. Crowe, Dr. Foster, Mr. Mason, Mr. T. Sympson, Dr. William Strange, Dr. Arthur Strange, Dr. Edward Waters;

Read letters of apology for non-attendance from the President, Mr. W. D. Husband, Dr. Vawdrey Lush, Mr. Dix, Dr. Lanchester, Mr. Sibley, Dr. Skerritt, Mr. Evan Jones, Mr. Macnamara, and Dr. Alfred Sheen.

Read circular convening meeting.

Read letter from the Solicitor to the Association.

The requisition, signed by fifty-three members, was then considered.

Resolved: That the step taken by the President of the Council, in calling an extraordinary general meeting of members at the Queen's Hotel, Birmingham, on Wednesday the 28th instant, be approved and confirmed.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

Meetings of the Council will be held on Wednesday, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

Cards for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
IVa. Diphtheria, sanitary.
V. Syphilis, acquired.
Va. ,, inherited.
VII. Puerperal Pyrexia.
VIII. Paroxysmal hæmoglobinuria.
X. Habits of Aged Persons.
XI. Albuminuria in the Apparently Healthy.

Note.—The further 150 cases of pneumonia asked for by the Committee have now been received, and will be included in the forthcoming issue of the *Record* in July. The Committee hope that cases will still be communicated, as opportunity may occur, with a view to a further report upon the subject in the future.

An inquiry is being now issued concerning the general condition, habits, and circumstances, past and present, and the family history of persons who have attained or passed the age of 80 years.

The replies to this inquiry will be most valuable when given by a medical man; but the questions have been so arranged that, with the exception of those on the last page, they may be answered by another person. [illegible]

Copies of the form and memorandum relating to Aged Persons, recently printed in the Journal, are ready for distribution through the local Secretaries, and will be forwarded to any one who is willing to fill up one or more of the forms, on application by post-card or otherwise to the "Secretary of the Collective Investigation Committee," 161A, Strand, London.

There is also now being issued an inquiry as to the occurrence of Albuminuria in apparently healthy persons.

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
May 1884. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

MIDLAND BRANCH.—The annual meeting of this Branch will be held in Nottingham on Thursday, July 3rd. Notice of papers, etc., to be sent to the Secretary, LEWIS W. MARSHALL, M.D., Nottingham.

METROPOLITAN COUNTIES BRANCH.—The thirty-second annual meeting of this Branch will be held at the Holborn Restaurant on Tuesday, June 24th, at 5.30 P.M. President: Charles J. Hare, M.D.; President-elect: Charles Macnamara, Esq. Dinner at 7 P.M.; tickets, 7s. 6d. each, exclusive of wine. Early application for dinner-tickets should be made to Dr. Grigg, 6, Curzon Street, Mayfair, W.—ALEXANDER HENRY, M.D., W. CHAPMAN GRIGG, M.D., Honorary Secretaries.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting of this Branch will be held at Cardiff on Thursday, June 26th next; Eben. Davies, Esq., President; A. Sheen, M.D., President-elect. Members wishing to bring forward communications, cases, etc., are requested to send titles to either of the undersigned before June 7th, in order that the same may be inserted in the circulars.—ALFRED SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.—May 21st, 1884.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual meeting of this Branch will be held at the Medical Institute on June 19th, at 3.30 P.M.—E. RICKARDS, Secretary, 14, Newhall Street, Birmingham.

NORTH OF IRELAND BRANCH.—The annual meeting of this Branch will be held in the Belfast Royal Hospital, on Thursday, June 19th, at 12 o'clock. Notice of papers and other business to be sent to Dr. DEMPSEY, Honorary Secretary, Clifton Street, Belfast.

SOUTH MIDLAND BRANCH.—The annual meeting will be held at the Infirmary, Northampton, on Thursday, June 26th, at 2.30 P.M. Members wishing to send papers, cases, etc., are requested to send the titles of the same to the Secretary, with as little delay as possible. The dinner will take place at Franklin's Restaurant, Guildhall Road, at 6 P.M. Tickets (exclusive of wine) 6s. 6d. each. Gentlemen intending to be present are requested to communicate with the undersigned not later than June 23rd.—C. J. EVANS, Honorary Secretary, *pro tem.*

BORDER COUNTIES BRANCH.—The seventeenth annual meeting will be held at Hawick on Friday, June 27th. Members intending to read papers or show specimens are requested to give notice to Dr. LEDIARD, Carlisle, or Dr. SMITH, Dumfries.

CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.—President, Wm. Groom, Esq.; President-elect, D. B. Balding, Esq. The annual meeting will be held at Royston on Friday, June 27th. Members intending to make any communication are requested to inform the Secretary as early as possible.—B. ANNINGSON, Honorary Secretary, Cambridge.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held in the Town Hall, Chester, on Wednesday, June 18th, 1884, at 2 P.M. (the Council meets at 1 P.M.) *Order of Business:* The President's Address; Report of Council; Election of Representative Members in the Council of the Association; Election of New Council and Office-Bearers; General Business. Dr. William Roberts will move: "That the necessary expenses of the Subcommittee on the Collective Investigation of Disease be defrayed out of the funds of the Branch." Dr. Fitzpatrick will move: "That, while fully recognising the generous and hospitable spirit which actuates those members of the Branch in whose towns the annual and intervening meetings are held, in providing a public luncheon for the members attending, it is not considered desirable, in the interests of the Branch, that the practice should be continued, owing to the loss of time, which should be devoted to the reading and discussion of papers, which have often to be omitted altogether." Mr. Reginald Harrison will move: "That the Lancashire and Cheshire Branch of the British Medical Association has heard with regret that the resolutions passed at the meeting held at the College of Surgeons on March 29th, have been rejected by the Council, and that they cordially agree with the spirit of those resolutions." *Medical and Surgical Communications:* Mr. Johnson Martin: Paper on Over-Education, or the Serious and Evil Effects of the Present System of Education. Paper on Cholera, its Cause, Prevention, and Treatment. Dr. Walter: Two Specimens of Uterine Polypus. Dr. Ransome: Some Cases illustrating the uses of the Bacillus-search. (Other communications are expected.) Luncheon will be provided by the members of the Chester Medical Society, at the Town Hall, from 12.30 to 2.30 P.M. Dinner at the Town Hall, at 6.30 P.M.; tickets, 7s. each, exclusive of wine. Arrangements have been made with the following firms for an exhibition of new drugs, special pharmaceutical and dietetic preparations, and medical batteries: Messrs. Clay and Abraham, Liverpool; Messrs. Mottershead and Co., Manchester; Messrs. Symes and Co., Liverpool; Messrs. Woolley and Co., Manchester. Messrs. Wood and Sons, Manchester, will exhibit a collection of surgical instruments and appliances. Messrs. Armstrong Brothers, Manchester, will exhibit optical goods, thermometers, and microscopes. The different exhibits will be on view from twelve o'clock.—CHAS. E. GLASCOTT, M.D., Honorary Secretary, 23, St. John Street, Manchester.

SOUTHERN BRANCH.—The eleventh annual meeting of this Branch will be held at the Council Chamber, Salisbury, on Thursday, June 19th, 1884, at twelve o'clock. The President-elect has kindly undertaken to provide refreshments at the Council Chamber. In accordance with the new by-laws, two gentlemen will be elected at this meeting as representatives of the Branch on the Council of the Association for the ensuing year. Members desirous of reading papers or other communications are requested to forward at once the titles to the Honorary Secretary. No communication must exceed seven minutes in length, and no subsequent speech must exceed five minutes. The address will be delivered by the President-elect at 2 P.M. During the afternoon, the members will have an opportunity of visiting several places of interest in the locality. The dinner will take place at the White Hart Hotel, at 6 P.M.; tickets, 12s. 6d. each, including wine. The Committee request that those gentlemen who intend to be present at the dinner will send in their names to Mr. H. J. Manning, Laverstock House, Salisbury, on or before Tuesday, the 24th instant.—J. WARD COUSINS, M.D., Honorary Secretary and Treasurer.

SOUTH-WESTERN BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at Exeter on Wednesday, May 21st. About 100 members and visitors were present. Before the meeting, the President-elect, Dr. Lewis Shapter, entertained the members at a luncheon at his house. The meeting was held in the board-room of the Devon and Exeter Hospital.

The chair was taken by the President, Mr. C. BULTEEL, of Stonehouse, who said that it only remained for him to resign his position as President for the year, and to introduce the new President. They would not expect many words from him on retiring, neither had the year been an eventful one, although it promised to be so to the profession. The Medical Act Amendment Bill was before Parliament when they (the Branch) last met, and the result was known to them. The House of Commons could not find sufficient time to attend to the wants of the medical profession. Whether they would have better fortune this year remained to be seen. In regard to the Association, the past year had not been an eventful one, but the current year would see the new mode of electing the Council—an important subject which would engage their attention that day, and upon it a great deal of the success of the society depended. Another question concerning the Royal College of Surgeons would probably be brought before the Branch—he meant the alteration arising from the action of the Council at their last meeting. They had to congratulate themselves that at last they had conceded the right of the Fellows voting by proxy in the election to the College of Surgeons, and this he thought an important grant. Other things were brought before the Council which had not been graciously listened to, and which would be brought before them before the meeting closed. He concluded by thanking the members for their kindness in having elected him last year to the honour of President.

President's Address.—Dr. L. SHAPTER then took the chair amidst loud applause, and proceeded to deliver an able address. He compared the character and degrees of progress of the Hippocratic era with that of our own day, remarking that, since the age of Hippocrates, who flourished 450 years before Christ, the art which he loved so well had degenerated, although in recent years it had recovered, thanks to the Harveian epoch, which had rescued it from its fall. In reviewing the Hippocratic times, he observed that the system of medicine was then founded upon recorded observations of preceding generations; but that Hippocrates himself, while admitting the fallaciousness and emptiness of experience alone, unsupported by knowledge, laid stress upon a comparison of disease with health, and upon the results of experience being invariably tested by the strict scrutiny of reason. His theory of medicine was further based upon a belief in a spiritual essence diffused through the whole work of creation, and which strove to preserve all things in their natural state, and to restore them when preternaturally deranged. This principle he called "Nature," and he held it to be a *vis medicatrix*. "Nature," says he, "is the physician of diseases." Hippocrates, moreover, insisted upon the dependency of the whole body upon disease manifested in a single part; he recognised no beginning in the body, but as a described circle, so was the body; there was no beginning to be found; and thus one part of the body imparted disease to the other parts, viz., the stomach to the head, and the head to the stomach; and if the very smallest part of the body suffered, it would impart its suffering to the whole frame. It must be recognised, too, that Hippocrates was well grounded in what they should probably term the elements of medical knowledge. From his writings, it would appear that very little had been added to his exact knowledge of anatomy; and if all wished to be his imitators as practitioners, they must be physicians of the whole body, and not only of a part—they must pay attention to the effect of local mischief upon the general frame, and not take too desponding a view from the local manifestations of diseases alone; and, more than all, Nature must be the guide, without any ignorant submission to her rule. In his first character, Hippocrates was a sanitary physician, and as such he dwelt upon the influence which climate, soil, and water, and the manners and customs of the people, exercised over the types and progress of disease. Such thoughts—enunciated 400 years before the Christian era—should be stirring to medical men, when they were just now awakening as a nation to the economical tendencies of sanitary science, and could hardly realise, as a community, the value of remedying, rather than patching, defective systems of drainage and water-supply. As a practical physician, Hippocrates gave terse aphorisms, which spoke eloquently of his great powers of observation. He foreshadowed, and even enunciated, many systems of treatment now called novel, and his method of recording and judging of fevers by the respirations and heat of the skin was a state of things to which we had in a great measure recurred. The disease really described by Blackall of Exeter, at the commencement of the present century, but worked out and claimed by Bright, and termed Bright's disease, was foreshadowed by Hippocrates; and they might well ponder upon this fact, that if the words and works of Hippocrates had only been studied in after ages, the discoveries of Blackall and Bright might have enlightened many earlier epochs of medical history. As a practical surgeon, too, the works of Hippocrates were based upon an extensive practice and familiarity with accidents occurring at the public athletic games of his country, and were characterised by clear logical reasoning for what was given as "proper" treatment; and it was here again worthy of thought that the practical observations of Hippocrates, opposed in many instances to modern practice, had been supported by such eminent modern authorities as Mr. Liston and Sir Astley Cooper, showing them to have been the practical results of thought and reasoning, rather than of routine. The lessons, then, to be learned were (1) that the unity of the body and the dependency of its several parts and systems upon one another indicate variety in diseased actions, and call for the establishment of a system of "general" apart from "special" prognostics; (2) that the teachings of pathology will only prove practically fruitful in so far as they practically explain and elucidate disease as it is observed by the physician; and (3) that treatment as the aim of the art must be based upon the collected and tested experience of chemical investigators, assuming that the science of therapeutics was not taken to exist in the manufacture of compound prescriptions and so-called specifics, but in simply and plainly giving the right medicine (and the right medicine alone) at the right time, in accordance with the recognised physiological action of the drug. To associations such as this might well be entrusted the task of collecting, testing, grouping, and diffusing aphorisms of clinical knowledge, and methods of treatment acquired by specialists and others, a work which it was out of the power of individuals to properly accomplish; and so high an authority as Mr. Jonathan Hutchinson asserted that in the houses, schools, workhouses, and hospitals of England there were many thousands of children suffering from ulceration of the cornea of the eye and intolerance of light, lingering on in disease for months, and only ultimately to become disfigured and incapacitated by scars, when only a little unity and investigation were wanted to fix upon a specified formula for a weak yellow oxide of mercury ointment, which should be used, to the abandonment of blisters, setons, and like painful measures; and would result in the saving of the sight of thousands, even if it were sometimes used in error, but without harm. How, again, could the diffusion of knowledge be more usefully marked than in the prevention of infant-mortality. Or take another example from the more special region of pathology. They had recently heard a good deal of the contagious character of consumption, and the "bacillus," or contagious material, was actually demonstrated. There was no question about admitting the occasional contagious character of consumption; but it would be a mistake to assume that it was otherwise than in rare instances, and there recognised by clinical observers that it is contagious. What they wanted to do, then, here again, as in so many other instances, was to wash their hands of fashion and extremes, and to have it definitely decided by competent and able investigators at what stage and in what way the disease is communicable to others, and in what forms it is not communicable. In conclusion, Dr. Shapter referred to professional education, and pointed out that by comparison with the cultivated Hippocratic mind the tendency of the day was to neglect the "training" of the mind, and the forming its capacity for observation and researches, for a mere routine-system of instruction in elements and a cramming for an examination as a final but inadequate test. The scientific "habit" of mind for judging of points observed was not, he pointed out, to be acquired by any amount of book-learning; and, in the absence of the old system of apprenticeship, under which the student cultivated the faculties of observation and self-reliance under the guidance of an eminent teacher, Dr. Shapter strongly urged the development of provincial hospitals as schools for preliminary medical education. The student would thus acquire a liking for his profession, or at least obtain an insight into it before he embarked on the expense and wider teaching of the higher schools; and, having been grounded and taught the elements of his profession practically, he would profit by the whole of his time spent at the higher schools, and it would no longer remain a disgrace to the system of professional education that a student reached his third year at a London school before he even visited a bedside, and that, even then, the aim of his studies was an examination.

The address was received with frequent marks of approval, and a vote of thanks to the President was carried amidst much applause.

Vote of Thanks to the Ex-President.—Dr. J. WOODMAN moved a vote of thanks to the ex-president for his services during the year. He spoke of the hospitality and ability shown by Mr. Bulteel during his presidency.—Dr. HENDERSON seconded the proposal, and remarked that the meetings during the year had been of an excellent character. The vote was most heartily agreed to.—In reply, Mr. BULTEEL said his services had been repaid manifold by the extreme pleasure he had found in being able to do anything for the society.—The HONORARY SECRETARY (Dr. Rees Philipps) then announced that a resolution referred to in the minutes had been sent to the proper quarters. The new rules of the Association needed an alteration of their by-laws, and on the suggestion of the Secretary, the consideration of this matter was referred to the Council of the Branch.

Report of Council.—The report of the Council was read by the Secretary as follows.

"Since the last annual meeting seven members of the South-Western Branch have died, seven have resigned, and several have been removed from other causes; thirty new members have been elected. The number of members is now 203. In addition to the annual meeting and council meeting, a quarterly meeting was held at Truro, and a special meeting at Exeter. The balance in hand has risen from £13 8s. 11d. to £16 9s. 2d. A petition in favour of the Government Medical Reform Bill was presented to Parliament by Sir Stafford Northcote; a protest against the conduct of the Government with reference to the Contagious Diseases Acts, and a copy of the resolutions passed at the last annual meeting, were sent to the Home Secretary and to the members of Parliament for the various divisions and boroughs in Devon and Cornwall. A memorial to the College of Physicians, to strengthen the hands of the corporation in its endeavour to show the state of feeling of the medical profession with reference to the prosecution of Messrs. Bower and Keates was duly forwarded. It is with the greatest regret that the Council has to report the very great loss it, and the Branch generally, has sustained in the lamented and untimely death of Dr. Hudson, of Redruth."

Mr. BULTEEL moved, and Dr. WOODMAN seconded, the adoption of the report, which was readily agreed to.

Annual Meeting of 1885.—The question of the election of six members to the Council of the Branch was referred to the members in Truro and neighbourhood, who were also authorised to nominate the president-elect, the town of Truro being selected for the next annual meeting.

Resignation of Honorary Secretary.—The Honorary Secretary, Dr. Rees Philipps, having announced his resignation in consequence of his approaching removal to Virginia Water, was accorded a very cordial vote of thanks for his past services.

Election of Officers.—Dr. P. Maury Deas, of Exeter, was appointed honorary secretary and representative of the Branch on the Parliamentary Bills Committee.—Dr. A. H. Bampton, of Plymouth, and Dr. Deas, were elected representatives of the Branch on the Council of the Association.

The Royal College of Surgeons.—Dr. JOHN WOODMAN proposed and Mr. C. BULTEEL seconded this resolution, "That the members of the South-Western Branch of the British Medical Association have heard with great regret that the resolutions passed at the meeting held at the College of Surgeons, on March 29th last, have been rejected by the Council, and that they cordially agree with the spirit of these resolutions." Mr. PAUL SWAIN of Plymouth, in supporting the resolution, explained the position of affairs between the Council and the Fellows and Members. He then expressed his regret that there should be any division between the Fellows and Members, as their interests were identical. He fully sympathised with the Members in their desire to assert themselves. He thought it a great misfortune that, as a rule, from the moment at which the Member emerged from the gloomy portals of the

Royal College of Surgeons, with a tin box containing his diploma under his arm, from that moment all interest in College matters ceased. He desired to remind the Members that, if the resolution of March 29th could be carried into effect, two great privileges would be at once conferred upon them—viz., the right to attend the meetings of the College, and the right of speech. He ventured to hope that the Members would see their way to work with the Fellows, and that there would be no antagonism between the two bodies, which would be fatal to both.

The resolution was unanimously adopted. The Secretary was instructed to forward a copy of the resolution to the President of the College of Surgeons.

Prosecution of Messrs. Bower and Keates.—A resolution was proposed by Dr. ROLSTON of Devonport, and seconded by Mr. GEORGE JACKSON of Plymouth: "That this meeting gratefully acknowledges the support given to the general practitioners in the action taken by the Presidents of the Royal Colleges of Physicians and Surgeons, and by other leading members of the profession, with regard to the prosecution of two medical men for alleged malpractice, which prosecution resulted in their conduct being approved." This was unanimously adopted.

Collective Investigation.—Dr. SIDNEY COUPLAND read a paper on the advantages of Collective Investigation. A hearty vote of thanks was awarded to Dr. Coupland for his paper.

Mr. Joseph E. Square of Plymouth was elected Honorary Local Collective Investigation Secretary for East Cornwall, in the place of Mr. W. Square, resigned.

Quarterly Meeting.—It was decided that the next quarterly meeting be held at Plymouth in July, on the occasion of the opening of the new South Devon and East Cornwall Hospital.

Communications.—The following were made.

1. Mr. J. D. Harris: The Treatment of Wounds by Dry Dressing.
2. Dr. Spencer Thomson: A new Oro-nasal Steam Inhaler.
3. Mr. Bankart: Card Specimen.
4. Dr. Deas: Specimen.
5. Dr. Davy: Specimen.
6. Dr. Saunders: Specimens.

Excursion.—After the meeting, the members visited the Show of the Devon County Agricultural Association.

Annual Dinner.—The annual dinner, which was held in the evening at the New London Hotel—Dr. Lewis Shapter, President, in the chair—was attended by sixty members and visitors. After dinner, some excellent songs were given by Messrs. Richmond (who also presided at the piano), Roper, Domville, Budd, and Deas.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Physiological Alcohol in the Tissues.—Malassez and Vignal on Tuberculous Zooglœa.—The Organisms of Septicæmia.—Pleural Effusion subsequent to Excision of Tumours of the Breast.—Sanitary Service in Algeria.—The Conseil d'Hygiène and Diphtheria.—Night Asylums.—The Death of a Medical Editor.

AT a recent meeting of the Academy of Medicine, M. Béclard, Professor and Dean of the Paris Medical Faculty, read a communication from Dr. Béchamp on the presence of alcohol in the tissues of the organism and the products of elimination, when in a normal condition. The author alluded to the researches of M. Dujardin-Beaumetz (see JOURNAL, April 19th) on the elimination of alcohol, and stated that it is a question that presents all but insurmountable difficulties, inasmuch as the animal economy both fabricates and eliminates alcohol independently of any that is imbibed. M. Béchamp found 1.50 grammes (twenty-four grains) of alcohol in acid or alkaline urine that had been allowed to ferment. In the hepatic parenchyma and muscular tissue of dead animals, before putrefaction sets in, alcohol can be detected. As much as two cubic centimètres of absolute alcohol can be obtained from an ostrich's egg. Alcohol is also a product of living tissues. Urine, passed by persons who had abstained from alcohol, furnished alcohol when distilled before fermentation had commenced. Cow's and ass's milk contain alcohol. Only certain organic substances, entirely free from saccharine matter, are non-alcohol-producing. M. Gautier observed that M. Béchamp does not confine himself to the question that MM. Perrin and Dujardin-Beaumetz have raised. These investigators sought to determine in what form alcohol, taken as food, is eliminated, not whether the products of elimination contain alcohol or not. M. Béchamp is, nevertheless, perfectly correct in asserting that living tissues furnish alcohol. M. Gautier, during his researches, observed the same phenomena.

MM. Malassez and Vignal have communicated to the Paris Biological Society further results concerning their researches on tuberculous zooglœa. After colouring a preparation of tuberculous zooglœa, by immersing it in alkaline methylene, it becomes apparent that some of the zooglœa is stained entirely, whilst other masses become coloured only at the periphery; in some instances, the zooglœa resists coloration altogether. It is the smallest masses of zooglœa which become thoroughly stained; those which are coloured at the periphery are very large, and are found on the surface of large tubercles; those which remain colourless occupy the centre of the tubercle. The zooglœa which becomes thoroughly coloured, when examined with a high power, presents the aspect of a chain of minute spheres: that which is only partially coloured is composed of small irregular granulations, and that which remains colourless is made up of spores. Thus the tendency of zooglœa to become coloured is in proportion to the vitality which it possesses.

M. Malassez presented a communication to the same society from M. Degagny, concerning human and animal blood in septicæmia. A waggoner hurt himself whilst putting a horse into a butcher's cart. He exhibited most alarming symptoms, and it was believed that he was ill with charbon. A specimen of his blood was sent to M. Degagny, who states that the affection in question was septicæmia. He observed in the patient's blood organisms presenting the outline of a figure of 8. The patient was treated by hypodermic injections of oxidised water, and recovered. M. Degagny found organisms presenting the figure of 8 in the blood of sheep attacked by septicæmia. According to this investigator, the organisms of septicæmia are found in blood long before death.

At a recent meeting of the Académie de Médecine, M. Verneuil read notes taken of two cases of pleural effusion, subsequent to removal of tumours of the breast. One had already been communicated to the Société de Chirurgie by M. Picqué. The operation was performed on November 15th; the axillary glands were healthy. The patient died four days after the operation; she exhibited symptoms of pleural effusion. At the necropsy a small quantity of sero-purulent effusion was found in the pleura; there was fatty degeneration of the kidneys. The second patient was treated by M. Verneuil. She was sixty years old, and had a scirrhous tumour of the right breast; the axillary glands were larger than the normal size. The general condition was good; the urine was free from sugar or albumen; the proportion of urea was normal. The morning after the operation a reddish œdema appeared round the wound. A few days subsequently phlegmonous erysipelas set in on the right side of the breast, followed by bilateral pleural effusion, and the patient died five days after the operation. At the necropsy several collections of pus were observed in the thoracic wall with bilateral sero-purulent effusion, more abundant in the left pleura than in the right, which was the side operated on. The pleuræ were somewhat abnormally vascular; the kidneys presented signs of interstitial nephritis. M. Verneuil explains these phenomena by the following hypothesis. That traumatism acts as a stimulus on generalised unhealthy conditions, and also recalls anterior morbid conditions. These morbid conditions thus aroused tend to attack the regions least capable of resistance. These recently created pathological areas always present the features of differentiation of the preexisting morbid condition.

The expenses incurred by the French Government in protecting its Algerian provinces from cholera, during the late Egyptian epidemic, amount to 41,209 fr. 50 (£1,648 11s. 11d.) A sanitary *cordon* was established between Tunis and Tripoli. Special official precautions were taken in localities where water could be obtained. The *cordon* was broken up as soon as Tunis was believed to be free from danger.

The Conseil d'Hygiéne Publique et de Salubrité has issued instructions to the general public concerning diphtheria, which are comprised under the headings of "General directions;" "What should be done when diphtheria attacks one of the members of a family;" "How to disinfect." Naturally, practitioners and nurses are familiar with the minute and wise rules and precautions drawn up by the "Conseil;" but the general public are ignorant of them. It is to be hoped that they will profit by the wisdom brought to their doors.

The exhibition of Meissonnier's works, for the benefit of night asylums, realised twelve thousand francs (£480) on the first day; the tickets were ten francs each.

Dr. Blondeau, secretary and editor of the *Progres Médical*, died a few days ago from an attack of gout. He was forty years of age.

BERLIN.

[FROM A CORRESPONDENT.]

Investigation of Bacteria.—Deaf and Dumb Congress.—Ophthalmological Medal.—The Vanity of Spectacles.

PROFESSOR FRESENIUS of Wiesbaden has established a special department in his Chemical Institute for bacteriological investigation.

A Deaf and Dumb Congress is to be held at [illegible] from July 1st to July 5th.

The International Association of Ophthalmologists, whose chief seat is at Heidelberg, intends founding a gold medal, to be awarded for the most eminent services in the field of ophthalmology. The first medal will be awarded next year, and will bear on the front side the form of dedication, surrounded by a wreath of laurel-leaves, and on the reverse a bust of the celebrated ophthalmologist, Professor Albrecht von Gräfe, with the dates May 21st, 1828, July 20th, 1870, the dates of Professor von Gräfe's birth and death.

Some interesting remarks were made, on May 24th, at a meeting of the Medical Pedagogic Society at Berlin, on shortsightedness. It was said that the percentage between shortsighted children in the country and in towns was as 3 to 30; and the excess of shortsightedness in towns was partly attributed to the unnecessary wearing of false spectacles from vanity, which naturally brought on shortsightedness. The experience of several interested in the matter was quoted, and special stress was laid on the necessity in all cases of consulting a medical man before giving a child spectacles. An instance was given of a school in Breslau, where, out of 100 children wearing spectacles, 47 were found to be wearing spectacles of too high a power.

CORRESPONDENCE.

PNEUMOTOMY.

SIR,—I regret very much that I was not present on May 27th at the Royal Medical and Chirurgical Society, when the very important papers of Dr. Cayley and Dr. Biss on Drainage of Pulmonary Cavities were read, and were followed by a very interesting discussion. If I had been present, I should have asked the Fellows to hear the following extract from a paper of mine, published nearly forty years ago in the *Edinburgh Medical and Surgical Journal*, No. [illegible], entitled Report of Cases treated in the Royal Naval Hospital, Malta, in 1843 and 1844. I was a young assistant-surgeon in the hospital at that time, and wrote as follows.

"The case of a man who was invalided [illegible] one. A seaman of the *[illegible]*, named Ashworth, had long presented the general symptoms of phthisis. An abscess formed in the right axilla, which was taken for a suppurating gland and opened. Air escaped with the purulent matter, and it became evident that a communication was established between the bronchial tubes and the opening in the axilla. He was admitted in an extreme state of emaciation and hectic, apparently in the last stage of phthisis. On stethoscopic examination, it appeared, from the situation of the dulness on percussion, and the healthy sound of the respiratory murmur in other parts of the lung, that the upper lobe of the right lung was the [illegible] portion. Large quantities of discharge, resembling the expectorated matters of phthisical patients, continually passed from the axillary opening, the hectic diminished, and his health began gradually to improve. Sedative medicine and light nutritious diet were prescribed, and the fistulous opening left entirely to nature. The discharge diminished, the opening closed, cough and expectoration nearly ceased; he began to walk about and recover his health and spirits, and, at the time of his discharge for a passage to [illegible], dulness of the right subclavicular region was the only [illegible] him. I have not yet learned the ultimate result of this case, or I should have given more minute details, as it has a most important bearing upon the proposition recently made of making incisions into the lungs in cases of phthisis. It would support the supposition that, if the tubercular deposit be circumscribed, and the pleuræ were adherent, a free external opening might [illegible], by obviating the necessity for bronchial irritation and consequent disturbance of the general system in the discharge of the softened tubercle.

"Two cases of gangrene of the lung have [illegible] accompanied by a peculiar change in the blood of the great veins of the neck and cerebral sinuses, probably dependent upon the [illegible] of the pulmonary veins of some of the gangrenous portions of lung."

The important fact with regard to the man Ashworth is, that I was informed, about two years ago, that he was alive and well, when he must have been nearly 70 years old. I regret very much that I did not note his address.

In one of the cases of gangrene of the lung, alluded to in the paper, I well remember vainly urging the principal medical officer to make, or allow me to make, an incision into the right lung; and, in the published report of the examination of the body, I find this sentence.

"Imperfect attempts had been made to circumscribe portions of dead lung, giving an appearance of distinct bags of fœtid slough. The most perfectly formed of these bags was in the lower lobe, and had discharged its contents into the pleural cavity, which contained about two pints of fœtid greenish serum, mixed with shreds of lymph."

But my principal object in writing this letter is to call attention to an extension of the surgery of the thorax beyond the incision and drainage of pulmonary cavities, and to give a very brief sketch of the experiments of Dr. Biondi, of Naples, upon extirpation of a lung. He performed total or partial excision of one lung upon 20 dogs, 25 rabbits, 8 guinea-pigs, 5 cats, 3 fowls, 1 pigeon and 1 sheep; in all, 63 animals. In 57 either the right or the left lung was completely removed. In 3 dogs, only one lobe was excised. In 1 dog, one rabbit and 1 guinea-pig, only the apex of each lung was excised with the interval of a month between the two operations. All these animals recovered.

In a pamphlet published at Naples in 1882 (*Estirpazione del Polmone, Contribuzione Sperimentale.* Per il Dott. D. Biondi. Napoli, 1882; 8vo., pp. 52), Dr. Biondi gives a full account of his method of performing these extirpations—and a report of many of the cases, with the progress after operation of the animals. I can only say now that of 66 operations on 63 animals, 36 were followed by recovery; of 57 where an entire lung was removed, 30 recovered; and the 6 where the apices, or only one lobe, were removed, all recovered.

I had a long conversation at Naples last January with Dr. Biondi, and considered all the steps which he would take if he were to remove a diseased lung from a man or woman. He naturally insisted upon preliminary practice on the dead body, but was convinced that practice on living animals was also necessary to enable us to learn how to prevent or stop bleeding, and lessen the danger of pneumothorax, of cardiac paralysis, of arrested respiration, and of septic purulent pleurisy. I may say briefly that the most tedious part of the operation consists in subperiosteal resection of the second, third, fourth, and fifth ribs. This is followed by slowly dividing the pleura longitudinally, introducing about half of one hand, separating pleural adhesions, gradually withdrawing one lobe of the lung after another, and then compressing the pedicle, or a portion of pulmonary tissue close to it, by pressure-forceps. Then the pedicle—bronchus, artery, and veins; adherent bronchial glands having been separated—is tied in three divisions, and the ligatures cut short, as in ovariotomy. The pleural cavity is cleansed by sponges, and the wound closed by suture.

Admitting that the cases of phthisis where the disease is limited to one lung only, or to part of one lung, must be rare, Dr. Biondi still contends that men of experience do occasionally meet with cases where the operation might save a phthisical patient from death.

I saw a lady in Naples whose right kidney Professor D'Antona had removed a year before on account of suppurative pyelo-nephritis, when she was in a state of extreme emaciation. Microscopic examination proved the case to be a typical one of tubercle of the kidney; yet the patient, when I saw her, was apparently in full health. Dr. Biondi asks why, if after such a case as this, or after resection of a tuberculous joint, recovery follows, it should not also follow removal of a lung. And he asks whether, if only 1 in 20 were saved by such an operation, even this would not justify operation in cases otherwise hopeless.

This is the question which, I trust, will be considered with all the careful attention it deserves by our own physicians; and if our aid is desired by our colleagues, I do not think British surgeons will shrink from even so grave a responsibility as they prepare themselves for it by practice on dead bodies of men and women, and, if need be, upon living animals.—I am, sir, yours faithfully, [illegible]

Upper Grosvenor Street, May 31st, 1884. T. SPENCER WELLS.

KENT-JONES FUND.

SIR,—The following further donations to the above fund have been received, in response to the appeal made in the JOURNAL of May 24th. [illegible] Esq., [illegible] W[illegible] Alex. [illegible], Esq. [illegible] Dr. [illegible] Dr. E. C. [illegible], Twickenham, [illegible] C. H. Wheeler, Esq. [illegible].—I am, sir, your faithful servant, T. LLOYD ROBERTS.

Denbigh, June 4th, 1884.

GOWAN'S OSTEOTOME.

SIR,—Will you allow me, through your columns, to make better known to operating surgeons the admirable osteotome suggested by Mr. Gowan? In two recent operations, I have found this instrument of the greatest service. The main features are that it grasps the bone and holds it firmly; the saw can be used so as not to play beyond the bone; thus all injury to the soft parts is avoided. It is a most useful instrument for resecting bone at the bottom of deep cavities. A few days ago I removed the head of the humerus from a man whose scapula I had previously extirpated for a sarcoma. The bone was surrounded by inflammatory material, so that it was impossible to turn the head out without disturbing the soft parts to a greater extent than was desirable; but with this osteotome the head was removed without the slightest injury. There is this additional advantage, too, that the forceps-blades seize the part to be removed, and thus all injury to the periosteum is avoided. The section is, moreover, perfectly clean.

In removing a lower jaw from the inside for phosphorus-necrosis, I used the osteotome for dividing the bone beyond the dead part; the section was made in a few seconds without the least injury to the soft parts, and the whole of the left ramus, with the condyle and coronoid process, and the body, as far as the right first molar, was removed. The instrument is also well adopted for dividing the neck of the femur in excision of the hip, and resecting the ends of the bones in operation for ununited fracture. It has, I believe, been used in both these operations, and I have no doubt there are many other operations in which this valuable osteotome will prove of service.

St. Thomas's Street, S.E. CHARTERS J. SYMONDS.

INFLUENCE OF DRYNESS OF SOIL ON PHTHISIS.

SIR,—In continuance of the subject of the claim of the late Mr. A. B. Middleton to be the first *in England* (omitted to be printed in my previous letter) to have noticed and written on the relation of subsoil-drainage to the diminution of phthisis, I would remind your readers that Salisbury was in reality one of the best test-cases that could be applied to the question, independently of being one of the earliest cities to carry out sanitary measures to the full. Mr. Bothams, our civil engineer, both at the time of the construction of the works and now, tells me that the subsoil (gravel) was saturated with water; that the brick sewers in the main streets were laid on invert blocks with open spaces in them, and in the other streets, by the sides of the glazed sewerage-pipes, porous drain-pipes were laid with open joints, to carry off the soil-water. The water-level was thus reduced four or five feet. He also doubts whether any of the other cities and towns mentioned by Dr. Buchanan in his table, *Ninth Report*, 1866, page 17, did so to the same extent for subsoil-drainage as Salisbury.

This explains why Salisbury heads the list in the marked diminution of phthisis, and also why Mr. Middleton, with that care for truth which all who knew him can tell you he possessed, and with only the results in Salisbury to guide him, formed the opinion that this soil-drainage was the chief element in reducing the phthisis-rate; and he called it, among his friends, his theory, until a longer interval of time had passed away for its confirmation. He knew that we were benefited by sewerage and the absence of cesspools; by waterworks from a deep spring outside the city, instead of wells nearly in each house; and by burial in extramural cemeteries; but his logical mind deduced the fact that the soil-drainage was the cause. I was among the number, at first, to doubt that so much was due to that alone; and hardly a week passed, at the time, without our discussing the question.

Now, may I ask, did Dr. Buchanan (after he had been told by Mr. Middleton his views, and given a copy of his paper read at Bath in 1864) have any towns to inspect with only subsoil-drainage like a farm, and no sewerage and other works, that he could come forward, ignore Mr. Middleton, and say to this effect (see Dr. Buchanan's letter, the *Lancet*, January 16th, 1869): "That is all very well; but your arguments applied to general sewerage-works, and had nothing to do with subsoil-drainage, which I discovered, and which was proclaimed in the *Ninth Report* of the Medical Officer of the Privy Council, page 17; and in the *Lancet*, vol. i, 1869, page 18?" When, in this same volume of the *Lancet*, Mr. Middleton tried to establish his claim, there was a refusal to publish a certain letter of Mr. Middleton's in reply to Dr. Buchanan's; and part of a subsequent one only was printed, omitting the concluding paragraph, which I copy from Mr. Middleton's handwriting. "As my object has always been the clearing up of truth, and believing that, to do so, my reply to Dr. Buchanan is needed to place the circumstances clearly before the public, I again express my regret at your decision of last week, and will thank you to cause that reply to be published in your advertising sheet of the *Lancet* this week."

I now come to Dr. Buchanan's account of Salisbury in the *Ninth Report*, 1866, page 153, and compare it with Mr. Middleton's paper, "The Sanitary Statistics of Salisbury," read at the British Association at Bath, September 1864, and published in the *Statistical Journal*, vol. xxvii, part 4, 1864, and also as a pamphlet entitled "The Benefits of Sanitary Reform as shown at Salisbury." All the facts, with alteration of language, under the head of sanitary operations, etc., are culled from the paper read at Bath; but the title of the paper and author is not given, and the only allusion to it is the following sentence: "For drainage and sewerage, the works consist (Mr. Middleton writes in 1864) partly of brick mains and circular glazed earthenware pipes." The conclusion arrived at by Dr. Buchanan in the *Tenth Report*, 1867, page 109, "that wetness of soil is a cause of phthisis to the population living upon it," was originally suggested to him by Mr. Middleton; and the *claim* advanced by him and for him—*e. g.*, Professor Corfield's address at University College (see *Lancet*, October 7th, 1875), "or look at the discovery by an old University College man, Dr. G. Buchanan, of the connexion between phthisis, our great endemic plague, and dampness of soil below the houses"—is untenable.

I would suggest that, after a perusal of Mr. Middleton's paper at Bath, "The Sanitary Statistics of Salisbury," his letters to the *Salisbury Journal* under the title of "Salisbury the English Venice," the admissions in Dr. Buchanan's letter in the *Lancet*, and the personal recollections related by myself, the conclusion which would be arrived at would confirm the statement at the commencement of my letter, "that the late Mr. Middleton was the first in England to notice and write on the fact of the relation between dampness of soil and phthisis;" and, secondly, that, with this knowledge, merit is due to Dr. Buchanan for having patiently worked out the question.—Faithfully yours,

Salisbury, May 17th, 1884. W. D. WILKES.

ATMOSPHERIC DISINFECTION.

SIR,—With your permission, I beg to offer the further following remarks with reference to the subject of Dr. Robert Lee's communication, published in your issue of May 17th.

Dr. Lee calls attention to the interesting fact that when an aqueous solution of carbolic acid is evaporated, the carbolic acid evaporates with the steam in a constant ratio; and he thinks that, for the treatment of a case of phthisis, diphtheria, or whooping-cough, this substance can be used with greater accuracy than sanitas oil. Now I venture to think that Dr. Lee has fallen into an error, for although carbolic acid may escape with the steam in a constant ratio, yet it must not be forgotten that immediately evaporation takes place, the vapour becomes immensely diluted with air, so that a patient, in breathing such vapour, cannot be supposed to be treated with an accurately known amount of carbolic acid. I fail to see also what this accuracy has to do with the treatment, so long as the active agent used in the treatment of the disease be present in sufficient quantity, and there is no doubt whatever that sanitas oil can be employed in sufficient amount, and certainly with equal effect, as carbolic acid; that is to say, it is not a question of using precisely so much sanitas oil, but merely sufficient sanitas oil, and so long as sufficient oil be employed to float upon the surface of water undergoing evaporation, there will be a sufficiency of the vapour generated for the treatment of the disease.

I go further, and venture to express the opinion that the employment of carbolic acid for the treatment of the diseases above referred to is to be condemned for two reasons; first, because carbolic acid is a poisonous substance which must prejudicially affect, more or less, the parts of the body with which it may come into contact; and secondly, because it is not an oxidising agent; and I am profoundly convinced that, as regards the treatment of such diseases, recourse must be had to oxidising agents.

Sanitas oil is not only a powerful antiseptic, equal in effect to carbolic acid, but it is also, at the same time, an oxidising agent equally powerful as a ten-volume solution of peroxide of hydrogen, which substance indeed it generates immediately it comes in contact with any moist or mucous surface.—Yours faithfully,

C. T. KINGZETT.

TUBERCULAR TUMOURS OF THE LARYNX.

SIR,—At a recent meeting of the Clinical Society of London, Dr. Percy Kidd presented an interesting specimen of tubercular growth of the larynx, and is reported (BRITISH MEDICAL JOURNAL, April 26th, 1884) to have referred to Schintzler as the first to demonstrate the presence of such tumours in the windpipe.

The existence of well defined solitary tubercular tumours of the upper air-passages, occurring independently of ulceration of the surrounding mucous membrane, and histologically distinct from the granular and papillomatous growths so often met with in the larynx of the consumptive, was first pointed out by your correspondent over two years ago in a communication to the Clinical Society of Maryland (*vide* Abstract in the *Maryland Medical Journal*, June 1, 1882), which was subsequently published in the *Archives of Medicine* "Tubercular Tumours of the Windpipe. Tuberculosis of the Laryngeal Muscles. A Contribution to the Pathological Histology of Laryngo-tracheal Phthisis," *Arch. of Med.*, New York, October, 1882). Prior to that date, such neoplasms had not been described, nor had a case been recorded whose tubercular nature had been demonstrated by the microscope. In the paper referred to, two such cases were reported, a distinctly circumscribed growth of the trachea, and a remarkable diffuse nodular tumour involving the whole of the laryngeal vestibule, the process ceasing abruptly, on each side, at the free border of the ventricular band. Microscopic examination showed both growths to be formed of clearly defined closely aggregated miliary tubercles, set in a more or less well marked vascular network of hypertrophied connective tissue, and representing all stages of degeneration. In some, caseation had so far advanced, that nothing was left but the cellular wall (microscopic vomica). The growths seemed to have originated from the submucous tissues, and the nodules in the deeper portions were further advanced in caseation than those which were more superficial. In neither case was there any trace of ulceration in the upper respiratory tract.—Yours faithfully,

JOHN N. MACKENZIE, M.D.

Baltimore, U.S.A., May 20th, 1884.

STATE HONOURS FOR THE MEDICAL PROFESSION IN IRELAND.

SIR,—In your issue of Saturday last I was very gratified to notice an announcement that the Queen had been pleased to confer the well-merited distinction of K.C.B. upon Dr. Acland, who was recently created a C.B. I would wish to know, however, whether the advisers of the Crown felt, when the first title was conferred, they had dispensed all that was at their disposal suitable for so distinguished a recipient, or whether they proceeded now to give further effect to what must have been evidently a mistake in the first instance.

I would also wish to know, with reference to this subject, whether the leaders in medicine and surgery in Ireland are still to remain unrecognised by State honours suitable for their positions, or whether the bald decoration of knighthood is to be considered the only title the profession in Dublin can expect to receive or hope for in future. No doubt any compliment which the Queen is pleased to bestow on her subjects must be received and accepted with loyal respect for the donor; but there is no breach of loyal duty in feeling keenly as an affront an honour which Her Majesty confers, not of her own motion, but in compliance with the suggestions of her responsible advisers, when it proves, beyond all manner of doubt, that, if the inferior title were to be accepted in Dublin by the profession as a suitable distinction for scientific attainments, it would be thereby lowered in its social status as compared with the medical profession in London. Nothing, I feel confident, would be farther from the wishes of the heads of the profession in England, than that there should be any apparent grounds for so injurious and unfair an assumption. But it is, nevertheless, a fact that, since the death of the last Irish medical baronet, no new creation has taken place, although it would have been always easy to select from among the leaders of the profession in Dublin men who, during a long and honourable career, have attained the highest professional eminence, with ample means and position to support an hereditary title.

I sincerely trust, therefore, that there is every reason for hoping that the mistake which has been unintentionally made will be very shortly rectified, so as to leave no feelings of soreness behind, and thus assist in maintaining the relations between the profession in England and Ireland, which have been for so many years those of unbroken mutual respect and acknowledgment of entire equality.—I am, sir, yours,

June 2nd, 1884. M.D. UNIV. DUBL., F.R.C.S.I.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.—An ordinary meeting will be held in the rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, W., on Tuesday afternoon, June 10th. The chair will be taken at four o'clock by the President, Dr. Norman Kerr. Dr. W. B. Carpenter will read a paper on "The Causation, Physical and Moral, of Inebriety," and Mr. Axel Gustafson one on "Inebriety and Volition."

DR. O'CONNOR, the medical superintendent of St. George's-in-the-East Infirmary, has suspended the usual visiting privilege to patients' friends during the small-pox epidemic.

MEDICO-LEGAL AND MEDICO-ETHICAL.

EXPOSURE OF INFECTIVE PATIENTS.

AT Worship Street, on June 4th, Cornelius Fisher, living in Median Road, Lower Clapton, appeared in answer to a summons at the instance of the sanitary authority of the parish of Hackney, for exposing a person who was suffering from small-pox. The case was conducted by Dr. Tripe, medical officer of the parish; the defendant, who pleaded "Guilty," was not represented. It appeared from a statement made on oath, at the request of the magistrate, Mr. Partridge, that the defendant was a practitioner in Clapton Park, and the person in question was a female servant in his household. (The name of the defendant is not to be found in the *Medical Directory* nor in the *Medical Register* for 1884). On May 8th the defendant applied to the nuisance inspector to have some bedding disinfected, and this led to inquiries. It was found that on that day the defendant's servant had been received into the Infectious Diseases Hospital at Homerton, having walked thither. She explained to the gate-porter that her master had ordered her to go on foot through the streets. The defendant admitted that such was the fact, and that he believed there would be no harm or danger, because the young woman was then only just entering upon the disease. He admitted that she had before that day shown premonitory symptoms, and Dr. Tripe said the danger of infection was equally present in that as in subsequent stages of the malady. The medical officer added that the gate-porter's testimony (he being an experienced man) was the only evidence to formally prove that the young woman suffered from small-pox; but the hospital doctor could be produced if necessary. The parochial authority were doing their utmost to arrest the progress of the disease, but this object was entirely overthrown by practices like the present. There were three similar cases reported; but, as the sufferers had left those under whose charge they formerly were, there was a difficulty in fixing the liability in the present state of the law. The present proceeding was under the thirty-eighth section of the Sanitary Act, 1866. The defendant said he did not think the disease was so far advanced as to be capable of contagion when his servant left the house. Mr. Partridge said this was a very serious charge. The public had a right at least to claim protection from those who possessed knowledge of science. He fined the defendant the full penalty of £5, and the costs.

WHAT THE COLLEGES DO FOR US.

THE want of ethical control on the part of the Colleges over their Members and Licentiates is illustrated in the subjoined, of which numerous copies have been forwarded to us.

"Interesting to gentlemen. I, Dr. Daniel Sutherland, surgeon at the New Medical Hall, 73, Jamaica Street, Glasgow, hereby intimate to all whom it may concern, that I have long studied and treated confidential complaints and weaknesses as a principal part of my practice, both here and in Edinburgh, though never formally made known by advertisement, and it is possible this notice may be construed as a breach of professional etiquette, but I think it very pardonable when I consider the number of gentlemen constantly consulting me with their constitutions injured, and complaints aggravated, after being for months or years the dupes of quacks and druggists. I consider it a righteous necessity in the public interest to advertise the fact that a member of the profession proper devotes his time to the study and treatment of these special complaints. Gentlemen are therefore inexcusable if they fall into the hands of empirical pretenders. I make free to assure gentlemen entrusting me with their confidence that they may rely upon the highest professional honour and skilled conscientious treatment, whether they visit me at 73, Jamaica Street, Glasgow, or communicate with me by letter, which will have my immediate attention. I am, faithfully, Daniel Sutherland, Licentiate of the Royal College of Physicians, Licentiate of the Royal College of Surgeons; also of the Faculty of Physicians and Surgeons. For seven years Councillor and Trustee of the City of Edinburgh, and Manager of the Royal Maternity Hospital, Edinburgh; President of the Scottish Christian Evidence Society; Medalist (Royal College of Surgeons) [illegible]; awarded Queen's Prize (Science of Chemistry) Kensington Museum, [illegible]; Prize Honours (Royal College of Surgeons), [illegible], etc., etc."

CORONERS' INQUESTS AND MEDICAL WITNESSES.

SIR,—I should be glad of the opinion of the following case:—

R. A., a [illegible], whom I had known for [illegible] years, and whom I had treated more or less during that time, consulted me on April [illegible]. He suffered chiefly from loss of appetite, [illegible] depression of spirits, and passing [illegible] [illegible] [illegible] [illegible] [illegible] I gave him [illegible] [illegible] [illegible] [illegible] [illegible].

On April [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] to say

seeing him. An inquest was held on April 26th, over which Mr. Graham, coroner for the county Durham, presided, and to which I was not asked to attend. Should I have been there?—Yours faithfully, J. CAMPBELL, M.B., M.A.
Ebchester, Newcastle-on-Tyne.

MILITARY AND NAVAL MEDICAL SERVICES.

THE SUBORDINATE OR NON-COMMISSIONED GRADE OF THE INDIAN MEDICAL SERVICE.

THOSE of our readers who are familiar with the constitution of the Army of India are aware that there is an extremely useful and in every way respectable class of men, for the most part Indo-Britons who form the non-commissioned or warrant officers of the medical service—a class in many particulars filling the same social position as the warrant officers of the Public Works, Ordnance, and Commissariat Departments. They are classified as senior first and second class apothecaries, and constitute a most useful body of men, as all medical officers both of the Army Medical Department and Indian Service know. They are, as a rule, well educated, both generally and professionally, in the Government schools and Indian medical colleges; and every step in their service is gained by merit, ascertained by strict examination. The Government of India have very properly recognised the claims of this useful class to reward by granting honorary rank to those who have done good service, by promoting them to the grade of "honorary surgeon" and "surgeon-major," just as warrant officers in the department mentioned above are promoted subconductors, conductors, assistant and deputy commissioners.

By an order of Government in the year 1877, it was decreed that the rank of surgeon thus conferred should be *general*—that is, should hold good throughout the British possessions, in the case of those registered under the thirty-sixth clause of the Medical Act of 1858; and *local*—that is, confined to India, for all not so registered. At the same time, local honorary surgeons were informed that, if subsequently admitted to the British *Register*, their local rank would be converted into general. The majority of the officers thus rewarded, having been born and educated in India, and being unable to incur the cost of a visit to Europe, are necessarily unprovided with the diploma of any recognised examining body under the Medical Act; their rank, therefore, remains local. One such officer, well known in the service as an exceptionally able and worthy public servant, has been, since his promotion, admitted to the *Register* by the General Medical Council, in spite of his want of a British diploma. This officer naturally, therefore, applied, under the order above quoted, to have his honorary rank converted from local to general. He was refused; and the Government subsequently issued an explanatory order, that "registration is to be interpreted as meaning registration of a diploma recognised in Great Britain as entitling its possessor to registration there;" so that the officer in question is brought under the operation of an order having retrospective effect. The new rule may be a good one; that, however, is not the question. The petty injustice done to a highly meritorious officer by giving retrospective effect to it is obvious. It is constantly our duty to reprobate the spirit that seems to actuate all public bodies at home and abroad, throughout the British Empire, in their dealings with the medical profession. To keep its members in the public services of the country in a condition of chronic discontent seems to be a principle never lost sight of, and acted on with unvarying persistence. We have too often had occasion to protest against the recurrence of acts of petty injustice on the part of the Government of India to its commissioned medical officers; and we see the same spirit in operation to the disadvantage of a class of useful and absolutely indispensable medical servants of the State, many of whom fill posts in India of trust and great responsibility. How long is this unwise and unjust policy to continue?

CONTEMPLATED CHANGE IN THE A.M.D. UNIFORM.

"SURGEON-MAJOR" says that, as it has been recently stated in Parliament that the Army Medical Department and Army Hospital Corps were to be amalgamated, he is anxious to know whether the A.M.D. uniform is to be changed to that of the Corps. An early intimation of the fact by the authorities would, he thinks, be a great convenience to many medical officers who, having, like himself, just returned from foreign service, require new uniform.

⁂ At the Army Medical Department dinner on May 30th, the Director-General announced that all the recommendations of Lord Morley's Committee would be carried out; and as the change of uniform from red to blue is one of these recommendations, it may be concluded that the change referred to by our correspondent will take place. No doubt the necessary information can be obtained by direct application at the Army Medical Department.

TRAINING IN AMBULANCE DRILL AND FIRST AID TO THE WOUNDED.

THE following order just published will be interesting to many of our readers. It applies both to the Army and to the Auxiliary Forces.

"The training of officers and men of the regular and auxiliary forces in ambulance drill and first aid to the wounded will be carried out under the orders of general officers commanding, and principal medical officers of districts. Commanding officers will afford medical officers and others undertaking the duty every facility for the formation and instruction of classes, and will detail a competent noncommissioned officer to assist the medical officer in the drill, and take charge of equipment and appliances used in the instruction. On the formation of a class, officers and men of any branch of the service will be allowed to attend; the course of instruction will consist of at least twelve lectures and drills, of which nine attendances must be certified by the instructing medical officer before application is made for examination as to proficiency. A class should consist of not less than eight persons. When a class has completed a course and is ready for inspection, the instructor will submit the names on the Inspection Report of Ambulance Class, for transmission through the commanding officer to the general officer commanding and the principal medical officer of the district, and the latter will forward it, together with authority to inspect the class, to the medical officer he may detail as examiner. The examining medical officer will complete the report on the inspection of the class, and will also sign the certificates of proficiency, which will be prepared and signed by the instructor for those found qualified, and will forward both the report and the certificates to the principal medical officer; the latter will countersign the certificates and send them to the instructor for distribution, retaining the report as an office-record. Any number of officers and men may qualify, but certificates of proficiency will not be granted to the regular forces, but only to the militia and volunteers. In militia and volunteer corps, two for each company of the rank and file of those holding certificates will be selected as the recognised stretcher-bearers of the corps, and as such will be entitled to wear the Geneva badge on the right arm. To insure efficiency, and the retention of the right to wear the badge, the recognised stretcher-bearers of militia and volunteer corps will be required to attend four stretcher-drills annually. At the head-quarters of each district, a limited quantity of stretchers and appliances will be kept for purposes of instruction; and, when practicable, these will be issued under the sanction of the general officer commanding, on loan to corps in which classes of instruction are formed; the corps will be responsible for the carriage, safe custody, and return of this equipment. The Army Forms herein mentioned will be obtained by instructing medical officers forming classes on application to the principal medical officer of the district. The certificate of proficiency is of a size that it can be pasted into a man's small book, in the same manner as a school-certificate."

PRIZES OF THE ROYAL COLLEGE OF SURGEONS.—The following are the subjects for the prizes to be awarded by the Royal College of Surgeons to its Fellows and Members. The triennial prize, consisting of the John Hunter Medal, executed in gold, to the value of fifty guineas; or, at the option of the successful author of the dissertation, of the said medal executed in bronze, with an honorarium of fifty pounds, is offered for the best essay on "The Nature of Inhibitory Action in the Animal Body," to be elucidated by original research. For the Jacksonian Prize, the subject for the present year is "The Surgical Treatment of Uterine Tumours, both Innocent and Malignant;" for next year, "The Diagnosis and Treatment of such Affections of the Kidney as are amenable to direct surgical interference."

PRIZES.—The following prizes, each of the value of 500 lire (£30), are offered by the Medico-Chirurgical Society of Bologna: 1. The Sgarzi Prize, subject: "The Surgical Treatment of Pulmonary Caverns and Diseases of the Lung;" 2. The Gajani prize "On the Surgery of Diseases of the Stomach." Essays, which must be written in Italian, Latin, or French, and must not have been previously made public or read before a Society, will be received up to the end of 1885. The prize in each case may be divided among essays of equal merit, and honourable mention will be awarded to candidates whose essays are of high merit but not deserving of a prize.

FOOD, WINE, AND DRUGS IN PARIS HOSPITALS.—The amount of food, wine, and drugs distributed in the Paris hospitals, is the subject of a good deal of discussion, both within and without the medical ranks. In February, the Director of the Assistance Publique addressed a circular to the physicians, surgeons, and apothecaries attached to the hospitals, in which he drew their attention to the excessive consumption of meat, wine, and drugs in the Paris hospitals. In 1855, 1,256 litres of alcohol were distributed among the different hospitals; in 1870, 41,699; in 1882, 77,755. In 1855, 200 litres of rum were sufficient; in 1880, 20,287; in 1882, 32,298. The quantity of Bordeaux consumed has increased from 13,000 to 103,000 litres. An equally great increase has occurred in the consumption of sugar, coffee, and milk. In the last report sent in by the Administration to the Conseil de Surveillance, there is entered for one bed, at the Tenon Hospital, every day during January 1883, as an extra, one kilo. 500 grammes of raw meat, two litres of milk, two eggs, one cutlet, and two litres of broth. In the same ward, another patient is credited with having consumed three kilos. of raw meat, two litres of milk, two eggs, and a cutlet, daily. There are also instances of patients reported to have swallowed three kilos. of raw meat daily, from the 1st to the 16th of June; and daily, during July, one litre of Baujuls, six litres of broth ten eggs, etc.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

MEDICAL RELIEF IN THE SHIFNAL UNION, SALOP.

On October 30th, 1883, a man named Purcell, living at Long Row, Snedshill, in the Priorslee District of the Shifnal Union, Salop, called on Mr. J. McCarthy, the medical officer of the district, and requested him to attend his daughter, aged 26, unmarried, who was in labour. He went without an order. Mr. McCarthy declined to attend the case unless an order were obtained; whereupon, the father started off to the relieving officer's residence at Shifnal, four miles away, to get one. In the meantime, Mr. McCarthy, anticipating that no difficulty would be made, went to the father's house, and found that the young woman was not only in labour, but suffering from acute bronchitis, which had nearly asphyxiated her. It was therefore apparent that she needed delivery without delay. This, after considerable difficulty, was achieved by instrumental means, Mr. McCarthy having called a neighbouring practitioner to his assistance. Shortly after the delivery, the father returned and stated that the "relieving officer" had declined to give an order; and, although a second application was made next day, it met with the same result; that, too, in spite of the fact that the relieving officer had called at the house, and it was alleged that it was an urgent case. On the following Monday, November 5th, Mr. McCarthy made personal application to the guardians at their board meeting, one of the inspectors of the Local Government Board being present, when he was informed that the case would be inquired into on that day. The relieving officer called at the father's house, and gave an order for Mr. McCarthy's attendance on the woman, but dated on that day. Mr. McCarthy continued his attendance until the 12th, when the woman died, from congestion of the lungs.

On subsequently applying to the guardians for the fee of £2, for instrumental midwifery, the following reply was forwarded to him by the clerk of the board of guardians: "That Mr. McCarthy, the medical officer of the Priorslee District, having written stating that the fee for the delivery of Mary Ann Purcell was not paid at Christmas last, the case was considered, and the board declined to make an order for payment of the extra fee."

Considering that this decision was an unjust one, especially as he had paid £1 out of his pocket to the gentleman who had assisted him, Mr. McCarthy laid the facts before the Local Government Board, and requested their advice and assistance. On March 3rd, the department sent their reply to Mr. McCarthy's letter of February 15th, in which they state "that the Board's inspector, Mr. Dansey, having conferred with the guardians on the subject, reports that, although they appear to admit that the statements in your letter are substantially correct, they do not consider that you are entitled to extra remuneration;" and "as the Board have no authority to direct payment to a medical officer of extra remuneration to which he may consider himself to be entitled, it does not appear to the Board that they can usefully interfere in the matter."

We feel that our readers will agree with us as to the unfairness of this decision, and we are strongly of opinion that it is illegal. Although the attendance on the woman from a most [illegible] feeling of humanity on the part of Mr. McCarthy was given before the return of the father with the relieving officer's refusal to grant an order, which that official repeated next day, yet the subsequent [illegible] order for the doctor's attendance carried with it a legal [illegible] to the fee. So strongly do we feel on the subject, it appears to us to be advisable that Mr. McCarthy should at once test the question in the County Court. In the meanwhile, we trust that the attention of the public will be drawn to the subject by a question in the House of Commons.

DISTRICTS OF MEDICAL OFFICERS OF HEALTH.

The policy of the Local Government Board with regard to the appointment to districts of medical officers of health has undergone a good many changes and modifications. At first [illegible] appointments were always urged upon authorities, but these have now become somewhat out of fashion at Whitehall, and the [illegible] nowadays is one officer for one district, the size or population of the district being a mere incidental detail that need not be considered. Thus at the last meeting of the Ormskirk Rural Sanitary Authority, a letter from the Local Government Board was read stating the results of an inspection of the district made by Dr. Parsons, one of their medical inspectors. The Board stated that the inquiry was undertaken mainly with a view to the Board's ascertaining how the several medical officers of health, to whose reappointments they, under the circumstances, assented until June 24th next, had performed their duties. In transmitting the copies of the report, the Board stated that the result of the investigation was such as to lead them to the conclusion that in none of the divisions had the duties which devolved upon medical officers of health, under the Board's order and instructions, been carried out in as efficient a manner as the sanitary interests of the locality required. In one district only had anything approaching to the Board's requirements been attempted. It further appeared that there had been an absence of that personal conference between the officers and the authority which was requisite; but that was probably due, to a great extent, to the fact of the officers being so many in number. Having regard to these conclusions, the Board were unable to avoid the conclusion that the present arrangements for the discharge of the important duties of the office of medical officer of health were unsatisfactory, and that after June 24th, one efficient officer should be appointed for the whole district at an adequate salary.

This recommendation, as we have said, has now come to be the staple suggestion of the Local Government Board.

TOTTENHAM SANITARY ASSOCIATION.

In preparing their tenth annual report, the Committee of this useful little Association have fallen into the tactical error of recording the principal portion of their year's work in figures instead of in words. With the exception of one year, the death-rate of 1883 (16.14 per 1,000) was lower than any registered since 1871, although it is still in excess of that registered in twelve London suburbs. There was a notable decline in the mortality from zymotic causes, the death-rate being equivalent to 2.71 per 1,000, as compared with 4.01 recorded in 1882. But this rate is much too high; and, as the committee observe, the fact calls for the earnest attention of the local authority. The report contains a reference to the water-supply of the district, but otherwise is silent as to its sanitary circumstances, which, we believe, are surely, if slowly, improving.

Health of English Towns.—During the week ending the 31st ultimo, 5,757 births and 3,354 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 8,762,354 persons. The annual rate of mortality per 1,000 persons living in these towns, which in the four preceding weeks had declined from 22.7 to 19.9, was 20.0 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow:—Derby, 11.3; Brighton, 12.5; Hull, 14.4; Bristol, 15.3; Birkenhead, 17.2; Nottingham, 17.3; Bradford, 17.7; Newcastle-upon-Tyne, 18.3; Portsmouth, 18.4; Halifax, 19.1; London, 19.2; Birmingham, 20.6; Leeds, 20.6; Salford, 20.6; Bolton, 20.6; Oldham, 21.3; Huddersfield, 21.8; Norwich, 21.9; Sunderland, 22.0; Liverpool, 22.4; Manchester, 23.0; Leicester, 28.6; Sheffield, 24.1; Cardiff, 24.6; Plymouth, 25.6; Blackburn, 26.4; Preston, 28.8; and Wolverhampton, 29.3. The average death-rate last week in the twenty-seven provincial towns was 20.7 per 1,000, and exceeded by 1.5 the rate recorded in London. The 3,354 deaths registered last week in the twenty-eight towns included 500 which were referred to the principal zymotic diseases, against [illegible], 530, and 497 in the three previous weeks; of these, 150 resulted from measles, 133 from whooping-cough, 65 from scarlet fever, 44 from diarrhoeal diseases, 42 from small-pox, 39 from "fever" (principally enteric), and 27 from diphtheria. These 500 deaths were equal to 14.9 per cent. of the total deaths, and to an annual rate of 3.0 per 1,000. This zymotic rate was equal to 3.1 in London, and averaged 3.0 in the twenty-seven provincial towns, among which it ranged from 0.0 in Brighton, and 0.6 in Derby and in Hull, to 5.1 in Oldham, and 6.2 in Plymouth. The deaths referred to measles, which in the two preceding weeks had been 151 and [illegible], declined to 150, and caused the highest rates of mortality in Birkenhead, Wolverhampton, and Oldham. The fatal cases of whooping-cough showed a further decline from the weekly number, and showed the largest proportional fatality in Liverpool and Bolton. The 65 deaths referred to scarlet fever showed a further increase from the number recorded in the two previous weeks; this disease caused the highest death-rates in Wolverhampton, Salford, Huddersfield, and Bolton. The 39 fatal cases of "fever" showed an increase of 2 upon those in the previous week. The 27 deaths from diphtheria included 22 in London. Of the 42 fatal cases of small-pox in the twenty-eight towns, 36 were recorded in London, 3 in Liverpool, 1 in Sheffield, 1 in Sunderland, and 1 in Cardiff. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had risen from 148 to 924 in the ten previous weeks, further increased to 1,057 on Saturday last; no fewer than 370 new cases of small-pox were admitted to these hospitals during the week ending the 31st ultimo. The death-rate from diseases of the respiratory organs in London was equal to 3.3 per 1,000, and was slightly below the average. The causes of 83, or 2.5 per cent., of the 3,354 deaths registered in the twenty-eight towns were not certified either by medical practitioners or by coroners. In London the proportion of uncertified deaths did not exceed 1.1 per cent., while it showed a considerable excess in Liverpool, Salford, Blackburn, and Oldham.

HEALTH OF SCOTCH TOWNS.—In the eight principal Scotch towns, having an estimated aggregate population of 1,254,607 persons, 937 births and 547 deaths were registered during the week ending Saturday, May 31st. The annual rate of mortality, which had declined in the three preceding weeks from 24.9 to 22.3 per 1,000, was last week 22.7, and exceeded by 2.3 the average for the same period in the twenty-eight large English towns. Among these Scotch towns the rate was equal to 16.9 in Paisley, 18.6 in Greenock, 20.6 in Aberdeen, 21.8 in Perth, 22.8 in Dundee, 23.0 in Edinburgh, 23.9 in Glasgow, and 25.0 in Leith. The 547 deaths registered last week in these towns included 88 which resulted from the principal zymotic diseases; of these, 32 were referred to whooping-cough, 16 to diarrhœal diseases, 14 to measles, 12 to diphtheria, 9 to "fever," 8 to scarlet fever, and 1 to small-pox. These 88 deaths were equal to an annual rate of 3.8 per 1,000, and ranged in the various towns from 2.4 and 2.8 in Dundee and Aberdeen, to 4.0 in Glasgow and Edinburgh, and 7.8 in Leith. The 32 deaths from whooping-cough were within one of the number in the preceding week, and included 15 in Glasgow, and 7 in Edinburgh. Of the 14 fatal cases of measles, 4 occurred in Glasgow, 4 in Leith, and 3 in Dundee. The 12 deaths from diphtheria showed a further increase upon recent weekly numbers, and included 4 in Glasgow, 3 in Edinburgh, and 2 in Leith. Of the 9 fatal cases of fever, 4 occurred in Edinburgh, and 3 in Glasgow. The 8 deaths from scarlet fever included 6 in Glasgow, where a fatal case from small-pox was also recorded. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 3.7 per 1,000. As many as 80, or 14.6 per cent. of the 547 deaths registered last week in these towns were uncertified.

HEALTH OF IRISH TOWNS.—During the week ending Saturday, May 31st, the number of deaths registered in the sixteen principal town-districts of Ireland was 390. The average annual death-rate represented by the deaths registered was 23.6 per 1,000 of the population, the respective rates for the several districts being as follow, ranging in order from the lowest to the highest: Sligo, 0.0; Newry, 17.6; Londonderry, 17.8; Lurgan, 20.5; Armagh, 20.7; Dublin, 20.9; Wexford, 21.4; Belfast, 21.8; Waterford, 23.2; Limerick, 29.7; Cork, 30.5; Galway, 33.6; Drogheda, 33.8; Kilkenny, 38.1; Dundalk, 52.4; Lisburn, 58.0. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.1 per 1,000, the rates varying from 0.0 in Kilkenny, Drogheda, Wexford, Sligo, Lisburn, Lurgan, and Armagh, to 8.7 in Dundalk; the 12 deaths from all causes registered in the last named district comprising 2 from whooping-cough. The 91 deaths from all causes registered in Belfast comprised 2 from scarlatina, 2 from whooping-cough, and 3 from diarrhœa; among the 47 deaths registered in Cork were 1 each from measles, scarlatina, whooping-cough, and diarrhœa; and the 10 deaths in Londonderry comprised 1 from scarlatina, 1 from whooping-cough, and 1 from diphtheria. In the Dublin Registration District, the deaths registered during the week amounted to 150. Eighteen deaths from zymotic diseases were registered in Dublin, being 3 over the number for the preceding week, but 12 under the average for the twenty-second week of the last ten years; they comprised 8 from scarlet fever (scarlatina), 2 from whooping-cough, 1 from diphtheria, 2 from enteric fever, 2 from diarrhœa, etc. Twenty-seven deaths from diseases of the respiratory system were registered in Dublin, being equal to the number for the preceding week, but 9 under the average for the twenty-second week of the last ten years; they consisted of 15 from bronchitis and 12 from pneumonia. The deaths of 9 children under five years of age (including 5 infants under one year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 8 by other diseases of the brain and nervous system (exclusive of convulsions, and 12 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 25 deaths, mesenteric disease 4, and cancer 4. Two accidental deaths were registered.

HEALTH OF FOREIGN CITIES.—It appears from statistics published in the Registrar-General's return for the week ending the 31st ult., that the death-rate was recently equal to 89.1 in Madras and 30.5 in Bombay; small-pox caused 383 deaths in Madras, a higher number than in any previous week during the present epidemic, and in Bombay 12 fatal cases of cholera and 20 of measles were recorded; "fevers" were nearly equally fatal in these two Indian cities. According to the most recently received weekly returns, the average annual death-rate per 1,000 persons estimated to be living in twenty-two of the largest European cities was 28.7, and exceeded by no less than 8.7 the mean rate during last week in the twenty-eight great English towns. The death-rate in St. Petersburg was 36.9, but showed a further decline from the higher rates in previous weeks; the 656 deaths included 41 from measles and 23 from "fever." In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged 22.5, and ranged from 11.7 in Christiania to 25.6 in Copenhagen; diphtheria caused 4 deaths in Copenhagen, and scarlet fever 2 in Christiania. In Paris, the death-rate was equal to 25.5, showing a marked decline from the high rates in recent weeks, but exceeding the rate in London last week by no less than 6.3; the deaths included 49 from typhoid fever, 48 from diphtheria and croup, and 43 from measles. The 167 deaths in Brussels were equal to a rate of 20.3; the deaths from small-pox, which had been 27 and 16 in the two previous weeks, further declined to 9. In Geneva the rate was 24.3, and 6 of the 33 deaths resulted from typhoid fever; the deaths from this disease in the six previous weeks had ranged between 14 and 5. In the three principal Dutch cities — Amsterdam, Rotterdam, and the Hague—the mean death-rate was 30.3, the highest rate being 36.6 in Rotterdam, where 22 of 117 deaths resulted from measles; in Amsterdam, 15 more fatal cases of diphtheria and croup, and 5 of scarlet fever were recorded. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 30.3, ranging from 23.2 and 26.0 in Berlin and Trieste, to 39.1 in Prague and 39.5 in Buda-Pesth. Small-pox caused 18 deaths in Prague (showing a considerable decline from previous weekly numbers), and 4 in Buda-Pesth; diphtheria showed fatal prevalence in most of those German cities, and especially in Berlin, Dresden, and Munich. The death-rate was equal to 22.4 in Venice and to 31.9 in Turin; the 155 deaths in the latter city included 8 from typhoid fever and 7 from small-pox. In Lisbon, the 97 deaths (including 2 from scarlet fever and one from small-pox) gave a death-rate of 24.8. In four of the largest American cities, the recorded rate averaged only 22.4 per 1,000, and ranged from 18.4 in Brooklyn to 25.3 in New York. Diphtheria showed more or less fatal prevalence in all these American cities; and typhoid fever caused 10 deaths in Philadelphia.

HEALTH OF SCOTLAND.—The return of marriages, births, and deaths in Scotland, in the first quarter of 1884, has just been issued. The marriage-rate corresponded with the average for the same period of the ten preceding years, while the birth- and death-rates were considerably below their respective averages. The births registered during the first three months of this year were 30,889, which were equal to an annual rate of 32.1 per 1,000 of the population, estimated at 3,735,573; this rate was 2.5 per 1,000 below that in the first quarter of 1883, and lower than any recorded in the corresponding period of any of the ten preceding years. During the first quarter of this year, the deaths registered in Scotland were 19,115, equal to an annual rate of 19.9 per 1,000 of the estimated population, which was as much as 3.7 per 1,000 below the average rate in the corresponding quarter of the ten years 1874-83; and, with the single exception of the first quarter of 1882, when the rate was only 19.3 per 1,000, was lower than in the first three months of any year on record. In the principal towns of Scotland, containing an estimated population of 1,412,350 persons, the death-rate in the three months under notice was equal to 22.4 per 1,000, against an average rate of 21.1 in twenty-eight of the largest English towns. In the smaller Scotch town districts, the death-rate last quarter was equal to 20.5 per 1,000; while, in the remaining or rural population of the country, it did not exceed 16.7 per 1,000. Among the eight large Scotch towns for which weekly returns are published, the death-rate averaged 22.6 per 1,000, and was equal to 17.4 in Leith, 17.9 in Dundee, 20.5 in Edinburgh, 21.2 in Perth, 21.2 in Greenock, 21.9 in

Aberdeen, 24.9 in Paisley, and 25.8 in Glasgow. The 7,059 deaths in these principal Scotch towns last quarter included 3 which were referred to small-pox, 132 to measles, 94 to diphtheria, 299 to whooping-cough, 104 to different forms of "fever" (principally enteric), and 125 to diarrhœal diseases—in all, 870 deaths resulted from these principal zymotic diseases, equal to an annual rate of 2.78 per 1,000, against an average rate of 2.64 in the twenty-eight large English towns. Compared with the corresponding quarter of 1883, the deaths from each of these zymotic diseases showed a decline.

SMALL-POX IN SUNDERLAND.

THAT our strictures on the procedure of the Urban Sanitary Authority, in their arrangements for the isolation and treatment of the recent small-pox outbreak in this town, have not been without effect in developing a healthy public action, is shown by an annotation in the *Sunderland Herald and Daily Post*, of May 23rd, from which we learn that the Health Committee of the corporation had succeeded in obtaining the offer of twelve acres of ground, excellently adapted for the purpose of erecting thereon an hospital for the treatment of infectious diseases. The ground is high, possesses good natural facilities for drainage, and is situate about a mile to the west of the borough. After considerable discussion, the Health Committee decided, by a majority of twelve to two, to adopt their subcommittee's report, and recommend the purchase of the land for the purpose named by the corporation. The amount of the purchase money, £5,000 in all, or £416 an acre, is regarded as very moderate, seeing that the Birmingham Corporation have just had to pay £1,000 an acre for land which they required for the purposes of a new fever hospital.

We hold that the town of Sunderland lies under very considerable obligations to the two professional members of its Urban Sanitary Authority, Dr. Ayre Smith and Dr. Douglas, who have exhibited singular perseverance, as well as disinterested public spirit and enlightenment, in seeking to secure for this town such an immunity as is procurable against the development of infectious disease. We therefore sincerely hope that no obstruction in the form of a vicious economy may interfere with their benevolent and useful action.

MEDICAL OFFICERS OF HEALTH AND SANITARY PROSECUTIONS.

SIR, 1. Is a medical member of a sanitary authority justified in taking an active part in the defence in a prosecution for nuisance ordered by the authority of which he is a member, without any consultation or communication with the medical officer of health, there being no pretence of ill-feeling on either side?

2. Is he justified in taking part in an attack on the medical officer for a guarded account of the circumstances in his annual report?

3. Are medical officers of health justified in going into the districts of other medical officers to give evidence against them in sanitary prosecutions without communicating with them, in order to ascertain the ground for action?—I am, sir, yours obediently,

M. O. H.

. To the first two questions we must reply that it is altogether a matter relating to good taste and professional feeling; to the third question, that medical officers of health cannot be prohibited from giving evidence in sanitary prosecutions in the districts of other health-officers; indeed, justice might at times require them to do so, but it is only courteous to communicate with the health-officer first under these circumstances.

HOSPITAL AND DISPENSARY MANAGEMENT.

BELFAST ROYAL HOSPITAL.

AT the quarterly meeting of this charity held on May 26th, the secretary's report showed a rather discouraging state of the finances. At the close of the last year, the balance against the hospital was £700, in the eight months which have since elapsed this balance has increased to £2,000. In the present financial year there has been a general falling off in the receipts from donations and bequests, church collections, and general subscriptions. A great redeeming feature, however, in the future prospects of the hospital is the increased support received from the working classes. The subscriptions from this source are yearly increasing, and a strong opinion is entertained from the progress made in this direction, and from the growing popularity of the institution with the artisan classes, that Belfast will soon stand at the head of all other towns in the United Kingdom in having its principal hospital largely supported by the class who use it.

The Hospital Sunday Fund in Belfast, as compared with English towns of the same magnitude, has been very unsuccessful, not averaging more than £500 or £600.

A bazaar is in process of organisation, which it is hoped will materially augment the funds and relieve the committee of management of all difficulties.

IN consequence of the epidemic of typhus at Zurich, the authorities of that city have ordained that the fountains in public schools are not to be supplied with water. Boiled water is to be supplied to the masters and pupils. Typhus is prevalent at Geneva. The epidemic at Berne quickly disappeared.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—Admitted Licentiates on May 29th, 1884.

Deare, Arthur Cecil, 40, Bassein Park Road, W.
De [illegible], William Raoul, St. Bartholomew's Hospital, E.C.
Maitland, Percy Edmund, 12, Albert Street, N.W.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on the 29th ultimo, and, when eligible, will be admitted to the pass-examination for the Fellowship.

Messrs. F. J. Smith, student of the London Hospital; W. Permewan, and P. W. Fraser, of University College; A. Carless, of King's College; J. A. Smith, of St. Bartholomew's Hospital; G. Rowell, and J. W. Washbourn, of Guy's Hospital; J. Cahill, of St. George's Hospital; and H. Tonks, of the London Hospital.

Nine candidates, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for six months. Ninety candidates presented themselves for the examination just completed, as compared with eighty-six at the corresponding period last year; of this number, forty-eight were referred for six months' additional studies.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 29th, 1884.

Arkle, Charles Joseph, 18, Portland Terrace, Regent's Park, N.W.
Cook, Henry Samuel, Acocks Green, near Birmingham.
Kerr, Andrew Watson, 29, Prospect Street, Belfast.
Maguire, Charles Patrick, 1, Compton Street, W.C.
McMullan, Joseph Hugh, Belfast.
Sims, George Samuel, St. Thomas's Hospital.
Walker, Joseph Eagland, 158, Stanhope Street, N.W.
Windley, William, 27, Disraeli Road, Putney.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners held on May 8th and following days, the undernamed gentlemen passed their final examination for the letters testimonial of the College, and, having taken the declaration and signed the roll, were admitted Licentiates.

Messrs. B. J. Acheson, G. H. Bagot, L. A. F. Bate, J. Bernal, F. L. Carte, J. V. Collins, C. Cronin, T. Crowe, A. Cuffe, T. J. Daly, J. B. Delaney, T. L. Dillon, C. Eccles, P. J. Ford, F. J. Greig, J. Hanna, D. Kennedy, G. Kennedy, C. R. Kilkelly, B. Lane, F. D. Lowson, J. Lowney, E. M'Nulty, T. J. M'Grath, J. H. Maguire, E. L. Minchin, C. R. Moloney, W. A. Murray, L. T. M. Nash, C. J. Perrott, W. W. Scott, E. N. Smartt, A. Stewart, M. E. Thomson, A. M. Westropp, H. E. P. Wright, T. N. Wright, J. H. Woods, and J. F. Yates.

Thirteen were stopped.

MEDICAL VACANCIES.

The following vacancies are announced.

BURTON-ON-TRENT INFIRMARY.—House Surgeon. Salary, 130l. per annum. Applications by June 12th.

CHORLTON-UPON-MEDLOCK DISPENSARY.—House Surgeon. Salary, 100l. per annum. Applications to Mr. Adam Fox, [illegible], Princess Street, Manchester.

CORNWALL WORKS DISPENSARY.—Second Medical Officer. Salary, 200l. per annum. Apply for further particulars to S. F. Darby Weston, [illegible], Booth Street, Handsworth, Birmingham.

CUMBERLAND AND WESTMORLAND ASYLUM.—Assistant Medical Officer. Salary, 80l. per annum. Applications to Dr. Campbell, Garlands, Carlisle.

CUMBERLAND INFIRMARY, Carlisle.—House Surgeon. Applications by June 10th.

EAST SUSSEX, HASTINGS, AND ST. LEONARD'S INFIRMARY.—Assistant Physician. Applications by June 10th.

FLINTSHIRE DISPENSARY.—House Surgeon. Salary, 100l. per annum. Applications by June 11th.

FULHAM UNION.—Assistant Medical Officer. Salary, 100l. per annum. Applications by June 10th.

HAVERSTOCK HILL AND MALDEN ROAD PROVIDENT DISPENSARY.—Registered Practitioner. Applications by June 14th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by June 11th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Assistant Resident Medical Officer. Salary, [illegible] per annum. Applications by June 11th.

KINGTON UNION.—Medical Officer and Public Vaccinator. Salary, [illegible] per annum. Applications by June [illegible].

MANCHESTER SOUTHERN HOSPITAL, [illegible] Street.—Honorary Medical Practitioner. Applications by [illegible].

OWENS COLLEGE, Manchester.—[illegible] Dental Surgery. Applications by [illegible].

OWENS COLLEGE, Manchester.—Special Lecturer in Dental Mechanics and Dental Metallurgy. Applications by June 16th.

PARISH OF CHELSEA. Medical Officer of Health, Food and Drugs Analyst, and Gas Examiner. Salary, 450*l.* per annum. Applications by June 17th.

PARISHES OF NORTHMAVINE AND DELTING, Shetland.—Medical Officer. Salary, 60*l.* per annum. Applications to Mr. Robert Robertson, Inspector of Poor, Delting, Shetland, Lerwick, by June 30th.

QUEEN'S COLLEGE, Birmingham.—Professor of Anatomy. Salary, 262*l.* 10s. per annum. Applications by June 30th.

ROYAL BERKS HOSPITAL.—Assistant House-Surgeon. Applications by June 17th.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.—Honorary Physician. Applications by June 25th.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN.—Administrator of Anæsthetics. Applications to be addressed to S. V. Mercier, Esq., Secretary, St. John's Hospital, Leicester Square.

ST. MARY'S HOSPITAL, W.—Medical Superintendent. Salary, 150*l.* per annum. Applications by June 16th.

ST. MARY'S HOSPITAL MEDICAL SCHOOL.—Professor of Physiology. Applications to G. P. Field, Dean.

TOWNSHIP OF TOXTETH PARK.—Assistant Medical Officer.—Salary, 100*l.* per annum. Applications by June 11th.

TOWN OF CALCUTTA.—Health Officer. Salary, Rs. 1,250 per month. Applications to the Secretary to the Municipality, Calcutta, by July 15th.

WEST LONDON HOSPITAL, Hammersmith, W.—Assistant-Physician. Applications by June 30th.

YORKSHIRE COLLEGE, Leeds.—Professor of Physiology. Guaranteed Stipend not less than 300*l.* Applications by July 2nd.

YORK COUNTY HOSPITAL.—Assistant House-Surgeon. Salary, 50*l.* per annum. Applications by June 21st.

MEDICAL APPOINTMENTS.

Flood, F. P., M.R.C.S.Eng., appointed Honorary Surgeon to the Leeds Public Dispensary, *vice* W. H. Brown, resigned.

Le Cronier, John, M.D., appointed Consulting Surgeon to the Jersey General Dispensary.

Orwin, Arthur W., M.D., promoted to the office of full Surgeon to the Central London Throat and Ear Hospital.

Philipps, Sutherland Rees, M.D., appointed Medical Superintendent of the Asylum, St. Ann's Heath, Chertsey.

Rendell, H., M.B., C.M.Ed., appointed Assistant-Physician to the North-Western Hospital, Haverstock Hill.

Rowe, G. Herbert, M.R.C.S.Eng., appointed Honorary Surgeon to the Leeds Public Dispensary, *vice* C. J. Wright, M.R.C.S.Eng., resigned.

Russell, R. H., M.R.C.S., appointed House-Surgeon to the Salop Infirmary, Shrewsbury, *vice* W. Dowson, M.B., resigned.

Stewart, Andrew, L.R.C.P. and L.M.Edin., L.R.C.S. and L.M.Edin., appointed Honorary Surgeon to the Birkenhead Borough Hospital, *vice* S. Spratly, M.D., M.R.C.S., resigned.

Wood, G. Benington, M.B., C.M.Edin., appointed Resident Medical Officer to the Jersey General Dispensary, *vice* Frederick A. Hyne, M.R.C.S.Eng.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

DEATH.

Lloyd.—On Whitsunday, June 1st, at Boroughfield, St. Alban's, Ridgway R. Lloyd, M.R.C.S.Eng., aged 41.

St. Thomas's Hospital.—The following appointments have been made for the months of June, July, and August. *Resident House-Physicians:* C. D. Green, M.R.C.S., L.R.C.P. (extension); Walter Hull, M.B., M.R.C.S., L.R.C.P. (extension). *Non-Resident House-Physician:* F. W. S. Stone, M.R.C.S., L.R.C.P. *Assistant House-Physicians:* T. Scutt, M.R.C.S., L.R.C.P.; Y. Saneyoshi, M.R.C.S., L.R.C.P. *House-Surgeons:* F. F. Caiger, M.B., M.S. (extension); G. D. Johnston, M.R.C.S., L.R.C.P. (completion of term); G. F. Cooper, M.R.C.S., L.R.C.P. (completion of term). *Assistant House-Surgeon:* H. B. Robinson, M.R.C.S., L.R.C.P. *Resident Accoucheur:* John Orford, M.R.C.S., L.R.C.P. *Ophthalmic Assistant* (six months): S. W. Sutton, M.D., B.S. *Clinical Assistant in the Skin Department:* T. Glover Lyon, M.R.C.S., L.R.C.P.

Death from the Blow of a Cricket-ball. A schoolboy, aged 15, the son of Colonel Bruce Brine, R.E., while batting at practice on May 30th, was struck on the side of the head by a ball bowled by the school cricket-instructor. The lad continued playing for two hours more, but became unconscious four hours after the accident, and died in four hours more. No fracture of the skull could be detected, but it seems not improbable that there may have been fracture of the base and rupture of one of the meningeal arteries. The accident was attributed to the exceeding dryness of the ground.

Presentation.—Mr. Hugh Norris of South Petherton, on the occasion of his retiring from active practice, has been presented by his numerous friends with a handsome silver salver, accompanied with a purse of 150 guineas.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........	St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.
TUESDAY	St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.
WEDNESDAY ..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.
THURSDAY	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.
FRIDAY	King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
SATURDAY	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

Charing Cross.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th.; Dental, M. W. F., 9.30.

Guy's.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

King's College.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

London.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

Middlesex.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S. 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

St. Bartholomew's.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

St. George's.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

St. Mary's.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

St. Thomas's.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

University College.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

Westminster.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Odontological Society of Great Britain, 8 P.M. Casual communications by Messrs. W. St. George Elliott, W. E. Harding, David Hepburn, etc. A paper will be read by Mr. Oakley Coles On the Maintenance of Health amongst the Practitioners of Dental Surgery. Royal College of Surgeons of England, 4 P.M. Mr. Edward Albert Schafer: The Mechanism of Absorption.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Arbuthnot Lane: Three forms of Spinal Deformity. Dr. W. H. Broadbent: On a Particular Form of Amnesia—Loss of Nouns. Dr. Sharkey: Embolism of the Right Middle Cerebral Artery, producing Left Hemiplegia and Hemianæsthesia; Absorption of a Large Portion of the Right Hemisphere; Death Seven Years Later. Dr. Matthews Duncan: On Albuminuria with Parametritis. Dr. Stephen Mackenzie: Observations on the Weight of the Thyroid Body.

WEDNESDAY.—Epidemiological Society of London, 8 P.M. Dr. H. Franklin Parsons: Some Observations on the Etiology of Diphtheria. Dr. John Wortabet: Epidemiological Notes during the Autumn of 1883 in Beyrout, Syria. Office-bearers for the ensuing year will be nominated. Royal Microscopical Society, 8 P.M. Dr. J. Anthony: On the Camera Lucida. Mr. G. F. Dowdeswell: On Some Phenomena of the Red Blood-corpuscles of Vertebrates, with reference to the occurrence of Bacteria normally in Living Animals. Mr. C. D. Ahrens: On a New Polarising Prism. Mr. G. F. Dowdeswell: On the Constancy of Specific Morphological Characters in the Bacteria. Royal College of Surgeons of England, 4 P.M. Sir Henry Thompson: On Some Important Changes in Connection with the Surgery of the Urinary Organs.

FRIDAY.—Royal College of Surgeons of England, 4 P.M. Sir Henry Thompson: On Some Important Changes in Connection with the Surgery of the Urinary Organs.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications respecting editorial matters should be addressed to the Editor, 161a, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 161a, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal should be addressed to the Editor at the office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal, are requested to communicate beforehand with the Manager, 161a, Strand, W.C.

Correspondents who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered, are requested to look to the Notices to Correspondents of the following week.

Public Health Department.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

We cannot undertake to return manuscripts not used.

How Fever Spreads.

We have received from a medical man a copy of correspondence between himself and another practitioner, giving evidence of such gross carelessness, that we feel it deserves a special comment in these columns. The correspondent shows that the practitioner had sent for a monthly nurse to attend upon his own family, who were suffering from scarlet fever, and had actually permitted her to go direct from his house to nurse a woman whose confinement was immediately expected, and at a time when the children she had left were still in an infectious condition. Such disregard for the welfare of others is most discreditable, and words can hardly characterise too strongly such conduct on the part of a medical man, whose action cannot be excused on the score of ignorance.

The Wilson Fund.

Sir,—The following additional subscriptions to the Wilson Fund have been received since the last published list.

	£	s.	d.		£	s.	d.
Dr. Bartlett, Ipswich ..	1	1	0	Mr. Bryant	2	2	0
Mr. J. C. Hutchings, Tunbridge . . .	0	10	6	Dr. Walker, Peterborough ..	1	1	0
Mr. W. C. Worthington, Lowestoft	0	10	0	Mr. G. D. Collins, Broseley .	0	10	6
				Sir W. Gull, M.D., Bart. ..	2	2	0
				Mr. R. Flick, Saxmundham .	1	1	0

—I am, etc., H. A. Collins.

The Chantry, Saxmundham.

Hunc Caveto.

Sir,—The enclosed letter speaks for itself. It is, I think, desirable that such a barefaced attempt to [illegible] what ought to be unbiassed advice should be stigmatised as it deserves.—I am, yours, etc., F.R.C.P.

[Copy.]

Very honoured Colleague,—I am glad to inform you I became a consulting physician at [illegible] years ago, and in such a capacity solicit from your kindness to address me the patients to whom you advise this thermal station.

So many diseases derive benefit—scrofula, anemy, skin-diseases, rheumatism, diabetes, etc.—that it is easy to find a patient to advise these waters.

I will feel grateful for whatever you do for my advantage, and promise to pay you one pound for every patient coming under treatment through you to him.—Believe me, very honoured colleague, very sincerely yours. ——

—— May 1884.

*** The communication is one of a painful and degrading character, and fortunately unique in this country, in our experience. According to statements made with authority, the practice of consultants dividing fees with those who call them into consultation is not unknown in respectable quarters in various continental countries.

The Medical Act Amendment Bill and the Holders of Degrees.

Sir,—May I be permitted to state, in reply to the communication of "M.R.C.S.," in the Journal of May 31st, that Saving Clause [illegible] was introduced into the Medical Bill of 18[illegible] (at the instance of Lord Cranbrook) for the express purpose of protecting from the operation of the penal clause those legally qualified practitioners who, [illegible] British qualifications, possess a foreign university degree, the title of which they have been accustomed to use (see [illegible] April 5th, 1884).

It is true that the clause, as drafted by Lord Carlingford, seems to be of wide application, but there was no intention on the part of those who proposed it to include the [illegible] practitioners within its scope; and I would respectfully suggest to our Reform Committee that, after the second reading of the Bill in the [illegible] Clause [illegible] should be amended to read as follows:

"(66) Saving [illegible] by registered practitioners. This Act shall not make [illegible] any registered person, after the passing [illegible] of any medical [illegible] only using a title of any home, colonial, or foreign medical degree [illegible] possessed by him at the date of the passing of this Act."

Some such words as the above would, I think, provide for the vested interest (qui title) of all within the pale of the profession without sheltering charlatans.—I am, yours obediently, M.R.C.S.Eng., M.D.Heidelberg.

A Rare Work.

W. Berry asks if any of our readers can find the name of the author of an old work entitled [illegible]. It is a diatribe against the practice of midwifery by men. No copy of this work exists in the library of the Royal Medical and Chirurgical, or in that of the Obstetrical Society.

"New" Researches on Infection and Disinfection.

Sir,—With reference to your leader on this subject in the Journal of May 31st, permit me to quote the following from a short article by me On the Antiseptic Treatment of the Zymotic Diseases, published in the *Edinburgh Medical Journal* for September 1881.

"Granted the germ-theory to be true, it seemed to me to follow as naturally in medicine as in surgery, that the proper course to adopt was to kill the germs, or, if that be impossible without serious results to the patient, at all events to lower their vitality.... The variety of germs must necessarily be as great as that of the zymotics themselves, but there is also a variety af antiseptics as great as the variety of germs. We carefully attempt to destroy the germs in the air of the sick-room, and discharges of patients, by disinfectants. Why not also thus attempt their destruction in the body of the patient?"

I speak for myself, but I have no doubt that dozens of medical men have passed the same thoughts through their minds, which have now received prominence as a supposed new suggestion by the Waynflete Professor of Physiology in the University of Oxford.

Now it is not of much benefit to the race to have an "idea" without practically applying it. Accordingly, I prescribe carbolic acid for whooping-cough, internally, and also, in bad cases, by sprinkling of the solution about the room. In measles, I give syrup of tolu from the first; and in scarlatina, for the past twenty months (see memorandum in the Journal of February 10th, 1883), while using chloride of lime as a rule for external disinfection, I have carried out internal disinfection by the benzoate of ammonia, all with more satisfactory results than under the old principle of treatment.—I am, etc.,

A. Drummond Macdonald, M.B.Edin.

26, Spellow Lane, Liverpool.

Aberdeen, Banff, and Kincardine Branch.

Sir,—In the Journal of May 17th, there is a long report of a meeting of the Aberdeen, Banff, and Kincardine Branch; and in it I am made to say "that occasionally pulsation in the cord arose from the child, and not from the mother." A rambling conversation took place after Dr. Hall's paper, and one of my remarks was that I questioned the advisability of not tying the cord, and removing the child until pulsation in the cord had ceased, because compression of the cord shows that circulation between mother and child soon ceases; and that then the sooner the cord is tied and the child removed, the better.—I am, etc., A. MacGregor.

256, Union Street, Aberdeen.

A New Form of Stethoscope.

Sir,—Unless Mr. Brown will furnish further particulars as to his stethoscope than is given in the *Lancet* of 1877, I fail to see in what way his stethoscope differs from Stearne's binaural stethoscope; an instrument which (among other kinds) I have had in my possession for some time, and which is not adaptable to the various uses described by me. It forms a large cavity in the bell-shaped chest-piece, and is very different in many ways. In fact, the only points of resemblance are that both Stearne's stethoscope and my own have two tubes, and both have ear-pieces similar to those of an otoscope. Yours truly, Aydon Smith.

East Grove House, 18, Boundary Road, St. John's Wood, N.W.

Books on Diseases of Children.

Omega and G. F. P.—The reply to the question "What is the best book on the diseases of Children?" must be more or less a matter of individual opinion, but we may say that the books which probably best reflect the present state of knowledge may be taken to be, *A Practical Treatise on the Diseases of Children*, by Dr. J. F. Meigs and Dr. William Pepper, of Philadelphia; *A Treatise on the Diseases of Infancy and Childhood*, by Dr. Lewis Smith, of New York (both these books are published by Lewis, of Gower Street, and Dr. Smith's is the more recent); and the *Traité Clinique et Pratique des Maladies des Enfants*, by Rilliet and Barthez, which was long a standard work; the new edition of Barthez and Sanné appears likely to maintain its reputation, but only the first volume has been published. We are not acquainted with any work on diseases of Children in the tropics, but *A Manual of Family Medicine for India*, by W. J. Moore, C.I.E., Deputy Surgeon-General, published under the authority of the Government of India, by Churchills, in London, and by Thackers, in Calcutta and Bombay, contains much useful matter. Dr. Lewis Smith's books also deal with several diseases only or chiefly seen in non-temperate regions. The *Surgical Diseases of Childhood*, by Mr. Timothy Holmes, is distinguished by the author's well known learning and accuracy. We understand that a work on the same division of the subject may shortly be expected from the pen of Mr. R. W. Parker.

Cruelty to Horses in the Riviera.

Sir,—Having seen in your Journal, in the letters from Italy of Mr. Ernest Hart, a reference to cruelty to animals abroad, I venture to ask for a small space in which to state that friends in England are about to inaugurate a crusade against the shameful treatment of horses on the Riviera. With this end in view, we are trying to raise £100 as a starting fund, which will enable us to pay a travelling inspector, and extend the influence of such local societies for protection of animals as are already established. May I appeal to the generosity of medical men to aid in the protection of their faithful friend the horse? Cheques, postal orders, or stamps, will be gratefully received by me at 16, Rue Pierre Charron, Paris.—I am, sir, yours, etc.,

[illegible]

Shoeing of Horses.

Sir,—In 1872, I bought a Clydesdale-bred mare, four years old. [illegible] with [illegible] she was shaky [illegible] frequently and by lame [illegible]. I then had her shod on the Charlier system, and the result was that, in three months' time, the legs were [illegible] and [illegible] for the time [illegible] that I kept her, the same system being continued. She was [illegible] after twenty-five years hard work, with [illegible].

I have ever continued the same shoeing, except for a short time when country blacksmiths [illegible] the frog [illegible] of the foot. No stony or rough [illegible]. I had one lame for two days from throwing a fore-shoe at five miles from home, when the [illegible].

[illegible]

Yours faithfully, [illegible]

Fylham Hi[illegible].

Subscribers.—One month's notice.

Physicians in Health-Resorts.

Sir,—Is it so impossible as we commonly imagine to bring to book offenders against the obvious laws of professional etiquette? Of course, the time will never come when our profession will consist wholly of men of honour, but there is a lamentable want of moral courage in tackling men who are known to be flagrant offenders in these matters. The practice of meeting homœopaths in consultation, and of winking at other irregularities, is only too common among the "conscript fathers" of the profession. The corporations and universities also pay no regard to the conduct of their graduates or licentiates in these matters.

It may be a disagreeable and invidious thing to "post" offenders, but if every case of misconduct of this kind were at once reported to the Council of the Association or its Branches, and set forth on record in black and white for all time to come, we should find men less anxious than they now are to make themselves known by advertisements, either open or indirect. Personally, I think a regular advertised quack or a registered medical practitioner who advertises infinitely more respectable and honest than one who publishes quasi-medical lectures in ordinary newspapers; or, as is systematically done in continental health-resorts, and perhaps also in English ones—tips the *concierge* or the proprietor of an hotel, or gives the latter a bribe or percentage even on bills.

To expose in future all such cases at any cost, is the intention of yours truly,

Cato.

Strychnia and Tobacco.

Sir,—I can confirm by my own experience the effect of strychnia in producing a distaste for tobacco, as described in a letter headed "Result or Coincidence," in a recent number of the Journal.

Some years ago, I was ordered by a London physician a long course of arsenic combined with tincture of nux vomica. After taking the mixture a fortnight or so, I was surprised to find my taste for tobacco subsiding, and I very soon took a positive dislike to my pipe. That the arsenic did not produce this effect, I proved by omitting it for a time from the mixture. A year and a half afterwards, being quite well, and having regained my "tobacco-appetite," I had occasion to take some "Easton's syrup" for climatic debility contracted in Egypt, and found the same distaste for smoking to return. I daresay similar instances could be collected. It follows that the habit of smoking could be easily broken, if required, by a mild course of strychnia.—I am, sir, yours obediently,

Medicus, R.N.

The Cause of Cholera: a New Theory.

Sir,—I was particularly interested to read the account of experiments made by Mr. Vincent Richards, in India, on the nature of the poison of cholera, as described in the British Medical Journal of May 24th last, page 1008. He thinks that the poison is not an organism, but a chemical compound which can easily be destroyed, for instance, by permanganate of potash.

In the year 1866, I had an outbreak of cholera to attend in one of the districts of the Saffron Walden Union in Essex, to which I was then medical officer. There were forty-two cases and eight deaths. I said at the time, and have often referred to it since, that the only thing I found to do any real good was Condy's fluid, well diluted with cold spring water, and given as a drink freely. I first tried it merely as an experiment.—I remain, your obedient servant,

Wateringbury, Kent. John William Fry.

Royal College of Surgeons of England.

The following questions in Anatomy and Physiology were submitted to the candidates at the primary examination for the Fellowship on May 23rd. *Anatomy* (three questions to be answered): 1. Give the dissection required to expose the complete dome of the pleura of the right side. 2. Describe the action of the muscles passing between the trunk and upper limb in reference to the movements of the shoulder-girdle and arm upon the trunk. 3. Describe fully the twelfth dorsal vertebra, mentioning the various structures attached to it. 4. Describe the dissection required to expose the transversus pedis muscle.—*Physiology:* 1. What are the distinctive functional and structural characters of animal and vegetable cells? Give the evidence on which your statement rests. 2. Describe the means by which a muscle-curve is obtained. What circumstances modify the contraction of muscle, and the form of the muscle-curve? 3. Assuming the right forearm to have been voluntarily flexed, describe the cause of the nerve-impulse by which this movement was excited, from the cerebral motor ganglion-cells to its exit from the cord. Give the evidence on which your answer is based. 4. Describe the mechanisms by which accommodation is accomplished, and the methods of accurately determining them.

Chloroform-Narcosis during Sleep.

Sir,—Whilst reading your article on Dr. Girdner's chloroform-narcosis during sleep, I thought it might be of interest to record my own experience in such cases. When acting as house-surgeon at St. Thomas's, and at the York county hospitals, I frequently endeavoured to induce chloroform-narcosis during sleep; and I have succeeded in doing so at least twenty times, without the intervention of consciousness. Some of these I have a very distinct remembrance of, especially one little boy who expressed great astonishment on finding himself in a different ward the next morning, for he had been moved during the night. This plan of giving chloroform to a sleeping child has several advantages. In a hospital, a great deal of noise is avoided, a matter of importance to other patients; and the strugglings of a frightened child are prevented. Chloroform is the only drug I have ever used in this method; and I have never tried to narcotise sleeping adults. Occasionally, the child awakens shortly after beginning with the inhalation, but I think this is always due to the vapour being too concentrated, and irritating the nasal mucous membrane. It is also necessary to continue the inhalation much longer with a sleeping than with any other child, as with the former the respiration is slow and shallow. The rules, then, are, in these cases, to use a weak vapour, and to take plenty of time. Anybody carrying these out will be, I am sure, successful in the great majority of instances. Once being present when a pig was about to be killed, I obtained permission to administer chloroform. We found the animal asleep, and, by the aid of a sponge and walking-stick, I succeeded in rendering my patient insensible without awakening him, after which the butcher did his work. I may add that the meat obtained from this animal did not seem to differ in taste or smell from ordinary pork.—Yours obediently,

York. F. H. Weekes, M.R.C.S.

COMMUNICATIONS, LETTERS, etc., have been received from:

Sir Henry Thompson, London; Our Dublin Correspondent; Our Edinburgh Correspondent; Dr. Pyle, London; Mr. T. M. Stone, London; Mr. Morrant Baker, London; Mr. J. Lloyd Roberts, Denbigh; Dr. J. W. Moore, Dublin; Dr. Orwin, London; A Guy's Student; Dr. Philipson, Newcastle-on-Tyne; Sir T. Spencer Wells, London; Dr. Pye-Smith, London; Dr. Yarrow, London; Mr. F. Long, London; Mr. B. Jones, Leigh; Mr. J. Parette, Bristol; Dr. L. Humphry, Cambridge; Mr. T. Bates, Worcester; Dr. R. Lee, London; Mr. A. H. Benson, Dublin; Dr. Huggard, London; Dr. L. H. Ormsby, Dublin; Mr. W. E. Stainton Stanley, Wellow, Bath; Dr. A. W. Edis, London; The Right Honourable the Lord Mayor of London; Mr. J. B. Richards, Torquay; The Secretary of the Collective Investigation Committee; Dr. Crookshank, Cairo; Mr. J. L. Chambers, London; Mr. Shirley F. Murphy, London; Mr. Henry Greenway, Plymouth; Mr. J. W. H. Flanagan, Nusseraban, India; Mr. J. H. Gwynne, Cannock; Mr. G. F. Hodgson, Brighton: Dr. A. S. Merrick, Belfast; Dr. G. E. Shuttleworth, Lancaster; Mr. Andrew Stewart, Birkenhead; Dr. J. K. Spender, Bath; Mr. St. Clair B. Shadwell, Walthamstow; Mr. A. Eccles, Torquay; Mr. J. West, London; Dr. Day, London; Mr. F. Bingham, Purfleet; Our Belfast Correspondent; Mr. T. J. Verrall, Brighton; Mr. W. H. Flower, London; Dr. H. C. Pope, London; Dr. MacGregor, Aberdeen; Mr. H. A. Collins, Saxmundham; Dr. F. S. Palmer, East Sheen; Dr. Chavasse, Birmingham; Mr. T. L. Bashford, Berlin; Mr. Lawson Tait, Birmingham; The Honorary Secretaries of the Aberdeen, Banff, and Kincardine Branch; The Secretary of the Guildhall School of Music; Dr. W. Williams, Liverpool; Mr. William Donovan, Romsey; Mr. Robert Holtby, York: Mr. FitzJames Molony, Porlock; Dr. A. Collie, Homerton; Mr. Martin, Belfast; Mr. L. H. Tosswill, Exeter; Mr. N. E. Davies, Sherborne; Dr. S. Rees Philipps, Exeter; Mr. A. de Winter Baker, Dawlish; Mr. W. J. Walsham, London; Dr. Styrap, Shrewsbury; Mr. A. Drummond Macdonald, Liverpool; Our Birmingham Correspondent; Mr. W. Berry, Wigan; Dr. Crichton Browne, London; Mr. J. J. Lidye, London; Dr. C. Macdowell, Carlow; Mr. M. Thornton Parker, Fort Union; Mr. John Ferguson, Manchester; Mr. Joseph Thompson, Nottingham; Dr. James Anderson, London; Surgeon-Major Partridge, Anerley; Mr. A. Cunningham, Oldbury; Mr. A. R. Barnes, Boreham Street; Mr. J. H. Williams, Bootle; Dr. Thomas Barlow, London; Mr. H. Ludford, Maidstone; Mr. E. F. Flynn, Sunderland; Dr. Joseph Hatchett, Ashby-de-la-Zouch; Mr. C. J. Bond, Leicester; Mr. W. H. Bennett, Omagh; Dr. E. Whittle, Liverpool; Dr. W. S. Paget, Great Crosby; Dr. J. Knox, Bakewell: Dr. D. J. Mackenzie, Glossop; Dr. Crowdy, London; Mr. R. E. Power, Portsmouth; Mr. B. Jones, Leigh; Our Liverpool Correspondent; Dr. J. N. MacKenzie, Baltimore, U.S.A.; Mr. Dixon, Hove, Brighton; Mr. N. H. Nixon, London; Dr. Maclagan, London; Dr. C. Godson, London; Dr. F. Argles, Teignmouth; Mr. J. P. Graves, Waterford; Dr. D. Hepburn, London; Mr. A. Wilson, Leytonstone; Our Paris Correspondent; Our Aberdeen Correspondent; Dr. Steavenson, London; Mr. C. B. Keetley, London; Dr. Ward Cousins, Southsea; Our Glasgow Correspondent; Dr. T. H. S. Pullin, Sidmouth; Dr. C. Parsons, Dover; Dr. Fisher Brighton; Mr. H. Cribb, Bishop's Stortford, etc.

BOOKS, ETC., RECEIVED.

Death and Disease. By Thomas Southerst, Barrister-at-Law. London: Kegan, Paul, Trench, and Co. 1884.

Manual of Pathological Anatomy. By Cornil and Ranvier. Second Edition. Re-edited, Enlarged and Translated, with approval of the Authors, by A. M. Hart. London: Smith, Elder, and Co. 1884.

Eczema and Its Management; A Practical Treatise, Based on the Study of Three Thousand Cases of the Disease. By L. Duncan Bulkley. London: G. P. Putnam's Sons, and J. and A. Churchill. 1884.

The Treatment of Backward Displacements of the Uterus and of Prolapsus Uteri, by the New Method of Shortening the Round Ligaments. By W. Alexander, M.D. London: J. and A. Churchill. 1884.

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LECTURES
ON
SOME IMPORTANT POINTS IN CONNECTION WITH THE SURGERY OF THE URINARY ORGANS.

Delivered at the Royal College of Surgeons, June 1884.

By SIR HENRY THOMPSON, F.R.C.S.,
Surgeon Extraordinary to His Majesty the King of the Belgians, Professor of Surgery and Pathology to the Royal College of Surgeons, Consulting Surgeon and Emeritus Professor of Clinical Surgery to University College Hospital, etc.

LECTURE I.—INTRODUCTORY. THE TREATMENT OF STRICTURE OF THE URETHRA BY INTERNAL URETHROTOMY.

IT will be my object, in this course of lectures, to consider certain grave forms of disease which affect the urinary passages, for the purpose of examining the nature of these affections, and to discuss the best method of treating them. I cannot enter upon this important task without expressing my deep sense of the very high honour which the Council of the Royal College of Surgeons confers in assigning to me the position which I occupy to-day. Equally also am I conscious of a profound feeling of responsibility in accepting their invitation to present, in this place, an exposition of opinion relating to some of the most important themes of thought and activity which have occupied the intellects and the energies of surgeons from the earliest time to the present day.

There are two considerations which I am bound to submit to you, since they are those which have influenced my own mind as in some degree a justification for my presence here, and which sustain me in view of the task imposed. The first is, that a period of twenty-five years at least of very active engagement in the practical observation and treatment of the diseases in question has furnished an experience which, I believe, is almost without parallel at the present day. The second consideration is, that it has been my habit from the very first carefully to record at the time, in writing, every case I have seen; and that such notes are systematically arranged and preserved, so that they can be produced and referred to whenever required. It is my sincere desire now to offer to my professional brethren a faithful epitome of these facts, so far as they relate to the subjects treated in this course of lectures.

One word more I venture to utter regarding myself, and I do so only for the purpose of explaining how it is that the experience referred to has been so ample in regard of these particular diseases. I do so with the less difficulty, because the explanation is found almost solely in connection with our Royal College here. I just now spoke of twenty-five years of active surgical practice; but thirty-three years have elapsed since the Council of our College offered for competition, in 1851, as the subject of a Jacksonian Prize, "The Pathology and Treatment of Stricture of the Urethra," many questions concerning which were at that time warmly discussed by the profession both at home and abroad. The time happened to coincide with my entry on professional life, after an active house-surgeoncy at my hospital and elsewhere; and such a proposal offered the very occupation wanted by one whose time was now unoccupied, and who desired nothing so much as a defined object at which to work seriously and laboriously. It was the accident of obtaining that award, and, not long after, another Jacksonian Prize—an essay on the Prostate in 1860—which determined the nature of a career which I had never dreamed of thus shaping for myself. I claim, therefore, the honour of being in an especial sense—and it is a legitimate source of pride, I trust, within these walls, to do so—a son of our noble College; and, after the third of a century continuously devoted to studies thus initiated, I am here to report myself at the paternal hearth to-day, happily finding one of my earliest teachers and college-friends worthily occupying the presidential chair. The seeds were sown, sir, by your predecessors here; and they selected the variety which was distinct. The gathered harvest could only correspond thereto; and, such as it is, I desire, with your permission, to garner it here.

[The lecturer then gave a brief but carefully considered historical sketch of the treatment of stricture of the urethra, in England and abroad, during the present century, with a view of "tracing the formation of opinion respecting it, and of pointing out a growing concurrence in opinion among practised surgeons that, in dealing with stricture by operation, free incision of all the opposing structures must be adopted, or the result will be temporary only, and disappointing.]

I have just alluded to Professor Syme's early enunciation of this principle, which he decided for himself could only be effectively realised in practice by an operation performed in the perinæum, a proceeding which met with great opposition here, and was the occasion of a very acrimonious discussion. A cardinal defect in his method is now, at this distance of time, apparent. Recognising the truth on which I have been insisting, that the division of the stricture must be complete, he limited himself to the division of one stricture only, rarely being able to reach or deal with two from the perineal wound, if, indeed, he cared to recognise the existence of multiple stricture; or, at all events doing so, he believed in the disappearance of other or minor contractions, after the principal stricture had been freely divided. There is no warrant, however, for any such belief; it will not suffice for the purpose of affording substantial relief to a patient, whose urethra is narrowed by stricture in two or three distinct situations, to divide, however freely, only the chief of these, and leave the rest untouched. So far from a secondary narrowing disappearing after what has sometimes been termed "the master stricture" has been cut, it often happens, at no distant period, that the points formerly slightly affected seem to assert themselves more obstinately than before. I cannot, therefore, insist too strongly on the value of an axiom, which I will venture thus tersely to formulate—"if you cut at all, cut all," that is, all the points in the urethra at which the presence of obstructing deposit is to be demonstrated, and all the obstructing tissue at each point. Such is the unhesitating conviction which a long experience of internal urethrotomy has forced upon me.

In the year 1854, I published the Jacksonian essay referred to; and, after much personal intercourse and study with Professor Syme, I adopted his view in relation to the permeability of stricture—a circumstance which I now regard as one of the most valuable of the many important lessons I learned from that most able, fearless, and honest man. I have, in the course of my life, met with three instances in which, after much careful manipulation, I have been unable to pass an instrument fairly into the bladder; and in these three instances only have I performed perineal section for the relief of stricture without a guide previously passed. Between 1852 and 1855, I operated by Syme's method of external urethrotomy upon a grooved staff nine times only, thenceforth exchanging it for internal urethrotomy, which I have practised systematically ever since; at first, on the very worst forms of the disease only, and gradually, as the result of increased confidence in it and satisfaction with the results, much more frequently than at first. And now and then, but very rarely—for example, when large abscess and perineal fistula affect the perinæum—the division on a grooved staff has still been resorted to. These remarks on this important subject lead me now to present briefly an epitome of what my experience has led me to regard as the safest and most efficient mode of treating a confirmed example of organic stricture of the urethra.

I think it will be agreed by most experienced surgeons that, on first verifying the presence of an urethral narrowing, the history of which is recent, as a rule, nothing need be done beyond gradually restoring the calibre of the canal to its normal state, or thereabouts, by means of flexible bougies. The well known form styled "olivaire" can scarcely be improved; and if it be desired to carry the process of dilatation as far as possible, the well polished tapering silver or silver-plated steel dilators are very efficient, and at the same time uninjurious to the passage. Modifications of the flexible bougie are, however, now so numerous, in regard of form, material, and even also of their internal contents, that each surgeon will doubtless employ most advantageously that which best accords with his own views and with his own manner of manipulating. There are, of course, congenital [illegible] as well as acquired narrowings of the external meatus, [illegible] which will not dilate, and which a simple incision [illegible]. Strictures also affecting the canal within three or four inches of the orifice do not benefit much, or for any prolonged period, [illegible]. But when, in the ordinary case of recent stricture, the canal has been restored to a full calibre by dilatation, it may be [illegible] by an occasional regular use of the bougie by the patient himself for several, sometimes for many, years. In time, however, [illegible] tissues become more rigid, those which form the stricture [illegible] less readily, and a smaller instrument [illegible] passed. But sometimes even this [illegible]. For which reason I think it unwise, as a rule, to propose an operation in the early stage of stricture, but prefer to [illegible] a patient the chance of its being amenable for many years [illegible] altogether, [illegible] treatment indicated. But when [illegible] manifests itself, be it sooner or later, I think it is wise to resort to internal urethrotomy without delay. Were this plan always pursued, we should have no perineal abscesses or fistulæ, no consecutive chronic cystitis, with organic changes in the bladder, ureters, and kidneys, as a result. To advise the delay of an operation until symptoms indicate that such complications are appearing, involves complicity in a course which irretrievably damages the patient's life. Hence I have no hesitation now in advising internal urethrotomy whenever organic stricture, single or multiple, near or distant from the meatus, shows signs of not yielding readily to dilatation. No delay is, in these circumstances, of any value as regards the stricture.

When cases are first met with in a more advanced stage; when the use of dilating instruments is liable to be followed by temporary retention of urine, or by rigors, then very little question can arise as to the propriety of operating. It is very rarely too late to incur any risk there may be in doing so; and the persistence of the phenomena mentioned must, if not checked, undermine the constitution of those who are the subjects of them. In relation to those cases in which rigors almost always occur after the passing of a bougie, I know nothing so admirable as the results of urethrotomy; since, if completely performed, the operation itself is, in these very cases, rarely followed by such an occurrence.

I am convinced, therefore, of the necessity of ensuring complete division of all the obstructing tissue; not only in relation to future results, but to the present well-doing of the patient; and thus have an additional support for the value of my maxim: "If you cut at all, cut all."

This brings me to a very important subject. How are we best to ascertain, before undertaking to divide the morbid tissues constituting stricture, what are their extent and situation? In other words, what is necessary, for our purpose, to be done in order to diagnose the physical condition of the urethra?

It may first of all be remarked that, in a simple and recent case of strictured urethra, and therefore for a large proportion of all the cases of stricture, a very simple proceeding suffices to ascertain where and to what extent the canal has been morbidly narrowed. And as all instrumental interference with the urethra, however delicately effected, is apt to provoke irritation, which in a few persons is serious, we are not warranted in introducing large or complicated mechanical contrivances for the purposes of diagnosis, at all events in recent cases.

It suffices for the purpose to introduce a full sized bougie, by which I mean one which will pass in a healthy urethra without stretching it, merely separating its walls, to about the same extent as the flow of a full quantity of urine will do, when it passes naturally. Such a stream, in most persons, equals a volume, perhaps, of ten, eleven, or twelve of the English scale. If such an instrument fail to pass, we diminish the size until one is found which does pass; after which, dilatation may mostly be speedily and effectually made, and nothing more may be necessary. If more specific information be desired, in an exceptional case, a series of solid bulbous-ended instruments, of which the stem is slender, and each bulb follows the sizes of the catheter-scale employed, will supply accurately the data required, and on the easiest terms possible to be obtained. Such a series I have used for thirty years, and no other except for trial; and I have never seen any plan equal to this for simplicity, efficiency, and for effecting the object without inducing irritation. They are better also than flexible instruments of the same form, which are less easily used, and are far less accurate in the indications they afford.

Suppose, then, the case of a patient for whom it is decided to perform internal urethrotomy. The external meatus is first examined, and is often found to be contracted; a bulb, say No. 12 or 13 in size, passes tightly through it, and stops perhaps at an inch or more from the orifice; after the use of three or four smaller sizes, a No. 9 passes, and meets a check at five inches; and here, after other trials, a No. 2 or 3 goes on into the bladder. On withdrawing the bulbous instrument, the situation of the contracted parts is again verified by the check which the bulb receives in passing them in its progress outwards. It is clear, therefore, in such a case, that there are at least two chief points requiring incision, besides the orifice. This is all that need be ascertained before the patient is rendered insensible for operation, when the examination may be repeated, if the surgeon desire to do so with more minuteness before incising.

Now, at this point, it is necessary to consider some preliminary questions of importance—namely: What is the principle on which an intra-urethral incision which is out of sight ought to be made; and what is the best instrument to accomplish the purpose? Is the division of tissue to be complete, and to be made solely according to the judgment of the operator; or, is it to be made by a machine, the action of which is not necessarily to divide all opposing tissue, but simply to do so sufficiently to permit the introduction of a fair-sized catheter through the urethra, when the cutting-instrument is withdrawn? For example, we may introduce a small grooved staff along the urethra into the bladder, and then slide along the directing groove a blade more or less protected, so as to divide such tissues as lie within range of its point or edge, and no more. But this, I contend, is not an efficient mode of dealing with urethral obstruction, if its complete division is the object to be attained. Complete division, indeed, is rarely thus accomplished; much of the diseased tissue usually escapes the blade; the result is uncertain, and is far less perfect than that which follows a section made by a knife, directed by the will of the surgeon against the resistance encountered at the time, and previously ascertained by exploration. I suppose that a keen blade of appropriate form, and completely under the control of his hand, would be always employed by a surgeon, for use in any other part of the body than the urethra, when he desires to make an incision, the limits of which are to be carefully defined. For my own part, I can see no reason why that spot alone should be excepted from the action of this principle.

Take the fibres which confine a hernia, for example; here, the finger and the blade act in perfect harmony, the section depending entirely on the delicate perceptions of the former, which determine the surgeon's judgment during every moment of the cutting act. The section in tenotomy is, perhaps, a still more apposite illustration of the necessity that exists for an intelligently made division of every fibre, which opposes the return of the limb to its natural position. In both instances the section is made from the sense of touch only, and without the aid of vision: and it appears desirable that a like control should govern the act of dividing those bands which encompass the urethra and form the stricture. No mode of section is half so certain, so safe, and so satisfactory, as that of drawing through them from within outwards a little blade attached firmly to a long slender handle, a proceeding completely under the control of the surgeon's hand. I know that this is not the generally accepted mode of operating either here or elsewhere. It is precisely for that reason, cherishing as I do strong convictions as to the superiority of the method, that I have determined to make its advocacy the main theme for our consideration to-day. I am told, both here and abroad, that the cutting blade sliding in a groove, of which Maisonneuve's instrument is the type, is so simple and safe a proceeding that any man, however unpractised, may perform it. Is that a reason in its favour? The same doctrine was very lately taught in relation to the method of splitting strictures by means of two diverging rods, at one time so much in vogue, now so completely and so properly neglected, but always so easy of performance! Are we to accept an unsatisfactory proceeding because of its universal applicability, and thus be content to establish an imperfect standard for the sake of bringing it within the reach of incompetent operators? Between the two systems now under consideration, there is this difference; one is the product of a machine, and the other is the handicraft of an artist. And the same distinction, which is so obvious in regard to innumerable forms of human activity, between the uniform and commonplace results of machinery and the finished achievements of the intelligent painstaking artist, marks the character of the two modes of operating now in question. And let me remark that the practice of operative surgery becomes a sorry occupation if it be not indeed an art, and a very fine art, too! So far as it becomes a mere matter of mechanical contrivance, it ceases to be worthy the devotion of a man of parts. A cultivated hand is the most cunning and effective source of power; and the simpler the instrument employed the greater is the influence of that hand, and of the intelligence which guides and permeates it.

In operating for stricture, I have, during the last twenty-five years, used only a little blade with a long handle, and have always commenced by placing that blade on the further side of the stricture, and made the incision in a direction towards me, that is, from behind forwards, cutting just so much in length and in depth as the obstruction perceived at the moment appears to demand.

Now, in order to place a small blade beyond or on the bladder-side of a stricture, a certain amount of space in the urethra is required. In the case above supposed, in which the deeper stricture of the two admits only a bougie No. 2 in size, there is not room for a sufficiently strong instrument containing the blade to be so placed; but a little dilatation will enable it to pass. The calibre of No. 5, English, suffices for our purpose. Hence, in such a case, I simply tie in a gum-catheter (No. 1 is ample for the purpose), and retain it there two, or at most four, days. By that time, without changing the catheter for a larger one, or if so only once, the necessary enlargement of calibre is accomplished.

The urethrotome which I employ is made on the principle of the one used many years ago by Civiale, modified in one or two points by myself. The bulbous end has a mean diameter of No. 5; the stem is about 2½ or 3. The patient being under the influence of an anæsthetic, the little catheter which has been tied in is withdrawn, and the urethrotome is first introduced as far as to the deep-seated stricture, through which the terminal bulb is then insinuated. It must now be passed fully half or three-quarters of an inch further in, that is, beyond the stricture; and the blade being exposed in a direction towards the floor, is pressed firmly thereon and drawn forward, until all resistance, sometimes considerable, is completely overcome. A touch on the button near the handle sheaths the blade, and the outward movement proceeds until the site of the second stricture is reached, when another incision is made in the same manner as before. The urethrotome is then withdrawn, and the meatus freely divided by a scalpel or short urethrotome. I next take a blunt metal bougie or dilator, No. 15 or 16, English size, and ascertain if it will pass without obstruction into the bladder. It generally does so at once; if, however, its progress be arrested at any point, the situation of this is carefully noted, when I withdraw the dilator, reintroduce the original urethrotome, and divide the opposing tissue; but this, as I before said, is seldom necessary. I may add that I am very rarely satisfied with anything less than the free and easy passage after the operation of a metallic sound, No. 16 in size; in some cases, No. 17 or even 18 will pass. A gum-elastic catheter, No. 12 or 13, is then tied in, and should remain always 48 hours; with an extra 24 or 48 hours, if the incisions have been deeper than usual, or if hæmorrhage be free or continuous, the latter being a very exceptional occurrence.

It is sometimes objected that, if a small instrument can be easily passed through the stricture, and if this may be easily dilated so as to admit an urethrotome as large as No. 5, why should any cutting operation be performed? The reply need only be brief; the object of division is to remedy the tendency to recontract, which certain strictures exhibit, and which almost all do when they have continued several years. In other words, it is marked contractility in a stricture, and not mere narrowness, which renders operation by incision desirable.

An important inquiry remains: What are the results of internal urethrotomy in relation to the reappearance of stricture? Does the operation free the subject of it from that liability to return which constitutes the very serious character of the disease when treated only by dilatation?

The reply to this question cannot be a simple and categorical one; it must be made with limitations.

I may remark first, that it may be taken for granted that no mode of urethrotomy which fails to ensure complete division of the obstructing tissues has a chance of affording permanent immunity from the complaint. Whatever be the mode of operating, if incomplete division only be effected, the patient will find his urethra narrowing after a more or less prolonged interval of time. What happens then in those cases in which, as far as the operator can judge, he has effected a complete division? Well, I am free to confess that it is not possible to promise immunity from return. We may render the period of return as remote; we may produce a good calibre, easily maintained by occasional regular dilatation, a procedure which, before the operation, was not only ineffective, but painful and irritating. We may place a patient in a condition of health and comfort for several years, meantime saving his bladder, ureters, and kidney from the slowly but surely occurring grave changes which threaten his existence. Now and then, but rarely, I have met with a case in which the patient's troubles have never re-appeared. I am certain we cannot reckon on this result as a rule, and I mistrust claims to the contrary as due to error of judgment, or want of information, or as prematurely made, *i.e.*, without waiting sufficiently long to observe remote results. In enunciating this opinion, I have no hesitation whatever. But herein I have stated the worst in regard to the patient's prospects, and have shown you the reverse of the medal. Thus, supposing after a few years the patient finds himself unable, through re-appearance of contraction, to pass a bougie of adequate size, division can again be resorted to. It is not a dangerous proceeding, necessarily occasioning hesitation on the part of the patient, when his condition demands relief. Just as in calculous cases, a second, a third, or even a fourth stone can be, and often is, safely removed by lithotrity when, after the lapse of time, fresh products are formed; thus also may a stricture be dealt with by this operation, a second or a third time if necessary. By the prompt resort to the remedy, should it be again required, the disease may be confined to the canal, and the real gravamen of the malady, the implication of vital organs, certain to result after long continued ineffective dilatation, is altogether avoided.

I have performed this operation now for between three and four hundred patients. Some of my earliest cases were, from want of sufficient confidence and experience, less completely and freely cut than those on whom I have operated of late years, and a few of the early patients have been recut. I have not regretted such advice in a single instance, for the advantage to them has been undoubted.

The risk of the operation is very small. Estimating the number of patients on whom I have performed it as 340, which is within five, more or less, the deaths have been six, or not two per cent. These were due to pyæmia in three, to embolism in one, to extravasation and exhaustion in two; one of the latter was a case in hospital almost thirty years ago, among my earliest, and he was unfit for any operation.

The sum of my experience is the expression of a strong conviction that internal urethrotomy, completely performed, should be resorted to as the best and safest treatment of stricture, as soon as the easy use of the bougie fails to maintain the urethra patent, or to allay signs of irritation in the bladder arising from obstructed urethra. It is the best means not only for relieving urethral obstruction and its painful symptoms, but for ensuring the future sound condition of the organs which lie behind it.

A CLINICAL LECTURE
ON TROPICAL LIVER-ABSCESS.

Delivered at Charing Cross Hospital, May, 1884.

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Gentlemen,—You will remember that, when recently directing your attention to the case of J. S., who was suffering from tropical diarrhœa, I pointed out to you certain complications which seemed to remove it from the category of ordinary examples of this disease, and to render the prognosis more doubtful than it might otherwise have been. The symptoms referred to were a continuous daily rise of evening temperature to 100° or 101°; a tendency to sweat; a dry, glazed, and fissured tongue; anxious expression of countenance; a sense of fulness, sometimes of pain or uneasiness, on pressure over the liver; some tension of the recti muscles; with defective respiration, signs of consolidation of the base of the right lung, and cough. At the same time, the diarrhœa from which he had been suffering had ceased, and the dejections had become formed though copious, once a day, as is the case when much milk is taken. On the 7th instant, I found that symptoms of hepatic mischief had become more pronounced, and there was an appearance of bulging of the right side, which was not, however, confirmed by measurement.

His condition had become one of grave anxiety. At my request, therefore, Mr. Barwell introduced an aspirating trocar and cannula between the eighth and ninth ribs, in a line between the axilla and nipple; and, as I anticipated, pus escaped through the tube. The opening was at once enlarged by a free incision, and about thirty ounces of thick dark coloured pus, mingled with blood, escaped. A large drainage-tube was placed in the wound, the strictest antiseptic precautions being observed throughout the proceeding. The patient experienced great relief, and there was a rapid fall of temperature, which has remained normal since the operation. The look of anxiety and suffering, and the pain in the hypochondrium, have passed away. The sweats have diminished. He eats and sleeps well.

The case is one of considerable interest, and so instructive in its character that I have thought it well to invite your attention to it, and at the same time make it the text for some remarks on the subject of tropical liver-abscess generally. I speak of this disease as "tropical," because it most frequently occurs in those who live in hot and tropical or subtropical countries, or who have resided there for some time previously, as was the case with our patient, J. S. Of course, the liver may suppurate from certain causes anywhere; but the form of liver-abscess I am now considering is essentially a disease peculiar, if not confined, to hot climates; or rather, I should say, the conditions which give rise to liver-abscess are prone to occur in those countries; the suppuration itself may appear after return to a temperate climate, as in S.'s case.

Hepatic suppuration is not limited to the tropics, it may occur anywhere; but, in this country, it is comparatively rare, and is generally due to septic absorption from some wound, operation, or ulcer of the stomach, gall-bladder, or its duct; or to suppuration in the pelvic cavity or about the hæmorrhoidal region. Such cases are pyæmic, and very different from the large single abscesses found in tropical residents, but similar to certain forms which occur in connection with dysentery, and are due either to direct septic absorption through the veins, or to general septic poisoning. In the latter cases, the abscesses are apt to be numerous, and the liver may be studded with suppurating patches, where the pus has formed round portions of necrosed liver-tissue; these are most dangerous, perhaps generally fatal.

Let me briefly describe to you the different forms in which liver-abscess presents itself; but you must not expect that you will be able always to distinguish them easily; for, like other things classified, the forms may seem to run into each other, though typical examples are tolerably distinct.

First, then, the large single, or generally single, abscess is referable to heat, malaria, the effects of a tropical climate combined with altered conditions of living, food, drink; the excessive or injudicious use of alcoholic beverages; though you must not assume that, in all cases, intemperance is a cause. Tropical abscess may and does occur even in the most temperate, but it is more frequent in those who live freely. This abscess is often large and solitary (quite recently I removed eighty ounces and, again, fifty ounces, from the same liver within a week); there may be more than one abscess. The formation is generally preceded, especially in the sthenic, by fever, pain, and all the signs of active inflammation. Sometimes it assumes a more chronic form, and is insidious in its course, presenting no well defined symptoms, or so slightly marked as to escape observation until the existence of an abscess is revealed by bulging of the thorax, pointing in the epigastrium or below the ribs, or by sudden evacuations of the contents through the stomach, lungs, or bowels, or into the peritoneum, or it may be not until examination after death from some other disease. I have frequently detected liver-abscess where the symptoms were very obscure, indeed absent; and where it was not suspected. As a general rule, the prognosis of liver-abscess of the simple form, if it be recognised and properly dealt with early, is not unfavourable, though one must always feel uncertainty; but if early evacuation of its contents be effected, recovery is hopeful. The evacuations may take place spontaneously through any of the channels before mentioned; but if you are able to detect pus, and can remove it by a puncture, the chances of recovery are enhanced.

Secondly, liver-abscess, following or co-existing with dysentery and tropical diarrhœa, was regarded by Murchison and others as pyæmic, and due to absorption of pus or septic matter from the ulcerated bowel, and therefore similar to the septic liver-abscess of temperate climates. That this is the case in some instances is indisputable; and when multiple liver-abscesses occur in a person who is or has recently been suffering from dysentery or chronic diarrhœa, complicated with ulcerated bowels, or fever with Peyerian ulceration, no better explanation of its origin could be given; such cases are very dangerous. Let me ask you to note the nature of the abscesses in cases of this truly pyæmic character. They begin as patches of necrosed tissue, embolisms, or infarctions; which, if the patient live long enough, as generally happens, become abscesses from suppuration occurring around the dead tissue, as in the case of the core of a boil. This becomes the centre of a cavity, varying in size from a pea to an orange, containing *débris* of tissue, leucocytes, and finally pus, the whole being surrounded by an area of congested, and sometimes pus-infiltrated, liver-tissue. Such abscesses as these occur also in the other viscera; lungs, spleen, and kidneys; they are evidences of general septicæmia.

Liver-abscess, however, may be unassociated with dysentery or diarrhœa, and yet be multiple; on the other hand, it may accompany or follow dysentery or diarrhœa, and still be single. It is often difficult to come to any decided opinion as to the true character; each case requires careful study, and the etiological relation of dysentery with liver-abscess is always a matter of considerable interest. That liver-abscess and dysentery are dependent on each other, has been held by high authority. Annesley considered that dysentery was due to hepatitis. Budd, thirty-six or thirty-seven years ago, enunciated the opinion—which has received more support here than in India—that liver-abscess is always due to purulent absorption from the bowel; that, in fact, tropical abscess is pathologically identical with liver-abscess in this country. Abercrombie thought they were co-existent but independent of each other. Murchison, Macpherson, and others concur in this. Sir R. Martin and others thought that liver-abscess was intimately connected with disease of the cæcum; but this was not confirmed by *post mortem* examination, for, of seventy-two cases where the cæcum was affected, in only twenty-two was there liver-abscess. Moore says that eight observers out of twelve accord a percentage of 18, or 295 cases of liver-abscess in 1,522 of dysentery; four other observers give a ratio of 39 per cent., or 62 out of 131 cases of dysentery; 18 per cent. is more probably the correct ratio, the larger percentage being more probably due to all diseased conditions of the liver that have accompanied dysentery. Recent observations, I think, confirm this view of the relative frequency of hepatic abscess in connection with dysentery; and albeit in some cases of multiple abscess the condition is due to septic absorption from a dysenteric bowel, yet generally it is to be regarded rather as an expression of the general disease than as a direct consequence of dysentery. It would appear that, in different hot climates, it is more or less frequent according to circumstances, but that it is more prevalent in India than in any other country.

As to the extent to which hepatitis prevails in India, a late statistical report gives the following information. "In the European army of India, averaging 57,742 men, 28,780 admissions and 1,267 deaths were recorded under hepatitis during the ten-year period 1870 to 1879. This gives an admission-rate of 49.8, and a death-rate of 2.19 per 1,000. In the army of Bengal, the admission-rate was 47.1, and the death-rate 2.04 per 1,000. In the preceding ten-year period, the admission-rate was 59.2, and the death-rate 3.31 per 1,000. A considerable reduction has thus taken place in both the admission and the death-rate, and the diminution has been pretty evenly distributed over the different sections of the Presidency. There were 7,417 admissions and 349 deaths from hepatitis in the European army of Madras during the years 1870 to 1879; an admission-rate of 67.2, and a death-rate of 3.31 per 1,000; much higher rates than those for Bengal. During the immediately preceding ten-year period, the admission-rate from hepatitis was 70.2, so that very little diminution had taken place in the frequency of this disease. During the period 1870 to 1879, there were 4,234 admissions and 177 deaths from hepatitis in the European army of the Bombay Presidency, the admission-rate being 40.9, and the death-rate 1.71 per 1,000, slightly less than the corresponding rate for Bengal. For the years 1863-69, the average admission-rate from this disease in Bombay was 26.6 per 1,000. Hepatitis thus seems to have been more prevalent of late in the Bombay Presidency. The eighteenth annual report of the Sanitary Commissioner for 1881 tells us that the admissions for hepatitis per 1,000 men for that year were: Bengal 32, Madras 39, Bombay 29; the deaths per 1,000 in the same period were: Bengal 1.64, Madras 1.54, Bombay 1.52, from the same cause. It further remarks that, "of the chief diseases, hepatitis was the only one which, during 1881, yielded a higher death-rate than the preceding year, 1.60 per 1,000 against 1.34. The increase was, however, very trifling, and the admission-rates are nearly identical. In Madras, hepatic diseases in former years have prevailed to a greater extent than in the other Presidencies. The returns during the last two years have been very favourable compared with the preceding ten-year period." Also, "after anæmia and general debility, the chief causes of invaliding in the army of India were: hepatitis, 2.96 per 1,000; dysentery and diarrhœa, 2.83; phthisis, 2.21." As a great proportion of the deaths recorded under hepatitis were probably due to liver-abscess, it will be seen how large the experience of the disease is in India.

With reference to the relative proportion in which liver-abscess and dysentery were coincident or combined, Dr. Waring, in 1854, made the following notes.

Of 300 cases of fatal liver-abscess in India, in only 82 cases, or in 27.3 per cent., was the hepatitis preceded by symptoms of dysentery. Of the 300 cases, the number of abscesses was not stated in 12. Of the remaining 288, 177 had one abscess, 33 had two abscesses, 11 had three, 17 had four, 10 had from five to ten or more, and 40 had more than ten.

Relative Frequency of Hepatitis in different Foreign Stations.[1]

Year.	Strength.	Disease.	Admitted.	Died.	Invalided.
		Madras.			
1870	9,936	hepatitis	635	41	131
1871	10,684	,,	713	41	58
1872	10,892	,,	586	5	70
—	—	abscess	43	35	—
		China.			
1870	546	hepatitis	15		1
1871	516	,,	8	0	0
1872	789	,,	15	1	0
—		abscess	1	1	—
		Cape, and St. Helena.			
1870	2,441	hepatitis	66	4	16
1871	2,473	,,	24	0	6
1872	2,484	,,	23	1	3
		West Indies.			
1870	1,432	hepatitis	2	0	0
1871	966	,,	12	0	0
1872	1,112	,,	2	—	2
—	—	abscess	1	0	0

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[1] Fayrer, *Tropical Diseases.*

		Canada.			
1870	4,519	hepatitis	10	0	0
1871	2,383	,,	12	1	1
1872	1,602	,,	3	0	0
		Malta.			
1870	4,799	hepatitis	[illegible]	7	6
1871	4,977	,,	26	2	7
1872	[illegible]	,,	27	0	4
		abscess	2	1	0

Morehead says that, in malarious countries, liver-abscess frequently occurs in association with remittent fever without any ulceration of the bowel. The combination of malarial poisoning with hepatic mischief is most frequent, and it is often difficult to decide how far certain rigors and chills may be due to malarial fever, how much to incipient suppuration in the liver, or to what extent both may be concerned. Of course, when there are physical signs of enlargement, pain, bulging or pointing, there is no difficulty in diagnosis; but when these symptoms are absent, or only slightly expressed, as often happens, then the difficulty in diagnosing the true state of things is great, and exploration is needed to resolve the doubt.

My own impression is that liver-abscess and dysentery are often coexistent, as is liver-abscess with malarial fever, and that one may follow closely or precede the other; yet the diseases are independent, though, doubtless, they aggravate each other. At the same time, I repeat that, though I regard liver-abscess associated with dysentery as generally merely an independent result of a common cause, yet in some cases, as already explained, I do believe the liver-abscess may be the result of direct absorption of purulent matter, in which case the abscess may be single, double, or multiple, this being a different state of things from the necrotic multiple abscesses which result also from general septicæmic infection. I would summarise the relation of liver-abscess to other disease in the following terms.

1. Pyæmic abscesses which originate in necrosis of parenchyma, embolic deposits, or infarcts; form cavities varying in size from a mere speck to a pea, a walnut, or an orange; they contain *débris* of tissue, sanies, puriform matter, leucocytes, and, finally, pus. These are seen in various stages of development, and occur in other viscera, as well as in the liver; they are truly septicæmic.

2. A form of liver-abscess coexistent with, and due to, dysentery, is the result of direct absorption of pus or septic matter from the bowel into the liver, through the veins. Such may be solitary, double, or triple; this is also a very dangerous form of the disease, though not necessarily fatal, as it is to be feared must be the case in the former variety.

3. Dysentery, malarial fever, and hepatitis, may coexist with or supervene on each other, as results of climatic influences. In such cases, it seems natural to ascribe the liver-abscess to the dysentery; but it is probable that they are coincidences rather than consequences of each other, and that the cause which affects the glandular structures of the large intestine, as dysentery, may determine, coincidently, mischief in the liver. Such cases are obviously different from those before mentioned.

4. The ordinary tropical abscess is independent of dysentery.

Each of these forms of liver-abscess may occur in this country in persons who have resided in India or other tropical climates. I should also allude to the co-existence of liver-abscess with diarrhœa. In such cases the diarrhœa may depend directly on the liver-mischief, or it may be kept up by pressure and irritation of the bowel. It may precede the formation of the abscess, which sometimes takes place so insidiously as to escape notice until revealed by some of the symptoms previously described.

A few words now on the symptomatology and treatment of liver-abscess.

The early symptoms of the acute form, either when it occurs in India or here, are enlargement of the liver, pain, and high temperature. The fever is preceded by rigors, or chills, and followed by sweats. There is cough, pain in the right shoulder, inability to lie on the left side, owing to the weight of the swollen and dependent liver, nausea or vomiting, from pressure on the stomach or irritation of the vagus; a yellow tinge of the skin and conjunctivæ (sometimes, but not often, jaundice), and high coloured urine, containing lithates.

These symptoms, together with bulging or pointing, leave little doubt of the presence of abscess, and the diagnosis is not difficult; but there are cases in which the symptoms are not so well marked, and yet an abscess may have formed and escape detection until sudden bulging and fluctuation become apparent, or until the abscess bursts into the bowels, stomach, or lung, or it may be into the pericardium or peritoneum; in the latter cases with fatal consequences, in the former with great danger from shock or suffocation, but, happily, not often immediately fatal; for such cases not unfrequently recover.

The amount of pain in liver-abscess appears to depend a good deal on the part of the organ implicated. If the pus be deeply seated, or at a distance from the peritoneal covering, the pain is comparatively slight, or even absent. If it approach the surface, the pain is severe. There is, in any case, a sense of distress and uneasiness, but most distinctly when the patient turns on the left side. Tension of the recti abdominis muscles, with a sense of nausea on pressure, is also a characteristic symptom.

It often happens that the patient is suffering at the same time from malarial poisoning, and is liable to recurrences of febrile paroxysms, which make it difficult to decide whether they indicate fever or suppuration; and in some cases, when there has been no previous malarial fever, the rigors or chills of incipient suppuration are so slight as to have escaped notice, and the patient denies having had them at all.

Again, if the abscess be small and central, the pressure is so slight on neighbouring parts that the stomach is neither directly nor sympathetically affected, nor is pain felt in the right shoulder or in the hypochondrium in decubitus on the left side; these signs being either absent or so faintly expressed as to give little aid in diagnosis. In such cases, the patient may be thought to be suffering from malarial [illegible] and climatic deterioration of health, till an abscess reveals itself as before described, or it may be that it is not discovered till after death, when an encysted abscess is detected, a contracted cavity containing a certain amount of caseous matter, which reveals the former presence of an abscess, the contents of which have undergone absorption. Such cases are rare, but doubtless they do exist. In these, after years of quiescence, inflammation may light up renewed suppuration, and prove fatal.

The value of the thermometer is great in such cases; it is, perhaps, the most reliable indication we have of the change going on in the liver, the absence of other symptoms making diagnosis so obscure. All one can do in these circumstances is to wait, and watch the temperature and pulse, with the state of the skin and excretions. Occasional sweatings, which are far from being well marked, will tend to establish the probability of suppuration, and exploration may confirm it. I feel certain that such cases occur, and that I have seen them recover.

The treatment in the outset of the acute form is that of congestion; free purgation by mercurials and salines, chloride of ammonium, and ipecacuanha, hot fomentations; and, where the pain is severe and the temperature high, a few leeches on the side or to the anus may be useful. Rest and restricted diet. When pus has formed, favour its evacuation; as soon as possible, make a free opening with antiseptic precautions, and use a drainage-tube. When any doubt exists as to the presence of pus, explore with an aspirating cannula-needle; there is little danger in this proceeding if properly done. Slight inflammation may follow, but it will soon subside, and, even if no pus be detected, it still in some cases seems to do good.

If pus be detected, it should, if possible, be removed, a free opening being made either below the ribs or between them, according to circumstances, and free drainage being ensured through a good sized tube. The strictest antiseptic precautions are to be observed, both during the operation and in subsequent dressings.

I can report most favourably on the results of several cases which have come under my observation since I wrote on the subject some years ago. Where the matter lies deep, and much liver-tissue intervenes, it will be well to introduce a large trocar and cannula, having first made an incision, an inch or an inch and a half in length, through the skin, and leave the cannula in the wound to act as a drainage-tube. This in a short time can be replaced, if necessary, by a flexible tube. After a few days, in favourable cases, the cavity will begin to contract, and the tube will be thrust out, when one may with advantage, gradually shorten it. The discharge will soon cease to be purulent, assume a serous character, gradually cease altogether, and the wound cicatrise. No special treatment beyond attending to the diet and the state of the bowels is necessary, [illegible] with quinine, especially if there be any febrile tendency, [illegible]. Quiet and care in avoiding chill are essential until [illegible] is well advanced.

The previous history of the case will serve to some extent as a guide to the nature of the abscess, if it be single, [illegible] early, and if no complications arise [illegible] it may be that another abscess shall form, [illegible]. But in cases where multiple abscesses [illegible] character before alluded to, the prospect of [illegible] is very small; indeed, in such cases the operation [illegible] performed unless one of the abscesses, having [illegible] development, pointed, when relief, though [illegible] temporary character, would be given [illegible].

The question whether liver-abscess be single or multiple is always difficult, and, I fear, one about which it is often impossible at first to form an exact diagnosis, and until puncture has been resorted to. Generally, the evacuation of pus is followed by an immediate fall of temperature, which remains at or near the normal standard, provided the discharge be free and the pus protected from decomposition. A rise in the temperature, or its remaining high with recurrence of pain and sweating, give cause for apprehension either that a fresh abscess is forming, or that decomposition of the discharge is taking place. In either case, you must keep a strict watch on the symptoms, and interfere as early as possible to give exit to newly formed pus, or to remove decomposing discharge from the cavity of the abscess. If the symptoms of suppuration continue, although no physical sign may betray the prescence of pus, explore the liver freely with the aspirating needle. I have frequently given exit to fresh collections of pus which have formed under or near the site of the first abscess. As the wound heals, the diet may be increased, but you must protect your patient from all excesses or errors in food.

There are one or two points which you will do well to bear in mind, such as, when operating, the amount of liver-substance you may have to cut through before you reach the pus ; this may cause considerable hæmorrhage, but it will generally soon cease. As you wish to avoid loss of blood as much as possible, it is well in these cases to use a cannula sufficiently large to allow the free exit of pus, and leave it in the wound for a few days, substituting for it, after that period, a larger flexible tube, and making a larger opening if necessary.

The pus is often thick, and contains flakes of lymph which may block the tube, and render it necessary to clear it out. Remember that the drainage-tube should not be allowed to press against the wall of the contracting cavity, and that it will require shortening as the wound gradually closes ; also the imperative necessity for having free discharge and of keeping it sweet, to which end you must be most scrupulous in attending minutely to the strictest antiseptic precautions. When you are in doubt as to the probable formation of more pus (another abscess), use the exploring aspirating needle ; there is no danger in this, if done with due care and precaution, either below or between the ribs.

Should you find another abscess, if possible give exit to its contents by making a free opening. It is very desirable not to delay in these matters. My belief is, that earlier interference would in many cases have saved life and diminished suffering.

In any case a liver-abscess is a most serious affair, and the result is uncertain ; but, by observing and acting on the principles and practice inculcated, you may hope to meet with a considerable amount of success.

Never allow a liver-abscess to point and cause gangrene of the abdominal wall from pressure, and consequent inevitable death by exhaustion, in such cases where a simple incision would, in all probability, have relieved suffering, and might have saved life.

Note.—The patient who was the subject of this lecture was doing well in all respects on June 2nd, 1884.

Bequests and Donations.—The Royal Free Hospital has received £1,000, and the National Hospital for Consumption at Ventnor £600, under the will of Mrs. Esther Bunning.—Mr. George William Nugent, of Cambridge House, Maida Vale, has bequeathed £200 each to the Seamen's Hospital, Greenwich, the London Hospital, St. Mark's Hospital for Fistula, etc., the Royal Free Hospital, the Metropolitan Free Hospital, the Western General Dispensary, St. Mary's Hospital, the Hospital for Sick Children, the Female Lock Hospital and Asylum, the Middlesex Hospital, University College Hospital, and the Convalescent Hospital, Stone, Staffordshire.—Miss Mary Davidson Blair, of Forbes Road, Greenhill, Edinburgh, has bequeathed £100 to the Society for the Relief of the Destitute Sick, Edinburgh, £50 to the Smyrna Medical Mission, and £50 to the Longmore Hospital for Incurables.—The Lincoln County Hospital has received £200 under the will of Mr. T. Garfit, of Boston, and £50 under that of Miss Anne Torr, of Grimsby.—Mr. William John Campbell Allen, of Fannoran, Carrickfergus, has bequeathed £100 to the Royal Hospital, Belfast.—The Grocers' Company have given £100 to the Royal Medical Benevolent College.—The Hon. Mrs. Robert Bruce has given £50 to the Charing Cross Hospital, and £50, additional, to the Middlesex Hospital.—The Royal Hospital for Diseases of the Chest has received £43 10s. from Captain Wiltshire, being the proceeds of a concert at Myddelton Hall, Islington, on April 30th.

CLINICAL REMARKS

ON

CASES ILLUSTRATING THE ESSENTIAL IDENTITY OF PROGRESSIVE MUSCULAR ATROPHY AND PROGRESSIVE BULBAR PARALYSIS.[1]

By J. MAGEE FINNY, M.D.Univ.Dubl., F.K.Q.C.P.I.,
King's Professor of Practice of Medicine in the School of Physic; Clinical Physician to Sir Patrick Dun's Hospital.

Cases of primary labio-glosso-laryngeal paralysis are of sufficient rarity to secure for the recital of their clinical features some interest; for, although bulbar symptoms are not very uncommonly present at the termination of various systemic cerebral and spinal diseases, examples of primary bulbar paralysis are not frequently met with in the experience of physicians in general practice ; and it would seem, indeed, to be among the rarer features of nerve-paresis witnessed by those whose opportunities of studying neurotic lesions are extensive, if we may judge from the fact that Erb, when writing the article bearing directly on this subject (Ziemssen's *Cyclopædia of Medicine*), refers to but nine cases of which he had accurate notes, and Hammond states that he had met with but six.

With the exception of the two individuals, the record of whose state I am about to submit to the Academy, and of a third case which I saw when a senior student, but which, I confess, I failed at the time to recognise, I have not met with any other instances in my own practice, nor seen any in the wards of the hospital under any of my colleagues.

Apart from the intrinsic interest attaching to the pathological lesion of the medulla to which is due the disease termed labio-glosso-laryngeal paralysis, or, as Kussmaul, with special reference thereto, called it, "progressive bulbo-nuclear paralysis," I look upon these cases, the subject of this communication, as illustrating, in a marked way, the intimate relations which exist between it and progressive muscular atrophy.

Each of these diseases is to be met with separately. Although chronic progressive bulbar paralysis does occur alone, as a typical disease, unaccompanied by any general amyotrophic changes of the trunk and extremities—as, of Erb's nine cases, six were limited to paralysis of the lips, tongue, and larynx—yet it is proved to be one of the most frequent complications of progressive muscular atrophy. A striking example of this has been recently published by Dr. W. Fox (British Medical Journal, 1881, vol. i, p. 82). It is fairly formulated by Eulenburg (Ziemssen's *Cyclopædia of Medicine*, vol. xiv, p. 132). "One cause of death in progressive muscular atrophy is so frequent, and is clinically so nearly allied to progressive muscular atrophy, that it must be considered not as an accidental complication, but as a combined disease arising from the same or similar pathogenic causes. This is progressive bulbar paralysis. It may form a cause of death, either by producing a gradual palsy of the muscles of swallowing and of the larynx, or, when it occurs in an apoplectic form, with immediate palsy of the respiratory centres."

In like manner, in cases of primary bulbar paralysis, one of the commonest complications is that of progressive muscular atrophy. Hence the question presses as to the relative position these two lesions bear to one another. Is the fact of their being both present in an individual to be attributed to chance coincidence ? Is one sequential on the other? Or are the two groups of symptoms but evidences of the same disease affecting different but allied parts of the cerebro-spinal centres—branches of the same tree which, though springing from different parts of the parent stem, produce similar fruits ?

When glosso-laryngeal disease was for the first time systematically demonstrated by Duchenne in 1861, although it had been recognised twenty years previously by Trousseau, the close relation it bore to progressive muscular atrophy was thoroughly admitted by this accurate observer.

Duchenne considered, however, the two lesions to be quite distinct, the one from the other, and laid down the characteristic feature of progressive bulbar paralysis to be "paralysis without atrophy," in contrast to that of progressive muscular atrophy, which was "atrophy without paralysis." For several years subsequently this view of Duchenne's was generally adopted, and even in the present time it appears to have its adherents, among whom Hammond and Friedreich may be numbered.

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[1] Read before the Academy of Medicine in Ireland.

Accumulated instances of the two diseases being both present in the same individual—their occurrence being either synchronous, or subsequent in time, the one on the other—and the weight of evidence based on the great similarity of their clinical features, forced the conviction on the minds of physicians that this coincidence, this similarity, must be due to the one and the same lesion of the nerve-centres. Pathological anatomy had revealed that the primary or essential lesion constant to progressive muscular atrophy—as first demonstrated, I believe, by Lockhart Clarke and Charcot—consisted in degenerative changes in the multipolar ganglion-cells of the anterior cornua of the grey matter of the spinal cord; while that of labio-glosso-laryngeal paralysis was a like degeneration of the similar cells in the grey nuclei on the floor of the fourth ventricle. Then Charcot described a case of progressive bulbar paralysis, complicated with progressive muscular atrophy, in which these two lesions were demonstrated to be present; and, recently, Fox has contributed another, already referred to, beginning in muscular atrophy and ending in bulbar paralysis, in which the pathological changes peculiar to each were found present together. Lastly, the link which knits these diseases in intimate relationship was further forged by the analogy which physiological anatomy showed to exist between the grey motor nuclei of the medulla and the anterior grey cornua of the cord, and these parts are but continuations one of the other.

Our knowledge, by the additional light now shed on these lesions, may therefore be summarised in the words of Erb (Ziemssen's *Cyclop. of Medicine*, vol. xiii): "Accordingly," he says, "we may assume that, in both diseases, the pathological processes are either essentially identical, or at least very closely related; and that it depends upon their localisation chiefly whether the result is muscular atrophy or bulbar paralysis; and that, consequently, the two diseases may combine frequently and in every proportion;" and that the amyotrophic results are the same in mode of production, though they differ in situation.

As a contribution to the clinical literature of the disease, and as an illustration, not a proof, of the pathogenetic identity of these two affections, I beg to adduce the following instances, which came under my notice while I was physician to the City of Dublin Hospital in 1882.

CASE I.—Stephen S., a farmer, aged 50, was admitted into the City of Dublin Hospital on March 7th, 1882, under my care. He was married, and had had fourteen children, the youngest being three months old. He had always been a healthy man, and of temperate habits. He had never had rheumatic fever or syphilis, nor did he receive any injury to his head, and there was no history of any hereditary nervous disease. About August 1881, he first complained of a giddiness, of numbness of his tongue, and of difficulty in speaking. These latter symptoms had ever since steadily increased, and the pronunciation of most words had become an impossibility; while difficulty in swallowing had still added to his troubles. About six weeks before admission, he felt a tingling sensation in both arms and legs, "just as if they were asleep;" and, shortly afterwards, he noticed that he could not walk as well or as far as previously, that he was more easily tired, and that his arms became weaker. Soon afterwards, he experienced a pain in the top of his head, which, while it had never been severe, has lasted ever since. At this time, he noticed he was becoming deaf, especially in his right ear. He never had felt arthritic or lightning pains in his legs.

On admission, the patient was a tall well made man, looking younger than his age, and, at first sight, did not present the evidences of paralysis of the lips, which are so characteristic in advanced cases of progressive bulbar paralysis. He could close his lips; but he could not keep them closed, nor purse them together, and he was constantly wiping away the saliva which dribbled from between them. He could not whistle, or blow, or spit; and his mouth was usually open, its angles depressed, and giving a somewhat sad expression to the lower part of the face; while his eyes and upper part exhibited animation, and, on very slight provocation, great merriment. He was very emotional, and readily laughed; the upper part of his face and the upper lip being contorted, while the lower lip hung motionless and somewhat away from the gums.

When spoken to, he was unable to speak—that is, to use any words beyond "aye" and "no;" while his intelligence was unimpaired both as to understanding what had been said and in attempting by signs to convey his ideas; but he used no words, an indescribable jargon of grunts and repetitions of "ah," "ah," taking their place. It was found that he could imitate the sounds of the vowels very fairly; that the labials were not undistinguishable; but all efforts at the dentals or linguals utterly failed. Thus, while O, U, M, P, B, F, which depend upon the perfect action of the orbicularis, could be fairly executed, S, K, T, G, which required the free movement of the tongue, were impossible. The tongue could be protruded a very little way beyond the teeth; but it could not be raised to the palate, not to touch the upper teeth. Common sensation was unaffected either in lips or in tongue, nor was the special sense of taste impaired. The tongue appeared slightly atrophied, and, as it lay in the mouth, was observed to be very tremulous, fibrillary movements running slowly along various portions in irregular sequence. No note was made of its appearance with respect to its epithelial covering or its papillæ; so that, presumably, there was nothing very abnormal to be remarked. Owing to the paralysis of this organ, mastication and deglutition were very difficult. When eating, the patient took very small morsels; and he rolled them about his mouth for a considerable time, while particles escaped from the lips; and with his fingers he dislodged the food between his cheeks and gums, and pushed it well back in the mouth. He drank very cautiously, taking very small sups. Once the food entered the pharynx, it passed down without any regurgitation of liquids or solids through the nares; but, unless great care were taken, it was likely to produce fits of coughing from its entering the larynx; and this applied more especially to fluids. The uvula and soft palate seemed unaffected; they responded to excitation of touch, and there was an absence of nasal voice. The patient's sight was normal, and the pupils responded to both accommodation and light. The hearing in the right ear was slightly impaired, as compared with the left.

The physiognomy of the case was thus typical of glosso-labio-laryngeal disease, the chief manifestations being referable to paralysis of the tongue, alike in its intrinsic muscles and its deep attachments to the hyoid bone.

Examination of the trunk and extremities revealed well marked amyotrophic changes, such as are found in progressive muscular atrophy. On stripping the patient to his waist, fibrillary movements were seen in almost every muscle connecting the upper extremities to the trunk, in particular the pectorals; while the deltoid, triceps, and biceps, and all the muscles of the forearms, in like manner, exhibited the same symptom. There was slight "winging" of the right scapula, while all the muscles more or less showed loss of substance, and were soft and flabby. The flexors of the carpus and fingers and the thenar eminence of the right arm were more wasted than those of the left. By measurement, the right forearm was smaller in circumference than the left, although the patient was a right-handed man, and the dynamometer registered but 24 k. with the right, against 30 k. with the left hand. The muscles of the legs were much less visibly wasted, but their motor weakness was recognised by the stiff heavy way in which the patient walked, and the slow, awkward, and uncertain manner in which he raised his feet to any given height. Patellar reflex was not abolished, and each leg responded equally, while ankle-clonus was slightly marked in the left leg, absent in the right. There was no paresis of the bladder or rectum. All the muscles of the affected limbs responded to the electrical stimulus, but the faradic excitability of some was much impaired, a very strong current being needed to throw them into action. He was unable to write his own name, saying, before he had half written, he was too tired to write more. The letters and syllables he wrote were correctly spelled and written. There was no evidence of disease of the heart, lungs, or kidneys. It was noticed that there was great sensitiveness to the changes of temperature, and that he was worse in swallowing on a cold day with east wind.

The patient remained under observation for more than a month, but his condition was rapidly deteriorating; and on March 23rd his powers of swallowing had become so feeble, that suffocative symptoms were constantly imminent while taking solids or liquids; and he had to be slapped on the back to dislodge the particles. He became also much thinner and weaker, in spite of tonics and generous diet, and no improvement took place in his powers of speech. At his own request, he returned to his home in the county Kilkenny.

Of the subsequent history of this case, I regret to say that I am ignorant, although I endeavoured to obtain the information by writing two or three times to the medical man under whose care he was before coming to hospital; but there is little doubt that he succumbed to the accidents of the disease before many weeks had elapsed.

[*To be continued.*]

AMBULANCE LECTURES.—Dr. Frederick Pearse has been presented with a testimonial, in the form of some volumes of books, as a mark of appreciation of the ambulance lectures given by him at Haslemere during the past month. The lectures were well attended.

LADY SCIENTISTS.—It is a sign of the times, says the *Athenæum*, that a paper by a young lady, "On the Blastopore of the Newt," was read at the last meeting of the Royal Society, the writer being herself present.

A CASE OF ANTHRAX OR CHARBON, WITH EXTERNAL SYMPTOMS (MALIGNANT PUSTULE): EXCISION: RECOVERY.

By W. MORRANT BAKER, F.R.C.S.,
Surgeon to St. Bartholomew's Hospital.

FOR the following notes of the case I am indebted to Mr. Sydney Beauchamp, Surgical Dresser. For the original drawing from which the chromo-lithograph has been taken, I am indebted to the artistic skill of Miss C. G. Lock, sister of the ward in which the patient was treated.

J. L., aged 42, waterside-labourer, was admitted into St. Bartholomew's Hospital on Monday, April 7th, suffering from "charbon," or woolsorters' disease, with external symptoms, or so-called "malignant pustule." On March 26th, twelve days before he was admitted to the hospital, the patient, in the course of his work, had been handling two heavy bales of hides from China. The next day, March 27th, he noticed a small hard swelling below and behind the right ear, near the site of an old parotid abscess. This swelling increased rapidly, and in a few days he experienced considerable pain in mastication and difficulty in swallowing. On Friday, April 4th, the swelling was poulticed, and in a few hours a cluster of "vesicles" appeared on it. On Saturday, April 5th, he vomited, and again on the 6th. At this time, indeed, he was feeling very ill; he could not eat because of the pain in masticating and swallowing, and the discomfort was so great as to prevent his sleeping. On Monday, April 7th, in the morning, he was admitted to Darker Ward by Mr. Toller, house-surgeon.

On admission, there was on the right side of the neck, two inches below and two inches behind the lobule of the ear, a large flat "pustule," about the size of a florin, with a very dark centre, apparently formed by a superficial slough, its circumference being formed by a bleb with an irregular circular outline, looking as if several blebs or vesicles had become confluent. Immediately above and behind this sore was a separate bleb, about the size of a large split pea. (See Plate, Fig. 1.) Below the ear was a mass of inflamed lymphatic glands. All the surrounding tissues were œdematous and brawny, so that the fossa below the ear was filled up and the parts projected. The skin surrounding the "pustule" was very œdematous and erythematous. The erythema extended from the posterior border of the sterno-mastoid muscle behind to the anterior border of the masseter muscle in front; above, it reached the level of the temporo-maxillary articulation; below, it extended as far down as the third rib on the right side. The patient felt very sick; his temperature was 101.4°; he experienced much difficulty in swallowing, and was in great pain. The spleen could not be felt.

In the afternoon of the day of admission, he was seen by Mr. Morrant Baker, who, recognising the case to be one of "charbon," decided to excise the "pustule" at once. Chloroform was given, and Mr. Baker made a free incision round the "pustule," at a distance of a quarter of an inch from its margin, and removed it to a depth of half an inch. The tissues at the base were found so infiltrated and adherent, that it was necessary for removing it cleanly to dissect off some fibres of the sterno-mastoid muscle. An incision was also made into the mass of inflamed glands. Pure carbolic acid was applied to both wounds, and they were covered with sanitas oil (1 in 30) dressings. There was a considerable oozing of blood during the operation, and Paquelin's benzine cautery was afterwards used to check it. Six hours after the operation, the temperature had fallen to 99°; the pulse was 100, and regular. The patient seemed quite comfortable.

On April 8th, the morning after the operation, there was much less œdema and erythema of the neck and chest. The wounds looked clean, and the patient felt much more comfortable, suffering no pain. He was ordered an exclusively animal-diet.

During the day, the swelling of the glands and the extensive œdema and erythema decreased markedly. There was no longer any difficulty in swallowing, and the patient's appetite was good. The temperature was normal. He had vomited twice in the night, and slept but little.

On April 9th, he felt fairly well. The œdema and erythema had almost entirely disappeared. The glands were still somewhat swollen. Pulse and temperature were both natural.

April 11th. The glands were still swollen. There was no erythema or œdema. Sulphite of soda, ten grains three times a day, was ordered. On examining the urine and blood, for the first time, bacilli were found in both. April 12th. Bacilli were again found in the blood. The patient was progressing very favourably.

From this time, there was a steady improvement. The temperature never rose above normal. The glands below the ear decreased in size, and the wounds rapidly healed. The meat-diet was continued until April 16th, and nothing occurred to check further progress towards complete recovery.

A microscopic examination of the excised "pustule" was made by Mr. D'Arcy Power, but no bacilli were found in it.

Mr. John Spear, who investigated the origin of this case on behalf of the Local Government Board, found that the two bales of hides handled by J. L. were imported from China; and that this same consignment had been the means of infecting three other men with "charbon."

In the case of J. L., the period of incubation is very conclusively shown, as, beyond having to unload some hides on February 22nd, he had had no contact with anything capable of infecting him, until March 26th.

The chief points of interest belonging to this case will have been found in the accurate record of the facts in Mr. Beauchamp's notes; and in the results of the careful microscopic examinations of the blood and urine undertaken by him from day to day during its progress. From the result of these examinations, it may be regarded as certain that, in this patient, the blood had become generally infected; and the complete and rapid recovery is the more satisfactory.

So far as I can discover, this is the first instance of malignant pustule which has been recorded as occurring at St. Bartholomew's Hospital; I exclude, of course, so-called malignant carbuncle, of which we have had, in the course of years, many examples, and which, although sometimes confounded with charbon, is a totally different affection. The following case, however, of which the notes have been kindly given to me by Mr. Alban Doran, and which occurred in 1873, when he was holding the appointment of house-surgeon at St. Bartholomew's Hospital, may have been one of anthrax. The history at least points to the possibility.

"G. D., aged 52, a builder, tall and well made, came into the surgery of St. Bartholomew's Hospital on June 14th, 1873. His face was very pale and his tongue thickly furred, the integuments of his neck of a dusky red colour, but not brawny nor indurated, excepting at one point on the nape over the right splenius muscle. The skin of the lower part of the face was flabby, hanging in folds; his wife said it had never looked like that when he was in good health, the integuments of the upper part of the thorax were dusky and flabby without induration as in the neck. He stated that when working at a wharf at Hoxton, on June 11th, he felt a gnat biting the back of his neck, and he struck down the insect. Next day he felt very ill, and the bite was exceedingly tender. His illness increased, so he came to the hospital for relief. He was admitted, and Mr. Doran prescribed for him ammonia and bark, ordering a poultice to be applied to the neck. Two hours later, Mr. Willett visited the patient and ordered, in addition, that the seat of the bite should be painted with tincture of the perchloride of iron. At 10 P.M. the patient was sleeping comfortably, with no sign of dyspnœa. At 8 A.M. on the next morning, June 15th, on attempting to get out of bed, he turned very livid, and died in a few seconds.

"A *post mortem* examination was made by Mr. Butlin; and the following abstract is taken from the ward-book. 'The back of the neck was the seat of a very large brawny mass, from which infiltration of the subcutaneous tissue extended down the back, around the front of the back, and down the front of the chest. Nothing was discoverable in any of the organs to account for death, which appeared to be due to the carbuncular infiltration and blood-poisoning therefrom.' At the inquest, that was subsequently held, it transpired that hides and timber were being stowed in a warehouse at the wharf where the deceased had been working on June 11th."

The diagnosis of charbon in the present instance was not difficult. The characters of the local disease, which led one instantly to suspect, as a cause, some animal poison, and to cross-examine the patient from this point of view, were quite different from any other; and the voluntary statement of the patient that he had been engaged in carrying hides left little doubt of the nature of the disease.

In the treatment which was adopted, namely, free excision, followed by the application of a caustic, I followed the example of Mr. Davies-Colley, and of the other surgeons of Guy's Hospital, as recorded in the valuable paper by the former in vol. lxv of the *Medico-Chirurgical Transactions*.

Cases of "charbon" appear to be much more frequently admitted to Guy's Hospital than to any other metropolitan hospital, from its neighbourhood to the large leather-manufactories of Bermondsey; and it appears, from the table of cases given by Mr. Davies-Colley, that the success of the treatment by excision has been most marked. I am aware that all observers are not agreed as to the necessity for such radical treatment; but into this controversy I will not presume, from the experience of a single case, to enter. It may be fairly said, however, that in this particular case the greatest benefit was apparently derived from the procedure. The temperature fell; the erythema ceased spreading and began to fade; and the patient described himself as feeling altogether a different man within twenty-four hours after the excision of the pustule.

The treatment by an exclusively animal diet is, I believe, usually recommended in cases of "charbon," on account of the fact that the disease is not communicable to the carnivora. The plan seems rational and unobjectionable.

I was induced to select sulphite of soda from the long list of antiseptics, as an internal remedy, by the marked success which has attended the treatment of this disease (splenic fever) in cattle, by this drug, in the hands of Mr. J. B. Gresswell, of Louth.

Figure 2 represents the appearance of the intestine in a case of anthrax without external lesion, observed at Guy's Hospital by Mr. J. Poland, who has kindly placed the drawing, with the following note, at my disposal.

"The patient was a bargeman, Patrick G., aged 30, who had been unloading skins from his barge at a wharf at the river-side. Among these skins were some 'Chinese kipps.' He is said to have been engaged at this work for only one day, and to have complained the same evening of feeling ill; three days later, before admission into Guy's Hospital, he complained of pain in the pit of the stomach, and in the head; the next day, he had profuse diarrhœa, and in the night he had severe spasms, and became delirious. He was admitted into Guy's Hospital on the fourth day; he was then suffering from convulsive attacks resembling those of tetanus; he became cyanosed and comatose, and died eleven hours after admission. At the necropsy, lesions characteristic of anthrax were found in the stomach, intestines, and lungs; extensive hæmorrhages into the cerebral and spinal meninges were also present; there was no external lesion. The drawing (see Plate, Figure 2) represents one of the anthrax-nodules from the small intestine, very characteristic of the disease."

CASE OF AVULSION OF THE RIGHT ARM AND SCAPULA: RECOVERY.

By J. C. OGILVIE WILL, M.D., F.R.S.E.,

Surgeon to, and Lecturer on Clinical Surgery at, the Aberdeen Royal Infirmary.

THE following case is an example of a very serious injury with a very satisfactory result, and is, in some of its details, probably unique.

Lizzie W., aged 18, mill-worker, was admitted into the Aberdeen Royal Infirmary on Friday, January 5th, 1883, suffering from a severe injury, which she had sustained a few minutes before admission while at work in a flax-spinning manufactory. On examination, it was found that the right arm had been torn off at the shoulder-joint, and that the right scapula had been drawn through the wound at the shoulder, which extended horizontally outwards and backwards from the outer third of the clavicle for a distance of five inches and a half. The wound was somewhat slit-like in appearance, and its edges were even and regular. There was no hæmorrhage; the axillary artery was seen lying on the surface of the wound, pulsating feebly, and presenting an excellent example of efficient torsion. On inserting a hand into the wounded aperture, it was found that the whole scapula, with the exception of one or two very small fragments, had been torn away.

The acromial end of the clavicle projected unduly, and was removed by means of a bone-forceps. The wounded parts were then thoroughly washed with a 1-20 carbolic lotion, and provision was made for efficient drainage by the insertion of a large tube emerging through the skin at a point corresponding to that previously occupied by the inferior angle of the scapula. The edges of the wound were fixed together by means of silver-wire and catgut stitches and a single button suture, and a salicylic wool-dressing was applied.

The general condition of the patient was one of great collapse. She was sensible, but sensation was so blunted that she did not seem to suffer pain while the proceedings just related were taking place. At the conclusion of the dressing, no radial nor temporal pulse could be felt; but, on the subcutaneous injection of twenty minims of sulphuric ether, she revived considerably. At 12 noon, five hours after the accident, the pulse was weak, 106, and the temperature 100.2° Fahr. She passed a fairly comfortable day, and took and retained a little beef-essence and some stimulant.

January 6th, 9 A.M. She had a restless night, but slept towards morning. She complained much of thirst. Pulse 106; temperature 102° Fahr. The wound was dressed at 12 o'clock. There was a considerable amount of bloody discharge, with a slight odour. The wound was dusted with iodoform powder, and the salicylic wool-dressing was applied as before. Pulse 102; temperature 103.2°. At 9 P.M., temperature 102°. She had taken nourishment freely to-day.

January 7th. She had passed a quiet night, and slept very well. Pulse 105; temperature 101°. The wound was dressed, and there was less discharge.

January 8th. She had a very good night. Pulse 99; temperature 100.2°. The dressing was removed; the discharge was slight—so much so that the same wool was reapplied. The edges of the wound were sloughing slightly.

January 9th. She had a restless night, and looked pinched and worn out. Pulse 90; temperature 101°. The wound was dressed twice; there was considerable purulent discharge, with a very fœtid odour. She took a fair amount of nourishment.

January 10th. She slept well, and felt very much refreshed. Pulse 96; temperature 100.2°. The discharge was rather less than yesterday, but still very putrid. Iodoform ointment was applied.

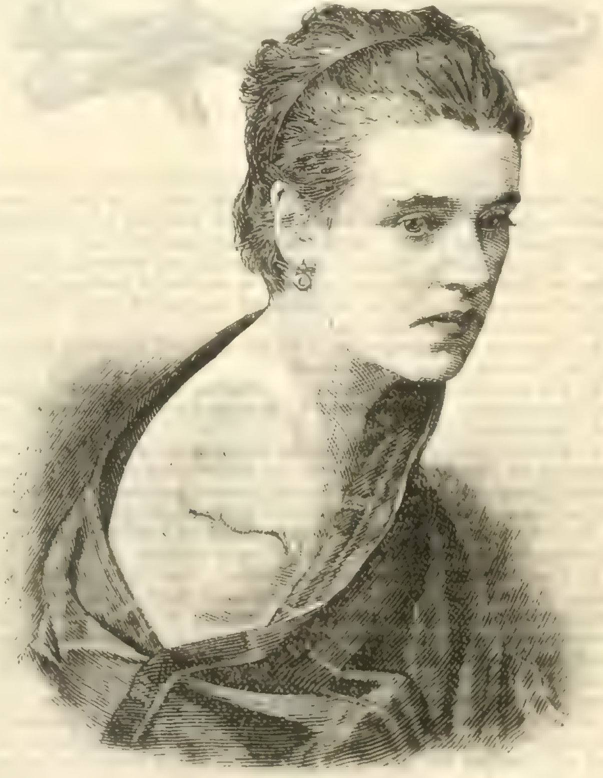
January 11th. The condition was the same as on the 10th.

January 12th. The patient began to look better; the discharge was less, and there was no smell. The wound was gaping, as the edges had sloughed slightly, but it looked healthy.

January 13th. The pulse and temperature were normal to-day, and the patient looked and felt well.

From this date everything went on satisfactorily, the patient regaining strength rapidly. She was allowed to leave her bed for half an hour on January 23rd, and next day she remained up for two hours.

On January 24th, the wound was covered with healthy granulations, and the gap which had been left on the recession of the edges was now on a level with the surrounding skin. The discharge was slight, and had no purulent taint. This superficial wound speedily cicatrised, and the patient was dismissed from hospital.



The accompanying woodcut, taken from a photograph, gives a faithful representation of the appearances presented by the patient a few weeks after her dismissal from the hospital; and I think that it will be allowed that the removal of this girl's arm and scapula was effected through a smaller wound, and has left less deformity, than in any similar case yet recorded where so formidable an occurrence has resulted from accident, or has been occasioned by operation, for there was but a single wound not six inches long, which is now represented by a mere linear cicatrix, with a little puckering at its anterior extremity.

The account given by those who witnessed the accident, as to the manner in which it occurred, was that the girl had fallen in a faint under a carding-machine, and that her sleeve had been caught by the teeth of a revolving cylinder, by which the arm was drawn in and torn from her body. No part of the arm or scapula could be recovered for examination, as they had been reduced to pulp before the machine could be stopped.

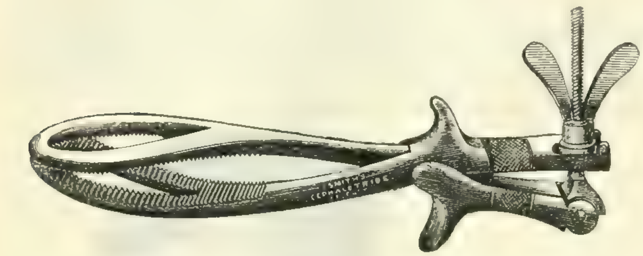
A NEW CEPHALOTRIBE.[1]

By JAMES SMITH, F.F.P.S.G., M.K.Q.C.P., (L.M. Rotunda Hospital, Dublin), Belfast.

THE following are the chief peculiarities of the cephalotribe I show you.

1. It is longer than those in use, being fifteen inches, of which the blades are ten, and the handles five; therefore, it is better adapted for operations at or above the pelvic brim. Each blade and handle is measured from the lock respectively.

2. In breadth of blade and pelvic curve, this cephalotribe is similar to Barnes's long forceps, an instrument I have used upwards of 600 times in 4,000 deliveries. I have, therefore, modelled my cephalotribe on the lines of a forceps whose efficiency I have fully proved. Further, as I believe axis-traction depends more on the accoucheur than on his tool, I discard all useless encumbrances, such as traction-rods, with the accompanying belly-band or waist-belt.



3. The cephalotribe possesses, also, a very moderate cephalic curve. This facilitates introduction, and, combined with the pelvic curve, renders slipping less likely when the head occupies a very anterior position above the pubes. Here, straight cephalotribes fail.

4. This cephalotribe is much less formidable and more efficient than those of Hicks and Kidd, etc., and can be applied in the same manner and with as great facility as the ordinary obstetric forceps. The services of an assistant are optional.

5. When the screw is applied to its utmost limit, the space occupied by the blades is one inch and a half.

6. The shoulders, in addition to affording greater tractile power, facilitate rotation. They should be of a piece with the handles, and not "dove-tailed" therein.

7. The fenestræ yield the following advantages. *a.* They add to the lightness of the cephalotribe. *b.* As compression goes on, the head bulges through (almost to a level with the outer surfaces of the blades), and enables the instrument to hold with much greater tenacity. *c.* For the same reason, expansion is obviated, to a great extent, in one direction, while compression is going on in another.

8. The grooves prevent slipping, also; but these might, perhaps, be dispensed with if the instrument were only used as a cephalotribe; but in some cases of extreme pelvic distortion, and more especially in those cases where malpresentation of the fœtal head coexists with maternal deformity (*e.g.*, the face, with approximation of the tubera ischii) the instrument has proved vastly superior to the craniotomy-implements hitherto in use, and has, in the opinion of the leading accoucheurs of the north of Ireland, superseded them entirely. The free borders of the grooves look towards the lock, and not towards the apices of the blades, which might be inferred from the woodcut. The grooves are, in my opinion, indispensable to the efficiency of the instrument as a combined cephalotribe and craniotomy-forceps.

9. The weight of the cephalotribe is about 2½ pounds. The ponderosity of the instrument is considerably augmented by the somewhat heavy, but withal neat, handles. However, obstetrically speaking, I am a believer in weight; indeed, I cherish the conviction that the maternity-physician, to be an efficient one, should overbalance 12 stones, while the occupant of the "master's chair" should counterpoise, at least, sixteen.

10. The practical utility of this cephalotribe is best proved by the fact that it has been successfully used, during the past seven years, in upwards of thirty instances, some, of course, being repetitions on the same patient; but the record of one case will illustrate all. [Here follow the particulars of a case I narrated to the meeting of the North of Ireland Branch of the British Medical Association, January 17th, 1879. On that occasion, I not only showed my cephalotribe, but I exhibited its fœtal victim.]

The child weighed, at time of birth, 8½ pounds, and was extracted from a woman on whom the operation of craniotomy had been twice performed by Professor Dill and others. On the last occasion, the exostosis on sacral promontory had progressed to such an extent as to preclude the application of Barnes's long forceps in any diameter. My cephalotribe was applied by Professor Dill and myself, and delivery was accomplished with ease and safety in almost as many minutes as the previous confinements occupied hours. Recourse was not had to the perforator or other instrument.

Let me now show the utility of this cephalotribe as a craniotomy forceps. After more than five years' rest, during which the pelvic deformity had much increased, this interesting patient again became pregnant, and in the fulness of time sought our professional services. The facts are briefly as follow.

On the forenoon of Monday, March 24th, of the present year, I was hastily summoned to the parturient couch of this distorted female; and on vaginal examination I detected the right hand presenting through a somewhat rigid os, of the size of half-a-crown. Anticipating Professor Dill's arrival, I introduced into the rectum a suppository containing half a grain of muriate of morphia and one grain of extract of belladonna. This medicament soothed the patient, and softened her os uteri. About an hour after the introduction of the suppository, Dr. Dill arrived, examined the patient, and found the right hand in the vagina and the os tolerably well dilated and dilatable. We determined on immediate action; and, the patient having been chloroformed by Mr. Dill, I proceeded to deliver by podalic version. At first I grasped both feet, but on coming to the obstruction I had to relinquish one—the right—but I succeeded in retaining the left in custody until it cleared the vulva. Traction was now made on the liberated limb; and, after the employment of much force, the breech appeared, soon followed by the rest of the body, including the arms. At this stage Mr. Dill and I conjointly manipulated the body so as to release the after-coming head, but our efforts were unavailing. The last act of the tragedy consisted in reduction of the head by the perforator, and its extraction by means of the cephalotribe, as you here observe. The administration of chloroform and the accomplishment of delivery only occupied fifteen minutes. The patient made a rapid and complete recovery, resuming her domestic duties within a week after the operation.[2]

PTOMAINES.

By THOMAS STEVENSON, M.D., F.R.C.P.,

Lecturer on Chemistry and Medical Jurisprudence at Guy's Hospital, etc.

IN 1880, the Italian Government appointed a Commission to investigate the alkaloidal bodies discovered by the late Professor Selmi in 1872, and to which he applied the term ptomaines, a nomenclature now pretty generally adopted. This Commission included Professor Selmi himself, and Professors Cannizzaro, Guareschi, Moriggia, Mosso, Paterno, Spica, and Toscani. A few papers have already appeared from the hands of individual members of the Commission, including one from Selmi, who in 1880 described (*Bull. delle Scienze Mediche Bologna*, 1880, pp. 35, 81) the physical properties of the hydrochloride of a basic body resembling conine. Its physiological effects, however, were similar to those of curare, a result confirmed by Th. Husemann (*Arch. der Pharm.*, vol. xiv, p. 327; xvi, pp. 169, 187; xvii, p. 327; xix, pp. 187, 415; xx, p. 270). In 1881, Armand Gautier (*Moniteur Sci.*, tome xi, pp. 572, 732) showed the basic character of the ptomaines by their power to neutralise acids, and by the formation of crystallisable chloroplatinates, like those furnished by the alkali-metals, ammonia, and alkaloids, generally. In the same year, this observer, in conjunction with Etard (*Compt. Rend.*, tome xciv, pp. 1298, 1357), showed that putrefaction begins with the evolution of nitrogen, that various schizomycetous organisms then develope, which attack the albuminoid bodies, with evolution the hydrides of sulphur and phosphorus; whilst leucines, leucinines, skatol, indol, carbylamines and ptomaines are formed. By fractional extraction of putrid liquids with ether, they obtained two bases, having the composition expressed by the formulæ $C_9 H_{13} N$, and $C_8 H_{13} N$, respectively.

Nencki (*Journ. der Prakt. Chemie*, Band xxvii, p. 47) claims to have separated the ptomaines from the products of the decomposition of gelatin by pancreatic tissue; and from one analysis of the chloroplatinate of a base he deduced the formula $C_8 H_{11} N$.

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[1] Read before the Ulster Medical Society.

[2] The makers of the instrument are Messrs. Maw, Sons, and Thompson, London, and it may also be obtained through Mr. J. J. Goskar, Apothecaries' Hall, Belfast.

L. Brieger (*Berlin Ber.*, Band xvi, pp. 807, 1186, 1405) obtained ptomaine-reactions from peptones prepared by acting on egg-albumen with gastric juice; but the base could not be separated. The extracts, nevertheless, were poisonous. From a fermented mixture of horse-flesh in water, he obtained the hydrochloride of a base, C [illegible] H [illegible] N [illegible], crystallising in needles; but he was unable to isolate the base itself from its salt. Doses of seven or eight grains of the hydrochloride were only feebly toxic to rabbits. The mother-liquid from which the salt crystallised was, however, more poisonous, and is stated to have contained the salt of a poisonous base, $C_5 H_{11} N$, isomeric with piperidine.

E. and A. Salkowsky (*Berl. Ber.*, Band xvi, pp. 119, 1798) obtained from putrid flesh and fibrin a base which they analysed, and to which they assign the formula $C_5 H_{11} NO_2$; but it was not poisonous, and is probably not a ptomaine, but an amide of valeric acid.

The labours of Guareschi and Mosso (*Archiv. Ital. de Biologie*, 1883) are most important, tending to discredit much of the previous work done in this field, and to condemn Dragendorff's method for separating the alkaloids in medico-legal analyses. They find that commercial alcohols are seldom so pure as not to contain bodies reacting like alkaloids; that commercial ether and chloroform need purification; and that ordinary amyl-alcohol and benzene contain pyridine. All experiments made with unpurified reagents are hence necessarily valueless. This circumstance may, perhaps, serve to explain the differences between observers, some of whom have been able, and others unable, to obtain similar results when working with like materials. From so much as eighty pounds of putrid human brains, only insignificant quantities of ptomaines were obtained—too small for analysis; and these, in doses of one-fifth grain to five grains, given to frogs subcutaneously, produced effects like curare, though it required the larger of the above doses to kill the animal. Experiments made with guinea-pigs convinced the authors that the ptomaine of human brains could not be confounded with any known poison in toxicological investigations by its effects upon animals.

From the putrefaction of enormous quantities of fibrin, there resulted a base, with alkaloidal reactions, and forming double platinum and gold salts. The composition of this base is represented by the formula, $C_{10} H_{15} N$, or $C_{10} H_{13} N$.

The discrepancies in the analytical results are not satisfactory. On frogs and birds, the extracts containing this ptomaine acted like that obtained from putrid brains. Moreover, fresh brains yielded to Guareschi and Mosso, by the Otto-Stas method, small residues giving the general reactions of alkaloids. Beef, too, yielded minute residues with similar reactions. Fresh materials yielded almost no ptomaines. Dragendorff's method of extracting the alkaloids, in which dilute sulphuric acid is used as the solvent, resulted in more alkaloidal extracts than the Otto-Stas method; and there is no doubt that the method of Dragendorff manufactures, so to speak, alkaloids. Coppola (*Gaz. Chim. Ital.*, vol. xii, pp. 11, 511) also has confirmed these results. He found that fresh dog's blood extracted by Dragendorff's method yielded abundant alkaloidal reactions; not so when extracted by chloroform. The large quantities of putrid material required to be operated on—often one or two hundredweight—to obtain ponderable quantities of a ptomaine, and the small toxicity of the substances thus obtained, except when employed in large doses, show that the probability of a ptomaine being mistaken for a vegetable alkaloid by a careful worker according to the Otto-Stas method, is remote.

REMARKS ON GASTRO-INTESTINAL MYCOSIS, CAUSED BY THE SMALLER FUNGI OR MOULDS.

By J. BRENDON CURGENVEN, M.R.C.S., etc.

IN the present day, when the cause of disease is sought for in germs, spores, bacteria, bacilli, etc., any facts that will elucidate the subject are useful. The question of the cause of disease is always one of great interest and of the greatest importance, not only to the medical profession, but to the world at large; as, by the knowledge of the source of the evil, we, by sanitary and other precautions, are enabled to arrest the development of serious and fatal maladies.

The decomposition of animal and vegetable substances not only gives rise to deleterious and poisonous products, but the decomposing matters form a nidus for the development and growth of many of the lower forms of life, such as bacteria, vibrios, and a great variety of fungi and infusoriæ. The germs and spores of these microscopic forms of life are always present in the atmosphere, but not so plentifully as to become a source of danger to living and healthy plants and animals; yet weakly plants, insects, fish, and sometimes animals and human beings, are attacked by them. It is, however, more than probable that, during mild winters, such as the last, when vegetable decomposition goes on unchecked by frost, and an abundance of fungi grow and spread out over the whole of the fallen vegetation of the preceding summer, the spores of these fungi, or of certain poisonous moulds, are inhaled, and are arrested by the mucous surfaces of the mouth, nose, and pharynx, in such quantities as to produce the symptoms of an irritant poison of the fungus-class. Moreover, these spores, by giving rise to a fresh growth of fungi on the mucous membranes, add to the symptoms.

I have long been convinced that many of the cases of intestinal and gastro-intestinal catarrh prevailing in the autumn and spring are due to these products of vegetable decomposition; and when, some years ago, heaps of dead leaves were stored in Kensington Gardens, I always warned people not to go near them.

A great number of the large fungi are poisonous; and, by analogy, many of the smaller fungi may be equally poisonous if the quantity taken be sufficient, the symptoms being more or less severe according to the amount, and the state of health of the recipient. The usual symptoms of poisoning by fungi, such as the *Agaricus phalloides*, *muscarius*, and *integer*, and the *Boletus luridus*, are vertigo, nausea, vomiting, diarrhœa, exhaustion, convulsions, and death.

The action of muscarin, the poisonous alkaloid of *Agaricus muscarius*, according to MM. Koffe and Schmiedeberg, on animals is somewhat similar to that of Calabar bean, and is antagonistic to atropine. It produces a flow of saliva, vomiting, and diminution in the frequency of the pulse, the blood-pressure sinking immediately to one-third of the normal amount. The intestines and bladder become tetanically contracted. There is great debility of muscular energy, amounting at length to paralysis.

In 1862, a boy was admitted into the Royal Free Hospital, having eaten some toadstools, probably a species of *Bolbitius*, picked in the Regent's Park. He was in a state of collapse, insensible, almost pulseless, and with frequent vomiting.

I have no doubt that many of the moulds are poisonous. Of the *Mucedines*; *Penicillium crustaceum*, and some of the *Aspergilli* are the most common, growing on nearly all dead and dying animal and vegetable substances. The *Mucorini* are also very general, and the *Mucor mucedo*, that occurs on bread, preserves, etc., is poisonous. I have known a whole yard of fowls, about four dozen, destroyed by being fed on scraps of bread, a great portion of which was mouldy. The symptoms shown were diarrhœa, drooping, and sudden death, with convulsive twitchings. Horses have often been made ill or destroyed by mouldy provender.

A case was related to me, some years since, of a little boy being seized by an illness resembling measles, immediately after having some mouldy linseed-meal thrown in his face; the sneezing and lacrymation commencing directly after the occurrence, and the rash following. It is also recorded that many of the men in a regiment of soldiers, marching in Canada, and sleeping on musty straw in barns at night, were seized by a like illness.

The following cases will illustrate the poisonous effects of one of the moulds, probably the *Penicillium*, or *Aspergillus*.

The first patient was a married lady, aged about 40, delicate in constitution, but who enjoyed moderately good health. She had, for a week or two previously to the onset of this illness, complained of headache and langour. On February 15th, I prescribed for her an aperient, and an antacid mixture. On the 16th she was better, and on the 17th she was again in her drawing-room, and expressed herself as again feeling quite well. It must here be noted that the two days, the 15th and 16th, were spent in her bedroom.

On Monday, the 18th, she felt quite well, and was engaged in reading and writing in her drawing-room until half-past one o'clock. At that hour, and when sitting quietly on the sofa, she felt a giddiness, then a faintness. Being alone, she tried to throw off the feeling by changing her position, rubbing her hands, etc.; but the faintness increased; she struggled to the bell, rang it, and dropped faint into a chair. Her servant came and laid her on the sofa; she then vomited. There was complete muscular prostration; the faintness and vomiting continued, and she became rapidly collapsed and pulseless, the limbs cold, and the voice reduced to a whisper. At 3.15 P.M. the bowels acted loosely, and again at 4.45 P.M. Some tincture of opium (ten minims) was given, with spirit of chloroform, and soon afterwards an injection of beef-essence and opium was administered. Brandy and beef-essence were also given, and injected into the rectum. At 5 P.M., the collapse and vomiting continuing, but without any action of the bowels, she was moved from the sofa to a mattress on the floor, before the fire, and hot-water bottles were put to the feet and the abdomen. There was no pain in the abdomen, which was flat and soft. She complained of a severe pain in the right shoulder. A mixture of bismuth, spirit of chloroform, and hydrocyanic acid was given at short intervals, and a mustard poultice placed on the epigastrium. At 9 P.M., vomiting recurring at intervals of an hour. Champagne was tried with no success. Enemata of beef-essence and brandy were continued. Ice in small pieces was swallowed frequently. She complained of pain over the bladder, which was empty. At 12 o'clock, midnight, the pain in the right shoulder was severe. She had vomiting at intervals of two hours. The collapse and absence of pulse continued.

On February 19th, at 4 A.M., she passed, on making an effort, about two drachms of bloody urine; the bladder was empty. A large linseed-meal and mustard poultice was placed over the kidneys; and, at 5.45 A.M. was replaced by a large linseed-meal poultice. At 9 A.M., Sir Andrew Clark saw her in consultation with Dr. Stephen and myself. He considered the illness due to some fungoid poisoning, a mycosis; and inquiry was made as to whether she had taken lately any preserved fruit or tinned food of any description; but it was distinctly stated that she had not; having been unwell, she had been living on very simple and plain diet. Sir Andrew related that he had once a severe attack of the kind, with collapse, from eating greengages, and that he knew of many cases of the kind occurring during the plum-season, from eating greengages that had their skins cracked, and on which there grew a mould. An effervescing draught and a pill containing half a grain of calomel were prescribed, to be taken every four hours. Beef-essence, and milk and soda-water were given as nourishment. At 1 P.M., the pulse was just perceptible, 96; respirations 24; temperature 99.7°. At 2.30 P.M., vomiting returned. I stopped the effervescing draught, and returned to the bismuth-mixture. She slept a little for the first time. There was no action of the bowels; and no urine was passed. At 4 P.M., an enema of a pint of warm water was given, which was retained. At 5.30 P.M., Sir Andrew saw her again with us. She complained of pain over the bladder and in the left groin. A hot poultice was applied to the abdomen; and at 7.30, as she could not pass urine on making an effort, a catheter was passed and a pint of urine drawn, which was high-coloured and slightly cloudy, relieving the pain of which she complained. No urine had been passed since the commencement of the illness (thirty hours).

February 20th, at 7.30 A.M., the urine was again drawn, a pint, light and clear, containing about one-tenth albumen. Pulse 92; temperature 99°. The bismuth and spirit of chloroform were continued. At 10.15 A.M., an enema of two pints of thin gruel was administered; this was retained. There was no peristaltic action of the bowels, which, like the bladder, seemed paralysed. The last vomiting was at 8.15 A.M., forty-three hours after the commencement of the attack. The bowels not having acted since the beginning of the illness, sulphate of soda was prescribed in an effervescing draught to be taken every three hours, for four doses; but there was no action until 6.15 A.M. on the 21st, fifty-eight hours since the last, when about half a pint of urine was also passed. Pulse still very small, 90; temperature 99.8°. At 7.30 P.M., a dessertspoonful of castor-oil was given, and the bowels acted at 10 P.M.

February 22nd.—Sir Andrew Clark continued to visit her daily with us, and took great interest in the case. She was improving in strength, although there was still a tendency to faint. She slept an hour or two at a time. Pulse 80; temperature 99.5°. She was passing urine at intervals, but with pain; the bladder also became painful when containing about half a pint. She was taking citrate of bismuth and citrate of potash; beef-tea, chicken-broth, milk, arrowroot, etc.

February 23rd.—The bowels acted in response to castor-oil. There was slight improvement in strength; the pulse was fuller and stronger.

February 24th.—The pain in the bladder continued, but was relieved on passing urine.

February 25th.—A little solid food was taken, and she was carried up to her bed-room in a sheet. The urine having a thick deposit and smelling of sulphuretted hydrogen, it was tested, and gave a slight reaction with lead. Under the microscope, the deposit was found to consist of pus-cells in abundance, vibrios, bacteria, and the mycelium and spores of a fungus quite covering the field of the object-glass. A $1\frac{1}{2}$ per cent. solution of carbolic acid was injected into the bladder daily. On the second day after its use, the quantity of fungus diminished; on the third day there was very little, and after that none. The pus and bacteria continued in diminishing quantities for three weeks, coming apparently from the urethra and the neck of the bladder, as there was smarting pain on passing urine, and at the finish a pain at the neck of the bladder, but there was no urgency or frequency in passing it. There was for a day or two, when the fungus was first discovered, a smarting and burning of the genitalia and urethra, especially around its orifice, due probably to the presence of the fungus; this was relieved by a lotion of lead and hydrocyanic acid.

If it should be said that the germs of the bacteria and the spores of the fungus were introduced into the bladder by the catheter, they must have existed in great abundance in the air of the room, as neither in my experience nor in that of scarcely anyone else has such an occurrence been before observed. Bacteria can and do exist in the urine quite independently of catheterism. In a case of renal calculus now under my care, there are abundance of bacteria in the urine. I consider that the mucous membrane of the urinary tract was invaded by the fungus in the same manner as the gastro-intestinal, by the spores coming into contact with the orifice of the urethra and parts adjacent, and giving rise to the growth of mycelium, which spread up the urethra to the bladder. This would account for the smarting and burning pain of which the patient complained.

There was a great loss of muscular power in the legs. At the end of five weeks, she could not support her weight on the left, and she could not bear any weight on the right, nor advance it in the slightest degree. At the end of another two weeks, she could support her weight on the left, and she could raise the right from the floor. The paralysis gradually passed off under rubbing and massage.

The importance of this case was enhanced by the occurrence of others where the symptoms were similar, but not so severe. First, I, who had spent two nights and the greater part of two days in the room with the patient, was, on Wednesday, February 20th, seized with vertigo, faintness, and nausea, followed by one diarrhœal action; the symptoms passing off after a dose of bismuth and opium, a little hot brandy and water, and a few hours' rest. The next morning (February 21st), the sister, who came up from the country on the first day of the patient's illness, and who had spent the greater part of two nights and two days in the room, was seized with vertigo, faintness, nausea, vomiting, and diarrhœa. She was confined to her bed for five days; the most distressing symptom was that of faintness, or absolute prostration, as if sinking through the bed. She only had about five diarrhœal motions, yet the prostration was so great that it could only be ascribed to the effects of a poison acting on the nervous system—such as produced the sudden collapse in the case of her sister. The breath in both cases was heavy and offensive, very like the smell of stagnant water. In this case also, there was some paralysis of the muscles of the legs. On first getting up, she could not stand; the next day, she could stand with support; by degrees, she improved—at first, dragging her feet along the floor without the power of raising them; and, at the end of a fortnight, she had quite recovered. The husband of the first lady, a nurse, and a servant, who were a good deal in the room, also suffered from vertigo, nausea, and diarrhœa, with prostration, passing off in a few days, the other servants in the house remaining perfectly well.

On the sister being taken ill, who had not been exposed to any other air in the house but that of the drawing-room and her bedroom, I came to the conclusion that the poison, whatever it was, was in the drawing-room. On the morning of February 22nd, I examined the room, and found a great number of vases of cut flowers and shrubs, hyacinths in glasses, and unhealthy and dying plants in pots, that had escaped my notice in the dim light maintained. I had them all removed; and, when placed on the floor in the conservatory close together, they covered a space about six feet square. The foul water, when poured out, filled two buckets, and had an offensive smell. I omitted to examine the water microscopically, but the mould on the plants and vases and in the water was evident to the eye. This mould, I have no doubt, was either the *Penicillium crustaceum*, or the *Aspergillus glaucus*, or both, the most common moulds found on dead and dying vegetable matter. The fructification of the mould found in the bladder differed from both of these; but may not a mould have a different development in the human body, in the same manner as other parasites?

We cannot fail to see the similarity of the symptoms in the cases above related to those produced by the poisonous fungi; and the reason, I suppose, that we do not more often meet with such instances of poisoning by the fungus-moulds is, that it is not often they are met with in such a concentrated form as in this drawing-room, the air of which must have been full of spores. The patient had been suffering from headache and langour for a fortnight; she had, in consequence, neglected to attend to her plants and flowers, and the air of the room had been very little changed in that time. Since the occurrence of these cases, I had some drinking-water sent to me from Pinner, where some children in a family had been suffering from sickness and diarrhœa, and in this water I found the spores and fibres of a fungus; whilst, in another case of diarrhœa and vomiting with faintness, I found fungus-spores and fibres in the coating on the dorsum of the tongue.

Through the kindness of Sir Andrew Clark, I am enabled to give an exact representation of the sediment of the urine, drawn to scale with the camera lucida, by his friend and assistant, Dr. Sheridan Delépine.

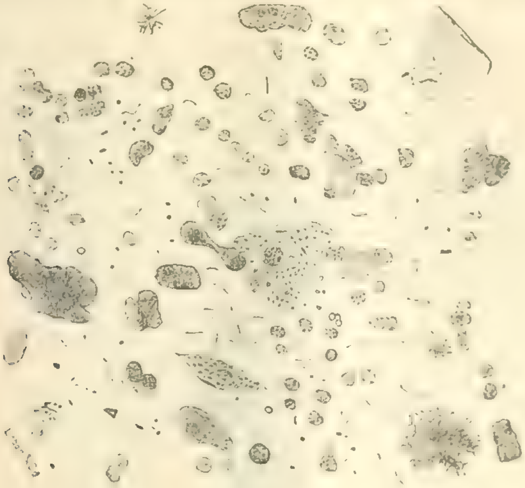

Fig. 1.

Fig. 1 shows the fungus-fibres and spores, the latter drawn a little too large, and the former too fine; there are also to be seen renal casts, renal and vesical epithelium, pus-corpuscles, and leucocytes,

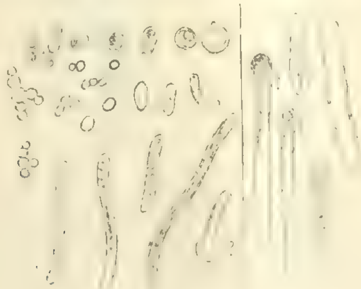

Fig. 2.

bacteria, and vibrios, magnified 300 diameters. Fig. 2 represents the various stages of growth of the fungus, magnified 1,200 diameters; the spores increasing by budding, and developing into fibres; those on the

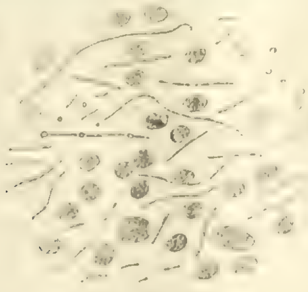

Fig. 3.

right of the line are the probable fully developed [illegible]. Fig. 3 represents the fungus-fibres, spores, micro-organisms, [illegible] as seen by myself with a power of 600 diameters.

PRESENTATION.—Dr. Aymer Macdougall, on leaving Carlisle to practise in Chesterfield, was entertained at dinner by several of his friends, and presented with a handsome silver tea and coffee service. The salver bears the following inscription: "Presented to Dr. Aymer Macdougall by a few of his friends, in token of their great regard for himself, and of high appreciation of his work, and as an expression of their regret at his leaving Carlisle, and of good wishes for him in his future career. Carlisle, 23rd May 1884."

THE TREATMENT OF NON-SPASMODIC WRY-NECK (TORTICOLLIS).[1]

By BERNARD ROTH, F.R.C.S.Eng.

THE adjective, "non-spasmodic," is better than "congenital," because it is sometimes difficult to decide whether a given case is congenital or not, and because some cases of so-called congenital torticollis are "spasmodic," and therefore not suited for the treatment advocated in this paper. I refer here, therefore, only to those cases in which there is no spasm of the affected muscle.

The diagnosis of "non-spasmodic" torticollis is easily made. The patient, lying on his back, remains passive, while the surgeon attempts to replace the head in a symmetrical position with regard to the trunk. In non-spasmodic wry-neck, the shortened sterno-mastoid muscle immediately becomes tense, and offers a complete resistance to the restoration; on flexing the head laterally towards the shoulder of the affected side, the previously rigid muscle becomes relaxed and softened, and can be easily moved to and fro with the fingers. In spasmodic wry-neck, the shortened muscle can be fully extended by the surgeon, allowing the head to be placed in the same longitudinal axis as that of the trunk; but, as soon as the surgeon's hand is withdrawn, the head returns to its previous vicious position, and, on passively flexing the head to the affected side, the contracted muscle continues to shorten, and it is with some difficulty that it can be made to relax even for a few seconds.

I find that, with the exception of Dr. Little, in Holmes's *System of Surgery*, and Mr. Edmund Owen, in his paper on Wry-neck, read before the Medical Society of London in 1878, most surgeons recommend the use of more or less complicated instruments, with or without previous tenotomy, for the treatment of "non-spasmodic" wry-neck. Mr. Owen's two cases were treated by tenotomy, and the patients were made to carry weights in the hand of the affected side, the contracted side of the neck being daily rubbed and shampooed, and the head coaxed towards a correct position by gentle but firm manipulations. At night the child was made to lie on the affected side, upon a firm mattress, the head being supported on a sand-pillow of proper thickness. These two cases had been five and six months respectively under treatment. Dr. Little says, "no apparatus effects so beneficial and lasting an impression upon the distortion as that which can be effected by the hands of the surgeon......When the patient is old enough, the surgeon will find the greatest use in encouraging the patient to sit before a looking glass, to hold the head erect and practise all the natural movements with accuracy" (*System of Surgery*, 3rd edition, vol. ii, p. 258).

The treatment I advocate is divided into three stages. 1. The first is a preliminary education of the patient in performing the usual movements of the neck; viz., flexion, extension, lateral flexion, right and left; rotation on its axis right and left. These exercises are done actively, also against the surgeon's resistance, and by the surgeon against the patient's resistance ("medical gymnastics;" see my article on Treatment of Lateral Curvature of the Spine, BRITISH MEDICAL JOURNAL, May 13th, 1882). The exercises are done while the patient is lying on his back, sitting, or standing. At the same time, he is shown by the looking-glass how much his head is on one side, and he is taught that he must exert himself to get even a slightly improved position of the head. This preliminary stage of the treatment need not last more than a week, as in Case 1. 2. The second stage of the treatment is tenotomy, under anæsthetics, of the clavicular attachment or of both attachments of the shortened sterno-mastoid muscle. 3. The third stage of the treatment can be commenced as soon as the skin-incisions are healed, that is in two or three days, as the skin always unites by first intention. The preliminary "medical gymnastic" education of the patient is now most useful; to his surprise, on trying to put the head straight he succeeds at once, and by daily practising the previously learnt exercises, and others for correcting the lateral spinal curvature which is nearly always present, he soon learns to hold his head vertically.

At first, even when the head is quite straight, the patient has the sensation that it is on one side, and it takes some days before he is quite satisfied on this point. This third stage need not last more than a fortnight, when the cure will be complete; that is, the whole [illegible], including the preliminary exercises and the tenotomy.

CASE I.—Master H. M., [illegible], 188[illegible], with the following history. He has [illegible] always held the head on one side. When four years old (eight years ago), he was placed under an orthopædic surgeon in London, who ordered a steel support with pelvic band and head-piece for fixing the head; this had been worn day and night up to the present time. There were four screws, which had been altered every two months by the surgeon during the eight years. The patient looked most wretched, wearing the instrument with a strap across the forehead. Here is a photograph (Fig. 1), taken before the treatment was commenced. The head was forced towards the right shoulder by the instrument. This second photograph (Fig. 2), taken at the same time, shows the patient without the instrument. The right sterno-mastoid was 4 inches long, and the left 5½, showing a shortening of 1½ inches. There was rather severe lateral curvature, with lumbar convexity to the left.

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[1] Read in the Section of Surgery at the annual meeting of the British Medical Association at Liverpool.

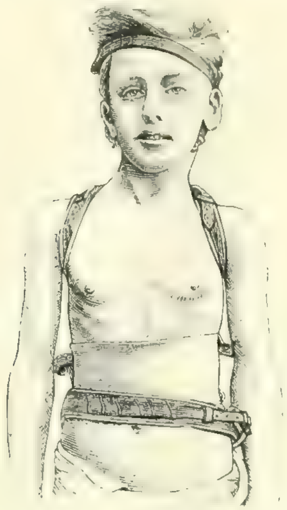

Fig. 1.

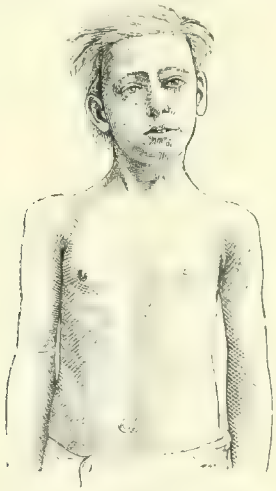

Fig. 2.

On April 13th, the patient began treatment by practising the preliminary exercises, which consisted of the prescription of twelve, given in my article in the BRITISH MEDICAL JOURNAL, already quoted.

On April 19th, within the week, the clavicular and sternal portions of the right sterno-mastoid were divided in the usual manner half an inch above the clavicle by two separate skin-incisions; the patient being put under ether by my friend Dr. Uhthoff (the sternal tendon being divided from the outside, the clavicular from the inside). Lint collodion, cotton-wool, and a bandage were applied. Four hours afterwards, the patient was comfortable, with no pain.

April 20th. The patient was sick several times after my second visit yesterday. He had a good night. There was no tenderness over the neck.

April 21st. The patient sat up without pain. The head was more vertical. He was dressed, and walked into the next room.

April 22nd. Without any painful force, the two muscles measured the same length.

April 24th. Yesterday being Sunday, the patient began to-day his medical gymnastic exercises as before the operation.

April 25th. The right muscle contracted a little when the patient attempted to flex the head when lying on his back.

May 3rd. The patient could place the head in a perfectly normal position by a voluntary effort. When lying on his back, he could flex the head comfortably, showing complete union of the divided muscle within twelve days of the operation.

May 4th. The patient was exhibited, practically cured, at the meeting of the Brighton Medico-Chirurgical Society.

May 10th. Last visit, within the month of commencing treatment, with moderate effort, the patient could make both sterno-mastoids quite symmetrical. A month later, this photograph was taken (Fig. 3), showing a perfect cure of the deformity.

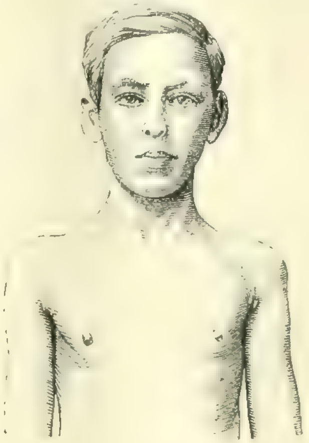

Fig. 3.

In June 1883, more than a year afterwards, the mother writes: "I am happy to tell you Henry continues quite well, and his head perfectly straight." On July 31st, I saw the patient, and found the muscles both measured exactly five inches and a half.

CASE II.—Miss D. C., aged 7, daughter of an Indian officer, was sent to me by Dr. D. Brown on April 6th, 1880. The patient had scarlet fever the previous October, and held the head on one side ever since. The right sterno-mastoid was one inch shorter than the left. The clavicular insertion alone was tense, the sternal portion being rather wasted. Slight lateral spinal curvature was present.

After one month's treatment by "medical gymnastics," which failed to elongate the shortened sterno-mastoid, its clavicular portion was divided from the outside on May 27th, Mr. H. N. Smith of Brighton giving chloroform. Four hours after operation, the patient was so comfortable that she refused to believe any operation had been performed.

May 31st (fourth day after operation). Medical gymnastic exercises were recommenced. The patient could now hold her head quite straight when thinking about it.

June 9th. The head was held perfectly erect, and was as often flexed laterally to the left as to the right.

July 3rd. Last week for treatment. Both muscles were of equal length a little over one month from the day of operation. Six weeks later, Dr. Brown wrote: "Little Miss C. was really wonderful before she left for Cauterets." Two years later, there had been no relapse.

CASE III.—Master M. P., aged 6, only son of a clergyman, was examined by me on May 27th, 1879. The patient had always held the head bent to the left. The left sterno-mastoid was one inch shorter than the right. The clavicular insertion of the affected muscle had disappeared. There was slight lateral curvature with upper dorsal convexity to the left. At the urgent request of the parents, "medical gymnastics" were persevered in for two months, but only a quarter of an inch of elongation of the shortened muscle was obtained. Therefore, on August 1st, I divided the sternal insertion of the right muscle in the usual way to the outside, chloroform being given. Five hours afterwards, there was some pain, caused, no doubt, by severe vomiting due to solid food having been given contrary to orders shortly before the operation.

August 2nd.—There was no pain anywhere.

August 3rd. The patient was dressed, and sitting up. The head could be placed quite straight without pain.

August 4th (third day after operation).—The boy recommenced the medical gymnastic treatment. The two sterno-mastoids were of exactly the same length. The patient could hold the head perfectly straight on paying attention.

August 7th.—The left muscle contracted a little while the boy was lying on his back, on attempting to raise the head from off the couch (flexion of the neck).

August 9th.—The divided muscle had healed sufficiently to contract rigorously, although only the ninth day after the operation.

August 30th.—The patient ceased treatment. The spine was quite straight. The two sterno mastoids remained of equal length. A year afterwards, there had not been any relapse, and the head remained quite straight.

From the above notes, it will be observed that I employ no apparatus whatever, either before or after the operation, and that I do not insist upon any rubbing of the affected muscle. A couch with movable back and horizontal seat (of which I gave an illustration in the BRITISH MEDICAL JOURNAL of March 5th, 1881) is useful, on which the patient is trained to hold his head in the best possible position. Walking about is allowed as usual during the whole treatment, except during the two days immediately after the tenotomy.

The results in these three cases will compare favourably, I believe, with any published, especially in regard to the rapidity with which a complete cure was obtained, and with no tendency to relapse a year or more afterwards.

The treatment I here venture to bring forward is based on rational surgical principles, and I trust that other surgeons may be induced to try it. It consists essentially of (1) a week's preliminary daily training of the patient's neck-muscles; (2) tenotomy; and (3) two or three weeks' daily further perseverance with prescribed medical gymnastic exercises, and a re-education of the patient's muscular sense as to the proper position of the head, without the employment of any mechanical contrivances throughout the treatment.

PATHOLOGY, SYMPTOMS, AND TREATMENT OF CELLULITIS OF THE NECK.[1]

By G. HARRISON YOUNGE, L.K.Q.C.P.I., etc.,

Surgeon Army Medical Department.

STRANGE to say, cellulitis of the neck, although a most important and dangerous affection, is not even mentioned in the ordinary text-books on surgery. Yet a glance at the anatomy of the neck is sufficient to show how important is this disease. When inflammation of the cellular tissue of the neck takes place, serum and pus are effused under the cervical fascia, giving rise to severe and dangerous pressure, not only on the larynx and trachea, pharynx and œsophagus, but also on the large blood-vessels passing to and from the brain, and on the sympathetic and pneumogastric nerves. As Mr. H. G. Croly of Dublin says, when writing of this affection, "Diffuse inflammation of the areolar tissue of the neck is one of the most serious and fatal forms of disease which the erysipelatous type assumes."

Causes.—The causes of cellulitis of the neck may be divided into predisposing and exciting, the former being the same as in all other erysipelatous inflammations. In fact, this disease may be predisposed to by anything that tends to lower the general health, such as want of attention to hygienic conditions, intemperance, want of proper food, and also the opposite extreme, namely, overfeeding combined with deficient exercise.

Diseased states of the blood, especially those occurring in Bright's disease and in the gouty diathesis, predispose to erysipelas, and therefore to this disease. In many cases, however, the disease comes on suddenly in strong healthy persons, without the previous existence of any of these conditions. The exciting cause is always exposure to wet and cold. The disease, therefore, almost always occurs in winter, and is most prevalent in low damp situations. Cellulitis of the neck, unlike other erysipelatous diseases, is rarely, if ever, traumatic, and is, probably, never due to infection.

Symptoms.—The symptoms of the disease are always well marked and characteristic. For a few days before the local symptoms become established, the patient complains of general malaise, there are frequent chills, with a feeling of great languor and inability for all exercise. A dull aching pain in the back is almost invariably complained of. At the same time there is severe headache; the tongue becomes thickly furred; there is nausea, and occasionally vomiting, and the bowels are obstinately constipated. The temperature is always above normal, but rarely exceeds 102 Fahr. After the general symptoms have lasted from twenty-four to forty-eight hours, the local symptoms set in. The patient now complains of severe pain in the neck; there is [illegible] and difficulty in swallowing, especially solids, and there is a clear, ringing, metallic cough, very like that heard in the first stage of croup. Then the neck becomes swollen, the swelling extending from one angle of the jaw to the other, and then downwards along the sterno-cleido-mastoid muscles to the clavicle. In a small number of cases the swelling is unilateral, and then extends from the angle of the jaw downwards to the inner end of the clavicle. The right side is, I believe, invariably affected when the disease is unilateral. The swelling is at first tense and elastic, but, after about twenty-four hours, it becomes soft, has a brawny feel, and pits on pressure. The neck has now a most characteristic appearance. When looked at from the front, it is seen to be considerably swollen from the jaw down to the clavicle, while the centre of the swelling presents a horizontal depression corresponding to the attachment of the cervical fascia to the os hyoides. This gives to the swelling an appearance exactly as if a muff had been twice folded round the neck. When this brawny feeling of the tissues is established, the symptoms of the disease become greatly intensified, as now effusion of serum and pus has taken place beneath the deep cervical fascia, and is exercising injurious, and if not relieved fatal, pressure on the deep structures of the neck.

There is now great difficulty of breathing, in bad cases amounting to orthopnœa, while the voice is a mere whisper, or there may be complete aphonia. The patient is entirely unable to swallow solids, and occasionally even fluids, these regurgitating through the nose when attempts are made to swallow them. The pressure on the veins of the neck retards the return of the venous circulation. The face, therefore, becomes congested and livid, while cold clammy drops of sweat collect on the forehead. At the same time congestion of the brain takes place, giving rise to great anxiety, restlessness, and occasionally to delirium.

In cases where the effusion extends underneath the sterno-cleido-mastoid muscles, serious pressure is exercised on the sympathetic and pneumogastric nerves, which greatly increases the dyspnœa, and gives rise, at first, to violent and irregular action of the heart, and afterwards to great weakness of this organ.

If, when effusion has taken place, the tension be not relieved by free and deep incisions into the cervical fascia, œdema of the glottis may set in and prove rapidly fatal; or the dyspnœa may gradually increase, and the patient die comatose from carbonic acid poisoning; or, what still more frequently happens, sudden spasm of the glottis may occur, the result being suffocation. Even if these dangers be avoided, deep and destructive sloughing of the tissues of the neck will take place, if the matter be not allowed free vent.

There is never any difficulty in diagnosing this affection. The characteristic appearance of the neck, the brawny feel of the tissues, and the subsequent pitting on pressure, distinguish it from every other disease found in this region. In this disease, although there is abundant effusion of serum and pus, fluctuation is never obtained. This is due, I believe, to the fact that the effusions are always situated under the deep cervical fascia, which binds them down so firmly that we cannot detect fluctuation.

Pathology.—This disease consists essentially of an erysipelatous inflammation of the areolar tissue, which fills up the spaces between, and connects together the deep cervical muscles. This tissue rapidly breaks down, giving rise to sloughs, while at the same time serum and pus are effused into the intermuscular spaces. As nearly all this mischief takes place beneath the deep cervical fascia, which is dense and unyielding, we can at once see what an amount of pressure is exercised on the important anatomical structures of the neck, and how necessary it is to give relief to this pressure by free incisions.

Treatment.—Of all the diseases to which man is subject, none require more prompt treatment than cellulitis of the neck; for if relief be not afforded by surgical means, the disease is almost necessarily fatal, or if recovery do chance to take place without operation, it will only be after sloughing has set in, and extensive disorganisation of the tissues of the neck has taken place, which will give rise to stiffness and great deformity. From the first, our treatment should be such as to support the strength of the patient, and all remedies which tend to lower the powers of the system should be carefully avoided. It is to be remembered that the patient is suffering from a [illegible], and will also have to pass through a period of [illegible] before recovery takes place. Lowering treatment [illegible] the chances of premature [illegible]. The patient should have a good purgative at the commencement of the [illegible], as the bowels are always constipated. He should then be placed on a mixture containing chlorate of potash combined with tincture of the perchloride of iron, or nitric acid with decoction of cinchona. It seems to me that a combination of chlorate of potash with tincture of iron has a peculiar and most beneficial effect in all erysipelatous diseases, and I now invariably prescribe it. At the same time, plenty of milk, beef-tea, chicken-broth, and raw eggs and brandy should be given. Overstimulation, however, is to be carefully avoided, and the quantity of brandy given should be regulated by the amount of asthenia present. If the patient cannot swallow these articles they should be given in the form of enemata. If given thus, the benefit to the patient will be greatly increased by the addition to each enema of a little pepsine and hydrochloric acid about half an hour before it is administered. Local applications, as large linseed-poultices, hot fomentations, and poppy-stupes, should be applied, as they relieve pain and tension. However, all these measures are of small importance in comparison to the surgical treatment, as they have little or no curative power over the disease, and if they alone be used the patient will probably die. As Mr. H. G. Croly says, "The symptoms are urgent and alarming, and if relief be not afforded by prompt and bold surgical aid, the patient may be suffocated."

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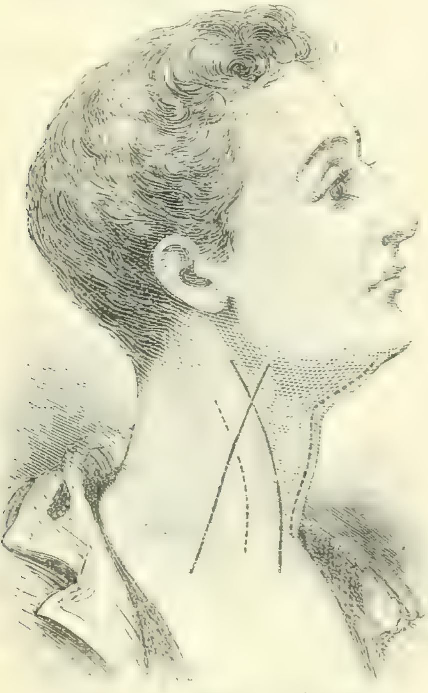
[1] Read before the Bengal Branch of the British Medical Association.

As soon as the brawny feeling of the tissues, with pitting on pressure, sets in, free and deep incisions should be made into the cervical fascia. When these incisions have been made, the relief which they give is immediate, even though no serum or pus escape; as the cervical fascia, being divided, stretches and tears, and the tension is thus greatly lessened. I have seen patients who had almost complete aphonia and dysphagia able to speak and swallow in five minutes after incisions had been made, and this even though no fluid escaped.

To illustrate the suddenness of the relief afforded I may mention a case which I treated at Fort Pitt, Chatham. The patient was admitted into hospital in January 1882, complaining of general febrile symptoms and slight sore throat. On the evening of his admission he was seized with a severe rigor and pain in the right side of his neck. The symptoms and appearances above described soon manifested themselves, only in this case the disease was entirely confined to the right side of the neck. About forty-eight hours after the swelling of the neck began I was called to see him, and found that violent dyspnœa had suddenly set in. On examination, it was found that the swelling had greatly increased, and had pushed the larynx considerably to the left side. As the patient was in imminent danger of suffocation, an incision was at once made through the skin one inch to the outer side and one inch above the inner articular end of the clavicle, where the swelling seemed to bulge most. The cervical fascia was then divided on a director, and a large quantity of sanious pus at once escaped. The man expressed immediate relief, the voice became clear, and he drank some beef-tea in a few minutes afterwards.



---------- *Line of Safety.*
———— *Line of Danger.*

In making the incisions, it is only necessary to remember the anatomy of the neck to do so with perfect safety. On the accompanying sketch, which is taken from one by Mr. Croly, in his pamphlet on *Cellulitis of the Neck*, the lines of safety and danger are well shown. The lines of danger are shown by the black lines, while those of safety are shown by the dotted lines. The line extending from the angle of the jaw to the centre of the clavicle represents the course of the external jugular vein; while the curved line, along the inner border of the sterno-mastoid muscle, shows the course of the carotid vessels. The lines of safety will be seen to extend along the mesial line from the chin to the interclavicular notch, and along the posterior border of the sterno-mastoid muscle—taking care, however, to avoid the spot where the muscle is crossed by the external jugular vein. In making the incisions, it is best to adopt the method recommended by Hilton —viz., to make an incision through the skin with a scalpel; and then, having passed an ordinary pair of dissecting-forceps through the cervical fascia, forcibly separate their blades, and thus tear through this structure. In the supra-hyoid region, however, along the mesial line, this is not necessary, as here the scalpel can be passed to the full length of its blade without danger.

Before concluding, I would refer to a variety of this disease, first described by the late Dr. Osbrey of Dublin, and which is nearly always fatal—namely, that occurring in children recovering from malignant scarlatina. In these cases, the disease sets in very insidiously, and is invariably followed by sloughing. Dr. Osbrey believed it was not good practice to make incisions into the cervical fascia in these cases, as the patients are not able to bear them, and they, in his opinion, only hasten a fatal termination. These cases are to be treated with chlorate of potash and tincture of iron, together with all the nourishment the patient can be got to take.

NOTES OF A CASE OF GONORRHŒA, WITH ACUTE RHEUMATISM AND ENDOCARDITIS OCCURRING IN ITS COURSE.

By T. C. RAILTON, M.D.Lond., B.Sc., F.R.C.S.,

Senior Assistant Physician to the Manchester Clinical Hospital for Women and Children.

The following case, which I shall endeavour to report as briefly as possible, is of considerable interest, and deserves to be recorded on account of the rarity with which gonorrhœal rheumatism is complicated with endocarditis. Rosenstein, in Ziemssen's *Cyclopædia*, vol. vi, almost denies the occurrence of endocardial complication in this form of rheumatism; while Senator, in vol. xvi of the same work, asserts that, if more than two or three joints be affected, if there be abundant sweating and affection of the heart, we have not to deal with gonorrhœal rheumatism at all, but with a case of acute rheumatism, accidentally associated with a gonorrhœa. It is difficult to see why this so-called gonorrhœal rheumatism, very similar in its character to the forms following scarlet fever or childbirth, in which endocarditis is by no means of uncommon occurrence, should differ from them in any special immunity from valvular complications, or in any of the other clinical features. In all three, there appears to be reason for assigning their origin to something akin to pyæmia.

J. R. C., aged 21, bookbinder, was first seen on September 17th, on account of a sore-throat. His previous and family-history were as follows. He had never suffered from rheumatism in any form, nor from scarlet fever. He had always enjoyed good health. His parents were both dead from phthisis, neither of them having had rheumatism to his knowledge. About the beginning of August, he contracted gonorrhœa for the first time in his life; for this he had an injection prescribed, which caused the discharge to diminish. On the 25th, he discontinued using it, thinking he was cured; but he still noticed the end of the urethra to be occasionally glued up, and a drop of pus to escape when the orifice was pressed open.

Without having been particularly exposed to cold or wet previously, on September 15th he began to feel ill. He had repeated shiverings, aching in his limbs, and sore-throat, and felt feverish.

On the 16th, his throat became worse; swallowing was painful and difficult, and his head ached excruciatingly.

On the 17th, when seen for the first time, his tonsils were swollen, and intensely red; his headache was so severe, that he said it almost blinded him. His temperature was only moderately high (102° Fahr.).

On the 18th, the throat was as before; he complained also of great pain in the lumbar region of the back, aggravated by the slightest movement.

On the 20th, the swollen tonsils had commenced to diminish in size without having suppurated. He had great pain in the right wrist, which was found to be slightly reddened and swollen. Copious sour-smelling perspiration had come on during the previous night. The heart was examined for the first time, and was found to be free from murmur, and with a normal superficial dulness. He was ordered salicylate of soda.

On the 22nd, the throat was perfectly well; but, during that and the following days, the left wrist, both ankles, and the knees were successively attacked with pain, redness, and swelling; the pain in the back continued, and there was also pain in the anterior muscles of the thighs. The case during this period presented the typical appearance of acute rheumatism; the patient was sweating copiously, was restless and sleepless, and every movement gave pain in the parts affected.

Upon auscultating the heart on the 22nd, a very faint systolic murmur was to be heard at the apex, in an area about two inches in diameter, extending only as far as the left mammary line. He complained of no pain in the region of the heart. There was no cough. He continued in this condition until the 25th, with the temperature moderately high; the joints affected as above.

On the 25th, the fever, pain, and sweating began to abate. The systolic apex-murmur was still present, and the pulmonary second sound was found strongly accentuated. The superficial cardiac dulness remained unchanged, the apex-beat was in the fifth interspace within the mammillary line.

On the 29th, the systolic murmur at the apex and the accentuated pulmonary second sound were as before. On October 3rd, a second murmur became audible, systolic in rhythm, with its maximum intensity at the aortic cartilage. It was conducted down the sternum towards the ensiform cartilage, and towards the left nipple as low as the third interspace, at which place it was lost, leaving a distinct interval between it and the apex-beat, where the mitral murmur was to be heard. The area at which this latter murmur was audible was as contracted as before. It could not be heard at the back. The second sound was reduplicated, and the accentuation of the pulmonary second sound, though still present, was not so marked. The fever and pain having entirely subsided, he discontinued the use of the salicylate of soda. On October 4th, he got up.

On October 5th, the gonorrhœa, which he had not noticed at all during his illness, returned with a copious purulent discharge.

On October 22nd, after having used an injection assiduously, the gonorrhœa had disappeared. On auscultation of the heart, the murmurs were found to have disappeared, but the accentuation of the pulmonary second sound was still audible, as also the reduplication above mentioned. The superficial cardiac dulness was still unchanged.

I should not have brought forward this case in contradiction to the statements of Senator and Rosenstein, were it not for the fact that the gonorrhœa seems to have been intimately connected with the rheumatism. The occurrence of the latter at a comparatively late period of the gonorrhœa by no means contradicts this, for it is acknowledged that the limited and subacute rheumatism, which is the usual form taken by this complication when it occurs, makes its appearance most frequently when the discharge has been in existence some time. The abeyance of the discharge during the acute attack, and its reappearance in full force upon recovery, appear to me to point to some intimate causal relation, though what that may be I do not pretend to say, between the two phenomena.

As regards the heart symptoms, I believe that the apex murmur was the result of valvulitis affecting the mitral opening; and, although [illegible] slight chronic change in the mitral valve is still taking place. The [illegible] carditis rather than to anæmia. The absence of right hypertrophy does not [illegible] of time.

The [illegible] to anæmia, since it occurred at the end of a fortnight's illness.

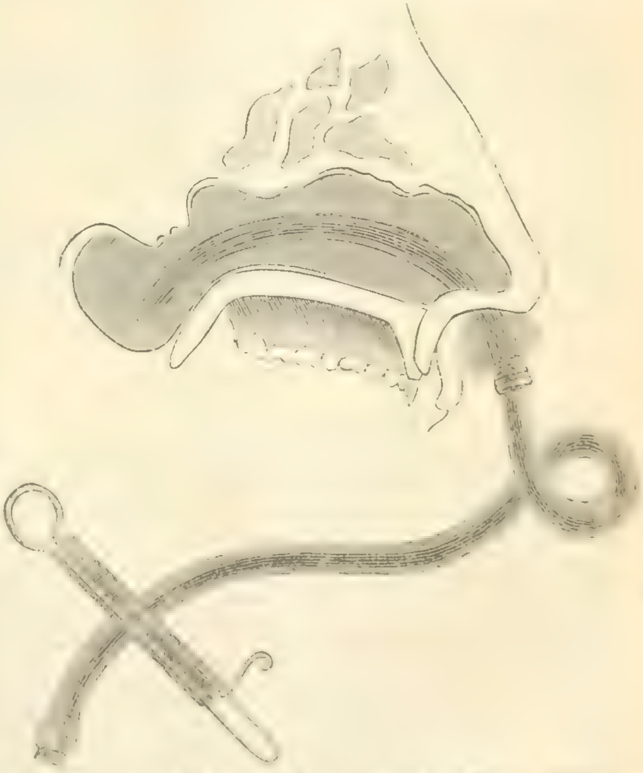
[illegible]

A SUBSTITUTE FOR THE OPERATION OF PLUGGING THE POSTERIOR NARES, AND AT THE SAME TIME APPLYING PRESSURE AND COLD TO A LARGE PORTION OF THE NASAL TRACT.

By W. L. CHESTER, M.B.,

Surgeon, Army Medical Department.

In a case of hæmophilia, which recently came under my observation, and in which there was severe and persistent epistaxis, the posterior nares was several times plugged, causing very great distress to the patient, and only affording temporary relief. I devised the accompanying appliance, but regret that, owing to the fatal termination of the case, I was unable to test it practically on the living subject. I did, however, test it on the dead subject, having previously made "Bichat's" section, and found it, apparently, fulfil all the required conditions admirably. When collapsed and oiled, it is inserted without the least difficulty. The only point on which I have any doubt is as to whether it would exert sufficient pressure to check the hæmorrhage; but, if the India-rubber bag were made of thicker texture, any desired amount of pressure could be obtained. The materials and construction are very simple. The end of a gum-elastic catheter, four inches long; a piece of India-rubber tubing; an article of "French" manufacture, in common use, but usually applied to a less laudable purpose; and an ordinary clamp, are all that are required.



[illegible] inflated.

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SURGICAL MEMORANDA.

THE UNION OF WOUNDS AND FRACTURES IN OLD PERSONS.

I[illegible] Professor Humphry's request for information on the above subject, I beg kindly to relate the particulars of a case which recently came under my notice.

Mrs. E. M., aged 90, was proceeding to attend a prayer-meeting on the evening of January 19th last, when, from some cause which she was unable to explain, she fell down. As the result, she received an extremely bad comminuted fracture of both bones of the leg, about the junction of the middle and lower thirds, the lower fragment almost penetrating the skin. With great difficulty the fragments were brought into position, as she would not keep the limb quiet for an instant, and eventually it was necessary to administer an anæsthetic, to make sure that all was right. When the splints were adjusted she constantly loosened them, and jerked the limb about.

For the first two days it was almost impossible to keep the limb quiet, as she was in a semi-delirious state, and obstinately refused to do as she was desired.

On the second evening, I administered four minims of the hypodermic solution of morphia, but, as this had no effect, in two hours' time I repeated the injection. She now, after a short time, fell asleep, and remained in a drowsy state, with contracted pupils, throughout the greater part of the following day, but talked sensibly when aroused.

She was carefully prevented from sleeping much, and finally awoke in quite a different state from that in which she had been previously, having become perfectly quiet and sensible, and very willing to do everything she was told. From this hour she progressed most satisfactorily; perfect union took place, and the splints were removed in about ninety-one days from the date of the injury. She was now allowed to sit up for a few hours daily, and in another ten days went home, having been altogether 101 days under treatment. She has since been seen walking about with a stick, just as well as before the injury occurred.

Doubtless such a good result was due to her strong constitution, as she said she had never been a day in bed during her life until this accident happened to her, and had never even suffered from a headache. WM. H. BENNETT, B.A., M.B.

Highfield, Omagh, co. Tyrone.

CLINICAL MEMORANDA.

ABSCESS OF THE LUNG.

THE report of the discussion, in the JOURNAL of May 31st, on the case of gangrene of the lung brought forward by Dr. Cayley, and that of pus-secreting basic cavities of lung by Dr. Biss, at the meeting of the Royal Medical and Chirurgical Society on May 27th, has brought to my mind a case which occurred in my practice a few years ago, and of which I regret I did not take notes at the time, as it was one of more than ordinary interest. It was that of an army pensioner, aged about 50, who had served in India for some years, and was discharged on account of some disease in the bones of the foot, the history of which I was unable accurately to get, resulting in deformity, and compelling him to walk on the outside of the foot; his health was otherwise fairly good, with the exception of an occasional bronchitic cough. When I was called to see him, he was suffering from pneumonic consolidation of the left lung, with urgent dyspnœa. He was treated on the usual routine principles, but resolution did not take place kindly, the front of the lower lobe remaining consolidated, and a good deal of the dyspnœa persisting; still he was able to get up and come downstairs, being in a state of semi-invalidism until the summer—a couple of months—when the symptoms again became urgent, rigors and sweating coming on. In the course of a week or so, a fluctuating tumour made its appearance, tending to point in front, between the ninth and tenth ribs. The breathing being laboured, I opened this, with a Syme's abscess-knife, when some thin sanious pus exuded, the wound showing a tendency to bleed. I dressed it with a pad steeped in carbolic lotion, kept in position by a wide roller. The pad required frequent changing, as it became saturated with the discharge, and in a few days a suppurating wound existed at the site of the incision; and, the pad having slipped, a portion of the lump protruded, about the size of a small orange, the lung-substance looking healthy, well inflated, but very turgid; one or two sharp attacks of bleeding occurred, necessitating the firmer application of the compress. About this time, another intercostal bulging occurred higher up, about two ribs intervening, which opened of itself. I thought it best not to interfere, as the lower opening might drain the upper abscess; the same character of discharge occurred in this, but no intercostal lung-hernia. After draining a few days, the lung could be returned without producing difficulty of breathing, and a healthy granulation took place in the wounds, very slow, and occupying several weeks before healing entirely. The treatment adopted throughout was antiseptically washing the wounds, keeping a compress steeped in carbolic lotion retained by a roller-bandage, and the internal administration of a sedative cough-mixture. There was no blood brought up through the mouth, and the expectoration of rusty sputa existed for only a few days. I have no doubt this was a case of pneumonic infiltration, which did not undergo the usual resolution, but, remaining in a state of consolidation, finally, to all intents and purposes, acted as a foreign body; and, being useless, nature endeavoured as usual to throw it off in the form of abscess, and, as we often see, herself pointed to the mode of cure. The man has made a good recovery, and is now engaged in his daily avocations as far as the deformity of his foot will allow, and has needed no medical attendance since. I might here state that, should I again meet with a case with similar tendencies, I would adopt a mode of treatment I find very successful in pneumonia, where resolution is slow and imperfect, namely, the administration of repeated small doses of iodide of potassium with senega, and external counterirritation.

JOHN WAUGH, M.D., B.A., St. David's, Toddington, Beds.

OBSTETRIC MEMORANDA.

A SUGGESTION FOR THE EASY APPLICATION OF THE MIDWIFERY FORCEPS.

AT the April meeting of the Cambridge Medical Society, I had the pleasure of mentioning to the members present a plan for the application of the forceps in midwifery, which I have found both easy and safe. No member present had ever applied the forceps in this manner; and, as I have found it very useful, it may be worth bringing under the notice of the profession generally. One of the chief minor objections to the use of the forceps is the fuss and trouble necessary to place the patient, already much exhausted and worried, in the orthodox position close to the edge of the bed, and, when so placed, patients frequently complain of feeling unsafe, and as if in danger of falling.

The plan which I have adopted entirely obviates these troubles, and is as follows. Let the patient lie in the ordinary position on her side, and at a reasonable distance from the edge of the bed, then let the upper blade be introduced as a lower blade, and then passed posteriorly round the head of the child into its proper position as the upper blade. When this is accomplished, the lower blade may be introduced in the usual manner, and the two handles locked. No force must be used, but the handle of the forceps manipulated as gently as that of a catheter when being introduced into the male bladder. I have applied the forceps in this manner more than twenty times in the last three years without any difficulty, and without causing any injury to the head or face of the child.

I always use Simpson's long forceps, but I see no reason why any other forceps, with blades not wider than Simpson's, should not be used with equal ease. I have several times applied them in this manner before the head of the child has descended through the brim of the pelvis. Of course, if the head be impacted in the brim, this plan cannot be carried out.

In teaching the use of the forceps, I think too little is said as to the direction in which the force should be applied after the head has reached the perinæum, and when it is considered wise or justifiable to terminate the labour with the help of the forceps. I believe that the force should be applied anteriorly, in a curved direction, terminating in a line almost parallel with the abdomen of the patient; in fact, in the same direction in which one might imagine that the woman herself would pull if attempting self-delivery with the forceps. Were more attention paid to this point, I am convinced that many perinæa which are now lacerated would escape uninjured. HENRY CRIBB.

Bishops Stortford.

THERAPEUTIC MEMORANDA.

THE TREATMENT OF MIGRAINE, OR "SICK HEADACHE."

IN Dr. Beale's admirable book on *Slight Ailments*, there is a chapter on the etiology and treatment of the above disorder, which is well worth the study of practitioners. I might differ from Dr. Beale on the propriety of styling "sick headache" a slight ailment, as it afflicted me at rhythmic intervals for more than twenty years, and often made me very wretched. And other men might do battle with him as to the relative position of the nervous and digestive phenomena; but this point is not *ad rem* now. My present desire is to direct attention to Dr. Beale's excellent rules for the management of a common and distressing malady; and I venture to add one or two others gathered from my own former sufferings.

I always felt particularly well on the day before an attack, and this generally warned me for an approach of the enemy. At bed-time I took a very mild aperient of aloes and myrrh. It was most fatal to have a good night, *i.e.* a long and deep slumber; and so my first preparation was to put off going to bed as long as possible, and if that ghostly thing rang, called the night-bell, I welcomed the peal as my truest friend. My invariable rule was to keep sleep at bay as much as possible, however tired I might be; an almost sleepless night would dash aside the coming headache. Only milk and porridge should be taken for supper; soup or meat is simply poison.

When the sufferer awakes and feels that his misery is upon him, Dr. Beale's advice to starve should be absolutely obeyed. It is of no use to attempt to eat, for there is no appetite, and nothing would be digested. But that neurotic food named tea may be taken hot and strong, and at frequent intervals; strong coffee is sometimes better still, but it never did me so much good as tea. An amelioration of the headache and a return of the appetite were generally simultaneous. Another remedy, usually of great service, is the fomentation of the head with the hottest water that can be borne, and continued for at least ten minutes. I do not think that Dr. Latham's suggestion of cold applications to the head can ever be safe or useful. Rest and darkness are grand therapeutic means; but how can either be enjoyed by a professional man who has to work whether his head aches or not?

A few words about medicines. Dr. Latham esteems guarana more highly than Dr. Beale. On the morning of a headache, I prescribe half a drachm of powdered guarana to be taken with hot water every two hours for three doses; but if these do not afford almost immediate relief, it is useless to give more. Citrate of caffeine may do good when guarana fails. But I wish to lay special stress on the prophylactic treatment of migraine. Before the days of chloral and the bromine salts, Indian hemp was much more in fashion than it is now; and I often recommended a dose of Indian hemp and of quinine to be taken every night during the intervals of the neuralgic attacks. It is doubtful whether any combination of more modern drugs promises better success; and we must remember that our aim is gradual alleviation rather than sudden cure. In several cases I have thought that hypophosphite of soda contributed to a patient's benefit.

Dr. Beale very properly advises patients to "live very well, and not to be too fidgety as regards food." The rules of life should be based upon that supreme common sense which goes by the imposing name of hygiene; and when all this has been done, there is little more that practical medicine can now accomplish for what is decidedly one of the severest of "minor ailments."

JOHN KENT SPENDER, M.D.Lond., Bath.

CASE OF RHEUMATIC FEVER, WITH HYPERPYREXIA: WET PACKING.

L. T., aged 26, a housemaid, was attacked with rheumatic fever on May 19th, 1883. When I first saw her, on the 21st, her temperature was over 101°; pain and swelling of the wrists, knees, and ankles, were present; and the other ordinary symptoms of the disease were well marked. Between the 21st and 28th, the temperature ranged from 101° to 103°, and a decided endocardial murmur became developed. The treatment during this period consisted of alkalies and salicin. Opium was also given (in one grain or half-grain doses as required), and blisters were applied above the affected joints and to the right of the sternum. On the morning of the 29th, the temperature was 104.4°, though there was a remarkable subsidence of the articular pains, and she expressed herself better. On [illegible] evening, about 7 o'clock, I found the temperature [illegible], and the pulse [illegible]. She was delirious and [illegible], was passing her motions and urine involuntarily, and was in a state of [illegible] danger. As the readiest means of reducing the temperature, I had her packed at once in a wet sheet, had her hair cut close, and ice applied to the head and trunk. Thirty grains of quinine were immediately given, and [illegible] grains more in two doses during the night. By [illegible], the temperature had fallen to [illegible], and she was then [illegible]. On the morning of the 30th, the temperature [illegible], the wet sheet was removed, and was not [illegible] of the [illegible].

Throughout the 30th, the temperature remained at 101.6°. On the 31st, it rose to 104.4° in the evening, but from that date it gradually fell, and was subnormal on the 8th June. Between the 29th May and the 1st June, insomnia was a very marked symptom, and there was delirium occasionally. The patient, however, made an excellent recovery, without relapse or any untoward symptom, and was able to proceed to her own home in Cambridgeshire for change of air on the 23rd June. The natural action of the heart seemed quite restored, and no stiffness or swelling of any joint remained.

W. W. [illegible], Surgeon-Major A.M.D.

TREATMENT OF TUBERCULAR MENINGITIS BY PHOSPHORUS.

NEVER having seen a case of this disease cured, I determined, a few years since, on visiting a young child suffering from tubercular meningitis, to experiment with some drug which might possibly save the patient's life. Remembering the pathological character of this affection, I reasoned that phosphorus would be the proper treatment to adopt, but I scarcely expected success, as I feared death would occur before the remedy would have time to act. I thought I would not entirely dispense with the ordinary treatment, but give it in alternate doses every four hours, so that the patient would have one medicine or the other every two hours.

I prescribed Fauconnet's syrup of phosphorus, a French preparation, sold in this country by Roberts and Co., New Bond Street, London. At the expiration of twenty-four hours, I was delighted to find a marked improvement in the child's condition; and, in the course of four days, there were no dangerous symptoms remaining. The patient continued to improve, and was convalescent in about three weeks from the commencement of the treatment. The parents have since informed me the child was excitable for some time after this illness, but is now quite well in every respect.

The next case of this disease I was called on to attend, I tried the phosphorus-treatment only, believing the alternate doses of the ordinary treatment played no part in the cure of the first case. Rapid improvement and a cure followed. One case I attended in a child, the subject of chronic hydrocephalus. Not only was the acute meningitis cured, but the head became much reduced in size. In this case, there was also digestive derangement, with aphthæ on the tongue and lips, which I treated by administering alternate doses of chlorate of potash mixture, etc. The youngest patient I have attended for tubercular meningitis was a girl, a year and a half old. This poor creature was very wasted, most probably from mesenteric disease. The rotation of the head, the altered countenance, and the peculiar scream, told plainly of the malady within. I scarcely hoped for success in such a case, and yet, after eleven days' phosphorus-treatment, all symptoms of disease in the brain-membranes had disappeared. I continued treating the patient for lung and bowel-affections a few weeks longer, and I left her in a delicate condition.

For children, I prescribe from one to two minim-doses of the phosphorus-syrup for each year of age, the dose to be repeated every four hours whilst necessary. The drug should be dispensed mixed with simple syrup, so that a teaspoonful shall contain the required dose. This should be afterwards diluted with water if the proportion of the drug be large. I can quite imagine that certain other preparations of phosphorus would prove equally useful. I have not had occasion [illegible] an adult for this affection, but I think the dose for such patient should not exceed thirty minims of the drug. Perhaps less would suffice.

It was not my intention to have published my mode of treatment for the above named disease until I had made further trials; but my past success in dealing with an affection which is generally considered incurable, has led me to yield to the plaintive appeal, [illegible] of May 31st, from "A Member," who has lost three children from [illegible] fall a victim to the same disease.

In conclusion, I trust this [illegible]

[illegible]

[illegible]

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

MANCHESTER ROYAL INFIRMARY.

A CASE OF DUODENOSTOMY.

By F. A. SOUTHAM, F.R.C.S., Assistant-Surgeon to the Infirmary, and Surgeon to the Clinical Hospital for Women and Children.

John H., aged 45, was admitted on March 5th, under the care of Dr. Morgan, suffering from symptoms of pyloric obstruction.

For some months, there had been gastric trouble, gradually increasing in severity; the symptoms being localised pain over the pit of the stomach, with tenderness on pressure and persistent vomiting, the ejected matter being at times mixed with a little blood.

When admitted, the patient was extremely weak and emaciated, weighing only 7 st. 5 lbs. No food could be retained by the stomach, even fluids being at once rejected. The urine (specific gravity 1020) contained a little albumen. He was also suffering from symptoms of chronic bronchitis. Examination of the abdomen in the umbilical region revealed the presence of a hard, well defined, freely movable nodule, apparently about the size of a walnut, the position of which underwent considerable variation, as it could be felt from time to time above, below, or to the right or left of the umbilicus. From the history of the case and the symptoms, it appeared to be one of pyloric obstruction, the result probably of scirrhus of the pylorus.

For a fortnight after admission, the patient was supported simply by nutrient enemata, administered every four hours; but as, in spite of this treatment, he was rapidly wasting, losing as much as 5¼ lbs. in six days, the question arose, whether any relief could be afforded by operative interference, both the patient himself and his friends being very anxious to have something done. The mobility of the nodule, its small size, and its circumscribed nature, indicated that the case, if one of pyloric cancer, was favourable for excision of the pylorus; but the feeble and extremely emaciated condition of the patient, and the fact that albumen was present in the urine, rendered it very improbable that he would be able to stand the shock of so severe an operation.

As a palliative measure, it was therefore proposed to explore the abdomen, with the view of performing duodenostomy, *i.e.*, establishing a fistulous opening in the duodenum on the distal side of the obstruction; or, if this were found impracticable, of performing gastrostomy, and then attempting to pass a tube through the constriction, so that food might be introduced along it into the bowel. (Before doing so, however, several attempts were made on the cadaver to perform duodenostomy; it was found extremely difficult to bring the first portion of the bowel up to the opening in the abdominal wall, and it therefore appeared somewhat doubtful whether this would be feasible on the living body.)

The patient was transferred to the surgical wards; and, on March 20th, under anæsthesia and with antiseptic precautions, an incision, three inches long, was made in the median line, midway between the ensiform cartilage and umbilicus. The abdominal cavity having been opened to the same extent, the left lobe of the liver was exposed to view; and, below this, there bulged prominently forward into the wound what at first sight appeared to be the pyloric end of the stomach, but what was afterwards found to be the commencement of the duodenum. On introducing the finger into the abdomen, a ring of induration could be distinctly felt running round the pylorus, which lay about one inch to the left of the centre of the line of incision; the disease was limited to the pylorus, and there appeared to be no adhesions or secondary implication of surrounding parts. As the duodenum came up readily to the external wound, it was, without any difficulty, stitched to the abdominal walls by a single row of eleven silk sutures, passed (as in the first stage of the operation of gastrostomy) so as to include, on the one hand, the whole thickness of the abdominal parieties; on the other hand, the peritoneal and a part of the muscular coats of the bowel.

The upper and lower parts of the abdominal wound were then closed with silk sutures, and the wound was dressed according to the Listerian method, no drainage-tube being left in the peritoneal cavity.

After the operation, the patient was removed to bed, and, as before, nutrient enemata were administered every four or five hours.

The following morning, the temperature was 99°, and the pulse 104. The patient had passed a fair night, and appeared very comfortable. On the second morning, the temperature was 102°, and the pulse was 138. He complained of thirst, and was suffering from slight cough. The enemata, given as before, were all retained.

On the third morning, a decided change for the worse had come over the patient; his features were pinched, and he appeared very prostrate and exhausted. The temperature was 103°; the pulse was 160, and so weak as to be almost imperceptible. None of the enemata had been retained since the preceding afternoon. As the patient was apparently sinking from simple collapse, it was thought advisable to open the duodenum without further delay, and supply nourishment by this means. The wound was accordingly exposed, and, a small opening having been made into the bowel, which was found to be firmly adherent to the abdominal walls, about two ounces of peptonised milk were at once introduced through a gum-elastic catheter; this was repeated every two or three hours, but the patient never rallied, and, becoming gradually weaker and weaker, died the same evening.

On *post mortem* examination, no evidence of peritonitis was found; the bowel was firmly adherent to the abdominal walls, and the opening in the duodenum was well clear of the ring of induration, which almost occluded, and was limited to, the pyloric end of the stomach. To the naked eye, the ring of induration appeared to be of a cancerous nature, but sections made through it, and examined microscopically by Dr. R. Maguire, showed the presence of nothing but dense fibrous tissue; consequently, the case turned out to be, not pyloric cancer, as was at first supposed, but simply one of stenosis of the pylorus, the result probably of cicatricial contraction after chronic ulceration.

REMARKS.—Duodenostomy appears to have been first performed by Langenbuch, of Berlin, in 1880, in a case of cancer of the pylorus, where the disease extended for some distance along the lesser curvature of the stomach, and where consequently pylorectomy, which he had intended, was found to be impracticable. He attached the first part of the duodenum to the abdominal walls, and on the seventh day opened the bowel; but the patient died ten days later from inanition. About twelve months ago, and consequently prior to the adoption of the operation in my case, Dr. Robertson, of Oldham, informed me that a short time previously he had, with the assistance of Dr. G. Thompson, performed duodenostomy in a case of pyloric obstruction from simple stricture, but that the patient, who was extremely exhausted at the time of operation, sank about twelve hours subsequently from shock.

These cases are instructive from several points of view, for they prove that duodenostomy is practicable on the living subject, at any rate upon those who, as the result of inanition from any cause, are somewhat emaciated, and where consequently the abdominal walls are thin and retracted; also that, under these circumstances, the operation is not a very difficult one, being more speedy, more easy of performance, and attended by less shock than the much more formidable one of pylorectomy. In cases, therefore, of pyloric cancer, where the patient's condition is such that pylorectomy is out of the question, duodenostomy might be more generally adopted, on the same principle that we perform gastrostomy in malignant stricture of the œsophagus, simply as a palliative measure, with a view of affording relief from starvation, and of lengthening life.

In cases of simple stenosis of the pylorus, the operation, on the same grounds, might also be performed as a substitute for pylorectomy, which has recently been adopted in these cases, or in place of Loreta's plan of "digital dilatation of the contracted pylorus" through an opening made into the stomach; for the relief afforded by the latter operation is probably only temporary, owing to the tendency of the stricture to contract again.

In those cases of simple ulceration of the stomach which are of an intractable nature, resisting all treatment, and ultimately terminating fatally, and for which both pylorectomy and simple excision of the ulcer have recently been performed, duodenostomy might, when other plans have failed, possibly be adopted with the view of allowing the stomach that condition of physiological rest under which healing of the ulceration might take place; and if this result was attained, there is no reason why the fistulous opening in the bowel should not then be closed, and the process of alimentation again be carried on in the natural way.

In the present instance, the fatal result was doubtless due to the fact that surgical interference was delayed until too late; otherwise, there was no reason why the patient should not have recovered from the operation, and his life have been lengthened for a considerable period.

LONDON HOSPITAL.

A CASE OF GIANT GROWTH OF THE LOWER LIMB: WITH REMARKS.

By FREDERICK TREVES, F.R.C.S., Assistant-Surgeon to, and Lecturer on Anatomy at, the Hospital.

C. M., a domestic servant, aged 20, was admitted into the London Hospital on February 21st, 1884. She was suffering from an ulcer situated on the outer side of the right leg, about the level of the head of the fibula. The ulcer measured two inches by one inch, had a regular edge, a sloughy base, and was surrounded by an extensive dusky red areola. It had appeared spontaneously a month before her admission, and had gradually increased until it had attained the size named. It had the foul, indolent, and unwholesome appearance of ulcers that are to be met with upon the lower limbs of old and ill-nourished patients, or upon limbs the seat of such nutritive disturbances as follow upon long abiding and neglected varicose veins.

This kind of sore appeared singularly out of place upon the leg of a young woman, who was apparently in the enjoyment of the most vigorous health, and whose history indeed showed that she could hardly recollect a day's illness in her life. She presented no evidence of any constitutional disease. She had never had syphilis.

On examining the patient for some local cause for the ulcer, a remarkable disproportion in the dimensions of the lower limbs became evident. The right lower extremity was in every part larger than the left. The measurements of the parts were as follows: length of right lower limb 31⅝ inches, of left 29⅝ inches; circumference of right thigh 21 inches, of left 13½ inches; circumference of right calf 14 inches, of left 12. The appearance of the skin was the same in the two limbs. The right limb, compared with the left, looked clumsy and ill-proportioned. The subcutaneous tissue was very dense, so that on no part of the limb could a fold of skin be readily picked up. The enlargement involved all parts of the extremity. The bones were larger, and notably the patella; the individual toes were larger, the right buttock was larger. The hypertrophy ended abruptly at Poupart's ligament and the crest of the ilium. The right side of the vulva was larger than the left. There was no œdema in any part of the hypertrophied extremity, nor, indeed, had there apparently ever been any; even long continued pressure with the thumb produced no visible impression. This enlargement of the entire limb was congenital. Relatively speaking, it appeared to have been neither greater nor less at the time of birth than at the present time. The ill paired extremity had caused the patient no serious inconvenience. In spite of a somewhat clumsy gait, she led a very active life, and it was only after long continued exertion that the limb gave the least trouble. After such exertion it was apt to feel very hot, to appear heavy, and to become a little painful. Two years before admission, an ulcer, with all the characters of the present one, appeared spontaneously over the right ankle, and healed after treatment with enforced rest, continued for nearly two months.

REMARKS.—I have ventured to consider this case an example of "giant growth," using that term in preference to, if not in actual opposition with, the expression "congenital hypertrophy." By "giant growth," I take to be understood a hypertrophy due in the main to certain congenital defects in the lymphatics of the part. These vessels are in a state of dilatation, and exhibit degrees of varicosity. The lesser degree would be expressed by the term lymphangiectasis, the more severe by the title lymphangioma cavernosum. I have especially introduced the term "congenital hypertrophy" in connection with this matter, because, while it is allowed that all congenital hypertrophies (in a strict sense) are not due to disordered lymph-vessels, it must also be allowed that the pathology of such enlargements as are not so caused is extremely vague. In the present case, there was every reason to believe that the enlargement was due to congenital varices of the lymphatics of the member. It is assumed that the varices in such cases leads to obstruction in the lymph-circulation. This lymph remains in the tissues; much of it is probably returned by the veins, but a large residue loiters behind; in time, it becomes organised, and from this extra supply of nutritive material extra tissues are built up, and a general hypertrophy of the limb results. The pathology of the affection is identical with that of macroglossia and macrochelia, affections wherein it has been clearly shown that the congenital enlargement of the tongue on the one hand, and of the lip on the other, is due to lymphangioma cavernosum. These giant growths may be considered to stand at the head of an interesting series of pathological changes that are due in the main to lymphatic obstruction. These changes would commence with simple lymphatic œdema, then pass on to certain forms of solid œdema, thence to elephantiasis Arabum, where œdema and substantial new growth are singularly blended, and finally end in the present condition, where new growth without œdema appears to be the result of the lymphatic obstruction. In many examples of giant growth, the condition of the lymph-vessels has been demonstrated by the appearance upon the skin of a series of vesicles, which were proved on examination to be extremely varicose lymphatics. No such appearance was met with in the present instance. In support, however, of the diagnosis, the following points may be mentioned. 1. Limbs presenting precisely similar appearances have shown, on microscopic examination, a general varicose state of the lymphatics. 2. Like hypertrophies have occurred in patients the subjects of macroglossia or macrochelia. 3. There was, in the present case, an absence of all evidence of abnormality or disease in the venous or arterial system. 4. The ulcers met with were such as would occur in a part whose higher nutritive activity was hampered by a general defect in the lymphatics. 5. Lastly, the large collection of cases of giant growth made by Busey shows that the congenital form is more common in women than in men, is most frequent in the lower extremities, and is especially apt to occur in the right lower extremity.

One point remains to be noted. The temperature of the right limb was always above that of the left. The difference varied from three to seven degrees, and was very evident to the touch. I observed the same phenomenon in a similar case of giant growth I saw some years ago in a man. Mr. Holmes, in speaking (Holmes's *System of Surgery*, vol. iii) of the temperature of hypertrophied limbs, observes that it is in most cases normal. He alluded to two instances in which the temperature was diminished, but to only one in which it was increased.

The patient, whose case I have recorded, was kept in bed, with the limb supported upon an inclined plane, and carefully enveloped by a Martin's elastic bandage. At the end of a month, the ulcer had healed, but the limb was by no means diminished in size.

ST. BARTHOLOMEW'S HOSPITAL.

FOUR CASES OF TALIPES CALCANEUS, OF PARALYTIC ORIGIN, TREATED BY EXCISION OF A PORTION OF THE TENDO ACHILLIS.

(Under the care of Mr. WALSHAM, Assistant-Surgeon to, and Demonstrator of Orthopædic Surgery at, the Hospital.)

IN the BRITISH MEDICAL JOURNAL of May 31st, p. 1058, attention is called to the subject of excision of portions of muscles and tendons for the relief of deformities of paralytic origin. An account, therefore, of the following cases which have recently been under my care in the Orthopædic Department at St. Bartholomew's Hospital may be of some interest.

All four cases were well marked examples of paralytic talipes calcaneus. From one-half to three-quarters of an inch of the elongated tendo Achillis was excised, care being taken to interfere with the vascular supply and the surrounding connections of the tendon as little as possible. The ends of the tendon were cut obliquely in opposite directions, so that, when brought together, they overlapped splice-wise for about three-quarters of an inch, and in this position were secured by kangaroo-tail-tendon ligatures, two of which were applied on each side. The operation in each instance was done under the spray, the wound dressed with eucalyptus-gauze, and the foot secured in a position of extension by accurately fitting splints. All the children were markedly improved, and two of the cases, I think, considering the paralytic nature of the disease, may be said to be completely successful. The power of flexion, as well as of extension, of the foot was regained, and the heel could be raised in walking. Not all cases that come under notice are suitable for the operation. Where the calf-muscles have undergone complete atrophy and fatty degeneration, no good can, of course, be expected; but where any muscular fibres remain intact, the shortening of the tendon, by bringing these into action, would appear to somewhat restore to the muscle its lost power. A rough estimate of the state of the muscles may be formed by the amount of wasting of the limb, but a more accurate knowledge of their condition will be gained by testing their reaction to the faradic and continuous currents.

The instrumental treatment of paralytic calcaneus is so unsatisfactory, and excision of the tendon so simple, and, in proper cases, so successful, that the operation deserves more attention than it appears to have hitherto received.

CASE I.—A healthy looking little girl, [illegible] came under treatment on Saturday, [illegible]. When [illegible] the use of her [illegible] that the heel [illegible] that she was able to walk, but [illegible] from the ground [illegible] talipes calcaneus [illegible] tendo Achillis, which [illegible] right angles with the leg, could then be made out as a flat band passing over the back of the ankle-joint. The foot could be drawn into the above position by the child, but she could not again extend it. There was no rigidity or contraction of the anterior muscles of the leg. The muscles of the right calf appeared somewhat wasted, the right leg measuring, round its thickest part, half an inch less than the left; the foot in front of the transverse tarsal joint, presented the characteristic "downward droop," but there appeared to be very little, if any, contraction of the plantar fascia or plantar muscles. The child walked, putting the heel first to the ground with the toes a little raised, the foot, at the same time, being slightly everted. She was unable to lift the heel.

On September 25th, a vertical incision was made over the tendo Achillis at its narrowest part, and, the tendon having been carefully exposed, a director was passed under it, and it was completely divided across; care being taken, before doing so, to fix an artery-forceps on the upper end, for fear of it retracting into its sheath. With a very sharp scalpel, a portion of the lower end of the tendon, measuring about half an inch, was sliced off obliquely from behind forwards, and from below upwards. The upper end was drawn gently down, and, half an inch having been removed, it was sliced obliquely from above downwards and before backwards. The two portions were then brought together, the upper behind the lower; the foot, in the meantime, being held in a state of extreme extension, in order to approximate the lower end as closely as possible to the upper. In this way, the tendon was spliced by means of two moderately sized kangaroo-tail-tendon ligatures, applied on each side. There was no hæmorrhage. The skin-wound was carefully and accurately united by kangaroo-tail-tendon, and dressed with eucalyptus-gauze, and the foot and leg were placed in Bavarian plaster-splints. The child had no pain after the operation, slept well, and took its food as usual the next day. The pulse and temperature remained normal throughout. The dressing was not disturbed until ten days after the operation; the wound was then found practically healed, but, for precaution's sake, the foot was again put in antiseptic dressings, and kept on the splint for another week. The dressings were then discontinued, but the foot was kept on the splint in a state of extreme extension to allow of thorough consolidation of the divided tendon. On October 31st she was discharged walking well, and raising the heel.

CASE II.—F. B., a boy three years old, was admitted on November 6th, 1883. When a year old, he had scarlet fever, after which the mother noticed that the right foot gradually assumed its faulty position. On walking, the heel was placed first on the ground, and the foot could not be raised by the tendo Achillis. On manipulation, the foot presented well marked characters of talipes calcaneus. The right leg was considerably wasted, the calf at its widest part measuring one inch less than the left, and the thigh, three fingers' breadth above the patella, being also one inch less than on the opposite side. On November 14th, Mr. Walsham excised two-thirds of an inch of the tendo Achillis, and spliced the ends, as in the former case, by kangaroo-tail-tendon. The foot was placed in extreme extension on a tin varus-splint. The patient had a restless night, the temperature rising to 101.4°; but it fell again to normal the next day, and from this date he progressed without a bad symptom. The dressings were allowed to remain undisturbed for twenty-one days. On their removal, the wound was found practically healed, and the foot was placed in accurately fitting poroplastic splints. On his discharge on December 28th, the note states: "The tendo Achillis now stands out prominently behind the heel; it is adherent to the skin at the site of the former wound, and for half an inch feels thickened and indurated." Up to this date, the boy had not been allowed to walk, for fear of stretching the yet young uniting medium. "To-day he has been placed for the first time on his feet, and could walk well without his splints, raising the heel at the ankle-joint." He was made an out-patient for a course of galvanism, and a subsequent note given by Dr. Steavenson states: "Much better; can flex and extend ankle-joint well. All muscles respond to faradic current."

CASE III.—G. N., a little girl, two years old, was admitted on November 28th, 1883. When a year old, she suddenly lost the use of her left leg, but her mother was confident that she had no fever or other constitutional symptoms. She now presented, like the preceding cases, well marked paralytic talipes calcaneus of the left foot. The left leg measured one inch and a quarter less than the right around its widest part, and the left thigh was likewise slightly smaller than that of the opposite side. The peronei and anterior muscles reacted to both the continuous and the faradic current, but no response from the gastrocnemius and soleus could be elicited by either. On December 8th, half an inch of the tendo Achillis was excised; the tendon was spliced with kangaroo-tail-tendon, as in the preceding cases, the wound closed with horsehair-sutures, and the foot secured in position by a plaster-of-Paris bandage. There was some slight suppuration, but by December 21st the wound was nearly healed. She was discharged on January 11th, walking better, but with the foot still slightly flat.

CASE IV.—W. J., a boy three years old, was admitted on January 2nd, 1884. His mother stated that, eighteen months earlier, he had had inflammation of the lungs, and soon afterwards she noticed loss of power in the right foot and leg, but no treatment for the paralysis had been sought. The talipes calcaneus was well marked: the right calf measured 6⅜ inches, the left 7⅝ inches; the right thigh, two inches above the upper border of the patella, 8⅝ inches, the left 8⅞ inches. The gastrocnemius of the right side did not respond to a moderately strong faradic current, but the other muscles were normal.

On January 5th, a portion of the tendo Achillis was excised, as in the other cases, and Bavarian plaster-splints were applied. On January 15th, the wound was found practically healed. On February 8th, the note states, "the foot is much improved in position, but the patient is not yet allowed to walk." He was made an out-patient for a course of galvanism, from which he received much benefit, and when last heard of he was walking well.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 10TH, 1884.

GEORGE JOHNSON, M.D., F.R.S., President, in the Chair.

Three Forms of Spinal Deformity. By W. ARBUTHNOT LANE, M.S., F.R.C.S.—The author described three distinct forms of spinal deformity occurring among labourers who carried heavy burdens. In these, the normal curves of the spine were modified to transmit most advantageously the superjacent weight to the pelvis and lower limbs. It was highly probable that there were many other distinct forms besides modifications of the three described. The first form occurred in men whose work consisted in carrying heavy weights on their right shoulders, as draymen. In the case of a man supporting a weight in this manner, it would be found that his spine formed a large curve, with its convexity to the right, and that the upper dorsal cervical vertebræ were flexed more than normal. The accompanying slight rotation of the bodies of the vertebræ also affected the position of the ribs. By the continual pressure which the weight exercised on the upper two or three ribs on the right side, they, acting as levers on the bodies and transverse processes of the vertebræ, rotated the upper three or four dorsal vertebræ towards the left, forming a small curve with its convexity to that side. The position of the spinous processes in their single curve was not modified by this rotation to any extent. The formation of the upper curve necessitated a compensatory increase in the deviation of the lower part of the spine from the median line, with an increased rotation of the bodies of the vertebræ. The form of the bodies and intervertebral substances, and the position of the ribs on each side, were altered by these progressive changes. In the lumbar region there was no compensatory curve to the left. The second form was caused by carrying heavy loads on the back. Here the pressure produced compression-changes in the bodies and intervertebral substances of the fifth, sixth, and seventh cervical vertebræ, straightening of the upper two-thirds of the dorsal spine, marked and progressive lordosis, destruction of the bodies and intervertebral substances of the lower dorsal and upper lumbar vertebræ at that part of the spine where the straightened dorsal part joins the lumbar convexity. It also produced a form of spondylolithesis, due to yielding of the last lumbar vertebra, or upper part of the sacrum, with the development of osteophytic outgrowth. There might also be some lateral deviation of the upper dorsal spine, due to a greater destruction of one side of the vertebræ in the lower dorsal and upper lumbar regions. The third form was caused by carrying loads on the head. The changes produced were most marked in the cervical spine, where a well marked lateral curve was produced, with its convexity to the right. The axis and third cervical vertebræ were frequently fused together, and the bodies and fibro-cartilages of the cervical vertebræ were much modified by pressure, especially in the concavity of the curve, and between the upper vertebræ. There could be seen a regular gradation from partial compression of the intervertebral substances to their complete removal, when synostosis of the vertebræ ensued. In the dorsal region there were two compensatory lateral curves, the upper being the best marked, though it was not so definite as that in the cervical region. The convexity of the upper one was directed to the left, that of the lower to the right. Mr. Lane also showed specimens from the museum of Guy's Hospital, in which there was osseous ankylosis of the occipital bone with one or more cervical vertebræ. He wished to include these under the same class, as being due to the effect of weight sustained on the head.

Mr. WARRINGTON HAWARD remarked that the first class of cases described by Mr. Lane, viz., those in which spinal curvature had resulted from weight on one shoulder, had been frequently described before, and were named in America cases of "the grocer-boy's" spine. They were much indebted to Mr. Lane for specimens of this, such as he had brought forward, and which were rarely to be seen. The careful consideration of them threw light on other conditions which were not so easily understood. The two chief factors in this class of cases of curvature, were the maintenance of the body in an abnormal position, and the use of the muscles of one side of the body. The carrying of a weight on the right shoulder produced a curve with convexity to the right, chiefly on account of the increased muscular action of the right side. In all such cases, there was rotation of the vertebræ, which was due to the action of the spinal muscles attached to the median line, and leading upwards and outwards to the ribs; such muscles, for example, on the right side, when in contraction, pulled the vertebræ round from right to left. The old idea that rotation was due to contraction of the muscles of the concavity, would not bear investigation, and the treatment of the malformation was considerably affected by the abandonment of this theory. Mr. Lane had spoken of instrumental pressure on the ribs as curative; but it was almost impossible in practice to make any instrument act in the oblique line of the muscles without producing a sore place on the chest-walls; the aim of the surgeon should rather be to help the action of the muscles of the concave side, so as to produce a balance. The ankylosis of occiput to vertebra, or of one vertebra to another, as the result of pressure, was a novel view; and certainly, in most cases of joints, where the pressure was no more continuous than in these cases of carrying heavy weights, the effects of pressure were to produce not ankylosis, but looseness of the joint. For the satisfactory explanation of the ankylosis, more clinical facts were necessary.—Mr. NOBLE SMITH pointed out that some cases of spinal curvature had been described in which a single curve only had been found, without compensatory curvature, which Mr. Lane seemed to consider essential. The rotation of the vertebræ was sometimes ascribed to contraction of the serratus magnus muscle, but such could not explain rotation in the lumbar region, nor could any influence be supposed to be exerted by the ribs. Experiments by Herman Meyer showed that in dead bodies, where there was no muscular action, a rotation of the vertebræ always accompanied a mechanical curvature of the spine. The important fact, which had been pointed out in England as long ago as 1843, and had been rediscovered in America lately by Dr. Judson, was that the posterior parts of the vertebræ formed part of the parietes. The specimen of spinal curvature in which there was no rotation of the vertebræ was probably a case of congenital malformation; indeed, the absence of rotation was the best diagnostic sign that a spinal curvature was congenital. The ankylosis of vertebræ was certainly a most improbable result of pressure. There were many specimens in the hospital-museums of such ankylosis, but there was little clue to their history. A remarkable one in the Musée Dupuytren, in which there were ankylosis and ossification of the front of the bodies of all the vertebræ, was taken from a man who worked for long in a low place, where he had to stoop; but there was no sufficient evidence that the malformation was due to pressure.—Dr. CHAMPNEYS remarked that in some cases there could be little doubt that pressure did produce ankylosis in a joint; for example, ankylosis of the sacro-iliac joint was produced constantly by scoliosis of the lumbar vertebræ. Mr. W. ARBUTHNOT LANE said he was on the point of mentioning the cases to which Dr. Champneys had called attention; and, further, he had no doubt that examination of the clinical history would show that, in the cases he had brought forward, the ankylosis was due to pressure. In the thirty-two bodies of males which had been dissected at Guy's Hospital during the winter session, he had observed spinal curvature in thirteen, and in nine of these the curvature was of one of the classes on which he had dwelt in his paper.

On a Particular Form of Amnesia (Loss of Nouns). By W. H. BROADBENT, M.D. The paper was a contribution towards the elucidation of the mechanism of speech and thought, in continuation of previous attempts in the same direction, the opportunity being afforded by an examination of the brain in a case characterised by the impossibility of saying nouns substantive, while all other parts of speech were spoken freely and distinctly. The patient was a gentleman, aged 77 at death, seen at intervals, with Mr. [illegible], between September 1878 and December 1883. He had a slight [illegible] attack of right hemiplegia, with predominant affection of the face, and hemianæsthesia, and an affection of speech, which, in about a month, settled down to the defect, which remained the same for more than five years. During all this time, he never uttered a noun, except once or twice by accident, so to speak, and inappropriately, while he could say other words, and employ long phrases, provided that they did not contain a noun. When he wished for anything, he would say, "Please give me the one," and the nurse would make guesses what it was. Other mental functions were normal. The lesions found after death were limited to the left hemisphere of the brain, and consisted of small and unimportant depressions in the posterior part of the intraventricular corpus striatum, slight diminution in size of the thalamus, complete atrophy of the calcar avis in the posterior cornu of the ventricle, and, finally, an extensive area of softening within the fissure of Sylvius in the posterior half of its extent, sparing altogether the anterior and antero-lateral convolutions of the insula, the third frontal, and the foot of the two convolutions of Rolando, destroying completely the two long posterior convolutions of the island and the subjacent white fibres, down to and including the corresponding part of the external capsule, but not invading the lenticular nucleus (or extraventricular corpus striatum), and undermining the supramarginal lobule and angular gyrus, but not implicating the entire thickness of their axial white fibres or reaching the convexity of the hemisphere. The inframarginal or first temporo-sphenoidal convolution was remarkably little affected. Another case, seen with the late Dr. Frampton, was related; it was similar in all respects, except that the patient could not read. No *post mortem* examination was obtained. The hypothetical mechanism of speech and thought tentatively advanced by Dr. Broadbent in previous papers, assumed that, in the highest or cerebral, as in the lowest or spinal, nerve-centres, there were sensory and motor departments, the motor apparatus being educated, so to speak, by the sensory; this education being represented structurally by the formation of groups of cells, through which orderly movements are effected. On the sensory side, it was supposed that in the integration of speech and thought perceptions from the different perception-centres converged upon a common cortical area, where they were combined or elaborated into an idea, this idea being symbolised by the associated auditory perception or name. The corresponding motor centre to this name or idea-centre was supposed to be a propositionising centre, in which took place the mental rehearsal of a phrase or sentence, which was a necessary antecedent to its utterance. Hence, if the path from the visual perception-centre to the naming-centre were interrupted, the sight of an object would no longer recall its name; and a case answering to this condition was related in the first paper on the subject read before this Society. Again, damage to the tract of fibres passing from the auditory perception-centre to the naming-centre would prevent the patient from understanding what was said to him. The case forming the subject of this paper was supposed to illustrate damage to the communicating tract between the naming and the prepositionising centres. The patient could rehearse a phrase in his mind, but the name or noun was not supplied from the appropriate centre. Attention was further called to other remarkable facts in connection with loss of speech.—The PRESIDENT congratulated Dr. Broadbent on his most interesting paper, and expressed his great satisfaction on hearing such good use made of the injuries of the brain by disease, for the investigation and localisation of its functions, which the laws applying to vivisection had rendered otherwise difficult.—Mr. HORSLEY did not attempt to analyse speech, but asked if the fibres which came from the hippocampus major had been found to have been destroyed, as he had gathered from the paper; for this bore on Ferrier's observation, that the destruction of the hippocampus major produced loss of sensation on the opposite side of the body. He also had not felt sure as to what was considered to be the extent or cause of the softening of the corpus callosum.—Dr. A. T. MYERS ventured to enter a humble protest against what Dr. Broadbent had described as the agreement of the logicians with the grammarians, in making a complete class of nouns out of nouns-substantive. Nouns had very properly been defined as the subjects of predication; that was a logical class, and included among its most prominent constituents pronouns, the "I" perhaps being the most important of all. From the few words of the patient first quoted, it seemed as if he might have had the capacity for realising the [illegible], but not the [illegible] state which would have interested philosophers; but, later on, they were told that he used the words "him" and "you," which were logically nouns, and must, on the general hypothesis, be [illegible] at the Platonic centre of ideas. The incapacity to use nouns was limited, therefore, to a part only of a logical class. It was not obvious why any part [illegible] should be [illegible] words [illegible] Dr. Broadbent's [illegible] methods of speech. It would further be interesting to learn if the patient could write sentences including nouns.—Dr. S. WEST had had a case with lesion of the very part of the brain which had escaped in Dr. Broadbent's case—viz., the cortex round the upper end of the Sylvian fissure. The case was one of a man with granular kidneys and bronchitis, who suddenly became aphasic, with hemiplegia and hemianæsthesia of the right side. He recovered some power of sensation, but died after six weeks. On examination, there was found to be plugging of the distal portion of the left Sylvian artery, and softening of the cortical portion of the inferior parietal lobules and angular gyrus; there was no deep lesion.—Dr. BROADBENT, in reply to Mr. Horsley, said he had not been able to find any distinct signs of degeneration of the fibres coming from the hippocampus major. The *post mortem* examination had only been possible under very inauspicious conditions, and all parts of the brain were soft; the corpus callosum had been ruptured by accident in removing the brain, but he had no good reason to think it was softer than the rest. The pronouns were not exactly in the same class as nouns-substantive, and did not call up a picture so vividly; they were of later growth, except perhaps the ego. His patient had always refused to write anything except his own name, as often happened in similar cases.

Embolism of the Right Middle Cerebral Artery producing left Hemiplegia and Hemianæsthesia; Absorption of a large portion of the Right Hemisphere; Death Seven Years Later. By SEYMOUR J. SHARKEY, M.B.—A woman, aged 34, was admitted into Guy's Hospital on March 8th, 1876, with the history that, three weeks previously, being in her ordinary health, she was suddenly attacked with giddiness, faintness, and nausea. These symptoms were followed by twitching of the left side of the body, general convulsions, and loss of consciousness. After four days she recovered consciousness, and was then found to be completely paralysed on the left half of her body, and, in addition, to have lost sight, hearing, taste, smell, and common sensation on the same side. The ophthalmoscope revealed no disease of the fundus of either eye. There was a systolic murmur to be heard all over the cardiac area, but there were no other physical signs of organic disease. Four weeks after the commencement of her illness, it was found that the anæsthesia was less marked. Six weeks and a half from the onset, sight and hearing were completely restored, and within three months common sensation had returned. The power of motion improved greatly in the left leg, and much more slowly in the arm, and the patient returned home, four months from the beginning of her illness, with perfect sensation, both common and special, with her left arm almost useless, but with very fair power in the leg. Seven years after these events, the patient was admitted into St. Thomas's Hospital, and there died of cardiac dropsy. At this time, she was found to have no loss of sensation, and sight and hearing were equally good on the two sides. The left leg was slightly paralysed; the left arm much more so. At the *post mortem* examination, aortic disease, with general dropsy and the usual chronic congestion of the viscera, were found. The left hemisphere of the brain was normal, as were all the cranial nerves. A large portion of the right hemisphere—that part, in fact, which is supplied by the middle cerebral artery—had been almost entirely absorbed. The following conclusions were drawn. 1. If the angular gyrus and superior temporo-sphenoidal convolution be respectively connected with sight and hearing on the opposite side of the body, their destruction does not involve permanent loss of these special senses. 2. Contrary to what has lately been asserted, each hemisphere is specially connected with the sight of the opposite eye. 3. Sensation, whether common or special, on each side of the body, is not so intimately connected with certain definite areæ of the opposite hemisphere as is the case with motion; for the patient gradually recovered from her hemianæsthesia, notwithstanding the destruction of those regions, disease of which originally gave rise to it—a fact which shows that other parts, either of the same or of the opposite side of the brain, were capable of completely restoring the lost functions.—Dr. BROADBENT remarked that the hippocampus major and the gyrus surrounding it seemed to have escaped, and served for common sensation. The tracts of both hemispheres for vision and hearing became associated in the medulla and pons Varolii, so that there was nothing in the history of the case which contradicted the results of experimental inquiry.—Mr. HORSLEY suggested that the affection of sensation was due to changes secondary to the initial lesion, and the same might possibly be true of the fibres governing the leg; its cortical centre was not destroyed. He was anxious to know if any defect of ideation was noticed in this case of hemiplegia.—Dr. SHARKEY pointed out that no absolute conclusions as to cortical functions could be drawn from this case, as there was injury not only of the cortex, but of the internal capsule, optic thalamus, and corpus striatum as well. The special connection of the angular gyrus with the opposite eye, as Ferrier had demonstrated, had been strongly confirmed by a case of which he had lately read a description to the Society. The comparative immunity of the leg he attributed to the partial communication between the anterior and middle cerebral arteries, whereby a blood-supply could be kept up. The state of the woman's mind he had learnt was somewhat affected.

On Albuminuria with Parametritis. By J. MATTHEWS DUNCAN, M.D.—In this paper, Dr. Duncan showed the frequent association of parametric phlegmon and abscess with albuminuria, pointing out the absence of this complication in perimetric inflammation and abscess, and in other inflammations and abscesses.—Dr. CHAMPNEYS said that he believed that the facts Dr. Matthews Duncan had laid before the Society were novel. The comparative frequency of albuminuria with parametritis was a point well worth attention, and the knowledge would relieve the physician in some cases, where he might otherwise think it a very dangerous symptom.

On the Weight of the Thyroid Body. By STEPHEN MACKENZIE, M.D.—Dr. Mackenzie presented tables of the results of careful estimation of the weights of the thyroid body in all cases in which a *post mortem* examination had been made in the London Hospital during 1871 and 1872, with a view of determining some standard of reference which could be used in such an enquiry as was now being made as to the state of the thyroid body in myxœdema. It was found, contrary to expectation, that the thyroid body constituted a higher percentage of the total weight in men than in women.

The PRESIDENT announced that the meetings for the session were now at an end, and bade farewell to the Society, in the hope of meeting again in October.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, JUNE 5TH, 1884.

JONATHAN HUTCHINSON, F.R.S., F.R.C.S., President, in the Chair.

Report of Committee on the Prevention of Blindness from Ophthalmia Neonatorum.—Dr. W. A. BRAILEY read report of the Committee. In answer to a very large number of inquiries issued to private persons, ophthalmic and lying-in hospitals, and institutions for the blind, 23 statistical replies, all of them from institutions for the blind, were received. Four of these, those of the Belfast Deaf, Dumb, and Blind Institution, the London Society for Teaching the Blind to Read, the Blind School at York, and the Blind Institution at Hull, were tolerably explicit, and the answers appeared from other evidence to be trustworthy. In the Belfast Institution, 30 per cent. of the persons concerned owed their blindness to ophthalmia neonatorum. In the London Society, 20 per cent. were certainly blind from this disease; but, from the extremely frequent occurrence of "congenital cataract" and "cause unknown" in cases of blindness from birth, the Committee were of opinion that at least another 10 per cent. should be added, thus making again 30 per cent. In the Yorkshire school, 41 per cent. were blind from this cause; and in the school at Hull, 5 cases out of 14 (35 per cent.) personally examined by Dr. Rockliffe were with certainty attributable to the same disease. The statistics of the other institutions were inexplicit, but pointed to about the same results. These numbers agreed substantially with those of foreign investigators, notably those of Reinhard, who, on investigation of 22 German blind asylums, found 658 blind from this disease among a total of 2,165, = 30½ per cent. The Committee recommended the adoption by the Ophthalmological Society of the following resolutions (modified from those originally suggested by Dr. David McKeown): 1. That the purulent ophthalmia of new-born infants being the cause of a vast amount of blindness, mainly because of the ignorance of the public regarding its dangerous character and the consequent neglect to apply for timely medical aid, it was desirable to instruct those in charge of new-born children by a card, in substance as follows:

"*Instructions Regarding New-born Infants.* If the child's eyelids become red and swollen, or begin to run with matter, within a few days after birth, it is to be taken without a day's delay to a doctor. The disease is very dangerous, and, if not at once treated, may destroy the sight of both eyes."

This to be distributed through the medium of the Poor-law and Birth Registration organisations of the United Kingdom. In England, the relieving officer, and in Scotland, the inspector of the poor, should, in every case of labour under the Poor-law system, read to and leave with the person obtaining the order for medical aid, or the persons in charge of the patient, a copy of the card. In Ireland, the card should be attached to the order for medical aid in such cases, and the person who gave the order and card should, before doing so, read the card to the applicant. The registrar of births should read and hand to each person registering a birth a copy of the card. 2. That the advocacy and aid of the medical press be solicited in drawing general attention, and especially that of the authors of text-books on midwifery, of the lecturers on the same subject for students and midwives, and of the various institutions which train, and charitable institutions which employ, midwives, to this important subject. 3. That a copy of the first resolution be forwarded to the respective presidents of the Local Government Boards of England and Ireland, and of the Board of Supervision in Scotland, and such other persons, if any, as may be necessary; and that a deputation be appointed to wait upon the said presidents and other persons, if necessary, and urge upon them the official adoption of the views therein expressed, and to take such other steps as they consider necessary.

The report was signed by Mr. Frederick Mason, Chairman of the Committee, and was formally adopted by the Society.

A deputation, consisting of Sir William Bowman, Bart., F.R.S., Mr. Jonathan Hutchinson, F.R.S., Mr. Brudenell Carter, Mr. Tweedy, Dr. M'Keown of Manchester, and the Honorary Secretaries, Dr. Brailey and Dr. Abercrombie, was appointed to wait on the President of the Local Government Board.

Uniocular Diplopia.—Mr. TARGETT showed, for Dr. Brailey, a man, aged 56, who exhibited in a remarkable manner the phenomena of the case described by Messrs. Gunn and Anderson at the last meeting of the Society. He had on the right side paralysis of the external rectus, with dilatation and immobility of the pupil. He gave a clear history of uniocular diplopia on this side, but only in the outer half of the field of vision. Now that the optic discs had become atrophic, this symptom was no longer noticeable. Perception of red and green was wanting. The right knee-reflex was much weaker than the left. Without any local cause, he had nocturnal incontinence of urine. He had none of the usual symptoms of locomotor ataxy. He was probably suffering from constitutional syphilis.

Tubercle of Choroid.—Dr. P. H. MULES exhibited a coloured drawing of a typical example of miliary tubercle of the choroid, as seen with the ophthalmoscope, as well as microscopic sections of tubercles. The patient was a girl, aged 10, who died of acute miliary tuberculosis fourteen days after the apparent commencement of her illness. After death, miliary tubercle was found in the lungs, kidneys, liver, spleen, and cerebral meninges, as well as in the choroid. The drawing shown was made two days before death; there was double optic neuritis, and surrounding the disc in each eye were eight or ten circular nodules, yellowish white at the centre, and passing gradually at the periphery into the colour of the natural choroid. The surface of several of the choroidal tubercles was traversed by a retinal vessel. Dr. Mules thought that the ophthalmoscopic appearances, taken alone, were hardly sufficiently diagnostic of tubercle to separate it from other choroidal affections, notably the very early stage of choroiditis disseminata, but that, taken in connection with other symptoms, they afforded valuable confirmatory evidence.

Serous Cyst of the Iris.—Mr. W. ADAMS FROST exhibited (for Mr. Waren Tay) a case of serous cyst of the iris, in a man aged 28. Twenty-four years ago, the eye had been injured by a fork, and the development of the cyst dated from that time. Ten years ago, an iridectomy was performed. The cyst occupied the upper and inner quadrant of the anterior chamber, extending quite up to its periphery, and reaching about halfway across the pupil. The lower part of its posterior surface was lined by a layer of uveal pigment. The cyst itself was sufficiently transparent for a fundus-reflex to be obtained through it in several places. The pathology of the affection was discussed, and the papers by Mr. Hulke (*Ophthalmic Hosp. Rep.*, vol. v.) and M. de Wecker (*Graefe Saemisch Handb.*, vol. iv, p. [illegible]) referred to. As bearing on the question of treatment, it was mentioned that, in one of Mr. Hulke's cases, the increased size of the cyst gave rise to sympathetic irritation in the other eye, which subsided on excising the cyst. In other cases, on the other hand, the excision had been followed by loss of the eye from suppuration. As the cyst in this case was in contact with the cornea and lens, and extended quite up to the periphery of the anterior chamber, its removal would probably be a matter of difficulty and danger.

Sarcoma of Choroid.—Messrs. COWELL and [illegible] showed a glycerine-jelly preparation and microscopic sections of a case of sarcoma of the choroid occurring in a woman, aged 37. The case was shown at the meeting of the Society in March last, when the tumour could be seen with the ophthalmoscope in the upper and outer quadrant of the fundus. After the March meeting, the whole of the retina became detached, and the eye was excised. Up to the present time, there was no recurrence of the disease.

Disseminated Choroiditis.—Messrs. CRITCHETT and JULER exhibited a living case of disseminated choroiditis occurring in a woman, aged 46. There was a distinct history of syphilis, acquired [illegible] years ago. The case was peculiar on account of the great number of large and small yellowish-white patches distributed over the fundus, including the yellow-spot region of the right eye. The left eye had become totally blind three years earlier, presumably from the same cause. Very little pigment was to be seen, and the visual acuteness and visual field of the right eye were normal.—The PRESIDENT observed that the form of choroiditis was very unusual, the small size and large number of the white patches being remarkable. He recalled one case which he had seen, where the patches were similar but not quite so numerous. It occurred in a young lady, aged 15, whose father had suffered from syphilis. There was no other trace of hereditary taint, but the patient recovered rapidly under antisyphilitic treatment.

Concomitant Strabismus following Severe Scalp-Wound.—Messrs. CRITCHETT and JULER also showed a boy, aged 14, who had sustained a severe wound of the scalp on February 7th. Four days after this accident the eyes became convergent, and he suffered from double vision. There was no loss of consciousness at any time. He made an excellent recovery from the scalp-injury, but the squint remained. The convergence was at first attributed to paralysis, but, on examination, the patient was found to be hypermetropic (5 D). Both the primary and the secondary deviations were equal. The left field of fixation was normal, and the right only indicated a deficiency in the power of the external rectus. The squint was therefore considered to be chiefly concomitant.—In reply to Mr. NETTLESHIP, Mr. JULER said that there had been diplopia; and this, Mr. NETTLESHIP observed, proved that the squint was of recent origin.

Acute Optic Neuritis associated with Acute Myelitis.—Dr. SHARKEY read a paper, prepared jointly by himself and Dr. J. B. LAWFORD, on this subject. The patient, a girl, aged 17, was admitted into the Royal London Ophthalmic Hospital, under the care of Mr. Streatfeild, on November 23rd, 1883. There was nothing noteworthy in the patient's previous history, and there were no grounds for suspecting syphilis. Her vision began to fail, without evident cause, on November 9th, and by November 13th she was quite blind. She had neither headache, sickness, paralysis, nor fits, but simply loss of sight. She was a fairly healthy looking girl; but, on examination, severe double optic neuritis was found, and she had no perception of light. Thirty-three days after her vision failed, she began to complain of paralysis, with loss of sensation, first in the left leg, then in the right. Anæsthesia gradually spread up the trunk and involved the arms, and she had incontinence of the evacuations. During the latter part of her illness, she was under Dr. Bristowe's care in St. Thomas's Hospital. Cystitis came on, she passed offensive purulent urine, and the temperature reached 105° Fahr. Finally, she died of peritonitis, sixty-two days from the time when her vision first failed, and twenty-nine days after the first appearance of paralysis. At the necropsy, peritonitis, cystitis, and suppurative nephritis were found. To the naked eye, the brain and its membranes, and the cerebral sinuses, appeared healthy, but there were softening and great congestion of the cervical region of the spinal cord over a space two or three inches in length. The rest of the spinal cord and its membranes seemed healthy. Microscopic examination revealed the presence of acute inflammation in the softened cervical region, in the columns of Goll above it, and in the lumbar enlargement, as well as in the optic nerves, discs, chiasma, and tracts. There was slight inflammation of the meninges about the chiasma, and on the under surface of the frontal lobes. The interest of the case, in the opinion of the authors, lay in the association of acute optic neuritis with acute inflammation of the spinal cord. It had long been known that slight changes occasionally occurred in the fundus of the eye in cases of injury to the spinal column and cord. But it was only comparatively recently that attention had been called to the association of acute optic neuritis with myelitis, independently of injury. Clifford Allbutt, Seguin, Noyes, Steffen, and Erb, had noticed its occurrence, and more recently Dreschfeld and Chisholm. The conclusion which Dr. Gowers and Dr. Dreschfeld drew with regard to these cases was, that the optic neuritis and the myelitis were associated phenomena due to a common cause, but that neither depended directly on the other; the case detailed supported this view, for the optic neuritis preceded the myelitis by a month, and there was no evidence at the *post mortem* examination of any anatomical connection. Clinically, such cases were of great importance, as they simulated disease of the brain; and their occurrence [illegible] Mr. M[illegible] [illegible] the patient was [illegible] Dr. Bristowe.

Recovery from Amaurosis in Infants. Mr. Nettleship read a paper founded on a number of cases of temporary blindness, or partial amaurosis, observed in infants. He dwelt especially on prognosis, and pointed out, first, that there was a fairly well defined group of cases where the amaurosis was not recovered from; in these cases sight was absent or defective from birth, several children of the same parents were often affected, and the parents were often akin; some of the patients were idiotic, others stupid or weak, others quite intelligent; the optic discs were either healthy or atrophied; in the milder cases, where sight was partly retained, there was often total colour-blindness; in cases of absolute blindness, the pupils might still react to light, which appeared to show that the centre for pupillary action in or near the corpora quadragemina remained intact, although higher centres were absent or atrophic. In cases of amaurosis, where recovery was probable, the history was of great assistance; it was generally stated that the child could see well for some months or even a year or more after birth, that it lost its sight during an illness with cerebral symptoms, often diagnosed as meningitis; the optic discs, in the great majority of cases, were either healthy, or showed merely some slight doubtful pallor; frequently the power of walking, standing, or even sitting, was lost during the same illness. The blindness appeared to last from one to six months, and recovery took place slowly. He thought that in all these cases intracranial inflammation certainly took place, and perhaps spinal mischief as well. The mode by which blindness was produced must remain in doubt until ophthalmoscopic examination had been made in the early stage of the blindness, as it was possible, though not probable, that papillitis might occur, and until *post mortem* examination had been made during the time sight was lost; possibly, in some cases, the blindness might be produced by pressure of fluid accumulated in the ventricles, but this explanation would not serve for all cases.—In reply to Dr. McKeown, Mr. Nettleship said that he was unable to state whether the blindness was in any way connected with dentition.—Mr. Waren Tay thought it very difficult to determine whether an infant was blind or not. In one case which he remembered, the infant had been brought to him as blind; ophthalmoscopic examination showed only that the discs were grey and the choroid thin, and he thought that in reality the infant could see.

A Case of Uniocular Diplopia. Mr. Simeon Snell related a case of uniocular diplopia occurring in an elderly medical man, who had observed it for several years. It was always horizontal; thus, on looking at a telegraph-wire, one line fainter was seen above the true line; the two objects were never seen side by side. The right eye was affected, V = [illegible]; not improved by plus or minus glasses; left, $V = \frac{20}{20}$, with Hm. 1 D. With both eyes looking at an object, the good eye, unless fatigued, controlled the bad one. The space dividing the "ghost" from the true line was only about three or four minutes of space, and, therefore, a line exceeding this amount in width would not appear doubled, but merely thickened and blurred. The subject, a scientific man, and conversant with optics, suggested as the cause irregularity in the curve bounding the crystalline lens, causing it to act like the divided object-glass of a heliometer. Mr. Snell, accepting the opinion that the diplopia depended on some alteration in the lens, asked whether the change in curvature, or irregular structure, or whatever condition it depended upon, was caused by the changes incident to the lens in presbyopia, presuming the diplopia corresponded with that period. Astigmatism, as far as examination went, was excluded.

Living Specimen. Messrs. Critchett and Juler showed a case of Double Lamellar Cataract, in which artificial pupils had been made; that of the right eye by iridodesis, and that of the left by iridectomy.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

MONDAY, MAY 5TH.

J. S. Turner, M.R.C.S., L.D.S.Eng., President, in the Chair.

Overgrowth of Rodent Teeth. Mr. Storer Bennett showed, for Mr. Balkwill of Plymouth, the skull of an English black rat, which illustrated the serious results which might happen to rodent animals from the continuous growth of their characteristic teeth, when, from any cause, their normal antagonism was lost. In this case, the two lower incisors had been deflected to the left, and the two upper to the right, so that they did not meet in the usual way. The right upper tooth had described one complete circle and three-fourths of another, and, being well inclined outwards, it had not met with any obstacle. The right lower tooth had penetrated the upper jaw and the parts above, and its point projected a quarter of an inch above the highest part of the skull. The left upper tooth, after describing a complete circle, had encountered the front of the upper jaw, which it had penetrated to the depth of a third of an inch. The left lower tooth had been broken off. The lower jaw was thus quite fixed, and the animal could only have obtained nourishment by means of suction.

Ethylate of Sodium as a Dental Anæsthetic. Mr. E. G. Betts stated that he had found ethylate of sodium very useful for obtunding the pain of sensitive dentine. Before applying it, the dentine should be carefully dried, and the application could be repeated at intervals as the sensibility returned. He had at first thought it might be useful for destroying the nerve-pulp, as it was used in medical practice for destroying cutaneous nævi, but, in this respect, it had not answered his expectations.

Alveolar Abscess.—Mr. J. H. Mummery read notes of a case of extensive alveolar abscess, of obscure origin. The patient, a strong healthy-looking young man from Natal, had suffered for more than a year from constant purulent discharge from an opening below the angle of the jaw, on the right side. He had consulted several surgeons, one of whom sent him to Mr. Mummery, with a request that he would remove the necrosed roots of the right lower first molar; this was done, but without affecting the abscess. The second molar had a small cement-filling, but was to all appearance healthy, as was also the third molar. Six months later, the patient returned in the same condition, and now consented to a further examination of the second molar, which was, however, still firm, and free from tenderness. On drilling into the pulp-cavity, pus escaped; the tooth was at once extracted, the sinus healed in a week, and a complete cure was effected. The patient stated that the tooth had cost him between £400 and £500 in travelling-expenses and surgical fees.

Observations on the Teeth of Certain Rodents. Mr. Betts read a paper, in which he disproved the statement, first made by Professor Hilgendorff, and since copied into several works, that the incisors of the leporidæ had a complete investment of enamel; and showed that the thin transparent layer at the back of the incisors of hares and rabbits was really cementum, and could be clearly demonstrated not to be enamel. This, although apparently a small matter, was of more importance than appeared at first sight, since the supposed fact had been held to show that the leporidæ were, in this respect, a missing link between the rodents and the other mammalia, whilst, in reality, the exact relations of this large class to the rest of the animal kingdom must still be considered an open problem.—The results of Mr. Betts's observations were confirmed by Messrs. A. Underwood and Chas. Tomes. The latter also remarked on the obscure zoological relations of the rodent class, and suggested that some of the missing links might possibly yet be supplied by a careful study of the marsupials.

ACADEMY OF MEDICINE IN IRELAND: MEDICAL SECTION.

FRIDAY, APRIL 18TH, 1884.

Henry Kennedy, M.D., in the Chair.

Etiology of Climatic Fevers in India.—Dr. J. W. Moore read an abstract of Surgeon-Major Gore's paper, which was read before the Section *in extenso* at the previous meeting, when, owing to the lateness of the hour, the discussion was adjourned. Surgeon-Major Gore showed that the common climatic fevers of the Kuneron Hill Ranges of North-West Bengal presented themselves under two very distinct forms—namely, as intermittents and remittents. He disputed the doctrine held by some, that remittent fevers were not to be met with in India as distinct from enteric fevers, and quoted briefly a description of the severe epidemic of malarial fever which prevailed in the neighbouring North-West Provinces in 1879, which differed in no respect from that met with in many parts of Lower Bengal. Having alluded to the ague-malarial fevers of the mountain-regions of North America, as described by Waggoner and Smart, he referred to the observations of Macnamara and Walker on the presence of malarial fevers in the hills in India, and to the great varieties in the degree and severity of the types of malarial fever, which often obscured the diagnosis between malarial and enteric fevers. He showed how malarial fevers varied in intensity and duration, according to the class of the poison, exposure to intense heat, individual peculiarities of constitution, different altitudes, the causes of scurvy or acquired anæmia from a previous residence in the plains; giving examples from the records of the 30th Regiment. At the same time, he pointed out how the malarial fever might ascend, and in how many different ways it might be taken into the system, and how the quinine-test might be vitiated by a variety of circumstances, and what therapeutical combinations were necessary to render it effective; alluding, finally, to those congestive remittents caused by an excessive dose of the poison, or the nervous system, or blood so altered from the natural standard as not to be amenable to any therapeutic combination which might be administered to avert a fatal termination.

Disease of the Bladder.—Dr. J. P. DOYLE read a paper on a case presenting some symptoms of disease of the bladder. A gentleman, aged 68, came under his care in May, 1883, for irritability of the bladder, and pain along the urethra, especially about an inch from the orifice. He consulted a London specialist, who, from the symptoms, expected to have found a calculus, but afterwards diagnosed enlargement with hardness of the right lobe of the prostate, which, he said, by pressure on the nerves, produced the pain, numbness, and lameness in the right lower extremity, from which the patient suffered. He also informed him that he would not be free from the pain during his life. On January 18th, inflammatory symptoms, with great increase of pain, set in. The slightest touch or movement produced increase of pain, with contraction of the muscles of the thigh, which in a few days became very tense and swollen; and, later on, some stercoraceous vomiting ensued, along with great tympanitic distension of the abdomen. The patient got great relief from puncturing the abdomen with the needle of a veterinarian hypodermic syringe in the position of the ascending colon, which allowed the escape of a large quantity of very offensive gas. On *post mortem* examination, no calculus was found, and the bladder and prostate were normal. The verumontanum appeared enlarged. The cæcum, ascending colon, and vermiform appendix, were found inflamed. The former were distended, and contained dark coloured matter like moist charcoal; and the latter was filled with a hard mass, which, on fracture, looked like charcoal. —Dr. MORE MADDEN considered that all the symptoms pointed to disease of the bladder, including displacement of the cæcum, which gave rise to an amount of trouble sometimes underestimated.—The CHAIRMAN had not seen any case where the thigh was involved: but he had seen one where the pain was down the right thigh. He did not think the prostate gland had anything to say to it.—Dr. DOYLE, in reply, said there was no perforation. The man had enlargement and hardness of the prostate. Contrary to what authorities mentioned, the patient never lay on the diseased side, but on the opposite. He was stated to have had a gouty rheumatic tendency.

Progressive Muscular Atrophy and Labio-Glosso-Laryngeal Paralysis. —Dr. J. MAGEE FINNY read a paper to show the identity of progressive muscular atrophy and progressive bulbar paralysis. It is published at page 1132.—Dr. C. J. NIXON observed that, in bulbar paralysis, there was always to be found a constant lesion in the motor roots of the nerves, and in the motor ganglia and the medulla. In all the *post mortem* examinations, there had been found constant trophic changes in the motor roots of the nerves, whereas, in nineteen recorded cases of progressive muscular atrophy, no change whatever was found in the motor roots; and another peculiarity was that the first sign was the atrophic condition of the muscles, while there were some cases recorded where, with distinct bulbar paralysis, there was no atrophy of the muscles at all. The absence of atrophy of the muscles could be explained by assuming the disease confined to the motor cells in the anterior grey horns, while the trophic cells in the neighbourhood had escaped the disease. He asked how Dr. Finny explained the number of cases met with by reliable observers, where there had been no disease found in the cord at all in cases of progressive bulbar atrophy. Another point was as to what distinction could be drawn between cases of progressive muscular atrophy and the acute or subacute forms of poliomyelitis. In poliomyelitis there was first paralysis, and subsequently atrophy; whereas, in progressive muscular atrophy, there was first atrophy, and then, in proportion to atrophy of the muscles, there was loss of motor power. There was a great amount of evidence to show that those diseases were to a large extent hereditary.—The CHAIRMAN pointed out that there were cases recorded of local origin in which there was no disease found in the spinal marrow or the brain. —Dr. FINNY acknowledged that Dr. Nixon had touched more points than he had dealt with in his communication, but he thought it was hardly time yet to come to any positive conclusion in comparing the two diseases, the number of observations on progressive muscular atrophy being much larger than that on bulbar paralysis. The microscopic examinations in the latter were very few, whereas the other disease had been the subject of general observation for many years. It was not in his power to explain the observations of Charcot as to the absence of lesions in the anterior grooves of the cord in progressive muscular atrophy. If his theory were correct, one of the essentials must be an ascending neuritis, and this, passing through the muscles, should show itself in the anterior roots before it reached the grey matter in the cord. There might be no lesion of the anterior column at all. In infantile palsy, rapid inflammation or other lesion took place in the multipolar cells; whereas, in muscular atrophy, the same process was going on much more slowly, and partially progressive muscular atrophy existed; but there were many cases where, before the atrophy was fully confirmed, there was paralysis, and that in bulbar paralysis. In Charcot's case, the lung was perfectly normal; but, after death, the examination showed it was in a very advanced stage of fatty degeneration. The amount of atrophy was somewhat due to the nutritive nerve-cells, which must preside over those parts. As to the etiology of the disease, so far as his knowledge went, there was little known about it. He did not agree with Dr. Nixon that hereditariness was shown to be a factor in those cases. It was not so in his cases, which he had brought forward, not to prove any special theory as to the origin of the disease, but to illustrate the close affinity existing between the two diseases.

FRIDAY, MAY 16TH.

HENRY KENNEDY, M.D., in the Chair.

Living Specimens.—Dr. J. M. REDMOND: (1) Case of Progressive Muscular Atrophy in a boy aged 10; (2) Case of Hemiplegia following Chorea.

Specimens exhibited by Card.—Dr. J. HAWTREY BENSON: An Aneurysm of Thoracic Aorta showing complete obliteration (by pressure) of the superior vena cava. Dr. C. J. NIXON: Cerebral Softening. Dr. H. C. TWEEDY: Microscopic slides showing Achorion Schönleinii. Dr. J. M. REDMOND: Mitral Stenosis with Cardiac Hypertrophy.

Double Optic Neuritis with Paralysis of both Olfactory Nerves and Sensory Division of Right Fifth Nerve.—Mr. JOHN B. STORY exhibited a patient suffering from atrophy of both optic nerves, and paralysis of the olfactory nerves and of the sensory division of the right fifth nerve. The patient was an unmarried woman, aged 32, who had enjoyed good health till the winter of 1882-3, when she began to suffer from a violent pain in her head. The pain later on became so violent as to confine her to bed, where she remained for some months in the spring and summer of last year. She became after some time completely unconscious; and when her consciousness returned (about July 1883) she found her senses of sight and smell totally lost, and sensation absent from the right side of her face and the little finger and ulnar side of the ring-finger of her right hand. She noticed a defect in the sense of taste at the same time in the anterior portion of the tongue at the right side. The examination of the patient completely established the truth of her statements, with the exception of the paralysis in the skin of the fingers, which did not appear to have any real existence, at least then. Corneal and conjunctival sensibility was completely absent, and the palpebral and lacrymal reflexes connected with it, while the cornea itself was perfectly healthy, and the tension of the right globe was rather above that of the other eye. He considered the case to be one of cerebral tumour, but could not assign any definite locality to the supposed new growth. The atrophy of the nerves was undoubtedly produced by optic neuritis. He commented on the various theories explanatory of the connection between papillitis and brain-disease, and upon the current views as to the production of neuroparalytic keratitis. The secretion of saliva from the right parotid gland was, so far as careful testing with vinegar could ascertain, completely abolished, that from the left gland being perfectly normal.—The CHAIRMAN would connect the symptoms with a tumour at the base of the brain, implicating particular nerves or parts. There seemed to be less vomiting in this case than usual.—Dr. C. J. NIXON considered that, if Mr. Story were perfectly satisfied that there was a lesion of both nerves of smell, and at the same time a lesion affecting some of the fingers of the hand and the forearm, it would be perfectly possible to account for all the phenomena that existed by an isolated tumour. It was remarkable to find that, with the implication of the sensory division of the fifth nerve, there was complete loss of the sense of taste on the corresponding anterior portion of the tongue.—Mr. STORY, in reply, said that non-persistence of pain had not unfrequently characterised the growth of tumours on the brain, and the cessation of vomiting, too, had been not unfrequently noticed. All were familiar with the fact that loss of sense of smell followed paralysis of the sensory portion of the fifth nerve. In this case, a probe might be put up the right nostril without the slightest effect; but if the left were touched in the same way, she shrank with pain. Assafœtida, valerian, oil of cloves, or ammonia, had no effect on the right side, whereas on the left, she exhibited the movement consequent on inhaling strong smelling-salts.

Reflex Paralysis.—Dr. C. J. NIXON read a paper on reflex paralysis, in which he summarised the different views which had been held in favour of and against the theory of this form of paralysis. He first examined the class of cases of paralysis which were usually cited as caused by reflex influence, viz., [illegible] from affections of the fifth nerve, and paralysis of the orbital nerves from a like cause. Having shown that those cases might be explained without reflex mechanism, he next examined the evidence as to the existence or non-existence of reflex paraplegia. Examining the views of Brown-Séquard, Gull, Leyden, and others, and the experimental observations on the subject, he directed attention to the absence of any true conception of the mode in which paralysis by reflex action was brought about, except it were understood to be produced by inhibitory influence; so that reflex paralysis, if it had any meaning, must be inhibitory paralysis. This name had, at least, the advantage of suggesting the way in which the phenomena of disease were produced. Dr. Nixon thought, however, that there was no necessity to admit the existence of an inhibitory paralysis, as, taking, for instance, the cases recorded as reflex paraplegia, they could arise in three different ways: as an ascending neuritis which set up myelitis; from extension of inflammation along the veins to the spinal cord; or from a lumbo-sacral neuritis which descended along the sciatic nerves.—Dr. McSWINEY called attention to the so-named reflex paralysis following wounds, of which Weir-Mitchell had given many examples.—Dr. BENNETT said that, in his hospital experience, Dr. Nixon had never seen a case of reflex paralysis, while he quoted instances of inhibitory nerve-influence, which he held to be another name for reflex paraplegia.—Dr. WALTER G. SMITH said that Dr. Nixon's views must to a great extent be felt to be in accord with those of modern teaching supported by the pathology of nervous diseases. To some the doctrine of reflex paralysis was a convenient one, as it explained many obscure causes. But he reminded Dr. Nixon of the danger of the logical fallacy of taking the part for the whole. Dr. Nixon, as an iconoclast, had proceeded to demolish the theory of reflex origin; but caution must be observed in dogmatising too strictly as to what could or could not happen in the domain of the nervous system. Dr. Nixon did not allow sufficiently for the extremely important effects of local sensory irritations, which included both the skin and the mucous membrane. No matter what part of the skin was stimulated, similar effects followed. Again, on tickling the inside of the thighs, in a bright light, the pupils would be seen to dilate. It was difficult to say what channel that influence travelled, yet it was the influence of reflex action.—The CHAIRMAN had recorded cases of children, from five to seven months old, who had suddenly lost power of one arm, and in these scarification of a gum or an active purge produced a cure at once. Thus the reflex paralysis was in those cases due to irritation of the mouth or the accumulations in the intestines.—Dr. NIXON replied that he had used the term "inhibition" first as a step in getting rid of the theory of Brown-Séquard that the paralysis was due to reflex spasm of the blood-vessels of the spinal cord. If not to that, it was due to something else—a number of things—and he took inhibition as one to which it might be due; and he had said there was no necessity for introducing this explanation of the theory of disease at all, inasmuch as it had been established that the paraplegia assumed to be reflex was due to causes which had been ascertained as an ascending neuritis, or a descending neuritis, or a neuritis established by the travelling up of inflammation along the veins. The received explanation of the results of the operations he had cited was that they were due to what was understood as the phenomenon of inhibition. With regard to Dr. Walter Smith's observations as to the effect of stimulation, Brown-Séquard had mentioned that peripheral stimulus might act in three different ways: it might influence secretion, or the condition of the blood-vessels, or the muscles. In his paper before the Section, he had confined his observations to the condition of the muscles that might be said to be influenced by peripheral irritation. He did not discuss the condition of the blood-vessels, such as would be brought about from irritation of an extensive surface of the skin following a blister, etc. There was not the slightest doubt that peripheral irritations of various kinds—worms in the intestines, and teething—produced convulsive phenomena; but it was quite a different thing with irritation transmitted to the spinal cord. Irritation was supposed to pass to the motor area, and yet the usual result was not attained. Although he had seen a great many cases of paralysis, he had never seen one that he could connect with any of those cases of local irritation, such as teething, or that recovered on suddenly lancing the gum, and he did not see why paralysis should be cured by such a simple procedure.

On the motion of Dr. GRIMSHAW, the remaining papers on the agenda were, for want of time to be read, referred to the Publication Committee. The Section then adjourned till next session.

MEDICAL MAGISTRATE. Dr. Lewis Wayne Morgan, The Hafod, has been placed on the Commission of the Peace for the borough of Pontypridd.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, MAY 21st, 1884.

ALEXANDER OGSTON, M.D., in the Chair.

Surgical Dressings.—Dr. A. OGSTON showed specimens of various new surgical dressings from Germany, procured by him during a recent visit to that country. These were dressings of wood-wool, moss-wadding permeated with solution of corrosive sublimate, and glace-wool. Dr. Ogston gave an interesting account of what he had seen done by these dressings, and remarked on their great value in surgery.

Case of Leprosy.—Dr. GARDEN exhibited a patient (a man of middle age) suffering from true leprosy, in whom the characteristic marks were very visible in the face and anterior aspect of the thighs. The spots on the thighs were of a light colour, and markedly anæsthetic; those on the face were dark tubercle-like appearances. The patient had contracted the disease during a residence in the West Indies. Dr. Garden was requested to bring up the patient again, so that the progress of the case might be observed.

Fibroid Tumour in the Vagina.—Dr. MICHIE (Cove) forwarded a report of this case. It was that of a girl aged 18, of lymphatic temperament, unmarried, never pregnant, and who had been in declining health (although suffering from nothing to excite particular anxiety) for twelve months before she was seen. She was first seen in June 1882, and was found to be suffering from excessive and almost continuous hæmorrhage from the vagina, which had persisted for five days. She was so blanched and drained of blood as to have passed into almost fatal syncope immediately before being seen, and her condition at the visit was that of extreme weakness and anæmia. The face, lips, and ends of the fingers were white and bloodless, while the pulse was little but a continuous thread, requiring a minimum amount of pressure to cause its obliteration. She was collected, but restless and uneasy, and the least movement brought on fainting. No results were obtained from a physical examination of chest or abdomen. The bed and clothes were saturated with blood. Alcohol was freely given; also gallic acid, digitalis, ergot and iron; and under these the strength slowly returned, and the hæmorrhage passed speedily into a sero-sanguinolent discharge, ultimately becoming serous, and disappearing altogether in three months. The first three weeks she was under treatment, the temperature went as high as 101° Fah., and the discharge was somewhat fœtid. An internal examination was not obtained at that time. At the end of three months she had almost regained her usual strength. About four months after being first seen, hæmorrhage returned, less in quantity than before, but greater than in ordinary menstruation, and this was said to have been caused by over-exertion. On this occasion there was retention of urine, requiring the use of the catheter. This retention was accompanied by pain in the hypogastrium, and this was the only pain in the case. The former treatment removed the symptoms of bleeding considerably, the menorrhagia remaining a few days, and being followed by a sero-sanguinolent and serous discharge. She remained in bed about a week, and then was as usual, and able to take her ordinary amount of exercise for the next fortnight. At the end of that period the hæmorrhage again returned to an alarming extent, and was accompanied by sickness and vomiting. She had suffered three days before being seen, and was greatly reduced, and seemed to be sinking; the lips, tongue, and finger-tips being bloodless, and the pulse thready, and over 140 per minute. As on the first occasion, the bed was saturated with blood. She was very restless but not in pain. The treatment formerly successful was of no service on this occasion, and she died three days later, hæmorrhage having continued more or less constantly till the time of her death. During the last few days of her life she was occasionally unconscious, staring vacantly, with eyes glistening and pupils dilated. She would then wake up and express a desire for something to drink, and be able to answer a few questions. No vaginal examination was obtained till towards the end of the case. When this was made, under chloroform (the patient lying on the back), the fingers impinged on a solid mass completely obstructing the vagina to within an inch of the outlet in front, and about an inch and a half behind; and when she was turned on the side the mass was so far retracted and movable towards the front as to enable the finger to pass along the posterior vaginal wall. The finger could not reach the upper limit of the vagina behind, and the os uteri could not be felt. The roof of the vagina was smooth and tense, but not hard. From the anterior wall there arose a large conical elastic mass increasing in diameter as it ascended. Its attachment to the front wall was deep and firm, and somewhat constricted and flattened laterally, and expanded above. In its axis it seemed about five inches long, with a diameter of three inches at the broadest part; movable above, fixed and attached below, everywhere smooth, rounded, elastic, but not fluctuating. To the touch, the lower or contracted part was more compact, while the expansion above was evidently a capsule, about two lines in thickness, holding loosely within a less consistent substance. The body of the mass extended upwards and backwards, and obscured and displaced by its base the mouth of the womb, which could not be reached. It had no surrounding adhesion, except a very slight connection by its base with the lower part of the uterus (as was supposed, for the junction of the two could not be defined). Its origin from the front wall of the vagina was deep and central. A doubtful hardness was felt in the hypogastrium externally. The above condition was discovered too late for radical treatment. Had examination been allowed when the case was first seen, the tumour might easily have been removed. The source and cause of the hæmorrhage was probably uterine, and might have been caused by a co-existing polypus, or by irritation and congestion due to upward pressure of the tumour. The nature of the tumour was considered to be fibrous, from its tendency to form a pedicle or constriction towards its origin from the wall of the vagina, from its elastic feel, and uniform outline, and mobility, and the absence of the surrounding adhesions. Its duration was uncertain, although the health declining perceptibly for seventeen months might give some indication of the length of time it had existed.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, MAY 2ND, 1884.

JAMES CARTER, F.R.C.S., President, in the Chair.

Adjourned Discussion on Dr. Latham's Paper on Uric Acid.—Dr. **SMITH** (Newport) remarked that the nature of gout and the origin of uric acid in the system were among the most difficult subjects from a physiological, medical, and chemical point of view; and, considering the vast quantity of products to which uric acid might give rise, and the ways in which its formation in the body might be explained, he would hesitate to ascribe its origin to the conjugation of any two particular substances without strong reasons for so doing. Dr. Latham's theory demanded the preformation of large quantities of glycocine and urea in animals in which uric acid was largely excreted, as in birds and reptiles. Dr. Latham thought the glycocine came chiefly from the bile, because in carnivora, which formed scarcely any uric acid, taurocholic acid and no glycocholic acid was found. But exactly the same might be said of the bile of snakes, which largely secreted uric acid. Again, there was no proof of the preformation of urea in birds and reptiles. Uric acid seemed to be formed not only in the kidneys, but in the spleen, liver, etc., and Kölliker found urate of ammonium in the acting cells of the light-organ of the glow-worm. The question might perhaps be elucidated by regarding it from an evolution point of view, and looking on the abnormal excessive formation of uric acid in man as due to a reversion to a former type; the greater excretion of uric acid in lower vertebrates being due to the greater importance of the kidneys and the smaller use of the lungs. The old theory, that uric acid was due to defective oxygenation, and which Dr. Latham dismissed as untenable because birds secreted uric acid instead of urea, was held by many good chemists. This old theory explained the presence of excess of uric acid in leukæmia, fevers, affections interfering with digestion and respiration, etc.—Mr. **LAURENCE HUMPHRY**, in criticising Dr. Latham's hypothesis as to the action of benzoic acid and the benzoates in the treatment of gout, referred to Dr. Garrod's experiment with hippuric acid. If an excess of the urine of a horse were added to human urine containing uric acid, the latter, after a time, disappeared from the urine; and it was concluded that benzoic acid, which was converted in the system into hippuric acid, might act in the same way. The difference in the composition of the urine in the sucking calf and the adult animal might be similarly explained.—Dr. **LATHAM** replied.

Perfect Recovery from Tubercular (?) Meningitis in a Child.—Dr. **BRADBURY** brought this case forward. A little girl, aged 2, first came under his care in the hospital in June 14th, 1883. She had been previously under one of his colleagues. She was admitted on March 13th with no family history of heritable disease. She had always been a healthy and intelligent child. Twelve days before admission she vomited once, and slight convulsive movements were noticed. Retraction of the head had been present ever since, and she became fretful and peevish. Headache had been constant for a week, and she screamed at night. Her condition remained much the same for the next few weeks, the temperature varying between 103° and 97°, and on April 7th her friends removed her. She was readmitted on June 14th. The previous symptoms were more marked; she had lost flesh rapidly, and ceased to recognise her parents. In addition, vomiting was constant, and a squint was noticed frequently. The pupils acted readily and were equal. The temperature was very erratic, between 102° and 98°, but usually higher in the evening than the morning. She was given one and a half grains of iodide of potassium three times a day on admission, and this was increased to two grains soon afterwards, and on July 12th she began to take cod-liver oil in half-drachm doses. On July 26th the vomiting had ceased, and the squint was much less frequently noticed, but retraction of the head continued; the right leg was extended and rigid, and the legs were not moved. On August 16th all the symptoms were less marked, and the temperature-chart showed a lower level and less variation. In October and November all the symptoms had cleared up; she recognised her parents, and was able to say a few simple words. This improvement continued through the next few months. Her mental condition was, however, impaired. The patient was shown. Dr. Bradbury thought this case ought to encourage perseverance with treatment, even when the aspect was very unpromising. The case was interesting to him as being the only one of meningitis he had known to recover; and he was inclined to think that it was probably tubercular. The long duration of the attack was curious, the average duration of tubercular meningitis being usually about three weeks. Dr. Bradbury referred to Dr. Bristowe's remarks on tubercular meningitis, published in the BRITISH MEDICAL JOURNAL on April 26th.—Dr. **LATHAM** thought it was probable that some cases of tubercular meningitis did recover. He related a case of a girl under his care, who had very marked symptoms of tubercular mischief, including severe convulsions, the case appearing hopeless. She recovered, however, from this, and some time after died with signs of tubercular disease of the lungs; but there was no *post mortem* examination.

REVIEWS AND NOTICES.

THE GOLD-HEADED CANE. Edited by WILLIAM MUNK, M.D., F.S.A., Fellow and late Senior Censor of the Royal College of Physicians. London: Longmans, Green, and Co. 1884.

THIS entertaining and scholarly volume is the product of the joint labours of two physicians, both intimately connected with the Royal College of Physicians. In the Library of the College in Pall Mall East, there is conspicuously displayed a gold-headed cane, which was carried successively by Radcliffe, Mead, Askew, Pitcairn, and Baillie; it was thus for nearly a century and a half the constant companion, and, for the earlier part of the period, it might almost be said, the insignia of office, of physicians each among the most eminent and popular of their day. Of this period of the cane's career, Dr. Macmichael, who was Registrar of the College of Physicians from 1824 to 1829, undertook to be the historian, casting his account into an autobiographical form. Of the second period, during which the cane has reposed at the College of Physicians, Dr. MUNK has given some account in three chapters, devoted respectively to Halford, Paris, and Mayo, who were in succession Presidents of the College during the eventful years from 1820 to 1862.

The first five chapters from the pen of Dr. Macmichael are very delightful reading, and were embellished when originally published by several very excellent woodcuts, which added materially to the interest with which they might be read.[1]

Dr. Munk has done very well to reprint the autobiography; and his own addition is not wanting in the wealth of anecdote and allusion which characterises the earlier chapters, though lacking somewhat in the skill of narration which gives so great an air of reality to Dr. Macmichael's chapters. To the chapter on the life of Dr. Radcliffe, the palm will, perhaps, be given; but that devoted to Dr. Mead is little, if at all, inferior to it. This is no doubt due in great part to the interest which must attach to the lives of these two remarkable men, who presented in their characters, in their acquirements, and in their habits, the greatest contrast, and resembled each other only in this, that each was the unquestioned leader of the physicians of his day and society. Radcliffe was coarse in speech, blunt in manner, and void of erudition; Mead was polished, courteous, and learned, yet Radcliffe was a great friend and benefactor of learning. [illegible] He was the founder of the Radcliffe Library and the Radcliffe Travelling Fellowships at Oxford, and of the [illegible] Trust

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[1] [illegible]

Fund which has built the Observatory and the Public Infirmary at Oxford.

Mead succeeded Radcliffe as the fashionable physician, and was his successor also in the house in Bloomsbury Square, where the latter had lived before his retirement to Carshalton. Mead had for his contemporary through the earlier part of his career Sir Hans Sloane, who was President of the College of Physicians and of the Royal Society, and left behind him a collection which formed the nucleus around which the British Museum has gathered. The leading surgeon of the day was Cheselden, and that they often met in consultation is proved by Pope's line—

> "I'll try what Mead and Cheselden advise."

They met, on one occasion at least, at the bedside of Sir Isaac Newton, who was suffering from stone in the bladder; but the great lithotomist shrank from undertaking the operation, being deterred, probably, by the age of the illustrious patient, who was in his eighty-fifth year. Dr. Mead lived for many years in a house at the corner of Great Ormond Street and Powis Place, well known to many of this generation as the Hospital for Sick Children, a handsome edifice in the Georgian style, recently pulled down to make way for the hideous new buildings of the hospital. He filled his house with a great collection of pictures and statues, and a large library of books, and kept up a good deal of state, holding always two tables, one for his friends, and a second table to which persons of "inferior quality" were invited. It is curious to read that, "in the forenoons, apothecaries used to come to him, at Tom's, near Covent Garden, with written or verbal reports of cases, for which he prescribed without seeing the patient, and took half guinea fees." The practice of medicine must, indeed, have presented then a curious contrast to our own day, and one not altogether to the advantage of the earlier period. The two classes of practitioners seem to have been separated then by a very clearly defined line into physician and apothecary. The latter, apparently, was never transformed into the former, but kept his apothecary's shop and attended high and low alike, either independently or as the satellite of the physician.

We have only to cast our eye back to the time of Mead to see how greatly relative rank has changed; a process of levelling up has done much, but has there not also been a process of levelling down? Dandridge, the apothecary patronised by Radcliffe, died worth more than £50,000. Is there any general practitioner of the present day who has been enriched to a like extent by the patronage or countenance of a consulting physician?

Dr. Mead was a great advocate of quarantine; he published a discourse on the subject, and an Act of Parliament was passed in consequence of the advice he gave. He rejected the notion that the improvement effected by the rebuilding of the central part of London had been the cause of the cessation of the plague, supporting his view by quoting the case of Bristol, the only other town which had much foreign trade: it also remained free from the disease; to quarantine, therefore, he attributed all the improvement. In the course of a long imaginary conversation, Dr. Macmichael puts into his mouth these words: "Take my word for it, it is quarantine alone, and not any increased cleanliness on the part of the inhabitants, that has kept out the plague."

A suggestion made by Mr. Loftie, in *A History of London*, published last year, is more in accord with present knowledge, but has hardly received as yet the attention which it deserves. It was in 1620 that Sir Hugh Myddelton completed his scheme for bringing water to London from Chadswell Springs in Hertfordshire (the works had been formally opened in 1613). The New River, as it was called, was recognised to be a great public benefaction, but the water did not come into immediate use, and Sir Hugh Myddelton himself was ruined. "The first dividend," writes Mr. Loftie, "was paid to the shareholders in 1633, but the water was evidently used only here and there before 1666. When the old wells were filled by the ruins, after the fire, the New River water became universal. In the city, as rebuilt, it was everywhere laid on, and London must acknowledge Sir Hugh Myddelton to have been its greatest modern benefactor."

The water-supply of London before his time was derived from three sources, each one as dangerous as the other; it was in part brought to the city from the streams which ran near it, by underground conduits; the water of the Tyburn was thus brought to Cheapside by conduits which ran along the line now occupied by Oxford Street; but the stream had previously been contaminated by the population, which had from very early times occupied its banks. A second source was the Thames at London Bridge, the water being pumped up by waterwheels between the arches of the bridge. The third source was water drawn from wells sunk in proximity to the houses, not only in the suburbs, but in the city itself; when it is remembered that cleanliness was even more disregarded by the poorer classes than now, and that there was no subsoil-drainage, it will at once be evident that these wells must have been constantly liable to pollution by excreta and other filth. Further, tea was then unknown; and that great safeguard of the poor, namely, that tea cannot be made without boiling water, was not in operation; for them, at that time, probably the only alternatives were ale and water. The first recorded deaths from the plague in the epidemic which goes by the name of the Great Plague, were those of two Frenchmen who died in the winter of 1664, but it did not reach serious proportions until the following June. The summer of 1665 was intensely hot; and through June and July the number of deaths constantly increased, reaching the fearful total of fifteen hundred a day in the first weeks in September. It does not seem to be at all straining an hypothesis to suppose that this excessive heat was connected with the rapid development of the epidemic, through the water-supply; as the increased evaporation, and the consequent lowering of the subsoil water-level, must have tended to intensify any existing pollution of the wells.

Dr. Munk also, in one of the chapters he has contributed to the volume before us, has something to say about the plague; for he writes that Dr. Thomas Wharton, the eminent anatomist, "was one of the very few physicians who remained in London, and in the exercise of his profession, during the whole of the plague in 1666" (this date is evidently a slip of the pen for 1665); and adds that, "when a panic had seized on most of the medical profession, and the great majority of them were hurrying with their families for safety into the country, Dr. Wharton's resolution for a moment wavered; but he was induced to persevere by a promise from the Government that, would he persist in attending the Guards, who as they fell ill were sent to St. Thomas's Hospital"—if, that is to say, he would do his duty—"he should receive the first vacant appointment of Physician in Ordinary to the King." This is a rather serious charge to bring against the profession of that day; and its gravity is somewhat increased by its being put by an ex-Censor into the mouth of a former President of the College of Physicians. Unfortunately, there seems to be too much truth in the assertion, and it is at least certain that it is true with regard to some of the most highly placed physicians; but that many physicians less prominent in the chronicles of the Royal College of Physicians, and many apothecaries, remained at their posts, appears to be proved by the contemporary evidence of Pepys, who, after having stated that the plague was especially bad in Westminster, writes, under date of October 16th, 1665: "And they tell me that, in Westminster, there is never a physician and but one apothecary left, all being dead." Further, he states that his "good friend and neighbour," Dr. Burnett, had the plague in his house in June, and that his servant died of it; and, further on, he writes, on August 25th: "This day I am told, Dr. Burnett, my physician, is this morning dead of the plague; which is strange, his man dying so long ago, and his house this month open again. Now himself dead. Poor unfortunate man!" From these passages, it would appear that the statement in the text is a little too sweeping, and that it was probably only the physicians who had become infected with the bad manners of the Court that fled so ignominiously.

Dr. Munk's short biography of Sir Henry Halford is very interesting. Halford was a son of a physician practising in Leicester; one of his brothers became a judge, another a dean, and a third an ambassador. He was thus one of a family who earned distinction in various fields. Halford's own career was one long success; he became Physician-extraordinary to King George the Third when only twenty-seven years of age; and before he was forty he was in possession of one of the largest practices of the day; lastly, before he was fifty, he inherited a large fortune from a distant relative, and he succeeded in ingratiating himself with the Prince Regent, while yet remaining the personal attendant of the King. In 1820, he became President of the College of Physicians, superintended its removal from Warwick Lane, and delivered an elaborate Latin oration on the occasion of the opening of the new buildings in 1825. He also instituted evening meetings, to which distinguished laymen were invited to listen to elegant discourses on subjects capable of being illustrated by those literary graces of which Halford and some of his contemporaries were such masters. Sir Henry Halford achieved a brilliant success in his own lifetime, but his contributions to medical science were neither numerous nor important, and his memory now chiefly survives as a courtier and man of wealth. The other two presidents with whom Dr. Munk is concerned were men of very different mould. Dr. Paris was a man of high scientific attainments, and possessed also not a little literary culture. Dr. Mayo, his successor, after a brilliant career at Oriel College, Oxford, when Copplestone was Provost, settled, after a few years at Tunbridge Wells, in London. The bias of his mind was strongly towards metaphysics, and his writings were chiefly on insanity. As a physician, however, though he became President of the College, he was not a success, though he presided through an eventful period of medical reform.

Dr. Munk has some interesting observations on the professional earnings of physicians. Radcliffe, he thinks, probably made the largest income, making allowance for the difference in the value of money, ever made by any English physician. Mead's income was from five to six thousand guineas; Warren, towards the end of last century, made about nine thousand a year; and Halford for a long series of years made more than ten thousand a year. "The professional earnings of the leading physicians of the present day," writes Dr. Munk, "are not materially in excess of some of the above mentioned."

With this quotation, which will be received, perhaps, with incredulity by many, we must take leave of this delightful volume, which has afforded us so pleasant a glimpse into the past.

NOTES ON BOOKS.

The Extra Pharmacopœia of Unofficial Drugs and Chemical and Pharmaceutical Preparations. By WILLIAM MARTINDALE, F.C.S., and W. WYNN WESTCOTT, M.B. Third Edition. London: H. K. Lewis. 1884.—The *Extra Pharmacopœia* is so well known, that it is necessary to do little more than record the appearance of a third edition. Under the headings of Perchloride of Mercury, Sanitas, Asthma-Powders, Compound Syrup of the Hypophosphites, and Nitrite of Sodium, several additions have been made, all of them of considerable practical value. It is, we think, a subject for regret, that the size of the book should have been unnecessarily increased by the addition of over twenty pages of advertisements. This is a matter of no little importance in a work intended for ready reference.

Pharmacopœia of the Victoria Hospital for Children (Chelsea and Margate). With an Appendix on "How to Manage Infants." Compiled by the Drug Committee. London: J. and A. Churchill. 1884. —Like all hospital pharmacopœias with which we are acquainted, this little volume contains a number of prescriptions of very various merits. Some of them are curious compounds of a great variety of drugs tending to produce similar results; such is the "mistura pertussis," which contains bromide of ammonium, lobelia, belladonna, tolu, and chloroform—a mixture which might be given with a happy confidence that, if one ingredient failed of its effect, some other one might be more fortunate. It reflects, perhaps, only too faithfully, the present state of therapeutics, in so far as concerns whooping-cough. Among the fifty mixtures, however, there are several very excellent formulæ; but we are surprised that there is not one containing mercury. The list of lotions and ointments is exceptionally full and good, and altogether the *Pharmacopœia* compares not unfavourably with those issued elsewhere. The appendix contains excellent advice on the management of infants. It is, we presume, intended to reprint and distribute this as a broadsheet.

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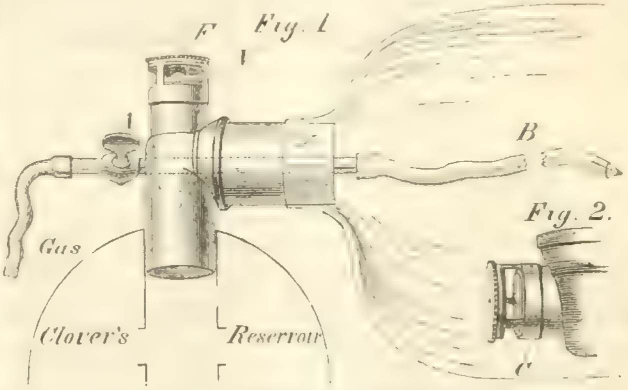
ETHER-APPARATUS.

By C. J. BOND, Leicester.

A REFERENCE to the figure will best explain a slight modification in Clover's ether-apparatus, as adapted for the administration of gas or ether, or both, which seems to me to possess several advantages. The gas-bottle is connected to the Clover bag by an India-rubber tube in the ordinary way, and this can be removed at A. This "gas" tube is, however, prolonged as an India-rubber tube to the end of the bag B, the object of this being to compel the gas to enter the bag at this end and out of the way of the expiratory blast, which passes up and escapes by means of the valve V; this opens outwards, and consists, as shown on a larger scale in Fig. 2, of a flat valve-piece controlled by a spiral spring, the pressure on which can be regulated by pushing down the collar C, the valve being thus completely closed on the administration of ether only.



The advantages are that, whereas it is impossible to give gas only with the Clover's ether-apparatus alone, it can, with the addition of these modifications, viz., the expiratory valve in association with the entrance of gas at the far end of the bag, be used as a simple and very efficient gas-inhaler only, or the administrator can commence with gas, gradually passing on to ether; or, by disconnecting the gas-tube at A and closing the valve, the apparatus is practically the same as the simple ether-inhaler alone.

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NASAL INHALERS

SIR,—I have just opened the issue of the BRITISH MEDICAL JOURNAL dated May [illegible], 1884; in it, I observe a letter signed George Moore, M.D., complaining [illegible] nasal respirator [illegible] New. [illegible] knowledge of Dr. Moore's [illegible] About one year since, I sought everywhere, though [illegible] respirator, [illegible] to obtain one. I, in [illegible] placed my [illegible] an instrument maker; and, in November [illegible], I forwarded to you [illegible] respirators, together with the communication you subsequently published in the BRITISH MEDICAL JOURNAL dated February 9th, 1884. I have just had a look at [illegible] impressions that the two instruments differ very materially in almost every respect.

[illegible] I am, sir, your obedient servant, [illegible]

Belfast.

TESTIMONIAL.—A testimonial, consisting of a valuable épergne, was presented to Dr. Peter Manby [illegible] on the occasion of his retirement from the post of Medical Superintendent of the [illegible] Asylum, [illegible] Dr. Rees Philipps, Superintendent of the Wonford House Asylum, Exeter.

THE annual dinner of the [illegible] Club will take place at the [illegible] Hotel, [illegible] on Friday, June [illegible], at 7 P.M., after the distribution of prizes at the [illegible] Medical School on that day.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 14th, 1884.

THE ANNUAL MEETING IN BELFAST.

FOR the third time in its history, the British Medical Association has received and accepted a cordial invitation to visit Ireland. On former occasions, Dublin and Cork have received the members with open arms; and now Belfast, the metropolis of the north of Ireland, and the great centre of ingenuity in that part of the kingdom, is making preparations to welcome the members to the meeting which will commence on July 29th. The experience of previous visits to the sister kingdom, and the tidings which have reached us regarding the arrangements in progress, indicate that the meeting in Belfast will not fall behind those which the Association has already paid to Ireland, in cordiality of reception by the hosts, or in intellectual and social pleasure on the part of the guests.

The post of president will be occupied by one of the leading physicians of Ulster, Dr. James Cuming, the Professor of Medicine in Queen's College, and Physician to the Belfast Royal Hospital. There will be three addresses; one in Medicine, by Dr. Ord, Physician to St. Thomas's Hospital; one in Physiology, by Dr. Redfern, the eminent Professor of Anatomy in Queen's College, Belfast; and one in Obstetric Medicine, by Dr. Kidd, a most worthy representative of the Dublin School, which has long stood in the front rank in the cultivation of that branch of the profession of medicine.

The preparations for the Sections are not yet complete; but, so far as they have gone, they indicate that there will be sufficient abundance of material to give rise to interesting discussions and occupy the time of the members.

The Section of Medicine will be presided over by Dr. Smith, one of the physicians to the Infirmary. In this Section, three important subjects have been chosen for special discussion, which will be introduced by physicians who have made the several topics objects of careful study. The subjects will be albuminuria, which will be brought before the Section by Dr. George Johnson; the causative relations of phthisis, by Dr. Douglas Powell; and rheumatoid arthritis (or rheumatic gout), by Dr. Dyce Duckworth.

The Section of Surgery will appropriately be presided over by Sir William Mac Cormac, who, before he settled in London, filled the post of surgeon to the Belfast Infirmary. In this Section, there will be a discussion on the use of the plaster-jacket in spinal disease, in which the leading part will be taken by Professor Lewis Sayre of New York, to whom the profession is indebted for the advocacy of this method of treatment, and whose presence, as that of other transatlantic and foreign and colonial friends, will be heartily welcomed at the meeting.

In the Section of Obstetric Medicine, Dr. Clement Godson has been appointed president. The subjects put down for discussion are the pathology and treatment of extra-uterine fœtation, and the treatment of intra-uterine disease; the debates on which will be introduced by Mr. Lawson Tait and Dr. Lombe Atthill.

The Section of Public Medicine will be under the presidency of Dr. Cameron, M.P. for Glasgow. In this Section, the subjects proposed for discussion are, the prevention of epidemics; the inspection of meat-markets; and overpressure in schools—all matters of great national importance, and in regard to which the expression of opinion on the part of the British Medical Association can scarcely fail to have a beneficial influence.

In the next Section, that of Ophthalmology, the post of president will be occupied by Dr. McKeown, who is well known as the author of some valuable contributions to ophthalmic surgery. Several interesting communications have already been promised for this Section.

The Section of Pathology will be presided over by Dr. Greenfield, the Professor of Pathology in the University of Edinburgh. A discussion on the Pathology of Pulmonary Emphysema will be opened by Dr. McVail of Glasgow.

The Section that comes next on the list, that of Pharmacology and Therapeutics, is now formed for the first time. The president will be Dr. T. J. Maclagan, a well known and able contributor to the science of medicine. It is announced that the *British Pharmacopœia* will be one of the topics of discussion, and that a series of resolutions in relation to this important subject will be brought before the meeting by the president and vice-presidents. There will be also discussions on antipyretics, on the therapeutic uses of electricity, on aspiration as a therapeutic agent, and on Indian drugs; and endeavours will be made to render the Section as practically useful as possible.

In the Section of Psychology, which will be under the presidency of Dr. Savage, Medical Superintendent of Bethlem Hospital, there will be discussions on the employment of the insane, the varieties of general paralysis, the use of alcohol in asylums, moral insanity and imbecility, and legal persecutions by discharged patients.

In addition to the subjects here enumerated, there will no doubt be, as in previous years, a number of interesting and valuable communications from members of the Association. But the information already given, incomplete though it may be, will be sufficient to indicate that the Belfast meeting will be the arena for the discussion of several of the most important subjects which could be brought forward in a society of professional men, either as connected with the advancement of medical science in its several branches, or as having an influence on the welfare of the public.

That interesting institution, the annual museum, which, thanks to the suggestion of Mr. Jonathan Hutchinson, has become one of the most attractive features of our annual meetings, and has served as a model for imitation in other analogous professional gatherings, gives promise of not being behind its predecessors in amount or in variety. Two spacious rooms have been engaged for the display of the numerous specimens and preparations which are expected. The general character of the exhibition is indicated in the programme published on another page.

Turning to the social aspect of the meeting, we find indications of the liberal hospitality which has always characterised the public and the profession in the towns where the meetings of the Association have been held, and in regard to which Belfast will hold no inferior position. Besides the public dinner on July 31st, there will be, on July 30th, a *conversazione* given by the President of the Association and the Executive Committee; and on August 1st the Mayor of Belfast will receive the members in the Ulster Hall. The north of Ireland abounds in objects of natural scenery and of antiquarian interest which, probably, comparatively few of our members have yet visited; and arrangements will be made by which the visitors to the meeting will have an opportunity of seeing these before they return to their homes and their professional labours. There will be excursions to the Giant's Causeway, Larne, Newcastle, and Warrenpoint.

In conclusion, we will only call the attention of our readers to the interesting medical history of Belfast which is published in another page, and for which we are indebted to Dr. Dempsey, one of the gentlemen entrusted with the onerous duties of local secretary.

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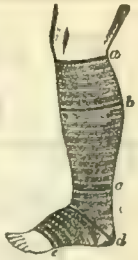

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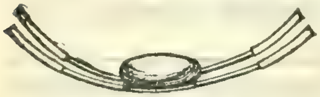

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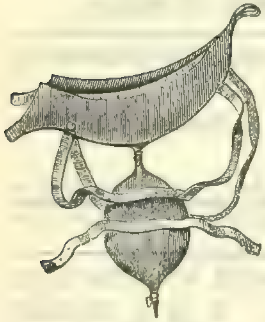

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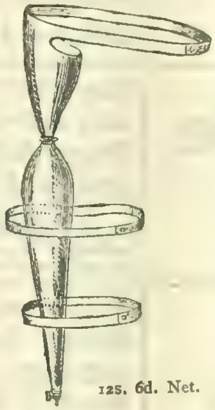

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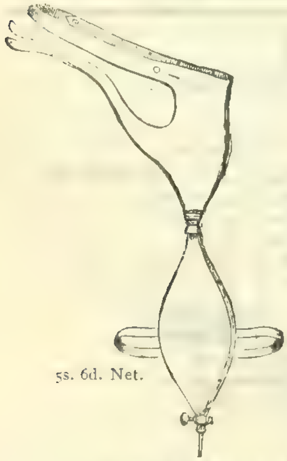

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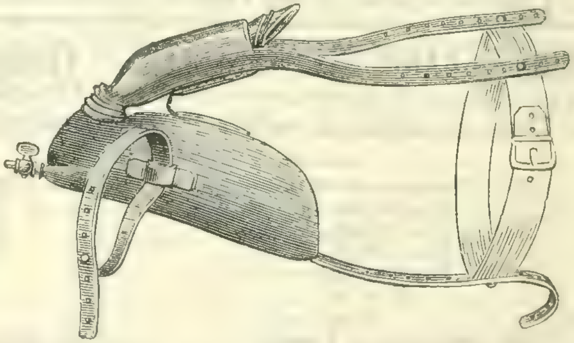

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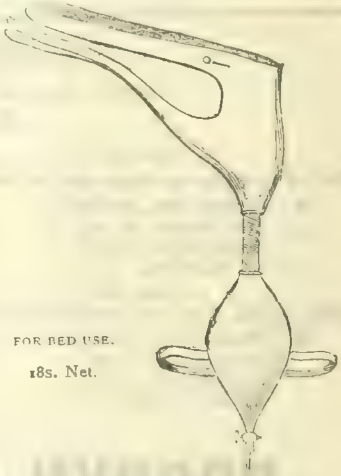

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REFORM AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE great activity and success of the British Medical Association, and of non-official bodies of the profession, in urging the cause of reform at the Royal College of Surgeons, have been a marked feature of the past eighteen months. In January 1883, the beginning of the period in question, the relation of the College to its Fellows and Members was markedly different from what it is in June 1884. The Council was composed, as now, of a body of surgeons who exercised great powers in virtue of decisions passed at monthly meetings. The members of this powerful body were elected by the Fellows of the College. The sole administrative privilege attaching to the diploma of Fellow was this power of voting for candidates for the Council. This privilege was important, and professedly unlimited as regards the residence of the voters, just as the membership of Council was not technically confined to metropolitan hospital-surgeons. In reality, however, the efficiency of the voting power was, to a great extent, neutralised by a regulation that the votes should be exercised personally, and not by proxy or voting-papers. This gave a very considerable, and, as we have long contended, an inequitable advantage to metropolitan candidates. A surgeon to a London hospital is certain to have a number of professional friends who are Fellows within his own medical school, and the tendency of the London Fellows not acquainted with that surgeon, and not educated at his school, is to vote for that surgeon, provided this be not to the prejudice of some candidate from their own hospital. The London Fellows can record their votes at the College on the day of election with great facility, and little or no loss of time.

With provincial candidates it was otherwise, for their friends were chiefly or entirely provincial, and could not attend at the election without great loss of time, and frequently great expense. Now, however, that inconvenience, which acted so grievously against provincial candidates and their supporters, has been overcome. For several years the Association employed itself from time to time in the furtherance of this reform. The subject, first raised in August 1863 in a letter published in the BRITISH MEDICAL JOURNAL, was brought before the Association at the Bristol meeting a week later, and reports and recommendations were read and made, with the support of many leading authorities, at that meeting, and later on at other annual meetings of the Association, at Cambridge (1864), Leamington (1865), and Chester (1866). After many years of agitation, undertaken by individual Fellows in the pages of this JOURNAL and its contemporaries, Mr. George Jackson of Plymouth, in May 1879, presented to the President and Council of the College a memorial, signed by about three hundred Fellows, metropolitan as well as provincial. The Council then decided that no alteration of the by-laws could alter the present mode of voting, that being settled by charter.

A few years later, in 1882, an association was formed at the Worcester meeting of the British Medical Association, which, while taking in hand the proxy-question, also undertook the furtherance of other claims which Fellows held to be their due. This leads us on to another subject; but, in order to dismiss the first, it is sufficient at present to note that a petition, signed by over 380 Fellows, was drawn up by this "Association of Fellows of the Royal College of Surgeons of England," and forwarded to Mr. Cadge for presentation to the College Council in 1883. In this petition, the right of proxy-voting was strongly urged. At a meeting of the Council in June 1883, Mr. Cadge moved that it was expedient that, at the election of the Council, the Fellows should be allowed to vote either in person or by paper. This motion, after being duly considered by a special Committee, was approved and adopted by the Council in November 1883.

The Fellows had, however, for long felt that they had a right to more power than the mere privilege of voting for members of Council. The Association of Fellows urged not only proxy-voting, but also the right of meeting in the College building. This was urged in the petition which included the former question. In the sequel, at a Council meeting on February 14th, 1884, Mr. Erichsen moved a resolution, which was seconded by Mr. Cadge and carried unanimously, that, in accordance with a certain section of the by-laws, the President should convene a meeting of the Fellows and Members of the College, should report to them the alterations in the charters proposed by the Council, and should receive from them any suggestions or recommendations with respect to these or any other alterations in the charters which they might have to offer for the consideration of the Council. The meeting was held on March 27th last. A proposal that the yearly property capable of being held by the College should be increased, was adopted. It was then proposed that the charter should be so altered as to give the Council power to determine the conditions of admission to the Fellowship by resolution, and not by by-law, so as to bring the proceedings in harmony with those concerning the admission of Members. This proposal was agreed to, and then followed another on the question of the fee for the Fellowship. It was proposed by the Council that the amount, thirty guineas according to charter, be left undefined; this proposal was approved. The next proposition, universally accepted, was for a change in the charter, authorising the use of voting-papers at the Council elections. Proposals for the abolition of fees payable by Members of more than twenty years' standing for admission to the Fellowship, for the abolition of examinations for the licence in midwifery, and for alterations in the constitution of the board of examiners in dental surgery, also met with approval.

After the dispatch of the business put before the meeting by the Council, Mr. Swain brought forward four important resolutions. The first was to the effect that, in the opinion of the meeting, it would materially conduce to the welfare of the College that the Fellows and Members should be invested with a larger share of its management. The second stated that it was desirable that no alteration in the constitution or relations of the College should be effected without the consent of the Fellows or Members convened to discuss such alteration. The terms of the third resolution were that there should be an annual meeting of the Fellows and Members, at which the annual report of the Council should be presented, received, and adopted; and the fourth urged that, at such meeting, the president for the ensuing year be elected by a majority of the Fellows present. Mr. Hickman also brought forward a proposal, which was carried, in favour of an amalgamation of the Royal Colleges of Physicians and Surgeons into a College of Medicine, with power to grant degrees.

At a meeting of the Council of the College on May 8th, no action was taken with regard to Mr. Hickman's proposal, nor in regard to a proposition, contained in a letter addressed to the Council by Mr. Tweedy, that members of Council should cease to be members on giving up the actual practice of their profession. On considering Mr. Swain's four proposals, all were rejected excepting the third, which claimed the right of annual meeting for Fellows and Members. The rejection by the Council of the remaining proposals has greatly displeased a large number of Fellows and Members. The Association of Fellows has gained its objects, proxy-voting and right of meeting in the College-building; but, according to Mr. Bartleet, it is not extinct. Mr. Swain, however, is forming a new association of Fellows and Members for the promotion and successful enforcement of the three rejected proposals.

It will be observed that the fourth of Mr. Swain's resolutions refers to Fellows only. A body of the Members have, however, quite recently taken independent action, and formed themselves into another distinct association. The most definite act of the Association of Members has been the preparation of a petition to the Privy Council, praying that a new charter may not be granted to the College until due effect be given to the rejected proposals. The petition also begs that the privileges originally and justly belonging to Members may be restored to them.

Such is the present attitude of Fellows and Members of the College to their Council, and at present the position is somewhat mixed.

Three associations, having cognate objects in reforming the constitution of the College, are in the field; doubtless they will soon coalesce, and unite their efforts.

The agitation in favour of the Fellows and Members is being, at present, actively carried on by Messrs. Swain, Pemberton, and others; whilst the British Medical Association, according to resolutions passed at meetings of its Branches, is also favourable to an extension of the rights of Fellows and Members. It seems that the objects for which Fellows and Members now strive are probably more easy to attain than proxy-voting and right of meeting, for which they strove so long, but not in vain. There is, we believe, also a very widespread feeling on the part of the Licentiates and Members of the College of Physicians of London, that its charter needs enlarging and liberalising; and before long we may expect to see some tangible expression of that opinion. At present, the Licentiates and Members are very much out in the cold, and the whole government and administration is in the hands of a self elected body of Fellows, into which there is no admission by mere public spirit, professional acquirement, talent or energy, except for hospital-physicians, or otherwise than by the favour of the powers that be.

THE PRINCIPLES OF NOTIFICATION OF INFECTIOUS DISEASE.

An interesting discussion took place at the last meeting of the Parliamentary Bills Committee on the subject of the notification of infectious disease. Probably, the resolution which that Committee passed, and which has been communicated to the Government, deprecating the partial and haphazard manner in which the question has been and is now being treated in Parliament, will command the almost universal sympathy of the profession. As Surgeon-General Ewart observed, and as was also remarked at the town's meeting which took place some weeks ago at Brighton, the medical men of that place would not object to an imperial measure framed on proper principles, and applicable to the whole country. What they do object to is, that Brighton should be, as it were, singled out for attack, and that Brighton medical men should be subjected to disabilities from which their neighbours at Hove, for example, or at Worthing, are exempt. As we have already announced, it has been arranged to hold a conference at the International Health Exhibition, to-day (Friday), to discuss this very subject of the compulsory notification of infectious disease; and there may be advantage in taking a brief survey of the Parliamentary position in which the question now finds itself.

In the autumn of 1882 (JOURNAL, vol. ii, 1882, p. 236), we set out somewhat in detail the action which the representative committees of our Association had taken up to that date with regard to this matter. The meeting of the Association at Worcester passed, with much enthusiasm and after set debate, a resolution that "this meeting earnestly desires compulsory notification of infectious disease, but it wishes to express its opinion that the compulsion to notify should be placed upon the householder as his duty as a citizen, and not upon the doctor" (vol. ii, 1882, page 321). Accordingly, the Parliamentary Bills Committee, on finding that a fresh crop of local Bills were being promoted in the session of 1883, which contained clauses making it compulsory upon medical men to notify, sought an interview with the President of the Local Government Board, for the purpose of pointing out to him the objections to this method of notification, and the unsatisfactory position of the question generally (vol. i, 1883, page 586). After some difficulty and perseverance, a deputation of the Association obtained audience of Sir Charles Dilke on July 20th last, and induced him to promise that, in case any Bills were brought forward this session, "applying for powers of compulsory notification of infectious disease, he would be prepared to arrange that such Bills should be referred to a public Committee of the House, before which Committee local medical men, or the Parliamentary Bills Committee itself, would be able to state their views, and have them fully considered" (vol. ii, 1883, page 192).

In the original drafts of five corporation Bills of this session appeared clauses framed on Mr. Sclater-Booth's objectionable precedent of 1882, providing for compulsory notification. In apparent accordance with the arrangement made between Sir Charles Dilke and the Association last July, a Select Committee was appointed by the House of Commons, on the motion of the Under-Secretary of State for the Home Department, to consider these Bills. But correspondence with the proposer of the Select Committee and the Chairman of the Committee itself has made it manifest that, so far from the Committee being prepared to receive evidence on the general question of the notification of infectious disease in its relations with the medical profession, it regarded itself as incompetent to reopen any question settled by Mr. Sclater-Booth's Committee of 1882, a Committee which heard but very partial evidence, and took an extremely narrow view of the whole matter. The Committee now sitting appears, in fact, to be nothing more than an ordinary Private Bill Committee of the House, to which, for greater convenience, all the Bills having sanitary clauses have been referred and acting upon this view, it makes a separate report to the House with regard to each Bill that comes before it, and deals with such Bills purely *ad hoc*, without reference to general principles.

These reports have been printed as Supplements to the Votes of the House, and chronicle in detail that such and such a section was altered in wording, so as to agree with the so-called "model" clauses of 1882; but not a word is said as to the general expediency of the measure, nor whether the Committee have satisfied themselves that it is proper to be enforced in the particular town.

There is no means known to us of impressing a Committee, so circumscribed in its purview and so limited in its scope, with the views of the profession at large with regard to the notification of infectious disease. Nor can mere spasmodic objections to one particular Bill or another be regarded as in any sense adequate. Hence the great importance of the whole question being grappled with by Parliament, in its broad relations to the welfare of the community at large.

We trust that the result of the discussion which takes place on Friday, at the International Health Exhibition, will be such as to strengthen the hands of the Parliamentary Bills Committee and the Association in their efforts—now extending over a series of years—to systematise legislation with reference to this and other medico-sanitary matters. Private Bill legislation may hardly unfairly be described as a huge lottery, in which right and wrong count for little, and the sophistries of counsel and length of purse for much. It is intolerable that questions of principle so large, in which individual liberties are concerned, should be decided, without opportunity for protest, by means of private corporation Bills, which glide through Parliament with very ineffective supervision; and we sincerely hope that Parliament may be brought to recognise that, what the Local Government Board complacently described, in one of their annual reports, as "local experiments" of this sort, cannot in justice be longer continued, without a general inquiry into the whole bearings of the question.

The present week opens up a prospect of more impartial and fuller review of the subject by Parliament than has hitherto been obtained. Mr. Ernest Hart, as Chairman of the Parliamentary Bills Committee, after communicating with Sir Charles Dilke on the unsatisfactory nature of the existing arrangements for dealing with these clauses in private rules for separate towns, further urged upon the Lord Advocate the importance of taking evidence from the medical profession before a Select Committee of the House of Commons on the clauses relating to notification of contagious diseases in the Scotch Burgh Police Bill. This Bill, having been read a second time in the House of Commons, has now been referred to such a Committee, and it will be necessary at once to take steps to secure a hearing, before this Committee, of witnesses competent to duly enlighten the members on the facts of the case, and the grounds of the decision adopted by the British Medical Association.

ANTHRAX.

THE recognition of anthrax in its earliest stage is of so much importance, and the disease is one as to which our information is so recent and incomplete, that we have thought it advisable to provide a coloured drawing to illustrate the case of anthrax which Mr. Morrant Baker describes at page 1134. The "malignant pustule," the external lesion of anthrax, presented in this case all the typical characteristics, and these have been reproduced in the chromo-lithograph with sufficient accuracy and faithfulness to make it valuable for reference. Anthrax, it would seem, has never obtained a permanent footing in England; the cases are somewhat rare, and can all be traced to infection connected with foreign hides or wools. It has thus acquired at Bradford the name of woolsorters' disease; while, in London, it has only been met with among men engaged in trades which involve the handling of hides. As a rule, the infection, which is in some way intimately connected with the presence and growth of the bacillus anthracis, finds entrance into the body through some scratch or abrasion, giving rise to the peculiar lesion of the skin which has hitherto, in this country, gone by the name of malignant pustule; to these cases the inaccurate, if convenient, term "external anthrax" has been recently applied, in order to distinguish them from the other class of cases in which no external lesion is produced, and to which the term "internal anthrax" is applied; the distinction, however, is of no etiological or pathological importance, the systemic infection being identical in both cases; still the two terms serve a useful purpose in explaining the clinical distinction which exists. Through the courtesy of Mr. John Poland, Surgical Registrar to Guy's Hospital, we are able to give also a drawing of the intestinal lesion observed by him in a case of anthrax without external lesion.

The case was shortly referred to in these pages on May 3rd, and there is appended to Mr. Morrant Baker's paper a short abstract of the notes which Mr. Poland has placed at our disposal; the case will, we understand, be published in full in the *Transactions* of the Pathological Society of London. These cases of internal anthrax are difficult to diagnose; and Mr. John Spear, in his recent report to the Local Government Board, states that "Drs. Goodhart and Mahomed, pathologists to Guy's Hospital, are of opinion that such cases have not in earlier years been entirely absent from the *post mortem* table of the hospital," though their true nature was not recognised; further, the invasion of the disease is so insidious, and its termination so sudden, that medical aid is often only sought at the last moment, when some one of the complications or localised manifestations of the disease is liable to be considered as the essential cause of death. In the *Transactions* of the Royal Medical and Chirurgical Society, vol. lxv., Mr. Davies-Colley published a list of the cases of anthrax observed at Guy's Hospital, and his paper was illustrated by an excellent drawing of the external lesion, which, in that case, was situated on the cheek. Since the date of that paper (June, 1882), there have been, Mr. Poland informs us, twenty additional cases; in one only of these cases, that, namely, which presented the intestinal lesion represented in Figure 2 in the chromo-lithograph, was there no external lesion. There has thus been a total of thirty-six cases of external anthrax observed at Guy's Hospital; eight of these cases, or about 22 per cent., died; of these eight cases, three had characteristic and well marked internal lesions, and a fourth had œdema of the glottis. In the twenty-eight cases which recovered the "malignant pustule" was excised on admission; in fourteen of these cases there were symptoms of general infection at the time of admission. It is, however, as yet too soon to determine how far the excision can be credited with the good result.

◆

THE Princess Louise, Marchioness of Lorne, has consented to open the new wing of St. Mary's Hospital on Wednesday, the [illegible] of July next, and will receive purses in aid of the fund for opening and furnishing the wards.

DR. GRANT BEY, Physician-in-Chief of the Egyptian Railroads, and one of the most respected physicians in Cairo, has been promoted to the rank of Commander of the Order of the Medjidieh.

AT a meeting of the trustees of the Tancred charities held this week in London, Mr. T. Haydon was elected to the Tancred studentship in Physic at Gonville and Caius College, and Mr. T. H. Leigh was elected to the Tancred studentship in Common Law at Lincoln's-inn.

M. PASTEUR has been furnished with an opportunity of testing his theories concerning rabies upon a human subject. One of the servants of the Paris and Lyons Railway at Tarascon-sur-Rhone, having been bitten by an undoubtedly mad dog, has just placed himself in the hands of the illustrious savant.

"WHAT to Do and How to Do It" is the title of an excellent little book issued by the Sanitary Laws Enforcement Society. It is intended as a manual of the law affecting the housing and sanitary condition of Londoners, with special reference to the dwellings of the poor. Messrs. Kegan Paul, Trench, and Co. are the publishers.

SIGNOR MANCINI, replying in the Chamber to Deputy Mascilli, who asked for precise information regarding the probable reappearance of cholera in Egypt, and as to whether the English had not, by their presence there, violated some conventions, and thereby facilitated its spread, said there was nothing abnormal in England's position in Egypt, nor had he reason to believe that she had done anything in violation of international arrangements which might involve deplorable consequences.

AN afternoon performance in aid of the funds of the East London Hospital for Children will be given by Mr. F. Hope Meriscord, at the Royal Avenue Theatre, Charing Cross, on Thursday, June 26th, at half-past two, when an original comedy-drama in four acts, founded upon incidents of hospital life, entitled "Sister Grace," will be produced for the first time. This drama is, we believe, the composition of one of the medical staff.

IT is not safe to practise without a diploma in Colorado. In a small town near Denver, Eli Madlong, practising as a physician, but without any diploma, prescribed some medicine for a patient who died, presumably from the effects of the prescription; whereupon, says the *Chicago Medical Review*, the indignant friends of the deceased hanged the venturesome practitioner by the neck until he was as dead as his unfortunate patient.

The Charities Register and Digest is the title of a valuable and very complete work just published by the Charity Organisation Society. It consists of a classified register of charities in the metropolis, and a digest of information respecting the legal, voluntary, and other means for the prevention and relief of distress and the improvement of the condition of the poor.

To the list we have already published of probable candidates for the Council of the College of Surgeons of England for the vacancies of this year, must be added the name of Mr. Allingham. Most of the candidates are surgeons whose established reputation, and valuable contributions to the literature, science, and practice of surgery, will [illegible] them to a [illegible] body of [illegible].

SUNDAY next, June 15th, is Hospital Sunday in London. The first Hospital Sunday collections were made in London in 1873, and produced £27,700; last year the amount collected was [illegible]. A letter from the Right Honourable the Lord Mayor, calling attention to the subject, will be found in another page.

WHEATLEY MEMORIAL FUND.

It is proposed to close this fund at the end of the present month. The Treasurer will therefore be glad to receive all subscriptions before that date.

THE YORKSHIRE COLLEGE.

The Leeds School of Medicine, which was founded upwards of fifty years ago, has been amalgamated with the Yorkshire College. The principal factor in bringing about this result is the recent obtaining of a charter by the Victoria University (Manchester), enabling it to grant medical degrees. As it is contemplated that, when the new buildings at Leeds are completed, the Yorkshire College will be constituted one of the colleges in the University, it is felt that the Leeds medical students ought to have the same opportunities of graduating close at home as those of Manchester. A chair of physiology is to be founded at the Yorkshire College, and applications for the professorship are now being sent in. The Council of the College have purchased the buildings belonging to the Medical School, and the amalgamation is to take effect from August 1st next.

DEATH FROM ADMINISTRATION OF CHLOROFORM.

We are favoured by Mr. Theodore Covernton, house-surgeon to the Cumberland Infirmary, Carlisle, with the following details of a death while under the influence of chloroform. The case was one of disease of the ankle-joint in a boy aged 17; an abscess required to be opened, and it was determined at the same time to explore the joint. Before the patient was put under choloroform the heart was examined by Mr. Covernton, and found normal. The patient took the anæsthetic easily, and breathed well during the operation, which lasted about five minutes, and involved the introduction of the finger into the joint, and the scraping away of some soft bone. Immediately the operation was over, chloroform was discontinued, and for some minutes he seemed to be recovering steadily from its influence, when vomiting came on. The finger was introduced to clear the throat, and the tongue brought well forward with forceps. By this time the heart had failed, and although artificial respiration, electricity, and tracheotomy were in turn tried to resuscitate him, he died. The chloroform was administered by Mr. Covernton in the presence of Dr. Maclaren, the operating surgeon. The friends would not allow a *post mortem* examination. An inquest was held the following day, and the jury returned a verdict, "that the deceased died from fatal fainting caused by the administration of chloroform," and added that no blame was attributable to any one.

AN EPIDEMIC OF ENTERIC FEVER AT ST. ALBAN'S.

Dr. C. E. Saunders, the Medical Officer of Health for the Middlesex and Hertfordshire Combined Districts, has concluded an exhaustive inquiry into an epidemic of enteric fever which suddenly broke out at St. Alban's, in May, and has drawn up a report which deals very ably with the somewhat peculiar circumstances under which the epidemic occurred. The first peculiarity was the extreme rapidity with which the cases followed each other; between May 8th and May 29th, seventy-three cases occurred in forty-nine houses. At first sight these houses had no common condition; they were not all on the line of any particular sewer, some of them had no sewers, and some were connected with sewers which go into a system separate from that of the rest of the city; further, the milk was supplied to these houses by six different retailers of milk. Under these circumstances all sorts of hypotheses were started to account for the epidemic, and the one which was apparently most favoured by the citizens, attributed it to foul smells arising from the gratings of the sewers in the streets. Dr. Saunders, however, was satisfied that the system of disconnection and free ventilation adopted in the construction of the new sewers rendered such a probability very remote, and he was led to investigate the source of the milk-supply with great care. He then discovered that every one of these six milk-sellers drew a part of their supplies from one source, a farm where, on January 26th, a domestic servant was taken ill, and passed through a typical attack of enteric fever, her convalescence not being complete until April 1st. The report is a very interesting instance of the value of a careful and temperate investigation, and is also of importance as showing how large a quantity of milk may be contaminated by the addition of a comparatively small quantity of milk containing the poison. It would be of interest in this connection if Dr. Saunders could ascertain what was the average total daily sale of each milkman. We learn with much regret that Mr. Ridgway Lloyd, a highly respected practitioner in St. Alban's, and one of the District Secretaries of the Metropolitan Counties Branch, has fallen a victim to the epidemic, at the early age of 41.

THE PREVENTION OF BLINDNESS.

The action of the Ophthalmological Society of the United Kingdom in taking steps to bring about some diminution of the present large amount of hopeless blindness caused by the ophthalmia of early infancy will, we feel confident, meet with the general approval of the profession. Blindness is for the individual a catastrophe, and for the community a grievous burden. The statistics just collected by the Society fully confirm the result arrived at by the investigation of twenty-two blind-asylums in Germany; one-third of the inmates of these asylums, both in Germany and in England, would be in full possession of their sight but for the terrible consequences of a disease which is among the most certainly curable of all diseases. We hope the Local Government Boards may be induced to accede to the proposed plan by which the relieving officers in England, and the inspectors of the poor in Scotland, would be made use of to distribute cards giving simple instructions to mothers to enable them to recognise the first symptoms of the disease, and to understand its gravity.

THE CORONERSHIP OF THE CITY OF LONDON.

At the fortnightly meeting of the Court of Common Council of the City of London on June 12th, the candidates for the office of coroner were asked separately if they were members of the Municipal Reform League, one of the twelve candidates unexpectedly replying in the affirmative. The Lord Mayor ultimately declared that the choice of the court had fallen upon Mr. Langham, the deputy coroner, and Mr. Thomas S. Hosford, of Highfield, Tulse Hill. Ultimately, Mr. Langham was declared to be elected by a few votes.

BARBAROUS SANITATION.

It is reported from Bagdad that the plague has broken out near Bedra Zarbutisk and Jassan on the Persian frontier, and that these places have been surrounded by a sanitary *cordon*. Our Paris correspondent gave particulars a fortnight since of this outbreak, and of the sanitary precautions of which the enforcement has been attempted. Sanitary *cordons* have never been found of much avail in such cases, and have been the cause of trouble, suffering, and much useless cruelty. Energetic local sanitation, the isolation of infected cases, and the disinfection of the houses from which they are removed, are the methods of prevention which British experience has suggested as most efficient; and we have little doubt that in this, as in most other great questions of hygiene, our continental colleagues will slowly follow our lead, and admit that British sanitation is not only practical, but is so chiefly because it is, in its motives and principles, scientific and humane.

THE DIETETICS OF CHEESE.

In the course of the recent very interesting Conference on Dairying, arranged by Dr. Bond, at Gloucester, certain objections to eating raw cheese were urged with much warmth by Mr. Matthew Williams. Whether he be right or not in denouncing the habit of eating raw lumps of cheese with bread as barbarous, he is unquestionably on the right path in pressing for improvement in our methods of cooking cheese, with a view to its being more generally introduced as a highly nourishing and economical article of diet, capable of being advantageously adopted in our national dietary in many agreeable and digestible forms, which are at present little known. Bread and raw cheese is a combination probably sufficiently well adapted to the *dura ilia messorum*, and to their want of resource, to long retain its immemorial place in the labourer's dietary, and elsewhere, as an economic aliment requiring no preparation. But although, as was pointed out by the lecturer, cheese is the most concentrated and economic food in the market, a 20 lb. cheese containing more nitrogenous substance than a sheep weighing 60 lb. or 70 lb., and although it is of the greatest importance for feeding the million, yet, in this country, it does not hold its own, and it is comparatively neglected in favour of far more costly meat-diet, even by persons of considerable intelligence and very limited means. Mr. Williams asks why it has not superseded meat, and proceeds to answer by pointing out one reason was that people found a difficulty in digesting it. This was because the salts of the milk were left in the whey when cheese was made with rennet. These, especially potash, were most necessary to assist digestion, and food which did not contain them should not be taken alone. Reasoning upon these two scientific truths, he had made a number of experiments as to various ways in which cheese might be made digestible. Casein itself was not indigestible, because it was taken with advantage by infants, and in milk there were two salts which were necessary to nutriment and easy digestion. His aim in the experiments he had performed, was to bring these constituents together, and see what nourishing and palatable foods could be made from them. By putting a sixth of an ounce of bicarbonate of potash with a pound of scraped cheese, and adding to them a small quantity of milk, he found them to dissolve and assume a liquid form. He used double Gloucester cheese in this instance, and the experiment was most successful. With American cheese it was not; and from this fact he was led to presume that double Gloucester cheese was made with rennet, as it ought to be, whilst the American cheese was not. This question of the solubility of cheese might therefore become a test as to its purity; but, in any case, Gloucestershire was right. In Italy, cheese was used in an infinite variety of ways, of which sprinkling it over soup was one of the most common. Maccaroni-cheese, as it was served in England, was frequently browned. The idea of browning cheese—half carbonising it—before it was eaten, was worse than eating it in raw lumps, because it rendered it more indigestible than ever. One excellent way in which to use cheese was to scrape it and put it in porridge. Mashed potato mixed with cheese-scrapings made a capital pudding, which was fit to eat. Cheese-stirabout was also excellent food. In Ireland, the people used large quantities of Indian corn for food. This alone was very insipid, but when taken with grated cheese, it was a different thing altogether. Instead of taking lumps of bread with lumps of cheese for supper, a far better plan was to make a cheese-pudding. This could be done by placing alternate layers of thin bread and cheese in a pie-dish, with a little milk or butter, and cooking in an oven. A most delicious and perfectly digestible pudding was the result. When an egg or two were mixed with the ingredients, a meal was made fit for a Roman emperor, and withal it was one of the most economical dishes that could be made. In Switzerland, cheese was served in a variety of ways. One delicious meal which the Swiss favoured was a pudding composed of cheese and eggs, beaten together with milk and butter. A quarter of a pound of cheese, two eggs, a bit of butter and a drop of milk, mixed together and warmed, in this way made a dish containing as much nourishment as a pound of beef-steak. It was food for the man of sedentary habits, for the hardy labourer, or for the athlete. In fact, it was one of the most palatable, nourishing, and digestible foods it was possible to take. The cheese-solution to which he had referred was a pleasant relish added to re-cooked fish or cold meat. In the letters from Italy, by Mr. Ernest Hart, which were published in the BRITISH MEDICAL JOURNAL, attention was drawn to the extensive use made of cooked cheese in the Italian dietary, and the method of preparing the savoury and digestible "*Gnocchi Romani*" was described in detail. The problem of dissolving cheese, on which Mr. Matthew Williams is still engaged, is a very important one, and is well worth public attention.

UNCOVERING AT FUNERALS.

WE publish this week a letter from a correspondent on the practice of uncovering the head at funerals. We quite agree with him that the practice is often highly prejudicial to the health of mourners, who may have many living persons dependent upon them, and who are exposed by the custom to actual risk of life, or at least to a very great chance of being seized with temporary indispositions, which are certain to cause them unfair and needless inconvenience. The depression of spirits under which the chief mourners labour at these melancholy occasions, peculiarly predisposes them to some of the worst direct and indirect effects of chill; and even when any person is present at a burial out of respect to the deceased, with whom he has had none of the deep sympathy due to relationship or intimacy, the risk of his catching cold is considerable, as a visitor of this kind has often walked some distance, or travelled in a hot carriage by rail or road. A duty of this kind is often pressed upon a medical man; and in his case the risk is great, and the result of any consequent illness often very serious. It is, however, very difficult to break old customs without giving offence; and perhaps the best thing to do, under the circumstances, is for the mourner to wear a skull-cap, or to raise his hat as little from his head as possible, as both these subterfuges appear to be conventionally permissible.

CREMATION.

AT a meeting of the City Commissioners of Sewers, a report was brought up from the Sanitary Committee on the reference to consider whether it was not advisable that a proper crematorium should be erected at the Ilford cemetery, that the public might adopt that mode of sepulture should they so wish. By the courtesy of Sir Henry Thompson, Sir Spencer Wells, and other members of the Cremation Society of England, they were enabled to observe the cremation of a horse at the Crematorium at Woking belonging to that Society. In the meantime, a Bill was introduced into the House of Commons with a view to regulate the proceedings in the cremation of the dead, but it was rejected on a second reading. The committee thought it was inexpedient to erect any apparatus for the cremation of the dead at Ilford until that mode of disposal has been regulated by Parliament. The consideration of the report was adjourned. The serious attention given to this subject by public bodies of so great importance, indicates that the time is at hand for some legislative regulation in this country of a practice which has in its favour so much enlightened public sentiment and scientific support.

PROVIDING FOR SMALL-POX PATIENTS.

THE difficulties encountered by any public body, entrusted with the duty of providing hospital-accommodation for a disease so universally dreaded as small-pox, was well exemplified at a special meeting of the Managers of the Metropolitan Asylums Board, held on May 30th. Sir Edmund Hay Currie stated (as we reported in our last week's issue) the steps it would be necessary to take, in order to meet the increase of the epidemic; and, at the same time, he deplored the position the managers were placed in by the objections of people who, living outside the metropolis, wanted all the cases kept within the metropolis; and of people who, living in the metropolis, wanted all signs of the epidemic kept out of sight. This very accurately describes the popular dislike to small-pox hospitals. The managers, in their endeavours to work on the lines recommended by the Royal Commission on Infectious Hospitals, have decreased very largely the beds available for small-pox in the several district hospitals, and not more than fifty patients are accommodated in each; indeed, we believe the number seldom exceeds forty. This, of course, necessitates most of the cases being sent to the hospital-ships or the camp at Darenth, with the result that the people in the country object to a large importation of small-pox patients to their district. This reduction in the number of cases treated in the hospitals in town does not, however, satisfy the more noisy of those who object to small-pox hospitals being placed in populous neighbourhoods, where they are likely to be required. The epidemic is most prevalent in the North-east of London, and naturally the agitation is directed against the Eastern Hospital at Homerton. Dr. Tripe, who, in his evidence before the Royal Commission on Infectious Hospitals, stated that, as regards the Homerton Hospital, "there does not seem to have been any great damage to the neighbourhood until about eighty or more cases were treated there, I look upon that number as safe," seems to have altered his opinion; for he now believes that the hospital is responsible for much of the small-pox in Hackney. His opinion is accepted by laymen in the district; and we find, in the *Times* of May 30th, a letter from the Rev. B. Meredyth Kitson, of All Saints, Clapton, attacking the hospital. He recommends that the site be sold, and more hospital-ships bought; or a hospital built on the breezy Essex flats. Mr. Kitson betrays a singular ignorance of the necessities of the situation, or is curiously indifferent to the sufferings of sick people, when he does not recollect that there will always be a proportion of cases too ill to be moved beyond the limits of London, and for these accommodation must be provided in the existing hospitals. And it is precisely such cases that are being treated at present at Homerton. But the most ill-advised portion of his letter is that where he speaks of the ambulance as a "black death-cart," constantly gliding through the streets; and then mentions the case of a young fellow who fainted at the sight of an ambulance, and was taken to hospital next day smitten with the small-pox. Mr. Kitson cannot, of course, be expected to know that this young man must have received the infection of small-pox ten or twelve days previous to the day on which he fainted, or that his fainting was the first symptom of the disease; but he ought to know that even those who believe that the infection of small-pox spreads directly from the hospital to the surrounding neighbourhood, agree that there is no evidence to show that it spreads from the ambulances to the people in the streets; while one who is a teacher of the people, might be expected to possess a judgment sufficiently sound to restrain him from writing in so ill-judged a manner, with regard to removal of the sick from their homes to the hospital, in perhaps the best-appointed ambulances that are to be found in the country.

THE STUDY AND CURE OF INEBRIETY.

THE meetings for the season of the Society for the Study and Cure of Inebriety will be held in the rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, W., at four o'clock P.M. The first meeting has already been held on June 10th, and report of the proceedings will be found on another page. Other meetings will be held on October 7th of the present year, and on January 6th and April 8th, 1885. The objects and aspirations of the Society are well and eloquently set forth in the inaugural address of Dr. Norman Kerr, the president, which has just been published at the request of the Society. Dr. Kerr sums them up as follows. "We confidently believe that we will succeed in acquiring a more exact acquaintance with the phenomena, causation, and conditions of cure of inebriety, by engaging in the study of this intractable disease with the same strictly scientific method with which we enter upon the study of other forms of disease. We shall be satisfied if we succeed in impressing on the public mind that inebriates are not necessarily scoundrels; that to treat the dipsomaniac as a criminal is not to cure but to confirm his inebriety, not to reform him but to make him worse; that no reproach should be cast on the inebriate for surrendering his freedom in the hope of cure; that no slur should be attached to residence (voluntary or involuntary) in a home for inebriates any more than in a hospital or an asylum; that inebriety is the inevitable outcome of our dangerous social customs—of our halting unrighteous legislation; that the moral, social, political, economical, and spiritual mischiefs arising from intemperance are the result of the operation of natural law, of the physiological and pathological action of an irritant narcotic poison on the brain and nervous centres of human beings endowed with a constitutional susceptibility to the action of this class of poisonous agents; and that it is the duty of those who are not so heavily handicapped in the race for temperance to employ every lawful means to aid and encourage their weaker brethren and sisters in a resolute, though always difficult, effort at amelioration, as it is the duty of the State to make permanent, while amending, the present temporary Act for promoting the reformation and cure of the habitual drunkard, and to supply adequate provision for the care and treatment of such needy diseased inebriates as, from their serious illness of body and of mind, are unable to contribute to their own maintenance and support."

FEMORAL HERNIA: PERFORATION OF A DIVERTICULUM.

AT the recent German Surgical Congress, Dr. Busch, of Berlin, described the case of a man, aged 53, who had for years worn a truss on account of a small femoral hernia on the right side; this gave him no inconvenience and could readily be replaced. At the beginning of April he was seized with severe pains; he reduced the hernia, that appears to have increased in size, and the pains immediately increased, and severe peritonitis and distention of the abdomen followed. The patient was admitted into the hospital almost moribund, and nothing could be felt in the right femoral region excepting a slight thickening of the tissues. Enemata of lukewarm water were administered, but the patient died within five hours after admission. At the necropsy, the peritoneal cavity was found to be filled with fæces; on the right side was the sac of a femoral hernia completely empty. A small diverticulum projected from the small intestine, two feet and a half above the cæcum; it was not gangrenous, but at its base a small perforation was detected. Dr. Busch believes that the diverticulum had probably occupied the hernial sac, and had become ulcerated through pressure of the structures surrounding the neck of the sac, hence the extravasation of fæces and the disastrous results that followed the reduction of the hernia. The diverticulum was exhibited before the meeting of the Congress.

POISONOUS COD-FISH.

M. BERTHERAND, of the Climatological Society of Algiers, has demonstrated, on himself and on others, the poisonous action of dried cod when it presents a vermilion tint. M. Mégnin has discovered in this vermilion-tinted cod a cryptogam which he considers to be a variety of the genus *consothecium*. M. Duvillier has found a considerable quantity of alkaloids of decomposition. The poisonous action of this dried cod is the result of the combination of the principle of the cryptogam and ptomaines. The symptoms are acute pain, bilious vomiting, diarrhœa, tenesmus, general collapse, intense thirst, cramps, coldness of the hands and feet, dysphagia, and a burning sensation in the œsophagus. M. Bertherand attributes the deterioration of the fish to the excessive heat of the Algerian coast. He proposes that sodium-borate or boric acid should be used instead of sodium-chloride; also that the cod should be dried by placing it in a strong current of air. Immediately it is caught, it should either be frozen according to the American method, or tanks should be provided in the boat, where the fish can be kept alive.

THE LONDON HOSPITALS.

AT a General Court of the Governors of the London Hospital, held last week, the Secretary (Mr. A. H. Haggard) read a report of the House Committee recommending an expenditure of £8,000 for providing better nursing-accommodation for the hospital. The Chairman, in moving the adoption of the report, said this was a necessary, but not a desirable, outlay. Three years ago, the nursing-accommodation of the hospital was very inferior; but, after a great deal of trouble, it had been much improved; and now, by means of the Nurses' Home in connection with the institution, it had not only supplied the wants of this institution, but had greatly benefited other hospitals of the metropolis. It was proposed to add a new wing to the present building, so as to provide accommodation for one hundred nurses. The recommendation was acceded to. It was announced that the Baroness de Rothschild had given £10,000 towards the funds of the hospital. Very earnest appeals are being made this week, on similar grounds, for the University College Hospital, and also for King's College Hospital. We have lately reported similar extensions and appeals at the Middlesex and Westminster Hospitals, for which large sums have been collected; and the Great Northern Hospital is to be amalgamated, extended, and reorganised, in connection with the great project for largely increased hospital-accommodation in the North of London. The Temperance Hospital has developed into a great institution, with large evidences of yet further development; and the Chelsea Hospital for Women has been successful in its energetic efforts at founding and fitting an institution of considerable dimensions and importance. In another paragraph we report the success of the Home Hospital in Fitzroy Square, and the inception of a Convalescent Fever Hospital in connection with that young and useful association. A new Central Committee has been formed for developing and co-ordinating the work of the numerous individuals and committees who have taken up and practically carried out the admirable scheme, inaugurated and carried into effect by the Rev. S. A. Barnett of Whitechapel, for providing, on a partially self-supporting basis, cottage-homes in the country for rural holidays for the sick children of the poor. So that, altogether, there is no reason to fear that the fountains of charity for the sick are running dry in the metropolis, as the cry was a year ago. Nevertheless, it is to be feared that the sources of donation, subscription, and legacy, which have hitherto sufficed to meet the ever extending wants of the hospitals of London, may prove to be inadequate to the enormous drafts made upon them; and the necessity for putting them on a partly provident and self-supporting basis, so as to draw a considerable part of their support from the classes which benefit by them, is being increasingly felt, and must tend to modify the mode of government and the theory of management of many of these institutions. The industrial classes are growing into power and increasing in resource, and they ought to be called upon more and more largely to take their share in the burdens which sickness imposes upon the public charity. There are abundant signs that they are conscious of the responsibility, and not unwilling to accept their share of the financial burden.

THE MUSEUM OF THE ROYAL COLLEGE OF SURGEONS.

On Saturday last, June 7th, a *conversazione* was given in the Museum of the Royal College of Surgeons, by Professor and Mrs. Flower. No fewer than 758 guests were present, including Lord Tollemache, Sir Richard Owen, Sir Frederick Pollock, Sir Rutherford and Lady Alcock, the President of the Royal Academy of Arts (Sir Frederick Leighton), Sir Joseph Hooker, Sir James and Lady Paget, Sir Joseph and Lady Fayrer, Sir Risdon Bennett, Sir Edwin and Lady Saunders, Sir Lyon Playfair, Dr. and Mrs. Günther, Mr. Chadwick, Mr. Henry Pollock, Mr. Simon, Mr. P. L. Sclater, and many other visitors well known to science and medicine. The band of the Commissionaires performed outside the Council Room, and the Library and other parts of the building were tastefully decorated with flowers. All who are or have been connected with the Royal College of Surgeons in any capacity must feel much regret when they remember that this *conversazione* was the last occasion on which the late Conservator and Mrs. Flower would have an opportunity of exercising that hospitality which has rendered them so deservedly popular ever since Professor Flower entered upon his duties at the Museum. Not only are Professor Flower's contributions to science of the highest value, but he stands among the first of those gentlemen who have done much to gain for scientists the social position and public esteem that they [illegible] deserve in consideration of their high aims and their beneficial influence on social progress.

INTERNATIONAL HEALTH EXHIBITION.

The daily conferences at the International Health Exhibition on questions affecting public health are of a character in every way worthy of that important undertaking. The papers read have been of a very high order, and the conference on Wednesday on Industrial Diseases was of quite exceptional value, in respect both to the importance of the papers and to the excellence and value of the addresses. The contributions of Dr. Ogle, Dr. Bristowe, and Dr. Ord, were of a peculiarly interesting character. These conferences are producing a mass of literature of a valuable character, and highly interesting to the profession. We greatly fear that, with the overwhelming demands upon our space for more purely medical and surgical matter, it will be impossible for us to do justice to them by reports of adequate length. Detailed reports of the more interesting conferences will, however, be found in the weekly issue of the *Sanitary Record*, which is entirely devoted to the Health Exhibition, its contents, and its literature; and we believe that, at a later period, the whole of the papers, with the full discussions, will be issued in a substantial volume by the Executive Council. Of the series of hand-books issued by the Council, that of Dr. Vivian Poore on the Duties of a Householder, Mr. Duff on the Legal Obligations in respect to Dwellings of the Poor, Professor Attfield on Water and Water-supplies, and Unfermented Beverages, Mr. C. E. Paget on Healthy Schools, Mr. Septimus Berdmore on the Principles of Cooking, Surgeon-Major Evatt, M.D., on Ambulance Organisation, Equipment, and Transport, Miss Catherine Jane Wood on Food and Cookery for Infants and Invalids, are already issued from the press. The Exhibition itself continues to attract vast crowds, a large proportion of the attendance being no doubt due to the attractions of the grounds and music, not less than to the varied social and scientific interest of the exhibits. The scientific value of the Exhibition is being daily strengthened by the completion of its various departments. The French Court, which is just being set in order, contains a peculiarly valuable collection illustrating the progress of the science and practice of hygiene in France; the exhibits being supplied by the Minister of Commerce, the laboratories of MM. Pasteur and Marie Levy, as well as by the chief scientific and public bodies in France connected with sanitary administration and practice. The Belgian Court contains much also which is of importance in relation to the science and hygiene of education. The meteorological pavilion is now complete. The contrasted Sanitary and Unsanitary Houses deserve careful study. The Biological and Public Health laboratories are rapidly approaching completion. We hear on all hands, from medical men who have visited the Exhibition, an expression of their profound interest in this most interesting display. A considerable number of sanitarians from all parts of the country have visited London, especially during the last Whitsun week, for the purpose of studying the Exhibition. It will, we believe, be found, by all who can give time to the careful study of the contents of the extensive buildings, that many days may be spent in a most agreeable and useful way, by carefully going through its various departments, note-book in hand.

APPEARANCES AFTER SUICIDAL HANGING.

Dr. [illegible], of Munich, has recently described in the [illegible] *Intelligenzblatt* the necropsies which he made a year or two since on the bodies of two suicides. The first case was that of a [illegible] aged 24, short, thin, and sickly, who destroyed himself after a disappointment in love. He tied the two ends of a large cotton handkerchief, folded diagonally and not twisted into the form of a cord, [illegible] all. As the handkerchief had been folded very broad, no line of constriction was found on the front of the neck. The hyoid bone, with the root of the tongue and larynx, had been forcibly and firmly drawn upwards and backwards against the posterior wall of the pharynx, so that all access of air to the glottis was excluded. There were small points of subconjunctival, subpleural, and subpericardial hæmorrhage. What appeared most remarkable to Dr. Nobiling was that the otherwise healthy endocardium of all the chambers of the heart was thickly spotted with small points of extravasated blood. The lungs were very œdematous. There were evidences of old pachymeningitis. The second case was that of a very corpulent man aged 40, subject to melancholia, who had mounted on a stool, attached the ends of a stout cord, made of a piece of vine-branch strengthened by hempen twine, to the cross-piece of a high window, put his head through the loop, and kicked the stool from under him. He was found quite dead, with the tips of his toes far from the ground, and his thick neck completely constricted above the thyroid cartilage by the cord, which made a deep mark round the neck. So deep was this constriction that the muscles attached to the hyoid bone, the sterno-mastoids, and the superficial layer of the muscles at the back of the neck, were all very deeply indented, and hæmorrhage had occurred into their substance. There was also much extravasation of blood into the connective tissue within the sheath of the great vessels of the neck, but the common carotids and the internal jugular vessels were uninjured. The larynx was pressed upwards and backwards against the back of the pharynx, the mucous membranes of the larynx, trachea, and bronchi, were deeply congested, and there were circumscribed hæmorrhages under the right vocal cord, the cellular tissue beneath the pleura on both sides, and in the pulmonary tissue. Aortic stenosis, great hypertrophy of the heart, nutmeg-liver, contracted kidneys, chronic gastro-adenitis, and colloid degeneration of the pancreas also existed.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

AT a meeting held on Wednesday, the 11th instant, at the offices of the Association, 3, New Inn, Strand, it was resolved to invite the Association of Fellows to unite with this Association in presenting a joint requisition to the President and Council of the College to call a special general meeting of Fellows and Members to consider what steps should be taken to carry out the resolutions passed at the late general meeting of the College, and to adopt such other measures as may be necessary to ensure the wishes of the Fellows and Members being attended to.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

THE annual dinner of this Society took place in one of the dining-rooms adjoining the South Gallery of the Health Exhibition at South Kensington on the evening of Wednesday last, the 11th instant, at the termination of that day's conference. Dr. T. O. Dudfield presided, and nearly a hundred ladies and gentlemen were present. The toasts of "The Queen" and "The Prince and Princess of Wales, and the rest of the Royal Family," having been given from the chair, Dr. King proposed the toast of the evening. Mr. A. W. Blyth proposed the three societies that had combined to form the conference, namely, the Society of Medical Officers of Health, the Sanitary Institute of Great Britain, and the Council of the Parkes Museum. Dr. Alfred Carpenter replied for the Institute, and Mr. Rogers Field for the Museum. Dr. C. E. Saunders proposed the Joint Committee of the Conference organised to carry out its objects, consisting of Dr. Dudfield, Dr. Bristowe, and Mr. A. W. Blyth for the Society; Dr. A. Carpenter, Mr. E. Turner, and Dr. Corfield for the Institute; and Captain D. Galton, Mr. R. Field, and Dr. Louis Parkes for the Museum. Dr. Bristowe returned thanks. Dr. F. Vacher, Birkenhead, proposed the toast of the "Readers of the Papers" at the Conference. Dr. G. Wilson and Dr. Corfield replied. Dr. Dudfield proposed the "Visitors," coupling with the toast the names of Mr. A. P. Trendell, the officer of the Health Exhibition who had been chiefly concerned in organising the Conference, and Dr. W. H. Stone, both of whom replied; the former for the officials of the Exhibition, the latter for the many medical men who were present. Dr. G. P. Bate proposed the last toast of the evening, "The Ladies," and Dr. Louis Parkes replied. The speeches were commendably short, the company being anxious to disperse early in order to enjoy the Exhibition, the music, illuminations, and other attractions.

SCOTLAND.

AT the meeting of the Council of the North Wales University, held on the 4th inst., three of the five appointments made to the staff were Scottish university graduates, the three selected gentlemen being members of the University of Glasgow.

THE meteorological returns for the month of May, which have just been published, show that in Scotland the early part of the month was marked by cloud and rain. This was followed by a very short period of mild weather, which in its turn was succeeded by easterly breezes, with a decidedly cold condition of the atmosphere, not at all propitious to vegetation. At the same time, agricultural reports show the harvest-prospects as so far very good.

WE understand that Dr. James Anderson, Examiner in Physiology and Natural History in the University of Aberdeen, and Examiner also at the College of Physicians, London, has found it necessary to resign the Aberdeen appointment before the natural end (in September) of his term of office. This has happened owing to an overlapping of the periods of the next July examinations held by the two bodies; and the Aberdeen authorities will consequently have to make a new appointment forthwith.

ROYAL HOSPITAL FOR SICK CHILDREN, EDINBURGH.

THERE were 103 patients treated in the wards of the Royal Hospital for Sick Children, Edinburgh, during the month of May, of whom 54 were in the hospital on the 1st of the month, and 49 were admitted during it; discharged, recovered, or cured, 15; and relieved, 6; while the average daily number of sick children in the wards was 62. In the outdoor department, 651 were treated as dispensary-patients, and 7 were vaccinated. In all, 761 patients were dealt with during the month.

PROPOSED VOLUNTEER MEDICAL CORPS FOR SCOTLAND.

ON Friday, June 6th, a meeting was held in Edinburgh University new buildings, under the chairmanship of Professor Douglas Maclagan. It was largely attended by medical students and by members of the profession, and it was addressed by Surgeon-Major Evatt, of the Army Medical Department, Woolwich, on "Volunteer Medical Organisation, with special reference to the Objects and Aims of a proposed Hospital Corps." In his address, the lecturer explained the constitution of an English Army Corps and the ambulance-arrangements thereof, and pointed out the importance of the Volunteer Force being well forward in such matters. Professor Turner spoke at the meeting also; and Professor Chiene moved, "That a volunteer hospital corps be formed in connection with the Edinburgh medical schools, and that a committee be appointed to make the necessary preliminary arrangements." This was seconded by Mr. C. W. Cathcart, and unanimously carried On the motion of Professor Turner, the meeting accorded a hearty vote of thanks to Surgeon-Major Evatt.

DUNDEE ROYAL INFIRMARY.

AT the annual meeting of the supporters of the Dundee Royal Infirmary, held on Monday, and presided over by ex-Provost Rough, the report submitted showed that, during the past year, the number of patients was 1,752, as compared with 1,918 in the previous year.

The average daily number of patients resident in the wards was 182. During the year, 136 patients died, this giving a mortality of 7.7 per cent., as compared with 8.7 in the previous year. The proposed children's ward has since last meeting been inaugurated, has been fully occupied, and so successful in its working, that an extension will soon be proposed. To the Convalescent Hospital at Bardlich there had been admitted during the year 610 patients, a great increase on the previous year, when the number admitted was 490. As to the financial report, it showed that the income for the year had been over £7,450, and the expenditure over £7,888; the deficiency, when added to accumulated deficits, raises these to £1,486. A considerable amount of the expenditure, however, has been in temporary expenses connected with the repairing and furnishing of the institution. The meeting resolved that the accommodation in the Convalescent Hospital be increased, and that free admission tickets to the infirmary be increased from 150 to 175 annually, this being another step towards making entrance to the infirmary quite free. It was also resolved that, at a cost of £1,300, the west front of the building should be renewed.

TREATMENT OF THE APPARENTLY DROWNED.

In a busy part of the Clyde, like that in the vicinity of Glasgow, the number of those annually falling into the river is very large, and there have been, from time to time, complaints that many of the cases have succumbed owing to the distance they were removed before treatment was put in force. With the view of obviating this difficulty, the authorities have very properly constructed two large and substantial wooden erections, one on the south side and one on the north side of the river, for the speedy treatment of persons who have fallen into the water. The places are furnished with everything requisite for immediate application in the way of restoration, having a stove to keep the air inside always warm, blankets to wrap the body in, and other restoratives. If steps are also taken for the speedy arrival of medical assistance, the authorities will have met a long felt want in a very complete manner.

THE POOR-LAW CONFERENCE IN GLASGOW.

As mentioned briefly in the last number of the Journal, a conference was held in Glasgow on the 3rd inst. for the discussion of subjects relating to the administration of the Poor-laws. The conference was originated by the three parochial boards of Glasgow, and in all respects it may be said to have been a success, save in the one particular that too much was attempted in one day, leaving no time for the discussion of matters of great interest and importance, especially as many had come from a distance to give their views and opinions on questions of more than local interest. The series of papers read and discussed dealt with public health, pauperism, lunacy, and the administration of charity in relation to parochial relief. To Dr. J. B. Russell was allotted the important question of public health and pauperism, and from him a most suggestive address was received, the text of which was that good sanitary rule pays in the end, although the outlay at first may be great, and that health is in the long run cheaper than disease and its consequent pauperism. Following this subject, that of lunacy and pauperism was dealt with by Dr. Yellowlees, who holds that the commonly received view of lunacy being on the increase is incorrect, and that circumstances, such as the additional Government grant given in the case of pauper lunatics, have had a great deal to do with the larger number of persons now coming under that term. Among several other interesting topics, that of private charity in relation to public relief was taken up by Mr. J. C. Burns, Chairman of the local Charity Organisation Society, and the facts stated by him ought to receive the thoughtful attention of all who desire that only those really deserving [illegible] should become the recipients of public benevolence. From the scope of this recent Poor-law conference, it must do good in many ways by thus directing attention to questions of interest to the whole community.

IRELAND.

MERCER'S HOSPITAL.

The governors of this hospital have issued an appeal for funds to enable them to pay off the debt of £1,300 they owe, and at the same time provide improved and much needed accommodation for the resident officers and servants. They desire also, if practicable, to open a children's ward, as well as male and female pay wards, which it is hoped would assist the financial condition of the hospital. For this purpose, in addition to a bequest of the late Mr. Ledwich, surgeon to the hospital, devised specifically for adding to the hospital accommodation, a sum of £2,500 at least is required, towards which £500 has been promised, provided the balance be collected within six months.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

Dr. A. H. Jacob has been elected Secretary to the Council of the College, in succession to the late Dr. J. Stannus Hughes. In consequence of this appointment, Dr. Jacob's seat on the Council is vacant. For the vacancy thus caused on the Council, Mr. Rawdon Macnamara, who was not re-elected at the late annual meeting of the Fellows, will probably be the favourite candidate. Failing his obtaining a seat on the executive body of the College, his position as its representative on the General Medical Council, which he holds until April next, is anomalous.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

The forty-second annual meeting of this Society was held last week, at the King and Queen's College of Physicians, Dr. William Moore, President of the College, in the chair. Mr. Arthur H. Benson, Secretary, read the report of the Council for the past year, during which, it was stated, the Society continued in a fairly satisfactory condition, and had been able to assist a very large number of applicants, although the amounts granted were necessarily very small. During the year ended May 31st, 1884, the sums that passed through the treasurer's hands amounted to £2,535; of this, £1,104 had been added to the funded property of the Society, in accordance with the wish of the donors. The sum of £1,230 has been distributed, leaving a balance of £201 in the treasurer's hands. Of the sum distributed, £205 was to medical men, £930 to widows, and £95 to orphans. One hundred and eight applications for relief had been received within the year (of which fifteen were new), most of them cases of extreme necessity. Of these, eight were from medical men, of which three were new; from the widows of medical men ninety, of which eleven were new; and from the orphans of medical men ten, of which one was new. The total receipts for the year were £2,821 14s. 5d., and the expenditure £1,375 12s. 8d., leaving in bank on the 31st ultimo, to the credit of the Society, £1,446 1s. 9d. The amount invested in trust for the Society in Bank of Ireland Stock was £6,140 9s. 9d., equivalent in cash to £20,640. Dr. James Little, in moving the adoption of the report, said that even if they had a much larger amount of funded capital to their credit than they had, they could not do without the sympathy and support of the members of the profession. The Society wanted and ought to receive the earnest sympathy and active support of every medical man in Ireland. It was to be regretted that the Society was not more universally supported throughout the country. Mr. J. Kellock Barton, in speaking to another resolution, observed that the Society deserved the gratitude of the profession, not only for the positive good it conferred on those who from adverse fortune required pecuniary assistance, but also because it aided in maintaining a proper professional tone in the [illegible] [illegible]. He believed that most of the medical legislation that had taken place latterly had tended in some degree to lower the status of the profession. The status and character of the medical body was to be found and maintained by efforts, not from without, but within; and in that way the Society [illegible] [illegible] to support the poorer members and their families, [illegible] their sympathy and [illegible]. The Registrar-General also made some very pertinent remarks upon the smallness of the annual income of the Society. It was discreditable, he said, that, out of 2,500 medical men in Ireland, the Society had only 500 subscribers. If the 2,000 medical men who at present gave nothing could be induced to contribute, say, on an average, 10s. a year, they would have £1,000 a year added to their funds.

THE COUNTY INFIRMARIES OF IRELAND.

At a recent meeting of the Statistical Society, a paper on the County Infirmaries was read by Dr. MacDonnell of Dundalk. He pointed out that, though existing as a system of relief, and that the oldest in the country, they lacked the cohesion and security which a central authority alone could give, and the absence of which had occasionally enabled local influences and prejudices to prove detrimental to almost their very existence. The infirmaries were originally established by Act of the Irish Parliament in 1765, for the purpose of affording medical and surgical relief to the poor in Ireland. The power of taxation for their support was limited to a grant from the Consolidated Fund of £100 *per annum* for each, increased afterwards to £500, and finally to a maximum of £1,400 a year, and £100 to the surgeon. Provision was made for the maintenance of more than one infirmary in counties deemed large enough for two institutions; owing, however, to the fact of workhouses, with hospitals attached to them, being subsequently established, it was not found necessary to act on this proviso. The cases admitted into these county institutions are, in all essentials, of the same class as those treated in our metropolitan hospitals. Their means of support are derived from presentments levied as county cess, subscriptions, and bequests and donations. Dr. MacDonnell prepared a return for the years 1881-2-3. For the last year the returns for the infirmaries (omitting Derry, Longford, and Meath) show that 1,350 beds were used to maintain 10,025 intern patients, giving an average to each institution of 417. The gross expenditure was £24,610 8s. 4d., or an average cost per bed of £20 2s. 10¾d., and per patient of £2 11s. 6⅛d. The gross county presentments amounted to £19,106 16s., and the gross incomes to £25,767 6s. 7d. Taking the acreage and poor-law valuation of the several counties, the levied presentments were found to bear a ratio of .32 of a penny per acre, and .52 of a penny per pound. From a perusal of these facts, it is seen that the actual cost to the cesspayer amounts to one halfpenny per pound of the valuation. For this amount, he obtains the advantage of having an hospital replete with every surgical and medical appliance, and maintained in a style of efficiency which compares most favourably with the metropolitan hospitals. The rooted repugnance which exists to entering a workhouse hospital does not obtain here. No pauperising element enters into the question, nor is any one disfranchised for accepting such relief. Last year, the Dublin hospitals, which receive a Parliamentary grant, treated 10,140 patients at a cost of £40,754, showing an average cost per bed of £53. Taking the three years mentioned above, we find the average cost per bed for the county infirmaries was £18 2s. 5d.; this, however, is not quite accurate, as some of the institutions have not furnished a daily average return of beds occupied; but, inasmuch as the infirmaries are, with a few exceptions, generally fully occupied, if, as an equivalent, one-third be added, we arrive at a sum of £25, representing the annual cost per bed in the infirmaries, against £53 per bed in the Dublin hospitals. It must be further borne in mind that only eleven institutions distribute the establishment-charges in Dublin; whereas twenty-five infirmaries have to be maintained in separate counties. The annual average cost per patient, treated in the various public lunatic asylums in Ireland during 1882, was £22 16s. 5d., and one-fourth might be added to this sum to represent the annual average cost per bed, as about 25 per cent. were either annually discharged or died. This would bring the average cost per bed to £28. Comparing, therefore, the average costs of the county infirmaries, of the hospitals receiving Parliamentary grants in Dublin, and of the lunatic asylums, there is conclusive proof of the economy practised in the infirmaries.

SANITARY CONGRESS AT DUBLIN.

Considerable progress has already been made in the arrangements for holding the next annual Congress of the Sanitary Institute of Great Britain in Dublin. All the officers of the Congress have been appointed, and it will be opened on September 30th, under the presidency of Sir Robert Rawlinson, C.B., chief engineering inspector of the Local Government Board of England. A large and influential Local General Committee, as well as an Executive Committee, has been nominated, and the Reception Committee is already at work. Dublin has always been successful in its congresses, and we anticipate there will be no lack of its *prestige* in this respect in the approaching one. Trinity College has been asked to grant its permission to hold the meetings of the Congress within its walls, and most suitable accommodation for the exhibition of sanitary appliances—which forms such an interesting and important feature in the annual meeting of the Institute—has been secured in the Royal Dublin Society's extensive premises at Ball's Bridge. The Sanitary Exhibition will remain open to the public for three weeks, and it is anticipated that several exhibits now on view at the Health Exhibition will also be entered for competition at Dublin. The business of the Congress will be transacted in three sections. Section I. Sanitary Science and Preventive Medicine.—*President:* Thomas W. Grimshaw, M.D., Registrar-General for Ireland. *Secretaries:* E. MacDowel Cosgrave, M.D., and George F. Duffey, M.D.—Section II. Engineering and Architecture.—*President:* Charles P. Cotton, C.E., Engineering Inspector Local Government Board for Ireland. *Secretaries:* J. P. Griffiths and W. Kaye-Parry.—Section III. Chemistry, Meteorology, Geology.—*President:* Charles A. Cameron, M.D., Superintendent Medical Officer of Health for Dublin. *Secretaries:* R. J. Moss, J. Byrne Power, and C. R. C. Tichborne. Already papers have been promised in each of these sections, and there is every reason to hope that the Dublin meeting will render service in the work the Institute has undertaken in the advancement of sanitary science, and the diffusion of knowledge relating thereto, as much in Dublin itself as generally throughout the kingdom.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

An ordinary meeting of the Council of the College was held on Thursday, the 12th instant. The minutes of last meeting were read and confirmed.

Signatures to the by-laws were received from Members elected to the Fellowship.

Reports were received from the Court of Examiners on candidates found qualified for the Fellowship, the Nomination Committee, and the Committee on the Formula for Alterations in the Standing Rules relating to candidates rejected at the Primary and Pass Examinations for the Membership.

The election of a Conservator of the College Museum, on the report of the Museum Committee, was postponed till Thursday next.

The Examiners in Medicine and Midwifery were re-elected.

A vote of thanks was given to the President for representing the Council at the Tercentenary of the University of Edinburgh.

Messrs. Lund and John Wood were nominated Hunterian Professors of Surgery for the ensuing year, each to give three lectures. Professor Parker and Messrs. Brailey, Hill, and Treves were nominated as Professors. Professor Schäfer, of University College, was nominated for re-election as Arris and Gale Lecturer on Physiology.

Mr. Holmes's motion, referring to the Scheduling the subject of Physiology, was referred to the Nomination Committee.

Mr. Christopher Heath gave notice of the following motion at the next meeting of the Council: "That an extraordinary meeting of Council be called to consider the mode of election, and the alterations proposed in that election."

A letter was received from Dr. Edwin Morris, proposing certain alterations in the Charter.

The consideration of Sir Spencer Wells's motion (see British Medical Journal, May 17th, p. 969) was deferred.

Mr. Robert Gorton Coombe, of Burnham, Essex, who obtained the Membership of the College in 1841, was elected a Fellow of the College.

FIFTY-SECOND ANNUAL MEETING
OF THE

BRITISH MEDICAL ASSOCIATION,

To be held in BELFAST, July 29th, 30th and 31st, and August 1st, 1884.

THE MEDICAL HISTORY OF BELFAST.

By ALEXANDER DEMPSEY, M.D.,
Physician to the Mater Infirmorum Hospital, Belfast.

General History of Belfast. Charitable Society. Fever Hospital. Royal Hospital. Medical School. Queen's College. Union Hospital and Infirmary. Lying-in Hospital. Nurses' Home and Training School. Ophthalmic Hospital. Ulster Eye, Ear, and Throat Hospital.—Samaritan Hospital for Women. The Mater Infirmorum Hospital. Hospital for Sick Children. Ulster Hospital for Women and Children. Belfast Hospital for Skin-Diseases. Convalescent Home and Children's Hospital. Hospital for the Insane. Ulster Medical Society.

As the members of the North of Ireland Branch of the British Medical Association are desirous that the forthcoming meeting in Belfast shall not only be well attended, but that it shall in all respects be a success, the local committee is making every effort in its arrangements to realise this desire. It is hoped that the meeting will not only be useful in furthering medical science, but that a greater sympathy may be promoted between members of the profession living on both sides of the Channel, when friends from a distance learn from personal observation the difficulties that the practical Ulsterman had to encounter before the North of Ireland attained its present position in civilisation, commerce, and general culture.

It has been suggested that a short summary of what may be called the medical history of Belfast may not be inopportune at the present moment. In order to carry out this suggestion, we shall now take what must of necessity be a very hurried and imperfect glance at some of the institutions and hospitals that have arisen for the alleviation of suffering in Belfast, coupling with it such information regarding its medical history as we have been able to collect and group together in a very short space of time from different reliable sources. And, first of all, a word or two as to the general history of Belfast.

Belfast, the capital of the province of Ulster, and the commercial capital of Ireland, having at present a population, in round numbers, of 210,000, cannot boast of any ancient or remarkable historical interest; indeed, it seems to have been quite unknown before the thirteenth century. Its ancient name was Beal fierste (hence Belfast), from *beal*, a mouth, *fiersad*, a ford. The fort on the Antrim side of the River Lagan, which marked the ford by which the inhabitants of County Down found their way over at low water, and by ferry at high tide, first received that name. Up till the sixteenth century, only a few small houses, scarcely deserving the designation of village, existed around this fort. The old castle of Belfast was built by the O'Neills. It was afterwards captured several times by English invaders, and again regained by the natives, aided by several reinforcements from Scotland during those three centuries. Walter Devereux, Earl of Essex, who in the latter part of the sixteenth century was sent to quell an insurrection by a native chief, whose estates had been forfeited and granted to an English noble, first directed the attention of the English Council in London to the convenience of Belfast in preference to Carrickfergus as a garrison town; but Sir Arthur Chichester, the Councillor of James I, is generally regarded as the real founder of the town. He carried out the favourite policy of James, and brought over many followers from his home in Devonshire, and settled them in Belfast. In 1613, James constituted Chichester Lord of Belfast Castle, and gave the town a charter, and the privilege of sending two members to Parliament. Scotch settlers also came over, and other colonists from Cheshire and Lancashire; and, about 1637, Belfast began to assume some importance as a commercial centre; but, up till the present century, it still remained a small and unimportant town, as late as 1782 having only a population of about 13,000.

The town continued to grow in commercial importance until religious differences, and the conflict between the Parliament and Charles I, spread to it, and almost completely suspended all business operations.

After the death of Charles, Belfast was retaken by the Royalists, and it was only after a four days' siege by Cromwell's party that it surrendered to his forces. Peace having been again restored, commercial prosperity prevailed.

The inhabitants do not seem to have appreciated the government of James II, and a deputation was despatched to express their sympathy and adherence to William Prince of Orange; and on the arrivalof his majesty in 1670, he was received with great demonstrations of enthusiasm.

During the reign of Queen Anne the loyalty of the inhabitants remained firm; and in order to resist the threatened invasion of the Pretender, and for the defence of the town and neighbourhood against foreign foes, the first Irish volunteers were incorporated. The Lord-Lieutenant, who was unable to send a force to protect the town, highly approved of the spirited exertions of these volunteers, many of them drawn from the highest ranks, for the defence of their country. The movement spread rapidly, and the annual reviews, and general rejoicings which attended them, were accompanied with great pomp and parade. The Irish volunteers not only defended from foreign aggression, but exercised an astonishing influence in relieving restrictions on Irish trade, and in the encouragement of Irish manufactures, and the establishment of an Irish House of Commons. With their good aims they no doubt prepared the way for, and glided into, another organisation known as the United Irishmen, which also had its origin in Belfast about 1791. Their original scheme was parliamentary reform and a union among Irishmen of all classes and religious persuasions, but it afterwards became apparent that, at a very early period, some of the leaders had the intention of making Ireland an independent kingdom.

In his history of Belfast, Benn states it is true that the highest in rank and distinguished in talent in Belfast and its neighbourhood were volunteers from the most unimpeachable motives; that the Society of United Irishmen also contained many such within its ranks, and was only abandoned by them when the design of some of the early leaders—armed rebellion by foreign assistance—became avowed. Considerable disturbance continued from the time of the extinction of the volunteers in 1793, owing to the alarm of the Government. An address, however, in favour of the union, was presented to the Marquis of Cornwallis, when he visited Belfast in 1801.

Since the beginning of the present century, the town has enjoyed a period of amazing success in commerce and manufactures. Its linen, muslin, and damask manufactures, as well as its shipyards, in which some of the finest of the transatlantic steamers have been built, have given Belfast a world wide reputation.

The Belfast Charitable Society.—Although there is some vague account of the existence of a "great hospital at Belfast" so far back as 1689, the medical history of the town may be said to date from 1774, when the Charitable Society first afforded public medical relief by means of the old Poor House and Infirmary, which was built at a cost of £9,000. This remained the only institution for the treatment of the poor down to 1792, and here were made the first trials of inoculation and vaccination in the north of Ireland. As the number of those who could receive treatment within the buildings of the Charitable Society was limited, and as no provision was made for rendering aid to the poor at their own houses, it was decided by the inhabitants of the town to form the Belfast Charitable Dispensary, and in May 1792, the following medical officers were appointed. Consulting-Physicians: Dr. Halliday and Dr. Mattear. Attending-Physicians: Dr. McDonnell and Dr. White. Attending-Surgeons: Mr. Fuller and Mr. McClelland.

These were the objects which this institution was founded to embrace, viz.: 1, A scheme for the relief of the poor of all descriptions; 2, A scheme for the promoting of the practice of inoculation; 3, A scheme for the recovery of persons drowned, and apparently dead; 4, A scheme for the relief of lying-in women. Rooms for this dispensary were supplied by the Charitable Society free of expense. Among those who took a very prominent part in originating and carrying on this dispensary, was the celebrated Dr. McDonnell.[1]

The Fever Hospital.—The dispensary continued to discharge its good work down to 1796, when, owing to want of public interest, and the existence of a heavy debt, it was well nigh extinguished. However, in the beginning of the following year, fever, the prevailing epidemic in Ireland at these times, increased to such an extent, that the friends of the dispensary resolved to establish a fever hospital in connection with it; and a house in Factory Row was taken, where was opened the new institution, under the title of the "Belfast Dispensary and Fever Hospital." This was the first hospital in Ireland for the treatment of fever.

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[1] Dr. McDonnell [illegible] from the [illegible] McDonnell [illegible]

In 1803, the Fever Hospital, after being closed for two years, was reopened in West Street, corner of Smithfield. In 1808, in accordance with a recent Act, the grand jury made a grant for the first time of £197 to the Public Dispensary and Fever Hospital. About the same period, fever having disappeared, the physicians and surgeons were empowered to take in suitable cases of other diseases.

In 1810, it was felt that the accommodation afforded by the old hospital for the treatment of accident and disease was much too limited; and the Marquis of Donegal, on being asked, granted a site in Frederick Street, where the new hospital was opened in 1817, in the place where it still stands. In 1820, pupils were first admitted into the hospital, each of the medical attendants being allowed to introduce one pupil to see his practice, and to act as clerk or dresser. Since then, up to the present time, pupils have been constantly received into the hospital. In 1827, at a meeting of the subscribers of the charity, the Committee were formally instructed "to give every encouragement for the delivery of clinical lectures on select cases in the medical and surgical departments, and to facilitate the attendance of pupils at these lectures, and on the general practice of the hospital." Dr. McDonnell delivered the first clinical lecture.

In 1840, the grand jury of County Antrim intimated to the Committee that they would withdraw their grant should any other cases than fever be admitted into the hospital. Consequently, it was necessary to separate the fever from the medical and surgical hospital; and, owing to lack of funds, the portion of the institution devoted to the treatment of general accidents and disease was, for a time, neglected. However, in some time, this difficulty was solved by the Poor-law Board erecting a new fever hospital in close proximity to the workhouse, which had been built in 1841. In 1845, after having been renovated at a considerable outlay, the hospital received the title of *The Belfast General Hospital.* Since then, the building has been enlarged by the addition of two extensive wings (the Charters and Mulholland); and, in 1875, when a royal charter of incorporation was obtained, its name was changed to that which it now bears, *The Royal Hospital.*

Within the last few years, the out-patient department has been much extended, and special departments for treatment of diseases of women and of the eye have been added. At present, there are 180 beds, and a staff of four surgeons, four physicians, a physician for diseases of women, an ophthalmic surgeon, assistant-physician and assistant-surgeon, and a surgeon-dentist. It is here that the students of the Belfast Medical School receive their clinical teaching.

The Medical School.—In 1836, a medical department was established in connection with the Royal Academical Institution (built and incorporated in 1810), where for some years previously courses of lectures on anatomy and chemistry had been delivered, the former by Dr. Drummond. The chairs were Anatomy, Theory of Physic, Surgery, Practice of Physic, Chemistry, Materia Medica and Pharmacy, Midwifery, and Botany. The following were the original professors: Dr. Drummond, Professor of Anatomy and Physiology; Dr. Andrews, Professor of Chemistry; Dr. John McDonnell, Professor of Surgery; Dr. Little, Professor of Midwifery; Dr. Marshall, Professor of Materia Medica and Pharmacy. In 1836, Dr. Matteer was elected to the chair of Botany, and Dr. Mac Cormac (father of Sir William Mac Cormac) to the chair of Practice of Physic. A course of lectures on Medical Jurisprudence was begun in 1840 by Dr. Hurst. Dr. Ferrar was appointed to the chair of Surgery in 1836, Dr. Coffey in 1837, and Dr. Gordon (well known for his contributions on fractures of the radius and clavicle) in 1847. In 1840, Dr. Little resigned the chair of Midwifery, and Dr. Burden was appointed. These professors continued to lecture until 1849, when the school was dissolved, and replaced by the Medical Faculty of Queen's College. It is worthy of note that this school at times had as many as 60 or 70 pupils in attendance.

Queen's College.—Queen's College, Belfast, where the meetings of the British Medical Association are to be held this year, the only State-endowed University College in Ulster, which has a population of 1,700,000, was opened in 1849, and the first degrees were conferred on its students in 1852. It has four faculties, Arts, Engineering, Law, and Medicine. The following were the original professors in the Medical Faculty: Dr. Carlisle, Professor of Anatomy and Physiology; Dr. Dickie, Professor of Natural History; Dr. Horatio Stewart, Professor of Materia Medica; Dr. Ferguson, Professor of Medicine; Dr. Burden, Professor of Midwifery; Dr. Andrews, Professor of Chemistry; Dr. Gordon, Professor of Surgery; Dr. Hodges, Professor of Medical Jurisprudence. It will be observed that, of the above, three, viz., Professors Andrews, Burden, and Gordon, lectured in the old school at the Academical Institution. Dr. Carlisle died in 1860, and was succeeded by the present well known and distinguished professor, Dr. Redfern, who had previously lectured at Aberdeen. In the same year, Dr. Dickie resigned, and was succeeded by Dr. Thompson (afterwards Sir Wyville Thompson), who in turn resigned on being appointed to the chair of Botany in the University of Edinburgh in 1870. He was succeeded by Dr. Cunningham. In 1865, on the death of Dr. Ferguson, Dr. Cuming (President-elect of the British Medical Association) was appointed Professor of Medicine. Dr. Cuming is an old student of Queen's College, and a graduate in Arts and in Medicine of the late Queen's University. On the death of Dr. Burden, in 1867, Dr. Dill was appointed; and in 1879 Dr. Andrews (Ex-President of the British Association) having resigned, was succeeded by Dr. Letts. Dr. Stewart died in 1857, and was succeeded by Dr. Reid, who still occupies the chair of Materia Medica.

In 1850, the Queen's University of Ireland was incorporated by Royal Charter for the purpose of granting degrees to students of the Colleges of Belfast, Cork, and Galway. All candidates for degrees, whether in Arts, Medicine, Law, or Engineering, were required to pass a matriculation examination and to pursue a regular course of study, either wholly in the Colleges, or partly in them, and partly in such other college or university as was approved of in that respect by the Charter. The course for a degree in Medicine extended over four years. In 1881, the Royal University came into existence, the Queen's University having been dissolved.

The following statistics will give some idea of the numbers attending Queen's College, Belfast. The average attendance during the first decade was 189; during the second decade the average rose to 368; during the third to 400; and in session 1881-82 there were 566 students enrolled, of whom about 300 were in the faculty of Medicine. Up to the present time upwards of 4,000 students have attended the College. Further, 1,266 students of Queen's College graduated in the Queen's University, of whom 431 were in Medicine, while in the new Royal University 136 students of Queen's College have taken their degrees, and of these 63 were in Medicine. To put it in another way, 1,402 students of Queen's College, Belfast, have graduated in the various faculties of the Queen's and Royal Universities, and of these 494 have taken the degree in Medicine.

Having said so much about the Royal Hospital and Queen's College, we will venture to give some details in reference to the other medical institutions.

The Union Hospital and Infirmary. In 1841 the Union Workhouse was opened, and, in connection with it, the New Fever Hospital was erected in 1846. Dr. Reid has been the medical attendant of the Fever Hospital since its origin. The Fever Hospital is capable of containing 500 patients. In the infirmary and hospital there is always an immense number of patients suffering from disease of almost every nature.

The Lying-in Hospital.—In 1793, a large meeting of the ladies of Belfast was held, their object being to establish "The Humane Female Society" for the relief of poor lying-in women. In the following year a house was rented in Donegal Street. Up to the year 1810, the number of annual admissions was under fifty; but, from this date up to 1830, the numbers were over one hundred. The new hospital in Clifton Street was opened for the reception of patients in 1830, and still continues its good work. It is largely attended by students, its certificate being recognised by the Royal University.

The Nurses' Home and Training-School.—This admirable institution was established in 1871 in connection with the Royal Hospital. The present commodious building in Frederick Street, almost immediately opposite the Royal Hospital, was erected at a cost of £5,000. Some of the nurses are employed in the hospital, while others, to the great advantage of the public, are available for private cases in the town and country.

The Belfast Ophthalmic Hospital.—It would seem that, so far back as 1816, some attempt was made to originate an eye-dispensary. However, in 1827, the Chapel Lane Dispensary was formed, one of the leading features of which was the management of diseases of the eye; it was dissolved in 1839. However, in 1845, Dr. Samuel Browne set about establishing an ophthalmic institution, and a house in Mill Street was opened in 1846. There diseases of the eye and ear were treated. The new hospital, in Great Victoria Street, built at a cost of £3,200, was presented to the inhabitants of Belfast in 1867, by Lady Johnston. It has an out-patient and an intern department. Students attend the practice.

Ulster Eye, Ear, and Throat Hospital.—This institution was founded in 1871 by Dr. McKeown. The present very suitable buildings in Clifton Street were erected in 1874 by the late Edward Benn, Esq., and were endowed for the amount of £2,000 by his brother, the late George Benn, Esq. There is a large extern department, while in the hospital there is accommodation for twenty-eight patients.

The Samaritan Hospital for Women.—This hospital, situated on the Lisburn Road, was erected by the late Edward Benn, Esq., at a cost of nearly £4,000. It was founded in 1872 by Mr. David Cunningham, under the medical control of Dr. McMordie, and is devoted to the treatment of diseases peculiar to women. In addition to an extern department, there are twenty-six beds for intern patients.

The Mater Infirmorum Hospital.—This institution, which is one of the most recent hospitals in Belfast, is situated on the Crumlin Road. It is under the care of the sisters of mercy, and is open for the relief of patients of all denominations. In addition to the extern department, there is very suitable accommodation for a large number of intern medical and surgical cases, and arrangements have been made by which, in a short time, the hospital will be much enlarged.

The Belfast Hospital for Sick Children.—This hospital, one of the most popular charities in Belfast, which was originally situated in King Street, was founded in 1873 with the following objects.

1. To provide for the reception, maintenance, and medical treatment of the poor during sickness, and to furnish advice and medicine to those who cannot be admitted into the hospital.
2. To promote the advancement of medical science with reference to the diseases of infancy and childhood.
3. To diffuse among all classes of the community, and chiefly among the poor, a better knowledge of the management of infants and children in health and during sickness.

The present building in Queen Street was erected at a cost of £5,598, and contains twenty beds for medical cases, and 20 for surgical. It has all the most modern improvements, and is largely attended by the senior students. There is a large out-patient department in connection with the institution.

The Ulster Hospital for Women and Children. This institution was founded in 1872, in Chichester Street, but was removed in 1877 to more suitable and extensive buildings in Fisherwick Place. At first, it was confined to the treatment of diseases of children, but in 1883 a department for women was added, and the premises were enlarged; there is also an extern midwifery department. The hospital contains twenty beds for the treatment of diseases of children, and ten for diseases of women. Its certificate in midwifery, diseases of women, and diseases of children, is recognised by the Royal University. Students attend the practice of the hospital.

The Belfast Hospital for Skin-Diseases.—This institution was provided by Dr. H. S. Purdon, as a Dispensary, in Academy Street, in 1866. The late Edward Benn, Esq., built the present hospital in Glenravel Street in 1875. There are baths in connection with the hospital. There is accommodation for intern patients, and a large outpatient department.

Convalescent Home and Children's Hospital.—In connection with the Royal Hospital, there is a Convalescent Home and Children's Hospital, built on the Throne Lands, Whitehouse, in the vicinity of Belfast, and given by the late Mr. Samuel Martin. It is to this place that convalescents are sent from the Royal Hospital.

The Hospital for the Insane.—In 1829, the Belfast District Hospital for the Insane Poor (Lunatic Asylum) was opened. The first Superintendent was Mr. Cuming, who, on his resignation in 1835, was succeeded by Dr. Stewart. He died in 1875, and was in turn succeeded by Dr. Merrick, the present Superintendent.

When the Royal University came into existence, it decided that candidates, before presenting themselves for the Medical Degree Examination, should produce a certificate of having attended a course of lectures (not less than twenty-five in number), and clinical instruction on Mental Diseases. The Belfast students attend the Lunatic Asylum, where, from the fact that there are over five hundred patients, admirable opportunities are afforded by Dr. Merrick for clinical instruction on every form of mental disease.

The Ulster Medical Society. This Society was formed, in 1862, by the union of the Belfast Medical Society (established so far back as 1806) and the Pathological Society. "It has for its objects to afford to its members increased facilities of consulting the best medical works and periodicals by means of the library; of deriving mutual instruction on medical subjects by means of its discussions and its pathological museum; and, as a collective body, protecting the interests of the medical profession. The meetings are held in the rooms of the Society, at the Royal Hospital." Professor Dill is the present President.

There are many other matters, such as the establishment of the Poor-law Dispensaries, the formation of the Belfast Branch of the Medical Benevolent Society, etc., that ought to be mentioned; but notice of these must for the present be postponed.

PARLIAMENTARY BILLS COMMITTEE.

A MEETING of the Parliamentary Bills Committee of the British Medical Association was held at the offices of the Association, 161A, Strand, on Wednesday, June 4th, 1884. There were present: Mr. ERNEST HART (Chairman) in the chair; Dr. Bryan, Mr. Wickham Barnes, Deputy Surgeon-General Ewart, Dr. Forsyth, Dr. C. Holman, Dr. Norman Kerr, Dr. Joseph Rogers, Mr. Sibley, Mr. Spanton, and Dr. Hart Vinen.

The minutes of the last meeting were read and confirmed.

The CHAIRMAN reported to the meeting the steps that had been taken with respect to the resolutions passed at the last meeting.

NOTIFICATION OF INFECTIOUS DISEASE.

The CHAIRMAN stated that, in the course of the present session, the private Bills of Brighton, Chester, Croydon, Dewsbury, and Jarrow, had been brought into Parliament. All of these, in their original form, contained clauses relating to public health; and several of them contained clauses relating to the notification of infectious disease. But, notwithstanding the notices that had been given in the JOURNAL calling upon local medical men, where they objected to these clauses, to make the necessary representations to Sir Charles Dilke, and to remind him of the promise that he had given this Committee that they should be heard in opposition, he was not aware that in any case the medical men of any town had asked to be heard; nor had the Committee had any communication from representative bodies of the medical profession in any one of these towns. Early in the year, he (the Chairman) had caused the sanitary clauses contained in these Bills to be looked through; and he wrote in the first week of April, on behalf of the Committee, to Sir Charles Dilke; and to Mr. Hibbert, M.P., the Under-Secretary of the Home Department; and to Mr. Talbot, the Chairman of the Select Committee of the House of Commons before which these private Bills came. Sir Charles Dilke replied, after some delay, by referring him to the Committee. The Chairman of the Select Committee, in turn, replied by stating that his Committee felt bound by the precedent created by Mr. Sclater-Booth's Committee of 1882; so that, where the clauses in any Bill conformed to the model of Mr. Sclater-Booth's Committee, his Committee would not interfere. That seemed to him (the Chairman) to be in opposition to the pledge which Sir Charles Dilke gave, because, practically, it reduced to a nullity the promise that some opportunity should be afforded of hearing any local professional opposition to the principle of compulsory notification by the medical man; but, in the absence of any organised local application to Sir Charles Dilke on the subject of the respective local Bills, it was very difficult for them to do more than make a further general representation to Sir Charles Dilke, which he proposed they should do.

Brighton Bill.—In respect to the Bills in question, the one which had caused the greatest stir was the *Brighton* Bill. This Bill contained a notification clause, and, in fact, all the sanitary clauses as to the prevention of infectious disease which were settled by Mr. Sclater-Booth's Committee of 1882. This Committee had had no official communication at all from any persons representing the practitioners of that town. During his (the Chairman's) absence from London in the winter, however, a communication came from an individual member of the profession to the JOURNAL office, stating the circumstances in which they were placed, and asking for advice. Those documents were dealt with in the JOURNAL, and advice was tendered as to the kind of opposition the local profession should give, and private advice was also given by a leading provincial physician, who had taken an active part in opposing compulsory notification by the profession, and to whom the documents were referred. The value of the assistance thus tendered had been [illegible] acknowledged. At the beginning of May, he had spontaneously communicated with a leader of the profession in Brighton, asking how it was that they had not communicated officially with this Committee, and whether the Committee could help them. The reply was that they had not forgotten the Parliamentary Bills Committee, but felt, for reasons which would be seen to be obvious, that any opposition, to be successful, should be exerted in Brighton, rather than in Parliament. A meeting was called of the profession in Brighton. A meeting of the town was also called, in which a good many members of the profession took part, and they [illegible] unanimously opposed notification in any form. The Town Council accepted their resolutions after a considerable fight, and passed a resolution that the clauses in question should be struck out from that Bill. He had, however, that morning received a letter from Mr. Hodgson, of Brighton, thanking the Committee for the good advice and valuable information which had been given them, on behalf of the Committee, and stating that, though they had succeeded, in the way advised, in putting such pressure on the Town Council that they were induced to withdraw all the clauses; yet they now learned that Lord Redesdale would not allow them to be withdrawn, notwithstanding that the profession in Brighton appealed against the Bill in the House of Lords.

Surgeon-General EWART, speaking as a resident of Brighton, said that the medical men at Brighton would not object to an imperial measure of notification of infectious diseases; but they felt, very early in the agitation of this question, that to single out Brighton for the introduction of this requirement, considering the alarms and panics which had been raised, and the great damage they had occasioned, would be to run a great risk. Brighton, as was known, was peculiarly situated; it was a great sanatorium, a health-resort, resorted to not only by persons from all parts of the United Kingdom, but from all parts of the Continent, during certain times of the year, and was not to be compared in any way, with respect to the notification of infectious diseases, to those manufacturing towns where they were not dependent upon such a floating population as frequented the town of Brighton. It would make little difference to the prosperity of those towns if a visitor arrived and contracted an infectious disease, and it became publicly known; but to Brighton, such publicity—often quite undeserved—had been known to have the most disastrous consequences to the town. It was not long ago since a couple of cases of scarlet fever were magnified into a number of eighty-two. It was for reasons of that kind, for reasons of expediency rather than from absolute opposition to notification of infectious diseases itself, and from the fact that the town enjoys a very favourable death-rate, that the medical profession felt that the introduction of such clauses at this particular period might be attended with ill effects. For example, it came forth that the notification would have to be made to a committee constituted of a number of individuals; and they knew how things leaked out, and especially reports of cases of infectious disease, which became enormously exaggerated. He believed there would be very little opposition on the part of the profession in Brighton, if the notification of infectious disease were made an imperial measure, when they would assent to it readily enough. The opposition to the Local Bill was by no means confined to the medical profession. Out of about one hundred and twenty active practitioners in Brighton, one hundred had signed the petition, which was a very large majority. He might also say that the managers of the one hundred and twenty, or more, schools were practically unanimous against the Bill. The hotel-keepers were unanimously against it as a local measure. In the local meeting, which had been alluded to, he believed there was only one dissentient to the resolution against the applying the notification of infectious diseases clauses to Brighton. There was not, he considered, any pressing necessity for the measure. What they wished to avoid was agitation, which did no good to Brighton, or to any other health-resort. What he would propose would be, that a small deputation should be organised by the Parliamentary Bills Committee to wait upon Lord Redesdale, for the purpose of asking him to give his consent to the withdrawal of the clauses, in conformity not only with the desire of the medical profession in Brighton, and with the community in general, but also with the desire of their representatives in the Corporation of the town.

Dr. ROGERS was of opinion that the members of the Parliamentary Bills Committee ought not to stultify the position they had taken up in years gone by in trying to stamp out preventable disease by going to Lord Redesdale for the purpose proposed, of opposing all notification in any form. If the medical men of Brighton had adopted the plan of objecting to the adoption of the scheme of notification in the town of Brighton until it became an imperial measure, he could understand it.

Surgeon-General EWART stated that that was the objection.

Dr. KERR said it could be readily understood that a measure of the kind, adopted only in that and a few other places, would have a great amount of publicity. He thought they should only look at the positive objection.

Dr. BRYAN asked for further information.

Surgeon-General EWART said Brighton was not exceptionally liable to zymotic disease; on the contrary, it enjoyed an immunity from zymotic disease which was, he thought scarcely paralleled by any other health-resort in the kingdom. In spite of the fact that it was handicapped in this respect by a large poor population—larger than any other health-resort with which he was acquainted—the zymotic death-rate was peculiarly low.

Mr. SPANTON said it had occurred to him, in listening to the discussion, that hitherto they had taken a certain line of action in not opposing the notification of disease, but in opposing notification by the medical man. This, he thought, they should maintain; and he suggested they should adopt a modified course, by going to Lord Redesdale and asking him to modify the clauses in such a way as to allow the notification to be made by the householder but not by the medical man. He moved the following resolution:

"That this Committee will support any opposition to the notification clauses in the Brighton Improvements Bill, so far as such notification is compulsory upon the medical profession, but that it approves of notification by the householder, in accordance with former resolutions of the Association."

This was seconded by Dr. ROGERS, and carried unanimously.

Other Local Bills.—The CHAIRMAN said with respect to the *Croydon* Bill, the case had been different. The profession at Croydon had been seriously divided in opinion; they had not been able to come to any conclusion, and the result was that the notification-clauses had not been opposed. They had not applied to this Committee to oppose them, nor, so far as he could find out, had they taken any steps themselves in the matter. At *Chester*, the Town Council had struck out these clauses in the Bill, and there were no medical points at all in the Bill calling for the attention of this Committee. At *Dewsbury*, the whole collection of sanitary clauses approved by Mr. Sclater-Booth's Committee in 1882 had been introduced, and had been approved by the Committee now sitting. At *Jarrow*, the notification of infectious disease had been in force during 1878, but the corporation had now come before Parliament to assimilate their clauses to those which were approved by Mr. Sclater-Booth's Committee. So far as the Committee were concerned, the result was that at Chester the clauses had been dropped; and at Brighton he thought that every effort should be made that they should be dropped in going through Committee in the House of Commons; and they would make some further representations with that view. At Croydon they would probably be inserted, because the profession there were divided; and at Dewsbury they would probably be also inserted, because the profession there seemed to be quite apathetic on the subject, and the Committee had no *locus standi*. He had seen it stated in one of the medical papers that this Committee did not apply for *locus standi* to be heard before Mr. Sclater-Booth's Committee last year. They had applied formally and officially, and were refused. Dr. Carpenter and he (the chairman) had also applied personally to be heard as witnesses, and had met with a like refusal. That Committee refused to hear anyone except those persons who had a distinct *locus standi* as being representatives of the local interest. The statement, therefore, that had appeared in the medical paper referred to, was made under a misapprehension. The Chairman added that he should like further to say that he entirely sympathised with the objection raised by the Brighton medical men to being dealt with separately; and he thought the Committee ought to make a representation to Sir Charles Dilke as to the great impropriety of invidiously dealing with the whole country piecemeal, and urge him to appoint a Select Committee to inquire into the whole subject. He would move the following resolution:

"That this Committee desires once more urgently to represent to the President of the Local Government Board the inadvisability of proceeding to deal with the question of notification of infectious diseases by local legislation, and desires to point out to him that this method of proceeding raises special difficulties arising, not out of the merits of the question, but out of the method of dealing with it; and to urge that in the interest of public health it is important that the whole question should be considered either by means of a Select Committee, or by a Royal Commission, or by such other method as he should deem best fitted for obtaining the equisite information as to the best means of ensuring compulsory notification of infectious disease."

This resolution was seconded by Dr. EWART, and carried *nem. con.*

The CHAIRMAN reported that, in connection with the International Health Exhibition, a conference was about to be held by a joint committee representing the Sanitary Institute, the Parkes Museum, and the Society of Medical Officers of Health, at which, on the 13th inst., this subject of the notification of infectious diseases would be discussed, and he hoped that Dr. Ewart and other members of the profession from Brighton would attend.

BURGH POLICE AND HEALTH (SCOTLAND) BILL.

The CHAIRMAN laid upon the table a copy of this Bill, which to a large extent was a reproduction of the similar Bill to which the Committee had objected last year (vol. i, 1883, page 1246). Although the

Bill was, on the whole, an improvement in point of drafting on last year's, it was still a curious medley of clauses taken more or less at random from a number of private Acts and the general statute law. He had prepared an abstract of the numerous sanitary clauses in the Bill which might be useful to the Committee (see below). Even these clauses, which in themselves were a considerable sanitary code, were incomplete, and had for their complement the Scotch Sanitary Act of 1867, which seemed to be left in full force. It would be observed that the Bill proposed that the medical profession throughout Scotland should be compulsorily forced, under penalty, to divulge the details of their practice to a fellow practitioner, who, except in one or two large cities, must of necessity be their rival in practice. Acting in the name and on behalf of the Parliamentary Bills Committee, he had, on the appearance of the Bill, at once informed the Lord Advocate of the opposition of the Parliamentary Bills Committee to the clauses in question; and, if the Bill were fortunate enough to reach a second reading, evidence against the principle of the Act would be given on behalf of the Association before the Select Committee, who would probably be asked to mould it into shape.

[The Bill has passed its second reading, and steps have been taken accordingly.]

COMPULSORY NOTIFICATION. Section 332 of the Bill requires the compulsory notification by the medical attendant and occupier alike of all cases of infectious disease (explained in the definition clause to include "cholera, small-pox, typhus, typhoid, scarlet, relapsing, continued, and puerperal fever, measles, scarlatina and diphtheria"). The notification is to be sent to "the medical officer at his office," and the fee to the medical man is to be half-a-crown per case, except that only one fee is payable for cases occurring in the same house within thirty days of each other, and that no fee can be claimed for cases occurring in poor-houses, prisons, reformatories, hospitals, and other public institutions. Offence against this enactment is punishable by a fine of forty shillings. Other diseases than those specified may be brought under the Act by resolution of the local authority, approved by the Board of Supervision.

SECTION 333. HOSPITALS AND RECEPTION HOUSES. Powers are taken for the compulsory removal to hospital of persons without accommodation proper for the treatment of the case and sufficient for the purposes of isolation (Section 334). An ambulance, with its attendant expenses, may be provided by the local authority (Section 335), who may also furnish nurses to attend upon infectious cases (Section 336). The inmates of an infected house may, on warrant of a magistrate, be removed to a reception house whilst their own house is being disinfected (Section 337), and the local authority may provide means of disinfection (Section 338). By Section 339, the local authority "*shall* erect or hire or maintain, within or near the burgh, a hospital for the treatment of persons suffering from infectious diseases, and a reception house as a temporary residence for persons removed from an infected house."

In this clause may be seen the evils of manufacturing general Acts by the indiscriminate cutting out of clauses from local Acts. This clause makes it compulsory upon every local authority in Scotland to provide a hospital and a reception-house. Theoretically, this is no doubt desirable, but as the authorities "may" only do certain other things which will alone make the hospital of any avail, the mandatory phrases of Section 339 are clearly out of place.

DISINFECTION. The local authority may carry out works of disinfection themselves, instead of requiring the occupier to do them (Section 340). Infected matters must not be deposited in middens, sewers, etc., without previous disinfection (Section 341).

CORPSES. The authority may provide mortuaries and hearses (Section 342), and may require the removal to a mortuary of a corpse offensive or prejudicial to the health of persons in the same or any adjoining building (Section 343). A magistrate may in certain cases order bodies to be buried within a fixed time (Section 344), and no body of a person dead of infectious disease is, without medical sanction, to be retained unburied, elsewhere than in a mortuary, for more than forty-eight hours (Section 345). The bodies of persons dying of infectious disease in hospitals are not to be removed therefrom except for the purpose of being forthwith buried (Section 346). Corpses may not be carried in public conveyances other than a hearse, without previous notification to the owner or driver (Section 347), and any carriage which has conveyed a case of infectious disease must be immediately disinfected to the satisfaction of the medical officer of health (Section 348). The body of any person dead of infectious disease must not be taken, either by railway, steamer, or other public conveyance, without a certificate by the medical officer of health that due precautions have been taken (Section 349).

INFECTED HOUSES AND THINGS. A penalty is imposed on persons ceasing to occupy houses when infectious disease has existed without previous disinfection, or giving notice to the owner, or making false answers to inquiries about the existence of such disease (Section 350). The letting, without disinfection, of houses in which infected persons have been lodging, is penalised (Section 351), and a similar fine is imposed on persons letting houses who knowingly give false answers to questions as to the existence of infectious disease therein (Section 352). A licence must be obtained from the magistrates for the use of any building as a hospital for the treatment of infectious cases, and no licence is to be granted unless the health-officer, or some other medical man, certifies that the building is suitable for the purpose (Section 353). A fine is imposed on guardians who permit a child who has suffered from infectious disease, or is living in an infected house, to attend school without a medical certificate that the child is free from infection, and that the house and its contents have been disinfected (Section 354), and a similar fine [illegible] permit such a child to attend school (Section 355). [illegible] washing-green [illegible] clothes [illegible] (Section 356). Water [illegible] purpose [illegible] cistern placed in or over any water-closet, or the waste-pipe from which discharges into any drain or soil pipe, or which is otherwise placed so as to be exposed to contamination (Section 357). Owners of houses [illegible] are liable to a penalty, etc. (Section 358).

MILK. The person of dairies and milk-shops must give immediate notice to the medical officer of health of any case of infectious disease on the premises (Section 359). [illegible] from which contagion [illegible] (Section 360), [illegible] (Section 361). Cowkeepers and milk-purveyors must, on demand, furnish lists of their customers (Section 362), a requirement which Section 363 repeats in greater detail, and with limitations. Section 364, moreover, is virtually a re-enactment in different words of Sections 360 and 361.

THE POOR-LAW MEDICAL OFFICERS' SUPERANNUATION ACT.

Dr. ROGERS proposed the following resolution, which was seconded by Mr. WICKHAM BARNES, and carried:

"That this meeting of the Parliamentary Bills Committee desires to express its sympathy with the movement now being made by the Council of the Poor-law Medical Officers' Association to modify the permissive enactments of the Poor-law Medical Officers' Superannuation Act, and hereby undertakes to urge such modifications on the Local Government Board and the Legislature as shall cause such clauses to be rendered compulsory."

THE CONTAGIOUS DISEASES ACT.

The CHAIRMAN stated that it would be remembered that it had been an instruction to this Committee to prepare a memorial to Lord Hartington on the subject of the Contagious Diseases Act, which memorial had been sent to each member of the Association, and presented to Lord Hartington, who had acknowledged its receipt.

FRENCH MEDICAL BILL.

The CHAIRMAN stated that it had come to his knowledge that a Bill had been introduced into the French Chamber affecting the interests of English practitioners. He accordingly addressed a letter to Lord Granville on the subject, and asked for a copy of the Bill. A reply, with a copy of the Bill, had been received from the Foreign Office, from which it appeared that the Bill was not a Government measure, but a private Bill. The effect of the Bill, however, would be to require that all British practitioners desiring to practise in France should possess a French degree. There was no reciprocity in this country for French degrees; but they were of opinion that some special privileges ought to be accorded to English practitioners practising among the English colonies in French health-resorts. The Chairman proposed that they should forward a copy of the Bill to the Medical Reform Committee, and ask them to compare it with the Medical Acts, and to communicate their opinion to this Committee as to whether they can usefully interfere.

Mr. SIBLEY seconded the proposition, which was carried, and expressed the thanks of the Committee to the Chairman for having ascertained the existence of the Bill, and bringing it before their notice.

SHIP-SURGEONS.

The CHAIRMAN stated that, in accordance with a resolution passed at their last meeting, a memorial, with full particulars, was presented to the Board of Trade, representing the views of this Committee and the Association as to the desirability of improving the condition of the ship-surgeons in the mercantile marine service, giving them a more independent position. Mr. Chamberlain had, however, given them no reason to hope that any action would be taken to further the views of this Committee on the subject. The action, however, taken by this Committee had met with a remarkable response in America, and it was felt on the other side of the Atlantic that the existing arrangements on board Atlantic steamers were not adequate to protect them from the dangers of infectious diseases. A measure had accordingly been introduced into the American Senate, apparently with some chance of passing, which would require that all Atlantic steamers carrying emigrants should carry surgeons appointed and paid on the footing suggested by this Committee; so that what they had asked for might possibly come to them from the other side of the Atlantic.

The Committee then adjourned.

THE BOWER AND KEATES CASE.

THE Committee met at Sir William Jenner's residence on May 30th. It was reported that the second civil action had been decided in favour of the defendants, the jury being so strongly of opinion that there was no case against Messrs. Bower and Keates, that they did not desire to hear the witnesses for the defence. Notwithstanding this, Messrs. Bower and Keates' solicitor had been served with notice of motion for a new trial, on the grounds of "wrong reception of material evidence, misdirection, etc." The Secretary [illegible] read a letter from Dr. Bower, giving a detailed statement of the expenses that had been incurred in the defence, amounting to £1,000, and the Committee unanimously agreed to pay over from the fund [illegible], on account, towards meeting the expenses.

MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

We direct attention to the report, which is subjoined, of the meeting on Wednesday of the Executive Council of the new Medical Sickness, Annuity, and Life-Assurance Society, founded at the beginning of this year, and which has just come into operation. We point with, we hope, not undue paternal pride and satisfaction to the remarkable progress which it has achieved. Founded as the result of purely unofficial and voluntary effort, it has already attained an assured success. Its financial basis has been calculated on the most secure foundation by the most eminent and experienced of actuaries. The number of members necessary to ensure a stable constitution has already been reached. The expenses have been kept down to a nominal sum, and are considerably within the margin estimated by the actuary.

The premium-income already reaches the respectable sum of £5,000 *per annum.* This Society offers to all the members of the profession advantages, in providing against contingencies of sickness and old age, of which the importance cannot be overestimated. We hope to see an early and very considerable further accession to the numbers of its members, now that it has attained, at so early a date, a secure and sound financial position; and we would earnestly recommend to all members of the profession, and especially to its junior members, that they should avail themselves of the advantages of membership. To a vast number, it offers the recommendation of a provident measure, which they ought not to neglect as a measure of self-respect, and as a provision of which prudent men should avail themselves early in life. To those of more secure and well established position, we would venture also to recommend this Society as one which it well becomes them to strengthen by their adhesion, and to encourage as a benefit to the whole profession, and as an institution of great professional and public utility. Communications from those desiring to join the Society should be addressed to the Secretary, Mr. Radley, 26, Wynne Road, Brixton, S.W.

A meeting of the Executive Council of this Society was held on Wednesday, June 11th, at 38, Wimpole Street, when there were present, Mr. Sibley, Dr. Dolan (Halifax), Dr. Clibborn, Mr. E. Noble Smith, Surgeon-Major Evatt, M.D., Mr. Behrendt, Mr. J. Brindley James, Mr. Major Greenwood, Junr., Mr. R. Wallace, Mr. Radley (Secretary), Mr. Ernest Hart in the chair. The minutes of the last meeting were read and confirmed.

The Secretary reported that during the last three weeks there had been 65 new proposals, showing an increased ratio, and making a total of 465 members up to date. The total amount of receipts for the first quarter up to the previous Saturday was £1,194 1s. 7d., leaving a balance in hand of £1,138 11s. 2d.

From a careful estimate it was calculated that the present premium-income was about £5,000 *per annum.*

A letter was read from Dr. G. W. Crowe, the Honorary Secretary of the Worcestershire and Herefordshire Branch of the British Medical Association, expressing satisfaction that the Society had deputed its Secretary, Mr. Radley, to attend the forthcoming meeting of this Branch, and stating his opinion that if the Society's aims and objects were made known at all the Branch meetings a large accession of members would follow.

It was reported that considerable activity with respect to this Society had shown itself in various Branches of the British Medical Association. At Birmingham, through the exertions of Mr. Ravenhill, a local Branch had already been created; and communications had been received from the Honorary Secretary of the Lancashire and Cheshire Branch, from the President of the Border Counties Branch, and the Secretary of the East Anglian Branch, offering to bring the matter before the meetings of the different Branches; a letter was also received from Dr. Pickett (Notting Hill) to the like effect. A letter was read from Dr. A. P. Fiddian of Cardiff, suggesting that a full list of all the members should be printed and supplied to each member, that members might have the opportunity of conferring with others in their district. This proposal was thought to be a good one, and it was decided to have a list of members and their addresses printed, arranging them according to districts.

Letters were read from Dr. F. L. Palmer, East Sheen, and from Mr. Julian Willis, Maida Vale, expressing their great interest in the Society, and their willingness to act as Honorary Secretaries of Branches.

THE INTERNATIONAL MEDICAL CONGRESS.

The official programme of the eighth session of the International Medical Congress, to be held in Copenhagen during the week from August 10th to 16th, under the presidency of Professor Panum, has been issued.

Six addresses will be given in the general meetings. 1. On Metaplasia, by Professor Virchow of Berlin. 2. On Morbific Micro-organisms and Vaccine Matters, by Dr. L. Pasteur of Paris. 3. On International Collective Investigation of Disease, by Sir William Gull, Bart., on behalf of the Collective Investigation Committee of the British Medical Association. 4. On the Natural Prevention of Malaria, and the means of Making Malarious Countries more Healthy, by Dr. Tommasi-Crudeli of Rome. 5. On the Neoplastic Diathesis, by M. Verneuil of Paris. 6. On the Investigation of Food-rations for Men in Health and in Disease, especially in Hospitals, Infirmaries, and Prisons of different Countries, by Professor P. L. Panum of Copenhagen.

There will be fourteen sections; 1. Anatomy; 2. Physiology; 3. General Pathology and Pathological Anatomy; 4. Medicine; 5. Surgery; 6. Obstetrics and Gynæcology; 7. Ophthalmology; 8. Pediatry; 9. Dermatology and Syphilis; 10. Psychiatry and Nervous Diseases; 11. Laryngology; 12. Otology; 13. State Medicine; 14. Military Medicine.

In the Section of Anatomy, among the subjects announced are: The Histology of Striped Muscle (Professor von Ebner, of Graz, and Professor Engelmann, of Utrecht, Dr. Ranvier, of Paris, Professor Merkel, of Königsberg, and Professor Retzius, of Stockholm); the Origin of the Red Corpuscles of the Blood (Professor Bizzozero, of Turin, Dr. Norris, of Birmingham, and Dr. Hayem, of Paris); the Coagulation of Fibrine and of Blood, and other matters relating to blood (Dr. Dogiel, of Kasan, Dr. Wooldridge, of Cambridge, Dr. Worm Müller, of Christiania, Dr. Malassez, of Paris, Dr. Otto, of Christiania, and Dr. Behr, of Copenhagen); the State of Gland-cells during Activity (Dr. Ranvier, of Paris, Dr. Heidenhain, of Breslau, and Dr. Langley, of Cambridge). There will also be communications from Professor von Meyer, of Zurich, Professor Heiberg, of Christiania, Mr. Henry Morris, of London; Professor His, of Leipzig (the Development of the Heart), M. Cadiat, of Paris, Professor von Kölliker, of Würzburg, Professor Macalister, of Cambridge (on the Lacrymal Bone), and others. Several of these subjects will be discussed in joint meetings of this and the next section.

In the Section of Physiology, besides some of the subjects mentioned under the preceding Section, there will be communications from Dr. Charles of Cork (the Gases of the Secretions), Dr. Gaskell of Cambridge (Inhibitory Actions), Dr. Kronecker of Berlin, Dr. Mosso of Turin, Dr. Marey and Dr. François-Franck of Paris (on the Mechanism of the Circulation), Dr. Burdon Sanderson, Dr. Mosso, and Dr. Marey (application of instantaneous photographs to physiological investigation), etc.

In the Section of General Pathology and Pathological Anatomy, Scrofula and Tuberculosis in Man and Animals will be the subjects of communications by Dr. Grancher of Paris, Dr. Chauveau of Lyons, and Professor Bang of Copenhagen. Dr. R. Koch will read a paper on the Morphological and Physiological Variability of Pathogenic Bacteria. Dr. Cornil and Sir William Gull will discuss Chronic Nephritis, and Dr. Friedländer Acute Nephritis. Other contributors will be Dr. Roquemondane of Limoges, Drs. Hannover and Salomonsen of Copenhagen, and Dr. Weigert of Leipsic. Several demonstrations will be given in this Section.

In the Section of Medicine, the first paper announced is one by Dr. Austin Flint on an Uniform Nomenclature of Auscultatory Sounds. The Antipyretic Treatment of Acute Infectious Diseases will be discussed by Dr. Liebermeister of Tübingen and Dr. Warfvinge of Stockholm; and their Treatment by Dr. Bouchard of Paris. Dr. Tommasi-Crudeli, and Dr. Rosenstein of Leyden, will read papers on Malarious Infection; Dr. Ewald of Berlin, a paper on the Influence of recent Pathological Experiences in regard to Tuberculosis; Dr. E. Bull of Christiania, one on the Opening of Pulmonary Cavities; Professor Grainger Stewart of Edinburgh, one on the Influence of Acute Infectious Diseases upon the Kidneys; Professor Jürgensen, one on Acute Pneumonia as an Infectious Disease; Dr. Budde of Copenhagen, one on the different forms of Diabetes Mellitus; and Dr. Joseph Ewart and Sir Joseph Fayrer will bring forward the subject of the Treatment of Diarrhœa and Dysentery in persons who have returned from hot and malarious climates. Other contributors will be Dr. Lépine of Lyons; Professor Leube of Erlangen; Professor With and Dr. J. Buntzen of Copenhagen; Dr. Laache of Christiania; Dr. Landouzy, Dr. Grancher, Dr. M. Dupont, and Dr. Roussel, of Paris; Dr. Baréty of Nice; and Professor Lewin of Berlin.

In the Section of Surgery, there will be a series of communications on the Antiseptic Treatment of Wounds by Sir Joseph Lister, Dr. Mosetig-Moorhof of Vienna, Dr. Schede of Hamburg, Dr. P. Bert of Paris, and Dr. Esmarch of Kiel. Operations in Tuberculous Diseases of Joints will be the subject of a paper by Professor Ollier of Lyons; Resection of the Stomach will be discussed by Professor Gussenbauer of Prague; Nephrotomy by Mr. Knowsley Thornton; and Operations for Movable Kidney by Dr. Hahn of Berlin. Dr. Macewen of Glasgow, Dr. Holmer of Copenhagen, and Mr. Keetley of London, will read papers on Osteotomy. Papers on Trephining in Localised Disease of the Brain will be read by Dr. Lucas-Championnière of Paris, Professor Ferrier of London, and Dr. Mollière of Lyons; on the Treatment of Stricture of the Œsophagus, by Professor Studsgaard of Christiania, Professor Verneuil of Paris, and Professor Hjort of Christiania; and on Operations for Malignant Disease of the Rectum by Mr. T. Bryant of London, Professor Esmarch, and Professor Verneuil. Papers by Dr. Guyon of Paris, Dr. Margary and Dr. Navaro of Turin, Dr. Boeckel of Strasburg, Dr. Robin of Lyons, Dr. Zabludowsky of Berlin, and Dr. Wanscher of Copenhagen, are also announced.

In the Section of Obstetrics and Gynæcology, the subject of Antiseptics in Laparotomy will be brought forward by Dr. Mikulicz of Cracow, and the Early Performance of Ovariotomy by Mr. Knowsley Thornton. The Treatment of Uterine Tumours will be discussed by Professor Koeberlé of Strasburg, Mr. Lawson Tait of Birmingham, Dr. Margary of Turin, and Dr. Menière of Paris. Other subjects will be Oöphorectomy (Dr. Hegar of Freiburg); Excision of the Cancerous Uterus (Professor Schröder of Berlin); Operative Treatment of Extra-Uterine Pregnancy (Professor Litzmann of Kiel); a Common International Nomenclature in Obstetrics (Professor Simpson of Edinburgh); Cæsarean Section and allied operations (Professor Müller of Berne, and Dr. Eustache of Lille); Albuminuria in Pregnant Women (Professor Halbertsma of Utrecht). Contributions are also announced from Professor Stadfeldt, Dr. Ingerslev, and Professor Howitz of Copenhagen; Dr. Zweifel of Erlangen, Dr. More Madden of Dublin, Dr. Sänger of Leipsig, Dr. Martineau of Paris, Dr. Zambaco of Constantinople, and Professor Lazarewitsch of Kharkoff.

In the Section of Ophthalmology, there will be papers bearing on the examination of the sense of Light and of Colour, by Dr. Samelsohn of Cologna, Dr. O. B. Bull of Christiania, Dr. Bjerrum of Copenhagen, Professor Holmgren of Upsala, Dr. Redard of Paris, Dr. Brailey of London, Dr. Dobrowolsky of St. Petersburg, and Dr. Gillet de Grandmont of Paris. There are also numerous other contributions, by Professor A. Graefe of Halle and Dr. E. Hansen Grut of Copenhagen (on Latent Squint); Dr. Schmidt-Rimpler of Marburg, Dr. Christensen and Dr. Bjerrum of Copenhagen; Dr. E. Meyer, Dr. de Wecker, and Dr. Galezowski of Paris; Dr. Mooren of Dusseldorf; Mr. Spencer Watson and Mr. Juler of London; Dr. Seely of Cincinnati, etc.

In the Section of Pediatry, the contributors will be Dr. Schepelern, Mr. Malling-Hansen, Dr. Wahl, Dr. S. Meyer, Professor Hirschsprung, of Denmark; Professor Kjellberg and Dr. Medin of Stockholm; Dr. Rupprecht of Dresden; Dr. Rauchfuss of St. Petersburg; Professor Ribbing of Lund; Dr. Rehn of Frankfort; Dr. Barlow of London; Dr. Baginsky of Berlin; and Dr. d'Espine of Geneva. Among the subjects treated will be Sea-side Hospitals for Children; Nephritis; Tubercular Meningitis; Rickets; Intestinal Invagination; Croup; Infantile Cholera, etc.

In the Section of Dermatology and Syphilis, the Syphilitic Origin of Tabes Dorsalis will be brought forward by Dr. Fournier of Paris; the Treatment of Syphilis with Mercurial Injections, by Professors [illegible] and Lewin of Berlin, Neumann of Vienna, and Dr. Martineau of Paris; other points in regard to the Treatment of Syphilis by Dr. Koebner of Berlin, Dr. Pick of Prague, and Dr. Jullien of Paris; the Etiology and Pathology of Leprosy, by Dr. A. Hansen of Bergen; Lupus, by Professor Doutrelepont of Bonn, Professor Pick, Dr. Leloir of Paris, Mr. Malcolm Morris of London, and Professor Kaposi of Vienna. There will be also communications from Dr. Schwimmer of Buda-Pesth, Dr. Bockhart of Wurzburg, Dr. Unna of Hamburg, Dr. Grünfeld of Vienna; Dr. Martineau, Dr. Barthélemy, and Dr. Gouguenheim of Paris.

In the Section of Psychiatry and Nervous Diseases there are announced contributions on Mental Diseases, by Dr. Steenberg of the St. Hans Asylum, Dr. von Schwartzer of Buda-Pesth, Dr. Paltz, and Professor Kjellberg of Upsala. Tabes Dorsalis, Lateral Sclerosis, and other Lesions of the Spinal Cord, will be discussed by Dr. Pitres of Bordeaux, Dr. Homén of Helsingfors, Dr. Eulenburg of Berlin, Dr. Charcot of Paris, and Dr. Friedenreich of Copenhagen. Contributions are also promised from Dr. Obersteiner of Vienna, Dr. Hallager of Viborg, Dr. Shuttleworth of Lancaster, Dr. Chervin of Paris, Dr. Adamkiewicz of Vienna, Dr. Zambaco of Constantinople, and others.

In the Section of Laryngology, papers will be contributed by Dr. Solis Cohen of Philadelphia, Dr. Gouguenheim, Dr. Felix Semon, Dr. Morell Mackenzie, and Mr. Lennox Browne of London, Dr. Schnitzler of Vienna, Dr. Bresgen of Frankfort, Dr. Guye of Amsterdam, Professor Voltolini of Breslau, Dr. Lefferts of New York, Dr. Fauvel of Paris, etc.

In Section of Otology, the principal contributors will be Dr. Woakes of London, Dr. Ladreit de Lacharrière, Dr. A. Robin, and Dr. Fauvel of Paris, Professor Lucae of Berlin, Professor Voltolini, Dr. Kirk Duncanson of Edinburgh; Dr. O. Green of Boston, etc.

In the Section of State Medicine, the means of checking the abuse of Morphia and other preparations of Opium will be brought forward by Dr. Brouardel of Paris; the Prevention of Scurvy in Prisons and Workhouses by Dr. de Chaumont of Netley; and the Health of Children in Schools, by Dr. Hertel of Copenhagen, and Professor Axel Key of Stockholm. There will also be discussions on Disinfectants, the prevention of Accidents from Substances containing Arsenic, the prevention of the Spread of Epidemic Diseases, Sea-Coast Hospitals for Children, Hygiene of Churchyards, and other matters.

In the Section of Military Medicine, lectures on the Antiseptic Treatment of Wounds in the time of War will be given by Professor Esmarch, Sir William Mac Cormac, Dr. Neudörfer of Vienna, and Dr. Strube of Berlin. Other contributions are also announced, including one on Sunstroke by Sir Joseph Fayrer, and one on Typhoid or Enteric Fever in the Tropics by Dr. Joseph Ewart.

For those proposing to attend the Congress, the following routes from England to Copenhagen are recommended, by the organising committee in Copenhagen, as the most convenient.

All the routes meet in Hamburg. From Hamburg Copenhagen may be reached, either *viâ* Kiel and Korsör, in 13 hours (6 hours at sea), or *viâ* Fredericia, Nyborg, and Korsör in 25 hours (2 hours at sea).

1. Queenborough, Flushing, Hamburg. Depart from London on Thursday, August 7th, at 8.25 P.M.; arrive at Copenhagen on Saturday, August 9th, at 10.30 A.M. (*viâ* Kiel and Korsör), or at 10.30 P.M. (*viâ* Fredericia, Nyborg and Korsör). 2. Dover, Ostend, Hamburg. Depart from London on Thursday, August 7th, at 8 P.M.; arrive at Copenhagen as above; or depart from London on Friday, August 8th, at 7.45 A.M., and arrive at Copenhagen on Saturday, August 9th, at 10.30 P.M. (*via* Kiel and Korsör). 3. Dover, Calais, Hamburg, as above. 4. London to Hamburg directly by General Steam Navigation Company's boats in about 36 hours.

The Danish Government and the United Steam Navigation Company in Copenhagen have granted members of the Congress return tickets gratis from Copenhagen to the frontiers of Denmark (Fredericia or Kiel).

On their arrival in Copenhagen, members are requested to apply for information concerning lodgings, etc., to the Bureau of the Congress, which will be established at the arrival station of the Korsör and Copenhagen railway. The Reception Committee will assist members in providing lodgings, if application be made not later than July 20th, to the General Secretary, Professor C. Lange, Copenhagen.

QUEEN'S COLLEGES (IRELAND) COMMISSION.

THE above Commission commenced its sittings in the library of the Queen's College, Belfast, on June 2nd, and after hearing all the evidence tendered, concluded on the evening of June 5th.

The Commissioners present were Mr. R. P. Carton, Q.C. (President); Mr. George Johnston Stoney, M.A., F.R.S.; Rev. Dr. Molloy, Catholic University; Professor Jack, M.A., LL.D., University of Glasgow; and Deputy Surgeon-General Jeffrey A. Marston; with the Secretary, Mr. N. D. Murphy, junr.

The Commissioners were appointed on May 6th, by a warrant from His Excellency the Lord Lieutenant, and the matters they were directed to enquire into and report upon, were:

1. What is the standard of education maintained in the Queen's Colleges, or any of them.

2. In what [illegible] distributed [illegible] Colleges respectively among [illegible] and the various branches of learning taught in said Colleges.

3. To what extent and with what results the students have availed themselves of the advantages offered by the Royal University of Ireland.

4. As to the fees charged to the students in the said Colleges.

The Commission was looked forward to with very considerable interest in Belfast, and its sittings were numerously attended, being open to the public. The President of the College and the majority of the professors were examined, and it is pretty generally felt there that, as far as the Belfast College is concerned, the result of the inquiry will rather strengthen than weaken its position in the country. The scope of the inquiry being very limited in extent, the question of sectarianism or denominationalism was not allowed to be entered upon by the Commissioners; yet it was sufficiently clear from the evidence, that only one section of the population have taken full advantage of the benefits derived from it.

Surgeon-General Marston subjected the medical professors, and the hospital surgeons and physicians, to a searching examination, so as to ascertain the efficiency of this department of the College. The Medical Faculty of the College is larger than any other; the number of registered students on the books of the College has reached as high as 360 in some years. Since the disestablishment of the Queen's University, there has, however, been a considerable falling off of students, more especially in the junior classes. Professor Redfern, who gave very important evidence, attributes this falling off of medical students to the fact of the Royal University making it compulsory on them to take one year of Arts, and to pass an examination in Arts at the end of that year. The effect of this change is to lengthen the medical course to five years, with consequent increased expense, and, according to Dr. Redfern, with no corresponding advantage whatever. He believes, and, indeed, he says, he is convinced from experience, that a student coming up fresh from school is better able to pursue the study of anatomy successfully than one who has passed through an Arts course before commencing the study of anatomy. He thought that a course of Divinity would be more useful to medical men than a course of Arts, because of the number of death-beds which they are brought beside in the practice of their profession; and, if students were able to study anything additional to that contained in their present curriculum, he thought it should be sanitary science. In referring to the question of examination, Dr. Redfern said that he believed the system of having frequent examinations during the medical course "was highly injurious and radically bad;" that a continual preparation for examination was not medical training; and the student who spent his time in preparation for competitive examinations, instead of devoting himself to the study of his profession, would be obliged to obtain medical training after receiving his degree. Dr. Redfern also thought medical examinations should be more practical, and conducted orally.

The clinical teaching of the medical school was made the subject of close inquiry by the Commission; and the evidence given by the Royal Hospital staff, as to the system of teaching and the material for clinical instruction, appeared to be satisfactory to the Commissioners, some of whom visited the hospital to judge for themselves.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.

At a meeting held on June 10th, Dr. **Norman Kerr**, President, in the chair, Dr. W. B. **Carpenter** read a paper on the Etiology of Inebriety. Every sensation, he said, must have a physical antecedent, and the mental craving for alcohol was the product of a physical condition. This was evidenced by the craving for a fresh dose of alcohol on recovering from the depression induced by preceding excessive doses, the mental condition being the expression of the physical condition. Another evidence was the development of the craving after excessive hæmorrhage, especially in the puerperal state. In such cases, the diseased state having arisen from a temporary disturbance and not yet made permanent, a cure was to be hoped for. The difference between temporary loss of nervous power and permanent depravation of nutrition of the nervous system was clearly seen in the results of treatment. Bodily fatigue was a frequent antecedent cause of inebriety, the diminution of heart-power, and consequent depression, often calling for alcohol or some other nervine stimulant. The evidence of alcoholic heredity was clear as to the operation of an antecedent physical cause, the alcohol-habit in the parents depraving the parental nervous system, and then similarly depraving the nervous system of the offspring. The habitual use of alcohol in excess, and in what many would consider moderate quantity, was apt to create an altered state of the nervous system, when that would depend on alcohol for support. Samuel Wesley, who could not execute his magnificent performances on the organ till after he had taken three glasses of gin and water, was a typical case. Nothing was so certain to induce this drink-craving as the habitual use of alcohol by persons susceptible to its action; and once the nervous system took on that depraved form, this remained as a diseased condition. Alcohol was a powerful paralyser of the will, and, whatever moralists might say, once the diseased condition of alcoholic inebriety set in and became confirmed, moral means were apt to fail, and the diseased state must be recognised and treated. Such were some of the physical causes of inebriety. The moral causes were such as nervous shock and depression from loss of property or friends. The depression from the moral cause was physical, and developed a longing for a nervine stimulant. In the early stage of inebriety, a moral impression could be met and overcome by a moral impression, such as of religion; but in the confirmed stage of inebriety, where there was a permanent depravation of nervous nutrition, the treatment of the diseased physical state must be resorted to. He had known cases of medical men who fell into inebriety through falling back on alcohol when tired with long country journeys and exhausting work. In one town, three generations of medical men had died from alcoholism. Inebriety had a physical as well as moral origin; and both, especially the physical causes, must be carefully diagnosed and treated.

Mr. **Axel Gustafson** read a paper on Inebriety and Volition. Dr. Drysdale, Dr. Bridgwater, and others, enforced the need for recognition of the disease-aspect of inebriety, and, on the motion of Mr. Jabez Hogg, the discussion was adjourned till Tuesday, July 1st.

CONFERENCE AT THE INTERNATIONAL HEALTH EXHIBITION.

The series of conferences held under the auspices of the Society of Medical Officers of Health, the Sanitary Institute of Great Britain, and the Parkes Museum of Hygiene, in the Conference Hall of the Health Exhibition, was opened on June 9th.

Dr. J. W. **Tripe** read a paper on the "Domestic Sanitary Arrangements of the Metropolitan Poor." After describing the various classes of poor whose habitations require sanitation, he referred to the imperfect arrangements now found in the majority of poverty-stricken dwellings. The principal defects in these houses arose from insufficient and impefect water-supply. The emptying of the dust-bins at rare intervals, he considered to be also a crying evil.

Mr. **Ernest Turner**, in a paper on "The Improvement of the Sanitary Arrangements of Metropolitan Houses," pointed out that the class whose sanitation required immediate attention was not the artisan, but the labourer. A great deal had lately been said about defective drainage in the slums, but were things in the dwellings of the higher classes any better? Leaky and imperfect drains, insufficient water-supply, lack of ventilation, and sewer gas were more often than was acknowledged causes of sickness and disease in nearly every part of London. This was the more astonishing as, owing to the action of so many sanitary reformers and the little cost of sanitary improvements, all persons would, it might have been expected, have profited by the lesson taught.—In the discussion on the papers, Mr. **Rogers Field**, C.E., entirely endorsed the remarks of Dr. Tripe and Mr. Turner. The only question with him was, had they gone far enough? Practically, all houses erected more than twenty years ago, he might have said ten years ago, were defective in their sanitary arrangements. Nor was this all, for he regretted to say that there were at the present moment numerous houses being built in various parts of London which contained pretty nearly all the sanitary defects which it was the object of the conference to abolish. What was wanted was more effectual and compulsory sanitary inspection. There were at present no rules for new houses. A set of by-laws should be constructed which should set down the sanitary requirements which ought in every case to be enforced.—Professor **Corfield**, in referring to the dust question, stated his conviction that there was only one solution of the difficulty, each parish should collect its own dust. He also thought that efforts should be directed to diminish the amount of dust in each house.—Dr. **Alfred Carpenter**, Dr. **Bartlett**, and other gentlemen, also spoke.

On June 10th, the chair was taken by Captain **Douglas Galton**, R.E., F.R.S. A paper on "Domestic Sanitation in Rural Districts" was read by Dr. **George Wilson**, Medical Officer of Health for the Mid-Warwick District. He dealt with the questions of labourers' dwellings, water-supply, and the disposal of refuse. On the first point, he quoted an estimate based on the report of the Agricultural Commission of 1867, that one-third of the rural homes of England were unfit for human habitation, and that therefore 700,000 hovels ought to be pulled down. In many villages with which he was acquainted, 10 to 15 per cent. of the cottages only contained one sleeping room, and about half only two, though in Warwickshire the defects were, according to the report of the Commission, much less glaring than in many other counties. Many of these defects could be dealt with under the Public Health Act; but a do-nothing policy was often encouraged by the appointment of officers of health at quite insufficient salaries.

One great obstacle to improvement was the poverty of the owners, and another the low wages of the occupiers. Another impediment to improvement was the fact that, unless the sanitary authorities applied for urban powers, they had no control over the erection of new cottages, and thus jerry-building of the worst description, and total absence of sanitary appliances, were liable to occur. The defects of water-supply were next dealt with, and the provisions of the Public Health (Water) Act shown to be in most respects adequate to meet the case, if only they were put in force. Dr. Wilson, in conclusion, referred to questions of scavenging and drainage, and advocated the general adoption of the pail or ash-pit closets.

Mr. H. PERCY BOULNOIS, C.E., read a paper on "Sanitary Houses for the Working Classes in Urban Districts." It was mainly occupied with technical details of construction which should be attended to in workmen's dwellings. Huge block buildings were held by the writer to be undesirable. Basement rooms were condemned, and flat roofs recommended as affording a drying ground or garden, and a means of escape in case of fire. He insisted on the advantages of a constant water-supply, or that, if intermittent, the greatest care should be taken in the construction and fitting of the cisterns.—Sir HENRY ACLAND pressed the necessity of relying more upon the general education of the people than upon compulsion for improving sanitary conditions; and pointed out the necessity of studying economy in the matter.—Sir ROBERT RAWLINSON, observed that he was often shocked at the exaggerated estimates for sanitary works which came before him.—Dr. THURSFIELD remarked on the difficulty of carrying out the provisions of the Public Health (Water) Act, owing to the limit of expense which could be incurred in providing a water-supply, the utmost limit being about £13.—Dr. WOODFORDE observed on the delay and difficulty which arose from rural sanitary authorities having no power to regulate the erection of buildings unless they applied for urban powers.—Sir THOMAS ACLAND thought it was very desirable that all officers appointed under sanitary authorities or boards of guardians should possess some certificate of competence to fulfil the duties.—Dr. ALFRED CARPENTER said the Sanitary Institute of Great Britain held examinations quarterly for surveyors and inspectors of nuisances in order to meet this requirement.—Mr. E. L. JACOB agreed with Dr. Wilson that the distinction at present existing between rural and urban districts was very objectionable, and ought to be removed. His experience showed that recently the Local Government Board was more reluctant to grant urban powers to rural sanitary authorities than they were formerly.—Dr. SAUNDERS thought it was quite time that the Act of 1872 should be reconsidered and amended. After some remarks from Dr. Armistead, Mr. Philip Munn, and Dr. Dudfield, the CHAIRMAN said there was no reason why buildings in flats should not be as healthy as smaller houses if they were properly arranged. The great difficulty was finding the money to build these houses.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1884:

ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

GRANTS FOR SCIENTIFIC RESEARCH.

THE Scientific Grants Committee of the British Medical Association desire to remind members of the profession engaged in researches for the advancement of medicine and the allied sciences, that they are empowered to receive applications for grants in aid of such research. Applications for sums to be granted at the next annual meeting should be made without delay to the General Secretary, at the office of the Association, 161A, Strand, W.C. Applications must include details of the precise character and objects of the research which is proposed.

Reports of work done by the assistance of Association grants belong to the Association.

Instruments purchased by means of grants must be returned to the General Secretary on the conclusion of the research in furtherance of which the grant was made.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
IVa. Diphtheria, sanitary.
V. Syphilis, acquired.
Va. ,, inherited.
VII. Puerperal Pyrexia.
VIII. Paroxysmal hæmoglobinuria.
X. Habits of Aged Persons.
XI. Albuminuria in the Apparently Healthy.

NOTE.—The further 150 cases of pneumonia asked for by the Committee have now been received, and will be included in the forthcoming issue of the *Record* in July. The Committee hope that cases will still be communicated, as opportunity may occur, with a view to a further report upon the subject in the future.

An inquiry is being now issued concerning the general condition, habits, and circumstances, past and present, and the family history of persons who have attained or passed the age of 80 years.

The replies to this inquiry will be most valuable when given by a medical man; but the questions have been so arranged, that, with the exception of some on the last page, they may be answered by another person. *Partial information will be gladly received.*

Copies of the form and memorandum relating to Aged Persons, recently printed in the JOURNAL, are ready for distribution through the local Secretaries, and will be forwarded to any one who is willing to fill up one or more of the forms, on application by post-card or otherwise to the "Secretary of the Collective Investigation Committee," 161A, Strand, London.

There is also now being issued an inquiry as to the occurrence of Albuminuria in apparently healthy persons.

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
May 1884. 161A, Strand, W.C.

NOTICE.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH. Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

MIDLAND BRANCH. The annual meeting of this Branch will be held in [illegible] Thursday, [illegible]. Notices of papers, etc., to be sent to the Secretary, [illegible] W. [illegible], M.D., [illegible].

METROPOLITAN COUNTIES BRANCH. The thirty-second annual meeting of the Branch will be held [illegible] Friday, June 27th, at [illegible] President-elect, [illegible] M.D., [illegible] Members [illegible] Esq. [illegible] W. [illegible] M.D., [illegible] M.D., Honorary Secretaries.

[illegible] June [illegible] M.D., [illegible] M.D., [illegible] Honorary Secretary [illegible]

[illegible]

[illegible]

[illegible]

Birmingham and Midland Counties Branch.—The annual meeting of this Branch will be held at the Medical Institute on June 19th, at 3.30 P.M.—E. Rickards, Secretary, 14, Newhall Street, Birmingham.

North Wales Branch.—The next annual meeting will be held at Bangor on an early day in July. Members intending to read papers or to make communications are requested to notify the subjects to the Honorary Secretary on or before the 24th instant, that they may be advertised in the circular convening the meeting.—J. Lloyd Roberts, Honorary Secretary, Denbigh. June 10th, 1884.

Lancashire and Cheshire Branch.—The annual meeting of this Branch will be held in the Town Hall, Chester, on Wednesday, June 18th, 1884, at 2 P.M. (the Council meets at 1 P.M.) *Order of Business:* The President's Address; Report of Council; Election of Representative Members in the Council of the Association; Election of New Council and Office-Bearers; General Business. Dr. William Roberts will move: "That the necessary expenses of the Subcommittee on the Collective Investigation of Disease be defrayed out of the funds of the Branch." Dr. FitzPatrick will move: "That, while fully recognising the generous and hospitable spirit which actuates those members of the Branch in whose towns the annual and intervening meetings are held, in providing a public luncheon for the members attending, it is not considered desirable, in the interests of the Branch, that the practice should be continued, owing to the loss of time, which should be devoted to the reading and discussion of papers, which have often to be omitted altogether." Mr. Reginald Harrison will move: "That the Lancashire and Cheshire Branch of the British Medical Association has heard with regret that the resolutions passed at the meeting held at the College of Surgeons on March 29th, have been rejected by the Council, and that they cordially agree with the spirit of those resolutions." *Medical and Surgical Communications:* Mr. Johnson Martin: Paper on Over Education, or the Serious and Evil Effects of the Present System of Education. Paper on Cholera, its Cause, Prevention, and Treatment. Dr. Walter: Two Specimens of Uterine Polypus. Dr. Ransome: Some Cases illustrating the uses of the Bacillus-search. Dr. Imlach: On Tubal Abortion. Dr. T. R. Glynn: On the Pathological Effects of Friction in Heart-Disease (illustrated by drawings). Dr. Wallace: Four Cases of Complete Excision of Cancerous Uterus; Successful Case of Excision by Abdominal Section of Fibroma of Broad Ligament. Cases of Genuine Fallopian Disease, with Specimens. Luncheon will be provided by the members of the Chester Medical Society, at the Town Hall, from 12.30 to 2.30 P.M. Dinner at the Town Hall, at 6.30 P.M.; tickets, 7s. each, exclusive of wine. Arrangements have been made with the following firms for an exhibition of new drugs, special pharmaceutical and dietetic preparations, and medical batteries: Messrs. Clay and Abraham, Liverpool; Messrs. Mottershead and Co., Manchester; Messrs. Symes and Co., Liverpool; Messrs. Woolley and Co., Manchester. Messrs. Wood and Sons, Manchester, will exhibit a collection of surgical instruments and appliances. Messrs. Armstrong Brothers, Manchester, will exhibit optical goods, thermometers, and microscopes. The different exhibits will be on view from twelve o'clock. Divine service at Chester Cathedral, at 10.15 A.M. and 4.15 P.M., followed by an organ-recital.—Chas. E. Glascott, M.D., Honorary Secretary, 23, St. John Street, Manchester.

Southern Branch.—The eleventh annual meeting of this Branch will be held at the Council Chamber, Salisbury, on Thursday, June 19th, 1884, at half-past twelve o'clock. Luncheon will be kindly provided by the President-elect at the Council Chamber, between eleven and half-past twelve o'clock. In accordance with the new by-laws, two gentlemen will be elected at this meeting as representatives of the Branch on the Council of the Association for the ensuing year. Members desirous of reading papers or other communications are requested to forward at once the titles to the Honorary Secretary. No communication must exceed seven minutes in length, and no subsequent speech must exceed five minutes. The address will be delivered by the President-elect at 2.30 P.M. During the afternoon, the members will have an opportunity of visiting several places of interest in the locality. The dinner will take place at the White Hart Hotel, at 6 P.M.; tickets, 12s. 6d. each, including wine. The Committee request that those gentlemen who intend to be present at the dinner will send in their names to Mr. H. J. Manning, Laverstock House, Salisbury, on or before Tuesday, the 17th instant.—J. Ward Cousins, M.D., Honorary Secretary and Treasurer.

Edinburgh Branch.—The annual general meeting will be held at 5, St. Andrew Square, on Tuesday, the 24th instant, at 4.30 P.M.—Charles E. Underhill, Honorary Secretary.

South-Eastern Branch.—The fortieth annual meeting of this Branch will be held at the Saloon Dining-rooms, Crystal Palace, Sydenham, on Wednesday, June 25th, at 2 o'clock precisely. The President-elect invites members and their friends to luncheon in the Saloon Dining-rooms in the South Corridor of the Crystal Palace, near the London, Brighton, and South Coast Low Level Railway Station, from 1 P.M. to 2 P.M. After the meeting, the Industrial Exhibition, the Fine Arts Gallery, the Panorama, and the various entertainments, will be open to the visitors. (On signifying their intention to be present to Dr. R. M. Miller, of Brafield, Church Road, Upper Norwood, Chairman of the Reception Committee, passes to the Palace and to the different entertainments will be forwarded to members.) An opportunity of visiting Dulwich Picture Gallery and the Norwood Cottage Hospital will also be afforded. Dinner will be served at 6 P.M. in the Saloon Dining-room; tickets (exclusive of wine), 10s. 6d. each. To facilitate the arrangements, the dinner-notice should be sent to Dr. Miller, as above, not later than June 23rd. Members desirous of making communications to the meeting should inform the Secretary on or before June 23rd.—Charles Parsons, M.D., Honorary Secretary, 2, St. James's Street, Dover.—June 7th, 1884.

Shropshire and Mid-Wales Branch.—The annual general meeting of the Branch will be held at the Salop Infirmary on Tuesday, June 24th, at 2 P.M. The chair will be occupied by the President, W. Bowen Davies, Esq. Members desirous of reading papers, or bringing forward subjects for discussion, are requested to communicate with the Honorary Secretaries as early as possible. Members are invited to exhibit patients, specimens, drugs, etc., before the meeting. A dinner will be held at the Raven Hotel after the meeting. Dinner-tickets, to include wine, 12s. 6d. each.—Ed. Cureton, Arthur Strange, Honorary Secretaries.

Northern Counties (Scotland) Branch.—The annual meeting of this Branch will be held at Elgin, on Wednesday, July 9th, 1884; Dr. D. McIntyre, of Fort William, President-elect. Members desirous of bringing forward any communication are requested to intimate the same at once to J. W. Norris Mackay, M.D., Honorary Secretary, Elgin.—June 10th, 1884.

Border Counties Branch.—The seventeenth annual meeting will be held at Hawick on Friday, June 27th. Members intending to read papers or show specimens are requested to give notice to Dr. Lediard, Carlisle, or Dr. Smith, Dumfries.

VICTORIAN BRANCH.

A meeting of this Branch was held at Melbourne on March 12th; Dr. Graham, President, in the Chair.

New Member.—Dr. Springthorpe was elected a new member.

Non-payment of Subscriptions.—The Honorary Secretary reported that the Council had resolved to erase from the list of members the names of all gentlemen who, after repeated solicitation, had not paid their subscriptions.

Address to Professor Owen.—The Secretary also reported that the Council had requested Mr. T. N. Fitzgerald, who had been formally empowered by the Branch to act as its representative during his visit to Europe, to present to Professor Owen the address from the Branches of the British Medical Association in Australia.

Paper.—Dr. W. H. Cutts read notes of a Peninsular and Oriental Voyage to England, including observations made during his visits to Ceylon, Aden, and Cairo and the Pyramids.

SYDNEY AND NEW SOUTH WALES BRANCH.

Election of Officers.—At the annual meeting of this Branch held on March 14th, the following officers were elected: *President,* Sir Alfred Roberts; *Vice-President,* H. N. Maclaurin, M.D.; *Treasurer,* A. J. Brady, Esq.; *Secretary,* W. E. Warren, M.D.

The fortieth general meeting was held at Sydney on April 4th; Sir Alfred Roberts, President, in the chair.

Sir A. Roberts thanked the members for having elected him President for the current year.

Papers.—The following papers were read.

1. Dr. Joseph Foreman: A Case of Extirpation of the Uterus through the Vagina.
2. Dr. O'Connor: Some Peculiar Cases of Suicide among the Insane.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.

A meeting of the above District was held at Hastings on May 27th; Mr. Kaye Smith presided.

Papers.—The following papers were read.

1. Dr. Lee: On Eruptions following Vaccination. The author considered in his paper the importance of recognising the fact that vaccination may cause certain eruptions, which we ought not to disregard, but rather to explain. Thus the prejudices, which have of late been increasing, against vaccination will be diminished, and the causes for them prevented. Any inflammation of the skin may produce these eruptions, and vaccination is only the cause in so far as it produces inflammation. The question, therefore, to consider was how to vaccinate with as little local inflammation as possible, and how to treat this when it does arise. The lecture of Professor Trousseau on Sudoral Exanthemata was referred to by Dr. Lee as of especial value and deserving of careful consideration.—Mr. White, Dr. Creighton, Dr. Moore, Dr. Ranking, Dr. F. Parsons, and Dr. Allen took part in the discussion.

2. Mr. Henry Juler showed some specimens of Diseased Eyes mounted in Glycerine-Jelly. Sections had been made of the eyes after they were frozen. The method of mounting, being that recommended by Mr. Priestley Smith in the *Ophthalmic Review,* was fully described.

3. Mr. Juler read a paper on the Shadow-test as a means of ascertaining and correcting Errors of Refraction. He thought this subject would be of interest on account of the frequency with which refractive errors gave rise, not only to affections of the eye and its appendages, but also to other affections met with in general practice, such as neuralgia, headache, and the like. He thought it would also be interesting on account of the simplicity, ease, and certainty with which this test could be applied. Mr. Juler briefly reviewed the symptoms of myopia and hypermetropia, pointing out the pathological consequences of the two diseases. In support of the fact that the latter affection often remains unnoticed till some severe disease or injury impairs the health, and with it the power of the ciliary muscle, he cited a case, recently occurring in his practice, in which marked convergent squint due to hypermetropia developed in a boy who had been admitted to St.

Mary's Hospital some weeks previously for a severe scalp-wound. After alluding to glaucoma and its connection with hypermetropia, and to astigmatism and its injurious effects both on the eye and the general health, Mr. Juler described the "shadow-test" and its mode of application as a means of diagnosing the existence of the various refractive errors. He further pointed out how, by trying a series of lenses, we could select the right glass to remedy this defect. In preparing the pupil for examination, he recommended a solution of homatropine hydrobromate (6 grains to the ounce), the effect of it being sufficient for the purpose and the dilatation passing off rapidly.

Owing to want of time, papers by Dr. Moore and Mr. Verrall were not read.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE sixth ordinary meeting of the session was held at the Museum and Library, Bristol, on Wednesday evening, May 28th, E. CROSSMAN, Esq., President, in the chair. There were also present forty-two members and one visitor.

New Member.—The following gentleman was elected: A. E. Blacker, L.R.C.P., L.R.C.S.Ed., Bristol.

Communications.—The following communications were made:

1. Dr. A. J. Harrison read a paper on Two Cases of Venesection in Heart-Disease. Dr. Spender, Dr. Waldo, and Mr. Wathen joined in the discussion which followed.

2. Mr. F. G. Stevens read a paper on the Treatment of Croup, which led to a discussion, in which the following gentlemen took part: Drs. Cunningham, Elliott, and Swayne, Mr. Dobson, Drs. Markham Skerritt and Shingleton Smith, Mr. Greig Smith, Dr. Thompson, Messrs. J. P. Bush, Penny, Ewens, and Prichard, and the President.

3. Mr. J. Taylor related the details of a Case of Columnar Papilloma of the Brain, and exhibited the tumour and microscopical specimens. Drs. Markham Skerritt and Swayne, Mr. Michell Clarke, and Dr. Shingleton Smith made observations on this case.

4. Mr. Cross read a paper on Glaucoma, which was discussed by Mr. Dew, Dr. Spender, and Mr. G. E. Alford.

5. Dr. Elliott exhibited an Incubator for Infants.

BRITISH MEDICAL ASSOCIATION.

FIFTY-SECOND ANNUAL MEETING.

THE Fifty-second Annual Meeting of the British Medical Association will be held at Belfast, on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1884.

President: A. T. H. WATERS, M.D., F.R.C.P., Senior Physician to the Royal Infirmary, Liverpool.

President-elect: JAMES CUMING, M.D., F.K.Q.C.P., Professor of Medicine in Queen's College, and Physician to the Royal Hospital, Belfast.

An Address in Medicine will be delivered by WILLIAM M. ORD, M.D., Physician and Lecturer on Medicine to St. Thomas's Hospital, London.

An Address in Physiology will be delivered by PETER REDFERN, M.D., Professor of Anatomy and Physiology in Queen's College, Belfast.

An Address in Obstetric Medicine will be delivered by GEORGE H. KIDD, M.D., Consulting Obstetric Surgeon to the Richmond and Hardwick Hospitals, Dublin.

SECTION A. MEDICINE.—*President:* J. W. T. Smith, M.D., Belfast. *Vice-Presidents:* G. F. Duffey, M.D., Dublin; Alexander Davidson, M.D., Liverpool. *Secretaries:* Richard Ross, M.D., 7, Wellington Place, Belfast; Thomas Barlow, M.D., 10, Montague Street, Russell Square, London.

SECTION B. SURGERY.—*President:* Sir William [illegible], F.R.C.S., London. *Vice-Presidents:* J. K. Maconchy, M.B., Downpatrick; J. W. Browne, M.D., Belfast; John Chiene, F.R.C.S.Ed., [illegible]. *Secretaries:* John Fagan, F.R.C.S.I., 1, Glengall Place, Belfast; Bennett May, F.R.C.S.Eng., 16, Temple Row, Birmingham.

SECTION C. OBSTETRIC MEDICINE.—*President:* Clement Godson, M.D., London. *Vice-Presidents:* Sir William Miller, M.B., Londonderry; William Stephenson, M.D., Aberdeen. *Secretaries:* W. Walter, M.D., 20, St. John Street, Manchester; Brice Smyth, M.B., 13, College Square East, Belfast.

SECTION D. PUBLIC MEDICINE.—*President:* Charles Cameron, M.D., M.P., Glasgow. *Vice-Presidents:* John [illegible], M.D., Belfast; David Davies, M.R.C.S.Eng., Bristol. *Secretaries:* [illegible] H. S. [illegible], M.D., 60, Pakenham Place, Belfast; Shirley Murphy, M.R.C.S.Eng., 158, Camden Road, London, N.W.

SECTION E. OPHTHALMOLOGY.—*President:* W. A. McKeown, M.D., Belfast. *Vice-Presidents:* W. A. Brailey, M.D., London; Edgar Browne, M.R.C.S.Eng., Liverpool. *Secretaries:* Joseph Nelson, M.D., Glengall Place, Belfast; R. N. Hartley, M.B., 38, Cookridge Street, Leeds.

SECTION F. PHYSIOLOGY AND PATHOLOGY.—*President:* W. S. Greenfield, M.D., Edinburgh; *Vice-Presidents:* J. J. Charles, M.D., Cork; D. C. McVail, M.B., Glasgow. *Secretaries:* A. H. Young, F.R.C.S., 96, Mosley Street, Manchester; T. Sinclair, M.D., 15, College Square East, Belfast; R. J. Anderson, M.D., Galway.

SECTION G. PHARMACOLOGY AND THERAPEUTICS.—*President:* Thomas John Maclagan, M.D., London. *Vice-Presidents:* Matthew Hay, M.D., Aberdeen; W. Whitla, M.D., Belfast; Walter G. Smith, M.D., Dublin. *Secretaries:* George Gray, M.D., Castlewellan, County Down; W. Murrell, M.D., 38, Weymouth Street, London.

SECTION H. PSYCHOLOGY.—*President:* G. H. Savage, M.D., London. *Vice-Presidents:* Daniel Hack Tuke, M.D., London; Isaac Ashe, M.D., Dundrum. *Secretaries:* A. S. Merrick, M.D., District Hospital for Insane, Belfast; S. Rees Philipps, M.D., Wonford House, Exeter.

Local Secretaries: John Moore, M.D., 2, Carlisle Terrace, Belfast; Alexander Dempsey, M.D., 26, Clifton Street, Belfast; John W. Byers, M.D., Lower Crescent, Belfast.

Treasurer: William Whitla, M.D., Belfast.

TUESDAY, JULY 29TH, 1884.

2 P.M. Meeting of Council.
3 P.M. General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M.—General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock. Tea and Coffee after the meeting.

WEDNESDAY, JULY 30TH, 1884.

9.30 A.M. Meeting of Council.
11.0 A.M. Second General Meeting. Address in Medicine.
2 to 5 P.M. Sectional Meetings.
8 P.M. A *Conversazione* will be given in Queen's College, by the President of the Association and the Executive Committee.

THURSDAY, JULY 31ST, 1884.

9.30 A.M. Meeting of Council.
11 A.M. Third General Meeting. Address in Physiology.
2 to 5 P.M. Sectional Meetings.
6.30 P.M.—Public Dinner, which will be held in the Examination Hall, Queen's College.

FRIDAY, AUGUST 1ST, 1884.

10 A.M.—Address in Obstetric Medicine.
11 A.M.—Sectional Meetings.
2 P.M.—Concluding General Meeting.
8 P.M. Reception by the Mayor of Belfast, in the Ulster Hall.

SATURDAY, AUGUST 2ND, 1884.

Excursions.

EXCURSIONS.

The following excursions will take place on Saturday, August 2nd. 1. An excursion to the Giant's Causeway, by special train to Portrush, thence by electric tramway to Bushmills (a distance of six miles), calling at Dunluce Castle on the way. Carriages will convey the visitors from Bushmills to the Causeway, where luncheon will be provided at the hotel. On the return journey, there will be tea at the Northern Counties' Hotel, Portrush. 2. An excursion to Larne and Garron Tower. By train from Belfast to Larne, thence by conveyances to Garron Tower (a distance of eighteen miles), along the most picturesque scenery of the northern coast, passing through the villages of Glenarm and Carnlough. Luncheon will be provided at Garron Tower, and on the return journey there will be tea at the Olderfleet Hotel, Larne. 3. An excursion to Newcastle, County Down. By train from Belfast to Newcastle, where visitors will have an opportunity of visiting this celebrated seaside resort, and the magnificent scenery around; including Donard Lodge, Slieve Donard (the highest of the Mourne mountains), Tollymore Park, and Castlewellan. Luncheon and tea will be provided. 4. Circular trip to Warrenpoint *viâ* Newcastle and Rostrevor. By train from Belfast to Newcastle, thence by car to Rostrevor, [illegible] along the [illegible] coast of County Down. From Rostrevor, [illegible] visitors to Warrenpoint, thence by train to Belfast [illegible].

On the afternoons of Wednesday and Thursday, there will be short excursions, by which members will [illegible] places of interest [illegible] Belfast [illegible] Messrs. [illegible] Queen's Quay, Belfast.

at 7 A.M., on Friday, August 1st, and proceed down the Lough to Carrickfergus Roads to the steamship *Vancouver*, where breakfast will be provided for 150 members, and an opportunity will be given to visit the newest ship of the Dominion fleet.

The Secretary of the Excursion Committee is Robert Esler, M.D., Pakenham Place, Belfast.

ANNUAL MUSEUM.

The eighteenth annual exhibition of objects of interest in connection with medicine, surgery, and the allied sciences, will take place in the Exhibition Hall, Botanic Gardens, Belfast (floor-space, over 5,000 square feet), and in the Queen's College, Belfast (floor-space, nearly 4,000 square feet), during July 29th, 30th, and 31st, and August 1st, 1884.

The committee who have been appointed to take charge of the arrangements will be happy to receive as under.

Subsection A.—1. Preparations, diagrams, casts and models of anatomical and pathological objects, microscopes and microscopic preparations (Dr. Lindsay).

Subsection B.—2. Surgical and medical instruments and appliances, thermometers, and other instruments for scientific investigation (Dr. Scott Core).

Subsection C.—3. Foods, drugs, chemicals, and pharmaceutical preparations (Dr. Bingham).

Literary and Sanitary Subsection D.—4. New medical books. 5. Ambulances, carriages, and other means of locomotion for the use of medical practitioners. 6. Sanitary appliances, including drawings, models, and apparatus, illustrative of the ventilation of hospitals, public buildings, and private dwellings. 7. Plans and models of hospitals, public buildings, and private dwellings, constructed upon the most improved hygienic principles. 8. Recent improvements in hospital furniture. (Dr. Henry O'Neill, General Secretary, 5, College Square East, Belfast, to whom all communications with reference to the Annual Museum are to be addressed, prepaid.)

It is intended that the surgical instruments, sanitary appliances, etc., shall be genuine novelties or improvements on those in common use.

The pathological specimens will be arranged in departments.

Exhibition of Instruments and Apparatus.—It is intended to arrange for the exhibition of complete series of instruments, electro-therapeutic apparatus, instruments for physical diagnosis, and appliances relating to sanitary science and public health. Facilities will also be afforded, when requested, for the display of instruments in action, or for special explanation by the exhibitors of apparatus.

Catalogue.—It is intended to print a catalogue of the exhibits contained in the museum, and lithograph plan. The Committee request that descriptions, etc., be sent in as early as possible—not later than July 7th, 1884.

Communications, objects intended for exhibition, etc., to be addressed (prepaid) to the Secretary of the Museum Committee, Dr. HENRY O'NEILL, 5, *College Square East, Belfast.*

During the week preceding the meeting, all articles should be sent direct to the Queen's College, Belfast, and addressed to the care of the Curator of the Museum of the British Medical Association.

All expenses of carriage to be prepaid, and all risk to be borne by the exhibitors; but the Committee will exercise every care of the articles entrusted to them. A card bearing the name and address of the exhibitor, with the name of the instruments, etc., to be enclosed in each package ready to be fixed on the outside of the exhibit.

The following discussions and papers are promised up to the present time. Members desirous of reading papers or joining in the discussions are earnestly requested to communicate without delay with the Secretaries of the respective Sections, as the date of the annual meeting is a week earlier than usual.

SECTION A.—MEDICINE.

In the Section of Medicine, the following subjects have been chosen for special discussion.

1. Albuminuria: a Practical Summary of its Causes and its Consequences, its Diagnosis and its Treatment. Introduced by Dr. George Johnson. Dr. G. A. Woods will take part in this discussion.

2. The Causative Relations of Phthisis. Introduced by Dr. Douglas Powell. The following have promised to speak: Professor Gairdner, Dr. Clifford Allbutt, and Dr. Balthazar Foster.

3. Rheumatoid Arthritis. Introduced by Dr. Dyce Duckworth. The following have promised to speak: Dr. Buzzard, Dr. B. Foster, and Mr. J. Hutchinson.

The following paper has been promised.

MADDEN, T. More, M.D. Alcoholism in Childhood and Youth.

SECTION B.—SURGERY.

There will be a discussion on Sayre's Plaster Jacket, to be opened by Professor Lewis Sayre (New York), who will give demonstrations. 1. Partial Suspension, and the application of the Plaster-of-Paris Jacket for Pott's Disease. 2. Partial Self-suspension, and the Application of the Plaster Corset for Lateral Curvature.

The following papers have been announced.

BARTLETT, T. H., Esq. Operative Treatment of Empyema.

CHIENE, John, Esq. Treatment of Wounds.

COOPER, Alfred, Esq. On Syphilis.

ESLER, Robert, M.D. Oakum as a Surgical Dressing.

FAGAN, John, Esq. Gastrostomy: its Merits as a means of treating Stricture of the Œsophagus, and the best mode of performing the Operation.

KEETLEY, C. B., Esq. Buried Sutures, with remarks on the importance of Suturing separately, Periosteum to Periosteum, Muscle to Muscle, Deep Fascia to Deep Fascia, and Skin to Skin, after Deep Incisions of all kinds.

LUND, Edward, Esq. On Torsion in its Application to the Treatment of Hemorrhoids.

MACNAMARA, C., Esq. Notes on a Successful Case of Gastrostomy for Stricture of the Œsophagus.

NORTON, A. T., Esq. Gangliar Disease of Joints.

ROTH, Bernard, Esq. The Surgical and Orthopædic Treatment of Infantile Paralysis.

SMITH, Noble, Esq. The Diagnosis of Disease of the Vertebral Column.

WATSON, W. Spencer, Esq. The Use of the Galvanic Cautery in the Treatment of Intranasal Diseases; with exhibition of a new instrument in illustration.

WRIGHT, G. A., M.B. A Note upon the Effects of Bone-lesions upon the Rate of Growth of Limbs.

SECTION C.—OBSTETRIC MEDICINE.

The following special discussions will take place.

1. The Pathology and Treatment of Extra-uterine Fœtation. This discussion will be introduced by Mr. Lawson Tait. The following gentlemen have signified their intention to take part in this discussion: Dr. Elder and Dr. W. L. Reid.

2. The Treatment of Intra-uterine Disease, with special reference to the best mode of making Applications to the Intra-uterine Surface. Dr. Atthill will introduce this discussion. The following gentlemen have signified their intention of taking part in this discussion: Dr. Fancourt Barnes and Dr. W. L. Reid.

The following papers are announced.

BARNES, Fancourt, M.D. How often is Craniotomy justifiable in the same Subject?

CROOM, J. Halliday, M.D. 1. The Special Advantages of Axis-traction Forceps in the Cavity and at the Outlet. 2. Early Lochia.

ELDER, George, M.D. On Alexander's Operation of Shortening the Round Ligaments for Retroflexion and Prolapse of the Uterus.

ESLER, R., M.D. On Phlegmasia Dolens.

MADDEN, T. More, M.D. 1. On the Treatment of Intra-uterine Disease. 2. The Treatment of Sterility.

REID, W. L., M.D. On the Operation (Alexander-Adams) of Shortening the Round Ligaments for Uterine Displacements, with three cases.

SMYLY, W. L., M.D. Expression of the Placenta.

SECTION D.—PUBLIC MEDICINE.

The following topics for papers have been suggested as likely to lead to useful and interesting discussions.

1. Prevention of Epidemics.

2. Inspection of Meat Markets; with special reference to the Causation of Disease in Man by the Consumption of Diseased Meat.

3. Over-pressure in Schools; with special reference to the record of clinically observed facts.

The following papers have been announced.

CAMERON, C. A., M.D. On Inspection of Meat Markets.

CULLIMORE, D. H., M.D. On Quarantine.

HOPE, E. W., M.D. On the Latent Period, Infectiousness, and Mortality from Typhus Fever.

MAKUNA, M. D., Esq. 1. On Mortality in England and Wales and in London during the last Three Decennials. 2. An Examination of the Theory of Aerial Dissemination of Small-pox Infection.

VACHER, Francis, M.D. On Inspection of Meat Markets.

SECTION E.—OPHTHALMOLOGY.

The following gentlemen, among others, have signified their intention of taking part in the work of this Section: Dr. Wolfe (Glasgow), Dr. Edwyn Andrew, Messrs. C. Macnamara, Frederick Mason, Simeon Snell, Gustavus Hartridge, etc.

A discussion on the following subject will be opened by Dr. Wolfe (Glasgow): Does the Position of the Section in Cataract Operations Influence Suppuration of the Cornea; if so, what part is played by Septic Infection?

The following papers have been announced.

Fitzgerald, Chas. E., M.D. The Influence of Errors of Refraction on Affections of the Conjunctiva, Cornea, and Iris.
Griffith, A. Hill, M.B. Death following Enucleation of the Eyeball.
McKeown, David, M.D. 1. Restoration of Vision by Iridectomy in the case of a man aged 62, after Sixty Years' Blindness; good Colour-perception. 2. On the Treatment of a Case of Atrophy of the Optic Nerve by Large Doses of Strychnia and Pilocarpin combined.
Story, J. B., M.B, and **Baker**, Arthur, M.B. (joint communication). On the Influence of Syphilis upon the Development of the Teeth, and the Occurrence of Diffuse Interstitial Keratitis.
Story, J. B., M.B. 1. The Minimum Knowledge of Ophthalmology to be exacted as a Qualification to Practise. 2. A Series of Cataract Operations.

SECTION F.—PHYSIOLOGY AND PATHOLOGY.

One or more of the following subjects will be discussed.

1. Influence of Nervous System on Normal and Abnormal Nutrition.
2. Functions of Leucocytes under Normal and Abnormal Conditions.
3. Physiology and Pathology of Lymph-transudation and Absorption.
4. Skin-absorption.
5. Dr. McVail will open a discussion on the Pathology of Pulmonary Emphysema.

The following papers are announced.

Kennedy, C., M.D.
Maguire, R., M.D. 1. The Darkening in Colour of certain Urines on Exposure to the Air. 2. On the Micrococcus of Pneumonia.
Paul, F., Esq. On the Pathology of Rodent Ulcer.
Woodhead, G. S., M.D.

SECTION G.—PHARMACOLOGY AND THERAPEUTICS.

The following arrangements have been made.

1. The President will deliver an introductory address, and will move a series of resolutions, supported by the Vice-Presidents, on the subject of the British Pharmacopœia.
2. A debate on Antipyretics will be opened by Dr. Alexander Collie and Professor Quinlan. Dr. Dujardin-Beaumetz (Paris) will read a paper on a new Antipyretic.
3. Dr. Hughes Bennett and Dr. Steavenson will open a discussion on the Therapeutical Applications of Electricity; in the course of which, different modes of Electrical Treatment will be illustrated.
4. Dr. Dudley Buxton and Dr. Stockman will give a series of demonstrations illustrating the action of certain Drugs on the Frog's Heart.
5. Dr. W. H. White will open a discussion on Aspiration as a Therapeutic Agent, to which Dr. Finny will reply.
6. There will be a special debate on Indian Drugs, in which it is hoped Sir Joseph Fayrer, Mr. Charles Macnamara, Dr. Waring, Dr. Ewart, and other distinguished authorities will take part.
7. Dr. Shoemaker (Philadelphia), a delegate from the American Medical Association, will give an explanation of the *modus operandi* of the New Oleates in certain Skin-diseases, to which Dr. Colcott Fox will reply.

SECTION H.—PSYCHOLOGY.

In this Section, in addition to the usual papers, the following special subjects have been selected for discussion.

1. Employment of the Insane.
2. Varieties of General Paralysis.
3. Use of Alcohol in Asylums.
4. Moral Insanity and Imbecility.
5. Legal Persecutions by Discharged Patients.

No communication shall occupy more than fifteen minutes, and no person shall be permitted to speak more than once, or for more than ten minutes, during the discussion thereon. A short abstract of each paper must be sent to the secretaries of the Section in which it is to be read, not later than July 23rd.

N.B.—Members who desire to take part in the discussions, or to read papers, are earnestly requested to communicate without delay with the secretaries of the respective Sections.

Dr. Ward Cousins hereby gives notice that at the annual meeting to be held at Belfast on the 29th day of July next, it will be moved that By-law 34 be and it is hereby repealed, and that the following new by-laws be enacted.

The formation of new Branches and the modification and division of the recognised existing Branches shall be subject to the decision of the Council.

The Branches of the Association, as now recognised by the Council, constitute the representative areas. The limits of the area of each Branch must be defined, and an outline of the whole organisation published in the form of a chart.

A.—WITHOUT THE LIMITS OF ANY EXISTING BRANCH.

Any number of members not less than 50 residing within, or not less than 25 residing without, the limits of England and Wales may form themselves into a Branch of the Association, subject to such Branch being recognised by the Council.

B.—WITHIN THE LIMITS OF ANY EXISTING BRANCH.

In the event of two or more recognised Branches being desirous of uniting to form one Branch, a requisition, specifying the particulars and objects of such union, must be forwarded by each of the Branches to the Council; and, on such union being recognised by the Council, the recognition shall date from the first day of January then next ensuing.

In the event of 100 members, residing in a district of a recognised Branch, being desirous of forming within the area of such district a new and separate Branch of the Association, they shall present a petition to the Council specifying the particulars and objects of the proposed separation. In the event of such separation being recognised, the recognition shall date from the first day of January then next ensuing.

Honorary secretaries of every Branch must forward to the General Secretary an outline of the area of the Branch as recognised by the Council of the Branch.

FRANCIS FOWKE, *General Secretary.*

London, June 10th, 1884.

SPECIAL CORRESPONDENCE.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

Purchase of Kensington Fields by the Corporation.—Hospital-accommodation for Small-pox Cases.—Inspectors of Nuisances as Sources of Infection.—Hospital Saturday Collection.—Tramcar-accidents.—Overwork in Elementary Schools.—Scheme for Sending Children to the Country.—Birkenhead Borough Hospital.—Testimonial to Dr. Gee.

To the east of Hall Lane, and between Edge Lane and Kensington, on the south and north respectively, lies a large bare space of ground, measuring 250,365 square yards, or, roughly speaking, about fifty acres. This land is known as Kensington Fields. It has recently been purchased by the corporation; and the public is exceedingly anxious to know what is going to be done with it. The subject was brought up for discussion at the last meeting of the city council, and it was then stated by Dr. Hamilton that some influential members of the council propose to utilise it for the purposes of a hospital for infectious diseases. It was also mentioned that the idea was to take ten acres for the hospital, around which another ten acres would be converted into a recreation-ground for the general public, whilst the remaining thirty acres would be sold for building. In reference to this project, our leading paper remarks: "Dr. Hamilton has done invaluable service in drawing public attention to the danger which threatens Kensington Fields. Better far that they should fall into the clutches of the 'jerry builder' than that they should be used as a site for a small-pox hospital, from which infection would radiate through a densely populated district. It is difficult to believe that any sane man can have designed such a fate for the fields." This fairly expresses popular opinion on the matter. It is certain that the plan will excite much opposition, especially amongst the residents in the immediate vicinity, who will doubtless feel aggrieved, like the people of Fulham and Hampstead. Some time ago, it was suggested that a good site for the proposed new infirmary would be on Kensington Fields. This proposition was strenuously opposed by the infirmary authorities for many and weighty reasons. Then it was proposed to build a new university college there. But it is hardly likely that either of these propositions will ever be carried out, seeing that the authorities of both infirmary and college decline to move, or rather to be moved, from their present positions. It is very generally felt that now there is a grand opportunity for the corporation to make a step in the right direction, and to provide a large open space for the benefit of the people. Open spaces are greatly wanted in Liverpool, which is, as has recently been stated, the most densely populated city in the kingdom. Certainly, it will be a very shortsighted policy to cover such a magnificent piece of ground with narrow streets and small houses. A short time ago, a very pathetic letter appeared in one of the daily journals from a poor woman, who strongly advocated the conversion of the fields into a recreation-ground. She pointed out that the large parks in the suburbs are too far away for people of her own position in life, excepting on Sundays and bank-holidays. The letter is valuable as expressing the opinion of one of the very class whose interests ought to be consulted in a question of this kind.

At a recent meeting of the Health Committee, Dr. Hamilton stated that Mill Road Hospital, the only institution we have for small-pox cases, was full; and, further, that the position of this hospital was most unsatisfactory, being surrounded by streets of small houses. Some of these houses are within twenty feet of the rear of the hospital, whose windows open right on them. In consequence of the great increase in the number of small-pox patients, he suggested the employment of a hospital-ship, or ships, as in London. His motion was negatived. This was proposed some time ago, but the medical officer of health reported against it. The Mersey doubtless offers advantages for the carrying out of such a plan; but there are serious disadvantages. The size of the river is in itself a disadvantage, rendering it much exposed to storms; and there is also the liability to sea-fogs to be taken into consideration.

A curious point recently came out in reference to the spread of small-pox. At the Health Committee, Dr. Bligh asked if inspectors of nuisances, after visiting houses infected with small-pox, were in the habit of proceeding to visit houses not infected on the same day. The medical officer said he knew nothing about it; but the chief inspector of nuisances confessed that such was the case—that he was following the rule laid down by the committee for years. The practice was condemned by members of the committee, and various remedies were suggested; but eventually the inspector of nuisances was instructed to report upon the matter.

It has often been asked why the Hospital Saturday collection in Liverpool is less successful than in other large towns, like Birmingham. Thus, from 1873 to 1883, the contributions in Birmingham amounted to £42,360 6s. 8d., against £21,609 17s. 9½d. in Liverpool. One explanation is that, in Birmingham, the workmen in many of the large establishments subscribe a halfpenny or penny per week; whereas here this plan is only adopted in a few instances, the majority of the workmen subscribing only once in the year, and then giving only a small sum. It is proposed to endeavour to extend the weekly subscription system.

The frequency with which tramcar-accidents occur here seems to call for some inquiry. Many of the casualties appear to result from structural defects in the cars themselves. Thus, the driver is seated so low that he cannot see properly over his horses; the steps to the top of the car prevent the driver from having an unobstructed view on one side; and the guards in front of the wheels are practically useless, being too high above the rails. But some of the accidents are undoubtedly due to our steep gradients and dangerously sharp curves.

An investigation under the auspices of the Medical Institution is being carried on as to the question of overwork in elementary schools. A circular has been issued by Dr. Gee, the President of the Institution, together with a list of questions. Medical men are requested to state their opinion on the maximum number of hours a child ought to work; and to relate the particulars of any cases that have come under their notice of illness occurring in teachers or school-children, as a result of overwork. Dr. Greves, Physician to the Children's Infirmary, is the honorary secretary of the inquiry. It is thought by many that the investigation will have to be extended beyond its present limits, if reliable data are to be obtained.

A scheme for boarding out sickly town-children, during the three weeks of their summer-holidays, in the cottages of suitable poor people in the country, is in process of organisation here. The arrangements will be very similar to those carried out in London. There is so much squalor and wretchedness in Liverpool; the streets are so full of sickly neglected little children; and the benefits resulting from such a project are so great, that already there is good reason to believe that the promoters of the scheme will receive hearty and efficient support.

At the special meeting of the governors of the Birkenhead Borough Hospital, held on May 29th, for the purpose of nominating candidates for the post of honorary surgeon in place of Dr. Spratly, who has resigned, a resolution was unanimously carried shortening the duration of the period for which the honorary medical officers serve, from 21 to 15 years. This is thought to be a step in the right direction. Mr. Andrew Stewart, a former student of the Liverpool School of Medicine, was the successful candidate for the vacant post. Some objection was raised to the candidature of Mr. Vacher, the medical officer of health for Birkenhead, on the ground that he was physician to the Fever Hospital, and that, consequently, it would not be safe for him to visit both institutions.

On May 29th, a meeting was held at the Reform Club, at which Dr. Gee was presented with a portrait of himself, and an illuminated address, in acknowledgment of his services during twenty-one years as Chairman of the Abercromby Ward Liberal Association. The portrait is by Mr. R. E. Morrison, a rising local artist; and is considered to be most successful, the likeness being excellent.

ABERDEEN.

[FROM OUR OWN CORRESPONDENT.]

The Medical School, Aberdeen University. East of Scotland Union of Naturalists' Societies.—Honours to Veteran Practitioners.—Economy at the Royal Infirmary.

THE summer session at this medical school has, so far, been a comparatively uneventful one. An important change has been effected in beginning the summer session in the end of April and closing about the middle of July. This admits of the medical graduation taking place early in August. There is no falling off of the number of those joining the medical classes.

The East of Scotland Union of Naturalists' Societies' held their first annual meeting at Dundee on the 6th and 7th instant. A large number of societies were represented, and the address was delivered by Dr. Buchanan White. A *conversazione* was held in the Albert Institute on Friday evening, and it was a decided success; while on Saturday there were a sea-dredging expedition to the Bell Rock and St. Andrew's Bay, and a land-excursion to Reswallie and Rescobie.

At the last meeting of the Garioch and Northern Medical Society, the attention of the members was drawn to the fact that Dr. Davidson of Wartle, and Dr. Manson of Banff, have completed fifty years as medical practitioners. It has been resolved by their medical brethren that a public dinner shall be given to them on Saturday, the 28th instant.

The managers of the Royal Infirmary are making every effort to diminish the expenditure, which is considerably in excess of the income. By judicious economy in several departments it is hoped that a satisfactory adjustment will be effected.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

Health of Manchester and Salford.—Canon Bentley.—Warrington Infirmary.—Preston Infirmary.—Playground at Pendleton.—Royal Albert Asylum for Idiots and Imbeciles.—Dental Lectureships in Owens College.

DR. LEIGH, the medical officer of health for Manchester, in his valuable report, lays stress upon the importance of reducing the very high death-rate of our city, by improving the condition of labourers' dwellings, extending accommodation for children suffering from infectious diseases, and mitigating the smoke-nuisance. It is an excellent programme, and one that ought to secure the immediate attention of the health-committee. It is not a flattering reflection that in this city our chances of living are smaller than in any other town in the country. According to the Registrar-General's summary report of the comparative mortality of all the large towns, Manchester showed an excess of over 50 per cent., *i.e.*, "taking 1,000 to represent the comparative mortality-figure of all the large towns, Manchester had a comparative mortality of 1,578." The adjoining borough of Salford was a little better, but it showed an excess of 25 per cent., and only nine large towns had a worse record. During the week ending May 31st, 207 births and 142 deaths were registered. The birth-rate was 31.5 per 1,000, and the death-rate 21.6 per 1,000, against 38.2 and 24.3 respectively in the corresponding week last year; 28 cases of infectious disease were reported during the week. In Salford, 122 births and 78 deaths were registered. The death-rate was 20.7 per 1,000; 47 cases of infectious diseases were reported, namely, 3 of measles, 22 of scarlet-fever, 8 of whooping-cough, and 6 of enteric fever.

By the death of Canon Bentley, we have lost one of the most active supporters of our charitable institutions. In his earlier years he took a great interest in the Royal Infirmary and Lock Hospital, of which latter institution he was trustee at the time of his death. He was closely connected with the management of St. Mary's Hospital for over thirty years, and was for many years its vice-chairman, and at the death of Dr. Radford, three years ago, he was elected chairman. The existence of the present premises is in a great part due to his exertions, and his help and valuable advice will be greatly missed by his colleagues on the board of management. Many members of the profession will gratefully remember his kind and cordial help and genial encouragement to them in their early struggles.

The persons employed in the various works have handed over to the Working-men's Committee the sum of £91 11s. 1d., as their half-yearly contribution to the Warrington Infirmary and Dispensary. A well appointed children's ward was opened last week in connection with this useful institution.

Messrs. Wright, Turner and Co., manufacturers, have written to the secretary of the Sanitary Association that they have thrown open to the public a vacant space of land at Pendleton over an acre in extent, and that it is their intention to lay the land with grass for cricket, and to supply bats, balls, etc. A portion of the land will be railed off for girls, where skipping ropes and other amusements will be provided. There will be seats for the aged, and shelter in case of rain, and music in the summer evenings. This is a most praiseworthy action, and one that our rich manufacturers would do well to imitate. Messrs. Armitage's recreation ground, in the same borough, has been established for a long time, and it has been highly appreciated in the district.

At the annual meeting of the Royal Albert Asylum, held last week at Chester, the Duke of Westminster, who presided, pointed out the necessity of increased support to this charity. In the seven northern counties there were about 8,000 persons afflicted with idiocy; and some 2,400 of these were between the ages of 5 and 20. The asylum could accommodate 600, and there was room for extension. At present it accommodated 510, and the average cost per head per week was 12s. 5d. Patients are trained for seven years, and, if possible, taught to learn various trades, and to become more or less useful members of society.

The Council of Owens College are now advertising for candidates for the new lectureships on dental surgery, and on dental mechanics and metallurgy. We understand that every effort will be made to render the dental department of the College in every way complete.

BERLIN.

Dr. Koch's Report on Cholera. The International Hygienic Congress. Statue to Professor Von Buhl.

Dr. Koch's detailed account of the results he has arrived at concerning the means to be adopted for protection against cholera will scarcely be in the hands of the public for five or six months. The time Dr. Koch calculates as necessary for completing the report he is preparing for the German Government will be about four months. I need scarcely lay stress on the importance this report will have for England. Germany's ultimate object in sending the Commission to Egypt and India was to discover the methods necessary for preventing the importation of cholera into Germany. Dr. Koch believed that the spread of cholera must sooner or later be a burning question for England; for he has convinced himself, by actual cases, notwithstanding the assertions made to the contrary, that cholera has been, and may very easily be again, transported from India to Egypt. In view of the quarantine measures that European nations would take if this plague were to pass through the Suez Canal, it is of the greatest importance to England to know how to prevent this.

This year's International Hygiene Congress is to be held at the Hague, from August 21st to August 27th. French will be the language used. Several Frenchmen have announced their intention to deliver addresses at the Congress, but there are also announcements from all parts of the world. Professor Pasteur will give an account of his recent investigations on the Modification of Virulence of Infectious Poisons; Professor Von Kelnburg, of Bonn, will discuss "The Progress in the Science of Infectious Poisons and their Uses for Hygienic Purposes"; Dr. Corfield, of London, will speak on "Science as the opponent of Disease; Dr. Stephen Smith, of New York, on "The Sanitary Service of the United States Navy"; M. Emile Trélat, of Paris, on "The Temperature of Rooms we live in and the Air we breathe"; M. Crocq, of Brussels, on "Drinking water." Professor Boeckh, of the Statistic Board for the town of Berlin, will deliver an address on "The Determination of Mortality according to the Causes of Death"; and Professor Schwappach, of Giessen, on "The Danger of Deforesting for the Moderate Climates of Europe." The following subjects to be treated in the various sections are also of interest:—"The Foundation of an International Medical Union for the Collective Investigation of Infectious Diseases," by Professor van der Corput, of Brussels; "The Question of Overburdening Pupils and Students," by Dr. Mouns Huizinga, of Haarlem; "The Right and Duty of the State to make Regulations for the Protection of the Health of Workmen."

The statement that Dr. Koch would deliver addresses at the above two Congresses is incorrect. The immense amount of work connected with his report makes it impossible for him to do so.

On May 24th a statue of the celebrated Professor Dr. Ludwig von Buhl, the eminent pathologist, was unveiled at Munich in the presence of the Minister of Education, the rector of the University, and a large number of other persons. Professor von Buhl was associated with Professor von Pettenkofer, and has rendered great services to Munich, having after a great deal of trouble established a special Chair there for Pathological Anatomy, and Histology. His services to medical science are well known to medical world.

CORRESPONDENCE.

HOSPITAL SUNDAY.

Sir,—On Sunday next, June 15th (Hospital Sunday), the inhabitants of London and its suburbs will be asked to contribute at the various churches and chapels in aid of the metropolitan hospitals and dispensaries. In 1873, the first Hospital Sunday collections were made in London, and produced £27,700. Last year, the Fund reached close upon £34,000, showing a satisfactory increase. We have within the metropolitan area 2,024 places of worship; and their congregations are asked to give on this one Sunday in the year their aid to 102 hospitals and 51 dispensaries, which annually provide for the treatment of fully 74,000 in-patients and 920,000 to 930,000 out-patients. The well working of such a large and beneficent charity as this is cannot fail to attract universal interest, sympathy, and attention.

The population of London may reasonably be estimated at 4,000,000; and when it is found that, out of these, something short of 950,000 persons are forced by the poverty of their circumstances and surroundings to seek gratuitous dispensary or hospital treatment, I feel that the managers of the Hospital Sunday Fund have urgent claims on the sympathies of all. Let me, therefore, ask the various congregations on Sunday next to give liberally, to provide during the year for the sick and suffering poor in our hospitals.

From those who may be absent from church or chapel I shall be glad to receive donations at the Mansion House, it being only by a simultaneous and hearty action on Hospital Sunday that we can hope to raise a sum which shall be worthy of a rich and prosperous city.—I am, sir, your obedient servant,

R. N. Fowler, Lord Mayor.

The Mansion House, London, E.C.

THE INTERNATIONAL MEDICAL CONGRESS.

Sir,—For gentlemen attending the meeting of the British Medical Association in Belfast, and desirous of visiting the International Medical Congress in Copenhagen, we may say that the best and cheapest route from Belfast would be *viâ* Liverpool and Grimsby and Hamburg, thus avoiding the expensive journey to London. The fare from Belfast to Copenhagen and back would be £7 15s. 6d. first class, £7 0s. 6d. second class. The steamers leave Grimsby every Wednesday and Saturday, after arrival of the train leaving Liverpool at 11.20 A.M.—Yours respectfully,

Thomas Cook and Son.

KENT-JONES APPEAL FUND.

Sir,—I am glad to be able to acknowledge the following further donations to the above fund, the unfortunate circumstances of the object of which are recorded in the Journal of May 24th: "A Brixton Pill," £1; Richard Lewis, Esq. (Westminster), £1; Thos. Langston, Esq. (Westminster), 10s.; Dr. Birkbeck Nevins (Liverpool), £5.—Your faithful servant,

J. Lloyd-Roberts.

Denbigh, June 11th, 1884.

THE ETHICAL COMMITTEE OF THE METROPOLITAN COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

Sir,—Towards the end of last year, a complaint was made by a medical officer of one of the smaller hospitals of London as regards the conduct towards him of two of his colleagues. The matter was referred to the arbitration of the Ethical Committee of our Branch; and, after bestowing on it much time and care, an award was arrived at, which was subsequently considered and confirmed by the Council of our Branch, and signed by me as Chairman of the Committee and as President of the Branch.

This award was communicated to the three parties specially interested, and it was hoped that the result would be that all past differences would be forgotten, and that, for the future, complete forbearance would be shown by the several parties concerned towards each other.

I extremely regret to find that this award has been recently, after a lapse of five months from the time when it was made, reprinted and extensively circulated, not only in England, but in Scotland, without any word of explanation as to who issued it; and, my name being attached to it, the circular has the appearance of being forwarded by myself, and with the sanction of the Council.

I am in consequence obliged to state that the reprinting of the award has been done, and the circulation of it has been made, entirely without my sanction or knowledge, and without the sanction or knowledge of the Council; and at a meeting of the latter yesterday, I was unanimously requested to state that it was never intended that the award should be used in such a manner as it has been, and that the reprinting and circulation of it have the emphatic disapprobation of the Council.—I am, sir, faithfully yours,

Charles J. Hare, M.D., President of the Metropolitan
Counties Branch of the British Medical Association,
and Chairman of the Ethical Committee of the Branch.
Berkeley House, Manchester Square, W., June 7th, 1884.

THE CONSTITUTION OF THE LONDON COLLEGE OF PHYSICIANS.

Sir,—Your leader last week on the recent occurrences at the College of Physicians, and the inferences which you draw as to the necessity for a change in the mode of government of the College, which shall admit the Members to a larger share of responsibility, open up a vista of change from which, no doubt, many will shrink. But the prospect is one which must be faced; and the changes indicated will surely come. The close form of government peculiar to the College is the relic of a time when all corporations were more or less self-elected close bodies, created by regal favour as select and exclusive bodies. The College of Physicians has long since advanced from this antiquated position, and enlarged its boundaries. It has a constituency of physicians, who are not hospital-officers, but general practitioners; who are not the less educated and influential men, and are rapidly becoming a majority of, if not in, the College. The time has come to determine their position in reference to the administration of a body of which they are important constituents, and which cannot long continue to treat them as mere excrescences. When the new growth becomes more bulky than that from which it has sprung, and to which it is attached, it is necessary to rearrange the conditions of life. Amputation is, no doubt, one method; but, short of this, other and more invigorating remedies naturally suggest themselves, and will, it may be hoped, be employed.

It cannot be anticipated that the general body of Members and Licentiates will long consent to be treated as persons unworthy of the suffrage, and incapable of sharing the responsibilities of self-government.—I am, sir, yours faithfully, Progress.

HOSPITAL AND DISPENSARY MANAGEMENT.

HOME HOSPITALS ASSOCIATION.

The sixth annual meeting of the Home Hospitals Association for paying patients was held on Tuesday afternoon in the Egyptian Hall of the Mansion House, the Lord Mayor in the chair. His lordship explained the objects of the organisation, tracing its origin to a meeting held in the same hall seven years ago in the mayoralty of Sir Thomas White. During that time the system of payment by patients according to their means for the treatment they receive when inmates of a hospital had rapidly grown in public favour. The annual report, as read by Mr. Tomkins, the acting secretary, showed that two of the principal endowed hospitals, St. Thomas's and Guy's, had adopted the system. The London Hospital, the largest of these institutions, is promoting a Bill in Parliament to enable the governors to admit paying patients, and many provincial hospitals, notably the Royal Albert at Devonport, were preparing to follow suit. Statistics were furnished to show that the demands on the Association at Fitzroy House were steadily increasing; and of the whole number of applications received, a considerable number had to be refused. The financial condition of the Association is highly satisfactory, and its promoters would be willing to establish and manage convalescent home hospitals, and especially one for the reception of infectious cases, providing those classes of the community who were likely to avail themselves of its facilities subscribed £10,000 additional capital, which would be required for this purpose. The new home which it is proposed to establish for the reception of infectious convalescents would be of the highest public utility, and we trust no difficulty will be found in carrying out so useful a project. The adoption of the report was moved by the Duke of Northumberland, seconded by Dr. Quain, and carried. Sir Risdon Bennett moved the second resolution, declaring that the complete success which had attended the establishment of home hospitals justified the Association in taking steps to form convalescent home hospitals for paying patients, and expressed his conviction that the suggestion was one of the highest possible importance. Mr. Alderman Stone, treasurer of St. Thomas's Hospital, seconded the motion, which was supported by Dr. Mahomed and Dr. Theodore Williams.

MEDICO-LEGAL AND MEDICO-ETHICAL.

FEES OF MEDICAL WITNESSES AT SESSIONS.

Sir,—Two weeks ago, I was subpœnaed by the Crown to give evidence in a case of felony, at the Clerkenwell Sessions, the prisoner having been a patient of mine. I was in attendance at the sessions for four days, from 10 to 4 P.M. daily. During these days, it is needless to say that my practice was much neglected, my patients much disappointed, and, in a few instances, patients lost. I do not think medical men are treated harshly in being subpœnaed when their evidence is useful in enabling justice to arrive at a more accurate conclusion; for I am a firm believer in justice to all men, hence I am a believer in every man being adequately remunerated for services rendered.

Looking at my own case, I think (as I dare say you, or any of your readers will) that justice was, indeed, very one-sided. Why I say so is this: that, after the trial, I applied at the court for my fee, when I was advised to call upon the Solicitor for the Treasury at Whitehall. I drove down there, and was informed that I must make application by letter. Returning home, I did so, and was duly forwarded a cheque for the extravagant sum of £4 4s.; from which, if I deduct cab-fares, luncheon, and pay to a *locum tenens*, you will readily perceive, not what the balance is, but what I have been out of pocket.

Surely justice is as great a consideration to medical men as lawyers. Lawyers look to their pockets as well as to justice, and generally succeed, in the former, at least. I, therefore, feel it is truly a shame that our more humane and all important profession should be so trodden upon as to allow this state of things to continue. If medical men, in addition to loss and inconvenience, are to receive the wages of an ordinary mechanic, a sum which the Crown evidently think adequate for the services rendered, it would at least show some consideration for doctor and patient if it were the custom to summon the former by telegram or special messenger immediately before the case comes on for hearing; and thus, by relieving the pockets of the Crown, add to our own pockets, to our own comfort, and to the comfort of our patients. I should be pleased to know if I cannot legally claim more for my four days' attendance, or, in the case of another similar subpœna, if I can claim exemption from attendance.

Hoping I have not trespassed too far upon the limited space of your valuable Journal, I enclose my card, and will be pleased to read any observations you or your readers may make upon the grievance of, yours very truly, J. L. C.

⁂ We quite agree that the scale of allowance to witnesses is often very inadequate. But, until it is revised, witnesses, at any rate in criminal cases, have no power to insist on higher payment. Under an Act passed in 1851 (14 and 15 Vic., c. 55), a Secretary of State is empowered to make "regulations as to the rates or scales of payment of costs, expenses, and compensations to be allowed, or ordered to be paid, to prosecutors and witnesses, and persons attending the court in obedience to any recognisance or subpœna in cases of criminal prosecutions." An elaborate scale of costs was issued by the Home Office in 1858, and is the one now in force. Under it, the highest allowance to prosecutors and witnesses, being members of the profession of law and medicine, is one guinea per day, with a small addition for travelling expenses. The courts may, in certain cases, order additional remuneration to witnesses who have been especially active in apprehending offenders; but this power is not likely to be of much benefit to gentlemen who have to attend in their professional capacity.

While the present scale of allowances remains in force, we fear that witnesses in criminal cases must put up with inadequate payment, and console themselves as best they may by the thought that, like jurymen, they are giving up their time for the public service. The hardship might, of course, be minimised by improving the arrangements as to settling beforehand when cases will be taken, and so avoiding the unnecessary waste of time caused by the attendance of witnesses on days when they are not wanted. The Home Secretary might also revise the scale of fees, so as to sanction the payment of proper compensation to those who attend. But, unless the class of men who are aggrieved unite and make their grievance felt, nothing will be done, and medical witnesses will continue to waste their time in courts when they need not be there, and to lose patients and fees which are not repaid by the country. It must always be remembered, however, that medical witnesses summoned as experts, and not as mere witnesses of fact, can dictate their own terms; and can even, if they choose, make them so high as to be practically prohibitive. Medical men who do not choose to give expert testimony can protect themselves, just as they can practically settle for themselves their own chosen scale of fees in other parts of their work.

MEDICAL ETIQUETTE.

Sir,—The following case has been the subject of dispute between myself and a neighbouring practitioner. May I ask you kindly to give your opinion upon it? The facts are as follows.

I had a case under treatment for a week or two, and was then told by the patient's wife that friends were worrying her to let someone else see him, and had mentioned the name of a neighbouring practitioner; but that neither she nor the patient desired it.

I offered to meet any consultant they might wish; or, if they would prefer a change, give the case up altogether. They both expressed themselves as perfectly satisfied, and requested me to continue attendance.

Upon making my usual visit one morning, I learnt that the practitioner in question had been sent for; that he had seen the case, and intended to continue the attendance.

His reason for so acting appears (as per enclosed correspondence) to be because he was told I refused to meet him. I wish to state I was never asked to do so; but, even supposing I had been, and had refused, would he be justified in taking the case, before notice had been given me to discontinue my attendance? I enclose my card; and remain, sir, yours truly,

M.D.

*** We have also received from Dr. M., the practitioner referred to in the letter of "M.D.," a note in which he states that the patient's wife had informed him that she had expressed to "M.D." her wish that Dr. M. should see her husband, and that "M.D" had replied to her that "he would not meet Dr. M., or any other practitioner in the neighbourhood" (Dr. M. being a general practitioner); and that, "if he met any one, it must be a physician." Dr. M. considers that, under these circumstances, he was justified in complying with the patient's wishes.

The correspondence transmitted with the preceding inculpatory note (including Dr. M.'s rejoinder to M.D.'s statement of alleged facts, a copy of which was sent to him) reveals but too clearly the old, old story of a want of candour on the part of patients, and it may be the too confiding acceptance thereof by the superseding practitioner; which latter, having especial regard to the class of patient, should, ere taking charge of the case, have carefully assured himself, either by direct personal inquiry of the husband-patient or wife, or by a friendly call upon, or note to, "M.D.," that due intimation had been given to him that his services were no longer required, or that he had relinquished the case; or, as asserted, had declined to meet him (Dr. M.) in consultation (*vide* Dr. Styrap's *Code of Medical Ethics*, page 56, rule 9).

At the same time, we are of opinion that it was the duty of "M.D." to have met Dr. M.; who, although a "general practitioner," was a graduate in medicine, of good professional repute, his senior, also, by many years, and, moreover, the one practitioner whose advice was specially desired by the family, and whose reasonable wish and indisputable right should, in our opinion, have at once and willingly been assented to. It is, therefore, with regret, that we are unable, after a careful examination of the facts disclosed in the several letters which have passed between the disputants, to arrive at any other conclusion than that "M.D." has (unintentionally, no doubt) erred in the matter, and, as regards himself individually, acted unwisely.

Under the somewhat exceptional circumstances, we deem it well, as a simple act of friendly counsel to a comparatively young practitioner, to suggest to "M.D." the advisability of reconsidering his apparent intention to retire altogether from a case rather than meet "a neighbouring general practitioner" as a consultant thereon; a regrettable resolve to which (as we read it) he unequivocally gives expression in his final letter to Dr. M.; and which not only conveys an unjust reflection upon the great body of the profession, represented in the person of the trusted "family doctor," but will assuredly, sooner or later, if persisted in, react injuriously upon himself

INDIA AND THE COLONIES.

AUSTRALIA.

DINNER TO MR. T. N. FITZGERALD.—On March 20th, Mr. T. N. Fitzgerald, Surgeon to the Melbourne Hospital, and Lecturer on Clinical Surgery in the University of Melbourne, was entertained at dinner by the members of the medical profession. About ninety gentlemen were present, and among the guests was his Excellency the Marquis of Normanby, Governor of Victoria. Dr. Brownlees, Vice-Chancellor of the University of Melbourne, occupied the chair. In proposing the toast of "The Governor," the chairman spoke of the particular interest his Excellency had always taken in the medical profession. After responding, the Marquis of Normanby proposed the toast of "Mr. Fitzgerald," of whose eminence as a surgeon he spoke in warm terms. Mr. Fitzgerald having replied, Professor Allen, on behalf of the Medical Society of Victoria, read a letter authorising Mr. Fitzgerald to represent the Society during his visit to Europe; and Dr. Neild read a similar communication on behalf the Victoria Branch. Testimony was also borne to the professional attainments and high personal character of Mr. Fitzgerald by Dr. Neild, Professor Allen, and Professor Halford.

PRIZE.—The Council of the Linnean Society of New South Wales offers a prize of £100 for the best original essay on "The Life-History of the Bacillus of Typhoid Fever." The author must confine himself to facts observed by himself, under methods which are to be clearly explained. Essays must be in English, and must be sent under a distinguishing motto to the Society's house, 54, Philip Street, Sydney, on or before December 31st.

TYPHOID FEVER. The *Australian Medical Gazette* for April reports that typhoid fever was on the increase in Sydney and the suburbs. On April 1st, there were 39 cases in the hospital. The average number of admissions for some time had been 12 per week. The disease is also reported as being prevalent at Dunedin, New Zealand, in different parts of the colony of South Australia, and at several places in Victoria.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Friday, June 6th.

Burgh Police and Health (Scotland) Bill.—The LORD-ADVOCATE, in moving the second reading of this Bill, explained that its object was one of consolidation and amendment. Scotland had had a succession of Bills dealing with the subject of the government of urban constituencies, and in 1862 a well-known statute was passed by which all the legislation on the subject was formulated. They had now had more than twenty years' experience of that Act, and in the course of that time a number of amendments had appeared to be fitting and desirable, and the object of this Bill was to amend and consolidate the existing provisions of the various Acts. He would only say further that, if the House should vouchsafe a second reading to the Bill, the proposal of the Government would be that it should be referred to a Select Committee. The right hon. gentleman concluded by moving the second reading of the Bill.—Sir R. CROSS said he would not oppose the second reading, but would defer his remarks until the Bill reached a future stage. He was glad that the right hon. gentleman had consented to refer the measure to the consideration of a Select Committee.—Mr. ANDERSON remarked that a notice against the Bill stood in his name on the paper; but he did not intend to make a speech against the second reading, inasmuch as his objections had reference rather to the details than to the principle of the measure.—The Bill having been read a second time, was, on the motion of the LORD-ADVOCATE, referred to a Select Committee.

Dr. C. Browne's Reports.—Mr. RAIKES asked the Vice-President of the Council whether he would be able to lay before the House the reports of Dr. Crichton Browne and others on over-pressure in elementary schools, *in extenso*, before moving the Education Votes in Committee of Supply.—Mr. MUNDELLA: The reports on over-pressure have not yet all come to hand, and the Bradford report has only just been received, so that I shall not be able to lay any summary of them before the House before the Education Estimates are moved, as I believe they will be, next Monday. During the recess I have had an opportunity of reading the voluminous and highly controversial letter of Dr. Crichton Browne, and I certainly could not make myself responsible for its publication *in extenso*.—Mr. LEIGHTON asked whether the right hon. gentleman would modify the New Code in consequence of the reports.—Mr. MUNDELLA: Certainly not.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.—In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 8,762,354 persons, 4,832 births and 3,286 deaths were registered during the week ending the 7th instant. The annual rate of mortality per 1,000 persons living in these towns, which had been 19.9 and 20.0 in the two preceding weeks, declined to 19.6 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow:—Leicester, 14.1; Brighton, 14.3; Newcastle-upon-Tyne, 14.5; Norwich, 15.6; Birkenhead, 16.1; Cardiff, 16.2; Salford, 16.4; Bristol, 16.5; Derby, 16.7; Blackburn, 17.0; Nottingham, 17.3; Bolton, 17.7; Hull, 18.1; London, 18.9; Bradford, 18.9; Birmingham, 19.4; Huddersfield, 19.4; Sunderland, 20.3; Plymouth, 20.7; Sheffield, 21.0; Portsmouth, 21.2; Liverpool, 22.8; Manchester, 23.1; Preston, 23.1; Leeds, 25.5; Halifax, 26.6; Wolverhampton, 28.6; and Oldham, 28.9. In the twenty-seven provincial towns the death-rate last week averaged 20.1 per 1,000, and exceeded by 1.2 the rate recorded in London. The 3,286 deaths in the twenty-eight towns included 163 which resulted from measles, 131 from whooping-cough, 62 from scarlet fever, 48 from small-pox, 42 from diarrhœal diseases, 39 from "fever" (principally enteric), and 24 from diphtheria; in all, 509 deaths were referred to these principal zymotic diseases, against 497 and 500 in the two preceding weeks. These 509 deaths were equal to 15.5 per cent. of the total deaths, and to an annual rate of 3.0 per 1,000. In London the zymotic death rate was equal to 3.7 per 1,000, whereas it did not exceed 2.5 in the twenty-seven provincial towns, among which it ranged from 0.6 and 0.9 in Derby and Brighton, to 5.3 in Wolverhampton, and 6.4 in Oldham. The deaths referred to measles, which had been 156 and 159 in the two preceding weeks, rose last week to

163, and showed the highest proportional fatality in Portsmouth, Oldham and Wolverhampton. The 131 deaths from whooping-cough showed a further slight decline from the numbers returned in the four previous weeks; this disease caused the highest rates of mortality in Sunderland and Liverpool. The fatal cases of scarlet fever, which had been 70, 68, and 65, in the three preceding weeks, further fell to 62, a lower number than has been recorded in any week since the middle of 1883; it showed, however, fatal prevalence in Leeds, Sheffield, and Oldham. The 39 deaths from "fever" corresponded with the number in the previous week. The 24 fatal cases of diphtheria showed a further decline from recent weekly numbers, and included 16 in London. The deaths referred to small-pox in the twenty-eight towns showed a further increase upon those returned in the two preceding weeks; 40 were recorded in London (exclusive of 20 registered in the hospital-ship *Atlas*, and in the Convalescent Camp, both situated outside Registration London), 3 in Liverpool, 2 in Hull, 1 in Birmingham, 1 in Sunderland, and 1 in Cardiff. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had risen from 148 to 1,057 in the eleven preceding weeks, further increased to 1,096 on Saturday last; 155 new cases were admitted to these hospitals during last week, against 237 and 370 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 3.3 per 1,000, and was slightly below the average. The causes of 77, or 2.3 per cent., of the 3,286 deaths registered in the twenty-eight towns were not certified either by medical practitioners or by coroners. In London the proportion of uncertified deaths did not exceed 0.9 per cent., while it showed a considerable excess in Sheffield, Leicester, Oldham, and Birkenhead.

Health of Scotch Towns.—During the week ending the 7th inst., 951 births and 561 deaths were registered in the eight principal Scotch towns, having an estimated aggregate population of 1,254,607 persons. The annual rate of mortality, which had been 22.3 and 22.7 in the two preceding weeks, further rose to 23.3 last week, and exceeded by as much as 3.7 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns the death-rate was equal to 12.9 in Greenock, 18.0 in Leith, 22.1 in Dundee, 23.0 in Edinburgh, 23.5 in Perth, 24.8 in Aberdeen, 25.0 in Glasgow, and 27.7 in Paisley. The 561 deaths registered last week in these towns included 99 which were referred to the principal zymotic diseases, against 88 in each of the two preceding weeks; of these, 36 resulted from whooping-cough, 24 from measles, 15 from diphtheria, 12 from diarrhœal diseases, 6 from "fever," 6 from scarlet fever, and not one from small-pox. These 99 deaths were equal to an annual rate of 4.1 per 1,000, which was 1.1 above the average zymotic rate in the large English towns. The zymotic death-rates in the Scotch towns ranged from 1.4 and 2.8 in Greenock and Aberdeen, to 6.2 and 6.3 in Paisley and Leith. The fatal cases of whooping-cough, which had declined from 43 to 32 in the three previous weeks, rose again to 36, and included 22 in Glasgow, and 10 in Edinburgh. The 24 deaths referred to measles showed a considerable further increase upon recent weekly numbers; 7 were returned in Leith, 6 in Dundee, and 5 in Paisley. The 15 fatal cases of diphtheria exceeded by 3 the number in the preceding week, and included 7 in Glasgow, 3 in Edinburgh, and 3 in Aberdeen. The 6 deaths from "fever" showed a further decline from those in the two previous weeks; and of the 6 fatal cases of scarlet fever 4 occurred in Glasgow, and 2 in Edinburgh. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 4.2 per 1,000, against 3.3 in London. As many as 77, or 13.7 per cent. of the 561 deaths registered last week in these towns were uncertified.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following Members of the College, having undergone the necessary examinations for the Fellowship at meetings of the Court of Examiners on the 29th, 30th, and 31st ultimo, were reported to have acquitted themselves to the satisfaction of the Court, and, at a meeting of the Council on the 12th instant, were admitted Fellows of the College.

Messrs. G. Pearse, M.D.St. Andrew's, Leicester, diploma of membership dated April 25th, 1862, and J. S. Karser, M.D.Bâle, Queen Anne Street, April 14th, 1882, students of St. Thomas's Hospital; T. Thyne, M.D.Edin., Twickenham, July 28th, 1863, of the Edinburgh School; H. Briggs, M.D.Edin., Liverpool, July 24th, 1877, of the Liverpool School of Medicine; J. W. Sanders, L.R.C.P.Lond., Bethnal Green, November 17th, 1878, R. H. Perks, L.R.C.P.Lond., Hampstead, July 24th, 1881, and L. A. Dunn, M.B.Lond., Brighton, April 20th, 1882, of Guy's Hospital; W. G. Evans, L.R.C.P.Lond., Colchester Street, S.W., May 20th, 1880, and E. H. Holthouse, M.B.Cantab., Helidon, Northamptonshire, January 21st, 1881, of King's College; G. C. R. Bull, L.R.C.P.Lond., Dover, July 21st, 1880, of St. Mary's Hospital; C. E. Jennings, L.R.C.P.Lond., Malmesbury, April 14th, 1881, of the London Hospital; C. Stonham, Gower Street, W.C., November 17th, 1881, of University College; J. M. Rogers, L.S.A., Berners Street, W., January 26th, 1883, and J. B. Sutton, L.R.C.P.Lond., Gower Street, W.C., April 4th, 1882, of the Middlesex Hospital; R. L. Knaggs, B.A.Cantab., and L.R.C.P.Lond., Putney, November 14th, 1883, and W. Fowler, M.A.Cantab., Old Burlington Street, W., November 15th, 1883, of the Cambridge School; S. White, M.D.Dub., Sheffield, of the Galway School of Medicine; and J. F. Bullar, M.B.Cantab., Southampton, July 30th, 1880, of St. Bartholomew's Hospital.

Three other candidates who also passed cannot be admitted until attaining the legal age of 25. Seven candidates were referred to their studies for twelve months. At the same meeting, W. J. Collins, M.D.Lond., Albert Terrace, N.W., July 28th, 1880, who passed in November last, having attained the age of 25, was also admitted a Fellow of the College.

Royal College of Physicians of Edinburgh.—The following gentlemen have been admitted licentiates of the College.

Messrs. E. B. Denny, Dublin; T. B. Cross, Scarborough; G. S. Pollard, Norfolk; T. B. Luscombe, Teddington; E. T. Yeates, Balbriggan; W. C. G. Collins, London; J. Newton, Manchester; H. J. C. Godfrey, London; R. D. D. Williams, Swansea; G. C. Hawkins, Teignmouth; G. P. Longman, Southampton; A. R. Rackham, Old Catton, Norfolk; S. R. Lelard, Hull.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 5th, 1884.

Brown, Lewis, 28, Chorley Old Road, Bolton, Lancashire.
Watson, James Russell, 31, Moore Street, Chelsea.

The following gentlemen also on the same day passed their Primary Professional Examination.

Hensley, Philip Henry, King's College.
South, Frederick William Berry, Guy's Hospital.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN. Acting Physician. Applications by July 9th.

BOSCOMBE PROVIDENT INFIRMARY, Bournemouth.—Resident Medical Officer. Salary, 60l. per annum. Applications by June 28th.

CHORLTON-UPON-MEDLOCK DISPENSARY.—House Surgeon. Salary, 100l. per annum. Applications to Mr. Adam Fox, [illegible], Princess Street, Manchester.

CLOGHER UNION.—Medical Officer, Clogher Dispensary. Salary, 125l. per annum. Applications by June 21st, to W. H. [illegible], Honorary Secretary, the Manse, Clogher.

CORNWALL WORKS DISPENSARY.—Second Medical Officer. Salary, 200l. per annum. Apply for further particulars to S. T. Darby Weston, 58, Booth Street, Handsworth, Birmingham.

COUNTY ASYLUM, Whittingham, Lancashire.—Dispenser. Salary, 50l. per annum. Applications to the Medical Superintendent.

COUNTY AND COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY.—House-Surgeon. Salary, 100l. per annum. Applications to Mr. H. Howells, 11, Morley Street, Carmarthen, by July 12th.

CUMBERLAND AND WESTMORLAND ASYLUM.—Assistant Medical Officer. Salary, 80l per annum. Applications to Dr. Campbell, Garlands, Carlisle.

DROMORE WEST UNION.—Medical Officer, Skreen Dispensary. Salary, 120l. per annum, and fees. Election on June 19th.

DUDLEY DISPENSARY.—Resident Medical Officer. Salary, 130l. per annum. Applications by July 1st.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Applications by June 23rd.

FULHAM UNION. Assistant Medical Officer. Salary, 100l. per annum. Applications by June 16th.

HAVERSTOCK HILL AND MALDEN ROAD PROVIDENT DISPENSARY.—Registered Practitioner. Application by June 14th.

HEREFORD GENERAL INFIRMARY.—Dispenser. Salary, 40l. per annum. Applications by July 7th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by June 14th.

KINGTON UNION.—Medical Officer and Public Vaccinator. Salary, 50l. per annum. Applications by June 30th.

LEEDS PUBLIC DISPENSARY. Junior Resident Medical Officer. Salary, 80l. per annum. Applications by June 23rd.

LIVERPOOL DISPENSARIES.—Assistant House-Surgeon. Salary, 108l. per annum. Applications to R. R. Greene, 34, Moorfields, Liverpool, by June 24th.

NOTTINGHAM FRIENDLY SOCIETIES' MEDICAL INSTITUTION.—Assistant Medical Officer. Salary, 150l. per annum. Applications to Mr. J. Lee, 46, Upper Eldon Street, Sneinton, Nottingham, by June 19th.

OWENS COLLEGE, Manchester.—Lecturer in Dental Surgery. Applications by June 16th.

OWENS COLLEGE, Manchester.—Special Lecturer in Dental Mechanics and Dental Metallurgy. Applications by June 16th.

PARISH OF CHELSEA. Medical Officer of Health, Food and Drugs Analyst, and Gas Examiner. Salary, 450*l.* per annum. Applications by June 17th.

PARISHES OF NORTHMAVINE AND DELTING, Shetland. Medical Officer. Salary, 60*l.* per annum. Applications to Mr. Robert Robertson, Inspector of Poor, Delting, Shetland, Lerwick, by June 30th.

QUEEN'S COLLEGE, Birmingham.—Professor of Anatomy. Salary, 262*l.* 10s. per annum. Applications by June 30th.

ROYAL BERKS HOSPITAL. Assistant House-Surgeon. Applications by June 17th.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road. House Physician. Salary, 80*l.* per annum. Applications by June 17th.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.—Honorary Physician. Applications by June 25th.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN.—Administrator of Anæsthetics. Applications to be addressed to St. V. Mercier, Esq., Secretary, St. John's Hospital, Leicester Square.

ST. MARY'S HOSPITAL MEDICAL SCHOOL.—Professor of Physiology. Applications to G. P. Field, Dean.

TOWCESTER UNION.—Medical Officer and Public Vaccinator. Salary, 50*l.* per annum. Applications by June 23rd.

TOWN OF CALCUTTA.—Health Officer. Salary, Rs. 1,250 per month. Applications to the Secretary to the Municipality, Calcutta, by July 15th.

WEST LONDON HOSPITAL, Hammersmith, W.—Assistant-Physician. Applications by June 30th.

YORKSHIRE COLLEGE, Leeds.—Professor of Physiology. Guaranteed Stipend not less than 300*l.* Applications by July 2nd.

YORK COUNTY HOSPITAL.—Assistant House-Surgeon. Salary, 50*l.* per annum. Applications by June 21st.

MEDICAL APPOINTMENTS.

Awdry, W. R., M.B., appointed Resident Assistant Surgical Officer to the General Hospital, Birmingham.

Brown, H. H., M.B., appointed Visiting Surgeon to the Chester General Infirmary, *vice* F. J. Salter, L.R.C.P., resigned.

Cockell, E. S., M.R.C.S.E., appointed Medical Officer to the Hartlepool Friendly Societies' Medical Association, *vice* J. J. Weir, M.B., resigned.

Davies, G. H., L.R.C.S. and L.R.C.P.Ed., appointed Honorary Ophthalmic Surgeon to the Blackburn and East Lancashire Infirmary.

Ogle, A., M.R.C.S., appointed Resident Medical Officer to the St. Marylebone General Dispensary.

Richards, Thomas, M.B.Edin., Assistant-Physician, appointed Honorary Physician to the Birmingham and Midland Free Hospital for Children, *vice* F. Marshall, M.B.Lond., resigned.

Stewart, A., L.R.C.P., appointed Honorary Surgeon to the Borough Hospital, Birkenhead, *vice* S. Spratley, M.D., resigned.

Stoker, George, M.K.Q.C.P., M.R.C.S., appointed Surgeon to the Hospital for Diseases of the Throat and Chest, Golden Square.

Thomson, J., M.B., appointed Junior Resident Medical Officer to the Hospital for Sick Children, Great Ormond Street, *vice* H. Smith, M.B.

Thomson, St. Clair, M.B., appointed Resident Medical Officer to the Queen Charlotte's Lying-in Hospical, *vice* J. B. Woolby, L.R.C.P., resigned.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

Critchett.—On the 7th instant, at 21, Harley Street, the wife of G. Anderson Critchett, of a son.

Harris.—At 1, Kenyon Terrace, Birkenhead, on June 4th, the wife of Alfred C. L. Harris, M.B., F.R.C.S.E., of a daughter.

Ladell.—On May 31st, Mrs. W. J. Simpson Ladell, 27, Canonbury Road, N., of a daughter.

MARRIAGES.

Duncan—Rodgers.—On June 10th, at St. Matthias's Church, Richmond, by the Rev. G. R. Roberts, D.D., and the Rev. Canon Procter, Vicar of Richmond, William A. Duncan, M.D., M.R.C.P.Lond., F.R.C.S.Eng., of 6, Harley Street, Cavendish Square, W., son of the late William Anderson Duncan, M.D., London, to Ada Mary, only daughter of the late Joseph Rodgers, Esq., Selwyn Court, Richmond, Surrey, and Abbeydale, near Sheffield, Yorkshire.

Nicholls—Burtonshaw.—On the 4th instant, at St. Oswald's, Crowle, Lincolnshire, by the Rev. A. C. Radcliffe, M.A., assisted by the Rev. C. F. Brotherton, M.A., Walter James, second son of F. W. Nicholls, Esq., of Kingsland Road, to Julia, second daughter of the late Abraham Burtonshaw, Esq., of Crowle.

DEATHS.

Higginson.—On June 7th, Alfred Higginson, M.R.C.S., aged 7[illegible]

Lloyd.—On June 1st, at St. Albans, of typhoid fever, Ridgway R. Lloyd, M.R.C.S.Eng., L.S.A., aged 41.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Royal College of Surgeons of England, 4 P.M. Sir Henry Thompson: On Some Important Changes in Connection with the Surgery of the Urinary Organs.

WEDNESDAY.—Royal College of Surgeons of England, 4 P.M. Sir Henry Thompson: On Some Important Changes in Connection with the Surgery of the Urinary Organs.

FRIDAY.—Royal College of Surgeons of England, 4 P.M. Sir Henry Thompson: On Some Important Changes in Connection with the Surgery of the Urinary Organs.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........	St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.
TUESDAY	St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.
WEDNESDAY ..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.
THURSDAY	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.
FRIDAY	King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.
SATURDAY	St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

Charing Cross.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th.; Dental, M. W. F., 9.30.

Guy's.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

King's College.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

London.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

Middlesex.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S. 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

St. Bartholomew's.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

St. George's.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

St. Mary's.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

St. Thomas's.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

University College.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

Westminster.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications respecting editorial matters should be addressed to the Editor, 161a, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 161a, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal should be addressed to the Editor at the office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal, are requested to communicate beforehand with the Manager, 161a, Strand, W.C.

Correspondents who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered, are requested to look to the Notices to Correspondents of the following week.

Public Health Department.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

We cannot undertake to return manuscripts not used.

On the Etiology of Herpes Zoster.

Sir,—I had recently under my care a young woman suffering from repeated attacks of coryza. These attacks had for some weeks come on suddenly every second or third day; and, after lasting a few hours, would disappear as quickly. They were described by the patient as frequent colds, and diagnosed by me as manifestations of hay-fever. I treated her with arsenic and bromide of potassium, with the result that the attacks became less frequent, and after a few weeks' treatment disappeared altogether. About a fortnight after I had discontinued attendance, she had an attack of herpes zoster, which ran an ordinary course, and the outcoming of which seemed to have a very beneficial effect on her general health. The attack of herpes zoster may have been caused by the administration of the arsenic; but I am inclined to regard both attacks as illustrations of the same diathetical tendency, a neurotic one. I am inclined to think, though I have no exact data to go upon, that herpes zoster, like hay-fever, is more frequently met with at this time of the year, which, if so, would also seem to show some kinship between them. I may mention, too, as bearing on the point, that I know another young woman who has had several attacks of herpes zoster. This fact, though it does not negative, is, I think, adverse to, its exanthematous relationship. It appears to me perfectly conceivable that, if the pollen of grasses will in certain individuals produce the manifestations of hay-fever, some similar irritant or germ in atmospheric suspension may, when taken into the system of persons of identical temperament, give rise to herpes zoster.—I am, etc.,

A. R. Barnes, M.B.Ed.

Boreham Street, near Hastings.

Menthol; not Oil of Peppermint.

Sir,—At the time when I first wrote regarding the properties of menthol, Mr. Alfred Wright, then of Finchley, attempted, and now again (Journal, May 24th) attempts, to establish the proposition that, because he had learned, presumably while serving as assistant medical storekeeper to the Royal Naval Hospital at Hong Kong—that oil of peppermint was used by the Chinese for facial neuralgia, and had afterwards brought the good idea of the heathen Chinee to this enlightened country—therefore the use of menthol itself was known centuries ago, and introduced by him here. (See *Ringer* 7th ed., p. 380, and *Lancet*, September 6th and 20th, 1879.)

The statements of Mr. Wright and of Messrs. Cocking and Co. are founded on a fallacy. As thymol is not oil of thyme, and it has long been admitted that a horse-chesnut is not identical with a chesnut horse, so is menthol not identical with oil of mint (peppermint). But Mr. Wright seeks to connect himself with both, when obviously he must be linked only with one—the oil of peppermint, little used in this country; on the other hand, I need scarcely repeat my claim, as yet untouched by adverse proof, to the discovery of the properties of the now much used solid substance named menthol, which I regard as the active principle of the oil.—I remain, sir, your obedient servant,

A. Drummond Macdonald, M.B.Edin.

26, Spellow Lane, Liverpool.

Albo-Carbon Lights.

Sir,—In reply to "Junior Member," who asks for the experience of those who have used the albo-carbon lights, I may state that I have had them in constant use for the last four years, and have never experienced the least inconvenience from them; but, on the contrary, have regarded them as a decided improvement on the ordinary burners. In one room, situated in the basement, the beneficial effect has been most marked. With the ordinary burners, this room used to be simply unbearable, but now it can be used with perfect comfort, though there are three albo-carbon lights in it. With the lighting of my house I am quite satisfied, but not so with the water; and I shall feel obliged by being advised as to the best filter for domestic use.—I am, sir, yours faithfully,

L.R.C.P.(Lond.)

Sir,—I have used the albo-carbon light for more than four years, and can confidently say that, for pureness of light, absence of heat, and economy, I have never yet seen any gas-arrangement to equal it. But, at the same time, unless carefully attended to, there is a chance of the gas becoming too richly charged with naphthaline, and then the air in the room soon becomes unbearable; this need never happen if one be content with a very good light, and do not try to get more than the generator can afford. The worse the gas the more the benefit from the albo-carbon, for with very good gas it does not give much improvement. The washer in the screw-cap should be renewed occasionally, about once in a year or so, to make sure that no gas and vapour escape in that way.—I am, yours truly,

F. H. C.

Medical Self-Respect.

Surgeon-Major Alcock.—We are obliged by the observations on the recent leader and the approval expressed. Perhaps our correspondent can illustrate the subject by definite examples, or practical applications. We are inclined to think enough has been said on general principles.

Examinations in Sanitary Science.

A Candidate.—Among the principal books the study of which is recommended to candidates for certificates in sanitary science we find: Dr. Parkes's *Practical Hygiene*; Dr. George Wilson's *Handbook of Hygiene*; Dr. Edward Smith's *Manual for Public Officers of Health*, and *Handbook for Inspectors of Nuisances*; Michael, Corfield, and Wanklyn's *Manual of Public Health*, edited by Ernest Hart; Eassie on *Healthy Houses*; Baldwin Latham on *Sanitary Engineering*; Henry Law's *Rudiments of Civil Engineering*; Alexander Buchan's *Introductory Text-book of Meteorology*. A complete list of books recommended by the University of Cambridge, with the regulations, may be obtained on application to Professor Liveing, Cambridge.

Royal Medical Benevolent College.

Sir,—Dr. Winslow will deserve the lasting gratitude of all boys educated at the above school if his letter in the Journal of the 17th ult. would lead to the omission of the word "benevolent" from the name of the school; Epsom School or College is all that is desirable, or that good taste requires. The boys would much prefer it; their friends would not feel degraded, whilst the whole tone of the school would be improved.

I am not writing without having felt the pang of indignation on receipt of the bill for the term's board and tuition in advance, stamped "Royal Medical Benevolent," etc.—Yours obediently,

Pater.

Uncovering at Funerals.

Sir,—I wish to bring before your notice a question upon which I think the heads of our profession would confer a benefit if they gave a decided opinion, and this is the custom of taking off the hat at funerals. I was some months ago at the funeral of a late medical man in this town. It was an exceedingly cold day, and our cemetery is far from being protected from the east wind, as is the town itself, and the change from a warm brougham to the hillside was in itself far from pleasant. There were three clergymen present, two of whom took the precaution of covering their heads, one with a mortar-board, and the other with a scull-cap. All the relations and friends, however, with the exception of myself, kept their heads uncovered during the service.

Now, without in any way wishing to detract from the solemnity of the service, or our wish to do all honour to the dead, I do not think one is justified, especially with others dependent upon us, in running so great a risk. How often do we come across cases of serious, and even fatal, illness, the commencement of which was due to cold caught in this way, and with all due respect to the clergy, I fail to perceive the difference between a mortar-board or scull-cap, and an ordinary high hat.

Would it not be well either to bring into practice the use of our caps and gowns, or some similar articles, or to bring before the public the fact that we in no way mean disrespect if we do not raise our hats while the service is being read?—Your obedient servant,

J. B. Richardson, M.B.

The Towers, Torquay.

The Treatment of Gonorrhœa.

Sir,—Referring to a new method of treating gonorrhœa by the introduction of open wire bougies, described in the Journal of March 15th last, I quite agree with Dr. McVail when he says that the fossa navicularis is the part first to become affected with the specific inflammation, travelling thence along the urethra, and ultimately affecting severely the sinus of the bulb.

It is also obviously desirable that injections should find their way to every part of the canal which is affected, so as to come into direct contact with each spot; but I am not convinced that this should be accomplished by means of complicated instruments, such as his first form of wire bougie. Patients suffering from this disease naturally have a desire that the treatment thereof should be, as much as possible, simplified. That the same result may be obtained as that for which Dr. McVail's first form of bougie is designed, I have been in the habit of recommending patients to adopt the following simple plan.

After the syringe has been emptied and withdrawn, and while the thumb and index-finger of the left hand are still pressing on the meatus, the thumb above, the finger below, retaining the fluid in the urethra, the thumb and index-finger of the right hand are placed immediately behind those of the left, pressing the urethra tightly between them, the effect of which is to force the fluid along the canal, the distance of the breadth of those fingers. The thumb and forefinger of the left hand may now be placed behind those of the right in a similar manner, and with a like result; and so the process may be continued, hand over hand, the fluid being sent along in front of the fingers to any part of the canal desired. By the above method fluids may even be passed, if necessary, into the bladder, the pubic bone taking the place of the thumb in the last stage.

Respecting the second form of wire-bougie, which is intended to be worn constantly by the patient, so as to keep the urethra open and allow a free discharge of matter, I am not so certain that keeping the diseased mucous membrane constantly on the stretch is conducive to a speedy cure; and the keeping up of a free discharge, without provision being made for its reception, would obviously be a source of discomfort and annoyance. I have found better results from frequently repeated mild injections, on the principle represented above, with the view of limiting the formation of matter, than from devising means for its free evacuation.

W. P. Meharry, L.R.C.P., L.R.C.S.Ed., etc., Belfast.

The Bacillus of Tubercle.

Sir,—There are a few questions I should like to ask with regard to the bacillus of tubercle.

1. Are there on record any cases of tubercular meningitis or other tuberculous disease of the brain in which the bacilli have, beyond question, been found? 2. If so, must they not have found access by means of the blood? Then why should they select a distant organ like the brain? 3. Supposing the first two questions answered in the affirmative, does it not appear strange that tuberculous disease of the brain should not be more often met with as a secondary complication of phthisis—a disease in which the vessels should be in the most favourable condition for the absorption of contagious germs?—I am, sir, yours, etc.,

J. W. H. F.

⁂ 1. Yes. 2. Probably by the blood. Many theories might be given why the brain is often selected, but a completely satisfactory explanation is as yet wanting. 3. In phthisis, the bacilli do not gain access to the blood-vessels, which are blocked in that part of the tuberculous lesion where the bacilli are present. When they do enter the blood, tubercles occur in various organs, as, for example, in the brain.

Medical Titles and Degrees.

Sir,—I quite agree with Mr. William Donovan's remark, that the efforts to alter the regulations of the University of Durham will be unsuccessful, not, however, on account of the "narrow-minded and self-important university refusing to listen to reason," but rather because the "reason" is altogether on the other side. I am surprised at his statement that the profession is able to obtain the passage through Parliament of such a clause as he advocates. I believe the profession has neither the will nor the power to obtain an Act making it lawful for medical men to assume a title which only an university can bestow.

If the medical profession has this power, then the other professions, which have more political influence than we possess, must have power to obtain titles in the same manner; and in that case, all their members who have passed the several examinations necessary to enable them to practise their profession, would be able to assume the titles of D.D., LL.D., etc., whether they have gone through an university course or not. If degrees are to be obtained in this wholesale manner, without residence, without examination, and without fees, what will be the future position and functions of the universities of the United Kingdom? Truly their "occupation will be gone"; they will be improved off the face of the earth by a short clause in a medical Bill. I hope that very few of our profession will follow Mr. William Donovan's advice, and try "to impress strongly on their several M.P.'s" a wish for anything so impracticable, and, withal, so unjust to those who have expended time, trouble, and money to obtain in a legitimate manner that which he desires to procure by his "little addition" to the Medical Bill.—I am, sir, your obedient servant,

Justitia.

SIR,—The question now agitating the University of Durham cannot be fairly considered without taking into consideration the fact that general medical practitioners of various classes and qualifications receive, by almost universal consent, the title of "Dr." in their ordinary intercourse with their patients, their friends, and the public; and that in many districts it has been for a long period of time their custom to make use of this title—granted to them by courtesy—upon their door-plates, not with any intention of conveying the impression that they were graduates in medicine of a university, but because of its being customary to do so, and at the same time a convenient mode of letting the public know that they were not practising as pure surgeons or physicians.

These men, who acted thus in perfectly good faith, and who only made use of their exact professional qualifications in all legal or professional documents, now find that Parliament is about to enact a very stringent penal law, which will compel them either to take an university degree or to remove the plate from their doors, which has stood there for years. The universities render the first alternative impossible when they make it necessary that those who seek their degrees should reside and attend lectures at their colleges; while the latter alternative means professional degradation—possibly ruin.

Justice demands that the universities, which will profit most by this enactment, should (at least for a limited period of time) grant their medical degrees to any medical practitioner, registered for a certain number of years, who is able to pass a fair practical examination.

If the universities do not voluntarily grant this favour, it would not be unreasonable to expect that that the British Medical Association, which is the representative of the general practitioners of the United Kingdom, and which has very rightly used its great influence for the improvement of medical education in the country, should bring this view of the matter before our legislators. They are not deficient in that high sense of justice and fair play so characteristic of the English nation, and would no doubt cause a clause to be inserted in the Act, by which all those universities which do not make a degree in Arts necessary to the obtaining of a degree in Medicine, would be compelled to throw open their portals in this manner for four or five years, during which the penal clause of the Act would remain in abeyance as far as previously registered medical practitioners are concerned.—I am, sir, yours truly, FAIR PLAY.

SIR,—Allow me to request, through the JOURNAL, that all those interested in the question of medical titles should strongly impress on their Parliamentary representatives the urgency of the question, and the expediency of supporting the amendment contained in my letter in the JOURNAL of 31st ultimo. I also crave assistance from the profession, with the view of pressing the matter when the Bill is before the Committee of the House of Commons. I would also suggest that a meeting should be held in London when the Bill is before the Committee.—I am, sir, yours etc., WILLIAM DONOVAN.

SIR,—Some time since I published a small pamphlet (H. K. Lewis) on *Medical Degrees and Professional Quackery*, in which I pointed out that the effect of the new Medical Bill would be to give a still greater value to the meretricious estimate now set on most of the Scotch and the Irish medical degrees, since, with the exception of the degrees of the University of London, and, possibly, of Edinburgh, I believed that the L.R.C.P.Lond., M.R.C.S., as tests of professional knowledge, were at least equal to any other medical degrees granted in the United Kingdom. I therefore proposed that the English Royal Colleges should obtain a new charter, conferring on them the right of granting degrees instead of diplomas.

I would further suggest that no alteration be made in the conditions for admission to the Fellowships of the two Colleges, but that the M.R.C.P. examination, remaining at its present standard, should constitute the M.D. of the Imperial or English University, to be passed not less than two years after the L.R.C.P., now constituted the M.B. examination. The M.R.C.S. should be styled the Bachelor of Surgery, no Master's degree being instituted. In fairness to existing licentiates and members, the charter should have a retrospective effect.

Such a charter would increase the classes at the metropolitan schools, for English students would no longer have any cause to migrate, provided only that all "examining down" schemes be prevented.—I am, etc.,

SHIRLEY DEAKIN, F.R.C.S.Eng., Surgeon, Bengal Service.

M.D., BRUSSELS.

SIR,—The letters of "M.D. Brussels," in the JOURNAL, should be seen and read by all intending candidates for the degree. The printed regulations supplied by the University do not convey a fair impression of the requirements, nor of the kind of examination, they are expected to pass. No one is accepted as a candidate without the production of a double qualification, in both medicine and surgery, from some one or more of the British corporations. These diplomas have to be presented at the University two days previous to the examination, and are retained by the authorities for inspection and reference during the test. Before I went over to Brussels in December [illegible], I took some considerable pains to ascertain particulars relating to the examination from men who held the degree. They one and all warned me not to go unprepared for a thoroughly good and searching test in practical and theoretical work. My experience fully confirmed the accuracy of their reports. Of the nine candidates who then presented themselves (which number included two who had been up before) only four succeeded in satisfying the examiners.

For some years past the rejections have reached nearly 60 per cent. This is an important statement when taken in conjunction with the fact that all the candidates are obliged to be registered medical practitioners with double qualifications. I have no hesitation in saying that the examination is very thorough, and conducted with such fairness and attention to detail (especially in clinical knowledge), that it will bear favourable comparison with any of our own. When all the British universities are closed to the busy practitioner by impossible conditions of prolonged residence, or restrictions to a certain age, there is something sad in the reflection that, after the expenditure of time, money, and with additional reading if successful at the examination, he is unable to call himself "M.D. Brussels." ANOTHER M.D., BRUSSELS.

ANÆMIA AND THE SUPRARENAL CAPSULES.

SIR,—I somewhere (I think in the JOURNAL) saw lately an article on this subject, with suggestions as to treatment; something new to me. I cannot find it again. Will some member kindly refer me to it, if in the JOURNAL? or, if not, can someone give me the headings of theory and treatment in a few words, and oblige, yours obediently, S.

MEDICAL REFORM.

SIR,—Your statement in the JOURNAL (June 7th, p. 1108) does not relate the whole of the facts concerning my letters. The substance of the letter published on June [illegible] was sent to you two months before, and I referred to Dr. Waters, of Chester, from whom I had a very courteous and detailed reply. Nothing was, however, done by the Medical Reform Committee in the way of altering the clauses in the direction I desired, and I again wrote, suggesting a slight alteration in the existing words of the proposed Act dealing with the penal clauses. Now I did not complain of suppression of my letters, and had others been allowed equal liberty, perhaps part of the feeling aroused would have remained in abeyance. There is, as you must be aware, a great apathy amongst the members concerning medical legislation. General practitioners complain loudly enough in private, but their engagements often prevent them from attending Branch or annual meetings. The only means, therefore, of making their sentiments known is through the columns of the JOURNAL. Some from want of courage, others from want of time, content themselves with letting the work of suggesting alterations, and pressing them upon the notice of the leaders of the Association, be done by the more courageous few. In order to stimulate the zeal of the former, it is sometimes only necessary to let them see that others are stirring in the matter to rouse them to give public expression to their private growlings. Seeing that the penal clauses affect most the interests of the bulk of those men who cannot attend meetings, either Branch or annual, it is not too much to expect that a full and complete expression of opinion should be allowed in the only way open to them.

Apart from the question of letters in the JOURNAL, you are no doubt aware that the meeting was called for a double purpose. The second was, to my mind, much the most important, namely, the full and detailed discussion of the penal clauses as they stand in the proposed Bill. It would have perhaps satisfied the minds of some if the detailed views of Mr. Upton had been published sooner. As it is, we have had only the *ipse dixit* of Dr. Waters, of Chester. With all due deference to Mr. Upton, the penal clauses must be construed according to the ordinary interpretation of the English tongue; and it still seems to me, after reading them over, that a successful prosecution of a quack cannot be sustained unless the latter has openly assumed a title. The whole clause must be construed together. If that be not the case, then the wording of the Act is too ambiguous to be allowed to pass unamended, and it is to be hoped the Medical Reform Committee will pay immediate attention to it.

Let me say in conclusion that a good deal of the feeling called forth on this subject has, in my opinion, been due to the unnecessary sensitiveness of Dr. Waters with regard to the Bill. His parental care of it has been such, that any outside suggestion has been sufficient to call forth an unwonted degree of feeling. His tone and manner at the meeting of the Lancashire and Cheshire Branch at Wigan were sufficient to show this. Surely we are all striving for the same end, that is, to benefit the profession at large; and any suggestions calculated to effect that purpose, offered in good faith, ought to be treated with courtesy, and receive full consideration.

I for one regret the unnecessary warmth of Mr. R. H. S. Carpenter's letters, but there has been a good deal of irritation shown on both sides, and it is hard to say which is the most to blame. One good will result from the full discussion of the matter in the JOURNAL, namely, that every member of the Association will be made acquainted with the whole case; and if, after full publication, the general practitioners still remain dead to their own interests, they have only themselves to blame.—I am, sir, yours truly,

Manchester. JAMES MCNAUGHT, M.D., M.R.C.S.

⁎⁎⁎ Dr. McNaught's letter confirms in every detail the statement which it professes to correct. In our opinion, it is not too much to say that under extraordinary provocation Dr. Waters has shown great dignity, courtesy, and self-command.

NEW REMEDIES FOR PSORIASIS.

SIR,—Having been, for more than twenty years, a sufferer from psoriasis, I am induced, now that the subject is raised in the JOURNAL, to add the testimony of my experience. The disease in my case was first manifested in the palm of my right hand, was about the size of a penny-piece, and became, after a while, fissured at right angles, extremely painful when pressed, and disposed to bleed when irritated. Other patches were subsequently formed about my fingers, and, after a while, on the soles of my feet near the heels. These developments were evidently influenced by pressure, for they occurred on the fingers mostly where, in driving, the reins bore on the skin; and a point worth noting is that a patch of the disease on the inside of one finger would very commonly produce a corresponding spot on the contiguous finger, proving the influence of contagion. I had but little affection of my elbows or knees, and the other parts of the body were nearly free from any disorder, save a disposition to scurf about the head and legs. The spots on the hands were slightly cup-shaped, and they all became fissured and distressingly painful to the touch, so that the use of my hands was commonly unpleasant. In connection with the local ailment was the occurrence of a highly saline condition of the urine, with a specific gravity of 1027, or more when cold, but never over 1030. No albumen or sugar at any time, but acidity and abundance of mixed urates with oxalates, in crystals and dumb-bells, in more sparing quantities. The general health all the while was good, and there were but few manifestations of dyspepsia.

I took the usual remedies, but found none so potent as the preparations of arsenic; and by taking these in very large quantities with the alkalies and an occasional dose of Plummer's pill, I was always enabled greatly to repress the disease; but on discontinuing the remedies my foe returned. However, about three years ago, I commenced drinking, as a daily beverage, Rayner's syrup of lime-fruit, diluted with about three or four times its bulk of water; and, though it was taken at first without reference to the psoriasis, I was extremely pleased to find that I had, in my case at least, lighted on a remedy, for the disease began to lessen, and has continued to do so ever since, so that my hands are now free from disease and my feet nearly so. A reading lens held over the palm of the hand does not reveal any abnormal condition of the cuticle, as it formerly did; and in relation to the urine, its specific gravity is [illegible] over [illegible], and there are no oxalates.

I now commonly prescribe Rayner's lime-fruit syrup as a beverage to my patients who suffer from psoriasis, in conjunction with [illegible], and am satisfied that the lime-fruit is a valuable remedy. I [illegible] a trace of this vegetable acid [illegible] that [illegible] may be obtained from Messrs. Rayner [illegible] through their agents in most towns.

I do not, of course, say that other preparations of the lime may not answer; but in this the acid is so judiciously mixed with saccharine matter, that all nastiness is prevented and [illegible].—I am, yours etc., [illegible] M.D. [illegible]

Bideford.

English-Born Children in India.

Sir, Can any of your readers inform me of the age at which English-born children can, with safety, be taken to reside at Calcutta? Yours faithfully,

M.R.C.S.

*** We have asked the opinion of Sir Joseph Fayrer on the subject of this query. He has favoured us with the following note. English-born children should never be taken to reside in Calcutta. They may remain, if born in India, till 5 or 8, but it is not desirable to take them thither from this country. Infants in arms and up to a year or eighteen months may be taken, if the mother cannot provide a good home for them when she is obliged to go, but it is better not to take them at all, if possible to provide a home for them in England.

A Strange Transaction.

Sir, Did any of your numerous readers ever hear of the following case of vaccination, from a commercial point of view unique in the anxious solicitude of the operator to please his new customer, and to adapt his price to the exigencies of his pocket? He presented to the parents of the infant three caskets, which contained lymph bearing a graduated value, the lowest being half-a-crown, the highest seven shillings! How the good people were to discover which casket answered best to the bucolic wish, I do not know, nor whether the materials of the caskets were respectively of "gold, silver, or of lead" to assist the guesser in his choice, by communing with himself, as Bassanio did, as to which contained "fair Portia's counterfeit." Having made their choice, I cannot tell you whether it came from the "gaudy gold," "the pale and common drudge 'tween man and man," or the "meagre lead;" but I fancy the choice was not altogether so successful as the noble Venetian's.—I am, dear sir, yours faithfully,

Laxfield, Suffolk. Edward Crickmay.

Secretion of Milk in the Male.

Sir,—In answer to Dr. Alfred Wiltshire's request, in the Journal of March 29th, for cases of secretion of milk in the male, allow me to give the following.

When a boy, I had a schoolmate who, at puberty, had enlargement of the breasts, hard and painful, and which, as he said, he could milk. I knew this boy to be guilty of masturbation. Since I have been in practice I have been consulted by the parents of two boys as to the condition of their breasts. In each case the parents feared cancer, and in each I found the same condition, viz., the glands being much enlarged, hard and tender, and, on the nipple being squeezed, a milky fluid could be made to exude. Remembering the case at school, I questioned each of these boys as to their habits, and each confessed to the same practice. I leave Dr. Wiltshire, in his essay, to explain the physiological connection between the male breasts and the male generative organs.—Yours faithfully,

G. A. McCallum.

Dunnville, Ontario.

The Treatment of Croup.

Sir,—I have before expressed dissatisfaction, in common with others, with the usual treatment of croup—that by emetics and diaphoretics—and have advocated recourse to medicines which prevent the formation of fibrin, notably the salicylate of soda and the aromatic spirit of ammonia. This treatment was at the same time recommended by me for diphtheria, and also for pneumonia upon another occasion.

I there referred to true croup, that form which is accompanied or characterised by the presence of false membranes similar to those of diphtheria. It is to false croup, or simple inflammatory congestion of the larynx as it occurs in children from exposure to cold, I now wish to refer.

I now think it may be affirmed without hesitation that false croup is a very much more common affection than true or diphtheritic croup, if the latter ever occurs at all, unassociated with diphtheria; in fact, that the very large majority of cases of croup so called, are cases of the false or non-membranous form of that disease.

I have had recourse, in the last three or four cases which have come under my care, to strong astringent remedies internally, and powerful counterirritants, in the shape of blisters, externally, and with the best results, viz., complete recovery in a few hours. I apply the blisters under each angle of the lower jaw, and give minim doses of the perchloride of iron, grain doses of the sulphate of alumina, and two-minim doses of the tincture of belladonna every two hours, sweetening the mixture with glycerine.

I feel sure this method, novel though it be, except for the blistering, is deserving of further trial.—I am, sir, your obedient servant,

C. R. Illingworth, M.D.

The Hind Fund.

Sir,—Your co-operation in connection with the other medical journals has materially aided the efforts made in my behalf; and the kindness and liberality extended to me demand my best and grateful thanks. The fund has been materially aided by your kind assistance and friendly appeal.—I am, sir, your obedient servant, George William Hind.

38, Alfred Place, W.C.

Mr. Walter Whish.—The book is published by Messrs. J. and A. Churchill, New Burlington Street.

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BOOKS, ETC., RECEIVED.

A Treatise on the Continued Fevers of Great Britain. By Charles Murchison, M.D., LL.D., F.R.S. Third Edition. Edited by W. Cayley, M.D., F.R.C.P. London: Longmans, Green, and Co. 1884.

Public Health: A Practical Guide to the Public Health Acts for the use of Medical Officers of Health and Inspectors of Nuisances. By T. W. Hime, B.A. London: Baillière, Tindall, and Cox. 1884.

Clinical Demonstrations of Ophthalmic Subjects. By J. R. Wolfe, M.D. With Illustrations. London: J. and A. Churchill. 1884.

An Epitome of the Reports of the Medical Officers to the Chinese Imperial Maritime Customs, from 1871 to 1882. Compiled and Arranged by Surgeon-General C. A. Gordon, M.D., C.B. London: Baillière, Tindall, and Cox. 1884.

A Short Guide to the Tercentenary Festival of the University of Edinburgh, including the Speeches and Addresses delivered on the occasion. Edited by R. Sydney Marsden. Edinburgh and London: Blackwood and Sons. 1884.

Wharton and Stillé's Medical Jurisprudence. Edited by R. Amory, A.B., M.D.; and E. S. Wood, A.M., M.D. Vol. ii. Philadelphia: Kay and Brother. 1884.

Recent Materia Medica. By F. Harwood Lescher, F.C.S. London: J. and A. Churchill. 1884.

Sleep-walking and Hypnotism. By D. Hack Tuke, M.D., LL.D. London: J. and A. Churchill. 1884.

Visceral Neuroses. By T. Clifford Allbutt, M.A., M.D., F.R.S. London: J. and A. Churchill. 1884.

Hospital-Construction and Management. By F. J. Mouat, M.D., F.R.C.S., and H. S. Snell. London: J. and A. Churchill. 1884.

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AN ADDRESS
ON
THE NATIONAL VALUE OF PUBLIC HEALTH.

Delivered at the Inauguration of the Juries of the International Health Exhibition, June 17th, 1884.

By Sir JAMES PAGET, Bart., D.C.L., F.R.S.,
Serjeant-Surgeon to Her Majesty the Queen; Surgeon to His Royal Highness the Prince of Wales.

May it please your Royal Highness, my Lords, Ladies, and Gentlemen,—It was very difficult to select, from the vast number of subjects relating to health and to education, one on which I could fitly speak to-day. On general education I could not venture to speak; and, believing that I should have to address a large and various audience, I thought it would be best to choose a subject by which I might urge one of the chief objects of this Exhibition, and one which I know that you, sir, have always had in view, namely, that the public themselves should consider, much more than they do, the utility and the means of maintaining their own health. I have, therefore, chosen the relation between national health and work, especially as it may be shown in a few of the many examples of the quantity of work which is lost to the nation, either through sickness or through deaths occurring before the close of what may fairly be reckoned as the working time of life. I think it may be made clear that this loss is so great that the consideration of it should add largely to the motives by which all people may be urged to the remedy of whatever unwholesome conditions they may live in. It is a subject which is often in the minds of the real students of the public health; but the public itself is far too little occupied with it.

I shall speak only of national health. In consideration of his own self, a man may be deemed healthy who lives idly, comfortably, and long; who enjoys every day of his life, and satisfies every natural appetite without consequent distress. And when such an one dies o old age, with a timely, uniform, and painless decay of every part, he may be deemed to have been completely healthy; and yet it is possible that he may have enjoyed his own health in the midst of a poor, unhealthy, and unhappy nation, to which he has done no good whatever.

If we could find a nation composed of people such as this man, we might be bound to speak of them as healthy; but we should be right in calling the whole nation utterly unsound, and might safely prophesy its complete stagnation, or its quick decline and fall.

It is not health such as this—idle, selfish, unproductive—that we want to promote either in the individual or in the multitude. Comfortable idleness, such as that of some vagrants and some fine gentlemen, is a despicable result of good health; it is what no thorough man would ever wish for. In view of the national health and welfare, the pattern healthy man is one who lives long and vigorously; who in every part of his life, wherever and whatever it may be, does the largest amount of the best work that he can, and, when he dies, leaves healthy offspring. And we may regard that as the healthiest nation which produces, for the longest time and in proportion to its population, the largest number of such men as this, and which, in proportion to its natural and accumulated resources, can show the largest amount and greatest variety of good work.

Here let me insert, as an interpretation clause, that in all this and what is to follow the word "man" means also "woman," and "he" means also "she;" and that when I speak of work, I mean not only manual or other muscular work, but work of whatever kind that can be regarded as a healthy part of the whole economy of the national life. And I shall take it for granted that a large portion of all national welfare is dependent on the work which the population can constantly be doing; or, if I may so express it, that the greater part of the national wealth is the income from the work which is the outcome from the national health.

It is a common expression that we do not know the value of a thing till we have lost it; and this may be applied to the losses of work which are due to losses of national health. There are very few cases in which these can be estimated with any appearance of accuracy; but I am helped to the best within our present reach by Mr. Sutton, the Actuary to the Registry of Friendly Societies. In his office are the returns, for many years past, of the sickness and mortality among the members of a very large number of these societies; and, among other things, there is recorded the number of days for which each member, when "off work" on account of sickness, receives money from his society. Hence Mr. Sutton can estimate, and this he has been so good as to do for me, the average number of days' sickness and consequent loss of work among several hundred thousands of the workmen and others who are members of these societies. From the entire mass of these returns, he deduces that the average number of days' sickness, per member, per annum, is very nearly 1½ weeks; and this agrees, generally, with the estimates made in other societies by Mr. Neison and others. But the average thus obtained includes the cases of members of all ages, and among them many cases of chronic sickness and inability to work during old age. In order, therefore, to get a better idea of the actual annual loss of work through sickness, he has calculated the average annual number of days' sickness of each person during what may be deemed the normal working time of life; that is, between 15 and 65 years of age. This he has done among the members of the large group of friendly societies known as the Manchester Unity of Odd Fellows; and then, on the fair assumption that the rates of sickness of the whole population during the working years of life would not be far different, he has calculated the following tables, showing the average annual rates of sickness of each person, enumerated in the Census of 1881 as living between the ages of 15 and 45.

Ages.	Number of Males: Census of 1881 (England and Wales).	Weeks' Sickness per annum, according to the experience of the Manchester Unity.	Average Sickness per Individual per annum (in Weeks).
15 to 20	1,268,269	844,428	.666
20 ,, 25	1,112,354	820,183	.737
25 ,, 45	3,239,432	3,224,134	.995
45 ,, 65	1,755,819	4,803,760	2.736
All ages from 15 to 65	7,375,874	9,692,505	.314

Ages.	Number of Females: Census of 1881.	Weeks' sickness per annum, according to the experience of the Manchester Unity.	Average Sickness per Individual per annum (in Weeks).
15 to 20	1,278,963	851,701	.666
20 ,, 25	1,215,872	896,685	.737
25 ,, 45	3,494,782	3,476,146	.995
45 ,, 65	1,951,713	5,368,229	2.751
All ages from 15 to 65	7,941,330	10,592,761	1.334

Briefly, it appears from these tables that the average time of sickness among males during the working years is 1.314 weeks—that is, a small fraction more than nine days each in each year—and that among females it is yet a small fraction more. The result is that, among males, there is a loss of 9,692,505 weeks' work in every year, and among females a loss of 10,592,761 weeks. Thus we may believe that our whole population between 15 and 65 years old do, in each year, 20,000,000 weeks' work less than they might do if it were not for sickness. The estimate is so large that it must, on first thoughts, seem improbable; but, on fair consideration, I believe it will not seem so. For the members of the Manchester Unity, who are in the working time of life, the reckoning is certainly true, and it is founded on the experience of between 300,000 and 400,000 members. In respect of health, they may represent the whole population at least as well as any group that could be taken. They are not very strictly selected; they are not picked lives; yet they are such as are able, when they are in health, to earn good wages or good salaries; and, as their prudence in joining this association shows, they are comparatively thrifty and careful persons. They do not, at all events, include many of the habitual drunkards, the cripples or utterly invalids, or those who, through natural feebleness, or early disease, or their profligacy, cannot earn enough to become members or maintain themselves in membership. Neither do they include many of the insane, or imbecile and idiotic, of whom there are, in our population, nearly 70,000, doing no work, and losing not less than 3¼ millions of weeks' work in the year.

It would be tedious to tell the grounds on which the estimate may be deemed too high, for just as many and as good could be told on which it might be deemed too low; and it is rather more than confirmed by some estimates of the annual sickness in other and very dif- different groups of persons.

In the Army, at home, the average number of days' sickness in each year is, for each soldier, about seventeen; and, as the number of the troops in the United Kingdom is more than 80,000, we have here a loss of about 200,000 weeks' service in each year.

In the Navy, on the home stations, the average number of days' sickness in each year has been, in the last five years, for each man, nearly sixteen; so that, for the total of about 20,000 men, there is a loss of 45,000 weeks' service in each year.

The amount of sickness in the services thus appears much higher than in the Friendly Societies. This is due, in great part, to the fact that a soldier or a sailor is often put off duty for a day or two for much less illness than that for which a civilian would "go on his club." Still, the one estimate may confirm the other; for the sickness in the Army and Navy is that of picked men, who were selected for the services as being of sound constitution, and who are in what should be the best working years of life; and, if it includes many cases of sickness for only a day or two, it excludes nearly all cases of more than a few months, such as make up a heavy proportion of the average sickness in the Friendly Societies and in the general population. And I may add that the estimates from these societies, that nine days in the year may justly be thought a fair estimate of the working time lost by sickness, is confirmed by the records of sickness among the 10,000 members of the Metropolitan Police Force; for among these, including cases of long illness such as are also in the societies, the average is more than nine days in the year.

I think, then, that we cannot escape from the reasons to believe that we lose in England and Wales, every year, in consequence of sickness, 20,000,000 of weeks' work; or, say, as much work as 20,000,000 of healthy people would do in a week.

The number is not easily grasped by the mind. It is equal to about one-fortieth part of the work done in each year by the whole population between 15 and 65 years old. Or, try to think of it in money. Rather more than half of it is lost by those whom the Registrar-General names the domestic, the agricultural, and the industrial classes. These are rather more than seven millions and a half in number, and they lose about 11,000,000 of weeks; say, for easy reckoning, at a pound a week; and here is a loss of £11,000,000 sterling from what should be the annual wealth of the country. For the other classes, who are estimated as losing the other 9,000,000 weeks' work, it would be hard and unfair to make a guess in any known coin; for these include our great merchants, our judges and lawyers, and medical men, our statesmen and chief legislators; they include our poets and writers of all kinds, musicians, painters, and philosophers; and our princes, who certainly do more for the wealth and welfare of the country than can be told in money.

Before I speak of any other losses of work or of wealth due to sickness, permit me, as in parenthesis, to point out to you how very imperfectly these losses are told or even suggested by our bills of mortality. These, on which almost alone we have to rely for knowing the national health—these tell the losses of life; and more than misery enough they tell of; but to estimate rightly the misery of sickness and the losses of all but life that are due to it, we need a far more complete record than these can give.

Take, for example, such a disease as typhoid fever—that which Mr. Huxley has rightly called the scourge and the disgrace of our country. It has of late destroyed, in England and Wales, among persons in the working time of life, nearly 4,000 in the year. Its mortality is about 15 per cent.; so that if, in any year, 4,000 die of it, about 23,000 recover from it. Of these, the average length of illness is, on the authority of Dr. Broadbent, about ten weeks. Here, therefore, from one disease alone, and that preventable, we have an annual loss of 230,000 weeks' work, without reckoning what is lost with those who die. And the same may be said of nearly all the diseases that are most prominent in the bills of mortality. The record of deaths, sad as it is, tells but a small part of the losses of happiness and welfare that are due to sickness. It is as if, in a great war, we should have a regular return of the numbers killed, but none of the numbers wounded, though these, more than the killed, may determine the issue of the war.

Let me now tell of another loss of work and of money through sickness and early death. In all the estimates I have yet referred to, no account is taken of those who are ill, or die, before they are fifteen years old. They are not reckoned as in the working time of life, though in some classes many thousands of them are; in the domestic, agricultural, and industrial classes of the Registrar-General, nearly half a million of them are included, and yet the losses of work due to sickness among children must be very large. Consider the time which might be spent in good productive work, if it were not spent in taking care of them while they are ill. Consider, too, the number of those who, through disease in childhood, are made more susceptible of disease in later life, or are crippled, or in some way permanently damaged; such as those who become deaf in scarlet fever, or deformed in scrofula or rickets, or feeble and constantly invalid, so that they are never fit for more than half work, or for work which is only half well done. These losses cannot be counted, but they must be large, and there are others more nearly within reckoning—the losses, namely, which are due to the deaths of those who die young. It may justly be said that all that they have cost during their lives is so much money sunk, so much capital invested and lost. If they had lived to work, their earnings would have been more than sufficient to repay it; but they have died, and their cost is gone without return. The mortality of children under 15 in 1882 was nearly a quarter of a million. What have they cost? If you say only £8 a piece, there are more than £2,000,000 sterling thus lost every year. But they have cost much more than this, and much more still is lost by the loss of the work they might have lived to do.

It is, indeed, held, I believe, by some that these things should not be counted as losses; that we have a surplus of population, and that really the deaths of children, though they may be the subjects of a sentimental sorrow, cannot reasonably be regretted. I cannot bring myself to admit that such a thing should even be argued. I have lived long in the work of a profession which holds that wherever there is human life it must be preserved—made happy, if that can be, but in any case, if possible, preserved—and no argument of expediency shall ever make me believe that this is wrong. Indeed, I am rather ashamed—even for the purpose that I have in view—to use so low an argument as that of expediency in favour of the saving of health and of life. I am ashamed of making money appear as a for motive for doing things for which sufficient motives might be found in charity and sympathy, and the happiness of using useful knowledge; but it seems certain that these are not yet enough for all that should be done for the promotion of the national health; therefore, it seems well to add to them any motives that are not dishonourable; and so I add this, that we lose largely, not only in happiness, but in wealth, by the deaths of these poor children.

I will add only one more illustration of these losses, which is always suggested by looking at tables of mortality. The deaths of persons between 25 and 45 years old, that is, during what may be deemed the twenty best working years of life, are annually between 60,000 and 70,000; in 1882, they were 66,000. Think, now, of the work lost by these deaths; and of how much of it might have been saved by better sanitary provisions. If one looks at the causes of their deaths, it is certain that many might have been prevented, or, at least, deferred. Say that they might have lived an average of two years more, and we should have had in this year and last an increase of work equivalent to that of at least 6,000,000 weeks; as much, in other words, as 6,000,000 people could do in one week.

More instances of losses of work by sickness and premature death might easily be given, but not easily listened to in this huge hall. Let these suffice to show something of our enormous annual loss, not only of personal and domestic happiness—that is past imagining—but of national power and wealth. Surely we ought to strive more against it.

But, some may ask, can these things be prevented? Are they not inevitable consequences of the manner of life in which we choose or are compelled to live? No; certainly they are not. No one who lives among the sick can doubt that a very large proportion of the sickness and the loss of work which he sees might have been prevented; or can doubt that, in every succeeding generation, a larger proportion still may be averted, if only men will strive that it may be so.

Let me enumerate some of the chief sources of the waste, as they appear to oneself in practice.

Of the infectious fevers, small-pox might be rendered nearly harmless by complete and careful vaccination. Typhus and typhoid, scarlet fever and measles, might, with proper guards against infection, be confined within very narrow limits. So, probably, might whooping-cough and diphtheria.

Of the special diseases of artisans, there are very few of which the causes might not be almost wholly set aside. Of the accidents to which they are especially liable, the greater part, by far, are due to carelessness.

Of the diseases due to bad food and mere filth; to intemperance; to immorality; in so far as these are self-induced, they might, by self-control and virtue, be excluded. And with these, scrofula, rickets, scurvy, and all the wide-spread defects related to them, these might be greatly diminished.

It can only be a guess—but I am sure it is not a reckless one—if I say, that of all the losses of work of which I have spoken, of all the millions of weeks sadly spent and sadly wasted, a fourth part might have been saved, and that henceforth, if people will have it so, a still larger proportion may be saved.

We may become the more sure of what may be done by looking at what has been done already. Let me show some of it; it will be a relief to see something of the brighter side of this picture.

In a remarkable paper lately read before the Statistical Society, Dr. Longstaff says: "One of the most striking facts of the day, from the statistician's point of view, is the remarkably low death-rate that has prevailed in this country during the last eight years." In these years, the annual death-rate has been less than in the previous eight years in the proportion of two deaths to every 1,000 persons living. The average number of deaths has been 50,000 less in the last than in the previous eight years. Doubtless many things have contributed to this grand result, and it is not possible to say how much is due to each of them; but it would be unreasonable to doubt that the chief good influence has been in all the improved means for the care of health which recent years have produced. This is made nearly certain by the fact that the largest gains of life have been in the diminution of the deaths from fever, and of the deaths in children under 15 years old; for these are the very classes on which good sanitary measures would have most influence.

The annual number of deaths from typhus, typhoid, and the unnamed fevers, has been about 11,000 less than it was about twenty years ago. The annual number of deaths of children under 5 years old has been about 22,000 less than it was; and that of children between 5 and 15 has been upwards of 8,000 less.

These are large results, and though they tell of only deaths, yet they bear on the chief subject I have brought before you—the working power of the nation; for, however much we might assign to improved methods of medical treatment of fever, yet the diminished number of deaths means a very large diminution in the total number of cases. The deaths during the working years of life were 6,500 less; and, this being so, we may hold that, if the average mortality was, say, 25 per cent., the diminution in the total number of cases must have been at least 25,000; and if we may believe, as before, that each of these involved ten weeks of sickness, we have, in these fevers alone, a clear saving of 185,000 weeks' work in every year.

And so, with the diminution of the mortality among children, there must have been a greater diminution in the number of costly and work-wasting illnesses, and a large saving of money that would otherwise have been sunk. And not only so, but many of the children saved in the last eight years will become bread-winners or care-keepers; and who can tell what some of them will become? or what the world would have lost if it had lost them?

Let me add only one more reckoning. In a paper last year, at the Statistical Society, Mr. Noel Humphreys said "that if the English death-rate should continue at the low average of the five years 1876-80, the mean duration of male life in this country would be increased by two years, and that of female life by no less than 3 [illegible], as compared with the English life-table." And he showed further that, "among males, 70 per cent., and among females, 65 per cent., of this increased life would be lived between the ages of 20 and [illegible] years, or during the most useful period."

I should like to be able to tell the value in working power of such an addition to our lives. It is equal to an addition of more than 4 per cent. to the annual value of all the industry, mental and material, of the country.

But, some will say; admitting that it is desirable, though seeing how keen the struggle for maintenance already is, can more than this be done? and the answer may be and must be, [illegible]. In this, as in every case of the kind, every fruit of knowledge brings us within reach of something more. While men [illegible] the knowledge they possess, they [illegible] be always gaining better. [illegible] tion has [illegible] of things which are better helps to national health than those of the same kind which we had twenty years ago, and with which the [illegible] already [illegible] were won. If I were not in [illegible] relation with the jurors, I would name some of them; there are [illegible] splendid works among them.

But I [illegible] not let me seem to disparage the past in praising the present. It is difficult to speak with gratitude enough of what has been done, even though we [illegible] to the yet better.

Anyone who [illegible] studied the sources of disease during the last thirty years can tell how and where it has been diminished. There is less from intemperance, less from immorality; we have better, cheaper, and more various food; far more and cheaper clothing; far more and healthier recreations. We have, on the whole, better houses and better drains; better water and air, and better ways of using them. The care and skill with which the sick are treated in hospitals, infirmaries, and even in private houses, are far greater than they were; the improvement and extension of nursing are more than can be described; the care which the rich bestow on the poor, whom they visit in their own homes, is every day saving health and life; and even more effectual than any of these is the work done by the medical officers of health and all the sanitary authorities now active and influential in every part of the kingdom.

But good as all this work has been, we may be sure it may become better. The forces which have impelled it may still be relied on. We need not fear that charity will become cool, or philanthropy inactive, or that the hatred of evil will become indifference. Science will not cease to search for knowledge, or to make it useful when she can; we shall not see less than we do now, and here, of the good results of enterprise and rivalry, or of the sense of duty, or of the sorrow for shame that there should be these evils in the land.

What more, then, it may be asked, is wanted? I answer, that which I have tried to stir; a larger and more practical recognition of the value and happiness of good national health; a wider study and practice of all the methods of promoting it; or, at least, a more ready and liberal help to those who are striving to promote it. In one sentence, we want the complete fulfilment of the design of this Exhibition, with all the means towards health and knowledge that are shown in it, and with its handbooks, lectures, conferences, and the guidance which will be given by the verdicts of its juries.

We want more ambition for renown in health. I should like to see a personal ambition for renown in health as keen as is that for bravery, or for beauty, or for success in our athletic games and field-sports. I wish there were such an ambition for the most perfect national health as there is for national renown in war, or in art, or commerce. And let me end soon by briefly saying what I think such health should be.

I spoke of the pattern healthy man as one who can do his work vigorously wherever and whatever it may be. The union of strength with a comparative indifference to the external conditions of life, and a ready self-adjustment to their changes, is a distinctive characteristic of the best health. He should not be deemed thoroughly healthy who is made better or worse, more or less fit for work, by every change of weather or of food; nor he who, in order that he may do his work, is bound to exact rules of living. It is good to observe rules, and to many they are absolutely necessary; but it is better to need very few besides those of moderation and cleanliness, and, observing these, to be able and willing to live and work hard in the widest variations of food, air, clothing, and all the other sustenances of life.

And this, which is a sign of the best personal health, is essential to the best national health. For in a great nation, distributed among its people, there should be powers suited to the greatest possible variety of work. No form or depth of knowledge should be beyond the attainment of some among them; no art should be beyond its reach; it should be excellent in every form of work. And, that its various powers may have free exercise and influence in the world, it must have, besides, distributed among its people, abilities to live healthily wherever work must be or can be done.

Herein is the essential bond between health and education; herein is one of the motives for the combination of the two within the purpose of this one Exhibition. I do not know whether health or knowledge contributes most to the prosperity of a nation; but no nation can prosper which does not equally promote both; they should be deemed twin forces, for either of them without the other has only half the power for good that it should have.

It is said, whether as fact or fable, that the pursuit of science and of all the higher learning followed on the first exercise of the humanity which spared the lives of sick and weakly children; for that these children being allowed to live, though unfit for war or self-maintenance, became thinkers and inventors. But science and art are now [illegible] prosperous.

[illegible] we may [illegible] over the world, we must strive for an abundance of this national health, tough, pliant, and elastic, ready and fit for any good work anywhere.

APPENDIX.—The following tables were arranged and very kindly given to me by Mr. Sutton.

Male Population enumerated in Census of 1881. Distribution according to Ages and Occupations.

Between the Ages	Class I. Professional.	Class II. Domestic.	Class III. Commercial.	Class IV. Agricultural.	Class V. Industrial.	Class VI. Returned by Property, Rank, etc.; not by Special Occupation.	All Classes.
0— 5	..	..	..	..	..	1,757,657	1,757,657
5—15	6,361	8,822	59,463	72,345	174,223	2,649,595	2,970,809
15—20	86,265	12,145	146,662	208,113	691,078	124,006	1,268,269
20 25	75,498	41,301	147,230	150,695	665,540	32,090	1,112,354
25—45	201,619	106,989	420,133	419,173	2,028,958	62,560	3,239,432
45—65	88,062	48,142	162,025	345,260	1,024,698	87,632	1,755,819
65—upwards	23,150	11,109	25,148	122,758	210,681	142,716	535,562

Probable Annual Amount of Sickness, expressed in Weeks, based upon the Experience of the Manchester Unity Order of Oddfellows.

Between the Ages	Class I.	Class II.	Class III.	Class IV.	Class V.	Class VI.	All Classes.
0— 5	..	..	..	..	..	..	..
5—15	..	..	..	..	..	..	..
15—20	37,462	28,061	97,647	138,560	460,130	82,568	844,428
20—25	55,669	30,453	108,560	111,110	490,730	23,661	820,183
25—45	200,660	106,480	418,140	417,190	2,019,400	62,264	3,224,134
45 —65	240,940	131,710	443,270	944,600	2,803,500	2,397,750	4,803,760
65 —upwards	279,890	134,310	304,050	1,484,200	2,547,400	1,725,500	6,475,350

Probable Annual Number of Deaths according to English Life Table No. 3.

Between the Ages	Class I.	Class II.	Class III.	Class IV.	Class V.	Class VI.	All Classes.
0— 5	..	..	..	..	..	113,399	113,399
5—15	47	66	413	538	1,296	19,716	22,106
15—20	349	261	910	1,291	4,285	769	7,863
20—25	653	357	1,273	1,303	5,751	277	9,614
25—45	2,271	1,205	4,732	4,721	22,846	705	36,480
45—65	2,115	1,156	3,891	8,295	24,618	2,105	42,180
65—upwards	1,953	937	2,122	10,360	17,779	12,039	45,190

Female Population enumerated in Census of 1881. Distribution according to Ages and Occupations.

Between the Ages	Class I.	Class II.	Class III.	Class IV.	Class V.	Class VI.	All Classes.
0— 5	..	..	..	..	..	1,763,207	1,763,207
5—15	5,672	100,423	1,250	2,150	101,031	2,766,392	2,976,918
15—20	37,028	453,548	4,235	9,466	366,251	408,435	1,278,963
20—25	37,561	332,968	4,606	6,905	298,555	535,277	1,215,872
25 —45	65,956	411,051	6,352	14,803	515,583	2,481,037	3,494,782
45—65	38,622	203,463	2,451	20,864	243,719	1,442,594	1,951,713
65 —upwards	11,281	43,849	573	10,652	53,050	533,677	653,082

Probable Annual Amount of Sickness expressed in Weeks, based upon the Experience of the Manchester Unity Order of Oddfellows.

Between the Ages	Class I.	Class II.	Class III.	Class IV.	Class V.	Class VI.	All Classes.
0— 5	..	..	..	..	..	..	..
5—15	..	..	..	..	..	..	..
15—20	24,658	302,030	2,820	6,303	243,900	271,990	851,701
20—25	27,701	245,555	3,397	5,092	220,180	394,760	896,685
25—45	65,604	408,860	6,318	14,724	512,840	2,467,800	3,476,146
45—65	106,230	559,620	6,741	57,388	670,350	3,967,900	5,368,229
65 upwards	140,360	545,580	7,129	132,530	660,050	6,640,200	8,125,849

Probable Annual Number of Deaths according to English Life Table No. 3.

Between the Ages	Class I.	Class II.	Class III.	Class IV.	Class V.	Class VI.	All Classes.
0— 5	.	..	..	..	..	100,970	100,970
5—15	42	758	9	16	763	20,900	22,488
15—20	243	2,974	28	62	2,401	2,677	8,385
20—25	338	2,998	41	62	2,689	4,822	10,950
25—45	752	4,685	72	169	5,876	28,276	39,830
45—65	809	4,263	51	437	5,105	30,225	40,890
65—upwards	893	3,473	45	843	4,201	42,265	51,720

MALTOPEPSYN.—Maltopepsyn is a fine powder, not unpleasant to take, and consisting, according to the statement of Messrs. Burgoyne, Burbidges and Co., who have introduced it into this county, of saccharated pepsine, 10 grains; saccharated pancreatine, 5 grains; acid lactophosphate of lime, 5 grains; exsiccated extract of malt equal to one teaspoonful of liquid extract of malt, 10 grains. The drug, according to this formula, contains ferments capable of acting on and digesting albuminous, fatty, and starchy bodies; that is to say, all the elements of food. We have found maltopepsyn useful in several cases of imperfect digestion, taken at the time of sitting down to table. It has also acted well when taken after meals, when some particular article of food has caused eructation.

LECTURES
ON
SOME IMPORTANT POINTS IN CONNECTION WITH THE SURGERY OF THE URINARY ORGANS.

Delivered at the Royal College of Surgeons, June 1884.

BY SIR HENRY THOMPSON, F.R.C.S.,
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LECTURE II.—THE SYSTEMATIC DIAGNOSIS OF URINARY DISEASE. DIGITAL EXPLORATION OF THE BLADDER, AND ITS RESULTS.

[THE lecturer commenced by illustrating in detail a systematic method of arriving at a correct diagnosis of diseases affecting the urinary organs, one which, he believed, might be found adequate to the solution of a very large majority of all cases met with; and continued:]

But it happens that the most patient application of the inquiry described sometimes fails to reveal the cause of symptoms; although it may, and often does, arouse suspicions as to what that cause may be. Thus, the evidence available in an exceptionally obscure case may point in the direction of impacted calculus, which is associated usually with extremely painful and frequent micturition, and mucopurulent urine; or it may indicate the presence of a growth within the bladder (not cancerous deposit in its walls, which is readily recognised from the rectum), such growth being usually associated with long continued or repeated bleeding, and sooner or later depositing in the urine organic *débris*, the structure of which may determine its character. In either case, no permanent relief is attainable without operation. Besides these, there is sometimes, as in the cases of elderly men who are unable to pass any urine without very frequent catheterism, another cause, not unfrequent; namely, distressing cystitis not amenable to relief by ordinary treatment, because the cystitis itself is maintained by the very agency—the catheter—without which the patient's existence is impossible. A vicious circle of actions is thus set going, which can only move from bad to worse. In all the conditions thus described, the patient's fate is sealed; but even this grave fact does not disclose all the severity of his lot, since the fatal event almost inevitably arrives through severe and protracted suffering. The painful experience which I have had of misery of this kind, and for which, in the later stages of disease, little relief is afforded except through the influence of narcotics, has long impressed me strongly with the hope of finding a means of escape for some of these patients, equally from the fatal issue and from the suffering which precedes it.

In January 1869, I opened the bladder for a man, about 60 years of age, in University College Hospital, above the pubes, solely to afford relief in cystitis of the kind described, no attack of retention being present, and maintained a tube there some weeks, to drain and relieve the bladder. I repeated this proceeding in six other cases, affording some relief, but with less of permanent benefit than I had hoped to attain. The opening was ill placed for purposes of drainage; it became sore from contact with urine, and kept the patient for the most part confined to his room. But the last case in which I did this operation impressed me so strongly, that from that time I determined on a different course, which issued in the plan which I have now put in practice nearly four years, and the results of which I shall lay before you without reserve to-day. But first I ask you to listen to a brief report of the case referred to.

Mr. C., aged 31, I first saw in 1870. For six years, he had had occasional attacks of bleeding. After two or three visits, he took a sea-voyage for his health, and thought himself cured. But he came again in October 1874, having had several fresh attacks recently. I sounded him, and felt nothing; some fusiform cells were observed in the urine, and were sketched in the note-book at that visit, and the bleeding was believed to be vesical.

1876. He had continued to bleed more frequently. I found three ounces of residual urine, and advised the use of the catheter daily, which checked the bleeding, as when there was no straining there was no blood.

1877. He passed shreds of organic tissue; sounded, nothing felt; weaker; micturition frequent and painful.

1878. Micturition was so painful that I resolved to open the bladder by a suprapubic opening, so as to enable the patient to obtain some sleep, which had been terribly broken by constant micturition. The operation afforded some relief, but he gradually became weaker, and sank about a month afterwards.

At the necropsy, a single pedunculated tumour was found in the bladder; it resembled in form and size an ordinary fig. It could have been easily removed had the suprapubic opening been enlarged.

It was clear to me from this case that a careful sounding had proved incapable of giving me sufficient information relative to the presence of a considerable growth within the bladder. Supposing that I could but once have put my finger there, instantly discovering, as I should have done, that easily removable tumour, how different would have been the issue of that unhappy case! He might have been enjoying life and health to-day. What, then, was to prevent me in future, under circumstances of equal gravity and like obscurity, from determining the presence or absence of such a growth by the direct sense of touch, as I could so easily have done there, had the necessity for applying it ever occurred to me? The question which therefore naturally presented itself was, from which point could I best examine with my finger the whole interior surface of the bladder; from the perinæum, or from above the pubes? After experiment on the dead subject, the answer seemed not doubtful. With a small opening into the membranous urethra from the perinæum, just large enough to admit the finger to arrive at the neck of the bladder, and making at the same time firm suprapubic pressure, I could explore without difficulty every portion of the surface described. If, then, by means of anæsthesia I could attain that degree of flaccidity and inertia in the living body which is natural to the dead, why should I not be able to effect as easily the exploration in the former case as in the latter?

Opportunity for making the experiment soon occurred, partly in the course of a lithotomy case or two; and, finally, in the person of a patient who came under my care in 1880, with severe and obscure symptoms.

At the outset of the case I met with a small calculus and crushed it, but subsequently found another, as I thought, impacted, not being able to remove it by the lithotrite. In order to ascertain the real state of the case, I decided to explore the bladder, and did so in November 1880, Mr. Ceely of Aylesbury, and others, being present. Having made the median incision, and complete etherisation having been attained, I felt, as soon as the finger entered the bladder, no difficulty in exploring the interior, finding, to my surprise, not a stone, but a single pedunculated tumour of considerable size, with a thick coating of phosphates on its surface. It was this coating, together with the immobility of the mass as previously determined by the lithotrite, which had suggested to me the presence of impacted calculus. I seized the tumour with a small lithotomy-forceps, and twisted it off at the neck. The patient made a rapid recovery, had no return of the growth or any sign thereof, and has enjoyed excellent health and activity ever since, as he does at this day. The operation took place nearly four years ago, but I waited a year and a half before presenting the case to the Royal Medical and Chirurgical Society, having then adopted the proceeding in three other cases.

I then proposed the systematic examination of the bladder by means of the finger as a desirable, and, indeed, as a necessary, proceeding in obscure disease believed to affect the bladder, when all other means had failed to detect the cause, distinguishing the method by the term "Digital Exploration of the Bladder."

In the surgical proceeding itself there is nothing new, nor did it ever occur to me that it could be claimed in that sense by any modern surgeon. Like others, I had often opened the urethra from the perinæum for stricture, for chronic and obstinate urinary fistulæ, for impacted calculus, for calculus sacculated in front of the neck of the bladder, and after lithotrity, when the patient could pass no urine except by catheter, and was unable to introduce the instrument, etc. But the object with which I proposed to operate was a new one, inasmuch as it was solely the exploration of every part of the bladder with the end of the finger, in order to diagnose its condition, and not necessarily to perform any further operation, unless this should be required by the discovery of a tumour or other condition admitting of surgical treatment. To effect this purpose, then, it was extremely important to determine what is the shortest and easiest route for the surgeon, as well as that which would incur the smallest amount of risk to the patient.

At first sight, it appeared that an incision involving the neck of the bladder must be necessary, and that the operation must therefore be some form of cystotomy. Happily, experiment proved that a section carried from the perinæum to the urethra, in other words "external urethrotomy," would suffice for my purpose. Now, this is a procedure almost without risk. The mere section of parts from the perineal surface in the median line, down to any part of the urethra anterior to the prostate, is one of the simplest and least dangerous of surgical operations.

Old, however, as is the proceeding in question, whether it be termed "external urethrotomy," or, as with the older French surgeons, the quaint term of the "boutonnière" be adopted (the very term shows how simple even at that period they considered it), the mode of performing it appears to me not altogether a matter of indifference. I shall, in the first place, however, premise that there is no longer any doubt that the median incision of the perinæum opens the shortest road to the neck of the bladder, and I shall briefly describe the steps of the proceeding which appear to me the most desirable to be followed in order to attain the end proposed with ease and safety.

The position of the patient, and the general accessories necessary, are those required for lithotomy; while the various steps of incising are those now generally adopted in the first stage of median lithotomy. When these are completed, and the tip of the finger first enters the cavity of the bladder, the morbid condition is generally recognised at once, and with it, therefore, the nature of the disease for which the exploration was undertaken. Whether this be so or not, the operator, maintaining the index in its place, and firmly pressing it into the cavity of the bladder, rises from his seat if necessary, and stands so that, by means of his own right hand, he can make firm suprapubic pressure, and bring the upper surface of the bladder into contact with the left index. He rapidly ascertains the presence or absence of tumour; if it be absent, he will, by slightly changing the point of suprapubic pressure, and also, as far as he can, the direction of the tip of the left index-finger, examine bit by bit the whole internal surface of the bladder. He will recognise or not, as the case may be, the smooth satin-like surface of the healthy lining, with here and there only a slight inequality; or he may find an irregular surface, elevated by interlacing lines of fibres, with little depressions and interstices, roughened patches on a surface otherwise smooth, and adhering scales of earthy matter perchance, or a small calculus half exposed, half hidden, lodged rather than sacculated, in a corner, etc. Indeed, it is difficult to say at present what may not be found, as fresh experiences have brought to light conditions to some extent not heretofore recognised, of which I have yet to speak. Hence there are few occasions, I confess, which for me have excited a more lively interest, than the moment at which my finger enters a bladder, the condition of which has been a theme of keen inquiry and speculation for some months or even for years before.

But, supposing it is at once apparent, from the examination just described, that tumour is present, the operator must next deliberately study its size, form, situation, and mode of attachment to the bladder. This is an extremely important matter, and will be considered, as well as the best mode of removing the growth, in the next lecture, devoted to the subject of vesical tumour.

On the other hand, no growth having been found, the next steps of the proceeding will depend on what other morbid or irregular condition has been revealed. Supposing that either some calculus or other matter has been removed, or that the bladder and urethra are merely to be maintained in a state of rest from their functions for a few days, free exit for the urine must be secured. For this purpose, a soft but stout India-rubber tube is to be fastened, with one end (smoothly bevelled) just within the bladder, the remainder occupying the wound, and protruding so as to convey the urine direct to some vessel suitable to receive it. If the object of treatment be that last described, the tube should remain a week or so, unless its presence occasion pain, in which case a large soft catheter may be tried; or, as sometimes happens, it is better, after the first or second day, for the urine to take its course through the wound. In any case, the bladder is to be rested and drained at least for a week; even a longer period is sometimes advantageous. The relief from frequent habitual catheterism thus afforded to a patient, who for months has been compelled to use a catheter twelve times or more every day, is so great that he often desires that the term of rest may be extended. I have seen some very remarkable examples of relief arising from the process, and relief of a permanent character.

I shall now briefly advert to the analogous operation in the female, when dealing with obscure forms of disease for the purposes of diagnosis and treatment. For digital exploration of the female bladder, all that is needful is sufficient dilatation of the urethra to admit the introduction of the index-finger; this may be accomplished by means of a three-bladed dilator or otherwise, after which the facility for examining is, of course, greater than that attained in the male. Dilatation, however, always requires, in whatever way it is rapidly performed, a certain amount of splitting or rupture of the urethra, which, however, I have never known to be followed by any permanent injury. I have thus examined five cases of women for the purpose of diagnosis, and have found tumour in two, and have removed both without any further enlargement of the opening. These will be included in the series of cases appended, forty-two in number, which I desire to present as the sum total of my experience of digital exploration of the bladder, together with the results which have followed in each case.

[The lecturer then presented a brief epitome of the histories of all the cases, in a tabular form, on which he had performed digital exploration of the bladder; omitting, for consideration at the next lecture, the twenty cases of tumour. He continued:]

In carefully analysing the twenty-two cases which remain after subtracting the twenty cases of tumour, there appear to be four chief forms of vesical disease, in which the operation of opening the urethra to withdraw the urine altogether by an artificial route, and so suspend the functions both of the bladder and urethra for a time, may render good service.

The first class consists of those cases, not unfrequently met with, in which all the symptoms of chronic cystitis have existed for a long period, and in a severe degree, and which persist in spite of long-continued and appropriate treatment; while, at the same time, it is understood that the absence of material cause for the cystitis, such as stone, stricture, vesical incompetence, etc., has been ascertained. Examples are Cases 2, 24, and 31, of the series.

The second class of cases includes those examples of prostatic disease in which the bladder has to be emptied by the catheter many times in the twenty-four hours, and in which painful chronic cystitis is obviously aggravated, if not maintained, by the necessary process of relief. Examples are Cases 5 and 34.

The third class embraces those cases in which impacted calculus or adhering calculous matter may be suspected, or may be known to be present by sounding. Examples are Cases 3, 4, 7, 22, and 36.

In the fourth class I place those cases in which painful and very frequent micturition or bleeding, separately or combined, have long existed, without signs of cystitis, the urine being clear, free, or nearly so, from mucous or purulent deposit; the cause of these symptoms having baffled the most careful inquiry. On exploration being made, no organic change is discovered, no light is obtained on the diagnosis of the case, but the functions of the bladder and urethra are suspended for a week or so, and the patient gets perfectly well. Of this remarkable history there are no fewer than six examples in the series; of which three, viz., Cases No. 8, 14, and 35 perfectly recovered, besides three others in which great improvement took place, but not complete recovery, Nos. 17, 23, and 41. The result of operation undertaken in the circumstances described, as a last if not almost hopeless resource has been very remarkable, and I do not at present pretend to explain the pathological condition in any one of them. Besides, there was one case, already referred to, in which adhesions between the mucous lining of the bladder were separated by the finger, Case No. 12; one case of division of the neck of the bladder, which was extremely tight and rigid, Case 41, which was greatly benefited; and one case of hæmaturia, in which the surface of the mucous membrane was studded with numerous minute villous papillæ, removed by scraping, followed by applications of caustic, No. 37, and in which, five months after operation, there has been no sign of return.

I cannot but hope that the results reported in these cases may lead to a further employment of this simple operation in cases of like obscurity, feeling sure that much valuable relief to suffering, as well as prolongation of life, may be attained by a judicious application of the proceeding.

BEQUESTS AND DONATIONS.—Mr. Robert Hunter, of Dalhousie Chesters, farmer, has bequeathed £5,000 to the Edinburgh Royal Infirmary.—Mr. Stoneham, of Ilfracombe, has bequeathed £1,000 to the Tyrrell Cottage Hospital.—The Rotunda Hospital, Dublin, has received £1,000 under the will of Mr. James Benjamin Hall.—The British Home for Incurables has received £1,000, and £68 interest thereon, under the will of Miss Martha Grant; £1,000 from "Miss M. H. F.," for the endowment of a bed in memory of a relative, and £250 from Major H. Thurlow and Captain Ernest H. Thurlow.—Mr. J. H. Andrew has given £500 to the Sheffield Public Hospital.—The Norfolk and Norwich Hospital has received £500 under the will of Miss Spencer.—The National Hospital for Consumption at Ventnor, has received £500 under the will of Mr. Samuel Lancaster.—Messrs. Marshall and Snelgrove have given £250, and Miss Mary Doxat £100, to the Middlesex Hospital, in aid of the funds for the new buildings.—Mr. James Gingell, of Whitechapel and East Ham, hay-factor, bequeathed £100 each to the London Hospital, the Samaritan Hospital for Women and Children, the Eastern Dispensary, Leman Street, and the City of London Hospital for Diseases of the Chest.

CLINICAL REMARKS

ON

CASES ILLUSTRATING THE ESSENTIAL IDENTITY OF PROGRESSIVE MUSCULAR ATROPHY AND PROGRESSIVE BULBAR PARALYSIS.[1]

By J. MAGEE FINNY, M.D.Univ.Dubl., F.K.Q.C.P.I.,
King's Professor of Practice of Medicine in the School of Physic; Clinical Physician to Sir Patrick Dun's Hospital.

(Concluded from page 1155.)

CASE II.—James C., aged 39, married, labourer in the country, was admitted under my care in the City of Dublin Hospital on May 5th, 1882. The patient, in the first instance, sought advice from my colleague, Dr. Fitzgibbon, the surgeon on duty, as his friends thought he was suffering from some tumour or abscess of his tongue, which interfered with his speech. Dr. Fitzgibbon, recognising the nature of the complaint, requested me to take charge of him.

Nine months previously, the patient's friends noticed a peculiar change in his speech, which gradually become so bad that they could not, without great difficulty, understand him. In January (1882), the patient noticed a weakness and loss of power in his hands, so that he was not able to dig and do other heavy field-work, but he continued to do light work, as driving horses and tending cattle, up to a couple of months before admission. His wife considered his present illness due to the fact of his having been engaged in working in a drain for some time last year, as while thus employed he had often to stand for hours in wet up to his body.

There was no history of his having had any previous illness, or syphilis. He had had six sisters and one brother, and, though the former were dead, he was not aware of their having had any affection like his.

On admission, the patient was a small man, fairly nourished, and, except in the regions affected by paralysis, presented nothing abnormal. His gait was unaffected, and he was able to walk well; but, when doing so, he kept his head bent forward, and turned his body when he wished to look to either side. This peculiarity seemed due, not to rigidity, but to weakness of the cervical muscles. His face presented a great contrast in its upper and lower halves; the former was bright and intelligent, and at times cheerful; the latter was vague, expressionless, and had a sad drawn look. The lips, which lay apart, were thinner than normal at the outer side, though thick in their middle, and the saliva ran in continuous streams from the sides of the mouth, unless constantly wiped away. There was also complete inability to whistle, smoke, spit, or to puff out his cheeks. On asking him to put out his tongue, he was unable to make its tip pass the front teeth. His efforts to comply with the request were very strange, and always the same, no matter how often he made the attempt. He would open the mouth very wide, and draw down the chin with his hand, receding his head at the same time, as if by this expedient the tongue would remain protruded. He could not raise the tip to the upper teeth, nor to the palate, and had very slight power in a lateral direction. It generally lay helpless in the bottom of the mouth. The organ was remarkably smooth in front from an atrophy of the papillæ, and was seemingly shortened, due probably to the inability to protrude it, and also from atrophy of its substance. It was raised in lumps in several parts, and particularly along the sides. This grooved and unequal appearance was also due to the atrophy of its substance. Fibrillary movements were plainly visible along its left side and near the tip. Its sensibility was unimpaired, and taste was normal. Speech was very indistinct, while the pitch of the voice was high and loud. Some few monosyllabic words he could make a fair attempt to pronounce, but any approach to a dissyllable or a sentence ended in a confused jargon. There was no aphasia, as he could correctly name each object shown him, and describe his symptoms sufficiently to make himself understood, partly by sounds which resembled words, and largely by gesticulation. In going through the letters of the alphabet, the letters E, K, N, P, and Z, seemed the most difficult to pronounce. As he was illiterate, his powers of reading and writing could not be tested. The power of mastication was not lost, but the food passed quickly, without almost any chewing, from presumably the inability of the tongue to roll it under the teeth. He drank but little at a time, and then did so by throwing the liquid well back, and gulping it down.

The palate, to all appearances, seemed unaffected, as, in touching it with the point of a pencil, it responded to stimulation. Liquids and food also never returned through the nostrils. That it was involved, though to a slight degree, was manifested by his inability to sneeze or blow his nose, acts which do not depend in any way on the power of closing the lips. The lower facial muscles and the tongue responded feebly to faradism, and there was no reaction of degeneration. The mind seemed to be unaffected, though at times he was very desponding, and when amused he laughed immoderately.

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[1] Read before the Academy of Medicine in Ireland.

On testing the general muscular power, it was evident that, in addition to the symptoms of progressive bulbar paralysis, for the relief of which he sought advice, his hands, upper extremities, and trunk were the seat of progressive muscular atrophy. The left hand was affected to a greater extent than the right, and exhibited the features of the "claw-hand." The dorsal interossei of each hand were atrophied, and, as well as the second and third left palmar, did not respond to faradism. The thenar and hypothenar eminences were also flattened; the abductor pollicis did not respond to electricity, while the opponens responded very feebly. The power of grasping was greatly impaired, the dynamometer registering 12k. to the right, and 5k. to the left, hand. The forearms were soft and flabby; the deltoids, and markedly the right one, were atrophied. The patient was unable to raise his right arm to the horizontal level, and without the aid of the left hand to place the right on the vertex. Fibrillary movements were seen in almost all the muscles, but were well marked in the deltoid, pectoralis major, triceps humeri, and flexor digitorum. Sensation was unaffected. With the exception of the deep cervical muscles which raise and turn the head, all of which were more or less involved as to function, and probably also as to size and structure, the muscles of the trunk and lower extremities were unaffected. There was no loss of power or co-ordination while walking, and the bladder and the rectum were healthy.

The patient remained in hospital for two months, and in some respects was much better than when admitted. He was able to use his right arm much better, and to raise it to the level of the shoulder. He was also less dejected, and was very anxious to try and work. The treatment consisted of nourishing diet; faradism and galvanism to the affected muscles; and chloride of barium, in half-grain doses, three times a day, combined with tincture of hyoscyamus.

REMARKS.—It is not my intention, nor, indeed, do I consider it profitable, to discuss the question of the origin of progressive muscular atrophy. The weight of evidence, at the hands of Charcot, Duchenne, and Joffroy abroad, and Lockhart Clarke and Ross at home, has convinced me that the "neuropathic theory" of Charcot is that which best explains the *rationale* of the disease; and that a similar primary central lesion, in the motor nuclei on the floor of the fourth ventricle, produces the paralysis and atrophy of the tongue, lips, pharynx, and larynx in progressive bulbar paralysis. The association of the two diseases is well exemplified in the foregoing cases. In both, the tongue was first affected. In Case I, eight months elapsed before the patient was aware of the presence of paralysis of the lower extremities; in Case II, four months. I say advisedly "before the patient was aware of the paralysis;" for it is more than probable that the progressive muscular atrophy had commenced its work long before the patient was made aware of it. It is a painless disease, most insidious in its approach, and fitful in its advances, involving separately several portions of a muscle, and not the whole; and it may not be until a very great portion of the muscle is invaded, or a group of muscles becomes atrophied, that the paralysis is recognised by the sufferer. This holds good for the muscles of coarser action, even more than for those of fine and delicate action. It is soon discovered in the fingers of a telegraphic or scrivener's clerk, or in those of a pianist, but very much later in the muscles of the trunk, arms, and lower extremities. I have no doubt in my own mind that, had they been looked for, fibrillary movements would have been discovered in the affected muscles of the trunk and extremities of these patients a very considerable time antecedent to the presence and date of their paralysis. As bearing on this point, I would refer to the case of the combined disease, [illegible] which Charcot has detailed, in which he discovered the presence of these evidences of advancing amyotrophic paralysis in the pectorals, deltoids, and latissimus dorsi muscles, before the patient was aware that he was suffering from anything but the affection of speech.

We may therefore, I think, fairly assume that, if not synchronous in their occurrence, the interval which elapsed between the primary engagement of the nerve-centres, which gave rise to progressive bulbar paralysis and progressive muscular atrophy, was short.

Fibrillary movements of the tongue and lips are signs more certain symptoms of the advancing bulbar disease than atrophy, for atrophy may not be an early sign. Paralysis may precede it by a very considerable interval, and even to the last the tongue may appear smooth and of normal volume. This was made known by the case of Charcot referred to, in which, while it appeared unaffected by atrophy, the tongue was very far advanced in fatty degeneration. It seems to me that in all probability the condition of this organ in Stephen S. (Case I) was very much the same as in Charcot's case, for though the tongue appeared slightly atrophied, as compared with the organs of James C. (Case II) its functions as to speech and deglutition were very much more impaired; in fact, no words could be attempted by Stephen S., although he had the aid of the lips, an advantage which the other patient had not, and yet the latter was able to pronounce some monosyllables, although his tongue seemed more furrowed, [illegible] and shortened by atrophy.

These cases illustrate, alike in bulbar paralysis and in progressive muscular atrophy, the very unequal manner in which the same disease may attack different individuals, and a similar want of order by which it makes its advances to a fatal termination.

Case I, in eight months, was fast approaching that consummation; Case II, on the other hand, seemed to be in a stationary or even improved condition at the end of ten months, so far as the disease of the muscles of the extremities was concerned, while, with respect to those of speech and deglutition the disease seemed to be in abeyance.

The bulbar lesion in Case I had chiefly and most seriously involved the nuclei of the hypoglossal nerves, so as to interfere with their function in their distribution to the muscles attached to the hyoid bone, and it but slightly touched the facial; while in Case II the facial nerve seemed much involved, as well as those filaments of the ninth which move the tip and anterior part of the tongue. In neither case were taste or sensation affected.

Further comment on these cases is unnecessary, beyond noticing that they throw no light on the predisposing or exciting causes of progressive bulbar paralysis; and, although syphilis is accredited with producing the disease by some observers, it is not a factor in these cases. In truth, nothing is known as to its etiology, beyond the facts that it occurs twice as often in men as in women; and after 40 years of age. Heredity is acknowledged to be a strong predisponent of progressive muscular atrophy; yet, though the two diseases are but parts of the one lesion, it has not been proved to be a recognised factor in progressive bulbar paralysis.

ADDRESS ON COLLECTIVE INVESTIGATION.[1]

By SIDNEY COUPLAND, M.D., F.R.C.P.,

Physician to the Middlesex Hospital.

ALLOW me, in the first place, to thank you, on behalf of the Collective Investigation Committee, for the invitation which has brought me here to speak of that Committee's work, before this important Branch. I very much regret that the secretary of the Committee, Dr. [illegible]ham, should have been unable to have come himself, and that the duty should have devolved upon me; for my knowledge of the practical working of the scheme is very incomplete as compared with his, so that the most that I am able to tell is but a small portion of what might be said upon the subject. As a member of the Committee, and therefore desirous to see its work prosper, my words shall not be lacking in earnestness, although they may be deficient in scope.

In setting on foot this undertaking, the British Medical Association is making a great experiment, and it would be too much to expect that it should achieve full success at a bound. Particularly is [illegible] of a plan that requires the cooperation of so large a [illegible] of whom may naturally ask whether the results to be obtained are worthy the efforts made to obtain them. Few, however, [illegible]

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[1] [illegible]

This question of utility is the main thing to be considered in every new venture; and, as regards this movement, much has been said in its favour. The leaders of our profession have spoken in no uncertain terms upon it. It has the advantage of appealing to a general sentiment; not that its scientific value should be overrated; but this will not be small, if the scheme can be worked as thoroughly as possible. At any rate, no one can gainsay the advantage to be derived by the co-operation upon one line of research of a vast body of skilled observers throughout the country. There are questions in medicine to which the experience of one man affords no answer; which will indeed never be answered until we can collate and analyse the experience of all. By means of the collective inquiry into such matters, we may expect to advance considerably our knowledge of unsettled points in etiology, as well as in therapeutics, and learn much of the cause and varieties of disease under varying conditions.

But collective inquiry is of value in other directions than these. It gives to every practitioner the means of recording facts that are daily before him, and recording them in a way that is sure to be of use. Is it not a source of regret that hitherto, in spite of the existence of so large a body of men engaged in one pursuit, men of culture and intellect, sagacious and skilful, so little should be produced? Even with the growing literature, and increase in journalistic activity of these days, the fact remains. We all know men, whose opinions are of the highest value, who have never put pen to paper, and who will not leave behind them, except by oral precept, one grain from their vast storehouse of accumulated thoughts and experiences. Partly, no doubt, this is due to the engrossing nature of their life-pursuit; the daily round of unceasing duty in ministering to the wants of the sick leaves them little leisure to devote to the records of the facts they observe. The world is the poorer then, and our science the loser, in a very real sense, when such men die, for "their works follow them." Any scheme which should prevent this great waste of knowledge is to be welcomed, and to a certain extent collective investigation does supply this need.

But the individual worker, in contributing to the common stock of knowledge, is himself benefited. For the scheme we advocate fosters and directs his powers of clinical observation; and fixes his attention upon matters, a knowledge of which may prove to be of instant service in his treatment of the case, as they will be ultimately of value when considered as parts in the work contributed to by all.

I need not, in this room, dwell longer upon this part of the subject, for we may all concede that collective investigation is good in itself. The main purpose of my presence here was not to advocate the cause so much as to explain the manner in which the work is conducted at present in our Association.

It was, of course, essential that there should be some central body to receive suggestions, to initiate and to control inquiries, and this was supplied by the formation of the Collective Investigation Committee, whose chairman, Professor Humphry, and secretary, Dr. Mahomed, have laboured so indefatigably to promote the work. The Committee not only decides the subjects suitable for investigation, but undertakes the reports upon the returns received; and last year issued the first number of the *Collective Investigation Record*, for the publication of these reports. The second number of the *Record* will appear this summer, and by its contents you will be enabled to form a fair notion how the work is proceeding.

There have now been instituted, since the Committee was formed two years ago, no fewer than eleven inquiries, embracing subjects of widely varying interest and importance. With few exceptions, the plan of conducting the inquiry is the same in all, viz., by means of schedules containing each point requiring notice, the preparation of these being placed in the hands of men specially qualified to deal with them, who are also instructed to draw up explanatory memoranda. Their work is submitted to the judgment and criticism of the Committee before it is finally issued to the profession at large. It is to Dr. Mahomed that we owe the device of printing the schedules upon cards of convenient size; and, as a proof of the value of this plan, I may mention that it has also been adopted in the German investigation, to which I have alluded. Some of these cards—notably those upon diphtheria, hæmoglobinuria, and syphilis—are in themselves an epitome of known facts concerning the diseases, and at first sight present rather a formidable appearance, calculated to damp the ardour of the observer. Although it has been contended, and with certain justice, that this over-elaboration tends to defeat the object aimed at, and to stifle under too great a mass of learning the free exercise of observation, I cannot but think that we are liable to take too exaggerated a view of this matter. For it must surely add vastly to the interest one always feels in investigating any case, to have before one, in concise form, all the points which the case may present to be unravelled; some of which, were our attention not specially directed to them, are likely to be overlooked. I hope, however, to hear from the members present an expression of opinion on this head, for I conceive that a weighty objection may be raised to those detailed investigations on the score of time; and that the Committee may have too much lost sight of the conditions under which the practitioner works, and, in aiming at an inquiry which shall be thorough, may have made too great a demand upon him. Practically, it has been found that the largest number of returns are received on those questions which are of limited scope; and until the profession is more generally conversant with the method, and more thoroughly convinced of its utility, both to individuals and to medical science, it is too much to expect that the returns will be numerous on the more detailed questions. Upon some of these questions—*e.g.*, that of hæmoglobinuria—the comparative rarity of the disease is an obvious explanation of the paucity of returns. It seems to me that the great reason in favour of elaboration, is the confirmation it brings of care and precision in observation. As to the manner in which the system has hitherto worked, and the character of the returns received, I have no personal knowledge except upon the inquiry into pneumonia. Dr. Sturges and myself are now engaged in sifting and analysing the returns on this subject, with a view to their publication in the forthcoming *Record*. Without in any way forestalling the tenor of the report (which is yet unwritten), it may be of interest if I refer briefly to this inquiry, taking it as an example of the practical working of the whole scheme.

Acute pneumonia is a disease of such general prevalence, and such well marked clinical characters, as to be peculiarly well suited for collective inquiry. It might be thought that little gain to knowledge could come from such inquiry upon a disease so widely known; but there has long been much difference of opinion respecting its real nature. For many reasons, clinical and other, some of which are enumerated in the memorandum that accompanied the card issued by the Committee, the opinion—which, I believe, Dr. Austin Flint, of New York, was one of the first to formulate, although, very many years ago, one of your own members, Mr. Christian Budd, of North Tawton, arrived at a like conclusion—that acute pneumonia should rank rather with the general specific diseases than with the inflammatory local disorders, has been gaining ground. Nowhere has this view been more strenuously adopted than in Germany, where it may be said to have culminated last year in the alleged discovery of a specific micro-organism by Friedländer. The Collective Investigation Committee, in placing this subject on their list, hoped to gather evidence from the practitioners of this country which should throw light upon the conditions under which pneumonia prevails, the circumstances which specially tend to a fatal type of the disease, and generally on its course and issues. Many collateral points would also come out of this inquiry, among the most interesting being the expression of opinion as to the appropriate lines of treatment in an acute disease which mostly runs so self-limited a course; the relative incidence upon age and sex; the relative frequency with which one or other lung is attacked and the portions involved, with their bearings on the ultimate issue of the case; the association with other diseases; and the liability or not to second attacks. Not that such an inquiry should set at rest for ever these questions, as some think. There can be no finality, but there can be placed on a firmer basis the facts of the natural history of diseases, and the circumstances that influence them. The accumulation of well attested facts is a step towards a conclusion, and brings us nearer to the truth; but to say that in this way we can arrive at the whole truth, so that dogma may be introduced into medicine, is to overleap the bounds of common sense. If this should be the fruit of collective investigation, we had better cease to advocate it. The progress of medicine was long shackled by a slavish adherence to the doctrines of the "schools," and subservience to "authority." Equally detrimental to the growth of knowledge would be the outcome of collective inquiry, which should set a limit to knowledge, and create a dogma based on the experience of the many.

In what respects and to what extent this present investigation upon pneumonia has advanced our knowledge, remains to be seen. It will be found to have borne some fruit, and to have brought to light several interesting and valuable facts, particularly in reference to epidemic influences and the occasional occurrence of contagion; and it will also correct and enlarge our ideas upon many points.

Apart from the results of the inquiry, has it, it may be asked, fulfilled the anticipations of its practical working? That more than 1,100 cards should have been filled up, by nearly 600 practitioners, affords a sufficient answer to this. For it shows that it is a workable scheme, and that it only wants to be more widely appreciated for the remaining nineteen-twentieths of the members of this Association to take the subject up. Never before in the history of medicine has such a result been obtained, and it seems to me to be full of promise for the future. I must, however, here confess to no little anxiety as to the machinery of collection and distribution of the cards of inquiries, and the expense of their maintenance. Already the post of Secretary to the Committee has become almost too heavy to be borne by a single individual, the mere tabulation of the returns involving the expenditure of time and patience which can never be adequately remunerated. It seems to me that, as the collective investigation scheme grows, many and important modifications will have to be made; and that the Association will have to consider the advisability of utilising its Branches for the purpose of collecting and tabulating the data furnished by members of the Branch. In doing this, still greater demands must necessarily be made on the finances of the Association; but, if the work is to be thoroughly done and successfully, the Association must not hesitate to expend money upon it.[2]

As to the other inquiries now in progress, I have but little to say. Such subjects as chorea, rheumatism, diphtheria, and albuminuria are each so full of interest, and so frequently under the view of every medical practitioner, that no doubt can arise as to the possibility of obtaining material upon them. There has, however, been started one investigation which appeals more widely than these; I mean that upon "old age," which was instituted on Professor Humphry's suggestion. The conditions of longevity have never been systematically studied; and we want the correction of ideas, gathered from solitary examples, by the results of a multitude of instances, to estimate them truly. And, in pursuance of this inquiry, we can enlist on our side the sympathies of the subjects themselves, who mostly take a pride in their length of years, and would be well pleased to give us answers to the questions we put them upon their life-history. Mr. Francis Galton's scheme of a Family Album, which was supervised by the Collective Investigation Committee, is more thorough and exact; but it will take long for it to be thoroughly known and established. This inquiry on "old age" promises, however, to be brought to an issue speedily; and from the manner in which it is taken up we may be able to infer how far Mr. Galton's expectations are likely to be verified.

Although, as I have indicated, I do not myself think that the actual labour expended in filling up many of these cards is much, and that the concise manner in which the points are drawn up minimises this labour, so that anyone really undertaking it will be surprised at the readiness with which it is done, I am free to admit that I have never had to do this personally. But I trust that no one will be deterred from assisting in these investigations on this score. Indeed, I have come here to urge you to co-operate, and to use your influence in persuading others to co-operate, in assisting in these researches. At the same time, if there be any points to which you may deem it desirable to draw attention, the Committee will be grateful for your assistance.

I should also remind you that two, if not three, of these researches have been conducted on a far more restricted basis than the rest. Notably was this the case in the inquiry into the communicability of phthisis last year. The subject was one which had been very prominently brought before the notice of the profession by certain pathological researches upon which I need not now dwell; and it was a question which admitted either a simple negative or affirmative answer—appealing merely to experience on a single point, and not requiring much detailed exposition. The result of that appeal was that, in a few weeks, 1,078 replies were received, of which number 261 gave an affirmative answer, more or less abundantly borne out by details of the circumstances; so that the evidence, on the whole, was considered to be in support of the view that, under certain conditions, phthisis is communicable from person to person. The inquiry may not have been conducted with all the precaution essential to a really scientific research; but the fact that nearly three-fourths of that large number of observers had no experience of contagion in phthisis, whereas the remainder had had more or less positive experience, is a result which may prove to be of value. In such a question as this, an affirmative, if capable of proof, outweighs many negatives.

Another inquiry has recently been conducted upon much the same lines, upon a subject which the collected experience of the many alone may be expected to throw light; viz., puerperal fever. It is to be hoped that the subject, which will be reported upon in the *Record*, will still be maintained in the list, in order that the multiplication of records of the disease, and the conditions of its supervention, may lead to that differentiation into its components which puerperal fever must undergo. It is time that, as a simple entity, the disease disappeared from nosology; but the varied febrile conditions of the puerperal state require yet to be widely and systematically studied.

As time goes on, we shall learn better how to frame those inquiries, and how to limit them. The question of collective investigation is not yet out of the experimental stage, and we must be prepared to modify and alter plans originally formed, as we find them to work in practice. As to the questions to be investigated, there is no limit to them. Indeed, the fear is lest we may be too much embarrassed at one time by having so many from which to make a choice; and, personally, I deprecate this multiplication of inquiries. In the selection of subjects suitable for inquiry, which will promise to yield good results, the Committee invite the guidance of all those concerned. Undoubtedly, the ultimate aim of such labour is to enlighten us on the great question of the treatment of disease. The more facts we have concerning the conditions under which diseases exist, and the more knowledge we possess upon their nature, the better shall we be able to cope with them in practice. A system of collective investigation which is directed to such an end should not fail of support; and I do not think that, as the knowledge of its objects is more widely diffused, there need be any fear of this. It requires only the active sympathy and personal participation in its work of every member of the Association to make it one of the most remarkable movements which the world has ever witnessed, as well as one of the most beneficial.

TOBACCO AMBLYOPIA.

By CHARLES SHEARS, L.R.C.P.Lond., M.R.C.S.,

House-Surgeon, Liverpool Eye and Ear Infirmary.

FORTY men, suffering from loss of vision, which was probably due to the abuse of tobacco, presented themselves for treatment at the Eye and Ear Infirmary during ten months. Having taken notes of these cases, the honorary medical officers have very kindly permitted me to publish them.

"Tobacco amaurosis" has been very fully discussed, both at home and abroad, during the last few years, more especially in this country by Mr. Jonathan Hutchinson and Mr. Nettleship. There still remain, however, many points about which there is great difference of opinion; and the hope that later observation by some gentlemen present may tend to set these disputed questions at rest, has encouraged me to bring the subject again forward.

The diagnosis of tobacco amblyopia was arrived at in the following conditions: 1, where there was rapid and usually great failure of sight, not remedied by spectacles, and not due to obvious external changes; 2, where no ophthalmoscopic changes were found, or, at the most, slight pallor or redness of the disc; 3, where the patient was an excessive smoker.

The after-progress of most of the cases which I have collected seems to confirm the correctness of the diagnosis which was made in the first instance.

Of the forty cases, fourteen recovered completely; fourteen improved greatly; and in twelve no improvement was noted. Of the twelve cases where no improvement was noted, three attended once or twice only, and have not returned, though written for; five attended once only, and could not be traced; one attended for the first time quite recently; in three no improvement took place after attending the hospital for a reasonable time. Of these three cases, two would not in any way diminish their smoking; and the third was such a confirmed drunkard that, quite recently, he was attacked by alcoholic paraplegia.

I have drawn up my cases in a tabular form suggested by Mr. Hutchinson, when writing on the subject of tobacco amaurosis.

1. *State of Optic Disc.* When attention was first drawn to tobacco as a cause of impairment of vision, very frequent mention was made of "white atrophy" supervening; and, from what I have been able to gather from the literature of the subject, a grave prognosis was given. Now, on the other hand, if a case be recognised as "tobacco amblyopia," one feels the greatest relief in being able to tell the patient that, in all probability, he will entirely recover his sight if he have only strength of mind enough to give up smoking. In 1869, Mr. Soelberg Wells, in [illegible] *Diseases of the Eye*, states that atrophy ensues in some cases, and Mr. Hutchinson, about the same time, [illegible] where [illegible] the disc [illegible]. In 1876, Professor [illegible] stated that progress to complete atrophy is very rare. Professor Hirschberg, on

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[2] I hope I shall not be considered as too [illegible] that arises out of this. I find, for instance, in the [illegible] one third of the cases reported upon [illegible] large and populous [illegible] of course, we have [illegible] of pneumonia in different parts of the country. [illegible] the Registrar-General, [illegible] to me that, if the British Medical Association [illegible] side by side with the collective investigation [illegible] would be rendered.

Notes of 40 cases of Tobacco Amblyopia under treatment at the Liverpool Eye and Ear Infirmary.

Name and Age.	Duration of Amblyopia.	Vision when first seen.	Habits as to Tobacco.		Subsequent Vision.	Ophthalmoscopic changes, etc.	Treatment, State of Health, etc.
			Before.	After.			
1. [illegible]	[illegible] months	R. [illegible] L. [illegible]	[illegible] oz. twist daily. Chews	Almost ceased smoking. Chews	In 4 months R. [illegible] L. [illegible] Jager 1	Temporal sides of discs pale	Strychnia. Temperate.
2. [illegible]		R. not [illegible] L. [illegible] Jager 1[illegible]	Over 1 oz. daily	Almost ceased	In 6 months R. [illegible] L. [illegible] Jager 1	Discs pale	Strychnia. Drinks to excess.
3. J. D., 41		R. [illegible] L. [illegible] Jager 16	1 oz. weekly	Almost ceased	In 9 months R. [illegible] L. [illegible] Jager 1	Nil	Strychnia. Temperate.
4. [illegible]	[illegible] months	R. [illegible] L. [illegible] Jager 16	½ oz. twist daily for 20 years	Ceased entirely	In [illegible] months R. [illegible] L. [illegible] Jager 1	Nil	Strychnia. Temperate.
5. [illegible], 49	12 months	R. [illegible] L. [illegible]	1 oz. twist daily	Smoked 1 oz. mild weekly	In [illegible] months R. [illegible] L. [illegible] Jager 1	Nil	Strychnia. Drinks to excess. Sexual excesses.
6. [illegible] W., 44	12 months	R. [illegible] L. [illegible] Jager 16	½ oz. twist daily	Ceased entirely	In 6 months R. [illegible] L. [illegible] Jager 1	Nil	Strychnia.
7. [illegible] W., [illegible]	Sight failing rapidly lately	R. [illegible] L. [illegible]	½ oz. twist daily	Smoked for 4 months & then ceased	In 6 months R. [illegible] L. $\frac{20}{50}$ Jäger 1	Nil. Central nebula left cornea	Strychnia. Temperate.
8. [illegible] W., [illegible]	[illegible] months	R. [illegible] L. [illegible] Jäger 16	½ oz. twist daily for 15 years	Almost ceased	In 1 month R. $\frac{20}{30}$ L. $\frac{20}{30}$ Jager 1	Nil. Central scotoma	Placebo. Drinks to excess.
9. P. C., [illegible]	4 months	R. [illegible] Jager 12 L. $\frac{20}{70}$ Jäger 14	1 oz. twist daily for 15 years	Almost ceased	In 2 months R. [illegible] Jager 4 L. [illegible] Jager 1	Temporal sides of discs pale. No scotoma	Strychnia.
10. [illegible] W., [illegible]		R. [illegible] Jager 6 L. [illegible] Jäger 12	½ oz. daily Chews	Continued to chew ½ oz. weekly	In 2 months R. [illegible] L. [illegible] Jager 1	Nil	Strychnia. Drinks to excess.
11. J. R., 53	2 months	R. [illegible] L. [illegible] Jager 10	½ oz. twist daily	Ceased entirely	In 3 months R. [illegible] L. [illegible] Jager 1	Nil	Strychnia. Temperate.
12. [illegible]	[illegible] weeks	R. L. [illegible] Jager 10	½ oz. twist daily	Almost ceased	In 5 months L. [illegible] Jager 1	R. blind from old choroiditis L. nil	Strychnia. Temperate
13. J. W., [illegible]		R. [illegible] L. [illegible]	1½ oz. weekly	Almost ceased	In 3 months R. [illegible] L. [illegible] Jager 1	Nil	
14. [illegible]		R. [illegible] L. [illegible] Jager 8	2 oz. weekly for 40 yrs. Chews	Continued to chew a little	In 12 months R. [illegible] L. [illegible] Jager 1	Discs pale	Strychnia.
15. M. [illegible]	[illegible] months	R. not [illegible] L. [illegible] Jager 16	½ oz. twist daily	Almost ceased	In 1 month R. [illegible] L. [illegible]	Central scotoma	Placebo. Teetotaller 5 years. [illegible]
16. J. [illegible]		R. [illegible] L. [illegible]	½ oz. twist daily		In 5 weeks R. [illegible] L. [illegible]	Discs pale	Strychnia. Could not be traced.
17. R. P. [illegible]	6 months	R. [illegible] L. [illegible] Jager 16	½ oz. twist daily for 30 years		In 1 month R. [illegible] L. [illegible] Jager 10	Discs pale. No scotoma	Strychnia. Drinks to excess.
18. W. A. [illegible]	1 week	R. [illegible] L. [illegible] Jager 16	½ oz. daily		In 3 weeks R. $\frac{20}{40}$ L. $\frac{20}{40}$	Nil	Bromide. Drinks to excess.
19. [illegible]	Several months	[illegible] Jager 14	Heavy smoker for many yrs	Ceased entirely	In 3 months [illegible] Jager 6	Nil	Strychnia. Temperate.
20. J. M. [illegible]		R. [illegible] L. not [illegible]	1 oz. twist daily. Chews	Continued to chew a little	In 2 months R. [illegible] L. [illegible]	Both cornea nebulous but especially the left	Strychnia. Drinks to excess.
21. C. S., 41	[illegible] weeks	R. [illegible] L. [illegible] Jager 16	½ oz. daily		In 3 months R. [illegible] L. [illegible]	Nil	Strychnia. Could not be traced.
22. W. R., 48	8 months	R. [illegible] Jager 12 L. not [illegible] Jager 16	Pipe half ever out of his mouth.	Almost ceased	In [illegible] months R. [illegible] Jager 8 L. [illegible]	Nil	Strychnia. Temperate. Has had two transient attacks of hemiplegia.
23. H. S., [illegible]	[illegible] months	R. not [illegible] Jager 16 L. not [illegible] Jager 18	2 oz. weekly for [illegible] years		In 2 weeks R. [illegible] L. [illegible]	Nil. Central scotoma	Placebo. Temperate. Recent case (four weeks.)
24. W. E., [illegible]		R. not [illegible] L. [illegible] Jager 16	Heavy smoker		In [illegible] months. Much better, is able to follow occupation	Nil	Strychnia.

Notes of 40 cases of Tobacco Amblyopia under treatment at the Liverpool Eye and Ear Infirmary.—Continued.

Name and Age.	Duration of Amblyopia.	Vision when first seen.	Habits as to Tobacco.		Subsequent Vision.	Ophthalmoscopic changes, etc.	Treatment, State of Health, etc.
			Before.	After.			
25. W. L., 26	2 months	R. not $\frac{20}{200}$ Jager 16 L. not $\frac{20}{200}$ Jager 10	½ oz. daily		In 2 weeks R. $\frac{20}{200}$ Jager 14 L. [illegible] Jager 8	Disc hyperæmic. No scotoma	[illegible]
26. W. C., 45	3 months	R. not $\frac{20}{200}$ Jager 16 L. $\frac{20}{200}$ Jager 14	2 oz. weekly for 20 years			Nil. Central scotoma	[illegible] case.
27. J. A., 49	4 months	R. $\frac{20}{200}$ L. $\frac{20}{200}$ Jager 16	½ oz. twist daily for 10 years		In 7 months. Much better and able to follow his occupation	Temporal side of discs pale	Strychnia. [illegible]
28. G. W., 45	2 months	R. not $\frac{20}{200}$ Jager 18 L. not $\frac{20}{200}$ Jager 20	½ oz. twist daily. Chews		In 2 months [illegible]	Discs pale	Strychnia. [illegible] 2 months, and then [illegible] has not returned.
29. R. H., [illegible]	18 months	R. $\frac{20}{100}$ L. [illegible] Jager 16	Heavy smoker for 20 years	Ceased entirely	In 1 month R. [illegible] L. [illegible]	Nil. No scotoma	[illegible] has not returned.
30. J. E., 46	5 months	R. $\frac{20}{100}$ Jager 10 L. $\frac{20}{70}$ Jager 8	4 oz. mild tobacco weekly		In 1 month No change		Strychnia. Only attended [illegible]
31. S. P., [illegible]	10 weeks	R. not $\frac{20}{200}$ L. not $\frac{20}{200}$ Jager 16	½ oz. twist daily for 30 years		In 1 month No change	Discs hyperæmic. Central scotoma	Bromide. Drinks to excess. [illegible] not returned.
32. R. G., 46	9 months	R. $\frac{20}{200}$ L. $\frac{20}{200}$ Jager 16	½ oz. twist daily			Nil. No scotoma	[illegible]
33. C. G., 48	3 months	R. not $\frac{20}{200}$ L. $\frac{20}{200}$ Jager 16	½ oz. twist daily for 30 years			Temporal side of discs pale. No scotoma	Strychnia. Drinks to excess. [illegible] Attended once [illegible]
34. T. C., 60	5 months	R. not $\frac{20}{200}$ L. not $\frac{20}{200}$ Jager 16	½ oz. daily for 30 yrs.		In 2 weeks No change	Nil	Strychnia. Attended [illegible]
35. W. G., 37		R. not $\frac{20}{200}$ L. not $\frac{20}{200}$ Jager 16	Heavy smoker		In 2 weeks No change	Nil	[illegible]
36. T. G., 42		R. $\frac{20}{[illegible]}$ L. $\frac{20}{[illegible]}$ Jager 12	Heavy smoker			Nil	[illegible]
37. E. B., 43	7 weeks	R. not $\frac{20}{200}$ L. not $\frac{20}{200}$ Jager 16	½ oz. twist daily for many yrs.		In 1 week No change	Nil	[illegible]
38. R. C., 44	8 months	R. not $\frac{20}{200}$ L. not $\frac{20}{200}$ Jager 16	Heavy smoker	Smoked and drank to excess	In [illegible] months No change	Nil. [illegible] months later discs very pale	[illegible] General [illegible]
39. R. B., 29	2 weeks	R. not $\frac{20}{200}$ L. not $\frac{20}{200}$ Jager 16	½ oz. daily	Almost ceased	In [illegible] months No change	Discs pale on temporal sides. Central scotoma	[illegible]
40. L. B., 59		R. not $\frac{20}{200}$ L. not $\frac{20}{200}$ Jager 1[illegible]	2 oz. weekly. Chews	Smoked and drank to excess	In 2 months No change	Discs very pale	[illegible]

the other hand, in a paper read at the meeting of the Association in Cork, said that tobacco amblyopia never ends in blindness; and with this statement, Mr. Nettleship, I think, agreed. In an article by Mr. Streatfeild, in the recently published Quain's *Dictionary of Medicine*, the following is met with: "Some cases of white atrophy occur in which there has been no preceding neuritis; of such, tobacco amaurosis is an example, in which, unless smoking be given up, by an idiosyncrasy of the patient, he soon becomes blind."

In twenty of the cases which I have collected, no ophthalmoscopic change was found; in eighteen, the discs were pale, and especially on the temporal side; in two, hyperæmia was met with. It would be foolish to attempt to draw any conclusions from so small a number of cases as forty; but in no instance was any condition of atrophy found. It must be within the experience of all ophthalmic surgeons to see cases of complete atrophy where no satisfactory cause can be found; some of these may be due to tobacco.

The failure of vision in "tobacco-amblyopia" is usually rapid and very marked; this leads patients to seek early advice, which may possibly explain why so few cases of genuine atrophy have been reported. Of my own cases, the longest period of failure of sight was eighteen months, the great majority being about three months. In many instances, the state of the disc greatly resembled that met with in "tabes dorsalis." In all our cases, the presence of the "knee-jerk" was taken as evidence that the patient was not suffering from this disease.

2. *Alcohol.*—Whether the abuse of alcohol, together with excessive smoking, is not a very powerful factor in determining the loss of sight, must be a most difficult point to decide; and here, eminent authorities differ. Saemisch, Wecker, [illegible] lay great stress on the combined effect of spirit and [illegible]. Mr. Hutchinson has said that, in his opinion, "the poisonous effect of tobacco is to some extent counteracted by alcohol." That alcohol is not a necessary factor may be inferred from a case reported by Mr. Stanford Morton, in which the patient was a teetotaller [illegible] his vision entirely on ceasing to smoke; and two of our cases had been teetotallers for many years, and fully half the [illegible] taken of alcohol in very moderate quantities.

Mr. Nettleship, in his remarks on a series of cases reported in 1877, says: "Alcohol, and especially spirit, is an [illegible] cause." At the same time, he [illegible] a man who recovered, reading [illegible] though [illegible] drink heavily all the time. Under these circumstances, may alcohol predispose by lowering the general [illegible] liable to the poisonous effect of [illegible] portant factor in causing the loss of vision met with in smokers?

3. *Habits as to Tobacco.*—[illegible] consumption of tobacco, or is it [illegible] observers, such as Galezowski, hold [illegible] given up; whereas Mr. Nettleship [illegible]

to reduce the quantity used. This seems to me to be a practical point of some moment; for many men would willingly reduce their smoking, and use very mild tobacco, whereas stopping it entirely would be the greatest possible hardship.

Of the limited number of cases which I have collected, many continued to smoke a little, and made an equally good recovery. The quantity smoked in the first instance was very rarely less than half an ounce a day, and a very strong form of tobacco was used. Six patients chewed as well.

4. *Treatment.*—It is usually the practice to give strychnia internally. This was done in twenty-eight cases; but patients seemed to make an equally good recovery when smoking was diminished alone. Dr. Galezowski states, in his monograph on *Toxic Amblyopia*, that workers in tobacco-manufactories suffer from loss of sight as in smokers. By the kindness of Messrs. Cope Brothers, of this city, I was allowed to go over their large tobacco-manufactory, and make any inquiries I thought necessary of their workpeople. About 1,200 men and women are engaged in the works; and I made careful inquiries of the foremen of the different departments. In no instance had any of them suffered from failure of vision, nor had such a case ever come under their notice. Many of the men had been over ten years in Messrs. Cope's employ. No amblyopia was produced by the absorption of tobacco-dust, as described by Galezowski. Mr. Charles Lee, one of our assistant-surgeons, kindly made similar investigations for me at a large tobacco-manufactory in Chester, and here, again, loss of sight from contact with tobacco was unknown.

If I may be allowed to draw any conclusions from the stated experience of our surgeons, and the cases I have been able to bring forward, they would be these:

a. Atrophy of the optic nerves is very rarely met with as the result of excessive smoking.

b. Tobacco is the essential agent in producing the failure of sight.

c. Great moderation in smoking, and especially the employment of mild forms of tobacco, is all that is necessary to ensure recovery.

In the great majority of the cases, no diminution in the peripheral field of vision was found. In twelve only were careful observations made with regard to a central defect in the visual field; and, of these twelve, six cases were found having well marked "central scotomata."

ARSENIC IN GASTRIC ULCER.

By JOHN STRAHAN, M.D., M.Ch., Belfast.

THREE cases of gastric ulcer occurring in my practice within the last three years, each ending in recovery in an unusually short time, and each occurring in the most dangerous class of subject—viz., a young woman—may illustrate the efficiency of a modern plan of treatment not enough known or practised in this country. Dr. S. Ringer certainly mentions arsenic as being more useful than the generally employed remedies, but does not recommend it in so hearty a way as to lead the profession to make trial of it. The American physicians are, however, using it very freely and with great success, not only in gastric ulcer, but in chronic gastritis, cancer of the stomach, and the various forms of intestinal indigestion, ileo-colitis, etc.

CASE I.—The first case in which I tried this plan came under observation about three years ago. The patient was aged 25, a female, unmarried, housekeeper to a widower father, and had been ill for two years. She was very much emaciated, and complained of all the symptoms usual in such cases—viz., localised pain in the epigastrium, of a gnawing, boring character, shooting straight through to the back between the shoulders, where a very tender spot existed on the spine rather below the angle of the scapula. The seat of pain in the epigastrium was also extremely tender to pressure. The pain was greatly increased by hot or stimulating articles of diet, and indeed by any food; the pain continuing until vomiting occurred, with great relief. There were also severe attacks of gastralgia radiating from the tender spot all over the epigastrium, which caused great distress at intervals, also acid pyrosis. The most diagnostic symptom, however, was hæmatemesis, which had occurred to a moderate extent three different times. There had been scanty menstruation, and latterly amenorrhœa, from the severe anæmia present.

She had been under the care of several competent medical men, and, lastly, under that of the late Dr. Thompson, one of the most distinguished men in the north of Ireland. He treated her with from quarter to half grain doses of nitrate of silver with a grain of opium in pill for some time, and then with large doses of bismuth, with opium and counter-irritation to the epigastrium. While under this treatment, she improved a good deal, but a few weeks after stopping the medicine she became as bad as ever; for some time, therefore, she had abandoned all treatment, thinking it useless. She came to me without the least hope of benefit, and merely to please a relative, an old nurse in the fever-hospital, whom I had known when house-physician there. I immediately put her upon regular milk-diet (four ounces every four hours), with lime-water, regulated the bowels with a simple aloes-pill at night, applied a small blister (the size of a penny) to the tender spot on the epigastrium, and gave her one drop of Fowler's solution, on an empty stomach, four times daily. She returned in a week much improved in every way. The vomiting had almost ceased; the pain was very much less, and she had gained a little colour. The treatment was continued for a month, when she was almost well. All the symptoms had ceased, and she was wonderfully improved in flesh. The arsenic had evidently also cured the anæmia. She continued the medicine a little longer, and was ordered to be very careful about her diet for some time. She has remained quite well ever since.

CASE II.—The second case was a girl aged 20, engaged in a linen-warehouse, unmarried, and of a very full habit, but lymphatic in temperament. When I was called to this case, the friends supposed her dead from vomiting of blood. She was in a severe state of syncope from a dreadful hæmatemesis, which had occurred without a moment's warning. After recovering her from the syncope by the usual means, brandy, the head low, ammonia to the nostrils, etc., I gave her ice and a large dose of gallic acid to guard against renewed hæmorrhage, which would probably have proved fatal. She was so utterly exhausted that I made no further examination that day, except to gently ascertain the absence of phthisis. In a few days, as there did not appear any symptoms of perforation, I made an examination, and completed the diagnosis of gastric ulcer, by finding localised pain and tenderness, with pain in the lower dorsal spine, and ascertaining that she had been troubled with more or less vomiting after meals, although otherwise in good health.

She was treated exactly as the first case, and with exactly the same result. She had to stay in bed a fortnight from debility, but, at the end of that time, she demanded an addition to the milk-diet on account of increased appetite. She was allowed all kinds of farinaceous articles in the fluid or semi-solid state. I added ten grains of ammonio-citrate of iron to each dose, as the anæmia was extreme. In another fortnight, she was quite well, was cautioned as to her diet, and remains well up till the present time (eight months).

CASE III.—The third case occurred about six months ago, in the person of a girl aged 18, a housemaid, who had been ailing for some time. She was becoming thin and anæmic, the menses scanty, and vomiting more or less after meals, so that her mistress first suspected pregnancy, and then consumption. This case was rather more latent than either of the others, as there had been no hæmatemesis. But there was no difficulty in diagnosing gastric ulcer, as on cross-examination I ascertained that the menses had never quite ceased, and that she had noticed "coffee-grounds" in the vomit several times. I was fortunate enough to see some of this for myself, when there was no difficulty in recognising altered blood. The lungs were healthy; the pain and tenderness in the epigastrium and in the back were very marked. Hence, taking the case as a whole, no doubt could exist as to the diagnosis. There was great constipation; and, as she could not swallow pills, I added sixty grains of sulphate of soda to each dose of arsenic. This regulated the bowels, and did not seem to interfere in the slightest with the soothing and cicatrising powers of the arsenic. The diet was regulated as before. In this case, the pain and vomiting stopped at once; there was no further appearance of coffee-grounds; she gained colour fast (she was in good flesh all along), and in three weeks was almost well. As she had a great antipathy to medicine in any shape, she now refused to take any more, and in another fortnight she was as bad as ever. The ulcer had evidently not been completely cicatrised. She was put on the same mixture again, and kept on it for a month, when she seemed quite well, and was allowed to try herself without medicine. Of course, for some time afterwards, her diet was confined to milk, all farinaceous articles in the semi-solid state, and white fish. She was denied all condiments, alcohol in any shape, sugar, meat, and anything quite solid, or anything hot. As she continued well at the end of another month, she gradually returned to her usual diet; she continues well up to the present time.

REMARKS.—It may be said that the improvement in the above cases resulted from regulation of the diet; but we know that milk-diet alone will not cure ulcer of the stomach so quickly, if at all. Besides, the first case had been put upon milk-diet several times before, and blistered several times before, so that she was rather unwilling to submit to my treatment at all, thinking she was just going to have the old treatment all over again. Of course, it is essential to regulate the diet, as no one could hope to cure a gastric ulcer while irritating food was continued. But, making all due allowance for the great improvement which always follows the regulation of the diet, I think the treatment by small doses of arsenic gives results to be obtained by no other mode of treatment. More than, at the outside, two drops should never be given, as the irritating action would then commence, to the injury of the patient. By an action on the end organs of the gastric nerves, small doses relieve the pain wonderfully, and improve the general tone of the gastric mucous membrane, curing the gastric catarrh which exists at least in the immediate neighbourhood of the ulcer, and thus relieving the patient of the vomiting of mucus, which is sometimes an important feature of the case. We also know that a weak solution of arsenic will, out of the body, heal unhealthy ulceration, *e.g.*, onychia, or even when given internally, so that it is not strange that it should act locally as a cicatrising agent on a gastric ulcer. Nitrate of silver, the next best remedy, recommended by such men as H. C. Wood, Da Costa, and Wilson Fox, is not nearly so efficacious, either in relieving the pain or in promoting cicatrisation. Indeed, in all gastric and intestinal affections in which nitrate of silver is so much recommended, and is so successful, I believe that the small dose of arsenic is far more valuable, and it is certainly far more convenient. Bismuth is highly recommended by Brinton and many high authorities, but it has been recently said that it very often owes its powers as a sedative to the stomach, to a trace of arsenic which it contains.

Some people are sceptical as to the reality of the cure in a case of gastric ulcer; there is no ground for this, for, although many ulcers continue open for periods of from four to thirty years, that occurs probably in absence of proper treatment. Besides, Brinton estimates that a cure takes place in about one-half of the cases which occur. This estimate is based on the number of instances of cicatrised ulcer found in *post mortem* examinations. It is also a more common disease than is generally believed. Dr. Brinton's researches show that it is found after death in an average of 5 per cent. of persons dying from all causes. Jaksch, quoted by Niemeyer, found, in 2,330 necropsies, ulcer in 57, and cicatrices denoting ulcers which had healed in 56; making the ratio of an ulcer, either existing or having existed, as one to every twenty subjects. My cases, too, were of the most dangerous sort, as they all occurred in young women; and it is in young women that perforation, with all its consequences—collapse, peritonitis, or abscess in the abdomen—is most liable to occur.

Perforation is most liable to occur when the ulcer is situated on the anterior surface of the stomach, as adhesions cannot so easily form between the stomach and the anterior abdominal wall as they can in other situations; but, as I diagnosed the ulcers in all of my cases to be situated on the posterior wall (on account of the pain darting straight through to the back), I was not uneasy about this danger, and did not confine the patients to bed, or hinder them from following their usual occupation, except in one case where the patient had to remain in bed on account of debility from hæmatemesis. When an improvement in the symptoms renders it probable that the ulcer is healing, great care in diet is important to prevent a relapse; and it is to be borne in mind that remissions are apt to take place, followed by a renewal of all the symptoms. Care is necessary for some time after the healing appears to have been completed; the patient is not to be considered as altogether safe for a year or two after apparent recovery, as the cicatricial tissue by which the ulcer is closed is of lower vitality than the mucous membrane generally, and in the case of lowered health from any cause, or the occurrence of chronic gastric catarrh, the ulcer is very liable to reopen; perhaps by the cicatrix being digested off by the gastric juice, should it become lowered in vitality by congestion or other cause.

Why young women should be so liable to the perforating form of ulcer, still remains unknown. It has been conjectured that the anæmia common at that period may stand in some relation to it, or affections of the endocardium, as no doubt the immediate cause of ulcer is usually embolism or thrombosis of a small gastric arterial twig, or even capillary, causing necrosis of the mucous membrane, or of the whole coats of the stomach within the space nourished by the obstructed branch, the gastric juice then digesting the affected part off. Small ecchymoses within and beneath the mucous membrane might act in the same way. Still, we cannot account for the fact that females are more liable to ulcer, in the proportion of two to one.

The Epsom Guardians have, with the sanction of the Local Government Board, increased the salary of Mr. Allan MacLean, Medical Officer for the Leatherhead and Fetchham District, from £50 to £65 a year.

A FEW REMARKS ON HAY-FEVER.

By WM. S. PAGET, M.D.Lond., M.R.C.P., Great Crosby, Liverpool.

I read with much interest the lecture on hay-fever by Dr. Morell Mackenzie, in the Journal of May 17th; as I have myself been a sufferer from the complaint for the past six summers, the susceptibility to it, in my case, somewhat curiously, having only arisen since coming to reside in a seaside locality, peculiarly destitute of vegetation. I suppose it is now a tolerably well established fact that the pollen of the *Graminaceæ* is the active agent in producing the symptoms of the disease. I believe, however, that when once the complaint has set in, inhaling the perfume of almost any flower in full bloom will evoke an attack; at least, I have found this to be so in my own case.

Although the flowering grasses are the noxious agents, there are other factors (alluded to by Dr. Mackenzie) of such great importance, that they ought to receive due attention, influencing, as they do very materially, the course of the disease, and affording suggestions as to its successful treatment; of these influences, I have generally considered intense heat, bright light, and east wind, as the most potent. With reference to east wind, I remember well that, six years ago, when my first attack occurred, the wind, during the whole hay-season, never shifted from the east or south-east, the weather being glaring and sultry; victims to the disease suffered greatly during that summer. Here, on the west coast, when the wind blows from the sea, I enjoy comparative immunity; the ready explanation of this of course is that, when it blows from the opposite quarter (easterly land breeze), the pollen is wafted down towards the shore from the country districts. No doubt this is, in great measure, the true explanation, but it does not cover the whole question, for I have noticed this peculiar fact, that even when I have driven up into the heart of the country, and have been surrounded on all sides by hay-fields in full flower, if the atmosphere be bright and clear, with a west wind, I have scarcely suffered at all. Consequently, one is driven to the conclusion that there is something specially noxious about the east wind during the hay-season, as well as at other times of the year.

With reference to bright light, every sufferer knows what an immense relief it is when the sky is overcast. Not that light alone can produce the disease, but, when once it has set in, the supersensitive conjunctiva is easily irritated by bright light, and the complaint materially aggravated. So, again, intense heat, especially if combined with glaring light, intensifies the suffering, particularly when the body is prostrated by over-fatigue.

With reference to treatment, I am afraid I am somewhat sceptical as to any specific internal remedy, though one would naturally expect a good result from some of the nervine tonics. I have tried most of them, but it is difficult to estimate their relative value. It is, no doubt, however, exceedingly important to have the general bodily condition at its best. Unfortunately, just as the hay-season comes on, most of the educated classes (and it is among these we chiefly find the complaint) are run down by a year's hard work, have had no holiday, have passed through the trying influences of spring, and consequently their resisting power is below par, and they are prone to suffer severely, unless they can get right away to sea for a holiday.

With regard to local measures, I attach the greatest importance to the protection of the eyes. In my own case, as well as in those of many with whom I have conversed, conjunctival irritation, especially intense itching at the inner canthus, precedes, as a rule, by some days, the nasal irritation; consequently, by wearing goggles or a veil, as suggested by Dr. Mackenzie, whenever out of doors, and commencing their use early, before the disease has developed, a great point is gained. The comforting, cooling effect, not only to the eyes, but to the whole surface of the body, can hardly be overestimated. By this means, not only are the eyes shielded from pollen, dust, and wind, but also from the glare and heat.

It is also of great importance not to get the body overheated, if possible, as an aggravated attack almost always supervenes upon severe physical exertion; therefore everything should be done as leisurely as possible.

With regard to local applications to the eyes, I have found the greatest relief from very gentle sponging, either with tepid water or a tepid lotion of zinc, morphia, and hydrocyanic acid. I think cold applications should be avoided; for, though they give great comfort at the time, they lead to a disagreeable reaction afterwards. When the nasal irritation is great, I find inhalation of a mixture of equal parts of carbolic acid and liquor ammoniæ very grateful. It is best to saturate a piece of sponge in this mixture, and keep it in a stoppered bottle, and inhale frequently. When the nose is much stopped, the employment of the nasal douche is valuable, using a weak carbolic lotion, or one of common salt or carbonate of soda. The plugging of the nostrils with cotton-wool is useful in preventing the entrance of pollen and other irritating matters, but is not altogether comfortable.

I have ventured upon these few remarks, not as containing anything novel, but with the hope that they may be of some use to others who are troubled with a very annoying and depressing complaint, for which people, as a rule, do not appear to have much sympathy. I am happy to say that my own attacks have been rather lighter each year.

THE TREATMENT OF HAY-FEVER.

By LENNOX BROWNE, F.R.C.S.Ed.,
Senior Surgeon to the Central London Throat and Ear Hospital.

THE short note of Mr. W. F. Phillips, on the use of belladonna for the relief of hay-asthma, is valuable, since this remedy has, at least, the recommendation of being rational. A few further remarks in the same direction may be of interest.

It being conceded, as well established by Blackley and others, that the exciting cause of the affection is invariably irritative action of a flower-pollen on the nasal mucous membrane, possession of a peculiar idiosyncrasy as a strong predisponent must equally be admitted. It is further highly probable that this idiosyncrasy affects the subject far more locally than generally.

Now, let us consider how it is proposed to attack these causes. The most highly recommended local remedies are snuffs and insufflations. It is submitted, however, that they are most illogical for treatment of a membrane primarily irritated by mechanical atoms, however finely divided. The physiological use of the nostrils being to filter the inhaled atmosphere of irritant particles, it has always appeared to me as unscientific to blow powders, however sedative, into either nares or larynx in cases of disease, as to use snuffs in a state of health; the mechanical action of the powders being of itself, in my judgment, quite sufficient to contraindicate their employment. The same argument applies with even greater force to "plugging the nostrils with cotton-wool or wadding." I had long had experience of the use of ointments in cases not dissimilar to those of hay-asthma, in which acute coryza is produced, or a chronic nasal catarrh is aggravated, by the dust of roads or of ball-rooms, or by certain atmospheres, as of east winds and chemical fumes; and, four or five years ago, I first recommended them to patients subject to hay-asthma, the remedy to be commenced some days, or even weeks, before the season of liability. At first, these unguents were prescribed in the form of vaseline with iodoform; but repeated objections to the odour of this last named drug, and the unsatisfactory nature of every vaunted deodorant, led me to advise that the medicated ointment should be employed only at night, pure vaseline being substituted in the day. Lately, I have come to the conclusion that the vaseline acts principally as a protective of the abnormally sensitive mucous membrane, and that the iodoform is, in very many cases, unnecessary. Consequently, I now seldom add anything beyond the oil of eucalyptus (one drachm to the ounce of vaseline), and, in severe cases, solution of atropine, *B.P.*, in the same proportion. Let it be noted that use of the ointment, as now advised, by application of a camel's hair-brush, well charged therewith, inside the nostrils, followed by a good "sniff up," is a very different thing from a "smearing over of the upper lip and the margins of the nostrils." The use of strong smelling salts combined with carbolic acid is of service in many cases, and is well known. It may be needful to mention that their action is quite distinctive in theory and effect from that of snuffs.

So much for local protection against an attack, or for local relief. What is to be done to eradicate local idiosyncrasy? "Whether this be due to some local abnormality affecting the structure of the mucous membrane, the capillaries, or the periphery of the nerves, of too delicate a nature to admit of detection by available methods of research," Mackenzie says, "cannot be determined." Nor do I think it important, being content to agree with his statement that repeated examination of the interior of the nose in cases of hay-asthma will not reveal "anything more than general congestion." Such a condition is sufficiently pathological, and its treatment is easy and effectual, the indication being to change the character of the secreting membrane. In my own practice, I prefer, as superior to all other alterant procedures, a slight searing with the galvano-cautery at only dull red, or black heat, as at once the most quick and efficient, and also the least painful remedy; but, since this method is not generally available to many practitioners, trial may be made with one of the following remedies, as advised in order of their comparative value by Dr. Lefferts, of New York, for the treatment of hypertrophic chronic rhinitis: fuming nitric acid, glacial acetic acid, and chromic acid. These remedies can be easily applied through an ivory nasal speculum, by means of a small probe, its end wrapped in absorbent cotton, saturated with the acid, the excess being well pressed out. Contact is maintained for barely a second. After-pain is but slight; a more or less deep slough is produced, with cicatrisation, and a less sensitive membrane is the result. Prior to such a radical treatment, a course of inhalations of the neutral vapour of chloride of ammonium, by means of the apparatus of Burroughs or of Kerr, is often efficacious in effecting resolution, and is, moreover, of considerable service in acute attacks. Its effects may be modified or increased by the addition to the water-chamber of various medicaments, as ozonic ether, eucalyptus or pine-oil in alcohol, camphor, chloroform, or aldehyde.

It is hardly necessary to mention that any other local cause of irritation, as a relaxed uvula, enlarged veins or granulations at the back of the pharynx, or hypertrophy or polypi of nasal tissue, should be looked for, and if present should be radically treated.

So large a share of success has followed me in the line I have indicated, that I have not found it necessary to search for any constitutional idiosyncrasy once the local sensibility was destroyed. Probably a gouty diathesis is the one most commonly associated with disposition to hay-fever. A few words only are necessary on my views as to the value of internal remedies for checking or allaying an acute attack.

Above everything I rely on a combination of opium and belladonna, the former of which is recommended by Dr. Mackenzie, the latter by Mr. Phillips. The first named physician, rather to my surprise, reports that he has had no experience of the use of belladonna in this complaint, and Mr. Phillips relies on this drug alone. Belladonna, from its well known action of checking, and even of suppressing, secretions from all glands, of inducing dryness of the Schneiderian membrane, and in the relief it often affords in ordinary asthma, is indicated as the most rational of all remedies for summer catarrh.

Laudanum, also, in small doses (three to six minims), given between meals, has an extraordinary effect in checking the majority of cases of common coryza. Without presuming to offer an opinion as to the correctness of the views of Dr. Harley on the non-antagonism of opium and belladonna, I may say that the idea to combine these two drugs in treatment of the complaint under consideration originated in perusal of his interesting experiments. My own experience points definitely to the conclusion that, while opium and belladonna act antagonistically in relation to prevention of some of the disagreeable physiological effects of each drug administered separately, their combination intensifies and prolongs their respective remedial actions, and on these grounds I confidently recommend their joint employment.

In conclusion, I venture to differ from the dictum that the treatment of hay-fever need by any means be considered as unsatisfactory, provided only it be conducted on scientific, not on empirical grounds.

P.S.—Since correcting the proof of the foregoing short note, I have received from Dr. John O. Roe, of Rochester, New York, two communications to the New York Medical Society, on the Pathology and Radical Cure of Hay-Fever, in which the author brings very considerable evidence in support of the view that in this disease there is to be found either hypertrophy of nasal tissue or some localised spot of sensitiveness in the nostrils. The treatment advised is that of galvano-cautery, and the success is remarkable, one case having had an immunity of recurrence for five years, and others for less periods. A similar view is shared by other American specialists, notably by Dr. Daly of Pittsburgh, who has also reported several cases illustrative of the success of local treatment of the nostrils by cautery in patients subject to hay-fever.

THE TREATMENT OF PHTHISIS BY MEANS OF THE EUCALYPTUS ATMOSPHERE.

By A. W. MAYO ROBSON, F.R.C.S.,
Assistant-Surgeon to the Infirmary, Leeds.

WHILST it would be presumptuous to say that a cure for phthisis has been discovered, the researches of Dr. Koch on the pathology of tubercle lead one to hope that such a desideratum is not an impossibility.

The general treatment, hygienic and otherwise, of the diathetic conditions predisposing to consumption, has been extremely successful in preventing disease in some, and even in curing it in others; but these methods as a rule are only capable of being followed out by the rich, and even in them are not by any means always successful.

Now, if we believe that consumption is essentially tuberculous, and that tubercle is dependent on a bacillus, we must look for a cure in some germicide which, whilst fatal to the guest, is harmless to its host.

We know that, if we render abnormal the surroundings of organised beings, either animal or vegetable, they cease to thrive, become unhealthy, perform their functions imperfectly, and in many cases die.

Now, one of the first functions interfered with is that of generation, as exemplified by the difficulty of getting wild animals to breed in captivity, and by the sterile condition of many plants when removed from their natural *habitat*.

Bacteria can be destroyed by antiseptics; and, since generation is a much higher vital act than simple growth, it is probably much easier to prevent their propagation. Hence I cannot help clinging to the hope, which is not altogether unsupported by experience, that if we can saturate the inhaled air of a phthisical patient with an antiseptic, such as eucalyptol, we may hope, first, to kill the bacterium termo present in the cavities, and so prevent putrefactive decomposition and fever; secondly, to kill the bacillus tuberculosis also present in the cavities; and thirdly, by charging the tissues around the air-cells and around the vomicæ with a substance poisonous to the organisms, to prevent the generation of fresh bacilli, and perhaps even to destroy those that have attained maturity.

Many antiseptics have been employed with more or less benefit, but the one I have for the last two years been using has given me such satisfactory results, that I venture to mention it with confidence, and that is the volatile oil of eucalyptus, which I order to be used in an orinasal respirator when the patient is not in the house; but at home I have the chamber charged at frequent intervals with eucalyptus air, by means of the machine which I described fully in the BRITISH MEDICAL JOURNAL of September 2, 1882, where I also related experiments which led to its employment. It lessens the cough, relieves the fever, and after hæmoptysis apparently prevents decomposition of the blood in the air-tubes.

Other means of relief in the way of general treatment are always carried out, so that it is difficult to say that the cure or relief is solely dependent on eucalyptus; but I firmly believe that several cases owe their cure, "apparently permanent," to this method. I will mention one case.

Mr. A., aged 26, with a consumptive family history, consulted me for cough, expectoration, night-sweats, etc., having lost two stone in weight within three months. There were dulness and crepitation at both apices, with all the general symptoms of phthisis. He very carefully followed out the eucalyptus treatment for two months, and then had a sea-voyage, after which he returned quite well, and has never had the slightest relapse. Moreover, he has been able to follow his usual duties during the past year as well as formerly.

I do not wish it to be thought that all my cases have been as satisfactory as this one; but, where the eucalyptus treatment has been diligently carried out, relief has nearly always followed.

Messrs. Mayer and Meltzer manufacture the machines for the production of the antiseptic air, and, at my suggestion, they have arranged to let them out by the month to anyone wishing to give the treatment a trial.

Mr. Kingzett drew my attention some little time ago to his valuable antiseptic, "sanitas," which, he says, acts more strongly than eucalyptus, but in the same manner, *i.e.*, by giving off peroxide of hydrogen. I should think that the antiseptic air apparatus might be advantageously charged with sanitas instead of eucalyptol, if the odour of the former were preferred.

DISCOVERY OF A CREMATORIUM.—During the progress of some excavations near Lincoln Cathedral last week, a [illegible] cremation furnace, in a good state of preservation, was unearthed. Near the mouth was a large quantity of charcoal, and underneath a sarcophagus. Within the latter were found ten urns of various shapes and sizes, provided with saucer-shaped covers, and all containing ashes or partly consumed bones. The discovery is one of great interest to antiquaries, and is remarkable from the fact of the crematorium being within the limits of the old Roman city.

OVERPRESSURE IN ELEMENTARY SCHOOLS.—Dr. Crichton Browne's report on educational overpressure in elementary schools, which was presented to the Vice-President of the Committee of Council on Education some weeks ago, contains, it is understood, evidence tending to show that grave evils and serious dangers to health are involved in the system on which these schools are now conducted. Mr. Mundella has promised that the report shall be presented to Parliament, along with other papers relating to the same subject; and there ought to be no unnecessary delay in the publication of documents dealing with a subject of such great national importance.

OBSTETRIC MEMORANDA.

NON-GRAVID HYDRORRHŒA.

THE term non-gravid hydrorrhœa I employ to designate a very anomalous copious discharge from the uterus in the unimpregnated state, and apparently allied to a similar condition occurring during gestation. Since writing my short paper (in the JOURNAL of May 24th) on this subject, my attention has been called to a series of lectures by Dr. Matthews Duncan which appeared in the *Medical Times and Gazette* in the early part of this year. In one of these lectures more especially, he notes the occurrence of sudden gushes of fluid. One case he relates in which the so-called discharge, when collected and examined, turned out to be urine. This simply shows how necessary it is to investigate closely all cases, but more especially those in which fallacies are apt to arise; for we all may, and frequently do, come to conclusions which are perfectly unjustifiable. Dr. Duncan, however, goes on to say: "There are some sudden watery discharges which I have been unable to explain, and have tried to satisfy myself by supposing they were from the glands of Cowper." It seems to me the cases here referred to are such as those to which I apparently have been the first to draw attention, and regarding the cause and origin of which I ventured a hypothesis. The reason, most probably, why this somewhat anomalous secretion has been up to the present overlooked, is dependent upon the fact that, as a rule, all discharges in the female, unless they otherwise attract special attention, receive the vulgar appellation "whites." Now, should my theory of the cause and origin of hydrorrhœa prove to be correct, it is quite evident that the usual line of treatment adopted by the majority of practitioners for the alleviation of the so-called "whites"—namely, the use of vaginal injections—will prove futile in allaying this discharge. My experience, however, of this symptom (hydrorrhœa), for symptom it undoubtedly is, has not been extensive enough to warrant me in advocating a definite line of treatment. It is one, however, without doubt, demanding general rather than local medication.

JAMES OLIVER, M.B.Edin.

THE APPLICATION OF THE LONG MIDWIFERY FORCEPS.

THE method of introducing the upper blade of the long forceps, as advocated by Mr. Henry Cribb, in the JOURNAL of June 14th, obviates to some extent a great difficulty. In principle, it is almost in accordance with the directions laid down in Dr. Robert Barnes's book, *Lectures on Obstetric Operations*; the second edition of which I read some ten years ago. In a case which occurred in my practice about that time, I was led, or rather compelled, to adopt Dr. Barnes's instruction. The patient, a primipara, [illegible] years of age, was in labour with twins. The abdomen was very large, and the lower extremities were œdematous. To place her in the orthodox position for delivery by forceps was impossible, as she could not flex the thighs upon the abdomen sufficiently, when brought to the edge of the bed. Nor do I think the lower blade ever could have been safely introduced in the manner generally taught when I was a student, owing to the great swelling of the thighs. Hence, in such a case, Mr. Cribb's modification would have proved inapplicable. I followed Dr. Barnes's direction. Holding the handle of both lower and upper blade almost at right angles to the trunk, that is, in this case, between the thighs, the blades were first directed each into the hollow of the sacrum, and then slipped, respectively, under and over the head of the child without any difficulty.

I have never since adopted any other plan; much less the old one of bringing the patient's pelvis close to the edge of the bed. Such a proceeding is quite unnecessary, and, as Mr. Cribb has pointed out, highly inconvenient. I have been surprised, over and over again, that, by practitioners of much wider experience than my own, this most valuable improvement upon the older method has not been adopted. I would respectfully refer Mr. Cribb, and those who may have read his interesting paper, to Dr. Barnes's book, where the modification alluded to is fully explained.

S. [illegible], M.D.,
Assistant-Physician, Manchester Clinical Hospital
for Women and Children.

SURGICAL MEMORANDA.

OPERATIONS FOR HERNIA IN AGED PERSONS.

REVERTING to the subject of operation for strangulated hernia in aged persons, I may mention that I have had [illegible] of this kind, [illegible]. My last [illegible] two months [illegible]. The patient was a woman, [illegible] years of age, suffering from [illegible]. She was [illegible], nevertheless, and made an excellent recovery, as did all the others. Antiseptic treatment was not adopted in any of those cases I am convinced that old subjects are much more tolerant of this operation than the young, and that in them a much smaller mortality may reasonably be anticipated.

James P. Bramwell, M.D., L.R.C.S.,
One of the Visiting Surgeons of the Perth Infirmary.

CLINICAL MEMORANDA.

ALBUMINURIA IN THE APPARENTLY HEALTHY.

On November 21st, 1883, I was asked to see J. R., aged 28, who was suffering from erysipelas of the lower lip, brought on by her pricking a small pimple which appeared on the lower jaw a few days before. On my arrival, she seemed very prostrate, more so than one would expect from the small local inflammation. The swelling of the lower lip rapidly increased, until it became difficult to even take liquids; it extended slightly to the neck, but tincture of iodine, locally applied, kept it from extending up the face. Matter did not form, except a slight purulent discharge from the original wound. In spite of treatment, she grew rapidly worse; and on the night of the 23rd she became delirious, and died on the evening of the 24th.

In this case, I was able to give a very serious prognosis from the first, being aware she was suffering from albuminuria, accidentally discovered four months before, when she came to consult me about a child of hers. She incidentally mentioned that she felt it difficult to open her eyes some mornings. I asked for some urine to be tested, and found it to contain albumen; but the patient herself did not feel ill. I advised her to remain under treatment for some time, but she soon gave up seeing me, as I think she did not believe there was much the matter, and I heard no more of her till I was sent for on November 21st.

This case shows how a person with albuminous urine may continue in apparently good health for some time, but is unable to withstand any illness, even the slight inflammation excited by the pricking of a pimple proving fatal. J. Wigmore, M.D., Twerton-on-Avon.

THERAPEUTIC MEMORANDA.

PHOSPHORUS IN TUBERCULAR DISEASE.

I can quite understand the remarkable success that has attended Dr. Greenway's treatment of tubercular meningitis by phosphorus. Phosphorus is a nutrient for exhausted nerve-substance, and it certainly seems a powerful absorbent of recent exudations. Phosphorated oil has even been said to promote the absorption of a cataract if it be rubbed over the eyebrow. In meningitis, we have exudation of yellow lymph about the base of the brain, beneath the arachnoid, and in the web of the pia mater. Prior to absorption, lymph undergoes a fatty transformation or solution, and this condition is speedily brought about by phosphorus, for the drug is well known speedily to induce fatty change in organs. Pathological knowledge appears, therefore, to point to the fitting medicine.

I have employed phosphorus as well as the hypophosphites of potash and soda, and under the influence of these preparations have seen pleuritic thickenings melt away. Old standing consolidations of lung, that had existed for one, two, or three months, I have seen at once begin to move and disperse as soon as the hypophosphite of potash was given; and cases that have appeared to myself and others very like acute tubercle in the lungs have sometimes recovered on the hypophosphite treatment.

I commenced, about twenty years ago, with phosphorated oil as a medicine, but, owing to its nauseous taste, I took before long to the use of the hypophosphite salts, which contain phosphorus in a very low state of oxidation; and certainly, in those lung-diseases which are of inflammatory exudative origin, and apt to run into phthisis, I know of no remedy to compare with the hypophosphites. Before the discovery of the tubercle-bacillus, I had come to the conviction, from observation, that there were cases of lung-disease where something seemed most decidedly to stop the way towards recovery by means of drugs given by the stomach. If inflammation be the sole agent that destroys the lung in phthisis, I should regard very few cases as incurable. It is the bacillus that seems to set the phosphorus-treatment at defiance; and I notice, at Victoria Park Hospital, that, just when I find the hypophosphites most helpless, then it is that my clinical assistant finds "lots of bacilli."

A few weeks ago, we turned out as cured a case of unmistakable disease in the upper third of one lung, and in that case, no bacilli were found. John C. Thorowgood, M.D., F.R.C.P.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

CHALMERS' HOSPITAL, BANFF.

FRACTURE OF LEFT FEMUR, ASSOCIATED WITH WOUND OF SCROTUM AND LEFT TESTIS: SUPPRESSION OF URINE: TETANUS: RECOVERY.

(Under the care of Dr. Barolay.)

[For the report of this case we are indebted to Mr. Alexander Thomson, M.B.]

A. C., aged 22, a mason, was admitted on October 13th, 1883. At 2 p.m., on the day of admission, he had been working at the building of a retaining-wall in a railway-cutting, when a slip of earth occurred which fell upon his back, striking him in the lumbar region, and partially burying him under it. On his being extricated, it was discovered, by the medical gentleman who saw him, that the left femur was fractured, and, moreover, that the scrotum had been lacerated, and that the left testis was protruding from the wound. The displaced testis was reduced, and the scrotal wound stitched. The injured limb was bandaged to its healthy fellow, and the patient at once dispatched in a conveyance to Banff (a distance of twenty-four miles), where he arrived at 11.30 p.m.

On admission, the patient, who was a powerful and well built man appeared to be perfectly conscious, and was able to answer questions, as to his injuries correctly and with readiness. It was made out on examination, that there was a simple transverse fracture of the left femur, about four inches above the condyles. There was also a linear wound of the scrotum, a little to the left of the raphé anteriorly, closed by two sutures. No other injuries were discoverable, nor did the patient complain of pain in any part except in those mentioned as injured. The temperature was 99.6° Fahr.; the pulse was 72, full and bounding; the pupils were normal. The fractured limb was treated by the extension method, and the wound of the scrotum was dressed with Sanitas Fluid No. 1 (one drachm to an ounce of water).

October 14th, 8.30 a.m. The temperature was 101.2° Fahr.; the pulse, 78; the respirations, 30. The patient had had a restless night; he had passed urine this morning. The bowels had not been moved. He was ordered a mixture containing five grains of bromide of potassium and two minims of tincture of aconite every two hours.

At 1.30 p.m., the temperature was 100.2° Fahr. The pupils were widely dilated. He responded to questions, but very slowly, and had a look of bewilderment.

At 3.30 p.m., he had become quite comatose. As the bowels had not moved, he was ordered one minim of croton-oil.

At 7 p.m., the temperature was 100.6° Fahr.; the pulse 128. He remained comatose. The respirations were 33 in the minute, and exhibited the "Cheyne-Stokes" characters. The pupils were dilated. As the bowels were not moved, he was ordered another minim of croton-oil.

At 8.45 p.m., the patient was suddenly seized with violent general convulsions. There was trismus, and ptosis of the left eyelid. The temperature was 100.6° Fahr.; the pulse 106; the respirations 30, and irregular. The bowels were still unrelieved. He had passed no urine since the morning. The pupils were powerfully contracted. A gum-elastic catheter was passed, and four ounces of dark coloured urine drawn off; it contained no albumen; the specific gravity was 1022. The convulsions continuing, at 9 p.m. five minims of a 2 per cent. solution of pilocarpin were injected subcutaneously, with the result that, in ten minutes thereafter, profuse perspiration occurred, and also abundant salivation, as evidenced by constant swallowing movements. Within a few minutes of the beginning of perspiration, the convulsions ceased; but their place was taken by constant rolling movements of the head, and rhythmical movements of flexion and extension of the left forearm. On auscultation, loud crepitations were heard over the whole of the right lung, but the breath-sounds over the left were normal. The scrotal wound was healthy, and showed no signs of irritation.

By 11.15 p.m., the patient's temperature had fallen to 99° Fahr., and by 2 a.m. on October 15th, to 98.8° Fahr. There had been no more convulsions, but the trismus continued, as did also the ptosis and the movements of the head and left forearm. The bowels had not been relieved.

At 8 a.m. on October 15th, the catheter was again passed, but only two ounces of dark non-albuminous urine were obtained. It deposited triple phosphates in abundance; and one or two granular tube-casts were detected. The crepitations over the right lung were still present, though less marked than on the previous evening. The temperature was 100.4° Fahr.

At noon, the bowels were moved slightly, for the first time since the patient's admission. At 8.30 P.M., the temperature was 100° Fahr.; pulse 80. The bowels were moved again. The retention of urine continued, and six ounces were drawn off. The crepitations over the right lung were still present; and the movements of the head and left arm continued. The trismus had passed off. He was ordered a mixture containing iodide and bromide of potassium in the compound gentian mixture of the *Aberdeen Pharmacopœia.*

The state of the patient remained without much alteration throughout the night and the whole of next day (October 16th).

At 8.45 P.M., the crepitations over the right lung had disappeared. He passed urine involuntarily. The pupils were contracted. Respiration was irregular, and interrupted by frequent deep sighs.

By the morning of October 17th, consciousness had so far returned, that he could protrude his tongue when repeatedly requested to do so. The temperature had now fallen to normal, and it only once subsequently rose above that point. The movements of the head and forearm continued, but were not so incessant as formerly. The ptosis had all but gone.

Consciousness gradually returned, and, by the evening of October 18th, he was able to speak distinctly, though very slowly, and to give rational answers to questions. The pupils remained contracted. His expression was still one of bewilderment, and his memory was so much at fault, that he did not remember events immediately preceding the time of questioning. The movements of the head and forearm had now also ceased.

On October 21st, he complained of severe pain in the right side of his back, in the region of the kidney. It continued with greater or less severity for a week; the urine remained normal.

On October 22nd, the fractured thigh was put up in plaster-of-Paris.

Loss of control over the bladder, which was the last abnormal symptom, disappeared on November 1st; and at this date also he had regained full consciousness, but with no recollection of any event since the time when he was working in the railway-cutting.

The further course of the case presented no unusual features; and the patient was discharged, cured, on December 28th, 1883.

CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL.

A CASE OF TRAUMATIC TETANUS TREATED BY LARGE DOSES OF HYDRATE OF CHLORAL.

(Under the care of Mr. FOULDS.)

F. F., aged 17, a pony-driver in a colliery, was admitted on January 24th, 1884. The left thigh and leg were fractured, and there were five lacerated wounds on the limb. He had been crushed by the wheel of a loaded wagon. The accident occurred forty-eight hours before admission, and he had lost a considerable amount of blood before the arrival of the colliery-surgeon. He was consequently weak and pale when brought in.

A long splint was applied, and spirit and lead-lotion to the wounds, and a pill of opium was given at bedtime.

On January 25th, as he was feverish and thirsty, he was ordered effervescing mixtures.

After this, the case went on fairly well until February 8th, when he complained of sore-throat, and what appeared to be symptoms of quinsy.

On February 16th, unmistakable symptoms of tetanus presented themselves, with the characteristic expression of countenance very pronounced. At first, the spasms were not very violent, although there was much rigidity of the muscles of the mouth and jaws. He was ordered thirty grains of hydrate of chloral at 4 P.M., to be repeated at bedtime.

February 17th. He was in much the same condition. From this time to February 22nd, the thirty-grain doses of hydrate of chloral were given three times a day; but the spasms increased in severity. The jaws were tightly clenched, and opisthotonos was so marked that, by placing the heel of the uninjured side in the palm of my hand, I could raise him so that, except the injured limb, the back of his head was the only part touching the bed. Hitherto, beef-tea could be given at intervals, but now this could no longer be done. The temperature had fallen below normal, probably owing to the respiration being interfered with. He was ordered sixty grains of the drug; this was at noon. A profound sleep followed, which lasted five hours, when he was roused. The muscles of the jaws relaxed, and he swallowed nearly a pint of beef-tea, after which he again relapsed into his former condition. The effect of the larger dose seemed to warrant us in repeating it; this was accordingly done twice before bedtime, each time with the result that, after a deep sleep, he could swallow plenty of nourishment. The pupils were widely dilated, and remained so.

The record for February 23rd runs thus: "Very little improvement; an extraordinary tolerance of the drug." He could, however, swallow beef-tea in the early part of the day, and he continued to be, as hitherto a most helpful patient. The following liniment was tried: chloroform of belladonna (Squire), one part, to seven of belladonna-liniment; one drachm to be poured on a piece of spongio-piline, three inches in length, and applied for five minutes at a time once an hour, until the whole length of the spine had been covered. No good result followed, and the spasms returned in all their previous intensity. Accordingly, at 3.10 P.M., the sixty-grain dose of chloral-hydrate was repeated, with the same effect as before—a long sleep, relaxation of the jaw, and ability to swallow.

The same dose was repeated on February 24th, at six in the morning, and again at four in the afternoon, and on February 25th, at 6 A.M., 11 A.M., and 8 P.M.

On February 26th, considerable relaxation of muscles generally had taken place, and the drug was discontinued until March 1st, when there was some slight return, which was relieved by a thirty-grain dose.

April 26th. He continued to do well, and went out on crutches; but there was still rigidity of the muscles of the legs and feet.

BOOTLE BOROUGH HOSPITAL, LIVERPOOL.

FRACTURE OF BOTH THIGHS, WITH CONCUSSION OF BRAIN AND OTHER INJURIES: RECOVERY.

(Under the care of Mr. THOMAS M. WILLS.)

[From notes by Dr. C. A. McLEAN, House-Surgeon.]

W. C., aged 12, was carried to the hospital on May 2nd, 1882, in an insensible state, with concussion of the brain and the usual symptoms of severe shock, the result of injuries received while attempting to pass over the Lancashire and Yorkshire Railway, he having been overtaken at a crossing by the Liverpool and Southport "Express," and dragged forty-five yards. He was placed in bed, and was found to have received, in addition to concussion of the brain, the following injuries: fracture of the right femur at the middle, comminuted fracture of the left femur in the middle third, compound fracture of the nasal bones; severe laceration and contusions on the left cheek, the angle of the orbit, behind the left ear, and on the back of the scalp; the face was much disfigured, and scarcely recognisable; the chest, left groin and thigh, and both knees, were also much bruised. The wounds were cleansed and dressed, the limbs rolled in cotton-wool and supported by sand-bags, hot bottles were applied to the feet, cold lotions to the head, and warm poultices to the chest. A spoonful of a stimulating mixture (ammonia with camphor) was cautiously administered, and repeated in thirty minutes; and, when the patient was able to swallow more freely, hot coffee and beef-tea were given him.

May 3rd. He vomited, and was very restless during the night; he was ordered a small dose of calomel, with rhubarb-powder, also a mixture of bromide of potassium with aromatic spirit of ammonia, and beef-tea and milk to drink.

May 4th. Consciousness was returning; he was restless, and troubled by cough.

May 5th. The wounds in the groin and left thigh were much inflamed; nitrate of silver was painted above the left groin, and poultices, with carbolic oil, applied to the limb. He spat up a little blood.

May 6th. The hæmoptysis had ceased, and he was ordered a mixture of perchloride of iron and chlorate of potash.

May 8th. The patient was feeling better. The [illegible] appearance of the thigh had almost subsided. A small slough was separating at the left groin; a small dose of quinine was added to the iron mixture; splints were applied to the right thigh, the left thigh being still supported by sand-bags only, and both limbs were extended by weights. On May 13th, the splints were removed, on account of his restlessness, but were reapplied to the right thigh on the following day.

May 16th. The left thigh was put up in splints.

This treatment was continued until [illegible], when the wounds had healed; the splints were then removed, and both thighs encased in fixed bandages, and the patient allowed to walk about with crutches. He complained occasionally of pain in his head.

June 30th. Discharged with a firm and perfectly straight pair of limbs. He has, on several occasions, visited the hospital since his discharge, feeling very well, and able to walk as usual.

REMARKS BY MR. WILLS. This case is interesting not only on account of the nature of the accident, and the extraordinary escape of the boy from instant death, but because of the modified treatment which it was found necessary to adopt. As shown by the above history, the patient's condition was most critical on, and for some time after, admission, so that sand-bags only, carefully padded, were used to support the broken limbs, any further constriction, by splints or bandages, being considered unsafe. As soon, however, as circumstances permitted, and after consultation with my colleagues, extension was made, the fractured ends of the bones put in apposition, and maintained by suitable weights and supported by sand-bags; perineal bandages could not be used, owing to the inflamed and sloughy condition of the groin, perinæum, etc. Splints could not be applied until the seventh day to the right thigh, and not until the fifteenth day to the left, for reasons already mentioned, and even then extension had to be continued by means of the weights, and the wounds dressed through openings in the bandages.

This case is a good example of the rallying power of youth, and illustrates the advantage of extension by weights in certain fractures of the lower limbs, as advocated by Mr. James and Mr. Buck, and described in Erichsen's and Holmes's works on surgery. The following examples are also evidence in favour of this mode of treatment, especially in cases where the soft parts are much involved.

J. H., aged 35, a carter, of powerful build and muscle, was admitted on May 30th, suffering from injuries caused by the falling of a case, weighing four hundredweight. His left thigh was fractured close to the knee; the tibia also was fractured below the knee on the same side, and the knee and the surrounding parts of the thigh and leg were greatly crushed, leading to synovitis of the joint, and threatened gangrene of the limb. Extension was maintained by weights, and the limb supported by sand-bags, while constitutional and local treatment was adopted to relieve the urgent symptoms, after which splints were applied, and extension continued for some weeks longer until union of the bones took place. This patient left the hospital on September 20th with a sound limb, and is now following his occupation.

J. C., aged 46, a seaman, of delicate frame, was admitted on July 31st, suffering from comminuted fracture of the left tibia and fractured fibula, with extensive injury to the muscles and soft parts. The leg was supported by sand-bags, suitable dressings applied, and gradual extension maintained by weights. On account of the threatened sloughy condition of the soft parts, and the tendency of a portion of the comminuted bone to protrude, splints could not be applied in this case for three weeks; still, the patient left on October 24th with a healthy and straight leg, but wearing a poroplastic splint as a temporary precaution. The same leg had been fractured on a former occasion, when, according to the patient's own account, it required many weeks to unite.

REPORTS OF SOCIETIES.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MAY 2ND, 1884.

J. L. W. THUDICHUM, M.D., F.R.C.P., President, in the Chair.

Radical Cure of Hernia. Mr. SWINFORD EDWARDS showed three cases of this operation. The first case, a man aged 40, was admitted into the West London Hospital with a strangulated inguinal hernia. Taxis under ether failed. The sac was opened, and the constriction at the neck divided in the usual way, and the bowel returned. After ligature and removal of some prolapsed omentum, the sac was freed from the scrotum, and being pulled down as far as possible, a catgut ligature was tied round its neck, and the sac itself cut off. The pillars of the ring were brought together with three silver sutures; the sutures were removed at the end of three weeks, when the patient was discharged cured. The patient was now, a year afterwards, wearing no truss, and doing his usual work. The second case, a lad aged 19, was operated upon for reducible inguinal hernia at his own request. In this case, the pillars of the ring were brought together by catgut instead of silver wire. The wound healed by first intention, and he was discharged cured one month after operation. In both these cases, the temperature never rose above 100°. The third case, a little girl aged 12, was operated upon, in the same manner, for reducible inguinal hernia. She was in hospital one month, and the temperature did not exceed 99°. In these cases, strict attention was paid to antiseptics; and Mr. Edwards laid great stress upon employing thorough drainage, iodoform next the wound, plenty of gauze-packing, and over all equable elastic pressure by means of an Esmarch's bandage. In femoral hernia, Mr. Edwards only ligatured and cut off the sac, not meddling with the femoral ring or saphenous opening. Mr. Edwards, in reply to Mr. Lunn, said he would have the operation performed on himself if he had a hernia.—Dr. THUDICHUM said the operation did not vary from Wood's, except in cutting off the sac.—Mr. BRUCE CLARKE said Mr. Wood did not insist on suturing the pillars of the ring, and also invaginated the scrotum.—Mr. KEETLEY said that the injection of irritating fluids into the canal had been practised in America and Germany with success.

Littré's Hernia.—Mr. KEETLEY read some remarks on a case. The patient, a woman aged 40, was admitted into the West London Hospital with a right femoral hernia. Partial obstruction had existed for five days. There was vomiting, local pain, and tenderness, but the bowels moved occasionally. The sac was opened, and reduction easy. A portion of the intestinal wall, about the size of half-a-crown, being strangulated and of a very dark colour, the sac was excised, and its neck tied, with antiseptic precautions. The local symptoms were relieved by the operation, but delirium came on in twenty-four hours, and death ensued in thirty hours. At the *post mortem* examination, the strangulated portion was found quite black, and the blackness had also spread for an inch or two upwards and downwards. There was no peritonitis, and the affected portion of the intestine was narrowed.—Mr. BRUCE CLARKE said excising the gangrenous portion of gut and reuniting by sutures was a treatment worth trying.—Dr. THUDICHUM said position was important in reducing herniæ; for instance, putting the patient on his knees and elbows, or even inverting him.—Messrs. Beckingsale, Edwards, and Lawrance, Drs. Owles and Culver James, took part in the discussion.—In reply, Mr. KEETLEY said the affected portion of the gut was ileum, that taxis had been employed, and that, where he felt convinced the gut could not recover, he would excise as suggested by Mr. Bruce Clarke.

Extra-uterine Pregnancy. Dr. ALDERSON attended the patient, aged 30, who was a healthy married woman with one child 12 years old, for the first time on August 4th, 1880. She had previously been under medical treatment for a slight brown vaginal discharge; and a sound had been passed, which occasioned much pain both at the time and afterwards. When seen by Dr. Alderson, she was suffering from severe uterine congestion and retroflexion. During the next three or four weeks, there were sharp attacks of acute peritonitis; and on August 22nd she passed *per vaginam* a large tough membranous cast of the uterus and Fallopian tubes. No improvement ensuing, Dr. Wiltshire was called in, and diagnosed a cataclysmic hæmatocele into the peritoneal cavity, probably due to the rupture of a tubal extra-uterine fœtation. On September 8th, acute peritonitis set in. Opiates by the mouth, rectum, vagina, and in fomentations, gave great relief; and the patient continued to make progress until September 13th, when the temperature was normal, and the pulse 100. At this time, the external swelling was smaller, and but little tender. The tumour could not be felt in the vagina, but *per rectum* there was a prominent firm obstruction about two inches up, which nothing could pass. On September 20th, she was taken to the West London Hospital, and the journey apparently caused the bursting of the fœtal abscess. A copious mattery discharge from the rectum ensued the same afternoon. After this, the patient never suffered any acute pain, and the discharge continued for three weeks. On October 12th, she passed through the rectum portions of fœtal bone, and the last piece of bone on May 24th, 1882. The patient apparently recovered entirely; but the fœtal head could be felt as a hard globular swelling through the rectum. It was important to distinguish the early symptoms of extra-uterine fœtation. In this case, he thought, the earliest symptom was the chocolate-coloured clotted discharge.—Mr. GUNTON ALDERTON had seen three cases of extra-uterine fœtation, in two of which the bones were discharged through the rectum.—Dr. VENN said the diagnosis was arrived at by a process of elimination. He recommended abdominal section in cases where the cyst was discovered before rupture. The discharge of bones through the rectum, when it occurred, should be encouraged; and he advised no interference when they were encysted.—Mr. S. EDWARDS asked if there were statistics comparing those operated on with those left to nature.—Dr. OWLES did not think it advisable to use the uterine sound where pregnancy might exist.—In reply, Dr. ALDERSON said the sound certainly caused the patient much pain and inflammation, though it apparently did not cause the death of the fœtus. With regard to fatality after operation, he had seen it recorded as high as 67 per cent. In twenty-four cases of primary operation by Parry, only one survived.

The Cavendish Lecture.—Dr. THUDICHUM announced that an annual lecture would be given under the auspices of the Society, to be called "The Cavendish Lecture," in honour of the distinguished chemist, who resided in the West of London, and who was an ancestor of the Duke of Devonshire, the President of the West London Hospital. He had much pleasure in announcing that Mr. Timothy Holmes would deliver the first lecture early in July.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, MAY 16TH, 1884.

The Sanitary Supervision of Bakehouses, with Especial Reference to those of Birmingham.—Dr. ALFRED HILL, Medical Officer of Health for Birmingham, read a paper on this subject. After some opening remarks, he said that the transfer of the inspection of bakehouses by the Amendment Act of last year from the factory-inspectors to the medical officers of health was really a reversion, after five years, to an old system, which had previously been in operation for fifteen years. The inspections of the first seventy-seven bakehouses were made by Dr. Hill, assisted by the inspector of nuisances; but, it being found impossible for the medical officer of health to personally conduct the inspection of the whole of the Birmingham bakehouses, numbering probably about 600, an assistant was appointed to devote his whole time to their inspection, with that of the milkshops. Between the passing of the Amending Act and April 30th, 198 bakehouses had been inspected; their sanitary condition might be regarded as generally satisfactory. The points to which attention had been directed were: position, cubic space, cleanliness, ventilation, accumulations of refuse, frequency of limewashing, keeping of animals, the employment of women, youths, or children, provision for sleeping, existence of water-closets, etc., in adjoining bakehouses, and water-supply. The positions varied greatly, but were generally suited to the requirements of convenience and health. The cubic space greatly differed; the average amount being 827 cubic feet per head; in no instance could there be said to be overcrowding. Cleanliness was well observed, as a rule, both as regarded the condition of the walls and surfaces, and the state of the utensils, while drainage defects were found in only twelve instances. Generally speaking, the ventilation was as satisfactory as could have been expected. Only four accumulation of refuse were discovered; no animals were found, except dogs, which were kept in three instances, and in only one case was the odour of mice detected. The employment of children, young persons, and women, occurred in fifty bakehouses, the number of each class being one child, thirty-six young persons, and twenty-one women. In no case did Dr. Hill find sleeping-rooms, water-closets, or other similar forms of convenience, in contiguity with the bakehouse. Generally speaking, the visits of Dr. Hill and of the inspector have been hailed with satisfaction by both the master and his workpeople.—In the discussion which followed, the President, Dr. Bate, Dr. Corner, Dr. Simpson, Dr. Alfred Carpenter, Mr. Lovett, and Mr. Shirley Murphy took part.

Slide-Rule.—Dr. G. P. BATE, Medical Officer of Health for St. Matthew, Bethnal Green, read a paper on the calculating slide-rule, as an assistant to the medical officer of health in mensuration and statistics, and exhibited and described a rule invented by Professor Fuller of Belfast.

ACADEMY OF MEDICINE IN IRELAND: SUBSECTION OF PUBLIC HEALTH.

T. W. GRIMSHAW, M.D., President, in the Chair.

Antiseptic Experiments in a Mortuary-Vault.—Dr. CAMERON read a paper on antiseptic experiments in the vaults of St. Michan's Church, Dublin, celebrated for their antiseptic properties. Bodies dried up in a desiccated mass, rather than decomposed, when deposited in these vaults. The author placed an infusion of melon in 12 glass tubes, and, having submitted both to a high and prolonged temperature, so as to sterilise the liquid, he placed a number of them in a vault of the church, which seemed to possess the greatest antiseptic properties. The tubes were deposited with great caution, and in such a way as to occasion the least possible disturbance of the atmosphere. The extremities of the tubes were broken by means of hot forceps, and the vault was kept locked up for six weeks. They were then removed from the vault. Seven of the tubes presented no change, but in the remaining five there was great turbidity, owing to the development of mycelium, etc. In the case of the liquid kept in the unbroken tubes at the laboratory of the Royal College of Surgeons, no turbidity was noticed in their contents. On nipping the ends of the tubes of those kept in the laboratory and the same number brought from the mortuary-vaults, turbidity set in under forty-eight hours. The author did not venture to draw any positive conclusion from these experiments, but their results seem to show that the preservation of the liquid was due to the great freedom from dust which he noticed in the vault. Franklin had found that, in the higher Alps, organic infusions remained for a long time freely exposed to the air without undergoing decomposition, a fact attributed to the freedom of the air at great altitudes from dust, which, of course, included germs of various kinds.—Dr. COSGRAVE believed the temperature of the vaults was very uniform, and, there being no floating particles, that might prevent the vegetable infusion from turning.—Dr. MORE MADDEN referred to the famous vaults near Palermo, where two miles of galleries were lined with the dead bodies of monks. The sides of the galleries and the dead bodies, which were in a state of desiccation, were coated with dust. The antiseptic properties of the galleries were ascribed to the peculiar dryness of the air, and also to the nature of the soil in which the galleries were excavated.—Dr. H. Kennedy, Dr. Woodhouse, and Dr. J. W. Moore also spoke. Dr. CAMERON said there was a good deal in the suggestion that the effect was due chiefly, if not altogether, to the uniformity of the temperature, which hardly varied. If there were no expansion by an increase of temperature, or no contraction by a fall of temperature, a liquid would be the same as when sealed. At night, the temperature must have fallen a little, and some little movement of air have taken place. But, even taking that view, it was the absence of dust that caused the preservation of the contents of the tube. Seven tubes remained perfectly clear, and five became turbid. The air and dust must have got into the latter. As a matter of fact, the vaults were dry. When vaults were not dry, moulds made their appearance, as at present in the vaults of the new markets.

Increase of Insanity: Suggested Reform of the Lunacy Laws and Practice.—Dr. T. MORE MADDEN, having recently read a paper in another section of the Academy on certain mental and nervous disorders, now called attention to other aspects of the subject, offering further evidence of the general prevalence and increase of insanity in all classes, and more especially amongst women, in whom it was frequently traceable to cerebro-nervous disorders, originating in reflex-irritation from utero-ovarian causes. These disorders, however, were very frequently unrecognised and neglected in lunatic asylums, the result being that many women were needlessly confined or improperly detained in such institutions. The present administration of lunatic asylums, and the laws by which it was directed, affording scope for the possible occurrence of abuses, he made suggestions for the improvement of the administration and some needed reforms in the lunacy laws. Although the recent increase of insanity had been disputed as a popular fallacy, and even by the psychological authorities, including the lunacy commissioners, the statistical evidence of the fact was uncontrovertable. At present, 1 in every 414 of the population of England and Wales was a registered lunatic, while in 1800, there was only 1 lunatic in 7,300 of the population. In 1806 there were 2,248 lunatics in England and Wales; in 1819, 6,000; in 1823, 8,000; and in 1826, 14,000. In 1845 there was 1 in 800 of the population insane, and 37 years later 1 in 414, or 76,765 lunatics, comprising 42,482 females, being an increase on the preceding year of 1,182 females and 676 males. In Ireland, since 1851, the population decreased 12 per cent., and there had been an increase of 41 per cent. in the number of lunatics. In 1851 the number was 9,980, or 1 in every 1,291; but last year it had risen to 13,820, or 2 in 369. The reform of abuses and the improvement of curative treatment could be attained with diminished cost to the public, if all the lunatic asylums became public property, and be placed under one central official administration in each county. The compensation of proprietors of private asylums would not be a serious consideration, considering the profits that would arise from continuing those institutions as first or second class State asylums, and ultimately these profits would reduce the cost of the general public lunacy system.—Dr. DOYLE hoped the gentlemen connected with private lunatic asylums would [illegible] The effect the diseases of the female genital organs might have in the causation of mental trouble was apt to be exaggerated by gynæcological specialists, and the question of lunacy was sometimes looked at through gynæcological spectacles. Where it was a case of one specialist attacking another, he discounted a good deal of the criticism. He knew some of the gentlemen who gave attention to diseases of the mind to have studied the diseases as earnestly as specialists did in any other branch of medicine or surgery. The great trouble taken both in public and private asylums could not be excelled by any specialist. As to the increase of lunacy shown by the figures quoted, it should be remembered that the causes of lunacy had greatly increased—*e. g.*, the wear and tear of modern life. On the other hand, the struggle for existence made it the more necessary to get rid of the drones of society; and certainly lunatics, being of no use to themselves or their families, were drones in society; and their families would be anxious to put them under restraint. Nowadays, medical education had advanced, and with it the diagnosis of insanity. Specialists in diseases of the mind would say there had been just as much improvement in the treatment of insanity as in obstetrics. Indeed, he saw a complaint made, in connection with the meeting of the British Medical Association in Belfast, that there had been no advance made in obstetrics for several years. But he did not admit the truth of either allegation. On the contrary, he believed there had been an advance. The use of opium in melancholia had a remarkably beneficial result. Dr. More Madden had adduced the statistics of Bethlem Hospital one hundred years ago; and, contrasted with those of the present, the cures were then two out of three, while now the proportion was much more unfavourable. But he did not believe in the statistics of one hundred years ago, nor in the treatment. Could any sane man believe that the exhibition of the patients to the public at twopence or threepence each was better treatment than that resorted to at the present day? In the majority of cases, where disease of the female genital organs gave rise to insanity, there had been an hereditary tendency to insanity, and that would come out just as if she had disease of the liver or the lung. Disease of the genitals was, no doubt, an exciting cause, but it required the background of an hereditary predisposing cause. He did not agree with Dr. More Madden and Dr. Doyle about doing away with private asylums, believing, as he did, that in those establishments the insane were as safe and as well cared for as they would be if confided to a corporation or the Government. Nor did he agree with Dr. More Madden's idea in reference to the medical superintendents of county lunatic asylums. As the head of the institution, the superintendent was properly a medical man, having a medical assistant and a crowd of officials under him to carry out the details. He was well paid for his work, and gave his whole time to it; and if, in the task of supervision, he missed the discharge of some of his medical functions, it was not greatly to be regretted. As a rule, consulting physicians, who resided outside the institution, knew nothing whatever about lunacy, being general practitioners, without any special knowledge. In his own experience, a ridiculous illustration of this occurred, where the consulting physician in three different cases—one of asthma, one of acute mania, and the third of injury to the knee-joint—ordered a blue pill and a black draught for each.—Dr. H. Kennedy and the Chairman also took part in the discussion.

REVIEWS AND NOTICES.

International Health Exhibition Handbooks Issued by Authority). London: William Clowes and Sons, Limited.

"Our Duty" in regard to Health. By G. V. Poore, M.D.

William Cowper, the poet, in one of those little didactic poems, to which he alone seems to have possessed the secret of imparting a genuine literary charm, tells the story of a virtuous schoolboy who endeavoured to dissuade his schoolfellows from robbing a farmer's orchard; failing, however, in this praiseworthy effort, he joined the marauders, comforting himself with the reflection that, since he was powerless to prevent the whole mischief, the little harm he would himself do would not be noticed by the "poor man." The moral of Cowper's poem is the moral of Dr. Poore's handbook. "Until," he says, "the individual occupier and the individual owner of property is made to feel his moral responsibilities, and, if necessary, is compelled to do his duty towards his neighbours, there can be no permanent improvement in the condition of great cities; and rural and semirural districts will drift into the same dangerously overcrowded state which characterises our big towns." Owing to the cupidity of some, and the apathy of others, districts, which a few years ago were rural, have been converted, not into healthy suburbs, but into ill-arranged, ill-built congeries of houses, little, if at all, better than the slums of the central city. Dr. Poore seems inclined almost to shake hands with Mr. Henry George, when he begins to lay schemes for preventing the progress of poverty and filth into the country. A cottage, he says, with a quarter of an acre of land, is no Utopian idea; but to hope that the population of London should be provided with one such cottage for each family is, we fear, Utopian to a very pronounced degree; at any rate, a house-agent would be able to tell Dr. Poore that such a cottage, more especially if "built on a slight eminence or on the slope of a hill, well exposed to the sun," would fetch a very pretty figure in this summer of 1884. London, arranged on such a plan, would reach in one unbroken series of streets from Redhill to Hatfield and Rickmansworth, and from Greenhithe to Chertsey and Uxbridge.

Leaving on one side, however, such speculations, the *Handbook* contains much valuable matter, set forth in a manner well calculated to attract the general reader, and to arouse a sense of the duties which every individual, and especially every householder, owes alike to himself and to his neighbour. The central idea of the book is the avoidance of the pollution of air and water by the storage or improper disposal of refuse. The ease with which sources of water may be contaminated, and the difficulty, the almost impossibility, of insuring purification when once contaminated, are illustrated by several striking cases, more especially the extraordinary Lausen epidemic, by which it seems to have been proved that water, containing typhoid-poison, may fail to be purified by irrigation over water-meadows, and subsequent filtration through nearly a mile of solid earth (a filter fine enough to arrest the particles of wheat-flour). Further, even deep wells are not to be completely trusted, owing to the immense distance from which water may find its way into them, if much water be raised by pumping. The moral taught by these facts finds expression in a chapter on the right use of refuse; the water-carriage of sewage is condemned as dangerous and wasteful, and some one of the methods of dry disposal is pointed to as the only safe and economical way of meeting the difficulty. The chapter on Air is short, and to the point; our folly in allowing the air of private rooms or of places of public resort to remain unchanged, and in polluting the general atmosphere with the products of imperfect combustion, is very forcibly dealt with; and a good point is made of the foolishness of the late hours, which, following the evil lead of the House of Commons, are fashionable. How much gas and coal are wasted, how much carbonic acid and other sulphurous products of combustion, and how much soot, are poured into the air of London, asks Dr. Poore, in consequence of this perversity?

The Handbook concludes with a short chapter on burial, in which the subject is very sensibly dealt with; and a rational burial, a literal carrying out of the words of the burial service, "we therefore commit his body to the ground; earth to earth," and not lapped in lead, is advocated.

Dr. Poore has not understood his subject precisely in the sense in which we should have taken it. We had expected to find in this Handbook a more definite and detailed account of the moral and legal responsibility of the householder with regard to the house, and of the individual with regard to his person; of how they can be assisted in carrying out their duties by the sanitary authorities, and of the legal as well as the moral penalties incurred by those who break the laws not only of nature, but of the land. The Handbook, however, is pleasantly written, contains much that every citizen ought to know, but of which too many are in ignorance, and will perhaps find its way into quarters where a more technical treatment of the subject would be productive merely of a sense of weariness.

Legal Obligations in Relation to Dwellings of the Poor. By Harry Duff, M.A., B.C.L., Barrister-at-Law, Fellow of All Souls' College, Oxford; with a Preface by Arthur Cohen, M.P., one of Her Majesty's Counsel.

This handbook deals entirely with legal questions, but it is written with clearness, and in language very free from obscure technicalities, so that it is not difficult for any reader to follow the history and explanations of the several enactments which impose regulations, whether on the mode of building the dwellings of the poor, or their maintenance in good repair. Mr. Duff, and Mr. Cohen also in the preface, support the opinion, more than once expressed in these pages, that what is wanted to put the dwellings of the poor into a reasonably healthy condition, is rather the recognition and enforcement of existing powers, than the creation of new ones. How much may be done by the enforcement of wise laws, has been conclusively proved by the case of the common lodging-houses; the reason, one reason at least, is that local authorities have been obliged, not merely empowered, to make by-laws for the well-ordering of these houses. With regard to tenement-houses, the case is different; but, by the recent circular of the Local Government Board (December 29th, 1883), local authorities are empowered and advised to make by-laws designed to compel the observance of sanitary precautions, and to limit the number of occupants; it is, therefore, in the power of every local authority to change the tenement-houses as the common lodging-houses have been changed.

All the statutes will, Mr. Duff says, be found, if taken collectively, to have two main objects, the immediate prevention of existing evil, and future improvement; "and it is practically true," he adds, "to say that those which provide for the former are almost invariably compulsory, while the obligation of those who deal with the latter, as a rule, is optional." Unfortunately, these exceptions to the first rule appear to be numerous, while those to the second are few. The great obstacle to the efficient working of Torrens's Acts has been the pecuniary outlay thrown upon the local authorities, a body elected by the ratepayers, who have in the end to furnish the funds. A similar obstacle has stood in the way of the success of Cross's Acts. Still much has been done; and Mr. Duff shows us very clearly what more may be done, as well as how to imitate the successful efforts already made by various local authorities.

The gist of the book, stripped of the necessary details which give it its peculiar value, will be found in the chapter headed "Conclusion." There are, Mr. Duff tells us, four classes of persons on whom legal obligations, with regard to the dwellings of the poor, either rest, or might be made to rest, under the existing law. First, the poor themselves may be fairly called upon to prevent the fouling of their own homes and the creation of nuisances, as well as to pay a loyal obedience to by-laws made for their benefit, and to keep their hands from picking down and stealing every saleable scrap of metal. Secondly, the immediate landlords of the poor, not being owners of the premises, are liable to punishment for causing or permitting the existence of a nuisance; and if, under the new powers recently granted, by-laws be made for the regulation of the number of inhabitants, and the manner in which they are lodged, the landlord will be responsible that they are obeyed, and for the cleanliness and order of the house. Thirdly, the owners of premises may, and should, be ordered to put their premises into a sanitary state, to demolish them if uninhabitable, and to sell them if necessary for the carrying out of an improvement. Fourthly, the local authorities and their officers may enforce all, and must enforce some, of the laws which are fully explained in the body of the handbook.

We strongly recommend the volume to those who want a short, clear, intelligible, and trustworthy guide through the mazes of "Sanitary Law." Mr. Duff has evidently himself thoroughly grasped the principles which underlie the whole series of statutes, and is thus able to be simple and explicit in his teaching.

NOTES ON BOOKS.

Where to take a Holiday: Reports on some Home and Foreign Health-Resorts, being the Holiday Number of the "London Medical Record." London: Smith, Elder, and Co.—In the BRITISH MEDICAL JOURNAL for August 4th, 1883, page 240, we noticed the first number of this useful publication. The recent appearance of a second number lends some justification to the supposition that the volume may form an annual periodical. Many of the papers are the same as were printed in the volume for 1883; but there are several additions, with the result that the number of the pages has been increased from fifty-three to sixty-four. Amongst the additional places mentioned this year are Bognor, the Channel Islands, Cheltenham, Droitwich, Eastbourne, Ilfracombe, the Isle of Man, Isle of Wight, Lowestoft, Lynton and Lynmouth, Malvern, Penzance, Ramsgate, Scarborough, Southport, Southsea, St. Ann's Hill (Ireland), and Weston-super-Mare. Dr. Vintras last year noticed the seaside resorts on the French coast from Dunkirk to Havre, at the mouth of the Seine; this year his second paper, in continuation of the former, describes some of the principal sea-bathing places on the Normandy coast between the mouth of the Seine westward to Caen, and the mouth of the Orne. Another noticeable improvement is that the annual this year made its appearance on June 2nd instead of at the middle of July, thus giving all those anxious to be guided by it in the choice of a resort for an autumn holiday a longer time in which to decide the momentous question. We cannot describe fully the varied information with which these pages teem. Suffice it to say that the holiday number is a collection of papers on various health-resorts contributed by physicians who have devoted considerable attention to the subjects on which they severally write. The information thus collected will be found very useful to practitioners and patients who may desire to know for what class of diseases each locality is most suited. Inspector-General Macpherson, Dr. Hermann Weber, Dr. Symes Thompson, Dr. C. Parsons, Dr. Burney Yeo, Dr. G. Thin, and Dr. Vintras are the chief contributors. Most of the principal English and some foreign health-resorts are noticed in alphabetical order, in articles giving particulars of their climate, water-supply, health-statistics, lodging-accommodation, and general resources. There are, besides, medical hints offered to travellers, and such a mass of valuable information on holiday-resorts to those who seek to improve their health by a holiday ramble, that this low-priced summer guide is likely to be warmly welcomed by the considerable body of persons whom its information may concern.

The Holiday Annual: A Handbook of Practical Information on Holiday Topics. London: Sir J. Causton and Sons.—We are pleased to notice the appearance of the eighth number of this excellent publication; and, as the review of the seventh number, in the BRITISH MEDICAL JOURNAL of August 11th of last year (page 271), had the effect of directing the attention of several of our readers to the work in question, with the result, as we know, that they were glad to become subscribers, we trust that others may again follow their example. The *Holiday Annual* gives notes of holiday-trips recently undertaken by tourists in various places, each essay noting the route taken, the hotels occupied, and the expenses of all kinds actually incurred. The information is just that likely to prove serviceable to people undertaking a holiday of a few days' or weeks' duration in almost any direction from England. Amongst the localities visited and noticed in the present *Annual* are Heligoland, Killarney (from Dublin), Rome, Naples, etc., the Peak of Derbyshire, Sweden and Norway, the Isle of Anglesey, Northern Italy, the Highlands of Donegal, Havre, a coasting trip around Scotland, the Rhine and Switzerland, the Island of Guernsey, Antwerp, Brussels, and Paris, and the New Forest and Rouen. Of the seven previous *Holiday Annuals*, all except the first two are still on sale, and can be had on application to the Editor, 1, Guyscliff Villas, Hither Green, Lewisham, Kent, at the low price of 6d. or 8d. each. Amongst these six numbers, those who intend to take a good autumn-holiday, but who have to be careful of the ways and means, would find trips that would be well within their means. Those of our brethren, for example, intending to visit the Medical Congress at Copenhagen, and others going to the Belfast meeting, would find in these pages hints for excursions in Norway and Sweden, and in the North of Ireland, which would be likely to prove very serviceable. We understand that a special number of the *Holiday Annual* is to be issued on July 1st, which will be principally devoted to home holiday-resorts.

The Leamington Waters, Chemically, Therapeutically, and Clinically Considered; with Observations on the Climate of Leamington. By T. W. SMITH, M.D. 12mo. Pp. 61. London: H. K. Lewis. 1884.—Every effort to call attention to our own health-resorts deserves recognition, and we are glad to see that Dr. Smith calls attention to the forgotten glories of Leamington. There is no question that the place is a pleasant one, offering many attractions, as regards situation, climate, houses, parks, and all material comforts. Its waters, which are almost the only English ones which contain sulphate of soda in any considerable amount, are undoubtedly efficacious in a variety of diseases which are ascribed to abdominal congestion. Waters which improve the action of the chylopoietic viscera cannot fail to benefit the system generally. For details we must refer to Dr. Smith's pleasant little book, which will be found an useful guide to those who think of paying Leamington a more or less prolonged visit.

THE ADELAIDE HOSPITAL.—The number of cases admitted into this hospital in 1883 was 2,119, of which 174 died. The average cost of each patient was £5 14s. 2d. The number of attendances of out-patients was 7,661, against 11,188 in the previous year. This diminution arose partly from the patients connected with the Deaconess Asylum being attended by the medical officer of that institution, and partly from the more stringent regulations now in force. One hundred patients had been sent to the Convalescent Hospital. There was an increase in the number of cases of enteric fever, there being in 1881, 71 cases with 12 deaths; in 1882, 159 cases with 22 deaths; and in 1883, 98 cases with 23 deaths. The principal causes of death were phthisis, [illegible]; heart disease, [illegible]; enteric fever, 2[illegible]; pneumonia, [illegible].

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 21st, 1884.

SIR JAMES PAGET ON THE RELATION BETWEEN NATIONAL HEALTH AND WORK.

THE science of preventive medicine is yearly increasing in importance, and growing larger in the public view. The active life of one man, who happily is still among us, and who was present at the ceremony at the Albert Hall on Tuesday, when the Prince of Wales received the Jurors of the International Health Exhibition, reaches back to a time when the elements of the science had scarcely begun to accumulate, and when our statute-book was a blank in all that regards the preservation of health. A generation ago, such an Exhibition as now exists at South Kensington would have been an impossibility. Statesmen, engineers, and medical men, have awakened to the importance of the subject; and the Prince of Wales, always ready to forward any movement which can ameliorate the conditions under which the teeming millions of this country live, has lent his far-reaching social influence to the cause of popular education in hygiène. The signs of the times encourage hope; but while we congratulate ourselves on the great victories that have been won, we must not forget that the struggle is not yet half over.

Sir James Paget's inaugural address was statistical and argumentative; he set himself to show the loss which the nation suffered every year from ill-health, which was clearly preventable, and the amount saved by the improvements already made. His statements were based on the calculations of Mr. Sutton, the Actuary to the Registry of Friendly Societies, and of Mr. Neison, the distinguished actuary whose advice has been of such high value to our newly formed Medical Sickness, Annuity, and Life Assurance Society. Taking only males between the ages of 15 and 65, Mr. Sutton found that the average time of sickness was little over nine days, while among women between the same ages, the average was a trifle higher; from this it is calculated that every year in England and Wales we lose the work that would be done by twenty million healthy people in a week. If we look at this in another way, we shall see that it is very nearly equivalent to saying that we lose the services of forty thousand healthy adults every year owing to disease; what the pecuniary loss may amount to it would be difficult, if not impossible, to calculate.

The terrible mortality among infants and children is a waste, not only of life, but of money; an argument which was employed by the speaker with an apology: an apology for the hardness of our hearts, and an eloquent disclaimer of any sympathy with the attitude of mind which needed such a stimulus in the path of well-doing. Man is born to trouble as the sparks fly upward, and too many are ready to shrug their shoulders at what they lazily assume to be one of the necessary penalties paid for our higher civilisation, and to talk vaguely of the "survival of the fittest." The preservation of life is the first instinct of the individual, and it clearly ought to be an abiding principle with the community. Here, we would warmly re-echo the words of Sir James Paget; we want a larger and more practical recognition by the public of the value and happiness of good national health; a high standard of national health, such a standard as seems to have prevailed in the great days of ancient Greece, which filled out and rounded the national life into that perfect whole which has been the despair of later races. We want more intelligent support and assistance from the public in our warfare against disease; that it should grow out of that phase of mind when the ravings of fanatics, or the old-wives' fables of dreamers and visionaries, can have the power to work terrible mischief in our national life and health.

Let every man among us learn that he cannot violate the inexorable laws of nature without incurring the retribution of offended nature, and that this retribution may fall, not upon the guilty individual only, but upon his innocent neighbour; let the public once understand that the laws and regulations which sanitary science demands and enforces, and which seem sometimes to bear hardly on individuals, are demanded and enforced, not in the interests of officials, or at the dictation of theorists, but in obedience to great natural laws, then the obstruction, avowed or passive, which preventive medicine now meets in too many quarters, will disappear, and be thought of as on a par with the crude and brutal practice of our barbarian ancestors who condemned their sickly offspring to die from exposure. It is a selfishness not far removed from this which leads the householder to conceal the occurrence of infectious disease in his house. Its notification may cause him some temporary inconvenience or pecuniary loss; its concealment may inflict on his fellow citizens pecuniary loss so enormous that its amount, when calculated out as Sir James Paget gave it, almost escapes comprehension, and a loss of mental vigour and of happiness which is not to be calculated or measured.

But it is not only, nor perhaps chiefly, a deliberate and malign selfishness which obstructs the progress of preventive medicine;

> "Evil is wrought by want of thought,
> As well as want of heart,"

as Hood, who, in his "Song of the Shirt," read his countrymen one great lessson, which has been taken to heart, so truly says, we have to reckon always and everywhere with the profound ignorance and thoughtlessness, not only of the poor and ignorant, but of the rich and educated. Instances without number might be quoted, but a letter published this week in the *Times* gives one which is as striking as can be needed. A lady, living in London, finding that her boys, on recovering from a severe attack of scarlet fever, suffered much from scurfiness of their heads, took them to a fashionable West-end hairdresser's, and they "had a good brush out with the machine-brush." By such carelessness as this the vicious circle is kept up. In quarters where we ought least to expect it, we find this indifference to, or ignorance of, our duty towards our neighbour with regard to health. The fact that a member of the medical profession was recently fined for allowing his servant to be exposed in the public street while suffering from an infectious malady, seems to show that, even in the course of medical education, the provision for instruction in hygiene is very inadequate; it is not made compulsory, and therefore it is omitted altogether, or left to be picked up by degrees by some brief references in the course of disquisitions on allied subjects. This is not as it should be, and the profession ought not to continue under this reproach. Legislation has done much; it has placed large powers in the hands of local authorities, who, too often, dare not use them for fear of incurring the displeasure of their constituents. It is the spread of just views on sanitary subjects which alone can alter this state of things for the better. Legislation cannot make a people healthy who prefer, from ignorance or slothfulness, to live diseased and to die prematurely.

OVER-PRESSURE IN ELEMENTARY SCHOOLS.

THE subject of over-pressure in elementary schools still continues to occupy much attention, and it is curious how wide is the divergence of view concerning it. Some persons in official position, like the School Boards of Bradford and Leeds, appear to doubt whether such a thing as over-pressure exists; or at least profess themselves dissatisfied with the evidence which has been produced to prove its existence. Mr. Mundella himself did not venture to go so far as this in his ad dress to the meeting of school managers, held in London on April 5th, and there is other evidence as to it to which we shall refer immediately. The Bradford medical men, it will be remembered, presented a petition to the local School Board some time ago, praying the Board to relieve the children under 10 years of age from compulsory home-lessons, as a means of diminishing the pressure which they believed to exist. The home-lessons referred to were those done in the evening, for the petition stated the opinion of the medical man that "evening brainwork was undesirable and frequently injurious to young children." The petition has been sometimes construed into a declaration of medical opinion that all home-lessons are undesirable; but this is a manifest error, nearly every medical man feeling that the best education is that which comes with the good will and self-help of the children, and no medical man objected to home-lessons if done in the afternoon. Although this seemed a modest request, the School Board did not see their way to accede to it, and adopted a rather curious mode of dealing with the question. They referred the petition to a mixed committee, composed of merchants, clergymen, and one or two medical men. The Board also asked for evidence in favour of the opinion of the medical men, which evidence they proposed to lay before the Committee above referred to. Can it be wondered at that the majority of the medical men refused to lay the evidence for their views before such a committee? No body of lawyers would dream of referring a legal point to a mixed committee of clergymen, business men, and doctors, with perhaps one or two lawyers added. Or what would be thought if it were proposed to refer a point concerning the architecture of a Gothic cathedral to such a mixed committee? Supposing, for the sake of argument, that the medical evidence had been laid before the committee, and that the committee had not been satisfied with it. What then? The medical men would still have held their expressed opinion. Their opinion ought to have been accepted for what it was worth, as the statement of the views of a body of men competent to judge of the question under discussion. We do not say the Board need necessarily have given way to it, but we do say that to deal with it in the way they did was absurd, and could not have possibly resulted in any satisfactory conclusion. To say after this that the evidence was inconclusive is foolish, because, to the (no doubt sincere) regret of the Board, a majority of the medical men refused to state their evidence, although adhering to their opinion in a second memorial, worded in the identical terms of their first petition. Within the last few days, the judges have decided that compulsory home-lessons are illegal, or at least that a child cannot be punished for not doing them, if the father or mother thinks they should not be done. It is much to be deprecated that affairs should ever have been allowed to come to such a pass. The Elementary Education Act was intended for the public benefit. There can be no doubt that it has acted very much for that benefit; and we cannot help thinking that a little more good feeling between the officials and the parents, a little more tact, and a good deal less officialism, would have prevented much of the irritation which has culminated in this decision. As things are, however, not only the Bradford School Board, but School Boards all over the country, will be compelled, by law, to do what the former refused to do voluntarily, on the advice of the local medical men. And not only so, but School Boards will be henceforth unable to enforce home-lessons on children of any age at elementary schools—a decision which, now that the law is settled by it, may have some quite unexpected effects.

As to the evidence for over-pressure, no doubt some further revelations will appear when Dr. Crichton Browne's report has been made public. Meanwhile, we would draw attention to the last report (1882) of the Registrar-General. Under the heading, "mortality at school-ages," some interesting facts are mentioned, the general result being that, "while the mortality of children from all causes and from zymotic diseases has considerably diminished, the mortality from diseases of the nervous system has exceptionally remained stationary. The general improvement has not affected this class of diseases." The fact is true for 1881 and 1882, as well as for the decade 1871-80, as compared with 1861-70. The decline in general mortality was 19 per cent., a very large fall, to be compared with no improvement at all, or a very slight deterioration in the mortality from nervous diseases. It has recently been asserted that the proof of over-pressure is even greater than appears from these figures; for it has been stated that, although the whole mortality from nervous diseases among children has not increased, its incidence has materially altered, being now less in children under 5 years of age than it used to be, and greater, on the other hand, among children from 5 to 15 years of age. If this be true, it seems as if the case of what has been called "the over-pressure agitators" has been conclusively proved.

Be this as it may, however, the following extract from the same report of the Registrar-General will be of great interest. "These statistics," he says, "doubtlessly tend to support the view that the strain of education produces, in a certain proportion of children, injurious effects upon the brain and nervous system; and, indeed, that such should be the case might be anticipated, for a certain amount of risk must almost necessarily be attached to the increased use of an organ, and such risk must be accepted as the inevitable drawback from counterbalancing advantages." We confess to a feeling of surprise in reading this passage. Surely "increased use" ought not to be accompanied by "risk" if the "increased use" is normal and physiological. And if, as the Registrar-General seems now to admit, education does produce "in a certain proportion of children injurious effects," is not this of itself the strongest proof that the cultivation of the organ has been pushed beyond the limits of fair "use," and that it has been abused? If education is to be the means of fitting children to perform better their part in life, how can it do that if it kills some of them off? And besides the injurious effects that can be measured by the Registrar-General, what of the finer damage to brain and nervous system which does not result in death, though it may result in grave deterioration? Education which results in issues of this kind cannot be doing the good the framers of the Act intended, the parents expect, and the School Boards no doubt aim at; or, at least, if, as is no doubt the case, it is doing much good, it is contemporaneously doing an amount of harm which can only, by a misnomer, be attributed to "increased use," and ought, in fairness, to be called "overwork" or "strain" or "over-pressure." It is, meanwhile, quite plain that the controversy cannot rest here. No exaggeration on either side should be tolerated. A temperate statement of facts is what is wanted. The Registrar-General seems, in default of further explanation, to have admitted that education is exerting some serious and deadly influences among a large number of sound and wholesome ones. The question remains: Are these (as he seems to believe) the unavoidable drawbacks from progress, or can they be prevented, and if so, how?

THE ENGLISH UNIVERSITIES AND THE MEDICAL PROFESSION.

The lists which we publish to-day of the candidates who have undergone medical examinations at Cambridge speak for themselves. They show how rapid and how great has been the success with which the medical faculty of that great University has been developed, and the extended influence which it is now exercising over medical culture and education. This is the partial realisation of one of our deepest hopes, and the triumph of a principle which we have greatly at heart, and which we believe to be vital to the elevation of the scientific and literary culture of the profession, and the maintenance of its just and high position in the hierarchy of the learned professions, as well as in social estimation and relative rank. As a learned profession—we [illegible] [illegible] [illegible] [illegible], the medical body ought to take its rank among the [illegible] [illegible] [illegible]. [illegible] [illegible] as well as in every Continental country, the [illegible] [illegible] [illegible] duate; that the biological and medical professorships at the universities are among their highest glories, and the students of medicine among their most valued, able, and favoured sons. Even in Scotland and Ireland, the connection between the medical profession and the universities is much wider and more intimate than in England, where we have so long languished under the cold shade of the corporations.

That these bodies have done a great deal of good work in their respective spheres, and have, in numerous instances, shown a high sense of public duty and professional honour, we are well assured; but that their influence, in divorcing the profession in England from the Universities has been great and mischievous, and that their predominance as licensing bodies has greatly facilitated the long neglect by the great English Universities of their duties as biological and medical training schools, cannot be denied. How fatally that neglect has operated for a long series of years in dwarfing these studies and minimising the faculties of medicine at Oxford and Cambridge, is not less apparent to the most superficial observer. Theology, schoolmastership, the law, have not only retained their University connections, but have grown to such long continued predominance in the University organisations, that the exile of biological and medical science and student from their share in the work and the influence of the Universities, had come to be considered as a normal state at the elder English Universities. Unfortunately, old prejudices and the distorted opinions as to the just relations of the great Universities had not only influenced the minds of the residents at the University unconnected and unlikely to sympathise actively, with the aspirations of medicine to take its place among the living faculties of the University, but had moulded into curiously perverse shapes the opinions of some of the most influential of the medical representatives of the older professional school. Moreover, some of the leading authorities of our London licensing bodies, the Colleges, imbued with the life-long influences of the associations in which they had been brought up and of the bodies of which they were heads, early fell under the influence of doctrines flattering to the corporations with which they were identified, and conducive to their perpetual domination of the profession.

It required no small activity of mind, no little physical energy and capacity, for taking a new standpoint to do what has been done at Cambridge. To revivify the worn, faded, and decaying elements of biological and medical teaching; to bring the heads of the University to view with favour the introduction into the University of a body of professors, lecturers, and students, who are athirst for scientific teaching; who aim at making biological training and medical study the first steps in their pathway through University life into medical practice. How successfully this has been achieved, and with what relative activity, the tests which we to-day publish will show. But they show only a part of the result. A fortnight ago we were in Cambridge, and we found that two hundred students are working in the Morphological Schools. The physiological, physical, and morphological schools of Cambridge, rapidly as they have been organised, are already an honour and a source of pride to the University and to our country. To appreciate the soundness, the scientific earnestness and completeness of the teaching, and the admirable methods pursued, a visit is necessary. It will well repay every medical visitor, who will certainly feel a glow of hope, pride, and satisfaction at the sight of this numerous, eager, well-trained, and well-cultured body of students who, in closest union with University life and thought, among the future divines, lawyers, statesmen, and gentlemen of England, are training to be "doctors," among the best influences of English life. Would that we could give as favourable an account of Oxford. It is sad to see how little Oxford yet does to fulfil her duty to herself, to the faculty of medicine, and to the country, in this great department of science and professional culture. There are signs of coming life which we recognise and hail with hope. But the teaching even of anatomy is still conspicuous by its absence, the course of teaching and examination is still modelled so as to exclude students of medicine, and to drive them away from Oxford. It is still true that there is no such thing as an Oxford medical school, no such thing, in any honest and real sense, as a medical student of Oxford, nothing but a mere simulacrum of an Oxford medical faculty—the shadow of a name. We see and hear of signs of a better time, and some changes are in prospect which promise the dawn of a brighter day. The whole profession, and the wisest of the well-wishers to University extension and growth will earnestly watch with us for the appearance of the first rays of progress above the horizon.

DR. WALLER has been appointed Lecturer on Physiology at St. Mary's Hospital Medical School.

THE Court of Common Council of the City of London have increased the salary of Dr. Collingridge, the Medical Officer of Health, from £500 to £700 *per annum*, from Christmas last.

AT an extraordinary meeting of the Council of the Royal College of Surgeons of England held on Thursday, June 19th, Mr. Charles Stewart, Curator of the Museum of St. Thomas's Hospital, was appointed Conservator of the Museum of the College.

THE presentation of the testimonial to Dr. Joseph Rogers will take place on Tuesday, June 24th, at 3 P.M., at the rooms of the Medical Society of London, Chandos Street, Cavendish Square. Mr. John A. Shaw Stewart has kindly consented to preside on the occasion.

A VACANCY has occurred in the office of Professor Superintendent of the Brown Institution, by the appointment of Dr. Roy, the late Professor, as Professor of Pathology in the University of Cambridge. Applications must be sent to the Registrar, at Burlington House, on or before July 8th.

THE following candidates, selected by the Council, were elected Fellows of the Royal Society at the annual meeting held on June 18th at Burlington House; namely, Professor G. J. Allman, LL.D.; Professor John G. M'Kendrick, LL.D., M.D.; Arthur Ransome, M.D.; Professor Charles S. Roy, M.D.; and Professor Morrison Watson, M.D.

THE success of Quain's *Dictionary of Medicine* has been remarkable. The London publishers are now issuing their ninth reprint, and in America it has reached what is called by the publishers there the seventh edition, to which, however, the term used by the English publishers, reprint, would be more properly applied, as no alterations have been made since the first issue.

THE NEW EDITION OF THE BRITISH PHARMACOPŒIA.

WE understand that the Pharmacopœia Committee of the General Medical Council meets this day (Friday) at 2 P.M., to consider the additions and omissions which it is proposed to make in the new edition of the *British Pharmacopœia*. It has been decided that the volume shall be published before the end of the present year.

THE LIBRARY OF THE HEALTH EXHIBITION.

THE Library Subcommittee of the Health Exhibition, of which Mr. J. L. Clifford-Smith is Secretary, have now held eleven meetings; and, as a result of their labours, they have succeeded in bringing together a valuable collection of books, periodicals, and Government reports, of many nations, bearing on the groups of the two great divisions—Health and Education—into which the Exhibition is divided. The two rooms in the Albert Hall, allotted by the Executive Council for this purpose, have been formed into a very complete resort for reading and research. The number of books at present received is about 6,000, and these are now being catalogued.

THE PLAGUE AT BAGDAD.

THE *North German Gazette* reports that a deadly disease, described as a sort of bubo-plague, is epidemic around Bagdad, on the right bank of the River Tigris. The Turkish officials concealed for a long time the prevalence of this disease. It proves fatal in three or four days, and it was only heard of through a Persian telegraph official at Mendeli. The Persian Government at once forbade pilgrimages to Kerbela, and took frontier-measures, while Turkey also is now at last said to have enjoined quarantine rules.

THE POSTAL MICROSCOPICAL SOCIETY.

WE publish, in another column, a letter describing the mode of operation of this useful and unpretending little society, which was founded in 1882, and is now steadily advancing both in the number of its members and its usefulness. Its object is to aid in the circulation, study, and discussion of microscopical objects, and to advance the pursuit of biological science among its members. The arrangements appear to be such as are likely to commend it to a great many of the members of the medical profession interested in microscopical science.

HOSPITAL SATURDAY IN BIRMINGHAM.

THE Hospital Saturday collection in Birmingham this year has been more successful than upon any former occasion. The total proceeds amounted to upwards of £6,202. After paying all expenses, the sum of £5,800 has been divided amongst the local medical charities, in the following proportions: General Hospital, £2,089 15s. 5d.; Queen's Hospital, £1,056 12s. 5d.; General Dispensary, £657 15s. 3d.; Children's Hospital, £548 7s. 7d.; Eye Hospital, £394 2s. 3d.; Birmingham and Midland Counties Sanatorium, £258 6s. 4d.; Homœopathic Hospital, £198 2s. 11d.; Women's Hospital, £204 17s. 7d.; Lying-in Charity, £75 13s. 6d.; Orthopædic Hospital, £185 7s. 3d.; Ear and Throat Infirmary, £21 9s. 8d.; Dental Hospital, £9 13s. 9d.; Skin and Lock Hospital, £49 2s. 10d.; District Nursing Society, £32 13s. 3d.

CONTINUOUS FOOTBOARDS.

MR. R. DAVY, surgeon to the Westminster Hospital, again calls attention to the necessity of having continuous and platform-overlapping footboards on all our British railway-carriages. A woman was admitted on Thursday, June 12th, into the Westminster Hospital, after slipping down between Westminster Bridge platform and the wheels of a train, with her right lower extremity nearly wrenched off her body, her right arm smashed to bits, and her body cruelly mangled. Happily, in a few minutes she died. No surgeon worthy of his name can hold his peace over these preventable mutilations; and, while sympathising to the full with the subjects of real accident, he should as sternly insist upon reform in cases due to arrant negligence. If anything short of explosions can make the British public hear, or such repeated evidence of what may happen to themselves compel travellers to listen, these victims would not be sacrificed, nor our common humanity shocked by such occurrences.

THE SPREAD OF SMALL-POX.

THE difficulties of the Metropolitan Asylums Board in accomplishing their public work are never ending. It is stated that legal proceedings have been commenced against the Board with a view of restraining them from continuing to use certain lands in their occupation at Darenth, Kent, as a hospital-camp for small-pox patients. The managers have at present about five hundred patients under treatment at this camp, and they contemplate establishing a second camp, as the number of cases has greatly increased.

VACCINATION AND SMALL-POX.

THE National Health Society, which does so much good work in bringing sanitary knowledge home to the community, and extending the circulation of useful literature, has taken prompt and practical measures with reference to the recrudescence of small-pox in the metropolis. It may be remembered that, on the occasion of the last epidemic, the Society caused to be prepared a popular pamphlet on the subject of vaccination, designed to be left by the vaccination-officer, or by special temporary officers appointed for the purpose, at each house within the infected districts. This plan was carried out with marked success in a number of localities, and the adoption of a similar course throughout the metropolis would no doubt lead to markedly beneficial results. The Local Government Board was so impressed with the usefulness of the Society's pamphlet, that they accorded to it the unusual honour of revision and amplification by their own officials, and, moreover, sanctioned, in a number of cases, the repayment of the expenses of its distribution out of the Metropolitan Common Poor Fund. The pamphlet may now, therefore, be fairly regarded as an official publication on the subject of which it treats. Acting upon this view, the Society have suggested to the local authorities of the metropolis, that it would tend to greatly encourage vaccination and revaccination in London if the plain facts on the subject were brought home to every householder in the district by a copy of the pamphlet being left at his door; and it would, moreover, materially assist the vaccination-officers in the discharge of their often difficult duties. In order to facilitate matters as much as possible, the Society are willing to supply copies of the pamphlet, as revised by the Local Government Board, at the actual cost of printing. Inasmuch as the boards of guardians will be able to claim from the Metropolitan Common Poor Fund the cost of the copies they may require, as well as the expenses of their distribution, and sanitary authorities have ample powers to do whatever they think necessary for the prevention of small-pox, it is to be hoped that the local authorities of every district will see fit to give the widest publicity in their districts to the actual facts on this very important question. Some of the local authorities, including the Holborn and Islington boards of guardians, have already done so; the Islington guardians have ordered the distribution of 5,000 copies. It may be worth while to add that it has been authoritatively decided that, under Section 28 of the Vaccination Act of 1867, boards of guardians are empowered to pay out of their funds all expenses connected with the printing and distribution of information as to vaccination, such as is contained in the pamphlet which the National Health Society is now reissuing.

HORRIBLE LONDON.

THE circumstances attending the death of an infant from small-pox, which Dr. Danford Thomas was called upon to investigate last week, were of a particularly horrible description. In the first place, the father was in such a drunken condition at the time of the inquest, that he was quite incapable of giving any account of himself or his surroundings. Dr. Hunter stated that he was called at ten o'clock on the same morning, and found the man, his wife, who was suffering from small-pox, the dead infant, and another child four years of age, who was embracing it, all in bed together. The room was in a most filthy and disgusting condition, and he was informed that the man had come home drunk the previous night, and at the time he saw him had just returned from work in the meat-market. Dr. Danford Thomas commented upon the terrible state of things which the inquiry had revealed, and added that it was of no use to caution the man, as he was in too deplorable a state of drunkenness to understand; he promised, however, to let the sanitary authority know of the circumstances. Immediate steps have, it is to be hoped, been taken for the removal of the infected persons, and for the performance of vaccination. But it is not easy to calculate the extent of the mischief that had meanwhile occurred. The man is employed as a porter at the meat market, and it is not pleasant to contemplate the facilities which he possessed for spreading the infection of small-pox.

VACCINATION RESULTS AT BIRMINGHAM.

AT a time when small-pox is rapidly assuming epidemic proportions in the metropolis, and when the antivaccinators are more than usually busy promulgating their doctrines, it may be useful to reproduce the figures as to the efficacy of vaccination as a prophylactic of small-pox, recorded by Dr. Hill, in his report on Birmingham for the first quarter of the present year. During this period, 362 cases of the disease were admitted into the borough hospital, of whom 322 were vaccinated and 33 not vaccinated, while in seven cases it was uncertain whether the patient had been protected or not, though no scars were visible. Of the total number of cases admitted, 40 died; 24 of these deaths occurring in vaccinated persons, 13 in unvaccinated, and 3 in the doubtful cases. These figures give a mortality of no less than 39.4 per cent. in the unvaccinated, against a percentage of 7.4 in those described as vaccinated, though it is notorious, as Dr. Hill observes, that much of the vaccination is of a very imperfect and unsatisfactory character. If it had been possible to have taken into account the deaths during this quarter of seven persons admitted in the previous three months, four of whom were unvaccinated, the ratios of mortality amongst those vaccinated and those not so protected would have presented a still more striking contrast. Not only, however, was the mortality among the unvaccinated very much greater than among the vaccinated, but the death-rate among the latter coincided with the amount or degree of vaccination, as judged by the number of marks. Amongst those who only had one cicatrix perceptible, there was a mortality of 14.9 per cent.; among those with two marks, a mortality of 13.3 per cent.; whilst those with three had a death-rate of only 4.7 per cent.; and in those with above three, there was absolutely no loss of life.

STIMULANTS AT INFIRMARIES.

A DISCUSSION took place at the last meeting of the St. Olave's Board of Guardians, as to the use of stimulants in the Rotherhithe Infirmary. A member drew attention to the fact that, in 1879, when there were 534 inmates, the cost of stimulants amounted to £423, and the death-rate was equal to 17.04 per cent. Last year, however, there were 1,004 inmates, the cost of stimulants being £280, and the death-rate only 13.76. This, the speaker thought, conclusively proved that the less the quantity of alcohol used, the longer the patients lived; and he hoped that the Board would impress upon the medical superintendent the necessity of still further reducing the consumption of stimulants. The guardians, however, wisely decided not to interfere in the question until returns had been obtained from other infirmaries, showing the quantity of alcohol used, the death-rate, and the character of the cases treated.

THE MACKEREL SCARE.

A PARAGRAPH has gone the round of the press to the effect that notices had been "posted outside the various metropolitan hospitals warning the public against the excessive use of mackerel and mild ale at this season of the year, as the larger fish are liable to contain a small worm which would be injurious and likely to create cholera and other diseases." To ascertain how such a story originated would be a difficult, and possibly a not very profitable or savoury task; on inquiry at all the large metropolitan hospitals we have learnt, as we expected, that no notice which could in the remotest degree afford foundation for such a report has been posted outside any hospital. A correspondent, whose experience of the London hospitals is very great, writes to us as follows: "The mackerel scare is a mare's-nest...there has never been a notice at any of the metropolitan hospitals about it. The whole thing is a practical joke on the gullible public." Curiously enough, a similar scare was got up in the Madras Presidency last summer, and the Sanitary Commissioner drew up a report dealing with the subject very fully and systematically; suffice it to say, that there is not a tittle of proof that disease has ever been caused by the worms which have their habitat in fish, and it is safe to say that every fish that ever was eaten contained numbers of worms and their ova.

SENTIMENT AT THE CLERKENWELL VESTRY.

THE vestry of Clerkenwell appears to be a body with a keen but somewhat misplaced sense of humour. In response to a letter received from the Local Government Board, inquiring what steps the vestry proposed to take with a view to adopting regulations for houses let in lodgings, a member moved a resolution to the effect that the sanitary condition of the district was incapable of improvement, "inasmuch as the interest of the landlord should be the first consideration with the local authority, and not the health, morality, and happiness of the people, which are unimportant questions, and should be dealt with by sentimental philanthropists, but do not come within the scope of the duties of such a body as the Clerkenwell vestry." The reading of this extraordinary motion was received with "roars of laughter," but it is surprising to find that the resolution was seconded, and, moreover, that one member went so far as to say that there was not a man at the vestry who would not support it. Wiser counsels, however, prevailed, and it was decided to refer the letter of the Local Government Board to the Sanitary Committee for consideration and report. At a time when the reorganisation of the Local Government of the metropolis is being seriously discussed, this display of levity is particularly ill-timed, and it cannot fail to lend a powerful argument in favour of the Home Secretary's proposal.

ASSOCIATION OF MEDICAL OFFICERS OF SCHOOLS.

IN February last, a letter appeared in this JOURNAL from Surgeon-Major Evatt and Mr. Alder Smith calling the attention of medical officers of schools to the question of school-hygiene, and suggesting that an association should be formed by them to consider the whole subject of school hours, periods of study, recesses, structure of class-rooms, the feeding and lodgment of pupils, quarantine, the prevention and treatment of infectious disease, gymnastic training, field-sports, over-pressure in schools, and cramming, etc. It was suggested that all present or retired medical officers of schools, of children's hospitals, and medical men specially engaged in the study of the ailments of the young, should be eligible as members of the new association. At that time, owing to the isolation of the various schools of the country, and the absence of any organisation such as was then suggested, there existed no centre where the lessons learnt in one large school might be recorded for the benefit of other institutions. The result of that letter was that thirty-five medical men formed themselves into the above named association at a meeting held at Christ's Hospital on April 10th. It has been decided to hold at least three meetings in the course of the year at the rooms of the Medical Society of London. The first discussion will take place on July 24th, when the subject of the prevention and treatment of outbreaks of infectious disease in schools will be considered. The Council of the association has just forwarded a circular to many of the large schools of England containing questions relative to this subject, and the honorary secretary (Mr. Alder Smith, Christ's Hospital, E.C.) will be pleased to send this circular to the medical officer of any school who has not already received one. The Society already numbers fifty members, and includes the medical officers of many of the well known educational establishments, comprising the Charterhouse, Haileybury, Wellington, London Orphan Asylum, Rossall, the Foundling, Sandhurst, Uppingham, Royal Military Academy (Woolwich), Leavesden Schools, Repton, and medical men attending Eton and Harrow. The great aim of this association will be mutual assistance in promoting school-hygiene, and the consideration of all subjects connected with the special work of medical officers of schools.

POISONED BY TINNED FOOD.

AT a recent adjourned inquiry at Wolverhampton, touching the death of Sarah Dewen, aged 51, and Frederick William Dewen, aged 20, mother and son, who died on the 21st ult., after having partaken of a hearty supper of tinned salmon, the medical evidence went to show that the fish was in a diseased state, owing to the bulged condition of the tin, which had allowed the entrance of air. There was no proof of metallic poisoning either in the fish itself or in the stomach of the deceased. The jury returned a verdict "That the deceased persons died from poisoning, arising from the decomposition of the food which they had eaten." A minute portion of the salmon, given to mice, caused their death in a few hours. It would be a pity if lamentable occurrences such as these should give rise to a general objection to preserved provisions of the kind. The Columbia tinned salmon now being imported on a great scale, and extensively used, is a valuable addition to our cheap food-resources. At the same time, such cases indicate an obvious necessity for care in examining every package which is opened, and rejecting all which are not found to be fresh and in perfectly sound condition.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

A FORTNIGHT since we announced the names of seven Fellows of the College, Messrs. Barwell, Lawson, Durham, Gant, Berkeley Hill, Lawson, and Pemberton, who were candidates to fill the vacancies in the Council, in addition to Mr. Thomas Smith, a retiring member of the Council, who sought re-election. Since then only one more candidate has appeared on the field, Mr. Allingham, who is well known for his authority as a specialist in diseases of the rectum and anus. It is somewhat remarkable that only one provincial surgeon, Mr. Oliver Pemberton, is among the nine competitors. Notwithstanding the large number of vacancies and the numerous momentous questions that are at present being raised with regard to the relation of the Council to the Fellows, the coming election does not appear to excite much interest. It is remarkable that although three associations exist which endeavour to take under their protection the interests of members of the profession that possess College qualifications, namely, the old Association of Fellows, to which Mr. Bartleet is secretary, the newer association instituted by the exertions of Mr. Swain, and the third association for the promotion of the rights of Members, none of these bodies have taken active steps to ascertain the special views of all the candidates, three at least of whom however, were present at the recent meeting of the new Association. Mr. Gant has announced liberal views in the direction of reform, and has promised to exert himself in furthering the cause of justice to provincial Fellows. It is to be hoped that the Fellows of the College, and particularly the associations that profess to defend their interests, will specially consider these questions while there is yet time. If something is to be done, as all admit, that something must be practical, and not a mere resolution at a meeting. The election is the present opportunity for action, and the success or failure of any of the nine candidates may entirely turn the scale in favour of or against the cause of Fellows and Members of the Royal College of Surgeons. The election will be held on Thursday, July 3rd, the proceedings commencing at 2 o'clock.

ENFORCEMENT OF THE LAW AGAINST OWNERS OF INSANITARY HOUSES.

THE unsanitary state of the dwellings of the poor in many districts having come to be one of the burning questions of the day, there has been in many quarters a cry for fresh legislation, as if we had made full use of all the powers already in existence. Mr. Arthur Cohen, Q.C., the senior member for Southwark, in the preface he has written to the Handbook of the International Health Exhibition, entitled "Legal Obligations in Relation to the Dwellings of the Poor," has confirmed the view which has frequently found expression in these pages. He says that the evils which exist in the structure and condition of the houses of the poor, "might all be removed by the exercise of legislative provisions which at this moment are contained in the statute-book. Many of these evils and defects have been allowed to continue, because the local authorities do not exercise the powers which they are authorised to put in force." This being so, it is gratifying to note the action of the magistrate at the Southwark police-court, in two cases which were recently before him. In both cases owners of houses had neglected to make the improvements which they had been called upon by the local sanitary authority to make. Mr. Barstow, the magistrate, accepted none of the usual excuses which are always made by owners, and in the first case imposed penalties amounting to £60, and in the second case a similar penalty. Such exemplary penalties will, no doubt, cause no small flutter among the owners of cottages and tenement-houses in Southwark, and if they can once be made to understand and to feel that it costs more to keep their houses in an unsanitary state, that, in fact, it does not pay to treat the law with contempt, there can be no doubt that there will quickly be a great change for the better.

THE ACTION FOR LIBEL BY A CORONER.

BY direction of the Lord Chief Justice, before whom the libel action, Johnson *v.* Mudford, was recently tried, and resulted in a verdict for the plaintiff (the Canterbury coroner) for £100 damages, full notes of the cross-examination of Dr. Johnson, whose conduct formed the subject of comment on the part of the learned judge, have been laid before the Lord Chancellor. His lordship, in a communication to the Lord Chief Justice, points out that the jury, by their verdict, were evidently of opinion that the comments were more than any faults of the coroner could justify; and other representations from the city of Canterbury satisfied him that there was some difference of opinion in that city upon the subject, and that the manner in which it was regarded from opposite sides was not altogether dispassionate or uncontroversial. He had authority by law to remove for inability or misbehaviour in his office any coroner, but he did not think that the materials which the Lord Chief Justice had now placed before him made a sufficient difference to require from him at the present time a course of greater severity, or an alteration of his lordship's former decision to take no action in the matter. In the contest for the coronership of East Kent, Dr. Johnson, who was a candidate, was defeated by a large majority.

CONFERENCES ON SANITARY LEGISLATION.

ARRANGEMENTS have been made by the Social Science Association for holding a series of conferences on Sanitary Legislation in connection with the International Health Exhibition, on June 26th and 27th, commencing each day at 3 P.M. The subjects will be as follows. On June 26th: Introductory Address by Francis S. Powell, Esq.; "What Conditions are Essential for a Healthy Dwelling, whether in an urban or in a rural locality, and how far is it desirable that they should be rendered Compulsory by Legislation?" by H. H. Collins, Esq.; "What, if any, restrictions in the interests of health should be enforced in connection with the Employment of Girls and Women in Workshops and Factories?" by J. H. Bridges, M.B. On June 27th: "Is it desirable that Notification of Infectious Disease should be Obligatory?" by G. W. Hastings, Esq., M.P.; "Is it desirable to legislate further respecting the duties of Medical Officers of Health?" by A. H. Brown, Esq., M.P. Copies of the programme and tickets of admission will be sent to all the members of the Social Science Association; but the Secretary, Mr. T. L. Clifford Smith, will gladly forward tickets to any others who may desire to be present. All applications should be addressed to the Office of the Association, 1, Adam Street, W.C.

REMOVAL OF THE SPLEEN.

At the recent German Surgical Congress, Dr. von Hacker, of Vienna, exhibited a tumour of the spleen, removed by Professor Billroth on March 20th, a month before the specimen was exhibited. The patient was a woman aged 42. She had observed the swelling for ten years; at first it had grown very slowly, but for the last two months had increased rapidly in size and caused dragging pains in the shoulder and sacral region. The abdomen was much distended; the tumour was well circumscribed, especially below, and was divided into three lobes. On moving it, a [illegible] could be felt [illegible] movements. When abdominal section was performed, no adhesions were found on the convex surface of the tumour, but in the neighbourhood of the hilum were several intestinal adhesions that were partly torn down and partly separated after ligature. Bleeding from the capsule of the spleen, while these adhesions were being separated, was checked by means of sponges. The splenic vein and artery were isolated, tied with a double ligature, and then divided. A strong adhesion to the pancreas was then discovered, and a portion of the growth, from three to four cubic centimètres, had to be left on it. The peritoneal cavity was then sponged out and the abdominal wound sewn up. There had been no leukæmia; the third week after operation the white corpuscles had increased somewhat in number. The patient made a good recovery, there were no enlargements of the thyroid body or lymphatic glands, no pains in the bones, and no nervous symptoms. The tumour was a sarcoma. The rarity of sarcoma of the spleen, and the great difficulty of the operation involved by the adhesion of the tumour to the pancreas, rendered this case remarkably interesting.

SOCIAL SCIENCE ASSOCIATION.

The presidency of the Social Science Association for the ensuing year has been accepted by Mr. G. J. Shaw Lefevre, M.P., First Commissioner of Works. The presidents of departments have also all been appointed, the following being the complete list: International and Municipal Law, Mr. John Westlake, Q.C., LL.D.; Repression of Crime, Mr. J. S. Dugdale, Q.C., Recorder of Birmingham; Education, Mr. Oscar Browning; Health, Dr. Norman Chevers; Economy and Trade, Mr. H. H. Fowler, M.P.; Art, Mr. Beresford-Hope, M.P. The preparations for the Annual Congress, which is to take place at Birmingham from September 17th to 24th, are being vigorously pushed forward by the different local committees, and a largely attended and successful meeting is anticipated. It is sixteen years since the Association met, for the second time, in Birmingham, and twenty-seven years since it held, in 1857, its first meeting, which also took place in that town.

HENRY I. H. GOODEVE, M.D.

Henry Ives Hurry Goodeve, formerly Professor of Anatomy in the University of Calcutta, died on Tuesday, at his residence, Cook's Folly, Stoke Bishop, near Bristol. The deceased was the eldest son of the late Mr. John Goodeve, banker, of Bury Hall, Hants, by his marriage with Elizabeth, daughter of Mr. William Hurry, of Great Yarmouth, Norfolk, and was born in 1807. He was educated at the University of Edinburgh, where he graduated M.D. in 1828. He became a Fellow of the Royal College of Physicians (London) in 1860, and was also a Fellow of the Royal College of Surgeons, and a retired surgeon of the Bengal Establishment. Dr. Goodeve, who was a magistrate and deputy-lieutenant for Gloucestershire, married, in 1828, Isabella, daughter of Mr. J. Barlow. He was left a widower in 1870.

TRAUMATIC ANEURYSM OF THE EXTERNAL ILIAC ARTERY.

Dr. Assendelft, of Sergatsch, in the province of Nijni Novgorod, has recently published a work entitled "Surgical Experiences of a Country Doctor," which has been favourably noticed in the Russian and German medical journals. The author had the advantage of living near a village where a small private hospital had been erected in 1872, and between June 1879 and March 1883 he performed 186 major operations in the wards of that institution. On May 26th, 1882, a countryman was admitted into the hospital, for a stab which he had received in the left groin twenty hours previously, during a quarrel with some other peasants. The wound had been followed by very severe hæmorrhage, which had ceased when the patient was taken into the hospital. Dr. Assendelft found a punctured wound immediately below Poupart's ligament, running obliquely upwards; the iliac fossa was filled with a large pulsating tumour, which projected above the crural arch. Pulsation was weaker in the femoral and posterior tibial arteries of the affected side than in the corresponding vessels of the right lower extremity. Taking into consideration the cessation of the hæmorrhage, and the risk of exposing the aneurysm and searching for the wound in the vessel in the midst of blood and coagula, with subsequent dangers from septic changes and from gangrene of the limb, Dr. Assendelft determined to pursue an expectant line of treatment. The wound healed, the swelling diminished in size and remained as a traumatic aneurysm of the size of a plum. In June, the aneurysm threatened to burst. On June 12th the aneurysm was exposed, strict Listerian precautions being taken, and excised after ligature of the artery above and below it. The patient recovered, without any loss of power in the left leg.

PYROLIGNEOUS ACID AS A PARASITICIDE.

Dr. Cramoisy, a Paris physician, submitted to the judgment of the Academy of Medicine in Paris, in November 1882, a note on the treatment of diseases of the skin produced by vegetable parasites. Dr. Cramoisy's system of treatment consisted in the use of pyroligneous acid. The work was submitted by the Academy to the decision of M. Besnier, whose report was read in January of this year. It deserves perusal as containing a clear and instructive statement of the general principles by which ringworm of the scalp can be most effectually treated. M. Besnier points out that there is no one remedy for ringworm, and that we possess at the present no medicinal agent capable of so modifying the tissues as to render them incapable of acting as foci for the germination of the microphyte without so altering their vitality as to cause destruction. The difficulty of treatment consists in rendering the soil unfit for the propagation of the parasite without at the same time leading to partial sloughing. The application of simple parasiticides is insufficient. In the depth of the hair-follicles the trichophyton tonsurans lives and multiplies, although the surface be covered over with parasiticide applications. Dr. Cramoisy, like many other therapeutists, had endeavoured to discover an agent which would penetrate the follicle, and he believed that he had discovered one in wood-vinegar, to which he had added red oxide of mercury in the proportion of 1 to 1,000, and salicylic acid in the proportion of 2 to 1,000. M. Besnier shows, in his report, that any success produced by this remedy is due to the pyroligneous acid. He states that this acid is not inferior to other agents which cause what he calls an eliminatory irritation, but that it possesses no special virtue as a parasiticide. It has, however, no special disadvantage, and does no harm. M. Besnier states that, although considerable irritation may have been produced by friction with this agent, he has never known it cause extensive dermatitis, nor partial baldness. Its disadvantage is the pain and inflammation which it produces. The practical conclusion to be drawn from M. Besnier's report is that in pyroligneous acid we have an agent equal in value to many of the other parasiticides which produce irritation; and a confirmation of the well established doctrine that the point to be aimed at in the treatment of these parasitic diseases is a sufficient amount of irritation to unfit the skin for the development of the parasite without causing partial necrosis.

TYPHOID FEVER IN SWITZERLAND.

We have received from the agent of the Federal Government a communication, in which he informs us that the epidemic of typhoid fever, which for some time in March and April was prevalent in Geneva and Zurich, has now practically disappeared. We are bound to say, however, that the statistical report received at the same time cannot be said to bear out this statement. In Geneva and its suburbs, there were, in the week ending June 7th, two deaths from typhoid fever, five from acute affections of the organs of respiration, and six from the diarrhœa of infancy. In Zurich and its surrounding communes, there were one death from diphtheria or croup, five from typhoid fever, five from acute affections of the organs of respiration, and five from the diarrhœa of infancy. How many of the cases of acute disease of the respiratory organs had their origin in defective sanitary arrangements it is impossible to say, but in England we have come to look on such cases with grave suspicion. It is not possible to form a sound opinion from the inspection of the bulletin of a single week; but, as at present advised, it is clearly our duty to warn those who propose to visit Switzerland for a summer holiday, to avoid towns where the number of deaths from preventable disease reaches so high a total as is shown by the official returns for Geneva and Zurich. Already too many of our countrymen who have gone abroad in search of health have found instead disease and death.

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SCOTLAND.

SIR LYON PLAYFAIR.

WE have authority to state that Sir Lyon Playfair fully intends to present himself again for election as the representative of the University of Edinburgh. His opponents have, we are glad to say, failed to induce any medical man to present himself as a candidate in opposition to Sir Lyon Playfair; they have, however, succeeded in securing the services of a lawyer. Without saying anything against the legal candidate, we shall not be going too far in assuming that no one can pretend that his public claims or abilities are in any way equal to those of the present distinguished representative of the University; and certainly it will not be contended that he is in any way so well fitted to represent the medical interests of the University as Sir Lyon Playfair. The distinguished abilities of Dr. Playfair, his intimate acquaintance with all the aspects of sanitary, scientific, and educational subjects which come before Parliament, his sympathy with medical progress, and his services to the medical profession, are too thoroughly recognised to need eulogy or comment. The powerful influence which he has exerted during the recent session in the discussions on vaccination and experiments on living animals, and in dealing with questions of medical education and sanitary administration, is fresh in the memory of the profession, and constitutes a most powerful claim on the respect and gratitude of the medical profession, and, indeed, of all those who think that the high interests of educational and social progress are of leading importance in legislation, and that the House of Commons contains only too few persons who have any solid knowledge on the subject. It is not too much perhaps to say, that it contains no one whose information on these subjects is at all comparable with that of Sir Lyon Playfair.

A NEW SCHOLARSHIP IN CLINICAL MEDICINE.

BY the munificence of the late Dr. Stark of Auchtermuchty, a new scholarship in clinical medicine has been founded in Edinburgh University to be called the "Stark Scholarship in Clinical Medicine." It is of the value of nearly £100, and is tenable for one year. During the time it is held by the Stark scholar, he is required to devote himself to original or other work in the wards under the superintendence of the professors of clinical medicine. It will be only be competed for once in two years, and has been so arranged that it shall alternate with the competition for the Murchison Scholarship in Edinburgh. The first competition will be held in the University and in the University clinical wards of the Royal Infirmary on Thursday and Friday, the 24th and 25th of July, 1884. The examination will include (a) Examination of Patients, with commentaries on their cases; (b) Questions on Therapeutics and Pathology; and (c) Identification of Specimens. The conditions with regard to eligibility for competition are, that candidates must be either matriculated students of the University of Edinburgh who are, or have been, in attendance on the University class of Clinical Medicine, or Bachelors of Medicine of Edinburgh University, of not more than eighteen months' standing, who have attended that class. Names and addresses of candidates should be sent to the Dean of the Faculty of Medicine not later than Monday, July 21st, 1884.

THE WATER-SUPPLY OF GLASGOW.

FOR some time, it has been felt by the Glasgow authorities that the question of increasing the water-supply of the city would have to be faced. Calculations showed that, since the Loch Katrine waterworks were constructed, the annual rate of increase in the amount of water consumed has been one million gallons per day, so that at present the quantity required for daily use amounts to 39,000,000 gallons. The existing aqueduct can only convey 42,000,000 gallons of water; hence in about three years the city would be face to face with the difficulty of a deficiency in the water-supply. Fully alive to the importance of a plentiful supply of pure water as an important aid to public health, the Glasgow Town Council has very properly decided to deal at once with the matter, and a Bill will be promoted in Parliament next session for carrying out a scheme by which the daily supply would be increased to 75,000,000 gallons. According to the proposed plan, Loch Katrine and the adjoining lochs are still to be the source of the supply, but their present high water-levels are to be raised, and a second aqueduct is to be constructed capable of conveying 63,000,000 gallons a day. In this way, it is hoped such an increased supply may be obtained, as will last the city for the next thirty-six years. It is estimated that the works required for this extension of the water-supply will cost £1,000,000; but no outlay is too great for a plentiful supply of pure water, and the Glasgow Town Council has done wisely in dealing with this important question in so satisfactory a manner.

THE DISPOSAL OF REFUSE IN LARGE TOWNS.

ABOUT three years ago, the town of Glasgow erected special works for the speedy despatch of the refuse collected all over the city. By the arrangements then adopted, the refuse is made to undergo a process of separation, by which it is made more valuable to farmers, and also of considerable profit to the town; for, by a process of burning, chemicals are extracted, and sold for a high price. The results obtained by this system have been so satisfactory, that the authorities decided to extend it; and, on the 13th instant, there were formally opened additional works, which cover ground about an acre in extent. They are on exactly the same principle as the former, though, of course, with certain improvements that experience has suggested. The importance of these Refuse Despatch Works, as well as their necessity, is brought out when it is remembered that, in the case of a city like Glasgow, there are 163 miles of roads and streets to clean and water, and from these 700 tons of stuff are gathered daily. To be able to dispose rapidly and profitably of such a large amount of waste material, speaks well for the system which Glasgow has adopted, and which as yet does not seem to have been taken up by any other large towns.

POPULAR CURES FOR DISEASE.

A STUDY of the history of medicine, especially in its earliest days, shows how quickly superstition found its way into the practice of the healing art; and, though modern science has almost entirely dissipated the belief in amulets, charms, and talismans, the yearly pilgrimages of modern days to certain shrines show that some people still place more confidence in supernatural agency than in the prescriptions of doctors. In a recent paper, read before the Society of Antiquaries of Scotland, the Rev. Hugh Macmillan of Greenock drew attention to two boulders, having rain-filled cavities, on the shores of Loch Tay, which were formerly associated with the cure of disease. The first one is a large rough boulder of clay-slate, shaped somewhat like a chair. It stands in the middle of a field, and has a deep square cavity, evidently artificial, and capable of holding about two quarts of water. The rain-water contained in this cavity was believed to be a sovereign remedy for the measles, so that the boulder was known in the district as the "Stone of the Measles," and people came to it from all parts of the district, it having ceased to be frequented only in the life-time of the present generation. The other stone is in the woods at Killin, and is called "The Well of the Whooping-cough," being formerly famous for the cure of this malady; and there are people in the village of Killin who remember being taken to the stone to drink from its cavity for the cure of the disease. The practice has now died out; and the existence of the stone, with its rain-filled cavity, is only known to few. Another instance of these local superstitions is quoted by Dr. Macmillan, and is to be seen in a solitary graveyard below Mornish, where there is only one erect tombstone, which is of comparatively recent date. On the top of it there are two white quartz pebbles, one of which has a single cavity drilled in one of its flat sides, and the other a similar cavity in each of its opposite sides. The popular belief was that these pebbles could cure inflammation of the breasts when the holes were applied to the nipples; and even recently, a woman who was thus afflicted was known to come a considerable distance to try the remedy. The explanation of these cavities is, that the stones are evidently the socket-stones for the spindle or vertical axle of a millstone, and thus belong probably to the series which is carefully preserved in the meal-mill at Killin, and still known as St. Fillan's curing stones, but no longer possessing in the popular mind the magic influence once attributed to them.

THE OUTBREAK OF SMALL-POX IN GLASGOW.

We are glad to observe from the last health-report issued by Dr. Russell that, although measles of a mild type is very prevalent in Glasgow, especially among the better classes of society, there has been a decided diminution in the number of small-pox cases. To those who have watched this outbreak, and have read the detailed accounts of its progress given in the different fortnightly reports, it must be quite clear that the disease has been kept within bounds, and its extension limited by the energy and vigilance shown by the members of the sanitary staff of the city. Their promptness in tracing cases, and in immediately isolating those affected, together with the judicious use of revaccination in the case of those exposed to infection, has undoubtedly been the means of saving Glasgow from a severe small-pox epidemic, such as is now taxing all the resources of the sanitary authorities in London.

THE EPIDEMIC OF MEASLES AT DUNDEE.

The recent monthly report of the medical officer to the Board of Health of Dundee shows that the epidemic of measles is rapidly spreading throughout the town. We observe that the spread of the infection is considered by the medical officer to be largely due to the wilful neglect of sanitary regulations by many school-teachers, inasmuch as they have failed to demand medical certificates from convalescent pupils who had been absent from illness, and who had returned before quite free from the disease. Steps should be taken to deal with teachers who thus wilfully neglect those ordinary precautions, by which alone the spread of infection can be checked.

DUNDEE ROYAL LUNATIC ASYLUM.

The Directors of the Dundee Lunatic Asylum held their annual meeting last Monday. The report of the directors stated that, as the result of the appeal to the community for assistance to the asylum in its present financial difficulties, over £2,192 of subscriptions had been received, and £1,550 promised. The subscriptions received had been divided by the directors *pro ratâ* among the various contractors for the new asylum, in the shape of a dividend of 6s. 1d. per £1, on account of the sums due to them. The directors had also been endeavouring to realise their property at the old asylum, and had feued 194 poles of ground, at the rate of £1 per pole. It was agreed to raise the rate of payment for in-patients from 10s. to 11s. per week, which will give an annual increase to the income of £500. The income for the year amounted to £9,987 17s. 5d.; and the expenditure to £8,877 5s. 9d.; leaving a balance of £1,110 11s. 8d. There are at present in the asylum 370 patients, being an increase of 30 over the number at the same period last year. During the year, 150 had been admitted, 46 recovered, 31 died, 25 removed to lunatic wards of the poorhouse. The report was unanimously adopted, and the directors expressed the hope that the liberality of the outer community would soon relieve them of their financial embarrassments.

THE UNIVERSITIES (SCOTLAND) BILL.

When we commented on this Bill in the Journal of June 7th, we stated that, while it would be generally acceptable as a measure of university reform, there were some of the details that would probably need some modification. Since then, the different Scotch universities have given formal expression to their views on the measure, and these bear out what we have said. Edinburgh is decidedly friendly in its tone towards the Bill, but finds itself unable to accept the provisions under which it is to take charge of the Observatory and the Botanic Gardens. Glasgow petitions against the financial proposals, which are likely to do grave injustice to that university; and St. Andrew's, while expressing satisfaction at the introduction of the measure, declares that it cannot accept the principle involved in the statement that the sum of £43,000 shall be held to discharge "all claims, past and future, of the universities." It is to be hoped that the Government may see their way to deal with these objections in such a way as to lead to the withdrawal of any further opposition to the Bill.

THE BEN NEVIS OBSERVATORY.

It will be remembered that, in October of last year, the Observatory on Ben Nevis was formally opened. Since then, continuous hourly observations have been made as to the temperature, pressure, humidity, and motion of the atmosphere on the top of the mountain. The results obtained have fully borne out the expectations formed of the value of such a high level station; and the council of the Scottish Meteorological Society have determined to make important additions to the Observatory, so as to enable the three observers to work under more favourable conditions. These additions will consist of a tourists' shelter, an office, two bedrooms, and a tower. On the top of the latter will be placed two self-registering anemometers for recording the velocity and direction of the wind, a subject upon which it is felt a good deal of reliable information is still needed.

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IRELAND.

Dr. Thomas Nedley, Physician in Ordinary to the Lord Lieutenant, has been appointed surgeon to His Excellency's household, in the room of the late Dr. J. Stannus Hughes.

On Thursday week, two insane patients in the Clonmel Lunatic Asylum, named Magrath and Quinan, tied two sheets together, fastened them to the iron bars of their dormitory, and then attempted to descend to the ground, about thirty feet beneath. The sheets, however, parted under the strain, and both men were precipitated to the ground. When discovered, both men were dead and fearfully mutilated.

HEALTH OF DUBLIN FOR 1883.

During the past year, there were registered in the metropolitan area 9,955 births, being at the rate of 29 per 1,000; and 10,161 deaths, or 28.3. The death-rate was very slightly over the average rate of the previous ten years; but, as the burial-returns under the Public Health Acts were not in force until 1879, about 10 per cent. of the deaths up to that year escaped registration; and therefore it may be taken that the mortality in 1883 was somewhat lower rather than above the average of the previous ten years. The only zymotic diseases which assumed somewhat serious proportions were scarlet fever and whooping-cough. The former caused 151 deaths, or a rate of 0.6 per 1,000; while whooping-cough was more fatal, having caused 276 deaths, or 1.1. To diarrhœa and dysentery 180 deaths were attributed, a decrease as compared with 1882; typhus fever, 130, as against 114; typhoid, 93, against 101; and diphtheria, 8, against 17. Only 23 deaths took place from measles, as contrasted with 443 in 1882. Phthisis caused 1,036 deaths, or an increase of 120; while the whole class of constitutional diseases shows a decided increase in 1883, as compared with the two years immediately preceding. In 1882, there were 15,531 water-closets and 11,269 privies in Dublin; and, as Dr. Cameron, whose report we are now considering, is strongly of opinion that the water-carriage of excreta is that best adapted to the circumstances of Dublin, and that the thousands of filthy privies in connection with the tenement-houses have done much to pollute the air and soil of the city, he has done all in his power to cause a general substitution of water-closets for privies in the tenement-houses, and in other houses in which the privies were placed close to the dwellings. During the past year, 970 water-closets were constructed in Dublin, besides those placed in connection with new houses; and he trusts that, in a few years hence, privies will become almost unknown in Dublin.

ENNIS WORKHOUSE.

AN inquiry was commenced last week by Mr. Bourke, Local Government Board inspector, into certain alleged irregularities in connection with the hospital of the workhouse. The evidence went to show that great laxity prevailed in the paupers' nursing arrangements, it being the practice of the head nurse to entrust the distribution of stimulants for hospital-patients to the pauper nurses, who applied them to their own use. It was shown also that the sick poor were treated with great neglect. The head nurse, afraid of the evidence, had sent in her resignation prior to the inquiry, and has refused to be examined.

COMBER DISPENSARY.

AT a recent meeting of the dispensary committee, the chairman referred to the death of Dr. Graham, late medical officer of Comber district. He said that he had not only been a physician, but a true-hearted friend, and was respected by them all. In his death, the public had lost a most faithful and devoted servant, whose place would be very hard to fill. A committee was appointed to draw up an address of condolence to be sent to the family of Dr. Graham. The salary of the appointment was £100 a year, but the committee wished to reduce it to £60, which was objected to by the Local Government Board, who have informed that body that they (the committee) had no power to alter that amount, that being a matter which rested with the board of guardians, subject to the sanction of the Local Government Board.

THE MEDICAL ACT AMENDMENT BILL.

THE King and Queen's College of Physicians in Ireland has petitioned the House of Commons to amend certain clauses of this Bill, as brought from the Lords, so as to grant the College an equality of representation on the Medical Board for Ireland, and [illegible] equality of curriculum, standard of examination, and fees to be charged under the medical boards in the several parts of the United Kingdom. The petition sets forth that the College [illegible] a teaching as well as an examining body, and [illegible] has discharged its duties in both respects. While [illegible] representation on the Medical Board than any other body, the College claims that neither the [illegible] University of Dublin nor the Royal University of Ireland, which is altogether an examining body, should each have one more representative on the Medical Board than the College, as proposed it should have. For, as the Medical Board for Ireland will have the right of appointing two members to sit upon the General Council, it is imperative that no undue preponderance of representation should be given to any one or more of the medical authorities constituting the Board, inasmuch as otherwise the authorities which are inadequately represented on the Board will probably fail to secure any representation whatever on the Medical Council. While the King and Queen's College of Physicians occupies a position in Ireland similar to that of the Royal College of Physicians of London, the Bill allots to the latter body four out of the sixteen representatives on the Medical Board for England, the representation of the Irish College of Physicians being only three out of fourteen. The College, therefore, has framed amendments to carry out its very strongly felt views in the directions indicated. It proposes that the Universities and the Colleges should each have three representatives, instead of the former only having three. With a view of securing equality of curriculum, standard of examination, and fees, it proposes that the Medical Council, instead of the Medical Boards, should frame the examination-rules; and it also suggests an addition to Clause 36, page 21, to provide that the surplus funds of the Medical Boards shall be applied in part to general public purposes of the medical corporations.

THE LABOURERS' ACT.

BOARDS of guardians have, without scruple, since this Act came into operation, expected their medical officers of health to carry out the necessary inspections under the Labourers' Dwelling Act, without any additional remuneration. Mr. Darley, County Court Judge for Wicklow, recently decided that the medical officer "could claim" additional remuneration for carrying out the necessary duties; but as the matter was one which required a more authoritative decision, another case, that of Dr. Rogers against the Youghal guardians, was put forward, at the instance of the Irish Medical Association, before Judge Lawson last week. The plaintiff was medical officer of health for Youghal district, and made a number of inspections and reports as to the sanitary condition of the labourers' dwellings within his district. The entire claim was £28, which the guardians refused to pay, and hence the action. Judge Lawson directed a verdict for Dr. Rogers, reserving leave for defendants to apply to have it changed into a finding for them, if the Court should hold that he wrongly directed, on the ground that the duties performed were properly within the functions of the medical officer of health.

CORK UNION.

AT a recent meeting of the guardians a resolution was adopted proposing to allow certain specified articles of food to be supplied to patients in the workhouse hospital by their friends; but the Local Government Board objected to the arrangement, as it would lead to irregularities and abuse, while the power which the medical officer possesses enables the sick poor in the workhouse to be supplied with very necessary for their proper treatment and comfort. A resolution having been proposed that the Local Government Board be requested to reconsider their determination, Dr. Brodie, Inspector of the Local Government Board, said that nothing could possibly lead to greater abuse than the introduction of food other than prescribed in the dietary by the medical officer. In the first place, it would create [illegible] house rules. Further, the fundamental test of proper admission to the workhouse, namely, destitution, must be frequently departed from [illegible] which people above their rank outside could neither afford nor [illegible] expressed on the subject.

CONFERENCES AT THE INTERNATIONAL HEALTH EXHIBITION.

THE conference organised by the Sanitary Institute of Great Britain, the Parkes Museum of Hygiene, and the Society of Medical Officers of Health, was continued on June 11th in the Conference Room. Mr. EDWIN CHADWICK, C.B., occupied the chair. Dr. BRISTOWE, the medical officer of health for Camberwell, read a paper on "Industrial Diseases." He instanced, among such diseases, chronic lead poisoning, from which lead-miners, plumbers, type-founders, painters, glaziers, glazed card manufacturers, and lacquerers suffered; chronic copper-poisoning, which affects brass-founders; chronic arsenical poisoning, to which persons employed in the manufacture of pigments, paper-hangers, and decorators, artificial flower manufacturers, persons exposed to the fumes of heated metals (particularly of zinc and brass), and manufacturers of dyes and leather-dressers were liable; chronic mercurial poisoning, which occurred amongst those employed in quicksilver-mining, the manufacturers of looking-glasses, barometers, and thermometers, furriers and persons engaged in the packing of furs which had been brushed over with the solution of the nitrate of mercury; chronic phosphorus-poisoning, which occurred amongst persons exposed to the fumes of phosphorus in the making of matches, but of which, owing to the precautions which had been adopted, very little has been heard for some years. Grocers, bakers, washerwomen, and others, were liable to inflammatory affections of the skin, mainly and primarily of the hands, commonly known as grocer's itch, baker's itch, washerwomen's itch, and so on, which affections were not itch in the proper acceptation of the term, but a variety of eczema, induced and kept up by the irritant effects, in the first case of sugar, in the second of flour, and in the last of soap or of the soda employed in washing. But the irritant effects of matters which were not poisonous were not limited to the skin. Occupations which habitually exposed the workmen to the inhalation of abundant solid particles that were incapable of solution or removal by the animal tissues or secretions, in many cases induced chronic diseases of the lungs; among these occupations being those of coal-miners, copper-miners, grinders, and millstone-makers, and flax-dressers. Apart from this, it was certain that many occupations tended to the production of pulmonary phthisis and fatal bronchial affections, arising from the fact that, where many persons were employed together at any indoor industry, the ventilation of the work-place was likely to be so bad as to convert the employment, which perhaps was not in its own nature of hurtful tendency, into an employment seriously dangerous to health. Referring next to the spread of infectious disease by the use of materials impregnated with morbific virus, he said some interesting facts had been collected in the past few years in reference to the affection known in Bradford as the woolsorters' disease, which was fatal in large proportions, and from which death usually ensued in the course of four or five days. The same disease occurred in London among persons who had to handle the raw hides coming from abroad—namely, wharf-labourers, sorters' labourers, and tanners' labourers.—In the discussion which followed, Dr. ORD cited some statistics for the purpose of showing the death-rate of persons employed in various occupations. He had taken, he said, first the number of persons living in 80 occupations when the census of 1881 was taken; and, secondly, he had taken the number of deaths of persons in those occupations in the years 1881, 1882, and 1883, in both cases excluding all who were under 25 and over 65 years of age. Taking the number 1,000 as representing the average number of deaths of persons in all these occupations within a given period, he found that the deaths of persons in hotel service were represented by 2,205; but even their chance of dying was twice as great as that of an ordinary average man. Next to them, inn-keepers and wine and spirit merchants were represented by 1,525; then came brewers, 1,361; cabmen and flymen, 1,482; butchers, 1,170; bargemen and lightermen, 1,305; china and earthenware manufacturers, 1,742; file-makers, 1,667; cutlers, 1,309; medical men, 1,122; farmers, 675; agricultural labourers, 653; gardeners, 559; and clergymen, 556. —At the close of the discussion, Dr. ALFRED CARPENTER tendered, on behalf of the Conference, a vote of thanks to Mr. Chadwick for presiding.

The spread of infectious diseases through milk and by other agencies formed the subjects of papers, and a discussion, on Thursday, June 12th.

Dr. W. N. THURSFIELD, medical officer of health for the Shropshire district, read a paper on cows' milk as a vehicle of infectious and epidemic disease, with suggestions for the more effectual prevention of such outbreaks. He said that the greatest risk of danger from milk lay in the fact that the chief consumers were of an age when the body was most susceptible of taking disease; and the consumption of unboiled milk might literally be said to bring the consumer into close connection with the animal from which the milk was drawn, and, always to some extent and often most intimately, with the family and domestic arrangements of at least one household and often two. That the above inevitable connections should be rendered as free as possible from danger to the milk consumer was the aim he had in view. Seeing that a considerable proportion of animals yielding milk were in that parturient condition which was specially prone to sickness, and considering to what extent milk was a reflection of the bodily condition of an animal and of its food, and how very absorbent milk was of volatile matters in the atmosphere, equally liable to take up and taste of any peculiar odour, organic or inorganic, as to be affected by putrefactive emanations, and, even in the absence of such, most prone to undergo septic changes, the wonder was not that so many, but that so few, bad consequences had been hitherto traced to it. After referring to proved cases of the dissemination of epidemics of typhoid and scarlet fever, and to the strong evidence existing that diphtheria had also been spread by milk, he said that, in addition to recognised human diseases, milk might become a vehicle for the transmission of recognised bovine disease to man. That the infection of foot-and-mouth disease (eczema epizootica) could be so transferred, there was no manner of doubt. It was asserted by some high authorities that bovine tuberculosis was transmissible to man. That a considerable proportion of milch cows were affected with tubercular disease was admitted; but whether the disease was or was not transmissible to the human subject through the milk, was a matter difficult to prove, though considerable evidence of probability had been adduced. If such transmission could be satisfactorily proved, or even shown to be frequently probable, the question of this disease would then transcend in importance any previously referred to by him. To eliminate or even to recognise every animal infected with tubercular disease in a herd of milch cows would be most difficult, and the question of the prevention of the disease in cattle would involve agricultural considerations of the highest importance. One notable fact in connection with milk-epidemics was, that they had generally occurred in connection with milk-purveyors who had been under contract to supply a certain amount of milk daily, to be subsequently retailed. Chemical analysis, especially when applied to mixed milk from a number of cows, although indispensable to expose a marked addition of water or abstraction of cream, was valueless as an indicator of infected milk, and, as negative evidence of danger or positive evidence of infection, was fallacious. With regard to any questions as to the measure of protection afforded by the Order in Council of July 1879, founded on the thirty-fourth section of the Contagious Diseases (Animals) Act, 1878, and relating to dairies, cowsheds, and milk-shops, he thought the answer must be, not only that it afforded no sufficient protection, but that, in those districts from which disease had been most frequently so imported, the risk was in some respects greater than before such legislation; and the reason he believed to be that this important matter, instead of being placed prominently under the operation of the laws relating to the health of mankind, had been made to occupy a very secondary and subsidiary place among the statutes relating to diseases of animals. Nowhere could it be considered a purely local question. In fact, it was almost the widest they had to deal with, as from some of the rural districts for which he acted as medical officer of health quantities of milk were consigned in bulk to Manchester, Liverpool, Birmingham, and London. It was not sufficient that a sanitary authority in London should have power, as at present, to regulate its own milk-shops, or even to interdict any suspected source of supply. There ought, in addition, to be some reasonable assurance that efficient precautions were taken at the source of the milk-supply, to which their local precautions could only furnish the necessary supplement. To place all dairies in rural districts under the same regulations as apply to cowsheds in large towns would be an unnecessary interference. Already, milk was too difficult to obtain by the cottager class in many rural districts, and every care should be taken not to render this more difficult. A wide distinction should be drawn between milk-purveyors and ordinary cow-keepers. The milk-purveyors should be alone subject to the special regulations and licence. To effectually prevent milk-epidemics, precautions are necessary: (1) at the house of the consumer; (2) at the milk-shop of the retailer; and (3) at the dairy-farm of the wholesale purveyor. Having entered in some detail into the way in which he would suggest these provisions should be carried out, he continued: "In the fulfilment of most of the above requirements, the milk-purveyor would be a gainer, as he would always be in a position to avail himself of responsible advice. Notification of disease need not, for obvious reasons, entail publicity, but in such cases the responsibility of the necessary isolation would devolve on the medical officer of health. He believed, indeed, that inspections might be so carried out that the inspector would come to be looked upon, not as an interloper, only borne with so far as the law demanded, but as one in a position, under certain circumstances of disease-incidence, to give advice, valuable from a commercial as well as from a sanitary point of view. Whatever differences of opinion there might be on technical points and matters of detail, he thought that all who had carefully considered the subject would have formed a decided opinion that the adoption of regulations as to the sale of milk should be incumbent on local authorities, and not permissive, as at present, and that the regulations should be applied at the producing as well as the distributing depôts."

Dr. W. H. **Corfield**, medical officer of health for St. George's, Hanover Square, next read a paper with regard to the manner in which infectious diseases were spread. It had been shown by Chauveau and others, from examination of liquids containing poisons of some of these diseases, that the poison existed in the form of solid particles, and was not in solution in the liquids; and other phenomena attending these diseases, especially the non-diffusibility of the poisons, as shown by the limited extent of the infecting area around an infected person, led to the same conclusion. These poisons, then, were "particulate;" they were also, without doubt, organised substances, and many of the phenomena that they exhibited induced us to believe that most, if not all, of them were organised. The atmosphere was a most universal medium or vehicle of communication for the poisons of these diseases, though the poisons of some of these diseases were much more readily conveyed directly by the air than were the poisons of others, and, indeed, some of them produced an evident and characteristic smell in the air around the patient. The smell of small-pox had been long known, and no doubt was referred to by the great Arabian physician, Rhazes. The poisons of some of these diseases were more especially conveyed in the foul air of sewers and drains. This was the case with enteric or typhoid fever, the poison of which was chiefly, if not entirely, discharged from the body by means of the intestinal canal, and with diphtheria. Among other media or vehicles of infection, he mentioned the clothing of persons not themselves suffering from the disease, the agency of laundries, public conveyances, wall-papers, letters, food, and drinking-water (especially in the cases of cholera, enteric or typhoid fever, with dysentery in hot climates) contaminated by sewer-air getting into cisterns from overflow or waste-pipes connected with soil-pipes or drains. Diphtheria had not been usually recognised as a disease conveyed by means of drinking water, but some interesting examples brought by Dr. Browning before the Society of Medical Officers of Health, made it very evident that, occasionally at any rate, this disease was spread in the manner in question. There could, however, be no doubt that, while enteric fever was generally contracted by means of polluted water, and occasionally by means of polluted air, diphtheria was generally contracted by means of polluted air, and only occasionally by means of polluted drinking water.

In the course of the discussion on the papers, Professor **de Chaumont** expressed regret at the nihilist attitude which had been taken up by medical men connected with the sanitary department of the Government in India respecting the origin of cholera. Without accepting as proven the results of the investigations of Koch, he said that the loss of this discovery to the British nation was due very largely to the obstruction put in the way of investigation by that department.—Dr. **Fleming**, speaking of the extent to which the flesh of animals that had suffered from tuberculosis or phthisis was sold in our markets, said the condition of our slaughterhouses was a disgrace to civilisation. Both slaughterhouses and dairies, etc., should be under constant and efficient inspection.—Dr. **Priestley** urged the importance of more care on the part of heads of families after the occurrence of scarlet fever and measles in their families. A more conscientious regard for others should be made a matter of education in public morality. He described a fever-proof garment which had been devised for the use of nurses and others who visited or had the charge of patients.—Mr. J. **Cleland Burns** said that when the community had once been convinced that the rates and taxes would be lowered by looking after the health of the population, sanitation would be properly carried out.—The **Duke of Buckingham** expressed his hope that these conferences would be fruitful of good by awakening public interest in matters so essential to the well-being of the community as those under discussion.—The **Chairman** (Dr. Alfred Carpenter) made some remarks with regard to the hybridising of disease-germs, and the production, under conditions favourable to the development of the hybrids, of new forms of disease. With regard to the spread of epizootic diseases, he read an order of the Privy Council just circulated which gave power to prevent the danger of the carrying of infection by drovers and others having to do with cattle. One beneficial effect which might be gained from these regulations would be the better understanding on the part of the people of the conditions under which disease was spread, and of the precautions necessary to prevent the dissemination of infectious diseases.

The proceedings closed with a vote of thanks to the Chairman, moved by Professor de Chaumont.

CHOLERA IN EGYPT.

We learn that reports have reached the Foreign Office which show only too clearly that the Sanitary Department in Egypt is quite unprepared to provide for either the discovery or the treatment of cholera, should it again appear as an epidemic there. At the present time, there is one native medical man in each district of each province. Each district contains from fifty to a hundred villages; and the statistics of birth, disease, and death are collected by the barbers! The native medical men, being both ignorant and corrupt, are entirely untrustworthy; and there are only two sanitary inspectors for all Egypt. It is quite evident that, with such an imperfect staff, it is hopeless to expect to have cholera reported until it has reached an epidemic magnitude which cannot be concealed. A short time ago, it was reported that there had been a sudden outbreak of typhoid fever at a village near Cairo. A report on the outbreak, and daily bulletins, were asked for; but those supplied by the medical man of the province were vague. Inquiry was then made by an European official, who discovered that no less than 6½ per cent. of the inhabitants of the village had suffered from the disease, and that the epidemic had been so long in existence that some of those who had been attacked were already recovering. If this can happen close to Cairo, how can we expect to receive early warning of the occurrence of cholera in the remote interior villages?

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

The meeting of Fellows of the Royal College of Surgeons which took place on Thursday, June 12th, was attended by Mr. Barwell, Mr. Allingham, Mr. Oliver Pemberton, Mr. Wickham Barnes, Mr. Henry Morris, Mr. Clutton, Mr. Crosse of Norwich, and many others who had replied to a postcard which was sent to every Fellow by Mr. Paul Swain. This gentleman, on taking the chair, reminded the meeting of the proceedings which took place on March 29th last, at Lincoln's Inn Fields, when certain resolutions were passed at a meeting of Fellows and Members of the College of Surgeons, held at the invitation of the Council. These resolutions the Council had subsequently ignored; and it therefore seemed to devolve upon him, as the proposer, to take action in the matter. Mr. Wheelhouse had, at that meeting, given those present to understand that the former Association of Fellows had ceased to exist, but this had since been denied; and he therefore hoped that the members of the former Association would unite with those of the new one for the common object which they had in view. As to the reasons for forming an Association, he might say that there was no idea of being antagonistic to the Council; they fully recognised the devotion with which the gentlemen who composed it served the College. Still, it was not altogether safe to trust a body like the Council with irresponsible powers, and there were many points in the management of the College which called for reform. The objects of such an Association were twofold: first, to extend and maintain their rights as Fellows; and, secondly, to obtain certain necessary reforms. The Fellows should, for example, have the right at an annual meeting to discuss the annual report, and, if needful, to amend it. This power would have enabled them to criticise the arrangement which had been entered into by the Council with the College of Physicians, by which students would be forced to pass the examination of each body, and pay the double fee. The result of this was that students would be driven away from London to obtain the diploma in Edinburgh, where they could get it at a quarter of the cost. The annual election of a president by rotation was not a satisfactory method, and called for reform. Again, it was a fact that, at the present moment, the whole ten members of the Court of Examiners were on the Council, and as he believed, constituted an actual majority in the Council. He need hardly say that such a preponderance was not right. The College revenue for last year was £19,000 and out of that more than £6,000 was paid to examiners. A certain number of the Court should certainly be elected from outside the Council and examiners at the end of four or five years should not be eligible for election for the next ensuing term. These were only two out of many other reforms to which he would not now refer. With regard to the Members, it should be recollected that the College of Surgeons was a corporate body. He thought it was a misfortune that from the moment a Member emerged from the College with his diploma, from that moment all his interest in the College affairs ceased. He would be the first to resist any encroachment upon the electoral rights of the Fellows; but he thought that the Members had a right to be considered, and that if they could gain for them the right of being present at the College meetings, and the right of speech, they would be conferring on them a benefit without interfering in any way with the rights of the Fellows.

Mr. John Tweedy then moved the first resolution:

"That a society be formed to promote the general interests of the Fellows of the Royal College of Surgeons of England, and to consider all matters relating to the constitution, government, and administration of the College, whether in its corporate, examining, academical, or political capacity." He reminded those present that the former association had been formed for a definite purpose, which had been carried out and conceded by the Council, and on that ground, as well as upon the declaration of its president, Mr. Wheelhouse, at the meeting in March, it was fair to suppose that it had ceased to exist. It was desirable that some means should be taken to promote the professional, social, and political interests of the Fellows, and that was the *raison d'être* of this association. Already replies had been received approving of the movement from upwards of 200 Fellows, and doubtless many more would join when the objects of the association became known. The aim was to benefit not only the Fellows, but the College itself.

The motion was seconded by Mr. Allingham; and Mr. Richard Davy spoke earnestly in support of it, and instanced the far better manner in which the affairs of the College of Physicians were conducted, and the much greater privileges which were enjoyed by its Fellows, whilst the Fellowship of the College of Surgeons carried with it but one privilege, namely, to annually vote for members of the Council. The resolution was unanimously carried.

The following officers and Committee were then proposed and elected unanimously:—*President:* Mr. George D. Pollock. *Treasurer:* Mr. Willett. *Honorary Secretaries:* Mr. John H. Morgan and Mr. W. Bruce-Clarke. *Committee:* Messrs. Allingham, Dr. Robert Barnes, Wickham Barnes, John Couper, Crosse (of Norwich), R. Davy, Pearce Gould, Reginald Harrison, Hickman, Jessett, Norton, Oliver Pemberton, Paul Swain, Steele (Bristol), John Tweedy; with power to add to their number. Mr. George Pollock then took the chair.

The following resolutions were then proposed and carried unanimously, being, with slight verbal alterations, the same as had been passed at the meeting in March. In moving the first resolution, Mr. Tweedy urged that the electoral rights of the Fellows should be kept separate and distinct, but he considered that Members should be allowed some share in the management of the College. He moved: "That in the opinion of this meeting, it will materially conduce to the welfare of the College that the Fellows and Members should be invested with a larger share of its management."

This was seconded by Mr. R. Barwell, and carried unanimously.

Mr. Tweedy next moved: "That it is desirable that no alteration in the constitution or relations of the College be effected without the consent of the Fellows and Members convened to discuss such alteration."

This was seconded by Mr. Wickham Barnes, and, after observations by Mr. Pearce Gould and Mr. Pollock, carried unanimously.

The third resolution, proposed by Mr. Tweedy, and seconded by Mr. Richard Davy, was also carried unanimously.

"That there shall be an annual meeting of the Fellows and Members, at which the annual report of the Council shall be presented, discussed, and, if approved, adopted.

Mr. Oliver Pemberton said that, as a member of the former Association, he considered that, after what had happened, it was justifiable to suppose that it had ceased to exist. He expressed his entire concurrence with all that had been said at the present meeting.

A further proposition as to the mode of election of the President of the College, which had been proposed at the meeting in March, was then discussed; but, after some advice from the Chairman, it was thought better to leave this matter for the present, and to trust to the Committee to deal with the subject.

A discussion then followed as to what means should be taken to acquaint the Council with the objects of the Association; and, finally, Mr. John H. Morgan proposed the following resolution, which was seconded by Mr. Paul Swain, and unanimously carried: "That a request be forwarded to the Council of the Royal College of Surgeons of England to receive a deputation from this Association, and that a Subcommittee be formed to represent the opinions of this Association to the Council of the College, and to take such steps as may seem desirable to further the objects of this Association."

On the proposal of Mr. Bruce-Clarke, it was decided that an entrance fee of 5s. should be required of every member on joining the Association; and it was requested that this might be forwarded at once to one of the Secretaries, in order to meet the current expenses, which had already amounted to a considerable sum.

THE HOSPITALS ASSOCIATION.

PAYING WARDS AND THE WORKING CLASSES.

The fourth and last general meeting of the present session was held at the rooms of the Medical Society, Chandos Street, on Wednesday evening, the 18th instant, Sir Joseph Fayrer, K.C.S.I., in the chair.

A paper was read by the Rev. Canon Erskine Clarke, M.A., on the subject, "Is it desirable that Hospitals should be made self-supporting, and, if so, to what extent?" Canon Clarke considered that free hospital treatment, though not so directly demoralising as charitable doles, does something to rob a man of his self-respect, and to make him less unwilling to receive charity of any other sort in the time of health. He instanced the case of a patient admitted to the Bolingbroke Pay Hospital, where he agreed to pay 10s. a week for his treatment. The next day, the patient's father heard that his son could be treated at St. George's Hospital for nothing, and he at once removed him thither. It cost £2 a week to maintain a patient in Bolingbroke House, so he would have received a gift of 30s. a week, if he had remained a patient at that institution, although by paying 10s. a week he would have borne his share of the cost, and so have maintained his independence. Having the opportunity, his friends threw independence to the winds, and preferred to take as a gift that towards the cost of which they could well afford to pay something. He was of opinion that it is desirable, for the sake of the character of the patients, and for the sake of their manly independence, that those who could afford it should pay something for their treatment in hospital. He further considered that it was desirable that hospitals should be self-supporting to some extent; at any rate, for their own sakes. He proposed that, in general hospitals, there should be a paying side and a free side; and, whilst giving on the free side everything that is now given, yet on the paying side to add some slight privileges and refinements. Possibly it might be desirable to make the visits of the students optional on the paying side. If the wholesome opinion that it was mean for anyone who could afford to pay to use the free side of a hospital could be widely inculcated into the minds of the people, great advantages would result to the hospitals and the patients. Four years' experience af Bolingbroke House had shown that very many of the industrial classes are able and ready to pay from 10s. to 20s. a week; and even the smaller of these sums would supersede the necessity of a good many guinea subscriptions to a hospital supported by voluntary contributions. The paying ward would check the use of hospitals by wealthy people for their servants, and by large employers for their business assistants, and would open the way to the gradual abolition of the objectionable system of subscribers' letters. If the hospitals were thus to be in a better financial position, then the medical and surgical officers ought to be duly salaried, and so heavy a strain should not be made on the already and always abundant unpaid services of the medical profession. Canon Clarke's answer to the question under discussion was, therefore, emphatically, that it is desirable, for the sake of both the patients and the institutions, to make hospitals self-supporting, though the extent to which this can be done will depend upon the working out of the principle in actual experiment, as well as on the different circumstances and wage-earning condition of the industrial districts from which the patients are mainly drawn.

Mr. J. S. Wood held that it was desirable to admit paying patients to hospitals, but that poor paying patients should receive identically the same treatment, and be equally available for clinical purposes with those who occupied the free beds. His experience in connection with the management of special hospitals, where paying patients were taken, convinced him that this system was popular with the people who benefited by hospitals; that it tended to increase, rather than to diminish, efficiency of administration; and that its general adoption would be for the benefit of the patient as well as for that of the hospitals.

Mr. Burdett spoke at some length on the rise and progress of the pay-movement in connection with our hospitals, and gave practical instances of the advantages to the patients of the adoption of free admission combined with an option to the patients to pay something, according to their means, for the treatment they received. He gave numerous instances of the advantages which this system placed at the disposal of the public in American hospitals, and stated that experience proved that it in no way interfered with the teaching of students or the training of nurses. He advocated the abolition of the ticket-system, and the substitution therefor of free admission, combined with a plan which would provide that the patients who were able should contribute something, according to their means, towards the expenses of the hospitals.

Mr. PIZEY, a working man, spoke in the name of his class against the adoption of paying wards by the existing hospitals. He maintained that a hospital should only be used by the working classes in case of accidents, or where the illness was of an acute or very serious character. He pointed out that, in such illnesses, the artisan's wages were stopped; that the expense of maintaining his family were necessarily increased; and that, for these reasons, it was impossible, or, at any rate, undesirable, that he should be asked to contribute to the cost of his maintenance in a hospital ward. He censured the governors of St. Thomas's, St. Bartholomew's, and Guy's Hospitals for their extravagant expenditure upon the buildings used for hospital purposes, and especially upon those which were devoted exclusively to the medical school.

Mr. DICKENSON, also a working man, thought it was desirable that the working classes should be brought to realise that it was their duty to pay something for hospital treatment if they were in a position to do so. It was a good English characteristic, that every man in the community felt it to be a privilege to extend a helping hand to his less fortunate brother. At the same time, the conditions of labour in England differed materially from those in America, and free admission to hospital treatment produced more good, by fostering feelings of gratitude towards the wealthier classes, than it did harm by promoting pauperism amongst the recipients.

Dr. BRISTOWE said that he had scarcely made up his mind finally on this question. He pointed out, in reply to Mr. Pizey, that if there were no medical schools, there would be no doctors, and if there were no doctors, what would become of the sick? He stated that he was opposed to the admission of paying patients into the wards of endowed hospitals, but that he thought it desirable that the metropolitan hospitals which were supported by voluntary contributions should open their unoccupied wards for the reception of paying patients. It was, in his opinion, far better that these hospitals should relieve themselves from debt by admitting paying patients, than that they should close a number of the wards, or get themselves into such financial straits that the very existence of the hospital might be seriously imperilled.

The Rev. Dr. [illegible] stated that he had been engaged in the management of hospitals, and as a hospital visitor, for many years. He was convinced that a large number of people obtained medical relief, as in-patients, at the metropolitan hospitals at present, who ought to contribute towards the cost of their treatment. His large practical experience convinced him that the adoption of paying-wards would result in great benefit to the hospitals and to the patients.

The Rev. Canon CLARKE, in reply, stated that, in spite of the remarks which had fallen from Mr. Pizey, he was convinced that the artisan and industrial classes were in favour of the establishment of pay-hospitals or paying-wards, provided such accommodation could be brought within an easy distance of their homes. Bolingbroke House was founded in consequence of the express wishes of the artisans of Battersea. Originally a free dispensary, with an income of £60 a year, the adoption of the paying system had converted it into a provident dispensary with 10,000 members. Last year, the [illegible] were so considerable that, after [illegible], there remained a surplus for division amongst the doctors, for their attendance upon the patients, of upwards of £900 [illegible] of Battersea, and the establishment of a pay-hospital there, had resulted in great benefit to the [illegible] classes, and had [illegible] tion to the medical profession, who were, until [illegible] to do this work for nothing. As showing how [illegible] was becoming, he might mention that £25,000 [illegible] by the London hospitals from the contributions of [illegible] treatment. No doubt, there were very many [illegible] to secure immediate admission to free beds, [illegible] very many well-to-do persons who wished to pay, [illegible] to pay, for their treatment. The combined system of free beds and paying wards [illegible] the utmost facility for [illegible] and the sooner its adoption by the existing hospitals became general, the better for the patients, for the benevolent public, and the [illegible] themselves.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council-Room of Exeter Hall on Wednesday, the 9th day of July next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, London, June 21st, 1883.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

MEETINGS of the Council will be held on Wednesday, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., June 20th, and September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

FRANCIS FOWKE, *General Secretary.*

GRANTS FOR SCIENTIFIC RESEARCH.

THE Scientific Grants Committee of the British Medical Association desire to remind members of the profession engaged in researches for the advancement of medicine and the allied sciences, that they are empowered to receive applications for grants in aid of such research. Applications for sums to be granted at the next annual meeting should be made without delay to the General Secretary, at the office of the Association, 161A, Strand, W.C. Applications must include details of the precise character and objects of the research which is proposed.

Reports of work done by the assistance of Association grants belong to the Association.

Instruments purchased by means of grants must be returned to the General Secretary on the conclusion of the research in furtherance of which the grant was made.

COLLECTIVE INVESTIGATION OF DISEASE.

CARDS for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
IVa. Diphtheria, sanitary.
V. Syphilis, acquired.
Va. ,, inherited.
VII. Puerperal Pyrexia.
VIII. Paroxysmal Hæmoglobinuria.
X. Habits of Aged Persons.
XI. Albuminuria in the Apparently Healthy.

NOTE.—The further 150 cases of pneumonia asked for by the Committee have now been received, and will be included in the forthcoming issue of the *Record* in July. The Committee hope that cases will still be communicated, as opportunity may occur, with a view to a further report upon the subject in the future.

An inquiry is being now issued concerning the general condition, habits, and circumstances, past and present, and the family history of persons who have attained or passed the age of 80 years.

The replies to this inquiry will be most valuable when given by a medical man; but the questions have been so arranged, that, with the exception of some on the last page, they may be answered by another person. [illegible]

Copies of the form and memorandum relating to Aged Persons, recently printed in the JOURNAL, are ready for distribution through the local Secretaries, and will be forwarded to any one who is willing to fill up one or more of the forms, on application by post-card or otherwise to the "Secretary of the Collective Investigation Committee," 161A, Strand, London.

There is also now being issued an inquiry as to the occurrence of Albuminuria in apparently healthy persons.

Applications should be addressed to:

The Secretary of the Collective Investigation Committee,
May 1884. 161A, Strand, W.C.

NOTICE.—The *Life-History Album*, prepared by the Collective Investigation Committee, is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

THE NORTH-WESTERN PROVINCES AND OUDH BRANCH.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

MIDLAND BRANCH.—The annual meeting of this Branch will be held in Nottingham on Thursday, July 3rd. Notice of papers, etc., to be sent to the Secretary, LEWIS W. MARSHALL, M.D., Nottingham.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting of this Branch will be held at Cardiff on Thursday, June 26th next; Eben. Davies, Esq., President; A. Sheen, M.D., President-elect. Members wishing to bring forward communications, cases, etc., are requested to send titles to either of the undersigned before June 7th, in order that the same may be inserted in the circulars.—ALFRED SHEEN, M.D., Cardiff; D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.—May 21st, 1884.

SOUTH MIDLAND BRANCH.—The annual meeting will be held at the Infirmary, Northampton, on Thursday, June 26th, at 2.30 P.M. Members wishing to send papers, cases, etc., are requested to send the titles of the same to the Secretary, with as little delay as possible. The dinner will take place at Franklin's Restaurant, Guildhall Road, at 6 P.M. Tickets (exclusive of wine) 6s. 6d. each. Gentlemen intending to be present are requested to communicate with the undersigned not later than June 23rd.—C. J. EVANS, Honorary Secretary, *pro tem.*

CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.—President, Wm. Groom, Esq.; President-elect, D. B. Balding, Esq. The annual meeting will be held at Royston on Friday, June 27th. Members intending to make any communication are requested to inform the Secretary as early as possible.—B. ANNINGSON, Honorary Secretary, Cambridge.

NORTH WALES BRANCH.—The next annual meeting will be held at Bangor on an early day in July. Members intending to read papers or to make communications are requested to notify the subjects to the Honorary Secretary on or before the 24th instant, that they may be advertised in the circular convening the meeting.—J. LLOYD-ROBERTS, Honorary Secretary, Denbigh.—June 10th, 1884.

EDINBURGH BRANCH.—The annual general meeting will be held at 5, St. Andrew Square, on Tuesday, the 24th instant, at 4.30 P.M.—CHARLES E. UNDERHILL Honorary Secretary.

SOUTH-EASTERN BRANCH.—The fortieth annual meeting of this Branch will be held at the Saloon Dining-rooms, Crystal Palace, Sydenham, on Wednesday, June 25th, at 2 o'clock precisely. The President-elect invites members and their friends to luncheon in the Saloon Dining-rooms in the South Corridor of the Crystal Palace, near the London, Brighton, and South Coast Low Level Railway Station, from 1 P.M. to 2 P.M. After the meeting, the Industrial Exhibition, the Fine Arts Gallery, the Panorama, and the various entertainments, will be open to the visitors. (On signifying their intention to be present to Dr. R. M. Miller, of Brafield, Church Road, Upper Norwood, Chairman of the Reception Committee, passes to the Palace and to the different entertainments will be forwarded to members.) An opportunity of visiting Dulwich Picture Gallery and the Norwood Cottage Hospital will also be afforded. Dinner will be served at 6 P.M. in the Saloon Dining-room; tickets (exclusive of wine), 10s. 6d. each. To facilitate the arrangements, the dinner-notice should be sent to Dr. Miller, as above, not later than June 23rd. Members desirous of making communications to the meeting should inform the Secretary on or before June 23rd. A meeting of the Executive Council of this Branch will be held at the Saloon Dining Rooms, Crystal Palace, Sydenham, on Wednesday next (not Thursday as stated in error in the notice), June 25th, at 1.30 P.M.—CHARLES PARSONS, M.D., Honorary Secretary, 2, St. James's Street, Dover.—June 7th, 1884.

SHROPSHIRE AND MID-WALES BRANCH.—The annual general meeting of the Branch will be held at the Salop Infirmary on Tuesday, June 24th, at 2 P.M. The chair will be occupied by the President, W. Bowen Davies, Esq. Members desirous of reading papers, or bringing forward subjects for discussion, are requested to communicate with the Honorary Secretaries as early as possible. Members are invited to exhibit patients, specimens, drugs, etc., before the meeting. A dinner will be held at the Raven Hotel after the meeting. Dinner-tickets, to include wine, 12s. 6d. each.—ED. CURETON, ARTHUR STRANGE, Honorary Secretaries.

NORTHERN COUNTIES (SCOTLAND) BRANCH.—The annual meeting of this Branch will be held at Elgin, on Wednesday, July 9th; Dr. D. McIntyre, of Fort William, President-elect. Members desirous of bringing forward any communication are requested to intimate the same at once to J. W. NORRIS MACKAY, M.D., Honorary Secretary, Elgin.—June 10th, 1884.

GLASGOW AND WEST OF SCOTLAND BRANCH.—The annual meeting of this Branch will be held in the Royal Infirmary on Thursday, June 26th, at 3 P.M. Business: 1. The President will resign the chair to the President-elect, Dr. J. B. Russell. 2. The council will give in their report. 3. Election of office-bearers. 4. Dr. Christie will move that: An invitation be given to the Association to hold their annual meeting at Glasgow as soon as they may find it convenient. Mr. A. E. Maylard will move that: Quarterly meetings of the Branch be held in four of the most convenient centres contained within the area included under the Branch. 5. The President will deliver his inaugural address on Infection and Disinfection. 6. Dr. William Macewen will give a demonstration in the theatre of Ward XXII, On some Points in the Surgery of Cerebral and Spinal Lesions. 7. Dr. James Dunlop will give a demonstration of the Use of Poroplastic Jackets and Jury-Mast Supports in the Treatment of Spinal Disease. These demonstrations will be given at separate hours. At 5.15 P.M., conveyances will be in waiting at the Royal Infirmary to convey members into the city. There will then be a dinner in the Bath Hotel, 153, Bath Street, at half-past five o'clock. Tickets 7s. 6d. each, exclusive of wines.—JAMES CHRISTIE, M.D., Honorary Secretary, 2, Great Kelvin Terrace, Hillhead, Glasogw.

METROPOLITAN COUNTIES BRANCH.—President, C. J. Hare, M.D., President-elect, Charles Macnamara, Esq. The thirty-second annual meeting of this Branch will be held at the Holborn Restaurant on Tuesday, June 24th, at 5.30 P.M. The following business will be transacted: 1. Election of new members of the Branch. 2. Report of the retiring council and treasurer's report. 3. Consideration of amendment of laws of Branch. 4. Address by the new President. 5. Such other business as the Branch may think it necessary to consider. Mr. Nelson Hardy gives notice that he will move: "That this Branch regrets that the resolutions, passed at the meeting of Fellows and Members held at the College of Surgeons on March 29th, have been ignored by the council of the College, and this Branch cordially agrees with the spirit of these resolutions." At 7 P.M. precisely, the members will dine together, Charles Macnamara, Esq., President, in the chair; tickets, 7s. 6d. each, exclusive of wine. Members are requested to state, not later than Saturday, June 21st, whether they will be present at the dinner. Replies should be addressed to Dr. Grigg, 6, Curzon Street, Mayfair, W.—ALEXANDER HENRY, M.D., W. CHAPMAN GRIGG, M.D., Honorary Secretaries.

BORDER COUNTIES BRANCH.—The seventeenth annual meeting will be held at the Tower Hotel, Hawick, on Friday, June 27th, at 1.30 P.M. The council meets at 1 P.M. Order of Business.—Election of new members, report of the council, report of the Rules Committee, election of office-bearers, fixing meetings for the year. Dr. Macdougall will retire from the chair, and Dr. Muir, Selkirk, will deliver his presidential address. Dr. Haddon, Hawick, will read a paper "On the Value of the Thermometer in Practice." At the desire of Mr. C. G. Wheelhouse, President of the Council of the Association, the following will be submitted. "What is the opinion of your Branch with regard to, 1, the admission of homœopaths as members of the Association? and, 2, the retention of those homœopaths who are already members?" Dr. Macdougall will bring before the members "The Claims of the Medical Sickness, Annuity, and Life-Assurance Society." Dr. Lediard will show a specimen of "Periostitis and Osteomyelitis." It is proposed to make a short excursion into the country, visiting Branxholme Castle and Harden Glen, and lunching (weather permitting) [illegible] who prefer it, or in the event of wet weather, one of the largest and most complete of the woollen factories will be inspected. Dinner at the Tower Hotel, Hawick, at 4 o'clock. Tickets 5s. each, exclusive of wine.—H. A. LEDIARD, Carlisle, and J. SMITH, Dumfries, Honorary Secretaries.

BATH AND BRISTOL BRANCH.—The annual meeting of the above Branch will be held on Thursday, June 26th, at the Mineral Water Hospital, Bath, at 4.30 P.M., when E. Crossman, Esq., will resign the chair to R. S. Fowler, Esq., President-elect. The business of the meeting will be to receive the report of the Council, to elect the officers of the Branch, to transact the necessary business, and to discuss such subjects connected with the interests of the Branch and of the profession, as may be brought before it. Mr. J. Hinton will describe a Case of Fractured Patella, treated by the Wire Suture, and will show the patient. Members having any communications for the meeting are requested to give notice of them to the Secretaries. After the meeting and before the dinner, a visit will be paid to the Mineral Water Baths, where, under the friendly guidance of Major Davis, the city architect, the remains of the Roman bath recently unearthed, and other interesting antiquities, will be visited. Members are requested to meet the President and Major Davis at the Pump Room at 5.45 P.M. The annual dinner will be held at the Grand Pump Room Hotel, Bath, at 6.30 P.M.

EAST YORK AND NORTH LINCOLN BRANCH: ANNUAL MEETING.

THE twenty-eighth annual meeting was held at the infirmary, Hull, on May 28th. There were thirty-four members present. Dr. LUNN resigned the chair to Mr. KEETLEY, the President-elect.

The minutes and the report of the Council were read, and a grant of £2 2s. to the Medical Benevolent Fund was proposed and carried.

The Business of the Association.—Mr. DIX, the representative of the Branch, made a long statement, referring to the reports of the proceedings of the Council, the homœopathic question, and the management of the finances of the Association.—Mr. R. H. B. NICHOLSON criticised the statements made by Mr. Dix, especially with regard to the finances of the Association, which he said had been so well managed, that £17,000 had been saved and invested.

Dr. Macmillan mentioned the measures considered by the Parliamentary Bills Committee during the year.

New Members.—Six gentlemen were elected into the Branch.

Election of Council.—This was proceeded with, Mr. Craven being declared President-elect. The President invited the Branch to come to Grimsby in the autumn.

Votes of Thanks were then passed to the officers of the Branch for their services.

President's Address.—This embraced a review of the chief matters of medical and surgical interest that had been brought before the Branch since he was last President. Some recent researches in medicine were referred to. Medical education, the representation of the profession in Parliament, and overpressure in schools, were each touched upon. The paper concluded by a reference to the prevalence, nature, and treatment of phthisis.—A vote of thanks was accorded to the President for his address.

Communications.—The following communications were made.

1. Mr. Sherburn: Cleft Palate; Operation.
2. Dr. Edward Daly: Softening of the Brain.
3. Mr. Howlett: Bubon d'emblée.
4. Dr. Rockliffe: Ophthalmoscopic Cases.

5. Dr. King: Excision of the Rectum.
6. Dr. Macleod: Notes on Sexual Insanity.

Dinner.—In the evening, the members dined together at the Vittoria Hotel.

BRITISH MEDICAL ASSOCIATION.

FIFTY-SECOND ANNUAL MEETING.

THE Fifty-second Annual Meeting of the British Medical Association will be held at Belfast, on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1884.

President: A. T. H. WATERS, M.D., F.R.C.P., Senior Physician to the Royal Infirmary, Liverpool.

President-elect: JAMES CUMING, M.D., F.K.Q.C.P., Professor of Medicine in Queen's College, and Physician to the Royal Hospital, Belfast.

An Address in Medicine will be delivered by WILLIAM M. ORD, M.D., Physician and Lecturer on Medicine to St. Thomas's Hospital, London.

An Address in Physiology will be delivered by PETER REDFERN, M.D., Professor of Anatomy and Physiology in Queen's College, Belfast.

An Address in Obstetric Medicine will be delivered by GEORGE H. KIDD, M.D., Consulting Obstetric Surgeon to the Richmond and Hardwick Hospitals, Dublin.

SECTION A. MEDICINE.—*President:* J. W. T. Smith, M.D., Belfast. *Vice-Presidents:* G. F. Duffey, M.D., Dublin; Alexander Davidson, M.D., Liverpool. *Secretaries:* Richard Ross, M.D., 7, Wellington Place, Belfast; Thomas Barlow, M.D., 10, Montague Street, Russell Square, London.

SECTION B. SURGERY.—*President:* Sir William Mac Cormac, F.R.C.S., London. *Vice-Presidents:* J. K. Maconchy, M.B., Downpatrick; J. W. Browne, M.D., Belfast; John Chiene, F.R.C.S.Ed., Edinburgh. *Secretaries:* John Fagan, F.R.C.S.I., 1, Glengall Place, Belfast; Bennett May, F.R.C.S.Eng., 16, Temple Row, Birmingham.

SECTION C. OBSTETRIC MEDICINE.—*President:* Clement Godson, M.D., London. *Vice-Presidents:* Sir William Miller, M.B., Londonderry; William Stephenson, M.D., Aberdeen. *Secretaries:* W. Walter, M.D., 20, St. John Street, Manchester; Brice Smyth, M.B., 13, College Square East, Belfast.

SECTION D. PUBLIC MEDICINE.—*President:* Charles Cameron, M.D., M.P., Glasgow. *Vice-Presidents:* John F. Hodges, M.D., Belfast; David Davies, M.R.C.S.Eng., Bristol. *Secretaries:* H. S. Purdon, M.D., 60, Pakenham Place, Belfast; Shirley Murphy, M.R.C.S.Eng., 158, Camden Road, London, N.W.

SECTION E. OPHTHALMOLOGY.—*President:* W. A. McKeown, M.D., Belfast. *Vice-Presidents:* W. A. Brailey, M.D., London; Edgar Browne, M.R.C.S.Eng., Liverpool. *Secretaries:* Joseph Nelson, M.D., Glengall Place, Belfast; R. N. Hartley, M.B., 38, Cookridge Street, Leeds.

SECTION F. PHYSIOLOGY AND PATHOLOGY.—*President:* W. S. Greenfield, M.D., Edinburgh; *Vice-Presidents:* J. J. Charles, M.D., Cork; D. C. McVail, M.B., Glasgow. *Secretaries:* A. H. Young, F.R.C.S., 96, Mosley Street, Manchester; T. Sinclair, M.D., 15, College Square East, Belfast; R. J. Anderson, M.D., Galway.

SECTION G. PHARMACOLOGY AND THERAPEUTICS.—*President:* Thomas John Maclagan, M.D., London. *Vice-Presidents:* Matthew Hay, M.D., Aberdeen; W. Whitla, M.D., Belfast; Walter G. Smith, M.D., Dublin. *Secretaries:* George Gray, M.D., Castlewellan, County Down; W. Murrell, M.D., 38, Weymouth Street, London.

SECTION H. PSYCHOLOGY.—*President:* G. H. Savage, M.D., London. *Vice-Presidents:* Daniel Hack Tuke, M.D., London; Isaac Ashe, M.D., Dundrum. *Secretaries:* A. S. Merrick, M.D., District Hospital for Insane, Belfast; S. Rees Philipps, M.D., Wonford House, Exeter.

Local Secretaries: John Moore, M.D., 2, Carlisle Terrace, Belfast; Alexander Dempsey, M.D., 26, Clifton Street, Belfast; John W. Byers, M.D., Lower Crescent, Belfast.

Treasurer: William Whitla, M.D., Belfast.

TUESDAY, JULY 29TH, 1884.

2 P.M.—Meeting of Council.
3 P.M.—General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M.—General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock. Tea and coffee after the meeting.

WEDNESDAY, JULY 30TH, 1884.

9.30 A.M.—Meeting of Council.
11.0 A.M.—Second General Meeting. Address in Medicine.
2 to 5 P.M.—Sectional Meetings.
8 P.M.—A *Conversazione* will be given in Queen's College, by the President of the Association, and the Executive Committee.

THURSDAY, JULY 31ST, 1884.

9.30 A.M.—Meeting of Council.
11 A.M.—Third General Meeting. Address in Physiology.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M.—Public Dinner, which will be held in the Examination Hall, Queen's College.

FRIDAY, AUGUST 1ST, 1884.

10 A.M.—Address in Obstetric Medicine.
11 A.M.—Sectional Meetings.
2 P.M.—Concluding General Meeting.
8 P.M.—Reception by the Mayor of Belfast, in the Ulster Hall.

SATURDAY, AUGUST 2ND, 1884.

Excursions.

EXCURSIONS.

The following excursions will take place on Saturday, August 2nd. 1. An excursion to the Giant's Causeway, by special train to Portrush, thence by electric tramway to Bushmills (a distance of six miles), calling at Dunluce Castle on the way. Carriages will convey the visitors from Bushmills to the Causeway, where luncheon will be provided at the hotel. On the return journey, there will be tea at the Northern Counties' Hotel, Portrush. 2. An excursion to Larne and Garron Tower. By train from Belfast to Larne, thence by conveyances to Garron Tower (a distance of eighteen miles), along the most picturesque scenery of the northern coast, passing through the villages of Glenarm and Carnlough. Luncheon will be provided at Garron Tower, and on the return journey there will be tea at the Olderfleet Hotel, Larne. 3. An excursion to Newcastle, County Down. By train from Belfast to Newcastle, where visitors will have an opportunity of visiting this celebrated seaside resort, and the magnificent scenery around; including Donard Lodge, Slieve Donard (the highest of the Mourne mountains), Tollymore Park, and Castlewellan. Luncheon and tea will be provided. 4. Circular trip to Warrenpoint *viâ* Newcastle and Rostrevor. By train from Belfast to Newcastle, thence by cars to Rostrevor, a drive of twenty miles along the sea-coast of County Down. From Rostrevor, tramcars convey visitors to Warrenpoint, thence by train to Belfast or Dublin.

On the mornings of Wednesday and Thursday, there will be short excursions, by which members will have an opportunity of visiting places of interest in the immediate neighbourhood of Belfast. Trip to the Dominion steamship *Vancouver*. By invitation of Messrs. Flinn, Main, and Montgomery, a steamer will leave the Queen's Quay, Belfast, at 7 A.M., on Friday, August 1st, and proceed down the Lough to Carrickfergus Roads to the steamship *Vancouver*, where breakfast will be provided for 150 members, and an opportunity will be given to visit the newest ship of the Dominion fleet.

The Secretary of the Excursion Committee is Robert Esler, M.D., Pakenham Place, Belfast.

ANNUAL MUSEUM.

The eighteenth annual exhibition of objects of interest in connection with medicine, surgery, and the allied sciences, will take place in the Exhibition Hall, Botanic Gardens, Belfast (floor-space, over 5,000 square feet), and in the Queen's College, Belfast (floor-space, nearly 4,000 square feet), during July 29th, 30th, and 31st, and August 1st, 1884.

The committee who have been appointed to take charge of the arrangements will be happy to receive as under.

Subsection A.—1. Preparations, diagrams, casts and models of anatomical and pathological objects, microscopes and microscopic preparations (Dr. Lindsay).

Subsection B.—2. Surgical and medical instruments and appliances, thermometers, and other instruments for scientific investigation (Dr. Scott Core).

Subsection C.—3. Foods, drugs, chemicals, and pharmaceutical preparations (Dr. Bingham).

Literary and Sanitary Subsection D.—4. New medical books. 5. Ambulances, carriages, and other means of locomotion for the use of medical practitioners. 6. Sanitary appliances, including drawings, models, and apparatus, illustrative of the ventilation of hospitals, public buildings, and private dwellings. 7. Plans and models of hospitals, public buildings, and private dwellings, constructed upon the most improved hygienic principles. 8. Recent improvements in hospital furniture. (Dr. Henry O'Neill, General Secretary, 5, College Square East, Belfast, to whom all communications with reference to the Annual Museum are to be addressed, prepaid.)

It is intended that the surgical instruments, sanitary appliances, etc., shall be genuine novelties or improvements on those in common use.

The pathological specimens will be arranged in departments.

Exhibition of Instruments and Apparatus.—It is intended to arrange for the exhibition of complete series of instruments, electro-therapeutic apparatus, instruments for physical diagnosis, and appliances relating to sanitary science and public health. Facilities will also be afforded, when requested, for the display of instruments in action, or for special explanation by the exhibitors of apparatus.

Catalogue.—It is intended to print a catalogue of the exhibits contained in the museum, and lithograph plan. The Committee request that descriptions, etc., be sent in as early as possible—not later than July 7th, 1884.

Communications, objects intended for exhibition, etc., to be addressed (prepaid) to the Secretary of the Museum Committee, Dr. HENRY O'NEILL, *5, College Square East, Belfast.*

During the week preceding the meeting, all articles should be sent direct to the Queen's College, Belfast, and addressed to the care of the Curator of the Museum of the British Medical Association.

All expenses of carriage to be prepaid, and all risk to be borne by the exhibitors; but the Committee will exercise every care of the articles entrusted to them. A card bearing the name and address of the exhibitor, with the name of the instruments, etc., to be enclosed in each package ready to be fixed on the outside of the exhibit.

The following discussions and papers are promised up to the present time. Members desirous of reading papers or joining in the discussions are earnestly requested to communicate without delay with the Secretaries of the respective Sections, as the date of the annual meeting is a week earlier than usual.

SECTION A.—MEDICINE.

In the Section of Medicine, the following subjects have been chosen for special discussion.

1. Albuminuria: a Practical Summary of its Causes and its Consequences, its Diagnosis and its Treatment. Introduced by Dr. George Johnson. Dr. G. A. Woods and Dr. W. R. Thomas will take part in this discussion.

2. The Causative Relations of Phthisis. Introduced by Dr. Douglas Powell. The following have promised to speak: Professor Gairdner, Dr. Clifford Allbutt, and Dr. Balthazar Foster.

3. Rheumatoid Arthritis. Introduced by Dr. Dyce Duckworth. The following have promised to speak: Dr. Buzzard, Dr. B. Foster, Mr. J. Hutchinson, and Dr. Brachet (Aix les Bains).

The following paper has been promised.

DUTTON, T., M.D. On the Treatment of Gastric Ulcer by Nutrient Enemata.
MADDEN, T. More, M.D. Alcoholism in Childhood and Youth.

SECTION B.—SURGERY.

There will be a discussion on Sayre's Plaster Jacket, to be opened by Professor Lewis Sayre (New York), who will give demonstrations. 1. Partial Suspension, and the application of the Plaster-of-Paris Jacket for Pott's Disease. 2. Partial Self-suspension, and the Application of the Plaster Corset for Lateral Curvature.

The following papers have been announced.

BARTLEET, T. H., Esq. Operative Treatment of Empyema.
CHIENE, John, Esq. Treatment of Wounds.
COOPER, Alfred, Esq. On Syphilis.
ESLER, Robert, M.D. Oakum as a Surgical Dressing.
FAGAN, John, Esq. Gastrostomy: its Merits as a means of treating Stricture of the Œsophagus, and the best mode of performing the Operation.
KEETLEY, C. B., Esq. Buried Sutures, with remarks on the importance of Suturing separately, Periosteum to Periosteum, Muscle to Muscle, Deep Fascia to Deep Fascia, and Skin to Skin, after Deep Incisions of all kinds.
LUND, Edward, Esq. On Torsion in its Application to the Treatment of Hæmorrhoids.
MACNAMARA, C., Esq. Notes on a Successful Case of Gastrostomy for Stricture of the Œsophagus.
NORTON, A. T., Esq. Gangliar Disease of Joints
ROTH, Bernard, Esq. The Surgical and Orthopædic Treatment of Infantile Paralysis.
SMITH, Noble, Esq. The Diagnosis of Disease of the Vertebral Column.
WATSON, W. Spencer, Esq. The Use of the Galvanic Cautery in the Treatment of Intranasal Diseases; with exhibition of a new instrument in illustration.
WRIGHT, G. A., M.B. A Note upon the Effects of Bone-lesions upon the Rate of Growth of Limbs.

SECTION C.—OBSTETRIC MEDICINE.

The following special discussions will take place.

1. The Pathology and Treatment of Extra-uterine Fœtation. This discussion will be introduced by Mr. Lawson Tait. The following gentlemen have signified their intention to take part in this discussion: Dr. Elder and Dr. W. L. Reid.

2. The Treatment of Intra-uterine Disease, with special reference to the best mode of making Applications to the Intra-uterine Surface. Dr. Atthill will introduce this discussion. The following gentlemen have signified their intention of taking part in this discussion: Dr. Fancourt Barnes and Dr. W. L. Reid.

The following papers are announced.

BARNES, Fancourt, M.D. How often is Craniotomy justifiable in the same Subject?
CROOM, J. Halliday, M.D. 1. The Special Advantages of Axis-traction Forceps in the Cavity and at the Outlet. 2. Early Lochia.
ELDER, George, M.D. On Alexander's Operation of Shortening the Round Ligaments for Retroflexion and Prolapse of the Uterus.
ESLER, R., M.D. On Phlegmasia Dolens.
MADDEN, T. More, M.D. 1. On the Treatment of Intra-uterine Disease. 2. The Treatment of Sterility.
REID, W. L., M.D. On the Operation (Alexander-Adams) of Shortening the Round Ligaments for Uterine Displacements, with three cases.
SMYLY, W. I., M.D. Expression of the Placenta.

SECTION D.—PUBLIC MEDICINE.

The following topics for papers have been suggested as likely to lead to useful and interesting discussions.

1. Prevention of Epidemics.

2. Inspection of Meat Markets; with special reference to the Causation of Disease in Man by the Consumption of Diseased Meat.

3. Over-pressure in Schools; with special reference to the record of clinically observed facts.

The following papers have been announced.

CAMERON, C. A., M.D. On Inspection of Meat Markets.
CULLIMORE, D. H., M.D. On Quarantine.
HOPE, E. W., M.D. On the Latent Period, Infectiousness, and Mortality from Typhus Fever.
MAKUNA, M. D., Esq. 1. On Mortality in England and Wales and in London during the last Three Decennials. 2. An Examination of the Theory of Aerial Dissemination of Small-pox Infection.
VACHER, Francis, Esq. On Inspection of Meat Markets.

SECTION E.—OPHTHALMOLOGY.

The following gentlemen, among others, have signified their intention of taking part in the work of this Section: Dr. Wolfe (Glasgow), Dr. Edwyn Andrew, Messrs. C. Macnamara, Frederick Mason, Simeon Snell, Gustavus Hartridge, etc.

A discussion on the following subject will be opened by Dr. Wolfe (Glasgow): Does the Position of the Section in Cataract Operations Influence Suppuration of the Cornea; if so, what part is played by Septic Infection?

Dr. Charles E. Fitzgerald will open a discussion on The Influence of Errors of Refraction on Affections of the Conjunctiva, Cornea, and Iris.

The following papers have been announced.

GRIFFITH, A. Hill, M.B. Death following Enucleation of the Eyeball.
JONES, Emrys, M.D. The Dangers of Lead Probes in the Treatment of Lacrymal Obstructions.
JULER, H., Esq. The best methods of Diagnosing and Correcting the Errors of Refraction.
MCKEOWN, David, M.D. 1. Restoration of Vision by Iridectomy in the case of a man aged 72, after Sixty Years' Blindness; good Colour-perception. 2. On the Treatment of a Case of Atrophy of the Optic Nerve by Large Doses of Strychnia and Pilocarpin combined.
STORY, J. B., M.B, and BAKER, Arthur, M.B. (joint communication). On the Influence of Syphilis upon the Development of the Teeth and the Occurrence of Diffuse Interstitial Keratitis.
STORY, J. B., M.B. 1. The Minimum Knowledge of Ophthalmology to be exacted as a Qualification to Practise. 2. A Series of Cataract Operations.
WOLFE, J. K., M.D. 1. On Subconjunctival Meridional Sclerotomy for the Cure of Detachment of the Retina. 2. Demonstration on Conjunctival Transplantation from the Rabbit to the Human Subject for the Cure of Symblepharon. (Cases shown).

SECTION F.—PHYSIOLOGY AND PATHOLOGY.

One or more of the following subjects will be discussed.

1. Influence of Nervous System on Normal and Abnormal Nutrition.

2. Functions of Leucocytes under Normal and Abnormal Conditions.

3. Physiology and Pathology of Lymph-transudation and Absorption.

4. Skin-absorption.

5. Dr. McVail will open a discussion on the Pathology of Pulmonary Emphysema.

The following papers are announced.

KENNEDY, C., M.D.
MAGUIRE, R., M.D. 1. The Darkening in Colour of certain Urines on Exposure to the Air. 2. On the Micrococcus of Pneumonia.
PAUL, F., Esq. On the Pathology of Rodent Ulcer.
WOODHEAD, G. S., M.D.

SECTION G.—PHARMACOLOGY AND THERAPEUTICS.

The following arrangements have been made.

1. The President will deliver an introductory address, and will move a series of resolutions, supported by the Vice-Presidents, on the subject of the British Pharmacopœia.

2. A debate on Antipyretics will be opened by Dr. Alexander Collie and Professor Quinlan. Dr. Dujardin-Beaumetz (Paris) will read a paper on a new Antipyretic.

3. Dr. Hughes Bennett and Dr. Steavenson will open a discussion on the Therapeutical Applications of Electricity; in the course of which, different modes of Electrical Treatment will be illustrated.

4. Dr. Dudley Buxton and Dr. Stockman will give a series of demonstrations illustrating the action of certain Drugs on the Frog's Heart.

5. Dr. W. H. White will open a discussion on [illegible] as a Therapeutic Agent, to which Dr. Finny will reply.

6. There will be a special debate on Indian [illegible], in which it is hoped Sir Joseph Fayrer, Mr. Charles Macnamara, Dr. Waring, Dr. Ewart, and other distinguished authorities will take part.

7. Dr. Shoemaker (Philadelphia), a delegate from the American Medical Association, will give an explanation of the *modus operandi* of the New Oleates in certain Skin-diseases, to which Dr. Colcott Fox will reply.

SECTION H.—PSYCHOLOGY.

In this Section, in addition to the usual papers, the following special subjects have been selected for discussion.

1. Employment of the Insane.
2. Varieties of General Paralysis.
3. Use of Alcohol in Asylums.
4. Moral Insanity and Imbecility.
5. Legal Persecutions by Discharged Patients.

No communication shall occupy more than fifteen minutes, and no person shall be permitted to speak more than once, or for more than ten minutes, during the discussion thereon. A short abstract of each paper must be sent to the secretaries of the Section in which it is to be read, not later than July 23rd.

N.B.—Members who desire to take part in the discussions, or to read papers, are earnestly requested to communicate without delay with the secretaries of the respective Sections.

Dr. Ward Cousins hereby gives notice that at the annual meeting to be held at Belfast on the 29th day of July next, it will be moved that By-law 34 be and it is hereby repealed, and that the following new by-laws be enacted,

The formation of new Branches and the [illegible] of the recognised existing Branches shall be subject to the [illegible] the Council.

The Branches of the Association, as now recognised by the Council, constitute the representative areas. The limits of the [illegible] defined, and an outline of the whole organisation [illegible] chart.

A.—WITHOUT THE LIMITS OF ANY EXISTING BRANCH.

Any number of members not less than 50 resident [illegible] not less than 25 residing without, the limits of England and Wales [illegible] Branch of the Association, subject to such Branch [illegible] the Council.

B.—WITHIN THE LIMITS OF ANY EXISTING BRANCH.

In the event of two or more recognised Branches [illegible] to form one Branch, [illegible] union, must be [illegible] union being recognised by the Council the reconstitution [illegible] of January then next ensuing.

In the event of 100 members, residing in a district [illegible] desirous of forming [illegible] the Association they shall present a petition to the [illegible] ticulars and objects of the proposed separation. [illegible] being recognised, the reconstitution shall date from the [illegible] ensuing.

Honorary secretaries of every Branch [illegible] an outline of the area of the Branch as recognised [illegible]

Mr. Dix hereby gives notice that at the annual meeting to be held at Belfast on the 29th day of July next, [illegible] to amend the By-laws so as to provide for the [illegible] of the Association of the travelling expenses [illegible] the Branches to the meetings of the Council.

FRANCIS FOWKE, *General Secretary.*

London, June 16th, 1884.

CORRESPONDENCE.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

SIR,—In nearly every other election to positions of trust and responsibility, it is usual for the candidates to express publicly their views on the various topics at the moment agitating the minds of the constituency. Is there any very good reason why the elections to the Council of the Royal College of Surgeons should be an exception to this rule? Professional eminence and personal popularity will always, and very properly, exert a considerable influence over the minds and votes of the electors, and there is much to be admired in that *esprit de corps* which plumps for the candidate from a particular school. But membership of the Council is, or should be, something more than an ornament and an honour; and if the Fellows really desire to take any part in shaping the destinies of the College, they must have some clue at least to the opinions and views of those whom they appoint as its executive.—I am, yours faithfully,

June 16th, 1884. WILLIAM HICKMAN, F.R.C.S.

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

SIR,—Permit me to state that at the meeting of Fellows held on Thursday, the 12th, Mr. John H. Morgan, 68, Grosvenor Street, and Mr. Bruce Clarke, 46, Harley Street, were appointed joint secretaries. All further communications with regard to the Association of Fellows should for the future be addressed to them.—Yours faithfully,

Plymouth, June 14th. PAUL SWAIN, F.R.C.S.

ROYAL COLLEGE OF PHYSICIANS.

SIR,—With reference to your excellent leading article on the Royal College of Physicians, it seems to me that the title Licentiate is a remnant of the past that ought to be abolished. The term—for it can scarcely be called a title—originated, as you are aware, with Henry VIII's Charter, when, amongst other privileges, the College controlled all medical practice in London and within seven miles, so that, without a licence from the College, no one, however well qualified, could practise within those limits.

It was a mere licence then, but things have changed since that, and the licence has become a diploma, equal in value to any in the United Kingdom. Why not then alter the term, so that those holding the diploma may feel that they form a component part of the highest medical corporation in the world. There is something of the *laissez aller* in the term Licentiate. "You have paid your fee, and here's your permit; now be off about your business," it seems to convey.

There is no reason why the title Member should not be generally given, as in the College of Surgeons. If there must be three grades—though there seems no reason why—a new title could be found for Members, *e.g.*, Associate-Fellows. However that may be, it is surely time that the vast body of physicians practising under the authority of the College should be acknowledged as Members, and not simply as permits.—Your obedient Servant, L.R.C.P.

THE PROPOSED MEDICAL SECTION OF THE POSTAL MICROSCOPICAL SOCIETY.

SIR,—A few weeks ago you very kindly inserted from my President a letter on the above subject, but as I fear that some slight misapprehension was inadvertently conveyed to some of your readers, I beg you will allow me the opportunity of stating briefly the object which I hope to attain by the formation of this new section, which is this.

The means of furnishing members of the medical profession with such slides as they are naturally most interested in, and such notes in relation thereto, as will not only anatomically describe the slides under observation, but will, where practicable, give a full history of the cases from whence they were taken, duration of the disease, the methods of treatment adopted, and every other matter of interest likely to prove of any educational value to all such recipients.

To accomplish this it is proposed that every member shall send to the honorary secretary for circulation, six slides of any one type of [illegible] with full descriptive notes thereon, to be written in the book, or books, provided for that purpose, and each member receiving the same will be asked to add any further notes in [illegible] of [illegible]

Boxes, containing twenty slides, will be circulated at regular dates, and in such a manner that each member should receive one at fortnightly intervals.

When each set of slides has been seen by all the members, it will be returned to the original contributors, who will be asked for a fresh supply; and that each series (or set) may circulate for a whole year, it is necessary that at least fifty members be enrolled. Several have already sent in their names. As the fees for the Medical Section (separately) will be the same as for the General Section, it is thought desirable that the two sections shall run concurrently; the first year's subscription, therefore, will carry on to September 30th, 1885, and will, after the first year, become due on October 1st in each year.

The first session will commence as soon as a sufficient number of slides have been received.

Members of the Medical Section will be at liberty to join the General Section also on paying half annual subscription extra.

A copy of the *Journal of Microscopy* is presented to every member quarterly, as published.—I am, very faithfully yours,

ALFRED ALLEN, Hon. Secretary.

HAY-FEVER AND HAY-ASTHMA.

SIR,—Will you allow me to say that I have placed in the hands of Messrs. Bell and Sons, and Corbyn and Co., Mr. Martindale, and Messrs. Savory and Moore, a formula for a powder to be used as "snuffs," which produces very surprising and salutary effects in the two troublesome maladies above-named. Its action is directly the opposite of the action of the snuffs hitherto prescribed. These have been sedative. Mine is powerfully stimulating to the nerves. It works by exciting the nerves of the parts affected to vigorous action, in result of which I get a temporary aggravation of the troubles, which, however, quickly subsides, leaving the local affection not only sensibly relieved but physiologically unlikely to recur. Begin by giving one full dose, which should be "snuffed" up both the nostrils strongly. This will produce intense local disturbance, with sneezing, coughing, and gasping, for which nothing palliative must be done. The excitement will pass off, with "a stinging sensation," in about fifteen or twenty minutes, and the patient will be better; but without waiting for a return of the malady, and in spite of "feeling better," he must, after the lapse of one, or at most two, hours, take a second dose, thereby inducing a new paroxysm. This will not last quite so long as the previous one, though it may be as severe. A third generally, occasionally a fourth, at intervals of three or four hours, will entirely cure the affection. I use the word "cure" advisedly. The principle of the treatment is exhaustion of special irritability by intentional excitation. The snuff may be ordered as pulv. boracis co. [M. G.].

Any medical man, who desires it, can have the formula from me; but as much depends on the mode of preparation, I have thought it best to place the details in the hands of leading chemists for use as prescribed.—Yours faithfully, J. MORTIMER GRANVILLE.

KENT-JONES FUND.

SIR,—I have to announce the following further donations to this Fund, in response to the appeal made on May 24th. R. Davies, Esq., Llanfairtalhairn, £2 2s.; R. M. P., 10s; W. Makeig Jones, Esq., Rotherham, £2 2s.; Dr. John Roberts, Chester, £1 1s.; W. P. Lewis, Esq., Beaumaris, £2; John T. Jones, Corris, 10s. 6d.; Dr. Owen Richards, Corwen, £1 1s.; Thomas Jones, Esq., Ruthin, 10s.—Your faithful servant, J. LLOYD-ROBERTS.

THE TYPHOID EPIDEMIC AT NICE.

SIR,—It may, I think, be of interest to your readers, and to all who are in any way concerned for the prosperity of the health-stations on the Riviera, to be furnished with an accurate account of the epidemic of typhoid fever at Nice in the autumn of last year. To the exaggerated reports which appeared in many newspapers, both in England and the Continent, it was in great measure due that the visitors to Nice and along the whole of the Riviera last year were far fewer than usual.

It is to be regretted that the Medical Society of Nice did not at once make known the results of the inquiry they instituted, since that would, I think, have done much to quiet the general anxiety on the subject. They have now, however, published them in their organ, the *Nice Médical*, and I ask for space to print the report in a condensed form; at the same time, I forward you a copy of the original.

On November 23rd, 1883, a subcommittee was nominated to draw up a set of questions, which were sent to all the medical men practising in the city; to which sixty-three returned replies.

Eight stated that they had observed a greater number of cases of typhoid fever than usual in the previous autumn; and sixteen others added that they had, during the same time, seen several instances of fever of a remittent type, similar to, though not identical with, typhoid.

In the town itself, 156 cases of true typhoid fever had been noted in private practice, 73 in the civil hospital, and 38 in the military hospital; or, altogether, 265. In addition to these, 43 cases of remittent fever had been observed in general practice in the town.

A few only of these cases had occurred in June, July, and August; but the greater number in September and October. The disease reached its maximum of prevalence in October; it still continued, though with lessened frequency, in the first half of November, but diminished with great rapidity in the second half of that month.

Out of the 156 cases 84 occurred in persons in comfortable circumstances, 20 among the working classes—hospital-cases of course excluded. Of the 156, 116 took place among the resident population, or among strangers resident in Nice for more than six months, and 12 among persons who had dwelt there for a shorter time. The cases were pretty equally distributed throughout the whole city; the barracks on the Place St. Dominique being the only spot that could be regarded as a focus of the disease.

The general sanitary condition of the dwellings in which fever-cases occurred is stated in 132 out of the 156 cases, and is said to have been good in 65 instances, apparently good in 6, tolerable in 38, and positively bad in 23. In 18 of these last cases, the bad condition of the privies or water-closets is especially noticed. The majority of cases were isolated, but once 3 cases occurred in the same family, 2 in five, and 2 four times in the same house, though not in the same family.

With reference to the general character of the fever among the cases occurring in the town, it was benign in 53, moderate in 9, severe in 24, and dangerous in 31, out of 120 in which this point is referred to. The mortality in the town was 16 out of 156, or 10 per cent.; 10 in 73 in the civil hospital, or 13 per cent.; and 3 in 38 in the military hospital, or 8 per cent.; or in other words, the total mortality was 29 in 265, or 11 per cent.

If one assume the number of cases not reported by the few medical men who made no report to have been 35, we arrive at a total of 300 cases, and a mortality of about 33; neither a large number nor a high mortality for a city whose population, exclusive of visitors, is between 70,000 and 75,000. It will, moreover, be observed that the epidemic began at a time when those who resort to Nice in quest either of health or of amusement had already quitted it, and that it had almost ceased before the return of the greater number; for, at the time of the publication of the report on December 7th, only 6 cases had occurred in the town since November 14th, and none at all in the military hospital.

At Nice, as often happens elsewhere, good has come out of evil. The conviction has forced itself on almost all that perfect frankness is invariably the best policy, and that the endeavour to conceal a known evil issues only in gross exaggeration of its extent.

It has further awakened the authorities of the city to a perception of the need for immediate action in order to improve in all respects the sanitary condition of the town. The eminent engineer, M. Durand-Claye, has been called in to advise as to the thorough drainage of the town—an enterprise the difficulty of which will be at once appreciated by all who bear in mind that the Mediterranean is a tideless sea.

A special subcommission of the municipality has been formed, under the name of Commission d'Hygiène et de Publicité, to study all questions connected with the sanitary state of Nice, and the publication of its vital statistics. The creation of a Bureau d'Hygiène has been resolved on, such as exists at Havre, Rheims, Nancy, and other towns in France, and which answers to the sanitary authority in England, and controls the work done here by the medical officer of health and his subordinates.

It must not be forgotten that sanitary science and boards and officers of health were unknown in this country fifty years ago. We must not, then, criticise too severely the imperfect projects of our neighbours, nor wonder that the steps of those to whom a road is altogether new should sometimes falter. But, more than this, we are bound, at least to my thinking, to do our best to help every effort, and not, when in quest of health or of pleasure, we go to regions where both are proffered with a lavish hand, act as though we owed nothing in return; and, murmuring at ignorance, we do nothing to enlighten, and complaining of defects we do not seek to remedy, waste in idle dissipation or in ignoble sloth the wealth and time and talents lent to us for others as well as for ourselves.—I am, etc.,

CHARLES WEST.

⁂ The moral is excellent, and will, we hope, be enforced *in loco*. The calling in of engineers will, however, we trust, not be regarded, as is too often the case, as a concession to public opinion, not necessarily followed by practically carrying out their plans. The municipality of Nice has shown much enterprise and liberality in providing for the pleasures of its visitors. A liberal outlay on the removal of the filthy conditions which militate against their health will, it may be hoped, approve itself to them as an equally prudent expenditure. Nice is not the only town of the Riviera which needs sanitary reconstruction. If she be one of the first to carry it out, she will not fail to reap a due reward; but works are needed, and words and promises are of little avail. Meantime, we shall hope to learn before November next what has actually been done in respect to the water-supply, the construction and flushing of drains, the removal of refuse, and the inspection of domestic sanitary fittings in hotels and lodging-houses, in all of which respects, Nice, when we last passed through, evidently needed very considerable and immediate reform, as did most if not all the other towns of the Riviera.

SPECIAL CORRESPONDENCE.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

The Sanitary Association and Health-Returns.—The Parson-Doctor.

THE Committee of the Sanitary Association have sent a memorial to the Registrar-General concerning the weekly returns of births and deaths for twenty-eight large towns, now published regularly. Owing to the fact that the figures relating to the different towns are marshalled together, the public have been led to use them as a means of comparing the sanitary condition of these towns—an application of them for which they were not intended, and for which they are quite unsuited. The committee suggest that in Table 1 of the weekly returns, columns 17 and 18 should either be omitted altogether, or else that their proper uses should be clearly indicated, and the dangers of their misuse pointed out. They also suggest that, in towns where the compulsory notification of infectious diseases is in force, the results should be added to the weekly returns, so as to be a warning as to their presence, and to ensure early measures to limit their spread. They also express a hope that a cordial and effective relation may be established between the numerous health-officers of England and the Registrar-General's office, so that a great Central Department of Vital Statistics may be instituted, to organise and publish a system of returns as to the local prevalence of preventable diseases and death, which would be of inestimable advantage to the public health.

The case of alleged fraud against the Rev. (?) E. J. Silverton and Charles Mitchinson (described as a "physician") came again before the stipendiary magistrate last week. Mr. Headlam thought it was not a case of false pretences, and dismissed the summons. Detective Caminada deserves the thanks of the medical profession for bringing the case to public notice, and showing how the people are misled The same detective a few years ago made a raid on the local quacks, and succeeded in routing most of them out of the city altogether. When the examining boards refuse to act in defence of medical interests, it is a good thing to havean active public servant to engage in the good work.

INDIA AND THE COLONIES.

SOUTH AFRICA.

PROSECUTION FOR NEGLECTING TO NOTIFY OUTBREAK OF SMALL-POX.—The trial of Dr. Wolff, before the resident magistrate of Kimberley, for failing to report to the hospital-board certain cases alleged to be small-pox, that occurred in the wards of the Kimberley General Hospital, of which he was resident surgeon, has now been concluded, and has resulted in a verdict against the defendant. The trial lasted from March 10th to March 27th, and judgment was given on April 24th. Dr. Wolff was charged, at the instance of the Crown, with contravening the thirty-fifth section of the Public Health Act, No. 4, 1883, in that he did, on the 19th day of February, 1884, fail and neglect to inform the hospital board of management, in their capacity as householders of the said hospital, of the infectious nature of a disease from which two patients in the hospital under his attendance were suffering, and proclaimed by Government Proclamation, No. 186, of November 1st, 1883, to be small-pox. He pleaded not guilty to the charge.

Evidence was led at great length by the prosecution to prove that the epidemic prevailing at Kimberley and neighbourhood was small-pox, and that the cases that occurred in the hospital were of the same nature as the prevailing epidemic. The history, course, and termination, of several typical cases, the opinions of experts both in Africa and in England, and the weight of medical opinion in Kimberley—all pointed to the conclusion that the epidemic was one of small-pox. But a small minority of medical men in Kimberley thought differently, chief among these being Dr. Jameson and Dr. Wolff. They asserted that the disease was chicken-pox or acute pemphigus; but, even among their supporters and themselves, there was much difference of opinion as to the exact nature of the disease, for Drs. Murphy and Harris, who combated the opinion that it was small-pox, admitted that the pitting in the face of a woman, about whom there had been a deal of discussion, was due to small-pox. This was the case of Mrs. Roodt, who, we gave it as our opinion some months ago, was suffering from small-pox. The deaths had been mostly in unvaccinated subjects, the eruption and course of the temperature was typical of small-pox, many patients were delirious, and many had the disease in a hæmorrhagic form; and yet Dr. Jameson and his followers maintained that the cases were acute pemphigus or chicken-pox. Chicken-pox of such severity is not mentioned in any medical authority, and acute pemphigus is a disease of children. But *nous avons changé tout cela* in South Africa, according to Dr. Jameson, who maintains that these diseases are quite different there to what they are in Europe. On the general question of the nature of the epidemic, the magistrate, in his decision, said that, judging from the evidence as a whole, and the authorities quoted, "I find that epidemics of the disease claimed by Dr. Jameson to exist here are totally unknown, and I have no hesitation in saying that the Crown has succeeded in proving the disease to be small-pox."

But the most important part of the trial related to the cases that occurred in the General Hospital. Dr. Wolff was accused of failing to report two cases—John Phillips and a man called "Gentleman." The former he certified to have died of acute pemphigus, and the latter of pleuropneumonia. There was also another case, that of Andrew Gallatly, a patient in the hospital, certified by Dr. Wolff to have died of varicella hæmorrhagica.

The history of these cases is not very complete, but we learn from the evidence of the nurses of the hospital that the eruption came out on Phillips the day after his admission into the Kimberley Hospital, and that he died seven days later. This patient was seen during life by Drs. Smith, Sauer, and Grimmer, who all agreed that he was suffering from confluent small-pox. Dr. Jameson says it was not small-pox, because the eruption was not pustular. If he had had much experience of small-pox, he would have known that, in many confluent cases, the stage of pustulation is delayed some days, and that a large number of confluent cases die before the stage of pustulation sets in. To base a diagnosis on a point like this is, to say the least, rash.

"Gentleman" had complained of pain in his head, etc., for some time previous to the appearance of the eruption; and had been in the hospital some length of time, how long does not appear. Indeed, the history of this case is most defective. Having regard to the importance of the case, we are surprised that, neither on the part of the prosecution nor on the part of the defence, was a complete history given. The patient was seen by Drs. Smith, Sauer, Grimmer, and Robertson, who considered him to be suffering from small-pox of a hæmorrhagic type. Dr. Jameson gave it as his opinion that he was suffering from acute pemphigus, while Dr. Wolff certified that he died of pleuropneumonia.

A *post mortem* examination was held, but unfortunately only Drs. Jameson and Wolff were present. Dr. Jameson stated that double pleurisy, with pneumonia of part of one lung, was found.

A highly important link in the chain of evidence was obtained from one of the nurses, who stated that, as soon as she called Dr. Wolff's attention to the presence of the eruption on these two patients, he ordered their immediate isolation.

The counsel for the prosecution contended, and we think rightly, that it was fully proved that these two men had died of small-pox. When Dr. Wolff ordered their isolation, he evidently considered it probable that the patients were suffering from an infectious disease; and an infectious disease characterised by an eruption considered by competent medical practitioners to be the eruption of small-pox, together with the fact that those medical men who denied that the disease was small-pox failed to show what else it could be, fully warranted the counsel for the prosecution in maintaining that he had fully proved the cases for the Crown.

With regard to the pleurisy and pneumonia stated to have been found at the *post mortem* examination of "Gentleman," we can only say that, owing to the exceedingly defective history of the case, it is impossible to say whether these were present before the small-pox attacked the patient, or were a complication due to the small-pox.

The case of the patient Gallatly, who was certified by Dr. Wolff to have died of varicella hæmorrhagica, was a very remarkable one. The following is the description of the case given by Dr. Jameson. "There was a most decided chicken-pox rash, with very severe symptoms, and latterly with numerous purpuric spots. The vesicles had blood in them, and tissue between the spots infiltrated with blood. It did not resemble black-pox in the least. The vesicles in black-pox are sometimes filled with blood. The vesicles in this case did not look like those of black-pox. Finally he had suffocation. In order to relieve him, we performed tracheotomy, and he died, evidently of exhaustion. There is always trouble in the throat in severe cases of small-pox." This description was given by Dr. Jameson in cross-examination. Now, if this is a description of any disease whatever, it is eminently a description of hæmorrhagic small-pox. The vesicles in this form of small-pox often assume a form and shape not unlike chicken-pox, on the trunk especially, and might mislead a careless practitioner, but we should hardly have thought that a man who prides himself on being an expert in skin-diseases, would have been so easily deceived. We presume that when Dr. Jameson says the vesicles had blood in them, he meant to say the lymph was stained with the colouring matter of the blood. Chicken-pox the case certainly was not, for chicken-pox of such severity is unknown, and the only other disease it could be was hæmorrhagic small-pox.

In view of the evidence given, the magistrate found—"That there was knowledge on the part of the defendant that the two cases in issue were identical with the Felstead cases, there can be no doubt, his own witnesses have proved this—and the Crown has also established their identity, and their infectious nature was known to the defendant. In conclusion," the magistrate said, "I have no hesitation in saying that it was within the defendant's knowledge that the Felstead disease or small-pox existed at the Hospital, and that it was his duty, as acting-surgeon in charge, to have reported accordingly to the Hospital Board. I find the defendant, therefore, guilty of this charge, and sentence him to pay a fine of £10 sterling."

In giving judgment, the magistrate expressed his regret that the greater portion of Dr. Wolff's address was unnecessarily devoted to an attack upon the professional evidence for the Crown, and to ascribe unworthy motives for that evidence. This was the worst feature of the trial, and calls for the severest condemnation. The case for the Crown was so conclusive, that Dr. Wolff could not shake it for a moment, and he had recourse to the unworthy plan so justly remarked on by the magistrate. And Dr. Jameson, to our surprise, for an M.D. of London ought surely to have some regard for the good name of the profession, joined Dr. Wolff in his unwarranted aspersions of his opponents. Dr. Jameson said that neither Drs. Smith, Sauer, Grimmer, Robertson, and others, were competent to give an opinion on the cases in dispute. Some of these gentlemen have evidently had a larger experience of small-pox, and have probably a very complete acquaintance with the disease; and, as Dr. Jameson failed to show what else the disease in dispute could be but small-pox, he said that he "did not want to argue with any of these doctors here, who were receiving pecuniary compensation." When asked to explain what he meant, he said, "Doctors who are receiving pecuniary compensation can only say, in reply, when anything is said to them about the minute pathology of the rash, 'it is small-pox;' therefore, the insinuation meant is that they do not know whether it is small-pox or not, but small-pox is more profitable." The counsel for the Crown characterised this as one of the most scandalous libels he had ever heard; and we must say that, unless Dr. Jameson was prepared to justify his statement, an accusation so unwarrantable and offensive should never have been made.

It is greatly to be deplored that such professional rancour should have been displayed on the part of the defence; but we are glad to observe that the case for the Crown was conducted in a singularly fair and impartial spirit. As an illustration of Dr. Wolff's tactics, it may be mentioned that he brought forward a witness who alleged that Dr. Robertson had attended his wife and pronounced her to be suffering from cancer of the womb, when in reality she was pregnant. It is sufficient to say that Dr. Robertson has given the story an emphatic denial, in a letter published in the local newspaper.

The lax manner in which certificates of death are given by one medical man at least came out in the course of the trial. Mr. Daniel Currie, L.R.C.P. and L.R.C.S.Ed., stated that he was in the habit of granting certificates of death, without ever having seen the patients, on the information of a layman. The magistrates advised Mr. Currie to discontinue this practice for the future.

While we deeply deplore the necessity that arose for the prosecution of Dr. Wolff, and the division of opinion regarding a disease so easily recognisable as small-pox, we must congratulate the Board of Health on having so completely and satisfactorily proved their case. Experts in small-pox in this country have no difficulty in recognising, from the published descriptions of the disease prevalent in the neighbourhood of Kimberley, and from the specimens of skins of patients who died that were sent home, that the disease was no other than small-pox; and Drs. Wolff and Jameson would have been well advised if they had accepted the opinion we expressed so unhesitatingly at the time regarding the nature of the epidemic.

AUSTRALIA.

Sale of Poisons.—At an inquest on the body of a farmer who had committed suicide, by taking strychnia, at Kangaroo Flat, Victoria, it was elicited that the poison had been sold to the deceased by a domestic servant in the employment of a Dr. O'Donnell. She did not know that strychnia was poisonous, nor was she acquainted with the Sale of Poisons Act. She was in the habit of making up most of Dr. O'Donnell's prescriptions. Dr. O'Donnell has been fined £4, with £4 17s. costs, or two months' imprisonment.

MEDICO-LEGAL AND MEDICO-ETHICAL.

SCHOOL BOARDS AND "HOME LESSONS."

A case involving the power of School Boards to enforce, under the Elementary Education Acts and their by-laws, the learning of lessons at home came before Justices Mathew and Day, in the Queen's Bench Division. The facts were these. The appellant, Hunter, a child ten years of age, attended the "mixed department" of the Board School at Tyersal, Bradford, of which the respondent is the head master. The child's mother, a widow with four children, and in the receipt of parochial relief, gave notice to the respondent that she had forbidden her child to learn home lessons, for not doing which he was kept in school for three-quarters of an hour after the time fixed by the by-laws. For this the master was summoned before the Bradford magistrates on a charge of assault and false imprisonment. The summons was, however, dismissed, the magistrates expressing no opinion as to the legality of enforcing home lessons, and the matter now came before this court on a case stated by the appellant, in order that this question might be decided.—Mr. Sidney Woolf was counsel for the plaintiff.—The respondent was not represented.—Their lordships were of opinion that technically an assault had been committed, as the School Board had no power to enforce the learning of home lessons, and that the magistrates, therefore, should have convicted the respondent. The case was, therefore, remitted to them, the Court giving the appellant the costs incurred in the proceedings.—The decision is obviously one of great and far-reaching importance.

WHAT THE COLLEGES DO FOR US.

T. M. W. forwards us the subjoined cutting of a public advertisement as a further example to add to those which we have recently given of "what the Colleges do for us in the way of control of the practices of advertising members and licentiates. He states that the only registered qualification of this gentleman is Member of the Royal College of Surgeons of England.

"The Cure of Consumption (and other Diseases of the Chest). Eighth Edition. [illegible]th Thousand. By an entirely new remedy. Illustrated by numerous cases pronounced incurable. By Edwin W. Alabone, M.D., M.R.C.S.Eng., F.R.M.S. Price 5s. Post free from the Author. Address: Lynton House, 12, Highbury Quadrant, London, N."

MEDICAL ADVERTISING.

Sir,—I send you a handbill which has been distributed from house to house, not even omitting the residences of old, long established medical practitioners, by a M.R.C.S.Eng. and L.S.A.Lond. I also send an advertisement which appears nightly in the bills of the Theatre Royal, Brighton; and should feel obliged by your opinion of the same.—Yours, etc.,

Another Disgusted.

"[illegible]9, Western Road, Hove. Private Dispensary, for Skin, Special, and General Diseases. Consultations, from 10 to 12 in the morning, and 6 to 9 in the evening. Fees: Advice and medicine, 1s.; servants and children, 6d.; visits and medicine, 2s.; vaccination from 1s.; private patients, 2s. J. Oliphant Betts, M.R.C.S.Eng., L.S.A.Lond., Surgeon, etc., registered; late Medical Officer, No. 4 District of the Holborn Union, etc. Retail Department: Patent medicines, sundries, drugs, toilet-requisites, etc., at reduced prices. Prescriptions made up at the cost of drugs sold over the counter. Powders for Children: Soothing, teething, fever, etc., 1d. Seidlitz powders, 1d. and 1½d. each. Syphons, 5d. each. Methylated spirits (best), 8d. per pint. N.B.—All transactions at the above charges are for cash only."

The other advertisement is an abridged form of the above. There can be but one opinion of the unprofessional character of these documents.

Mr. John Ewen, Bristol. We have commented upon the medical advertisement which you have forwarded, in the Journal of June 7th, and, unfortunately, have received numerous similar productions from correspondents.

OBITUARY.

RIDGWAY R. LLOYD, M.R.C.S.Eng., St. Alban's.

It is with deep regret that we record the death of Mr. Ridgway R. Lloyd, who for fourteen years past practised in St. Alban's, in partnership with Dr. Lipscomb of that place.

Mr. Lloyd, who was born in December 1842, was the son of the Rev. Dr. Lloyd, a gentleman who at first practised medicine in the West of England, and afterwards took holy orders. He studied at Guy's Hospital, and became a Member of the Royal College of Surgeons of England and a Licentiate of the Apothecaries' Society in 1866. For three years before commencing practice in St. Alban's, in 1870, he was House-Surgeon to the Peterborough Infirmary, where he earned the good opinion of the medical staff, to whom he owed much of the reputation he afterwards acquired as a surgeon.

The cause of his death, which took place on June 1st, at St. Alban's, was enteric fever, connected with the recent "milk-epidemic."

Mr. Lloyd was devoted to his profession, and he threw untiring energy into his work. His skill was well recognised by the inhabitants of St. Alban's and its neighbourhood, and by all with whom he came into contact; and great is the regret felt by all classes at the loss of a medical attendant of no ordinary capability, and of a personal friend, cut off in the prime of life, and in the midst of a most successful professional career.

The deceased was an occasional contributor to the medical periodicals. He published a description of a successful tracheotomy in a case of diphtheria, in the British Medical Journal, in 1875; an account of an operation for strangulated inguinal hernia, with hourglass contraction of the sac, in the same journal, in 1879; and other articles elsewhere.

He was a lover of antiquities, and greatly learned in architecture and archæology, which his residence in a city boasting of a magnificent abbey and many other relics of bygone ages, afforded him ample opportunities, though his professional duties gave him little time, to indulge and cultivate. He was one of the Honorary Secretaries of the St. Alban's Architectural and Archæological Society, and in 1873 published a translation from the original Latin of *An Account of the Altars, Monuments, and Tombs existing A.D. 1428 in St. Alban's Abbey*. This work was dedicated to the Earl of Verulam, President of the Society, and was recognised as possessing considerable merit. The late Sir Gilbert Scott valued highly his opinion on such subjects, and made frequent reference to him; and more recently his advice has been sought by Mr. H. H. Gibbs, who is munificently restoring the high altar-screen of the Abbey, in regard to the most appropriate figures to be placed in the niches which have been long denuded.

Mr. Lloyd was the senior medical officer to the St. Alban's Hospital and Dispensary. He was a Fellow of the Medical Society of London.

Since its formation in 1883, he had acted as District Secretary of the Hertfordshire section of the Metropolitan Counties Branch of the British Medical Association. As such, he was an ex officio member of the Council of the Branch, the meetings of which he regularly attended. His death has caused great regret among his colleagues, whose sincere esteem he had already obtained.

The funeral took place on Friday, June 6th, in the churchyard of the Abbey, and was attended by so large a number of professional and other friends, as sufficiently to show the high regard and esteem in which he was held.

He leaves a widow and one son to deplore his loss.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

Examinations in Natural Science.—The Examiners in the Natural Science School issued the subjoined class-list on June 13th. **Class I:** J. Bewsher, Balliol; A. D. Hall, Balliol; T. J. Richards, Merton; A. L. Selby, Queen's; C. St. D. [illegible], New; W. H. Spencer, Exeter; [illegible], Christ Church. [illegible] II: W. F. Colegrove, unattached; G. H. [illegible], Keble; [illegible]; W. E. Humphreys, Jesus; H. O'D. M'Cann, Queen's; C. Ogle, Trinity; J. G. Ogle, Keble; [illegible], Exeter; [illegible]; W. E. Roth, Magdalen; T. S. [illegible], unattached; [illegible], unattached. Class III: [illegible], New; C. H. [illegible]; E. A. Edelsten, New; [illegible]; P. C. Thomas, Balliol. Class IV: L. H. Bennett, [illegible].

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—*Friday, June 13th.*

Overpressure in Schools.—In answer to Mr. S. Leighton, Mr. Mundella said: Dr. Crichton Browne is not a Commissioner in Lunacy but a Visitor under the Court of Chancery. The document which he has addressed to me, in the form of a letter, is a voluminous essay on a great number of disputable questions relating not only to education, but to medicine, lunacy, ethics, and social and vital statistics. It is in no respect an official document; but, out of respect for Dr. Browne, I have promised to give a summary of it in the reports which will shortly be laid before this House. Until this is done, I must refrain from offering any opinion as to its contents. It has no bearing on the estimates any more than numerous other communications which I have received on the same subject.—Mr. S. Leighton asked whether the right hon. gentleman had any other reports in his office from inspectors or others which confirmed the opinion of Dr. Crichton Browne, that overpressure existed in elementary schools.—Mr. Mundella said that the general reports which he had would be shortly laid on the table of the House. They were all in contradiction of Dr. Crichton Browne's conclusions.—Mr. Raikes asked whether the right hon. gentleman still proposed to bring forward the Education Estimates on Monday, in the absence of this important and material information.—Mr. Mundella said it had nothing to do with the Education Estimates.

Wednesday, June 18th.

Private Lunatic Asylums.—Sir E. Wilmot asked the Home Secretary if his attention had been drawn to a recent publication, entitled *The Bastilles of England*, in which grave charges were made against certain Lunacy Commissioners; and, if so, whether any steps would be taken to inquire into the truth of these charges, or whether there was any foundation for them.—Sir W. Harcourt: No, sir, I know nothing of this publication; but I would point out to the hon. baronet that any complaints made against the Lunacy Commissioners should be addressed to the Lord Chancellor, who is the authority in such matters.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

Health of English Towns.—During the week ending the 14th instant, 6,446 births and 3,326 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons. The annual rate of mortality per 1,000 persons living in these towns, which in the two preceding weeks had been 20.0 and 19.6, was 19.8 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow: Brighton 13.4, Bristol 14.3, Bradford 14.7, Derby 16.1, Birkenhead 16.6, Hull 16.7, Nottingham 17.0, Leicester 17.7, Halifax 17.7, Norwich 17.9, London 18.8, Birmingham 18.8, Portsmouth 18.8, Sheffield 18.9, Newcastle-upon-Tyne 20.7, Salford 21.4, Huddersfield 21.8, Preston 22.0, Oldham 22.1, Plymouth 22.1, Sunderland 22.4, Leeds 22.8, Cardiff 23.5, Manchester 23.9, Blackburn 24.1, Bolton 24.9, Liverpool 26.9, and Wolverhampton 28.0. The average death-rate last week in the twenty-seven provincial towns was 20.6 per 1,000, and exceeded by 1.8 the rate recorded in London. The 3,326 deaths registered last week in the twenty-eight towns included 508 which were referred to the principal zymotic diseases, against 500 and 503 in the two preceding weeks; of these, 163 resulted from measles, 121 from whooping-cough, 66 from scarlet fever, 63 from diarrhœal diseases, 33 from small-pox, 33 from "fever" (principally enteric), and 29 from diphtheria. These 508 deaths were equal to an annual rate of 3.0 per 1,000; in London the zymotic death-rate was 3.3, while it did not exceed 2.8 in the provincial towns, among which it ranged from 0.0 to 0.6 in [illegible] to [illegible] and [illegible] in Plymouth and Liverpool. The 163 deaths from measles [illegible] with the number in the preceding week, [illegible] the largest proportional fatality in Blackburn, Wolverhampton, and Plymouth. The fatal cases of whooping-cough, which in the two preceding weeks had declined from 134 to [illegible], further [illegible] to 121, and caused the highest rates of mortality in Liverpool and Sunderland. The 66 deaths from scarlet fever slightly exceeded the number in the two previous weeks, and showed the largest proportional fatality in Halifax and Cardiff. The 33 fatal cases of fever were fewer than in any recent week. The 29 deaths referred to diphtheria included 24 in London and 2 in Liverpool. Small-pox caused 27 deaths in London (exclusive of 3 registered in the hospital-ship *Atlas*, and in the Convalescent Camp, both situated outside Registration London), 5 in Liverpool, and 1 in Sheffield. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had risen in the ten preceding weeks from 148 to 1,096, further increased to 1,238 on Saturday last; 332 new cases were admitted to these hospitals during last week, against 370 and 155 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 3.2 per 1,000. The causes of 65, or 2.0 per cent., of the 3,326 deaths registered last week in the twenty-eight towns were not certified either by medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.—In the eight principal Scotch towns, having an estimated population of 1,254,607 persons, 963 births and 548 deaths were registered during the week ending the 14th inst. The annual rate of mortality, which in the three preceding weeks had been 22.3, 22.7, and 23.3 per 1,000, declined to 22.7 last week, but exceeded by 2.9 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns the rate was equal to 13.4 in Perth, 17.6 in Dundee, 18.2 in Aberdeen, 21.1 in Leith, 21.3 in Edinburgh, 22.3 in Paisley, 22.9 in Greenock, and 26.6 in Glasgow. The 548 deaths registered last week in these towns included 28 which were referred to whooping-cough, 20 to diarrhœal diseases, 17 to measles, 11 to scarlet fever, 7 to diphtheria, and 5 to "fever;" in all, 88 deaths resulted from these principal zymotic diseases, against 88 and 99 in the two preceding weeks, equal to an annual rate of 3.6 per 1,000. The zymotic death-rates in these towns ranged from 1.4 and 1.7 in Aberdeen and Perth, to 5.4 in Paisley and 7.0 in Leith. The 28 deaths from whooping-cough showed a decline of 8 from the number in the preceding week, and included 18 in Glasgow, and 6 in Edinburgh. The 17 fatal cases of measles also showed a decline; 6 occurred in Leith, 5 in Glasgow, and 4 in Dundee. The 11 deaths from scarlet fever exceeded by 5 the number in the previous week, and included 8 in Glasgow. The 5 fatal cases of fever showed a further decline from recent weekly numbers. The deaths referred to diphtheria, which had been 9, 12, and 15 in the three previous weeks, declined to 7, of which 6 occurred in Glasgow. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 3.7 per 1,000. As many as 84, or 15.3 per cent., of the 548 deaths registered last week in these towns were uncertified.

HEALTH OF IRISH TOWNS.—During the week ending June 7th, the number of deaths registered in the sixteen principal town-districts of Ireland was 353. The average annual death-rate represented by the deaths registered was 21.4 per 1,000, the respective rates for the several districts being as follow, ranging in order from the lowest to the highest: Sligo, 0.0; Drogheda, 4.2; Armagh, 10.3; Newry, 10.5; Londonderry, 10.7; Lisburn, 14.5; Waterford, 16.2; Dundalk, 17.5; Belfast, 19.9; Lurgan, 20.5; Kilkenny, 21.1; Dublin, 21.2; Limerick, 28.3; Cork, 33.1; Wexford, 34.2; Galway, 40.3. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.8 per 1,000. No deaths from any of these causes were registered in any of the sixteen districts except Dublin, Belfast, and Cork. Among the 83 deaths from all causes registered in Belfast were 1 from whooping-cough, 1 from diphtheria, 1 from enteric fever, and 5 from diarrhœa, these 8 deaths being equal to an annual rate of 1.9 per 1,000 of the population; and among the 51 deaths in Cork were 5 from typhus, 1 from whooping-cough, and 1 from diarrhœa, the annual rate represented thereby being 4.5 per 1,000. In the Dublin Registration District, the deaths registered during the week amounted to 147. Seventeen deaths from zymotic diseases were registered in Dublin, being 16 under the number for the corresponding week of the last ten years, and 1 under the number for the week ended the 31st ultimo; they included 7 from scarlet fever, 5 of which occurred in the Donnybrook district. Twenty-eight deaths from diseases of the respiratory system were registered in Dublin, being 1 over the number for the preceding week, but 7 under the average for the twenty-third week of the last ten years; they comprised 16 from bronchitis, and 8 from pneumonia or inflammation of the lungs. There were but three deaths ascribed to convulsions. Three deaths were caused by apoplexy, 12 by other diseases of the brain and nervous system (exclusive of convulsions), and 9 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 16 deaths, and mesenteric disease 3. Six accidental deaths were registered. In 11 instances, there was no "medical attendant" during the last illness. Forty-four of the persons whose deaths were registered during the week were under 5 years of age (21 being infants under 1 year, of whom 6 were under 1 month old), and 29 were aged 60 years and upwards.

HEALTH OF FOREIGN CITIES.—It appears from the statistics published in the Registrar-General's return for the week ending the 7th inst., that the death-rate was recently equal to 29.1 in Bombay and 79.7 in Madras; small-pox caused 280 deaths in Madras (against 307 and 383 in the two previous weeks), and 10 in Bombay; while the fatal cases of cholera were 17 in Bombay and 8 in Madras; the mortality from "fevers" was greatest in Madras. According to the most recently received weekly returns, the annual mortality in twenty-two of the largest European cities averaged 28.2 per 1,000, and was no less than 8.6 above the mean rate during last week in twenty-eight of the largest English towns. The death-rate in St. Petersburg was 37.4, and showed a slight increase upon the rate in the previous week; the 666 deaths included 58 from measles, 15 from "fever," and 12 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate averaged only 21.4, the highest rate being 23.3 in Stockholm, where the 81 deaths included 3 from diphtheria and croup, and 2 from scarlet fever. In Paris, the death-rate was equal to 23.9, and showed a further decline from the rates in recent weeks, but exceeded by 5.0 the rate that prevailed in London; the deaths included 55 from diphtheria and croup, 32 from measles, and 26 from typhoid fever. The 185 deaths in Brussels, of which 8 were fatal cases of small-pox (showing a further decline from recent weekly numbers), gave a rate of 23.1. In Geneva, the 36 deaths included 4 from "fever," the death-rate being 26.5. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 30.6, the rate ranging from 25.8 in Amsterdam to 40.7 in Rotterdam; measles caused 31 deaths in Rotterdam and 10 in the Hague, and 6 deaths from scarlet fever occurred in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 30.0, and ranged from 23.2 and 25.9 in Trieste and Berlin, to 34.6 in Buda-Pesth and 40.4 in Prague. Small-pox caused 29 deaths in Prague and 4 in Buda-Pesth; measles showed fatal prevalence in Buda-Pesth and Breslau, and diphtheria-mortality was greatest in Hamburg and Berlin. The death-rate was equal to 23.1 in Venice and to 28.0 in Turin; the 136 deaths in the latter city included 10 from small-pox, and 5 from typhoid fever. The 102 deaths in Lisbon, of which 2 were referred to typhoid fever, were equal to a rate of 26.1. In four of the largest American cities, the mean recorded death-rate was only 20.6, while the rate ranged from 16.8 in Brooklyn to 23.3 in New York. The 361 deaths in Philadelphia included 21 from scarlet fever, 15 from typhoid fever, and 7 from diphtheria.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

BETHNAL GREEN.—The vital statistics of this parish for 1882 call for no special comment. The death-rate, 24.1 per 1,000, was almost the same as that for the previous year, and is still above the average. Of the total deaths, 27.3 per cent. were those of children under 1 year of age, and 51.5 per cent. those of children under 5 years of age. The deaths in children under 1 year of age showed a proportion of 164.7 per 1,000 registered births. Of the 886 deaths which represented this proportion, atrophy and debility accounted for 180, bronchitis and pneumonia 148, diarrhœa 65, convulsions 96, whooping-cough 79, premature birth 58, consumption of the bowels 35, suffocation 35, and water on the brain 17. The zymotic diseases were less fatal than in the preceding twelve months, the rate being 4.4 against 5.2; 487 of the 600 deaths, which resulted from diseases of this class, occurred in children not 5 years old, and 189 in children not 1 year old. Whooping-cough, coupled with scarlet fever, contributed 361 deaths, out of an aggregate of 555 from the principal zymotic diseases. Small-pox only accounted for 2 deaths against 57 in the previous year, and measles for 58 against 185 in the same period. Diseases of the nervous system, Dr. Bate remarks, were exceptionally destructive, causing 356 deaths, out of a total of 3,094, a very large proportion. A very remarkable and interesting account is given of the disused burial-grounds in the metropolis.

LOUTH RURAL.—The most striking feature in the sanitary history of this district for 1883 was the great fatality of scarlatina, which accounted for sixteen deaths out of the thirty registered to the whole of the zymotic diseases. It appears that Great Grimsby was responsible for several of the outbreaks in the district, and we join with Dr. Domenichetti in urging the sanitary authority of the town in question to exercise greater vigilance as regards the removal and isolation of persons suffering from infectious diseases. While admitting that the elementary schools were mainly instrumental in fostering scarlatina, and that on two occasions he deemed it expedient to recommend the closing of a school, Dr. Domenichetti states that the results of his experience tend to show the inadvisability of ordering the closure of schools immediately upon the appearance of an infectious disease; and quotes, in support of his argument, the case of Great Carlton, where there were as many as a dozen patients from scarlatina amongst the children. So well was the exclusion of the infected families carried out, that only one death was registered from the sequelæ of the disease. The death-rate from all diseases of the zymotic clase was 1.28, while the general rate of mortality was 15. The deaths among children under one year of age were in the proportion of 3.54 per 1,000. The birth-rate for the year was 26.7.

BERKSHIRE COMBINED DISTRICT.—Like most other districts, the rate of mortality, in 1882, for this combination—16 per 1,000—was higher than that for 1881, but was, nevertheless, below the average. The death-rate varied from 13.8 in Bradfield, and 14.8 in Windsor, to 19.3 and 24.9 respectively in the urban districts of Maidenhead and Wallingford. The birth-rate for the whole district was 31 per 1,000. It was highest in Newbury Urban (34.5), and lowest in the rural division of the same district (26.7). The mean proportion of deaths under 5 to total deaths, was 32.9 per cent. In Wallingford Urban, the percentage was only 18.2, in Newbury Urban, it was as much as 45. The mortality among infants was in the proportion of 98 deaths to every 1,000 births. As with children under 5, the proportion was lowest in the urban district of Wallingford, where it was only 7 per 1,000; it was highest in Maidenhead Urban, 147. Taking the whole district, the principal zymotic diseases accounted for 13.2 per cent. of the total mortality, or 2.1 deaths per 1,000 population. In Bradfield the rate was only .4, and, in Cookham Rural, 1.5. In both Maidenhead Urban and Newbury Rural, it reached, however, 3.4, and culminated at 4.2 in the urban division of this last-mentioned district. Measles was especially fatal in Windsor, whooping-cough in Maidenhead Urban and Wallingford Rural, scarlatina in Newbury Urban and Hungerford, and diphtheria in Newbury Rural.

SALFORD.—Dr. Tatham's report upon the health of this borough, during 1882 is, as usual, thorough and complete. The statistics of the year, both collectively and individually, are satisfactory. With the exception of the unprecedently low rate for 1881, the death-rate, 23.2 per 1,000, was lower than any previously reported, and, as compared with a seventeen years' average, showed a diminution of sixteen per cent. The deaths in infants under 1 year of age scarcely varied from the numbers recorded in recent years, the proportion being 177 deaths to every 1,000 births. There was a decrease, however, in the rate of mortality amongst children under 5. These deaths, which comprised half the deaths at all ages, were at the rate of 81.7 per 1,000, compared with a decennial average of 94.1. The deaths registered from zymotic diseases amounted to 19.4 per cent. of the aggregate mortality, and represented a rate of 4.5 per 1,000. The death-rate from the more familiar diseases of this class was 2.7 per 1,000, against a mean for the preceding decade of 3.9. The outbreak of small-pox, which occurred towards the close of 1881, rapidly developed in the early part of the year under notice. The disease was of a remarkably severe type, for, of the 72 cases reported, 18, or 25 per cent, terminated fatally. From measles there resulted 167 deaths, compared with 38 in 1881, and a decennial average of 144. Scarlet fever, as a rule the most fatal disease of its class, gave place to measles, contributing only 81 deaths, against an average of 200. The rate of mortality from fever, for the period 1872-81, was 0.64 per 1,000, but that for 1882 was only 0.34, while the deaths from diarrhœal diseases, 240, or 1.30 per 1,000, though in excess of those of the previous year, were well within the average (322). The birth-rate was 38.8 per 1,000, the same as in 1881.

STALYBRIDGE.—Mr. Roberts-Dudley's report for 1883 furnishes good reason for satisfaction. Perhaps, the most salutary feature in the report is the large decrease in the zymotic death-rate, which was only 1.3 per 1,000, a rate greatly below the average for the nine previous years. It is especially noticeable that not a single death occurred from whooping-cough, and it may be of interest to quote what Mr. Roberts-Dudley says with reference to this disease. "From my own observation," the medical officer states, "I may say that I find no zymotic disease so entirely disappear, and then recur again, as whooping-cough, proving, to my mind, that the germ, or poison, of the disease must come, and be governed, by atmospheric influence alone." The diminution in the number of deaths from diarrhœal disease, too, was very marked, only 15 being registered, against 34 and 27, respectively, in 1882 and 1881. Of scarlet fever, 34 cases were reported, compared with 77 in the previous year, but the proportion of deaths to cases was much greater, 1 in 4, against 1 in 10. The general death-rate, for the year, was 21.5, and the birth-rate 30.3. The deaths of children under 1 year of age, in comparison with the births, were 128 per 1,000, the most favourable proportion for seven years past.

STRETFORD.—The birth- and death-rates in this district during 1883 were respectively 28.65 and 15.3 per 1,000 population. More than 29 per cent. of the total deaths occurred in children under 5. Zymotic diseases accounted for 29 deaths out of an aggregate of 306, or 1.45 per 1,000. With regard to diseases of this class, it may be mentioned that small-pox did not make its appearance on a single occasion. Four deaths were registered from typhoid, and three from scarlet fever, 11 from diarrhœa, 2 from diphtheria, and 5 from whooping-cough. Mr. Pettinger calls attention to the fact that the district is still without a mortuary, and he urges the importance of such an institution.

STROUD UNION.—Beyond recording bare statistics, there is little to mention in connection with the sanitary history of this district for 1883. The birth-rate, which was 26.6 per 1,000, showed some diminution compared with previous years, while the death-rate—15.9 per 1,000—though a fraction higher than in the two preceding periods, still kept below the average. The infantile mortality was in the proportion of 109 deaths to every 1,000 births. It is noteworthy that no less than 21 of the deaths in children under one year of age, or 25 per cent., were attributed to "unknown" causes. Another unsatisfactory feature is the large number of uncertified deaths, amounting to 35, or 7.5 per cent. Among the causes to which these deaths were referred, Mr. Partridge gives some peculiar statements, as "hæmoptysis" in a child fourteen days; another infant, one minute old, dies of "apnœa;" a person, 31 years, of "asthenia" and "hæmoptysis." "Surely," Mr. Partridge observes, "we ought to know something more about these deaths. A penalty should be attached to every person not having a medical certificate of death to register from." The percentage of deaths from zymotic diseases—5.2—was, with one exception, the lowest on record, but it is still too high, considering the situation of the district.

MARTLEY RURAL SANITARY DISTRICT.—Mr. Hyde has supplemented his annual report for 1883, with a sketch of the sanitary history of the district for the previous ten years. During that period a very considerable amount of sanitary work has been carried out, with a result that the health of the district has materially improved. That such is the case, is clearly shown by a diminution in both the general and zymotic death-rates. Thus, for the ten years 1861-70, the general death-rate was 17.19, and the zymotic death-rate 2.71; while, for the ten years 1874-83, the general death-rate was 15.81, and the zymotic death-rate 1.44. For the year 1883 itself, the death-rate per 1,000, was 15.90. This rate is somewhat in excess of the rates for the three preceding years, owing to an increase in the number of deaths at the extremes of life, caused chiefly by affections of the lungs; but of an aggregate of 232 deaths, zymotic diseases accounted for 10, 6 of which were referable to whooping-cough.

MILE END OLD TOWN.—Dr. Corner's report for 1882-83 affords good ground for satisfaction. In spite of a large increase in the population, the deaths, representing a rate of 20.87 per 1,000, were 59 below the quinquennial average. The mortality amongst the young was heavy, 28 per cent. of the total deaths being those of infants in their first year, and 47 per cent. those of children under 5; but the high birth-rate, 38.6 per 1,000, accounts, to a large extent, for this excessive infantile mortality. The death-rate from the principal zymotic disorders was 2.68 per 1,000, or, if we include diarrhœa, 3.23. Of diseases of this class, scarlet fever, though less destructive than in the previous year, was the most fatal.

MONMOUTH (RURAL).—The deaths in this district during 1883 amounted to 378, or 38 in excess of the number in the previous year, and were equivalent to a rate of 17.05 per 1,000. It is to be observed that nearly the whole of the increased mortality occurred between the ages of 25 and 60. Among diseases of the zymotic order, scarlet fever and whooping-cough figured prominently, especially the former, which was frequently introduced into the district in the course of the year. A curious outbreak of German measles took place late in December at Lydbrook, where no less than 200 children were ill at one time with this complaint. The outbreak was apparently due to the attendance of children from the Ross rural district, who were sickening with the malady, at the church school. The disease speedily attacked every child out of that portion of Lydbrook which is within the Monmouth rural district. The epidemic, happily, was exceptionally mild, and the majority of cases kept their beds for a single day only. Another incident worthy of mention was the death of three children in one family, who all sickened and died about the same time. The nature of the sickness was wrapt in considerable obscurity; the cases appeared to be dysenteric. The children were all imbecile, and the conclusion come to was that they had, by chance, eaten some poisonous plants in the woods where they had been accustomed to play.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 12th, 1884.

Deeble, Stephen Lawson, 6, Crescent, Mornington Road, N.W.
Gubb, Alfred Samuel, 52, Newman Street, W.
Hodgson, Ralph, St. Bartholomew's College.
Jackson, William Edward Gillson, 13, Addington Street, S.E.
Llewelyn, Ithel Penderel, 26, Brunswick Square, W.C.
Newey, William Edward, Parade House, Dudley.
Tuck, Harry, Brighton Road, Surbiton.
Weaver, William George, 10A, Great Smith Street, S.W.
Woolby, James Balls, 18, Woburn Place, W.C.

The following gentleman also on the same day passed the Primary Professional Examination.

Jones, Evan, London Hospital.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.—Acting Physician. Applications by July 9th.

BOSCOMBE PROVIDENT INFIRMARY, Bournemouth. Resident Medical Officer. Salary, 60*l.* per annum. Applications by June 28th.

CHELSEA, BROMPTON, AND BELGRAVE DISPENSARY.—41, Sloane Square, S.W. Surgeon. Applications by June 26th.

CHORLTON-UPON-MEDLOCK DISPENSARY.—House-Surgeon. Salary, 100*l.* per annum. Applications to Mr. Adam Fox, 53, Princess Street, Manchester.

CLOGHER UNION.—Medical Officer, Clogher Dispensary. Salary, 125*l.* per annum. Applications by June 21st, to W. H. Bailey, Honorary Secretary, the Manse, Clogher.

CORNWALL WORKS DISPENSARY. Second Medical Officer. Salary, 200*l.* per annum. Apply for further particulars to S. T. Darby Weston, 38, Booth Street, Handsworth, Birmingham.

COUNTY ASYLUM, Whittingham, Lancashire.—Dispenser. Salary, 50*l.* per annum. Applications to the Medical Superintendent.

COUNTY ASYLUM, near Dorchester.—Assistant Medical Officer for the Second County Asylum at Forston. Salary, 100*l.* per annum. Applications to the Medical Superintendent by the 28th inst.

COUNTY AND COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY.—House-Surgeon. Salary, 100*l.* per annum. Applications to Mr. H. Howells, 11, Morley Street, Carmarthen, by July 12th.

CUMBERLAND AND WESTMORLAND ASYLUM.—Assistant Medical Officer. Salary, 80*l.* per annum. Applications to Dr. Campbell, Garlands, Carlisle.

DEVON AND EXETER HOSPITAL.—Clinical Assistant. Applications to Dr. Blomfield.

DUDLEY DISPENSARY.—Resident Medical Officer. Salary, 150*l.* per annum. Applications by July 1st.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Applications by June 23rd.

GLASGOW EYE INFIRMARY.—Resident House-Surgeon. Salary, 75*l.* per annum. Applications by July 31st.

HEREFORD GENERAL INFIRMARY.—Dispenser. Salary, 40*l.* per annum. Applications by July 7th.

KINGTON UNION.—Medical Officer and Public Vaccinator. Salary, 80*l.* per annum. Applications by June 30th.

LEEDS PUBLIC DISPENSARY.—Junior Resident Medical Officer. Salary, 80*l.* per annum. Applications by June 23rd.

LIVERPOOL DISPENSARIES.—Assistant House-Surgeon. Salary, 108*l.* per annum. Applications to R. R. Greene, 34, Moorfields, Liverpool, by June 24th.

NOTTINGHAM FRIENDLY SOCIETIES' MEDICAL INSTITUTION.—Assistant Medical Officer. Salary, 130*l.* per annum. Applications to Mr. J. Lee, 46, Upper Eldon Street, Sneinton, Nottingham, by June 30th.

PARISHES OF NORTHMAVINE AND DELTING, Shetland.—Medical Officer. Salary, 60*l.* per annum. Applications to Mr. Robert Robertson, Inspector of Poor, Delting, Shetland, Lerwick, by June 30th.

QUEEN'S COLLEGE, Birmingham.—Professor of Anatomy. Salary, 262*l.* 10s. per annum. Applications by June 30th.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road.—House-Physician. Salary, 80*l.* per annum. Applications by June 25th.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields, E.C.—House-Surgeon. Applications by June 23rd.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, 19, King William Street, West Strand, W.C. House-Surgeon. Applications by June 26th.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY.—Honorary Physician. Applications by June 25th.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN.—Administrator of Anæsthetics. Applications to be addressed to St. V. Mercier, Esq., Secretary, St. John's Hospital, Leicester Square.

TOWCESTER UNION.—Medical Officer and Public Vaccinator. Salary, 50*l.* per annum. Applications by June 23rd.

TOWER HAMLETS DISPENSARY, White Horse Street, E.—Medical Officer. Salary, 100*l.* per annum. Applications by July 7th.

TOWN OF CALCUTTA.—Health Officer. Salary, Rs. 1,250 per month. Applications to the Secretary to the Municipality, Calcutta, by July 15th.

WEST LONDON HOSPITAL, Hammersmith, W.—Assistant-Physician. Applications by June 30th.

WOOLWICH UNION.—Resident Medical Officer for the Infirmary at Plumstead, and Medical Officer to the Workhouse. Joint salary, [illegible] per annum. Applications by July 2nd.

YORKSHIRE COLLEGE, Leeds. Demonstrator of Anatomy. Salary, 150*l.* per annum. Applications by July 2nd.

YORKSHIRE COLLEGE, Leeds.—Professor of Physiology. Guaranteed Stipend not less than 500*l.* Applications by July 2nd.

YORK COUNTY HOSPITAL.—Assistant House-Surgeon. Salary, 50*l.* per annum. Applications by June 21st.

MEDICAL APPOINTMENTS.

Balfe, J., L.R.C.P., appointed Medical Officer to the Norwich Friendly Societies' Medical Institute.

Carson, J. S., M.B., appointed Medical Officer to the Norwich Friendly Societies' Medical Institute.

Cave, E. J., M.R.C.S., appointed Resident Medical Officer to the Royal United Hospital, Bath, *vice* M. W. H. Russell, M.R.C.S., resigned.

Clark, W. Ronaldson, M.B.Aberd., appointed Assistant Medical Officer to the Eastern Hospital.

Cooper, H. C. E., M.R.C.S., appointed Resident Medical Officer to the Hospital for Diseases of the Throat, Golden Square.

Frazer, H., M.D., appointed Medical Officer for the Workhouse to the Armagh Union, *vice* J. L. Riggs, M.D., deceased.

Greensill, J. H., M.R.C.S., appointed Resident Medical Officer to the Guest Hospital, Dudley, *vice* C. J. [illegible], M.R.C.S., resigned.

Grunlees, T. Duncan, M.B.Edin., appointed Junior Medical Assistant to the Cumberland and Westmorland Asylum, Carlisle.

Gunn, R. M., M.B., appointed Ophthalmic Surgeon to the Great Northern Central Hospital, *vice* W. J. Milles, L.R.C.P., resigned.

Hyne, Frederick A., appointed Honorary Medical Officer to the Jersey General Dispensary.

Maitland, A. D., M.R.C.S., appointed Senior House-Surgeon to the Sunderland Infirmary, *vice* E. F. Flynn, L.K.Q.C.P.I., resigned.

Maltby, A., M.R.C.S., appointed Assistant House-Surgeon to the Royal South Hants Infirmary, *vice* —— Roberts, L.S.A., resigned.

Miller, A. H., L.R.C.P., appointed Medical Officer to the Norwich Friendly Societies' Medical Institute.

Milligan, R.A., M.R.C.S., appointed Surgeon to the General Infirmary, Northampton, *vice* G. F. Kirby Smith, F.R.C.S., deceased.

Phillips, F. B. W., B.A.Oxon., B.Sc.Lond., appointed Assistant Medical Officer to the Eastern Hospital.

Stathers, G. Nicholson, M.R.C.S.E., L.R.C.P.Edin., appointed Medical Officer of Health to the No. 2 Sanitary District of the Wycombe Union.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

Abbott.—June 11th, at Noel House, Braintree, Essex, the wife of Charles E. Abbott, M.R.C.S., of a son.

MARRIAGES.

Ashmead—Walker. On June [illegible], at St. John's Church, Edinburgh, by the Rev. G. J. Cowley Brown, M.A., George Ashmead, L.R.C.P., L.R.C.S.Ed., Brierley Hill, Staffordshire, to Helen Wilhelemina, youngest daughter of the late Captain Henry Walker, Castle Stuart, Inverness-shire.

Dartnell—Jones.—June 12th, at St. Paul's, Prince's Park, Liverpool, by the Rev. Canon McNeile, assisted by the Rev. C. Bromley, M.A., cousin of the bride, William A. Dartnell, L.R.C.P. and S.Edin., [illegible], youngest son of the late G. R. Dartnell, I.G.H., to Isabella Steel, younger daughter of the late John J. Jones, of 19, Belvedere Road, Prince's Park, Liverpool.

Douie—MacFarlan. On June [illegible], at Leslie Park, [illegible], Stirlingshire, by the Rev. J. MacFarlan, minister of Ruthwell, William Douie, M.B., Carlisle, to Helen, daughter of the late Rev. J. MacFarlan, minister of Muiravonside.

Woollett—Pittis. On June [illegible], at Wymering Church, Cosham, Hants, Sidney Winslow Woollett, M.R.C.S.Eng., of Kessingland, Lowestoft, to Mary A. T. Pittis, of Cosham.

DEATHS.

Cresswell.—On June 12th, at Dowlais, Glamorgan, Jane Catherine, the beloved wife of Pearson R. Cresswell, F.R.C.S.

Teasdale. On May 5th, 1884, William Teasdale, M.R.C.S., Easingwold, Yorkshire, aged 77. For forty years he practised very successfully, and for thirty-six years was medical officer for the Stillington District, and gave great satisfaction.

Within a calendar month of the date of the opening of the Health Exhibition, upwards of half a million visitors had passed through the turnstiles.

The Hackney District Board of Works have sealed a petition for a faculty to lay out West Hackney churchyard as an "open space" for the recreation of the people. The churchyard at St. John, at Hoxton, has been re-opened to the people, and will remain open daily during the summer and autumn from 2 P.M. till dusk.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY ......St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M. W. F., [illegible]; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S. 1.30; Eye, W. S., [illegible]; Ear and Throat, Tu., 9; Skin, F., 4; [illegible]

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., [illegible]; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Royal College of Surgeons of England, [illegible] Sir Henry Thompson: On Some Important Points [illegible] Organs.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; [illegible] of the Journal, [illegible] to the Manager, [illegible] Strand, W.C., London.

IN order to avoid delay, [illegible] business of the Journal [illegible] to the [illegible] Journal [illegible]

AUTHORS desiring reprints of their articles published in the British Medical Journal, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names [illegible]

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

MEDICAL TITLES AND DEGREES.

SIR,—I beg to [illegible] Mr. [illegible] June 14th, [illegible] M.R.C.S. and L.R.C.P. [illegible]

I [illegible] who have gone to the trouble [illegible] expense of taking university degrees to have the M.R.C.S. and L.R.C.P. [illegible] by a new charter to the position of university degrees. If they [illegible] M.D., M.Ch., Q.U.I.

SIR,—The [illegible] that I would [illegible]

I [illegible] political power; still, I must say, that if some twenty thousand educated professional men [illegible] have no political power. God help the medical profession!

[illegible] in my letter of May 31st [illegible] The degree of M.D. is granted by numerous colleges and faculties who have no connection with universities. The degrees of M.A., M.D., B.D., D.D., etc., are granted by the Archbishop of Canterbury; and I do not think he is a university [illegible] "Catholic." There is a [illegible] England which grants the degrees of B.A. and B.D. under charter; this is not a university. Should the present Bill become law, the Colleges will be left high and dry. Students, after obtaining "the government stamp," will not care to incur the expense of taking college diplomas, which will confer no greater dignity than that which [illegible] they already possess; that is, [illegible] Now, if the colleges join hands with us, and ask that their diplomas shall carry the title of M.D., then the [illegible] will be avoided.

[illegible] Arts course [illegible]

[illegible] It was only [illegible] medical qualifications in England; and the act of [illegible] The Acts of [illegible] made the M.D. a legal [illegible] qualification, placing it before the law on a level with L.S.A. as a qualification.

If the profession is to be placed on a uniform basis as regards examination curriculum, why not have uniformity of title? Why should not the colleges in [illegible] kingdom in which they are situated, and have supreme control of medical matters, [illegible] M.D., England, Scotland, or Ireland, as the case may be.

[illegible] to help me. I [illegible] I am [illegible] WILLIAM DONOVAN.

Wellow, Romsey.

[illegible] approval of their statements or arguments, but only that the writers have for[illegible] correspondents.

[illegible] alting.

[illegible]

ASYLUMS FOR CHILDREN.

SIR,—Kindly inform me, through the medium of your JOURNAL, if there exist an asylum for children, idiots, and imbeciles, in the metropolis, or in any of the southern counties, similar to the Royal Albert Asylum in Lancaster, for the benefit of the artisan and poorer classes.—I am, sir, yours faithfully,

Hurstbourne, Bournemouth. THOS. WM. BLAKE, Mem. Brit. Med. Assoc.

⁂ Asylums for idiots and imbeciles, besides the Royal Albert Asylum, Lancaster are: 1. Metropolitan pauper asylums: Leavesden, Herts; Caterham, Surrey; Darenth, Dartford, Kent. 2. Voluntary institutions: Earlswood, Redhill, Surrey; Eastern Counties Asylum, Colchester; Western Counties Idiot Asylum, Starcross, Exeter; Midland Counties Idiot Asylum, Knowle, Birmingham; the Institution for Feeble-minded Children, Bath. Fuller particulars are given in Dr. Tuke's *Chapters on the History of the Insane in the British Isles.*

TUBERCULAR MENINGITIS.

SIR,—I sincerely sympathise with your correspondent, "A Member," in his loss of three children from tubercular meningitis, and in his desire to save his little girl from that dire disease.

Of course it is difficult, without knowing its surroundings, to prescribe usefully for any case; but if they permit it I would, after a nine years' residence in New Zealand, very confidently recommend the child's removal thither as a preventative. If, however, she be now ill, I should not advise her removal from her English home.

I may add that, previously to my New Zealand residence, I had visited most of the southern health-resorts in Europe, including Sicily and Malta; and I know of no country to compare with New Zealand for invalids with tubercular tendencies; choosing, of course, the particular part of the colony for each particular case.—I am, sir, yours faithfully, A. E.

DISPENSING ASSISTANTS.

SIR,—A notice, somewhat like the following, is often seen posted up in our hospital colonnades and libraries.

"Board and lodging, with time to attend hospital, offered to a senior student in return for services in dispensing, etc; a percentage given on midwifery."

After passing my first M.R.C.S. and first L.R.C.P.Lond. examinations, and being a fourth year's man, I applied for and got one of these places. I did not expect any salary, but I expected to do a few cases of midwifery. After being in the house about a week, I learnt that the principal only attends about one hundred and twenty cases in a year, and he does all those himself.

Another grievance is this. I commence work in the morning at 9.30, and do not get away until a quarter to 12; I have to be home again by four to send out the medicine, so that I barely get four hours and a half at the hospital. In addition to this I find that, although I was made to understand that I should be treated as one of the family, I am not looked upon in that light. The food is not particularly good; it consists of about an ounce and a half of bacon for breakfast, and bacon and cabbage, with about four ounces of beef or mutton, for dinner. Supper is sent up to the surgery, and consists of about two drachms of stale cheese, a piece of dry bread, and about a glass and half of "four ale."

I know there are plenty of men who, unfortunately, are obliged to take such places, and I write these facts in order that students, and the medical men who employ them, may see them in print, and that students may have some idea of these places before they take them. Apologising for taking up so much space, I am, sir, yours, A GUY'S STUDENT.

INJURY BY LIGHTNING.—The author of the article on this subject has omitted to send his name and address.

A NEW FORM OF STETHOSCOPE.

SIR,—I was not aware that the stethoscope described by me in the *Lancet*, 1877, was similar to Stearn's binaural; if so, I must thank Mr. Smith for the information. I can only say that the stethoscope that I made is the "acme of simplicity," and that it can be easily adapted to the various uses described by Mr. Smith.—Yours, etc., JNO. BROWN, L.R.C.P.Lond., etc.

Bacup.

SYPHILIS AND ECLAMPSIA.

SIR,—The following case may be of some interest to general practitioners. Four months ago, I attended an engineer's wife for syphilis; she was then just married, and two months pregnant. The usual treatment was adopted, but I lost sight of my patient before I had done with her, as she "felt better," and "could afford no more medicine." A fortnight ago, I was called in to see her, the message reporting her to be in "strong fits." I found her in very severe convulsions, her face black and livid, with frothy saliva emitted from the mouth, with very violent clonic spasms. The severity of the fits was most extreme, and there was not the slightest return to consciousness between them. A look at the puffy ankles, and a subsequent examination of the urine, confirmed me as to their puerperal nature. I had never before seen so bad a case. I injected 120 grammes of chloral-hydrate into the rectum, and, waiting half an hour, placed two drops of croton-oil on the back of the tongue; the bowels moved very freely in twenty minutes, which would allow fifty minutes for the chloral to operate. The fits declined in severity, and ceased. I was, however, ready and willing to induce premature labour, if required; but, in three days, nature came to the rescue, and a still-born six months child was welcomed by all. I claim no novelty in treatment, although I have not heard of the two drugs being used together in that way. But what I wish to draw attention to is this. In my last five cases, I got a clear history of syphilis being given to the patient by the husband, and, in four, the wives knew it. I have read most of what has been written on puerperal eclampsia; I have never read of its being associated with syphilis. I believe there is a strong connection between the two. In the lower-middle and middle classes, husbands give syphilis to their wives far more than, perhaps, the medical profession are aware of. A "respectable" married man contracting the disease will very naturally avoid his own local medical man, and either will he trust to quack nostrums, or go to a strange doctor in town, who knows nothing of him. My idea is that there is an intimate connection between syphilis acquired by a woman during pregnancy and puerperal eclampsia, namely, that of cause and effect. I do not for a moment contend it is caused solely by syphilis, or even chiefly so.—Faithfully yours,

Sudbury, Suffolk. JOHN WELLER, M.R.C.S.E., L.R.C.P.

N.B.—Only one of my five cases was associated with epilepsy.

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LECTURES
ON
SOME IMPORTANT POINTS IN CONNECTION WITH THE SURGERY OF THE URINARY ORGANS.

Delivered at the Royal College of Surgeons, June 1884.

By SIR HENRY THOMPSON, F.R.C.S.,
Surgeon Extraordinary to His Majesty the King of the Belgians, Professor of Surgery and Pathology to the Royal College of Surgeons, Consulting Surgeon and Emeritus Professor of Clinical Surgery to University College Hospital, etc.

LECTURE III.—TUMOURS OF THE BLADDER.

It is a fact which now begins to appear somewhat surprising, that, until a very recent period, the subject of tumours of the bladder has received a comparatively small share of attention, either from pathologists or from practical surgeons. The former have noticed these morbid products chiefly to remark on their rarity; the latter have alluded to them chiefly as, for the most part, beyond the power of art to remove. The literature relating to them is slender; and inasmuch as, with few exceptions, its earlier records treat the familiar outgrowths from the prostate, and the rarer neoplasms which arise from the bladder, without distinguishing between them, not much is available for our purpose.

[The lecturer gave a brief sketch of the history of operations for vesical tumour, from the case by Covillard of Lyons in 1639 to the present day, including the more recent cases in this country by Murray Humphry, Berkeley Hill, Davies-Colley, Bryant, and the series by Whitehead of Manchester, with their results, and proceeded:]

But there is another mode of studying the subject, which, indeed, it is only possible to pursue on an extensive and adequate scale in this country, since here only the requisite materials are to be found; I mean the study of the vesical tumours themselves, with their physical characters exposed to view, as found in the various museums of our metropolis, together with, in many instances, a few important facts relating to their history.

Of growths or tumours arising from the inner surface of the bladder, and pursuing an independent development within the cavity, there were in the metropolitan museums, prior to 1882, about fifty examples preserved in spirit. Forty-three of these were from adults of various ages; eight had occurred in young children. A large majority of the adult series had arisen in male patients; but as, in a few preparations, the sex is uncertain, no exact statement can be made. Of the eight children, six were female. In addition to these fifty cases, there are about an equal number of cancerous growths preserved in the same museums, and respecting which there is little more to be said. Returning to the non-cancerous growths, it may be stated that, in respect of physical conformation, a number of them consist of single growths from the walls of the bladder, more or less pedunculated; and they might obviously have been removed by operation without difficulty. Others are broad and sessile, and more rarely there are two or more independent growths in the same bladder. Some are delicate, soft, and fimbriated in structure; while others are firm and solid; much variety of density existing among them.

Next to the preserved examples may be considered the result of my own experience, derived from exploring the bladder, by means of which I have already encountered no fewer than twenty cases of vesical tumour. I have presented an account of them in a tabular form, which shows at a glance the age of the patient, the date of operation, the duration of symptoms up to that period, what was the earliest symptom observed, the result of examination of the urine before operation, the nature of the operation itself, the form and situation of the tumour, its structural elements after examination, and the after-results to the present time.

In some cases, I have removed the entire growth; and, when unable to do so, have taken away as much of it as possible; pruning, so to speak, the most salient portions, when the growth was inseparable from the walls of the bladder—a condition met with in several cases. In all instances, however, I have been careful to examine the growth minutely with the finger before operating, so as to offer a diagram of its size and form, representing a sketch made at the time. I think, in general terms, it may be affirmed that a single tumour attached by a narrow pedicle to the wall of the bladder is not very common, and to say that it may occur once in six or seven cases of non-malignant tumour probably approaches a correct numerical estimate. On the other hand, sessile growths, of which the base is perhaps the widest part, are met with as frequently as the pedunculated form just described; and there are intermediate forms between the two; the preponderance in number, perhaps, being among the non-pedunculated class.

We now come to structural characters. Hitherto, most of the statements relative to vesical growths have been somewhat vague, since the materials for observation have not been attainable. Thus it has been customary to regard villous growths as a class; and these were at no very remote period termed "villous cancer." The existence of papilloma has been generally recognised; occasionally sarcomatous growths have been spoken of, although probably without intention to convey the meaning which modern pathology attaches to the term. After that, follow epithelioma and cancer. At present it is not possible to form a complete generalisation, but valuable indications have been attained from the twenty cases now brought before you, which indicate a sufficient number of important facts to commence with. Everyone of the tumours with which I have dealt has been treated by a competent observer; at first by Mr. Stanley Boyd, with one or two by Mr. Eve, others by Mr. Shattock, while all the later ones (fourteen in number) have been laboriously investigated for me by Dr. Heneage Gibbes, from whom I have received in every instance a full written report on intimate structure, and several microscopic preparations, all of which are now before you.

After a survey of the museum-specimens on the one hand, and a consideration of the facts determined by histological analysis of my own cases on the other, with Dr. Heneage Gibbes, I have made the following attempt at classifying these products; and I think it will be regarded as warranted by the evidence.

First, there is the simple mucous polypus, which I have at present only found in the bladder of children, and in their cases only among the museum-preparations; some of these are analogous in structure to the soft nasal polypus, a form of myxoma, while other specimens appear to contain also more of the deeper normal fibres of the structures from which the growth arises.

In regard to the cases of vesical tumour in which I have myself operated, they fall naturally, as do those of other regions, into two distinct categories, namely, those which consist only of elements identical with the normal tissues of the bladder, "homœoplastic," and those which consist, more or less, of other elements never found in the tissues of the healthy bladder, or "heteroplastic."

The first category offers at least three forms of growth, but passing insensibly from one to the other, being apparently diverse developments of the same structural change. Two of them may be spoken of as papilloma, which appears in two typical forms.

1. *Fimbriated Papilloma.*—I employ this term to designate that product formerly known as the "villous" growth, which name is objectionable on several grounds. The most obvious character of the growth is a structure in which the vesical mucous membrane is developed into fine papillæ, which consist of long fimbriated processes of extreme tenuity, and usually form a group arising from a small circumscribed base. Immersed in fluid, the long fimbriated growths float out like slender-leaved aquatic plants in deep water; and when removed to air, collapse and form a soft mass resembling a small strawberry.

2. *Ordinary Papilloma.*—In the growth thus designated, papillary processes, although present in more or less abundance, do not constitute the chief part of the structure, which is accordingly more solid, consisting of the constituents of the submucous tissues of the vesical coats. The papillæ are short, less developed than the "fimbriated" processes of the previous division.

It may be remarked here that the mere presence of papillæ, whether short or fimbriated, does not serve in any way to identify or characterise a growth, since such papillæ may be met with springing from the surface of heteroplastic growths, as epithelioma and cancer.

3. The third type above referred to, although related with the preceding, inasmuch as the basic structures are still homologous with those of the bladder, appears to be best indicated by using the term "transitional" to describe it, as perhaps occupying a place between papilloma and a formation of malignant type, sarcoma. Thus there is not only a peculiarity in the arrangement of the basic fibres, but the presence among them of certain cells foreign to the structure itself is observed —a fact of importance. [Numerous examples of all these forms were shown by drawings and under the microscope.]

The second category of growths, the characteristic of which is heteroplastic structure, is illustrated in the bladder by epithelioma, and perhaps, but if so, certainly in rare instances, by the sarcomata; between which latter and the papillomata a relation has been suggested in the last noticed growth of the previous category, through the presence of certain cells above described. The existence of true sarcoma of the bladder has been affirmed, but not on the observation of fresh specimens. The presence of leucocytes, or of other cells, both round and spindle-shaped, liable to be found in abundance after inflammatory action in the growth, or as seen in the transitional form described, has perhaps led some observers to pronounce such structures to be sarcoma. Before long, it is not improbable that some unquestionable example will be met with and identified.

Scirrhus undoubtedly occurs as a deposit in the walls of the bladder, and usually affects the base and sides sufficiently to admit of identification by rectal examination. The hard, unyielding, irregular, knotty outline presented there to the finger is so characteristic as to make its presence easily recognised.

Cancer of an encephaloid type is sometimes met with, but it is difficult at present to say how often it affects the adult bladder; it is probably not common in that situation. One example of melanotic growth is referred to.

Finally, that rare product, dermoid tumour, is occasionally found in the bladder. The contents of dermoid cysts, it is well known, are sometimes expelled, probably from an ovarian source, through the urinary passages. But in one case, which occurred in the practice of my friend Mr. T. Bryant, and which I had the pleasure of seeing with him, the locality of a dermoid tumour was undoubtedly vesical. [The details of this very interesting case, in which Mr. Bryant discovered by exploration, and subsequently removed, a pedunculated tumour with complete success, were given.]

It may now be fairly inferred that the commonest species of tumour affecting the adult bladder are papilloma, occurring in two forms, besides that other product above described as an outgrowth of the ordinary submucous tissues forming the vesical coats, all homœoplastic in character.

About ten or eleven cases of my own series belong to this group. Collating the accounts given, and the phenomena manifested by these patients, the general symptoms may be described as follows.

The earliest symptom is almost invariably hæmorrhage. It is observed before unduly frequent micturition is complained of, and before it is painful. On the other hand, in most of the cases in which the tumour was of the malignant type or approached thereto, pain and frequency of passing urine generally preceded the appearance of blood, sometimes for a considerable period of time. In almost all cases, symptoms had been noted during at least three years before the patient applied to me; in some, as much as six or seven years. There appears to be nothing particularly characteristic in the nature of the hæmorrhage, excepting the one important circumstance always to be inquired for; namely, that in the act of micturition the stream may sometimes commence without any blood-stain, or with only a slight admixture, and end of a bright red colour from the presence of much fresh blood. With such an occurrence, and no recent urethral lesion having been made, the source of hæmorrhage must always be vesical.

I should first say that very little positive evidence is obtained by rectal and vesical examinations in relation to any other growths than the hard cancerous deposits, which are usually easy enough to identify. The sound does not offer much information in examining the bladder, mostly meeting with slight obstruction to its free movement on either side, and with less defined a limit than is usually presented by healthy vesical walls; but nothing very definite.

The examination of the urine, however, is often highly significant. Its object is to obtain disintegrated portions of the tumour if present, and to identify their structure under the microscope. It may be necessary to examine several specimens in order to obtain indubitable evidence on this point. An excellent way of obtaining them is to wash out the bladder freely with warm water. It rarely happens that this fails to detach materials sufficient for our purpose; but when it does so I have succeeded by using an evacuating catheter of small size, connected with the aspirator employed in lithotrity, and have thus obtained specimens which were complete evidence of the presence of a growth.

There is still another method which, when a fimbriated growth is present, will secure a specimen, and may sometimes identify the presence of a salient tumour. It consists in carefully exploring the bladder with a small flat-bladed lithotrite. I discovered my first tumour thus; it was coated with phosphates, and I thought it might be a partially sacculated calculus, as I could seize but could not move it.

Supposing that some fragments have been obtained, they should be placed under a quarter-inch object-glass, when a portion of a villus, sufficiently complete for identification, may be met with; the arrangement of columnar epithelium, at right angles to the central axis, and radiating round the terminal point, presenting unquestionable proof of the existence of such a growth in the bladder.

Further, the appearance of small semitranslucent fragments is very significant. Under the power named, these mostly appear to be made up of spindle-shaped nucleated cells, some comparatively short and broad, others elongated, and some nearly acquiring the character of a short fibre. These fragments have been present in several cases in which tumour has been subsequently found.

We may now suppose that exploration in a suspected case has been made by external urethrotomy, and that the steps of the proceeding have been followed, as described in the preceding lecture; and, further, that the operator, on introducing his left index-finger, at once encountered a growth of some kind. He should first deliberately spend some two, three, or four minutes, if necessary, in ascertaining its size, situation, and general outline.

Pressing the abdomen firmly with his right hand into the pelvic basin, he soon ascertains whether the tumour be attached to the wall of the bladder by a narrowish pedicle, or whether it is rather an outgrowth which springs from a considerable area of the coats, and is inseparable from them. He traces the surface, which may be broadly mammilated, one or many lobed, or simply polypoid, firm in contour, or soft and fleecy. He learns whether it belongs more to the side or to the floor of the bladder, or whether it springs from the opposite surface farthest from the meatus, or from the upper aspect of the cavity. The mind soon forms a distinct image of the body to be dealt with, and simultaneously arrives at a judgment as to whether it be possible to remove it entirely or partially; and, if the latter, whether a sufficient portion can be safely taken away to warrant further surgical interference. If the tumour be polypoid in form, with a distinct pedicle, narrow, or even wide, there can be no doubt as to the propriety of operating. But if the growth admit of considerable portions being removed without injuring the vesical coats, which should be approached with great caution, then, also, my opinion is that such portions should be attacked, under the conditions hereafter to be named. When, on the other hand, the substance is hard, and exhibits no marked prominence of contour, characters usually found to be associated, no such attempt should be made; a small portion may be easily removed for microscopic examination, and that should be done.

But now comes an important consideration, which should be disposed of before any interference with the tumour takes place from the perineal opening.

The survey of the vesical cavity being complete, the operator has to determine the following question. Am I capable of completing my design of removing the tumour before me wholly or partially, as the case may be, through the incision made, or should I do so more efficiently through a suprapubic opening? For, it is granted that a case may occur in which the latter course may be preferable, and, if so, there is no reason whatever for not selecting it. The perineal incision made will not add to the risks of the case, and it has afforded that most important element, the means of obtaining an exact diagnosis.

Now I may here say, that my proposal to remove vesical tumours by perineal urethrotomy has met with a direct challenge in Paris from my friend Professor Guyon and his school, who say that the suprapubic operation should be invariably employed for the purpose, and the perineal operation never. There can, I suppose, be no hesitation in anyone's mind that the high operation is a much more formidable and hazardous proceeding than the *boutonnière.* Why, then, should the former be practised in any case until absolute certainty is attained, not only that tumour is present, but also that it is removable by operation? Now it is only in a moderate proportion of suspected cases, say, perhaps, in two-thirds of them, that the presence of tumour can be regarded as strongly probable; in very few, indeed, can it be stated with certainty until the finger has entered the bladder. In no single case can the surgeon ascertain whether or not the tumour in question is separable from the bladder until the cavity has been opened and the interior examined. Well, all these facts—first, the fact of the presence of tumour; secondly, its form and size; thirdly, the nature of its connections with the vesical structures—all the data necessary for determining the question of operation, can be attained by a slight urethral incision which involves no risk. What imprudence, then, can be greater than that of performing the high operation, with all its admitted risks, while the operator does not know for certain that a tumour is present; and while he knows that, if he do find one, the numerical chances are that the tumour, although thus completely approached and laid bare, cannot be entirely removed without inflicting fatal injury on the patient; since in one half the cases the tumours are not completely removable?

Further, I declare that, while the *boutonnière* enables the surgeon to ascertain all the facts which it is necessary to obtain before operating, it also enables him to remove the tumour without difficulty, when it is polypoid in form, and therefore capable of being removed with a fair amount of ease and safety. If, however, he believe—and he is then in a position to determine the question—that he can attain a better result in any particular case by the high operation, there is nothing whatever to prevent his performing it. In one, or at most two, of my early cases, I might perhaps have so operated with advantage. I should probably do so now on again encountering similar conditions; but in all the remaining cases the risk to the patient would have been greatly increased by performing the high operation, and I should have acquired no facility for removing his tumour beyond that which external urethrotomy afforded me.

We shall now consider the means which it is desirable to employ in order to remove the tumour, when, having examined it fully, we have decided to make an attempt through the perineal opening. First, if we have the good fortune to encounter a single growth, with a pedicle of no great width, it is only necessary to introduce a pair of forceps into the bladder, and employ them there without aid from the operator's finger. The forceps should have serrated margins, so as to crush, but without power to cut, the tissues seized. When the blades are free in the cavity, they have merely to be opened easily and widely, and, on closing them, it is almost certain that they will grasp the polypus more or less completely. But let it be observed that no suprapubic pressure should be made during this act; nothing should be done to interfere with the natural contour of the bladder. The operator, by light and easy movements of the forceps in varied directions, ascertains that he has the growth within their grasp. My advice is that, above all things, he is not now to pull forcibly, but that he is to press firmly the blades together, biting or chewing a little, if I may use the terms, without changing the original situation of the bite or grasp. Then a little twisting movement may help to disengage the mass, and if this be accomplished, the forceps may be withdrawn with their contents; after which the finger enters to feel what remains, and what more must be done in order to complete the removal. But, supposing that the tumour has not been separated by the moderate amount of forceps-action described, the operator should remove them; when, on introducing the finger, he will probably find the part so nearly severed that the actual division may be completed with the finger-nail; or with one of the little serrated instruments which I have designed for the purpose, and for the employment of which there is ample room through the urethral wound, by the side of the index-finger. There is no difficulty or risk, with ordinary care, in removing a growth of pedunculated form, sufficiently close to the walls of the bladder to render the operation a permanently successful one. I suppose that the ultimate result of dividing the pedicle of a tumour in the manner described is such a cicatrisation of the wound as to prevent the recurrence of outgrowth from that spot hereafter.

But other means may be used, according to the judgment of the surgeon. A very small *écraseur*, with violin-string ligature, may be manipulated by the side of the index-finger, and used in polypoid forms of tumour. In the cases of women, such a tumour may sometimes be slowly and carefully brought into view by traction on the forceps, and then the pedicle may be ligatured. I have succeeded in doing this in one case; so has Mr. Bryant. In another, I drew a polypoid mass within view, and found it was a completely encysted calculus; I then opened the mass, when the calculus escaped.

But when the growth takes a more complex form, and several rounded lobes spring from a wider base, the forceps must be depended upon for removing them by repetitions of the same process which is employed for the single growth. When the base is wider still, and the growth is less prominent, it is doubtful if complete extirpation is possible by any proceeding, whether through a perineal or through a suprapubic opening. The wide base involves such intimate continuity of tissue between the coats of the bladder and the structures of the growth, that I believe separation to be mostly impossible, and that ablation of the prominent portions of the growth, when feasible, should be undertaken only with the view of retarding its progress, but with no prospect of effecting complete separation of the disease from the body.

These portions are to be seized and destroyed on the plan described, partly by crushing, and thus inducing sphacelus in the growth. I am sure that the resulting cicatrisation powerfully checks reproduction in some circumstances. The question arises in such cases, of applying some chemical astringent, as a solution of the perchloride of iron, which may check the hæmorrhage, which is mostly free, and may partially destroy the portion which remains after the forceps have done their work.

There is one circumstance important to be noted, especially in dealing with the less prominent growths; and that is, the effect of strong suprapubic pressure made by an assistant, in relation to their mode of presentation to the finger of the operator engaged in exploring the bladder, and in estimating their size and form. If that pressure be considerable, it forces the upper wall of the bladder into its own cavity, and thus makes them apparently salient to a greater extent than they really are. Thus an eager or inexperienced operator, unaware of the effect of suprapubic pressure, might be led to seize the mass thus offered to the forceps through the influence of this pressure, and, under the belief that it was a large growth, he might inflict a fatal wound by crushing a double fold of the coats of the bladder, and so making an opening in the peritoneum. To avoid such a catastrophe, it is only necessary, first, to decline the attempt to destroy any growth which is clearly not sufficiently salient to allow complete, or nearly complete, removal; and, secondly, never to employ the forceps while forcible suprapubic pressure is made; at least, to make no more pressure than is desirable just to steady and support the bladder and the parts adjacent.

We have now, finally, to consider what are the results which have been attained by the perineal operation in relation to vesical tumours.

Of the twenty cases of tumour, two were in women. One of these died in three days of total suppression of urine; necropsy showing advanced disease of the kidneys (one contained a large calculus), and that no injury was inflicted upon the bladder. The other is now in excellent health, having entirely lost her painful symptoms; observing a few drops of blood, occasionally, after more exercise than usual; more than two years have elapsed since the operation.

Of the eighteen male cases, five died within three weeks after the operation; three others died at periods of some months afterwards, two of them from malignant disease developed elsewhere. The other nine are living; on one of these, from whom I removed a tumour in the autumn of 1882, I operated again, removing a larger growth than the original one last February, and he has again recovered. In four cases, no attempt was made to remove the tumour, it being manifestly impossible to do so, but only to diminish it as far as practicable with safety; all these recovered well, and two of them are better than before. Of the remaining four, one has had no return whatever, four years having elapsed since the operation; a second has slight signs of a return, one year and a quarter since operation, but works hard for his living at 64 years of age; a third, who, like the last, was at death's door from loss of blood when I operated, has greatly improved, and is actively employed, but has recently shown some disposition to bleed after exercise, nearly a year since operation. The fourth was greatly improved, and returned to the active life for which he was before disqualified. The others have too recently been operated on to furnish any material fact to be reported.

To sum up. For every one of these cases of tumour, in the natural order of events, one result only was possible. Left without surgical aid, death inevitably awaited each; a fate not merely certain, but necessarily involving protracted suffering. Whatever surgery can accomplish in the way of saving life in many of these cases, is therefore so much clear gain. I am thus satisfied with the result of the first twenty cases. I could have heartily desired greater success; and I have reason to expect that it will be greater in the next twenty cases, as I have acquired experience valuable to myself, and which I have thus attempted, so far as in me lay, to make useful also to others.

DEATH OF DR. BISHOP.—The death of Dr. Thomas Bishop, a leading member of the English community in Paris, is announced. He was an M.D. of Aberdeen, F.R.C.P. London, and M.R.C.S. Eng. He had been for several years in failing health, suffering from emphysema and valvular disease of the heart; but he died more suddenly than might have been expected on June 23rd, when reading a newspaper. He was a great benefactor to all charitable associations for aiding poor British subjects in Paris. Dr. Bishop was brother-in-law to Sir Stafford Northcote. His remains will be buried at Torquay, where he possessed a house, in which he dwelt during his summer holidays.

DONATIONS AND BEQUESTS.—Mr. John D. Allcroft has given £1,000 towards the new wing of St. Mary's Hospital, out of a sum left at his disposal by the late Mr. W. Yarworth Jones.—Miss [illegible], the founder of the Isle of Wight Convalescent Home, Ryde, has given £1,000 further, making altogether £[illegible], to the endowment fund.—The Earl of Sandwich has bequeathed £[illegible] to the Huntingdon County Hospital, and £[illegible] to the [illegible] County Hospital.—Mrs. [illegible], of [illegible], has bequeathed £[illegible] and one-third of the "residue" of her estate to the York Lunatic Asylum.—The Worcester Infirmary has [illegible], under the will of Miss Mary [illegible], of [illegible].

AN ADDRESS
ON PNEUMONIA.

Delivered before the Birmingham and Midland Counties Branch.

By I. BURNEY YEO, M.D., F.R.C.P.,
Physician to King's College Hospital.

Mr. President and Gentlemen,—When I was asked to give an address for the purpose of opening a discussion on pneumonia before this, one of the oldest and most influential Branches of the British Medical Association, I could not but be sensible that, amongst the many distinguished members of this Branch, and especially among the eminent men who represent our profession in this important town, there were many who were better qualified to perform this task than I am. And if, for a moment, I hesitated to accept your invitation, it was for this reason alone, and not from any lack of interest in the extremely important subject you have selected for discussion.

The pathology, and still more the treatment, of pneumonia, have always been debatable subjects; and it is of undoubted advantage that the fruits of progressive research and recent additions to our knowledge should, from time to time, be submitted to such examination and scrutiny as wise and temperate discussion affords.

This was never so true as at the present time. For no one can doubt that the keen and searching spirit of positive experimental inquiry which animates the pathology of our day is destined to greatly modify our conceptions as to the nature of disease in many of its forms; that we shall have to break (if we have not already done so) with the traditions and dogmas of the past, so far as they act as fetters to free inquiry and supporters of contented routine; that much of our vague terminology and many of our hypothetical doctrines are about to disappear; and that we are drawing nearer and nearer to a knowledge of the nature of many of the most widely spread and gravest maladies, truer and more precise than any we have hitherto possessed.

This active spirit of positive experimental inquiry, as applied to pathology, bids fair, I believe, to make our present era one of the most remarkable and one of the most illustrious in the history of medicine.

The mistaken attempt to base a rational pathology exclusively on morbid anatomy, upon the anatomical analysis of morbid changes, has been pushed, perhaps, to its extreme limits; and, without wishing to detract from the value of the immense stores of information it has accumulated, it must be admitted to have failed to contribute to our knowledge of disease in a degree at all adequate to the labours it has involved. It has not inaptly been compared to searching for the causes of a conflagration amongst the ashes and ruins it has left. Yet pulmonary pathology must ever remain deeply indebted to these anatomical studies, and, in particular, for having enabled us to distinguish between many forms of pulmonary consolidation and infiltration, which we could not otherwise have accurately distinguished.

But it is with the results of experimental inquiries in connection with pneumonia that we are now especially concerned. With the application of that method to the study of pneumonia, we have entered upon a new phase in the pathological history of that malady, and it becomes necessary that we should ask ourselves, whether the conceptions that have hitherto prevailed as to the nature of that disease are correct or erroneous. It is a subject of the widest and most general interest, and one which has, I think, been wisely selected by this Association for the purpose of collective investigation, and by this important Branch for immediate discussion.

It may be well if, in the first place, I endeavour to set precise and definite limits to the subject-matter of our inquiry. The subject we propose to examine is acute lobar pneumonia, the so-called croupous pneumonia of German authors. We are not now concerned with other forms of pulmonary consolidation and infiltration; we are not concerned with lobular pneumonia, or with chronic pneumonia, or with the forms so-called secondary pneumonia which arise in the course of many acute and chronic maladies, and with regard to which it has been well said, that most of them "do not belong to the category of true pneumonia, but are either local inflammations, caused by some abnormal state which the pre-existing disease has induced, or conditions of hyperæmia and collapse, in which an inflammatory process plays but little part" (T. H. Green). We do not, of course, exclude cases of intercurrent pneumonia, *i.e.*, cases of true lobar pneumonia, attacking independently a person who may already be the subject of existing disease.

So, also, with respect to the consideration of acute pneumonia itself there are certain points on which it would be quite superfluous to enter before an assembly like this. I do not, therefore, propose to discuss either its clinical course, its symptoms, its physical signs, or its morbid anatomy. I propose to limit my observations exclusively to its pathological nature, its etiology, and its treatment.

Pathological Nature.—It will be best, perhaps, that I should state at once what is the latest assertion that has been made on this head, and the grounds upon which it is based. It has recently been asserted that acute croupous pneumonia is a parasitic disease, and that it is caused by the entrance into the body of a peculiar and characteristic micro-organism.

In order to establish the fact that a given disease is due to the presence of micro-organisms, it is held to be necessary—

1. That an organism of definite form and characteristics shall always be found in the blood, or in the diseased organs;
2. That the blood, or the diseased tissue, when introduced into another animal of the same species, shall produce the same disease;
3. That, when the blood or diseased tissue is inoculated on a suitable soil outside the body, the micro-organisms contained therein shall grow and be propagated indefinitely on similar soil;
4. That the organism thus separated from the remains of the material in which it was imbedded, thus isolated, when inoculated into a healthy animal, shall reproduce the same disease, and the same organisms shall reappear in the diseased parts.

It is maintained that, in pneumonia, as in anthrax, in septicæmia of the mouse, in erysipelas, in tuberculosis, and in glanders, all the conditions required to establish the fact that a given disease is due to the presence of a micro-organism have been fulfilled. I will endeavour to set before you, as briefly as possible, the history of this discovery.

So long ago as 1875, Klebs asserted that pneumonia was a parasitic disease, and that he had found, after death, in a case of this disease, a peculiar micro-organism, which he termed *monas pulmonale.* He found it in the contents of the bronchi, in the hepatised lung, and in the fluid of the ventricles of the brain. Eberth was the next to describe a micro-organism in pneumonia, which he had observed in a case complicated with meningitis. Subsequently, Koch stated that he had found a similar organism in the pulmonary and renal capillaries in a case of pneumonia. But Friedländer has the credit of first accurately distinguishing this organism, and describing its specific form and characteristics. He found these typical micrococci in eight cases of croupous pneumonia, which he examined after death. He found them in the alveolar infiltration, amongst the leucocytes and red blood-corpuscles; and some of the lymphatic spaces on the surface of the lung were so stuffed and bulged with these micrococci, that they were visible to the naked eye. Günther, of Berlin, found the characteristic organisms in some fluid he withdrew from the chest of a moribund patient. Leyden, of Berlin, contrived, by means of a hypodermic syringe, to withdraw a few drops of blood from the lung of a pneumonic patient, thirty-six hours before death; the puncture was made just below the scapula. The blood was examined by the dry method, and, after staining with methyl-blue, the organism was seen in the most characteristic form, as described by Koch and Friedländer.

It may be remarked that there is much difficulty in obtaining fluid from the lung by this method, and that Leyden attempted it in several other cases, with negative results; and now that the organism has been found in the expectoration, it is no longer needful.

These organisms—specimens of which, by the curtesy of Dr. Dreschfeld, I am able to show you—as described by Dr. Friedländer, are micrococci of elliptical form, one micro-millimètre in length, and one-third less in breadth. They occur connected together in pairs, as diplococci, and frequently they form longer chains; but these chains are distinctly seen to be made up of a series of pairs—a series of diplococci. They are characterised and distinguished from other micro-organisms found in the body by being surrounded by a capsule, which is thought by Friedländer to consist of mucin. The capsules, however, are not always present, and are not easily demonstrated. They are thought to be a product of the life of the micrococcus.

A similar organism, only a little larger, has been found by Kobner of Berlin in the lungs of cattle in an epidemic of bovine pleuro-pneumonia; and it has also been found in the lungs of horses similarly affected. Leyden states that there is a certain analogy between the micro-organism of pneumonia and that of erysipelas. Several observers have succeeded in making pure cultivations of this organism. It has been cultivated in gelatinised meat-infusion, and on potato.

In the gelatinised meat-infusion, this micrococcus grows in a peculiar manner. It grows partly on the surface, and partly downwards into the gelatine; so that it has the form and appearance of a pin, with the head on the surface. On potatoes, it grows in the form of small grey drops; and, if again inoculated on the gelatine, it again grows in the form of a pin. When cultivated in this manner, these micrococci are oval or elliptical, and resemble precisely those found in the lung; but they have no capsules.

I need not describe in detail the steps necessary to obtain a pure cultivation—*i.e.*, a cultivation of this particular organism, apart from others with which it may be found associated. I may, however, call attention to the extreme importance of these details, and to the necessity, on that account, of leaving these cultivations, for the present, in the hands of experts.

An interesting communication on the Pathogenesis of Pneumonia, by Dr. Giles, appeared last year in the BRITISH MEDICAL JOURNAL; but he does not appear to have followed the method prescribed by Koch and others in his attempts at cultivation; and, as he cultivated from sputum, which is generally crowded with other organisms (I have seen four or five different organisms in the same specimen of pneumonic sputum), it is certain he must have operated with other than pure cultivations. Moreover, the organism he describes differs altogether in its characters from that of Friedländer and others. He found, also, his cultivated organism fatal to rabbits; whereas the pure pneumonia-micrococcus does not affect these animals. Further, it has been shown that the saliva of healthy men sometimes contains an organism which is fatal to rabbits. These facts show how necessary it is to be extremely cautious in working with cultivated micro-organisms.

The pure organism obtained by Friedländer and others by cultivation has been introduced into the bodies of animals, usually mixed with distilled water, and injected into the pleural cavity. On nine rabbits it produced no effect; but it proved fatal to thirty-two mice in from eighteen to twenty hours. The organism was found in enormous numbers in the engorged and hepatised lung, in the blood, in the spleen, and in the fluid of the pleura. In the latter situation, the diplococci were encapsulated. When the same fluid was heated so as to destroy the organism, its injection produced no effect. Cultivations from these mice produced the same effect on other mice. Guinea-pigs were less sensitive; out of eleven, in six only was pneumonia produced. Of five dogs so treated, only one died; that one had typical pneumonia and pleurisy; the other four showed only a slight rise of temperature and temporary indisposition.

An attempt was also made to introduce the organism into the lungs of mice by inhalation, the fluid containing the micrococci being diffused by a hand-spray into their cage. In this experiment, some mice were affected, some were not. In the case of the latter, it is suggested that but little of the fluid entered the lungs, as they turned their backs to the spray. But there is another consideration which has been somewhat overlooked in connection with the inhalation of pathogenic organisms, and to which I may take this opportunity of calling attention. It is that, under normal conditions, the suspended solid particles in the atmosphere, taken in with the inspired air, are cast out with the expired air. The mucus of the buccal and pharyngeal mucous membrane is crowded with micro-organisms, but these the ciliated epithelium of the air-tubes keeps from reaching the air-cells; and they, probably, penetrate but a short distance into the air-passages with the tidal air. This was well shown in a case of empyema communicating with the lung, which was under my own and Sir Joseph Lister's care, in King's College Hospital, last year; for though there was an opening in the lung permitting the periodical ejection of large quantities of pus, the pus in the pleural cavity remained perfectly sweet, and quite free from putrefactive organisms, which was, no doubt, due to this protective office of the bronchial ciliated epithelium.

It has, no doubt, been a difficulty with many, in the way of accepting the view that diseases like phthisis and pneumonia are dependent on the inhalation from the air of special pathogenic organisms, that so many escape infection who must, it would seem, occasionally inhale these bodies.

But, apart from the consideration that the causes of these diseases are complex, and cannot consist of a single factor, we must give due weight to the very obvious reflection I have just stated; namely, that in the respiration of most healthy persons, whatever solid particles floating in the air pass into the lung in inspiration, pass out of it in expiration; that the air ordinarily exchanged in respiration is the tidal air, not the air of the air-cells; and that whatever organisms may penetrate beyond the limits of the tidal air into the air-passages, are arrested and driven back by the action of healthy bronchial ciliated epithelium.

Now it is possible that one of the factors in the causation of these diseases may be, for instance, a temporary or permanent paralysis of the ciliated epithelium, or a denudation of this protection from a portion of the air-passages; or some abnormal condition of the mucous secretion may either, on the one hand, paralyse these cilia, or, on the other, stimulate these germs to overwhelming multiplication. When we consider that the bacillus which causes septicæmia in the house-mouse is unable to produce any deleterious effect in the field-mouse, we must be struck with the very special nature of the conditions which determine the growth and activity of these organisms.

Considerations such as these dispose also of some of the objections that have been made, especially by Purjesz of Klausenberg, to Friedländer's view with regard to the organism which he has named the pneumonia-micrococcus. Purjesz says he has found it in the sputa of persons wholly free from pneumonia. But, assuming he has been correct in his recognition of the organism, it would seem that this must, necessarily, be sometimes the case, unless we were to maintain that every person who inhales this particular organism must have pneumonia, a proposition which no one hitherto has been so rash or so foolish as to make. With regard to the other objection made by Purjesz—that he has examined the sputa of many cases of croupous pneumonia and not found this organism—to this it might be replied that it is admittedly very difficult to find these organisms in the sputum, especially in mild cases, owing to the presence in large numbers of other organisms which may conceal its presence, and that the evidence of one isolated observer, when it is in opposition to that of many others, can never have much weight.

But a remarkable confirmation of Friedländer's observations is contained in an article by Dr. Rudolf Emmerich, of Munich, in the *Fortschritte der Medecin* of March last. The medical officer of the prison for men at Amberg had been struck by the recurrence, year by year, since 1857, of a considerable number of cases of pneumonia amongst the prisoners, which occasionally assumed an epidemic character. In the year 1870 there had been as many as 66 cases; and the last outbreak, in 1880, was a very malignant one, and lasted from January to the middle of June, during which there had been 161 cases, of which 46 had proved fatal. After weighing every probable cause, he was led to believe that the true cause would be found in the dormitories, for they were all attacked there, and in varying proportions from 4.7 to 25.5 per cent. He therefore concluded that the cause of the disease was more active in some of the dormitories than in others. After much reflection and examination, it occurred to him that the material which was used to fill up the space between the floors and the ceiling might be a possible breeding-place for a pathogenic organism. Some of this stuffing, consisting of a mixture of sand and mortar, was removed and sent to Emmerich for examination. It was examined chemically, and also by Koch's method of culture, for micro-organisms. Without entering into details, I may say that Emmerich observed, amongst other organisms which he obtained by cultivation of this material, what he regarded and spoke of as a peculiar pathogenic micro-organism; but he had not at that time seen Friedländer's description of the encapsulated pneumonia-micrococcus. When, however, some months afterwards, he became acquainted with Friedländer's paper and drawings, he at once recognised the pneumonia-micrococcus as the same in every respect as the peculiar organism he had found in the stuffing from the prison floors.

In his former observations he had not been working with pure cultivations, but he now set to work with more of the same material, and by following the necessary details, obtained pure cultivations of an organism resembling in every respect, in its form and size, and in its behaviour when injected into animals, that described by Friedländer. In this manner it was proved that the material found stuffing the space between the floor and ceiling of the dormitories of the prison, where epidemic pneumonia had so long been, as it were, domiciled, was crowded with enormous masses of the peculiar organism which has been stated to be pathogenic of pneumonia.

I have received a letter from Dr. Dreschfeld, of Manchester, referring to some very important and interesting observations which he has been able to carry out in connection with a peculiar form of pneumonia now, or lately, prevalent in Manchester; a specimen from one of these cases he has been good enough to send with the three others before you. I am sorry his letter reached me too late to embody its contents in this address. But I may, perhaps, have an opportunity of alluding to it again in the discussion; at any rate, I am glad to know that his cases will be published, and will form a most valuable contribution to the subject of the etiology of pneumonia.

The observations I have thus briefly brought under your notice, naturally lend great weight to a view of the pathological nature of certain forms of pneumonia, which is by no means new; for many writers in this and in other countries have expressed a suspicion that pneumonia sometimes occurs as an infective and contagious malady, and numerous instances of its epidemic occurrence are on record; while many, who would be unwilling to admit its infectious or contagious nature, are convinced of its occasional occurrence in what is called a "pythogenic" form.

I should like to call your attention to a few of what appear to me to be the most instructive instances on record of the supposed epidemic occurrence of pneumonia, and its supposed propagation by contagion. And I will first refer to an account, given by Stokes, of an outbreak of what he terms "asthenic pneumonia," in Dublin, the cases presenting so marked a typhoid character that he was evidently doubtful whether he was right in calling them cases of pneumonia, though the early occurrence of pulmonary consolidation was undoubted; but the clinical thermometer had not then come into use, and he was without that means of diagnosis. He says: "The occurrence of this disease, as affecting great numbers in a particular locality, was observed in this city some years since. The persons attacked were young and healthy men, privates in the constabulary force, who were quartered in the then newly erected barracks in the Phœnix Park; these young men were well fed and clothed, and might be considered as possessing the greatest strength and vigour. It is a remarkable circumstance that, at the time of the appearance of this disease, many cases of another and extraordinary affection were observed in the poor-houses and hospitals in and near Dublin. I allude to cerebral spinal arachnitis, and it is important to mention that several cases of this disease occurred in the force contemporaneously with those of pneumonia. The general characters of the pneumonia were suddenness of invasion, and great rapidity of progress; the lung rapidly passing into hepatisation."[1]

Another interesting account of an epidemic of pneumonia is given by Surgeon-Major Costello, of the Bengal Medical Department. On joining the 1st Punjab Infantry, at the end of March 1875, he found a state of alarm there, on account of the number of deaths that had taken place from pneumonia; at a time, too, when the temperature was warm and equable. The regiment had lost from 30 to 40 men, out of 550, in a few weeks. It was almost confined to two companies; and, when it appeared amongst the married, it spread to different members of the family; and, when cases were taken into hospital, it spread to other patients, ill of other diseases, and to the nurses and attendants. There was always a catching pain in the side, the infiltration spread rapidly through the lungs, and was attended with "typhoid" symptoms. Removal from barracks to tents, isolation of affected persons and their attendants, immediately arrested the progress of the disease. The 3rd Punjab Infantry lost 60 men from a similar outbreak. He believed it was caused by marching through districts known to be affected with bovine pleuro-pneumonia. (*Lancet*, January 29th, 1881.)

But to come nearer home; a very remarkable series of cases, pointing to direct contagion, have been recorded by Mr. Patchett of Shaw, near Oldham (*Lancet*, February 25th, 1882). A whole family of five persons died, one after the other, in less than a fortnight, of typical and uncomplicated pneumonia. Four brothers and a sister, all unmarried, lived together on a farm, where they had resided all their lives, which was well and healthily situated on a steep hill-side, and was in excellent sanitary condition. There was no suspicion of septic influence. The previous health of all the family had been exceptionally good.

The first case seen was on January 13th, 1876, the eldest brother, aged 73; he died on the 16th, after an illness of six days, with pneumonia of the right lung. The day of his death, another brother, aged 66, was found also to have right-sided pneumonia, which extended to the left lung; and he died in three days, on the 19th. On the morning of January 20th, a third brother, aged 63, who was quite well and at work the day before, was found with signs of pneumonia at both bases. On the evening of the same day, a fourth brother, aged 64, felt shivery and cold on going to bed; the next morning he had double pneumonia, and both died on the evening of the 22nd. The sister, aged 61, who had been in attendance on all the brothers, and appeared to keep up her health and strength remarkably well, was seized on the 23rd with right pneumonia, and died on the 26th.

This is, surely, a very remarkable record; but there is another, scarcely less so, by Dr. F. H. Daly, of Hackney Downs (*Lancet*, November 12th, 1881.)

In October, 1879, there occurred in the same house, and within a few days, four [illegible] cases of pneumonia; and these followed an illness in another child, who had not been previously examined by Dr. Daly, but who was now found to show signs of recent lung-consolidation; so that there were five members of this family, four children and the mother, who nursed them. The mother died, and the grandmother, a healthy woman, 60 years of age, who came to nurse her daughter, fell ill of pneumonia, and also died. There was no question here of unsanitary conditions—no overcrowding, or bad ventilation, or bad drains; there had been no chill, and no prolonged exposure. The husband and three servants, who were but little in the sick-room, escaped. "My cases," Dr. Daly remarks, "exactly resembled, in their mode of attack, case following case, and progress, some zymotic disease, contagious from one patient to another."

Several instances of the apparent communication of pneumonia from person to person have been reported to the Collective Investigation Pneumonia Subcommittee, and these will be duly set forth in our final report.

Many instances, from the time of Courvoisier, Laënnec, and even earlier, are also on record of the epidemic occurrence of pneumonia; cases of pneumonia occurring together in groups, larger or smaller, and in which the suspicion of spread by contagion has not been altogether absent. These instances appear to have occurred independently of any common meteorological conditions, but they have, in many cases, appeared to be in some way connected with local unsanitary surroundings. A good example of the latter is the account given by Penkert (*Berliner Klinische Wochenschrift*, 1881, Nos. 40, 41) of an outbreak of croupous pneumonia in a village of 700 inhabitants, 42 of whom were attacked, and 2 died, between March 11th and May 14th, 1881. The village consisted of one street, running down the side of a hill, at the bottom of which was the school-house, and opposite this the new cemetery; below, and at the lowest level of the village, was a small pond. The first cases occurred in children going to this school, which was so placed as to receive the emanations from this pond in a straight line. There was, at the same time, a rise of subsoil-water on account of previous heavy rains, as well as a considerable rise of temperature, which had previously been very low. There was also a north-west wind, which blew from the pond towards the school and other buildings. Penkert thought he could trace direct contagion in twenty-eight cases, and indirect, by the agency of an intermediate person, in four.

The occurrence of four such epidemics is mentioned in the Provisional Report on Pneumonia in the *Collective Investigation Record*. One occurred at Holmwood, in Surrey, and is reported by Mr. E. L. Jacob; one at Long Handborough, by Dr. Gilbert Child (a very interesting report); and one by Dr. Gooch, of Eton. In the latter only was the outbreak supposed to be distinctly traceable to defective drainage and sewer-gas poisoning. Other similar instances will no doubt be classified and analysed in the forthcoming final report.

I must not omit to draw your attention to a very interesting, and I think important, communication on an epidemic of pneumonia, by Dr. Bruce, of Dingwall, N.B. (BRITISH MEDICAL JOURNAL, August 11th, 1883). He records sixteen cases occurring between May 12th and July 3rd, with three deaths; and divides them into three groups of eight, four, and two; the other cases were scattered. As to its origin, he observes: "With some minds, the facts as detailed will doubtless lead to the conclusion that the theory of infection of specific germs will alone account for the peculiar outbreak; whilst others will look to an epidemic influence. Certainly, the weather was excessively cold, ungenial, and dry, with nightly frosts, about the time the disease prevailed most largely. On the other hand, I heard of some cases some miles away from this district before I saw it myself; and it will be observed that some of the cases occurred later (in June and July), when the weather was seasonably warm. Again, there were three sets of cases, occurring in groups of three each, and one set of two—a very remarkable set—which are very difficult to explain on any other theory than that of direct infection."

In the same number of the BRITISH MEDICAL JOURNAL is an interesting account of a small epidemic observed by Mr. Raven, of Broadstairs, and which he believed to be traceable to a distinct "pythogenic" cause. The points of special interest in his cases were, he considers, "the absence of typhoid symptoms, and the delay that occurred between the onset of the fever and the development of the lung affection."

You are doubtless aware that the question has been raised, whether these so-called epidemics of pneumonia may not be, in some instances, cases of typhoid fever, with early development of lung-consolidation; and this is a question which may well be inquired into in our discussion. This suspicion occurred to Stokes, in the epidemic of "asthenic pneumonia" recorded by him, and he points out the distinguishing characters which appear to him to separate these cases from typhus fever. It has also been observed that epidemics of pneumonia succeed epidemics of typhoid fever, and epidemics of typhoid succeed epidemics of pneumonia; and it would seem that the presence of putrescent matter is favourable to the culture of both germs (Alison, *Archiv. Générales de Médecine*, September and October 1883).

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[1] Stokes on *Diseases of the Chest*. Sydenham Society's edition, p. 303.

In an epidemic observed by Kühn (*Deutsch. Arch. für Klin. Medicin*, 1878, Band xxi; *Berlin. Klin. Wochenschr.*, 1879), at Moringen, in Hanover, the approximation to typhoid in some of the cases was well marked. The cases occurred in an overcrowded prison; thirty-three cases were observed in one epidemic, and seventy in another. They differed from those of typical pneumonia—there was no initial rigor, and the onset was gradual; the intestinal follicles were sometimes found swollen, and diarrhœa was present in two-thirds of the cases. It was distinctly infectious, and spread to the attendants.

The cases also observed by Dr. Giles, in the Punjab, appear to differ from the typical form of acute pneumonia, as seen in isolated cases in this country. He says, "a large number of cases, while running the same course, as to pyrexia and general symptoms, as seen in the typical acute pneumonia of Europe, are yet, as to physical signs, instances rather of lobular than of acute croupous pneumonia. The cases often run a very rapid course, and death sometimes occurs in twelve hours, with signs of pulmonary engorgement, but no pronounced dulness; and, on examination after death, only deep congestion of lungs, and often extensive pulmonary apoplexy are found."

I have here brought before you but a small fragment of the mass of observations which are on record, and upon which is based the view that pneumonia is an infective disease dependent on the presence of a specific pathogenic organism in the body; and that, under certain somewhat rare circumstances of time, place, or season, it may spread by direct and indirect contagion.

I have thought it best to bring this view of the nature of pneumonia before you, first of all, in order that we may the better be able to compare it with the older and more generally accepted views as to the nature of this disease, and see how it is related to them. Probably the most widely accepted view of the nature of pneumonia is, that it is a typical local inflammation, produced by exposure to cold, and that the accompanying pyrexia is merely symptomatic of the local lesion.

Another view, which, if not quite so widely accepted as the preceding, is certainly quite as authoritatively maintained, is that acute pneumonia is a general disease, and the lung-inflammation is simply the chief local lesion. The inflammatory process in the lung is the local effect of a general cause. The usual arguments in support of the latter view are these. In well marked cases, the fever does not run parallel with the physical signs of pulmonary inflammation. It frequently precedes them by a considerable interval. It does not coincide with them in degree or duration. High fever often accompanies a small tract of inflammation when it is situated at the apex of a lung instead of at the base. The fever often suddenly subsides long before the local signs show a corresponding improvement in the lung. Moreover, it resembles the specific fevers in its typical course—the rapid onset, the sudden defervescence. Finally, the anatomical changes in the lung are not such as can be produced by artificial injury of that organ.

It is interesting to look back just a quarter of a century, and see how such a philosophically minded physician as was the late Dr. Edmund Parkes, felt exercised in presence of these two views as to the nature of pneumonia;[2] and, with less perfect light than we now possess, how difficult he found it to decide which view is the right one; though he clearly seems to lean towards the latter. After alluding to the view "that the lung-disease is not a primary but a secondary condition, and that it succeeds to and brings to an end, by purifying the blood, a condition of general pyrexia, arising from blood-disease," he adds, "without believing that this relation is quite determined (if it were determined, the case would be settled), there is no doubt that the fever ends spontaneously, or very greatly lessens, at the time when the inflammation of the lung is very great." "The weak points" he continues, "in this hypothesis, are the want of definite indication of the blood-disease, and of its mode of production." These are weak points no longer since Friedländer's discovery. "Its strong points are the explanation it gives of the previous malaise; of the sudden outburst of fever, when the diseased blood, at last, implicates the nervous system; of the singular and rapid termination of the pyrexia at a time when the lung-lesion is yet intense; and of the enormous elimination of urea during the very first days, before the lung-consolidation has softened down."

Then he goes on to state the arguments in favour of the first view. "The lung-symptoms are remarkably early in manifestation, though though they may not be very intense. Pain in the side, and cough, are very soon present, and sometimes occur even before the shivering and headache. The pyrexia, although great in the early days, is perhaps not greater than might have been produced by the condition of the lung; and as to the termination of the fever, this may be supposed to occur because the really truly febrile stage of the pneumonia is not the period of complete exudation, but the preceding period of intense hyperæmia. To say that the pyrexia is gone, when the lung-lesion is yet most intense, may be an incorrect expression of the fact; the consolidation may possibly, indeed, be most intense, but this may be merely the natural termination of that enormous hyperæmia and blockage of vessels from local changes of nutrition, which is in reality the essential disease. The difference between the two hypotheses would be this: the fever ends spontaneously; first, because the blood is purified; or secondly, because the local disease ends spontaneously; *i.e.*, the active febrile-making local disease. This last assumption, however," he adds, "is decidedly a very bold and hazardous one." Having thus stated the two views, and the arguments in support of both, with characteristic fairness and impartiality, he adds—"Between these two views it is not very easy, nor perhaps is it desirable yet, to choose, for the blood has not yet been sufficiently examined." This was five-and-twenty years ago. Had Parkes been alive now, no one, I feel sure, would have taken a greater interest in the recent experimental inquiries into the nature of pneumonia than he would have done.

Of these two views, it will be seen that the one is entirely opposed to the theory which regards pneumonia as a parasitic disease, infective, sometimes contagious, and not unfrequently epidemic; whereas the other view gains support from, and is quite consistent with, the belief in the parasitic nature of this disease. But there is yet another view which merits our attention, namely, that pneumonia is sometimes an inflammatory and purely local disease, and at other times an infective general disease. This view has been advocated by Mr. Wynter Blyth (*Lancet*, September 1878, p. 416). After alluding to some interesting cases of apparent communication of pneumonia mentioned to him by Dr. Christian Budd, of North Tawton, he says, "in all probability there are two forms of pneumonia; one probably arising from cold, or a like cause, the other zymotic; and these two forms are, at the present time, confused together, just as typhus and typhoid were. That such an epidemic form exists, infectious, zymotic, self-propagating, I feel in my own mind convinced."

I must own there appears to me to be much [illegible] in favour of this eclectic view. When we consider what diverse conditions are capable of setting up inflammation and consolidation of the lung; when we consider in what various morbid states secondary pneumonia occurs, it is surely not inconsistent to believe that primary pneumonia may arise from more than one exciting cause. But even if we admit that pneumonia is caused by exposure to cold, it does not necessarily follow that the chill acts directly on the lung; and it is still open to us to believe that the blood is primarily affected, just as it may be in acute rheumatism. But the prevailing want of symmetry in the lung-affection would seem to point to the [illegible] of some more strictly local influence.

Those, however, who maintain the unity of pneumonia—and so great an authority as Jürgensen is amongst the number, although, if I understand him aright, he would separate certain so-called typhoid forms as not croupous pneumonia at all, but only secondary lung-consolidation dependent on septicæmia—those advocates of the unity of pneumonia, notwithstanding the very varying degrees of intensity with which it appears in different periods, contend that these differences are due to the different degrees of activity or malignancy of the exciting cause, of the morbific germ, at different times and in different places: and they urge, in support of this view, that great changes in the virulency of various pathogenic organisms have been shown under cultivation; that well recognised infectious diseases, like scarlet fever, appear at different times with very varying degrees of virulency; that the organism characteristic of pneumonia has been found in mild as well as in severe cases; that an extreme virulency has been observed in cases which [illegible] examinations have shown to be cases of true croupous pneumonia. For instance, [illegible] reports a case that ended in eight hours from the initial [illegible]; and [illegible] two cases, one that of a vigorous man, aged [illegible], who died in thirty-four hours, and another case, [illegible] to him by [illegible], in which death occurred in twenty-four hours.

[illegible].—What I have already said with regard to the probable nature of pneumonia, leaves me little [illegible] with [illegible]. I have, necessarily, anticipated much of this part of the subject.

Most observers agree that pneumonia [illegible] with unsanitary conditions—that, in short, there is what has been named a "pythogenic" [illegible]. I [illegible] of the word "pythogenic" [illegible] question-begging epithet;" and medicine has too many such terms in common use. We understand, however, what it means, and may use it provisionally.

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[2] Clinical Lectures. *Medical Times and Gazette*, February [illegible].

[illegible]

But what is the real influence of exposure, of chill, as a cause of pneumonia? Is it simply a predisposing cause, or is it an exciting cause? That it has a causal relation of some sort to many cases of pneumonia, there seems to me to be no reason to doubt. I cannot, in an address of this kind, bring before you the various statistical statements that have been published for and against the view that exposure is a common cause of pneumonia. You will find them set forth in the elaborate articles on pneumonia in Ziemssen's *Cyclopœdia*, and in Reynolds's *System of Medicine*. That we have been in the habit of over-rating its influence, as a cause of pneumonia, is very possible. It is notorious that pneumonia often occurs during the prevalence of winds, especially the winds of spring; and not with winds from any particular quarter; for it is found to prevail with south-west winds as frequently as, or more so than, with east or north-east winds. Now, in this connection, we have rather overlooked the fact, that winds are carriers of dust as well as conveyers of cold (or rather, abstractors of heat); and that while, on the one hand, they carry away heat from the surface of the body, on the other hand, they gather up dust of all kinds, and blow all manner of micro-organisms into our air-passages. It has been noticed, again and again, that all depressing agencies may predispose to pneumonia, such as exhaustion from physical fatigue,[4] and depressing emotions; and it may be that exposure to a cold wind acts both as a predisposing cause, by the depression of the normal resisting power it produces by rapid abstraction of heat, and also as an exciting cause, by means of the micro-organisms it blows into our air-passages; especially if the view I have already suggested be correct, that a paralytic or subparalytic condition of the bronchial ciliated epithelium may in this way be induced.

A French writer whom I have already quoted found, in the analysis of eighty cases of pneumonia, that physical fatigue was apparently a predisposing cause in a great proportion of them; and I have heard it said that pneumonia occasionally occurs in boys of public schools after fatiguing games of football. It would be interesting to have further information on this point.

Treatment.—I have left myself little time to speak of the treatment of pneumonia, and what I have to say I must state very briefly. Personally, I am content to be what, in political language, is called "an opportunist," in the treatment of pneumonia. I believe in no special treatment; but I believe in a rational common sense management of individual cases. We most of us know that many cases of pneumonia simply require careful watching and nursing through their malady; and I have seen, in cases so treated, or rather managed, convalescence progress very rapidly. We most of us also know of other cases which tax severely all the resources of our art, and often baffle them all. I may say also, for my own part, I am entirely opposed to all lowering methods of treatment. I think they are counterindicated by the tendency to cardiac asthenia which the concomitant pyrexia induces, and also by the consideration that those cases that support lowering measures best are precisely those cases which do extremely well without any active interference.

There are, however, certain circumstances—certain accidents of the disease—the treatment of which requires careful consideration. These are:

1. *Excessive dyspnœa* from overwhelming pulmonary hyperæmia and œdema, in addition to the consolidation. This is the only indication I know of for bleeding in pneumonia, and its occurrence is exceedingly rare.

2. *Excessive pyrexia,* attended by delirium and danger of rapid cardiac exhaustion. Here the cautious application of cold to the surface (not in oversensitive nervous organisations, which, I venture to think, bear this treatment badly) may, I believe, be used with benefit, as advocated by Jurgensen; but I am very certain that we should select our patients very carefully for this mode of treatment. I am also inclined to think that we use quinine too little in pneumonia as an apyretic. Sulphurous acid will also undoubtedly reduce the temperature in some infectious diseases. Quinine, combined with sulphurous acid, merits more frequent use for this purpose in low typhoid forms of pneumonia. This medicine should be given from the commencement of the illness.

3. *Pain in the Side.*—I am in the habit of giving five-grain doses of Dover's powder every five or six hours, in the earliest stage of pneumonia, to relieve pain; and I find it has an excellent influence, not only directly in the relief of pain, but indirectly by relieving the distress and anxiety of the patient and procuring calm sleep, and so really sparing his strength, and protecting him against exhaustion later on. By relieving the pain in the side he is also enabled to make deeper inspirations, and so to make the best use he can of the breathing surface that is left free to him for aerating his blood. Chloroform-inhalation has been advocated by Oertel (*Respiratorische Therapie*) for the same purpose; and the late Sir James Simpson used to think highly of its use in pneumonia. The application of a few leeches over the seat of pain is also a valuable expedient.

4. *The Tendency to Cardiac Exhaustion, with Sleeplessness and Delirium.*—In these, the so-called typhoid symptoms, the free use of alcoholic stimulants are essential. Many cases of pneumonia require no alcohol; many other cases can only be kept alive by alcohol.

One word on the so-called abortive treatment of pneumonia by aconite. I am not ignorant of the excellent effect of aconite in certain ephemeral pyrexiæ, associated with local inflammations; and I believe it to be a valuable remedy in cases of slight pulmonary congestion with pyrexia, a condition which should be more precisely distinguished and described than it has been in our text-books; but I have no belief in an abortive treatment of acute croupous pneumonia by aconite.

A consulting physician in London tells me he has seen recently three fatal cases of pneumonia in which aconite was being "pushed." I hope, if there be any advocate of that treatment present, he will forgive me for saying that it is to me inconceivable how it should ever be thought right to "push" such a drug as aconite in such a disease as pneumonia.

These few considerations as to the treatment of pneumonia, I submit with much deference to an assembly like this.

It now only remains for me, in conclusion, to say a few words as to the relation of collective investigation to the subject of this discussion. I trust the considerations I have here put before you have not failed to convince you how appropriate a subject is that of acute pneumonia for present investigation.

The statistics and other information obtainable from hospital-records are of great interest and importance; but we want information as to the course and incidence of disease amongst those classes which are not found in hospitals but in private practice, and our knowledge of the natural history of a disease like acute pneumonia would be very incomplete without an analysis of the experience of private practitioners.

You will be glad to learn that the number of one thousand cases which the Collective Investigation Committee desired to obtain before issuing a final, or rather a complete, report, has been received, and in hands so competent as those of Drs. Sturges and Coupland, we may look for a report of considerable value to this Association; but in the present unsettled state of opinion as to the nature of pneumonia, we trust to continue this investigation for some time yet, and we shall hope to continue to receive reports of cases and the experience of observers, especially in disputed points of etiology, such as its occurrence from exposure to chill, its conveyance by contagion, its appearance in the form of epidemics, and the circumstances to which they may be traceable. Any new experience as to treatment or modes of prevention, will also be of great value.

Some complaints have been made that our mode of procedure is, in certain instances, too elaborate. Personally, I have always been in favour of making our inquiries as simple as possible, but we must not sacrifice precision to simplicity. I can, however, assure you the London Subcommittee are thoroughly convinced of the desirableness of doing away with elaborate details as much as possible. You must please remember that this movement is in its infancy, and we can hardly hope to hit upon the very best possible modes of procedure all at once. With regard to the value of the results obtained, that will depend greatly on the movement spreading, and being adopted by the great body of members of the Association.

It has been said, and that in the way of reproach, that our conclusions will be put forward as "final" and authoritative, on questions which are still open to doubt. I cannot think there is any real danger of this kind; the very word "investigation" seems to contain a protest against "finality."

We have also been charged with pride and conceitedness, altogether out of proportion to our prospects of usefulness. That there is some ground for pride in the fact that this great Association has been able to originate and organise and establish a movement of this kind I, for one, am not inclined to dispute—a movement which endeavours to draw into the work of thoughtful observation and careful investigation of disease every member of this Association. As to the conceitedness of which we have been accused, I would ask those who think investigation productive of conceit to try it. I think I can promise them that the first result will be to show them how many errors they have been accustomed to regard as truths, and that, so far from tending to conceit, it rather tends to humility—to what has been spoken of as a "divine unrest," a divine discontent, the parent of fruitful effort, and the source of increasing knowledge.

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[4] Alison. *Archiv. Générales de Médecine.* September and October 1883

CASE OF SCARLET FEVER, NEPHRITIS, ANASARCA, CONVULSIONS, DEATH: TEMPORARY RELIEF BY WET PACKING.[1]

By WILLIAM H. DAY, M.D.,
Physician to the Samaritan Hospital for Women and Children.

E. M., aged 7, a bright, healthy-looking boy, was first seen by me on October 1st, 1883. He had been out walking the previous day, apparently in his usual health. At the time of my visit at 3 P.M., the body, arms, and legs were covered with a bright red rash, which I at once recognised as the characteristic eruption of scarlet fever. The tongue was moist, and slightly furred at the back; but neither at this time, nor at any period during the illness, was it unduly red, or the papillæ prominent. There was no pain in swallowing, and nothing was observable in the fauces beyond a general redness, as is seen in an early stage of inflammatory sore-throat. The temperature was 101.4°, pulse 120, respiration quiet; the urine contained a few urates, but no albumen. The bowels being torpid, a grain of calomel was ordered to be taken at once, followed in an hour by two teaspoonfuls of aromatic syrup of senna.

In the course of the evening, the bowels freely acted, and the next day it was reported that the patient had passed a restless night. At 10 A.M. the temperature was 103.4°, pulse 130. Eight grains of salicylate of soda, with solution of acetate of ammonia, were given in water every four hours.

For the next two days the temperature fell, and on the morning of the 5th it was 100.0°; in the evening it rose to 102.6°. The glands on the left side of the neck were slightly enlarged; the left tonsil was excavated with an ashy looking slough, and the patient swallowed with difficulty. He was now ordered chlorate of potash and iron. The throat was sprayed once in four hours with a mixture of chlorate of potash, dilute hydrochloric acid, glycerine, and water.

On the 6th he was better, but the corresponding tonsil was swollen, and there was a small ragged ulcer in its centre. As he complained that the mixture caused much pain in swallowing, it was used as a spray instead, and a chlorate of potash drink substituted.

On the 7th, granulations could be seen where the slough had separated from the left tonsil. There was some whitish exudation covering the entire hard palate, which was easily removed with cotton-wool.

On the 8th, complete and general desquamation of the skin had commenced; the glands on the left side of the neck were swollen, but the throat was healthier.

On the 10th (tenth day of eruption) the rash was still distinct, and the urine normal. The worst feature was that both tonsils, uvula, and pharynx, were covered with dark ash-coloured sloughs. He appeared to hold his ground, but, the temperature having recently risen, it seemed to indicate suppuration in the indurated glands on the left side of the neck, too deeply seated to be detected. The salicylate of soda mixture, with solution of acetate of ammonia, was resumed every four hours.

On the 11th, the temperature was 101.0° in the morning, and 103.6° in the evening. The skin was freely desquamating. After two doses of the salicylate of soda mixture, the temperature fell.

On the 15th, the temperature, which had risen slightly the previous day, was 101.4° in the morning, and 104.4° in the evening; pulse 120. The swelling in the neck had much increased. The salicylate of soda mixture was again resumed; the bowels acted freely, and the temperature fell next day to 100°.

On the 16th, the urine was scanty and turbid; when heated it became partially clear, but, on boiling, there were traces of albumen. Pain was referred to the loins, and a poultice, with a little mustard, was applied. More active measures, such as leeches, did not seem warranted.

On the 17th, the left side of the neck was more swollen; and in the centre of the swelling there was deep-seated fluctuation. The swelling on the right side of the neck was scarcely to be detected. The strength was well maintained; the patient took milk and tea freely, and slept comfortably. The highest temperature during the day was 101.4°; pulse 108. The urine was clearer, but contained a considerable quantity of albumen, a few epithelial casts, and small and large hyaline casts; no blood-discs were seen.

On the 18th, as there was more evidence of fluctuation on the left side of the neck, Mr. W. Adams made a small valvular incision, and let out three ounces of laudable pus. The face was a little bloated, and the eyelids were somewhat puffy; but there was not the least swelling of the hands or feet. The urine was scanty and highly albuminous, about a fourth part being thrown down as a deposit. The microscopic appearances were the same as on the previous day.

On the 19th, there were frequent ineffectual attempts to pass urine, which was clearer, but more scanty; specific gravity 1010, acid, containing renal cells and tube-casts, as before mentioned. I expressed the opinion that the child ought to be put into a wet pack, and everything was got in readiness. Dr. George Johnson, who saw the patient with me at 7 P.M., concurred in this opinion. The temperature at the time of consultation was 101.6°; pulse 92; respirations 36. The skin was moister, and there was neither headache nor confusion of the mind. The child looked better, and the suppression of urine was the only unfavourable symptom. A sheet was wrung out of hot water, and the patient enveloped in it from the neck to the feet, and then rolled up closely in a dry blanket. Under this, a large sheet of mackintosh was laid on the bed, which delayed evaporation.

On the 20th, at 2 A.M., the patient was taken out of the pack, having been in it five hours, and then enveloped in a blanket. At my visit at 9 A.M., there was copious sweating; the temperature had fallen to 99.0°; pulse 84. Only five ounces of urine were passed the day before, and only two ounces from 10 P.M. the previous day till 9 the next morning. Since 2 A.M. till now (9 A.M.), he had sweated profusely. He had vomited some dark green bilious fluid, and the bowels had acted freely; but the face was a little more puffed. At 1 P.M., it was stated that he had had some quiet sleep since my last visit; but there was a good deal of tremor, especially of the hands. He swallowed food well, and there was free discharge from the neck. At 3 P.M., the bowels acted freely and loosely; pulse 112. He was sick, and brought up bilious fluid. At 1 P.M., he had a warm bath, which refreshed him; and there was much desquamation of the skin. He passed two ounces of urine, and the distension of the abdomen and pain complained of the day before were less. He asked for books and pictures, was perfectly intelligent, and wished to get up, as he was tired of remaining in bed. When I saw him at 9 P.M., his bowels had acted an hour before, the motions being dark, copious, and watery. There was more pain in the stomach, but no vomiting. The wound in the neck discharged freely. Temperature 101.4°. He had another pack.

On the 21st, at 9 A.M., when visited by me, it was reported that he was taken out of the pack at 2 A.M., when he perspired freely. He was wrapped in a blanket, and slept for twenty minutes. He had had four hours' quiet sleep. There had been no return of tremor, and no pain in the stomach, since last visit. Slight pain was complained of over the left eye. The wound in the neck discharged freely. He had passed five ounces of urine since 10 P.M., containing much albumen. The bowels had acted twice freely, the evacuations being watery. There was slight puffiness on the dorsum of both feet, and some œdema of the scrotum; but the face was not more puffed. This was the first day the temperature and the pulse had been normal. As large pieces of epidermis were peeling off the skin, he was put into a warm bath at 2 P.M. An hour later, the skin was hot and inclined to dryness, and therefore the pack was repeated at 6.45; which, however, failed to induce satisfactory perspiration. The bowels again acted, and three ounces of clearer urine were passed. The œdema had extended to the penis, and the odour from the skin was most unpleasant.

On the 22nd, it was reported that, at 12.30, he was taken out of the pack; after which, he had five hours of tranquil sleep. Temperature 99.2°; pulse 100, quite steady and regular. From 3 A.M. to 9 A.M., he passed four ounces of clearer urine, and perspired freely. At 4 P.M., Dr. Johnson came, and advised that the pack should be again resorted to in the evening; and a mixture given every four hours, consisting of ten grains of acetate of potash and five minims of tincture of digitalis. The urine contained only a small quantity of albumen, with a few epithelial and hyaline casts, so that, as far as the kidneys were concerned, the prognosis was hopeful. At 9 P.M., the bowels had again acted freely, and the feet were less œdematous. Four ounces of urine were passed since last visit; six ounces since 3 P.M.).

On the 23rd, on my visit at 9 A.M., it was stated that he had slept six hours; the dropsy was fast disappearing, and the swelling in the neck had [illegible]. The bowels had acted freely in the night. The only unsatisfactory symptom was a trace of blood in the urine, noticed for the first time. At 6 P.M., since my last visit he had passed sixteen ounces of urine, containing more blood, and his general condition was not so good. Since 2 P.M., he had not slept, and was very irritable and fretful. Ten grains of bromide of potassium were ordered, in a little spirit of chloroform. At 7 P.M., the bowels again acted freely, and about this time he passed three ounces of urine of a light port-wine character. As he was hot and restless, and the temperature had run up to 103.6°, he had another pack. At 7.30, his lips and limbs trembled, and he was extremely restless; in a few seconds he could neither speak nor swallow; his hands were cold, and he became much convulsed. As soon as he was able to swallow, he took a little brandy and water; and a large linseed-meal poultice was applied over the stomach, as he was in pain. When I saw him at 9.15, the temperature was 103.4°; pulse 130, weak and running. He was pale and agitated, working his hands about incessantly, and having a most anxious manner. When I offered him some brandy and water, he insisted on taking the glass in his own hands, and was quite intelligent. At midnight, he was sleeping, and shortly afterwards he awoke with tremor, and died in a slight convulsion, due to the uræmic poisoning, as in Bright's disease, and, it may be, to intracranial effusion, though death from convulsions in these cases of dropsy does not necessarily lead to anything more than increase of redness in the membranes of the brain. The high temperature at the close of life might have been also due to pyæmia; the pus in the cervical glands, and the sloughs on the tonsils, lend some support to this view.

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[1] Read in abstract before the Harveian Society.

REMARKS.—When the skin in scarlet fever is extensively involved, and the rash remains distinct for many days, as in this case, it is the exception to meet with dropsy, as the consequence of scarlatina-poison passing through the kidneys. Dropsy is not a frequent complication. Although it is said to follow mild cases as a rule, I am disposed to think that here the renal complication was owing to the excess of poison in the system, and that, seeking its elimination through the ordinary channels, it deranged every organ through which it passed; the throat in sloughing, the mucous membrane of the stomach in vomiting, the bowels in diarrhœa, the cervical glands in abscess, the kidneys in nephritis. Occurring, too, at the time when desquamation had commenced, the skin no longer played its due part in the excretion of the poison, and therefore the morbid process was either set up or intensified in the glandular structure of the kidney. The kidneys were congested; the uriniferous tubes became choked or distended with epithelium, and the urinary elements were retained in the blood, whilst the circulation through the kidneys was arrested, and the secretion of urine checked. It is a noteworthy fact that the only other member of the household (which was large) who contracted the disease, was a brother of the patient, 9 years of age, who had had a mild attack in April, 1883. This patient was lately under treatment for many weeks, and dangerously ill. He had an attack of pericarditis, which was said to have been due to cold and rheumatism; but I am inclined to think was attributable to the scarlatinal poison. A cardiac murmur remains, and epileptic seizures are frequent. Vomiting and frequent action of the bowels took place about the time of the dropsy, when the kidneys were most involved. Though considerable exhaustion may ensue, it is a vicarious action, not rashly to be arrested. The profuse activity of the skin and bowels is supplementary to the kidneys, when the functions of those organs are checked, and they are incapable of discharging their duty. Cold, exposure, and irregularity in diet, are such well known exciting causes of dropsy to scarlatina-patients, that we all recognise the importance of bestowing the greatest attention on the disease in its mildest form. Here, no one of these causes was in operation. In this case, no trace of albumen could be detected in the urine till the sixteenth day of the fever, although it was carefully looked for each day. On the following day there was a large quantity, with epithelial and hyaline casts; the day after, the urinary secretion was very scanty, and the albumen had so increased that a fourth part of the specimen examined coagulated into a semi-solid mass on the application of heat and nitric acid. This symptom was of the gravest significance, and an indication of renal mischief in an acute form. The face and eyelids became puffy for the first time since the illness; and, with the scanty secretion of urine, it was evident that the tubuli uriniferi were choked up with the products of inflammatory action. Coincident with the dropsy, albumen was detected in the urine.

I have met with slight dropsy in three cases in children after scarlatina, where the urine was normal on each occasion when examined. It by no means follows that albumen may not have been present at some period of the illness, and one seems inclined to adopt this view; but absence of albumen in the urine has already been noted in scarlatinal dropsy, by several authorities.

The exact significance of albumen in the urine in these cases, and the precise relation that it holds to scarlatinal dopsy, is a question of much importance. Slight albumen in the urine is not of great pathological import; mere opalescence of the urine, without tube-casts, renal epithelium or oily products, does not necessarily denote nephritis or actual kidney-change. It is not uncommon to meet with albumen in the urine in measles, typhoid fever, acute rheumatism, pneumonia, and some other febrile states. There is, in these cases, an increased determination of blood to the kidneys, of sufficient intensity to lead to the presence of albumen in the urine, frequently to a mere trace, which disappears in the course of a few days. A mere trace of albumen in scarlet fever and some other diseases, without renal products, does not appear to be of much importance. When the urine possesses the characters I have described, then we have no hesitation in ascribing the anasarca to structural change in the kidneys. The exact relationship of small quantities of albumen in the urine to scarlatina I do not attempt to explain. It may be due to some altered blood-condition, to an impediment in the circulation, or to simple hyperæmia of the kidneys, without inflammation. "Dropsy is not a necessary concomitant of renal congestion." ("Congestion of the Kidneys." By W. Roberts, M.D., F.R.S.; Reynolds's *Medicine*, vol. v, p. 453.) "In chronic Bright's disease probably one-third or one-fourth of the cases run their course without dropsy." ("On Bright's Disease," *Ibid.*, p. 514.)

Dr. F. Roberts, speaking of the complications of scarlet fever, mentions "dropsy without albuminuria, and having no obvious cause" (*Theory and Practice of Medicine*, 1877, vol. i, p. 140). Dr. Bristowe says "sometimes anasarca survives the disappearance of the albuminuria; sometimes it becomes developed in those who have never had albumen in the urine" (*Theory and Practice of Medicine*, 1876, p. 162).

Niemeyer writes, "while part of the patients affected with hydrops scarlatinosum, which is a symptom of acute inflammation of the kidney, recover, and another part die with the symptoms of uræmic intoxication, and still more of pneumonia, pleurisy, pericarditis, etc., the second form of scarlatinous dropsy, not accompanied with albuminuria, is a sequel of scarlatina as free from danger as it is inexplicable. It generally develops gradually, may become very extensive, is not limited to the subcutaneous connective tissue, and rarely extends to the serous cavities. In some cases of very extensive scarlatinous dropsy without albuminuria, recovery takes place in a remarkably short time, as I know from my own observation" (*Practical Medicine*, vol. ii, p. 543). Dr. West makes no mention of such cases, nor do Meigs and Pepper.

I have lately been reading a very interesting paper by Dr. Dyce Duckworth "On Scarlatina Dropsy, with little or no Albumen" (*St. Bartholomew's Hospital Reports*, 1883, p. 321). He records the case of a boy under his care, aged 4 years and 9 months, who was attacked with very marked anasarca after scarlatina, with partial suppression of urine. After the customary treatment by vapour-baths, large doses of jalap-powder, and dry cupping to the loins, the urine passed freely, and contained only a faint trace of albumen. From that day no further trace of albumen could be detected, and no renal elements were ever found on microscopical examination. Dr. Duckworth concludes that, as it is only in cases of scarlatina that all the symptoms of acute nephritis may follow, excepting its most distinctive feature, albuminuria, it must be inferred that there is something specifically peculiar in these cases, depending, probably, on the scarlatinal poison. Bartels (Ziemssen's *Cyclopædia*) mentions an epidemic in 1853 and 1854, where he met with a few cases in which dropsy set in after scarlet fever, although the urine passed by the patients contained no albumen, and in one case the quantity excreted in twenty-four hours did not exceed one ounce.

In July 1874, a boy, seven years of age, came under my care at the Samaritan Hospital, with slight dropsy after scarlatina; the eyelids, hands, and feet were puffy, but the urine, which was carefully examined on three separate occasions, did not contain a trace of albumen. The mother stated that, a month previously, the patient had a bright rash over his body, and that two other children in her family had a similar rash, which was regarded as scarlatina. The dropsy made its appearance five days before the child was brought to me. At this time, I was inclined to regard it as due to anæmia, the boy being pale and weakly looking. In 1876, a boy, aged 8 years, had scarlatina, followed by a mild attack of dropsy, about three weeks after the disappearance of the eruption. The face, hands, legs, and feet were puffy. He attended at the Samaritan Hospital till the dropsy disappeared, but there was no albumen in the urine, which was carefully examined at each visit. I came to the conclusion at the time that, although I did not detect albumen, it must have been present at some time of the illness; but it by no means follows, from what has been stated, that it was so.

With regard to the treatment of the wet pack, great improvement followed at first, but it was not maintained. It was employed—

1. To produce copious sweating to relieve the internal organs from congestion, especially the kidneys, which were unable to eliminate morbid products from the blood.

2. To check the excessive rise of temperature, and the dangers arising from it, as in typhoid fever, where the cold bath has been found to supersede the action of quinine, salicylate of soda, and all other antipyretic remedies with which we are acquainted.[1]

When blood appeared in the urine after the pack had been used for some time, and the dropsy was fast disappearing, it was a signal proof that the kidneys were seriously involved. With all the precautions taken, this could in no degree be assigned to the packing. Not the least chill ever attended or followed its use. In healthy persons, prolonged cold bathing has occasionally produced temporary albuminuria. In typhoid fever, repeated cold baths have not been found to increase the frequency of acute nephritis (Cayley on Typhoid Fever, 1880, page 117).

Notwithstanding failure in the case in question, I can speak very highly of this mode of exciting free cutaneous action, so strongly advocated by Dr. George Johnson both in scarlatinal dropsy and in some other affections where it is advisable to encourage diaphoresis (*Lectures on Bright's Disease*, 1873, p. 133). In many cases, I have known the dropsy to disappear and convalescence proceed in the most satisfactory manner.

The odour from the skin to which I have alluded was so offensive, that everyone detected it who entered the room. At first, I thought it was owing to some neglect, but on the closest examination this proved not to be so. The apartment which the child occupied was large and well ventilated, the two nurses in attendance were extremely clean, and the bed and body linen were changed frequently. Vogel refers to a peculiar odour said by Heins to be emitted by scarlet fever patients, but that he has never detected it himself. It has been compared to the odour of old cheese, or a menagerie (*Diseases of Children*, 1874, p. 476).

COLLECTIVE INVESTIGATION.

By THOMAS M. DOLAN, M.D., Halifax.

WHEN Collective Investigation was first started, I raised objections against the scheme (BRITISH MEDICAL JOURNAL, vol. ii, 1881, pp. 29, 101)—objections based partly on financial and partly on scientific grounds. I have since watched the development of the experiment, and have carefully followed the working and spirit of the movement. As a few years have now elapsed, I think it is possible to form an estimate of the value of Collective Investigation, as carried out by the British Medical Association, and to appraise it at its true value.

Collective Investigation has formed a very fertile theme for addresses, and several eminent men have, on various occasions, sung its praises.

May I be allowed to say something on the other side; and to point out, with due deference to the opinions of those eminent men, some of the fallacies and weaknesses of the scheme?

1. The recent report of Mr. S. Murphy on "Diphtheria" affords me a peg on which to hang my first objection. He is evidently a believer in the Baconian method. I alluded, in my first letter to the BRITISH MEDICAL JOURNAL (p. 101, *loc. cit. ante)*, to the fallacies of this method as applied to investigation of disease.

I take it for granted, not only from his report, but from the barrenness of the results up to now, that the Baconian method is the one upon which the Collective Investigation Committee depend. If this be true, the basis of the scheme is wrong. It falls into the error so well pointed out by Jevons in his *Principles of Science*. He tells us that hundreds of investigators may be constantly engaged in experimental inquiry. They may compile numberless note-books, full of scientific facts, and endless tables of numerical results; but they can never, by such work alone, rise to new and great discoveries. By a system of research, they may work out deductively the details of a previous discovery; but to arrive at a new principle of nature is another matter.

Francis Bacon spread abroad the notion that, to advance science, we must begin by accumulating facts; and then draw from them, by a process of digestion, successive laws of higher and higher generality. In protesting against the false methods of the scholastic logicians, he exaggerated a partially true philosophy, until it became as false as that which preceded it. His notion of scientific method was a kind of scientific book-keeping. Facts were to be indiscriminately gathered from every source, and pasted in a ledger, from which would emerge in time a balance of truth.

It is difficult to imagine a less likely way of arriving at great discoveries. The greater the array of facts, the less is the probability that they will by any routine-system of classification disclose the laws of nature they embody. Exhaustive classification in all possible orders is out of the question, because the possible orders are practically infinite in number. If book-keeping were all that was required, we should have long since arrived at a knowledge of diphtheria. There is a personal equation which must always come into play, and which always has come into play, viz., the personal equation of the discoverer.

Jevons has well pointed out some of the qualities required before facts display their meaning, or fall into logical order. I need not give the quotation, as his work is well known and easily to be obtained. Collective investigation carried on then on the Baconian method cannot, *per se*, lead us to new discoveries.

2. I have before me the first report of the Collective Investigation Committee. This has been published at considerable expense to the Association. Was it worth spending £300 or £400 on? Is it worth 1s. 6d. additional to the members? To both these questions I unhesitatingly reply in the negative. In considering this little work, we must leave out the addresses, the cards, the memoranda, etc., which had all been previously published in the JOURNAL. The report on phthisis is the main feature, and this report well illustrates the impossibility of arriving at results by the pure Baconian method. What is the scientific value of this report? Will any member of the Committee have the hardihood to assert that it has a particle? I look forward to the next publication in the hope of getting better value. This leads me on now to the subject of finance.

3. When, at the Council meeting of the Yorkshire Branch, June 29th, 1881, I introduced this subject, Mr. Jackson, Secretary to the Branch, assured us that only £300 a year would be spent. I wrote to the JOURNAL and said: "If the scheme be carried out effectually and according to the published report, over £[illegible] a year must be spent. If the scheme were likely to be attended by all the advantages expected by Professor Humphry, I would say—pay the seven members liberally for any work they may do, and at the same time pay all who may contribute observations. The pecuniary question is insignificant in comparison with scientific acquisitions. I differ not so much about expense, but as to the results of the expenditure."

My prognostications have come true. It was impossible to keep within the £300 limit, and what it may reach to will depend on the Council. The results of the expenditure are not proportionate to the cost.

4. Amongst my objections I urged "that there was danger of the centralisation of this work in London. Naturally, it would be easier and cheaper to appoint medical men resident in London." I asked the question, "Is this desirable?" That it has been centralised can be easily seen from the names of the medical men who have been doing the work. The following is, I believe, a correct list: Drs. Mahomed, Burney Yeo, Octavius Sturges, Sidney Coupland, Stephen Mackenzie, Dyce Duckworth, Barlow, Goodhart, Mr. Murphy, and Mr. Macnamara, all residents in the metropolis. Professor Humphry represents the provinces. I repeat that it is not desirable to have such centralisation, as it handicaps provincial practitioners in many ways. I may be accused of looking at this question in too narrow a point of view, and possibly I may have thrown at me that favourite word "Humanity," which people spell in so many different ways. I saw humanity recently at the Health Exhibition in large placards, or, (as we should call them in the provinces,) advertisements, of medical men's names, so that I can discount at its proper value any appeal based on the ground of the duty we owe to humanity. Do we owe no duty to ourselves? Let those who are honest amongst us answer as their hearts tell them. I say we owe to ourselves the first law of self-preservation. Are we to efface ourselves? I answer, No. I hold it to be my duty, if I had any new idea or fact which would clear up any problem of disease, to work it out patiently, and then, when it was ripe and verified, to bring it before the profession through some of the ordinary channels, as our societies and journals. Humanity would gain, and at the same time I should obtain that which I was legitimately entitled to. It is a great advantage to those practitioners whose names have been printed on the Collective Investigation cards. They have been thus brought before the profession in a special manner connected with a special disease, so that an inference might be drawn that they were authorities on this disease—an inference not always correct. It is not unreasonable to expect that some of our provincial physicians should be placed in the same favourable conditions, not that I expect that the

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[1] "The Cold Bath in the Treatment of Enteric Fever." By [illegible]. BRITISH MEDICAL JOURNAL, February 2nd, 1884.

scheme will be then any more productive of real gain. I demand for them, however, a share in the advantages.

I also pointed out the danger of private workers in the provinces being swamped by London committees—*experto crede.* I ran that danger, but was not swamped. Some years ago, I was working at the subject of hydrophobia; for some years, I had been collecting material, and, fortunately, had my MSS. in order, but not quite ready for the printer. I had published a few pages of matter. A publisher informed me that there was a Committee appointed in London to investigate this subject. This Committee had on it Drs. Burdon Sanderson, Dr. Lauder Brunton, Mr. Callender, Dr. Greenfield, Mr. Ernest Hart, etc. I saw clearly that, in the face of such a Committee, any words of mine would not have a chance of a hearing, and that my only hope of safety lay in the speedy publication of anything I had to say. I rushed my MSS. into book-form, at a considerable sacrifice of time, with imperfections which would not have occurred had I not been thus hurried, for I reckoned on a couple of years' more time to complete my observations. The success of my book I need only briefly allude to, thanks especially to Sir Joseph Fayrer, who reviewed it in *Brain.* The book became to me not only a financial success, but I also won what we are all striving for—some *kudos.* Had I waited until this Committee published their report I should probably not have had a reader. At the end of my book, I said, as I was compelled to do, "I feel a pleasure in leaving further investigation in the hands of such competent experimenters as Drs. Burdon Sanderson and Lauder Brunton, to the publication of whose researches I look forward with interest and hope." I naturally felt that I must give way before such names, and that I was virtually effaced. What publisher would look at the MS. of an obscure provincial practitioner in the face of such a Committee, even though my facts were as good? He would decline it; I know this from experience. I got over the difficulty by publishing my work at my own expense.

5. What, after all, must we expect to obtain from collective investigation, supposing that it realised the expectations of its promoters? Individual opinions, which will only have their value either from the personal bias of the secretary or of the framer of the card.

The Committee, in their first report, stated: "That the success will much depend upon the energy, perseverance, and judgment of the secretary." I said, in one of my letters, "that I had no doubt the largest share of work would fall upon him; and that he ought to be a histologist, physiologist, physicist, therapeutist, and hygienist."

The Committee were fortunate in securing the services of Dr. Mahomed, but naturally they could not expect to retain his services long. Any man of ability would simply use this as a stepping-stone, so that we have now a new secretary, who in turn will be succeeded by another; thus we shall have ever changing opinion in the interpretation of the facts submitted. But, it will be answered, the opinions of the secretary will always be checked by the Committee or the framer of the card. Very true, but even then we shall be liable to individual opinions and crotchets, in the absence of the philosophic faculty which makes discovery rare; but, admitting this power of veto possessed by the Committee, we shall still be largely at the mercy of the secretary, who will first sift the cards and draw up the report.

6. The Association is now spending in collective investigation a very large sum annually, and I think it is time the members should look carefully into it, and ask themselves the questions: Is such an outlay required? Will scientific medicine be benefited to a proportionate extent by such a disposition of the funds? Could we not devote our surplus money to better purposes? I have endeavoured to show that, up to the present, the outlay has not been productive of proportionate results.

I trust that before the Belfast meeting the subject will be fully ventilated in the columns of the JOURNAL, and that my observations may lead to healthy criticism of the scheme. I would ask the members to leave on one side the man who has said these things, and simply to consider "what has been said," and to discard altogether the bugbear of authority.

We may be told that, in several countries, this scheme has been copied. Man is an imitative animal, and *primâ facie* there is a glamour about collective investigation which appeals to some of our instincts. It has called forth some eloquent speeches, and I could myself write a very readable paper in favour of it, for the subject is very broad. I have taken, however, a side of the picture which has not been presented to the members.

I am as desirous of scientific advancement as any man in the profession, and I am also desirous of the general good of the Association; but I hold that scientific medicine will advance without this subsidy, and that the greatest good to the greatest number of the Association is not secured by this scheme.

Admirable scientific work and scientific research have been done in England by private workers, without any pecuniary assistance from funds. Stimulated by ambition or love of science, numbers of men have contributed to the elucidation of the problems of disease at their own expense, and have published the result of their researches on the usual marketable terms.

In the future, as in the past, there will always be found men able and willing to throw themselves into scientific work, in order to clear up some of the problems which disease opens out. Such subjects as micro-organisms, and the properties of iodoform, the nature of phthisis, diphtheria, chorea, rheumatism, acute gout, are now occupying the attention of scientific workers in all parts of the civilised world; and, when that inspiration comes—which is of the nature of the poetic faculty, rare—we shall receive that light for which we are longing.

The various medical societies in London and in the provinces are also engaged in the same class of work, so that there is no fear of scientific medicine being left in a neglected condition. In conclusion, then, I hold it to be unnecessary to devote from the funds of the Association—

1. £200 a year, with £100 a year for travelling-expenses, for a Secretary to the Collective Investigation Committee.

2. £200, in two endowments of £100 each, to two men selected by the Committee for some special researches. The class of work undertaken by the men thus endowed will be worked out as well by private workers, and there is danger of private workers being suppressed by this expenditure.

3. A sum varying from £300 to £500 a year on cards, memoranda, etc., relating to the special subjects selected by the Investigation Committee.

The reason of my objection is well expressed in the phrase, *Le jeu ne vaut pas la chandelle.* The funds of the Association might be devoted to more useful and universal objects, whereby science would be equally advanced, and the general bulk of the members benefited.

FIVE CASES OF EXTRA-UTERINE PREGNANCY OPERATED UPON AT THE TIME OF RUPTURE.

By LAWSON TAIT, F.R.C.S.Ed. & Eng.,
Surgeon to the Birmingham and Midland Hospital for Women.

PENDING the discussion on the pathology and treatment of extra-uterine pregnancy, which is to take place at Belfast, I desire to place on record this, the first series, as I believe, of cases of extra-uterine pregnancy operated upon at the time of rupture; that is, from the tenth to the thirteenth weeks. Most of us are familiar with such dramatic incidents as that of the actress in the Bois de Boulogne, where sudden or very rapid death has occurred from hæmorrhage due to the tear of a venous sinus in the rupture of an early Fallopian pregnancy. I have been unfortunate enough to see a large number of them, five or six and twenty, and of late I have been encouraged by my success in other abdominal diseases to try what surgery could do in these cases.

For this treatment, of course the difficulty was the diagnosis, but as I have now completely adopted the principle of always opening the abdomen when I find a patient in danger with abdominal symptoms, this barrier no longer exists. The diagnosis is, however, not so very difficult after all, for in many cases the existence of pregnancy has been suspected before the rupture occurred. It may be in the majority, however, that this misleading feature is present; the patient has never been pregnant, or has not been so for many years, and then the arrest of menstruation attracts no particular attention. If, however, it be found that the patient has been eight weeks or more without a period, that there is a pelvic mass fixing the uterus and on one side of it, and that sudden and severe symptoms of pelvic trouble and hæmorrhage came on, the rupture of a tubal pregnancy may be at once suspected, and if an operation is to be done—and it clearly ought to be done—it must be done without delay. Early interference is clearly a chief element of success in modern abdominal surgery.

The first case to which I was called after I had made up my mind as to the line to be adopted in such cases, occurred on January 17th, 1883, in the practice of Mr. Spackman of Wolverhampton. He had already made the diagnosis, and I was of opinion that he was perfectly correct. The patient had not had a child for many years; menstruation had been arrested for eleven weeks, and symptoms of rupture had occurred. When I saw her she was blanched from hæmorrhage, and her skin had the peculiar staining which is characteristic of the extravasation of blood into the peritoneum. The contents of the pelvis were fixed, and there was a distinct mass on the left side. The abdomen was distended, and the patient in a good deal of pain.

Though I feared that interference might have come too late, still I advised operation, and immediately proceeded to carry it out. I opened the abdomen, and found a quantity of clot derived from a ruptured Fallopian pregnancy on the left side. As well as I could, I stitched the edges of the rent to the abdominal wound, but every touch caused hæmorrhage, so that I had to desist without doing much save removing the fœtus and some of the placenta. The patient never regained consciousness, and died shortly after being removed from the operating table.

On March 1st, 1883, I saw, with Dr. Page of Solihull, a patient who had not been pregnant for many years, in whom there was a fixed mass in the pelvis, and whose menstruation had been arrested for about three months. She had a high pulse and an exalted temperature and great pain. I advised abdominal section, and found the abdomen full of clot. The right Fallopian tube was ruptured, and from it a placenta was protruding. I tied the tube and removed it. I searched for, but could not find the fœtus, and I suppose it got amongst the folds of intestine and there was absorbed. Certainly it has not since been seen. The patient made a very protracted convalescence, but she is now perfectly well.

On April 9th, 1884, I opened the abdomen in the case of a patient whom I had seen a few days previously with Dr. J. W. Taylor, of Moseley, Birmingham. She had symptoms of acute pelvic inflammation, the organs being fixed, and there was a mass behind and to the right of the uterus. She also had not been pregnant for many years. I admitted her to my private hospital; and during the removal, doubtless, the rupture occurred. At the operation, I found the abdomen filled by a quantity of blood-serum and free clot. The left tube was distended by a placenta, which protruded through a rupture. I tied and removed the tube, but I could not find the fœtus. She made an easy recovery, and now has almost completed her convalescence.

On May 25th, I operated upon a patient in the Hospital for Women, aged 27, who had had two children, the last having been born three years ago. She had menstruated regularly till three months previously. Pelvic pain had been in existence for some weeks, and had become steadily worse. I found the uterus fixed, and a larger tender mass on the left side; and I diagnosed the case as possibly one of pyosalpinx. At the operation, I found the left Fallopian tube had burst, and that there was a quantity of loose clot in the pelvis. The fœtus was lying in the pelvis, attached to the placenta, which remained in the tube. The tube was adherent to surrounding structures, but was easily detached, tied, and removed. She made an easy recovery; the wound has completely healed, and she has left the hospital.

The fifth case has just occurred, an illustration of the curious sequence of exceptional cases often seen in practice.

A. M., aged 34, married fifteen years, has had four children, the last having been born six years and a half ago. Her last menstruation was early in April. Late in May she had an attack of intense abdominal pain, which increased in intensity till June 3rd. I found the uterus fixed, and a boggy swelling to the left. The abdomen was swollen, and peritonitis was clearly beginning, the pulse and temperature being both high, intense pain occurring occasionally, and the patient's expression being anxious. I opened the abdomen on June 5th, and found the pelvic contents matted together with recent lymph and blood-clot. I found the left tube torn almost in two, and occupied by a placenta, apparently of about the tenth week. I could not find the fœtus. I tied and removed the tube, drained the pelvis, and the patient has made an easy recovery.

These cases all confirm the view of the pathology of extra-uterine pregnancy, which I advanced many years ago, that in origin it is always tubal, and that its varieties depend merely on the direction in which rupture occurs. These results also confirm the soundness of the policy of interfering early in such cases, for four out of the five have been easily and completely cured of one of the most formidable conditions of pregnancy. The first and only fatal case might have had a better ending if Mr. Spackman had seen her sooner, for it is only just to him that I should say he recognised the nature and gravity of the case at once, and sent for me immediately.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY. An adjourned discussion on the papers of Dr. W. B. Carpenter, F.R.S., and Mr. Axel Gustafson, will be opened by Mr. Jabez Hogg, on Tuesday, July 1st, 1884, in the rooms of the Medical Society of London, 11, Chandos Street. The President, Dr. Norman Kerr, will take the chair at 4 o'clock. Dr. H. Rayner, Surgeon-Major G. K. Poole, Dr. C. R. Francis, Mr. Harrison Branthwaite, Dr. H. W. Williams, Dr. Joseph Rogers, and others, hope to take part in the discussion.

A CASE OF STRYCHNIA POISONING.

BY LESLIE OGILVIE, M.B., B.Sc.,

Lecturer on Comparative Anatomy at the Westminster Hospital, and Physician to the Paddington Green Children's Hospital.

ON May 12th, at a quarter past 9 o'clock P.M., while seeing my patients at the North-West London Hospital, I received a summons to visit a man named Thomas Cross, aged 72, who lived near the hospital. I was told that both he and his wife were seriously ill, and that he was on the point of death. It was explained to me that both had taken a powder about two hours previously, that the woman felt ill about ten minutes afterwards, and that an interval of about an hour had elapsed before the man was seized with any symptoms. In the interval, he had been able to visit a daughter who lived in the neighbourhood, and he became suddenly ill on his return home.

On my arrival, I found the old man near the open window *in articulo mortis*, the buttocks resting on a chair, his body and legs extended, the heels resting on the floor, and his head supported by a woman.

On inquiry, I was told that he had been convulsed, and, knowing that a powder had been administered, the position of the body suggested to me death from strychnia poisoning. I was told, however, that he had been subject to fainting fits, in which he struggled for breath, and for which he was under treatment at the hospital. Both he and his friends thought at first that this attack was of a similar nature, because he had great difficulty of breathing.

The symptoms presented by the wife strengthened the suspicion of strychnia poisoning. She had an anxious expression, and was seated on the bed, with her chin elevated and her jaws closed, so that she could with difficulty articulate. Her mind was clear, and she described her symptoms with intelligence. She complained of a "crampy feeling in the chest," rigidity of the muscles of the legs, and complete inability to walk or assist her dying husband, stiffness of the jaws and neck, and great thirst. She stated that the symptoms had been more severe an hour previously. She was with difficulty removed to another room, as she trembled when moved, and begged to be left alone. I did not think it necessary to administer apomorphia, for which, however, I had sent to the hospital, because the symptoms were subsiding, and nearly three hours had elapsed since their onset. I gave her sixty grains of bromide of potassium, and repeated the dose almost immediately. Owing to the partial closure of the jaws and the difficulty of swallowing, she was only able to drink small quantities at a time. She gradually improved, and ultimately recovered. In neither case had there been any vomiting.

I was informed that one of the daughters had arrived on a visit that afternoon, and had brought the powders with her. She stated that she had given the powders in beer, and that they contained calomel. She had been in the habit of taking them for years, and thought that her parents might derive benefit similar to that which she had experienced. She had no other powder with her, and the cups in which the doses were given had been washed.

I had little doubt that strychnia had somehow been administered, and the circumstances being such as to excite suspicion, I deemed it necessary to communicate with the police, in the meantime collecting the bottles, and requesting the daughter and other persons not to leave the house.

On viewing the body of the man about one hour after death, with Dr. Murrell of the Westminster Hospital, whom I had called to my assistance, we found the rigor mortis well marked, the legs somewhat separated, the knee-joints stiff, the skin dry and still warm, the face pale, the mouth closed, and the pupils moderately contracted.

The following is an account of the *post mortem* examination, performed forty-four hours after death, in warm and damp weather. I was fortunate in procuring the advice and assistance of my colleagues, Dr. Allchin and Dr. Murrell, of the Westminster Hospital, who verified the appearances observed. The body was well nourished. It showed considerable signs of *post mortem* decomposition, as indicated by the green discoloration and distended condition of the abdomen, and extreme staining of the superficial veins over the root of the neck, shoulders, upper arms, and the inside of the thighs and legs. There was considerable *post mortem* congestion of the posterior aspect of the entire trunk, limbs, head, neck, and ears; and gaseous distension of the subcutaneous tissue at the root of the neck (*post mortem* emphysema). There was extreme and equal arcus senilis. Some sanguineous fluid was escaping from the mouth. The *post mortem* rigidity was passing off, but was still distinctly perceptible in the muscles of the calf and thighs. The usual cadaveric rigidity of the masseter muscles was noticed. There were no marks of injury of any kind on the head or body. A catheter was passed, and about an ounce of pale-coloured slightly turbid urine drawn off into a chemically clean bottle, which was then sealed and labelled. On reflecting the skin, the subcutaneous fat was found to be small in quantity, and the muscles of the thorax pale in colour. There was about three ounces of blood-stained fluid in the peritoneal cavity; and the stomach and intestines were moderately distended with flatus. There were no signs of inflammation. A ligature was placed round the œsophagus, about two inches above its cardiac orifice, and another round the transverse part of the duodenum. The stomach was not removed at this stage, the examination of the thorax being proceeded with. The usual amount of the heart was uncovered by lung. There were about two ounces of blood-stained fluid in each pleura, and about two drachms of a similar fluid in the pericardium. The heart weighed fifteen ounces, and was much enlarged, soft, and flabby. The substance was pale and mottled, and distinct patches of fatty degeneration were perceptible, especially in the left ventricle. The valves were apparently competent; the circumference of the mitral valve was four and a half inches, and that of the tricuspid five inches. The maximum thickness of the left ventricle was five-eighths of an inch. Good muscular tissue existed to the extreme apex of the right ventricle. There were some atheroma of the coronary arteries. The aorta was uniformly distended. It was generally deficient in elasticity, with a small amount of atheroma. The aortic cusps were slightly thickened, but not atheromatous. No clots were found, even in the extreme auricular appendages, and very little blood. The lungs were intensely congested, especially posteriorly, and were almost black from decomposition. They were crepitant throughout. The gullet, stomach, and duodenum were removed, and placed in a clean bottle, which was sealed and labelled. The liver, kidneys, and spleen were small, but healthy. They, too, were preserved in separate vessels. The intestines were empty. The trachea and pharynx were examined, and no sign of foreign body, or ulceration, or other morbid change, was observed. There was no sign of injury to the scalp or skull. The dura mater was normal. There was considerable subarachnoid effusion, chiefly over the posterior half of the brain. The vessels and sinuses were very empty. There was some atheroma of the vessels of the circle of Willis, and of those in the Sylvian fissure. There was no hæmorrhage of any kind in any part of the brain. The spinal cord was removed and carefully examined, and no sign of congestion or extravasation was found.

Sufficient cause of death not having been found at the *post mortem* examination, the specimens, preserved as above described, were subjected to analysis. A large quantity of strychnia was found in the stomach, together with sixteen ounces of partially digested food.

REMARKS.—The points of interest in this case are the following.

1. The length of time which elapsed before the onset of the symptoms in the case of the man is probably accounted for by the presence of a quantity of food in the stomach.

2. The fact that so much strychnia remained in the stomach, two and a half hours after its administration, points to the importance of administering an emetic in such a case, even after the lapse of some hours. It would naturally be best to administer the emetic hypodermically, as there might be difficulty in getting the patient to swallow. The use of the stomach-pump would induce the tetanic spasms.

3. As regards the *post mortem* appearances, the points to be noted are: the persistence of the *post mortem* rigidity after considerable decomposition; the absence of clots in the heart; and the pale condition of the thoracic muscles.

WHAT IS THE FUNCTION OF THE CORPUS CALLOSUM?

BY WILLIAM W. IRELAND, M.D., Preston Lodge, Prestonpans.

IN the BRITISH MEDICAL JOURNAL for May 24th, there is an abstract of a lecture on the Structure and Functions of the Brain in relation to Disease, delivered before the Faculty of Physicians and Surgeons of Glasgow, by Mr. D. G. Hamilton, Professor of Pathological Anatomy in the University of Aberdeen. The lecture seemed to promise some information about [illegible] functions of the corpus callosum. The theory that it was a commissure for associating the two sides of the brain and bringing them into harmony, which, Mr. Hamilton tells us, has met with almost universal acceptance of late years, having never seemed acceptable to me, I was pleased to learn that some one was willing to consider afresh the question, What is the use of this mass of white matter? To this, comparatively little attention has been paid by experimental physiologists. When Professor Hamilton announced that he had investigated the matter for himself, and inquired particularly into the literature of the subject, and that he had confirmed and improved upon the observations of Foville and Gratiolet, the lecturer seemed to approach something interesting. After a description of the course of the fibres of the callosal tract (he omits all mention of cells or nuclei), he sums up with a number of assertions which do not seem to be clearly deducible from his premises, and which come into direct collision with what I have myself written. It is to be hoped that the interest of the subject is sufficient to excuse me in defending the following statement. "The function of the corpus callosum is unknown, and it is clear that its absence, uncomplicated with other deficiencies, is not sufficient to cause idiocy." (*Idiocy and Imbecility*, 1877, p. 68.) The lecturer says very distinctly that, "when the corpus callosum is congenitally deficient, persons in whom this defect occurs are more or less imbecile," and that, "whenever the destruction of the corpus callosum is extensive, it seems as if the whole internal economy of the brain were disturbed, and more or less mental alienation or idiocy follows." This would, of course, support his theory that the fibres of the corpus callosum "are part of the anatomical substratum of those faculties of the brain which may be termed psychical."

Congenital deficiencies of the corpus callosum are very rare. It is doubtful whether more than thirty cases have been described. I happen to have seen one, which was complicated with other deficiencies in the brain; and this is so generally the case that it is not safe to draw inferences from the want of the corpus callosum, since the incapacities observed during life may be owing to the abnormal appearances in other parts of the brain. I was able to cite two cases, observed by Dr. J. Sander and Professor Germano of Turin, where the corpus callosum was found to be entirely wanting, without any mental derangement or deficiency of intellect being observed during life; and after the book appeared, another case was published by Dr. G. Eichler. It was that of a man who died at the age of 45. The corpus callosum, fornix, and soft commissure were wanting, and the anterior commissure was somewhat larger than usual. There were some abnormalities in the gyri, especially the temporal and occipital. There was nothing particular noted about his intelligence. He could read, write, and count. He seems to have been a man of average intelligence, and had led a respectable life (*Archiv für Psychiatrie*, Band viii, Heft 2). There is a report of Dr. Eichler's paper in the *Journal of Mental Science*, January, 1879, and in *Brain*, vol. i, p. 419.

The lecturer observes that in animals not possessing a corpus callosum the intelligence is feeble, or confined to a few definite circles of action; but as the callosal brain is reached, more or less improvement in the intelligence of the animal is noticed. Is this really the verdict of zoology? We thought that birds wanted the corpus callosum; but some birds, such as crows or parrots, are much more intelligent than many quadrupeds.

Professor Hamilton concludes: "Whether as yet unobserved morbid changes in the corpus callosum may throw any light upon those great blanks in our pathology, namely, mania in its various forms, melancholia, and, more especially, general paralysis of the insane, remains to be seen. It is possible that even a vascular change, an abnormal vaso-motor action influencing this part of the brain, might be sufficient to account for many forms of mental derangement."

I had no idea that the pathology of mania and melancholia were so ill worked out; and if Professor Hamilton will inquire into the pathology of general paralysis, he will find that, as far as our present means of investigation go, there is very little left to do.

COLOTOMY AND OSTEOTOMY.

BY H. A. REEVES, F.R.C.S.Ed.,
Surgeon to the London Hospital.

THESE operations are at present attracting surgical attention. As the introducer into this country of inguinal colotomy, and being second on the list of osteotomists, I feel called on, through recent publications, to record my experience regarding them. Sigmoid colotomy, though originally a French operation, never took root in France as a palliative in rectal cancer, or stricture with ulceration; but since the publication in the BRITISH MEDICAL JOURNAL, a few years ago, of my early cases, this operation is finding favour on the Continent, and also in this country. In that paper I pointed out the various advantages of inguinal over lumbar colotomy, and indicated the best mode of reaching the colon; and since then I have operated on eight other cases, making the total of sigmoid colotomies eleven in adults; if three in infants, done for imperforate rectum, be added, the number of my inguinal colotomies amounts to fourteen. During the past fifteen years, in addition to these, I have had occasion to perform thirty-nine lumbar colotomies, and the result of these fifty-three operations, *i.e.*, thirty-nine lumbar and fourteen inguinal, is briefly this: ten out of the eleven sigmoid colotomies on adults lived for several months after the operation, one done *in extremis* at Dorking died on the third day after operation, with those symptoms of perforation which occur often in late colotomies.

The operations on infants were, as is the rule in such cases, unsuccessful. Of the thirty-nine lumbar operations, thirty-six survived the operation for periods varying from seven or eight months to as many and more years, according to the nature of the disease for which the operation was undertaken. I have recently given a clinical lecture on these cases at the London Hospital, and hope shortly to see it published, as in it fuller details of these cases, and of the merits and demerits of the various modes of doing colotomy, are given.

We are told not to hide our light under a bushel; so I may be excused for saying that recent publications concerning colotomy have afforded me a double agreeable surprise—first, that I come second, instead of, as I previously thought, fourth or fifth, on the list as regards the number of operations done; and, secondly, that my results are (until better be shown) first, as regards recoveries and duration of life after the operation. I believe the reason of this success to be that I advise early operation. Directly I find that there is malignant rectal disease, or any form of stricture with ulceration, pain, and loss of flesh, I urge immediate colotomy, provided the case be not favourable for excision. Of this operation I can only say, from the experience of seven cases, that I am not very favourable to it; and though I see a large number of cases of rectal disease and of rectal stricture (which is, unfortunately, very common in women) I very rarely see a case suitable for it, and the only cases which proved successful in my hands were three cases of epithelioma low down; in the four others recurrence, sooner or later, took place, and colotomy was subsequently performed in three of them.

For the benefit of patients, and, consequently, for the greater success of the operation, I trust surgeons will be guided by the result of my experience in early colotomy, and I feel sure they will soon be able to record equal, and possibly greater, success. It is necessary to speak clearly on this point; for in the last edition of Holmes's *System of Surgery*, in the article on Diseases of the Rectum, colotomy is very slightly alluded to, and looked on as a last resource, and it is just in these very cases that the operation is most unsuccessful. It may be as well to give recent proof of this.

During the last six weeks, I have seen five cases of rectal stricture, and have done four colotomies, two lumbar, and two inguinal. Three of these were hospital cases, and one was operated on at Arundel; three of the patients were females, and two males. In the fifth case, a male, I proposed colotomy, but as my senior was expected in the afternoon, the case was left for him, and, for some reason, the operation was not done. The man died early the next morning with symptoms of perforation, and the *post mortem* examination showed ulceration and perforation of the cæcum and peritonitis, so that colotomy would have had no chance. Another case recently occurred in the practice of a colleague in which lumbar colotomy was done, but the patient died some hours after, and in this case the cause of death was ulceration and perforation of the cæcum. I could relate others, but these are ample to show that late colotomy is as useless as any other surgical or lay proceeding to which the expression "too late" can be applied.

Of late, two cases of Macewen's osteotomy have been recorded, in one of which the popliteal vessels were wounded, and amputation, followed by death, was the end. In the second case the popliteal artery was divided, and subsequently tied, and the patient did well. These grave accidents occurred in the hands of skilful and experienced operators and are, of course, more likely to happen in inexperienced hands, so that I would again draw attention to the remarks I made some years ago as to the anatomical dangers inherent to Macewen's osteotomy, and, indeed, to all operations about this situation, and would again recommend diaphysal osteotomy, as pointed out in a short paper published a few years ago in this JOURNAL under the heading of Femoral (*i.e.*, about the junction of middle and lower thirds) Osteotomy. I always operate from the outer side, and if the operation be done according to the directions given in the paper alluded to, the plan is safe and simple. I have discussed the whole question of osteotomy and its various modes in a chapter of a shortly forthcoming book on *Practical Orthopædics*, and must refer to that for fuller details.

Colotomy and osteotomy form two of the most important practical subjects for discussion at the coming congress at Copenhagen. For this reason, and also because I desire again to point out the dangers inherent to lumbar colotomy and Macewen's operation, and to furnish proof of surer and safer roads, I have taken up the pen. I should, however, consider the communication imperfect were I to omit mention of an important fact, which is, that my colotomies and osteotomies were done without Listerian precautions. I never adopt these, and if I may be allowed to say, and pardoned for saying it, I would ask the following pertinent (which some may think impertinent) question: Can any surgeon show better results?

I have never had a death from osteotomy, whereas several cases of death from the operation have been recorded, from some or other cause, after Listerism, and in several of these the case was complicated by suppuration.

SURGICAL MEMORANDA.

THE EXCISION OF PORTIONS OF TENDONS OF PARTIALLY PARALYSED MUSCLES.

BEARING upon this subject, it may be of interest to state that, in several cases where a muscle has been quite useless from partial paralysis, and where the foot has been cold and flaccid, I have found that simple subcutaneous section of a tendon has had the effect of rapidly increasing the warmth of the foot, and of so improving the nutritive condition of the muscle, that its functions have been restored.

One of the patients upon whom I thus operated I exhibited at a meeting of the Harveian Society last year. Mr. Jessop of Leeds first drew my attention to the fact that tenotomy could be performed with benefit under such circumstances. When there is redundancy of tendon, as in the cases already recorded, excision of a portion of the tendon is doubtless the better operation. NOBLE SMITH.

THERAPEUTIC MEMORANDA.

THE USE OF SALICYLIC ACID IN THE TREATMENT OF LUPUS VULGARIS.

I HAVE for some time employed salicylic acid, in the form of ointment, as a remedy for eczema of the scalp, and impetigo contagiosa occurring in children, with the most satisfactory results, cases that have defied other treatment yielding rapidly to its agency, and I have been induced to make a further trial of it in other skin-affections.

By the kindness of Mr. Rigby, surgeon to the Doncaster Infirmary, I was permitted to employ it in a very bad case of lupus exedens, which had been for some time under his care.

The patient, a woman about 25 years of age, had her face terribly disfigured, the ulceration having destroyed one *ala nasi*, the whole of the cheek and eyebrow being also involved. She had been in the hospital before, and had improved under treatment with Donovan's solution and a visit to Harrogate. But on her return, although she was kept under observation and treatment, fresh tubercles developed, and the parts that had cicatrised soon became again involved, and she was re-admitted to the institution. I first tried an ointment of 15 grains to the ounce of vaseline, which was of no use; I then increased the strength to a drachm, and then to a drachm and a half to the ounce.

The ulcers soon began to heal, no fresh tubercles appeared, the cicatrices became soft and lost their shiny, unhealthy appearance, and the skin of the face is now almost sound. She was taking a mixture containing Donovan's solution and the liquor ferri dialysati. But as this had been administered without apparent benefit before admission, I think it is fair to give the credit to the external remedy. I have not heard of salicylic acid being employed before in the treatment of this particular disorder, and its action seems very satisfactory, especially as it does not appear to cause irritation.

J. G. MARSHALL, M.B.Cantab., M.R.C.S.,
House-Surgeon to the Doncaster Infirmary.

OBSTETRIC MEMORANDA.

FORCEPS.

THE suggestion of Mr. Child as to the introduction of the upper blade of the forceps is well known to me; and for more than twenty years I have practised it. It was shown to me nearly twenty-two years ago by the late Mr. J. Hutchinson of Manchester. It simplifies the operation considerably, and is very easy to learn after a little experience. Most practitioners have their own way as regards the after part of the operation. For my own part, I rarely or never "extract", but remove the forceps when the head is on the perineum, and let nature finish it. I have never, in a long experience of operative midwifery, had to stitch up a perineum. HENRY WATSON, M.D., Newbury.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN AND IRELAND.

MIDDLESEX HOSPITAL.

TWO CASES OF METRORRHAGIA.

(Under the care of Dr. ARTHUR W. EDIS, Obstetric Physician.)

[We are indebted for the following notes to Mr. H. T. THORNTON, Resident Obstetric Assistant.]

Metrorrhagia, of Eight Years' Duration, Cured by Removal of Small Placental Polypus.—Y. S., aged 51, married twenty-five years, and the mother of five children, the youngest eight years old, was admitted on April 16th, 1884.

The history she gave was, that she had always enjoyed good health until her last confinement, since which she had suffered with profuse and irregular discharge of blood, varying in duration from one to four weeks. During the last four months, the hæmorrhage had been almost continuous, attended by "dragging pain" in the left iliac region. On vaginal examination, the uterus was found to be bulky and mobile, but fairly normal in position. The uterine sound passed upwards and forwards to the depth of four inches. The cervix uteri was not much altered in consistence. Protruding from the anterior lip was a small sessile growth, about the size of a hazel-nut. Some sanguineous discharge was still present.

On April 18th, the cervix uteri was dilated by means of laminaria-tents, which were allowed to remain in all night. At 10 A.M. on April 19th, the tents were removed, and the cervix found to be well dilated. After irrigating the interior of the uterus with carbolised water, the finger was inserted, and the cavity explored. A small nodular sessile mass was detected on the fundus uteri; this was seized with a long ovum-forceps, and removed by means of torsion and traction. The interior of the uterus was then scraped carefully with a sharp curved curette, but no further nodules were detached, but merely some thickened mucous membrane. Pacquelin's cautery was employed to destroy the growth detected in the anterior lip of the cervix uteri. The uterus was again irrigated to remove any *débris.* There was scarcely any hæmorrhage at the time, or subsequently, and the amount of pain was so inconsiderable as not even to require the administration of an anæsthetic during the operation.

She convalesced rapidly, without a bad symptom, and was discharged cured on May 7th, at her own request. Before leaving, the uterus had diminished considerably in bulk; and the hæmorrhage ceased from the date of the operation. The portion removed was not larger than a hazel-nut, and had every appearance of being a so-called placental polypus.

REMARKS BY DR. EDIS.—This case strikingly illustrates the rational treatment of menorrhagia. The patient had been enjoined to "rest up," and had taken quantities of various medicines from time to time. Exploration of the interior of the uterus naturally suggested itself, and was at once resorted to, with the most satisfactory result.

In all cases of persistent uterine hæmorrhage, when the usual remedies fail to check it, other means should be employed, without allowing the patient to linger on unrelieved.

Retained Portion of Placenta; Metrorrhagia of Six Weeks' Duration; Relieved.—Matilda S., aged 39, married, and the mother of seven children, was admitted on February 14th, 1884. She stated that she had always, until lately, had fairly good general health. Her last child was born six years before her admission. Since then, she had had three miscarriages at about the third or fourth month. Six weeks before admission, having missed four periods, she believed herself pregnant. She went to washing at this time, and, straining herself, brought on a miscarriage. She lost a good deal of blood at the time, and had lost continuously ever since, often passing clots. The discharge lately had had a very offensive odour.

When admitted, the temperature was 98.6°; the pulse 94, and small. She was extremely anæmic and very weak. Vaginal examination showed that the uterus was bulky, mobile, and rather low down in the pelvis. The cervix was soft and very patulous. Blood-stained mucus was still flowing from the os, which easily admitted the tip of the forefinger.

On February 16th, at 9 A.M., a sponge-tent was introduced, and allowed to remain in until 2.30 P.M., when the cervical canal was found well dilated. On introducing the finger into the uterus, a distinct projection, the size of half-a-crown, could be felt at the fundus. An anæsthetic being administered, this growth was removed by means of the long ovum-forceps and sharp curette. There was but little hæmorrhage during the operation. The uterine cavity was then irrigated with carbolic acid solution. The growth was examined carefully, and found to be of placental structure, firm and hard. Glycerine tampons were then introduced daily, and the patient was placed on a mixture of ergot and cinchona every four hours. The uterus was washed out daily with carbolic solution. The temperature remained normal throughout. After the removal of the growth the metrorrhagia ceased, and she rapidly gained strength and colour.

She left the hospital on March 6th, feeling quite strong, with no discharge or pain, and with the uterus almost normal in size.

SWANSEA HOSPITAL.

CASE OF RETAINED MENSES FROM IMPERFORATE HYMEN: EPILEPSY: OPERATION: RECOVERY, WITH TEMPORARY RELIEF FROM EPILEPSY.

(Under the care of Mr. H. A. LATIMER, Surgeon.)

ON September 29th, 1880, E. S. D., aged 18, employed in washing bottles at an aerated water works, presented herself at the out-patients' department, complaining of epileptic fits, and of a lump in the abdomen. She was a tall well developed girl, with a pasty skin and delicate appearance. The family history was good. The father died in 1879 of typhoid fever; the mother was healthy, but suffered from neuralgia. There was no history of epilepsy. The previous personal history was as follows. She was a seven months' child, and was always a weak girl, though she never had any definite illness until four years before admission, when a fit suddenly occurred without any previous warning (this was in December, 1876). Since then, she had suffered off and on from epileptic fits (the account given of unconsciousness and subsequent drowsiness was clear on this point). She had never seen a menstrual flow, and had never suffered from any pain at menstrual periods until within about four months, and then not inordinately. She had had typhoid fever three years earlier; she had never suffered from hysteria.

On examination, a tumour was found, oval, of rounded outline, and occupying the position of an enlarged uterus. The upper margin was irregular, and reached to within two inches of the costal arch on the right side, and within two and a quarter inches on the left side. The tumour was dull on percussion, whilst at the flanks there was resonance. On examination in the vagina, a bulging resistent membrane was found just within the clitoris, and quite occluding the passage. The urine was drawn off, but no diminution of the tumour resulted. A hand placed on the tumour and a finger against the bulging membrane brought out an obscure sense of fluctuation between the two points. The breasts were well developed.

October 1st. Mr. Latimer operated at the patient's house, chloroform being administered by Dr. Pritchard, house-surgeon. The large needle of the aspirator brought away thick reddish material. An opening was made with a bistoury and director, and about a pint and a half of a chocolate-paste-like material was let out. The vagina was then syringed out with warm water. The swelling subsided as the menses flowed.

October 2nd. She felt pretty comfortable. The temperature was 99.2° Fahr.

October 3rd. She was very comfortable. The temperature was normal.

October 4th. In the afternoon, the pulse was 112, and the temperature 102.2°. A sharp pain in the right iliac fossa was first felt at 9.30 A.M. The bowels had acted on the previous evening and in the morning, the motions being yellow, "like from a baby." She felt sick, but had had no rigors. On vaginal examination, thickened walls were felt in all directions, as if the parts were hypertrophied and brawny. The anterior lip of the uterus was very big. The os uteri was bulky, thick, and patent. The opening in the membrane was stretched with the finger, as some adhesions were occluding it. She was ordered 10 grains of disulphate of quinine every eight hours, two aperient pills at once, and linseed-meal poultices to the abdomen. Frequent injections of Condy's fluid and warm water were also prescribed.

October 5th. The pulse was 108, and the temperature 99.6° Fahr. Two motions had been passed; the tongue was moist and white; and there had been no rigors. The membrane was torn freely in all directions by the two fingers. The quinine, poulticing, and syringing were continued.

On October 6th, she was much easier. The pulse was 100, and the temperature 99°. She slept well during the night. Examination was made with the thumb in the rectum and the forefinger in the vagina; the wall of the vagina was felt to be thickened.

On October 7th, the temperature was normal. She was very comfortable. She was ordered to discontinue poulticing, but to remain in bed, as her uterus was evidently in the same state as that of a woman at the termination of natural labour.

January 4th, 1881. She had menstruated three times since the operation, the discharge being profuse and dark red, and containing many clots. No pain was experienced at the time, but a little afterwards. No sign of fits had been noticed.

November 1st, 1882. Mr. Latimer attended her in labour; a large child being delivered by forceps under methylene. She remained entirely free from any fits from the time of the operation up to the seventh month of pregnancy; five fits occurred altogether before her confinement.

In May, 1883, she was nursing her child. The fits were again frequent; the first one took place six weeks after her confinement, and the longest interval of freedom from them subsequently had been two weeks. As a rule, she had one a week.

REPORTS OF SOCIETIES.

EAST YORK AND NORTH LINCOLN BRANCH.

ANNUAL MEETING, MAY 28TH, 1884.

T. B. KEETLEY, M.R.C.S.Eng., President, in Chair.

Cleft Palate: Operation.—Mr. SHERBURN exhibited this case. Before doing so, he made a few remarks on the operation. The disease was an arrest of development prior to the fourth month of utero-gestation. There were varying opinions as to the age at which the operation should be performed. As there was danger from hæmorrhage in very young children, and as the chief object of the operation was to enable the patient to speak, he was inclined to wait until the patient was between two and four years of age. The case he now brought forward was that of a young lady, aged 16, who had been operated on in Dublin when she was 4 years old. The wound broke down at the end of a week. An artificial palate was of no good to her. Two years ago, she came under his care. It was a complete cleft palate. He freely separated the fibrous margin which united the hard and soft palates. The levator and tensor palati muscles were divided after Pollock's method, which was described. Silver sutures were put in. Opinions differed as to the length of time sutures should be left in. In this case, he left them in for two years. She came back last April to have the soft palate done. The sutures were removed from the hard palate, and the soft palate was closed, the sutures being left in until the present time, and he intended to leave them in for an indefinite period. The patient was then exhibited.

Softening of the Brain.—Dr. EDWARD DALY read notes of this case, which was supposed to have been a tumour of the brain before death. The patient was aged 41; he weighed between 14 and 15 stone; had had no gout, rheumatism, or syphilis. In 1881, he had epileptic convulsions. In 1882, he had pain on the right side of his head, and his face was drawn to the left. This lasted for some months. His grasp got weak, and, later, his foot and leg became numb and weak, but there was no loss of motor power. His hearing became defective. In 1884, there was loss of motor power. Drowsiness and paralysis came on, with retention of urine. Finally, he became comatose. He was conscious until a few days before death. The heart was normal; also the urine. Hemianæsthesia was the prominent symptom for months. He could not distinguish between heat and cold, or perceive when he was pinched. The anatomy and pathology of the disease were fully described. The lesion was supposed to be an affection of the posterior division of the internal capsule. Sections of the brain were handed round.

Bubon d'emblée.—Mr. HOWITT brought forward this case. In this affection, the primary lesion was in the glands. There was no chancre. The glands suppurated, and the pus was auto-inoculable. On January 26th, a patient presented himself with a chain of enlarged inguinal lymphatic glands on both sides. They were typically enlarged, being arranged in a graduated series, the largest nearest the genitals. He was very carefully examined, but no chancre was found, and he denied any risk of contagion. He was seen again on February 27th. He now had pains about his joints, and a squamous syphilide all over. He was again most carefully examined, with the assistance of Mr. Wright, of the Manchester Infirmary; but no lesion could be found in the genitals or anus. There was a slight tendency to hypospadia. He now admitted connection six weeks before. The existence of this disease was denied by many syphilographers. Hunter believed in it. American authors considered it "not proven." Holmes spoke uncertainly on the point. The glands usually suppurated, and the pus was auto-inoculable; but in this case the glands subsided without suppuration.

Ophthalmoscopic Cases.—Dr. ROCKLIFFE exhibited the following cases. 1, Opaque Nerve-fibres; 2, Tortuous Vessels; 3, Irregularity of Lens; 4, Glaucoma; 5, Old Choroiditis; 6, Hæmorrhagic Retinitis; 7, Floating Opacities of the Vitreous.

Excision of the Rectum.—Dr. KING said this operation used to be tabooed, but he had done it on several occasions. The patient whose case he was going to relate was the wife of a small farmer, aged 52, a very hard-working woman. The disease extended from just above the anus to the middle of the sacrum, and was confined to the posterior aspect of the bowel. An incision was made from the anus to the coccyx, which allowed the hand to be introduced, and the mass was scooped out in one piece. There was a good deal of bleeding. She recovered from the operation well, and had a normal temperature next day. It was two months before she could go home. She could now work, and had gained a stone in weight. If the operation added a couple of years to her life, he thought it a justifiable one. The growth was epithelioma.

Notes on Sexual Insanity.—Dr. MACLEOD read a brief paper on this subject. This disease generally occurred in young girls and women from 18 to 24, who were affected with amenorrhœa or dysmenorrhœa. An illustrative case was that of a girl, aged 24, who came of a healthy family, but was not so strong as the others. She was well until 17; menstruation was painful and irregular. Her habits then changed; she became dull, gloomy, and at times irritable. This went on for years. Then she became excitable, and was removed to an asylum for nine months. She did not improve. She then became depressed, and her health fell off. Two months ago, she came to Beverley. She was dull and apathetic, and would not work. She was untidy and dirty in her habits; at times she showed erotic tendencies. She was free from organic disease. Her menstruation was normal; she was somewhat anæmic. These patients manifested erotic tendencies, and frequently masturbated. The character was perverse. The disease was sometimes attributed to disappointment in love, but probably existed before the supposed disappointment. There was often hereditary predisposition, and neurotic tendencies. The disease was characterised by sharp attacks of excitement, followed by apathy. It manifested periodicity. The physical health was generally poor, with anæmia and a general want of development. The prognosis was favourable if the patient lost the characteristics of girlishness and developed into womanhood. In the treatment, the two chief points were the establishment of the menstrual flow, and the restoration of the bodily health. Fat-forming foods, with iron and tonics, were best. Sedatives and stimulants should be avoided. Asylum treatment was the best, where there was a regular system of work.

REVIEWS AND NOTICES.

PRACTICAL MANUAL OF DISEASES OF WOMEN, AND UTERINE THERAPEUTICS, FOR STUDENTS AND PRACTITIONERS. By H. MACNAUGHTON JONES, M.D., M.Ch., F.R.C.S.I. and E., Examiner in Obstetrics, Royal University of Ireland, Fellow of the Academy of Medicine in Ireland, etc. London: Baillière, Tindall, and Cox.

IN the preface, the author informs his readers that this book is simply intended as a practitioners' and students' manual, and that diseases of women should not be treated as a speciality; indeed he deprecates all specialism excepting ophthalmic and otological work. After a brief sketch of the anatomy of the female organs, there are two good chapters on the examination of cases. In cases of dysmenorrhœa with contraction of the canal of the cervix, the author speaks favourably of the stem-pessary and dilatation by bougies, and in extreme cases he advocates division of the cervix about ten days after the cessation of a menstrual period, followed by the introduction of Sims's glass stem or Greenhalgh's uterine stem. He has seen "some splendid results" in cases of chronic ovarian excitement, treated on Dr. Weir Mitchell's plan. Dr. MACNAUGHTON JONES rightly impresses on the student the symptomatic character of metrorrhagia and menorrhagia. He is also guarded in his opinion on pessaries. "It is deplorable," he observes, "the extent to which the element of pessary-adjusters has degraded practice, and opened the door for every form of inventive humbug;" but he desires not to be understood as undervaluing the assistance afforded in treatment by a well adjusted pessary. He certainly believes in the efficacy of a large number of varieties of that instrument, which he describes and figures, dwelling at length on the different kinds of displacement, including anteflexion, for which he recommends several operative measures. No mention is made of Alexander's operation for the cure of prolapsus and other displacements. In the chapter on Fibroid Tumours, the author's advice is very sound. He regrets the growing tendency on the part of the intelligent practitioner to relinquish his independent judgment before the assumed omniscient skill of some specialist, and quotes the words of Dr. Keith, in his communication to the JOURNAL of December 8th, 1883, on the justifiability of hysterectomy.

In the chapter on Ovarian and Extra-ovarian Cysts, the numerous theories on the origin of multilocular ovarian tumours are well summarised, the authorities being named, which is useful for reference. The author most rightly admits that extra-ovarian cysts may arise in the tissue between the peritoneal folds that form the broad ligament, quite independently of the parovarium. He devotes several pages to the consideration of ovarian fluid and the proliferating malignant cells found in ascitic fluid in cases of malignant peritonitis and cancer or sarcoma of the ovary. Major and complicated operations, such as ovariotomy, hysterectomy, and plastic operations on the vagina, are not described; but reference is made to larger obstetrical, gynæcological, and surgical treatises.

At the end of the work is a useful appendix on some of the principal spas of Europe, and of health-resorts and sea-bathing places, which cannot fail to prove of value to all who have under their charge women who possess sufficient competence to avail themselves of the hygienic and therapeutic advantages of such places during convalescence from tedious and debilitating uterine and ovarian disorders.

This work shows signs of somewhat hurried preparation. Thus, M. Péan's name is printed Peau on page 292; and, for some unexplained reason, the surname of Dr. James Foulis is constantly spelt "Fowlis," even in the index. The work is published in a very attractive form, the binding being neat, the print and paper excellent, and the size convenient for carriage. It contains over a hundred and eighty woodcuts, the great majority of which represent instruments. Dr. Macnaughton Jones's *Practical Manual* is an excellent work of its kind; for, though we labour under a multiplicity of text-books, such productions are not, as a rule, the work of a mature and experienced authority, as in the case of the manual under consideration.

INTESTINAL OBSTRUCTION, WITH AN APPENDIX ON THE ACTION OF REMEDIES. By HUGH OWEN THOMAS, M.R.C.S. ABDOMINAL HERNIA. By RUSHTON PARKER, B.S., F.R.C.S., Professor of Surgery in University College, Liverpool. London: H. K. Lewis.

IT is a somewhat difficult and invidious task to convey a just estimate of the value of this book; there is much in it to commend and to admire; a power of original thought, and a wealth and aptness of clinical illustration, which ought to make its perusal pleasant as well as profitable; unfortunately, the pleasure is diminished, if not destroyed, by the intemperate tone which defaces too many of its pages. Criticism of contemporaries and of predecessors, and of popular modes of treatment, is not only permissible, but it is to be desired to the fullest extent; it is possible to criticise freely, and, if necessary, unfavourably, without falling into the fault which we have indicated.

Yet when all deductions have been made, Mr. THOMAS's book remains a work of very great merit. He defines intestinal obstruction to mean "any condition of the intestine, its surroundings or contents, which retards, or completely arrests, in their progress towards the rectum, the matters contained within the gut." Ordinary constipation is, therefore, in his opinion, to use his own words, "an infinitesimal degree of obstruction." He contends that the natural mode by which constipation is overcome is, that the general *malaise* produced by it tends to cause an increase in the quantity of fluid taken, at the same time that the quantity of solids ingested decreases. He protests, therefore, very strongly, against the use of aperients on every occasion on which constipation occurs. For instance, in the management of fractures, where the routine administration of some purgative on the third day is surely attended by pain and discomfort, and some disturbance of the fracture, he allows the bowels to remain inactive—indeed hopes that they may remain so—until the fourth week. To achieve this end, he limits the diet very strictly: tea, biscuit and butter in the morning and evening, broth thickened with arrowroot, sago, or rice for dinner, and water-arrowroot with wine or brandy for supper. As a rule, on this diet the bowels are opened spontaneously about the end of the third week. The greatest confidence may be placed in Mr. Thomas when he is dealing with clinical detail, but we may be permitted to surmise that such a dietary cannot always be enforced. This, however, may suffice to introduce one of the central points of Mr. Thomas's argument; his doctrine is non-intervention. Thus, in cases where obstruction is slowly being produced, where in fact it is already present in a slight or "chronic" degree, his sole prescription may be a diet "restricted in quantity and selected in quality......as the period of urgency is never very long, seldom beyond six weeks—a time much too short to kill, even by semi-starvation, unless other evils be present to try the patient's endurance, as during this time some amount of assimilation takes place, and the patient's vitality is economised by quiescence in bed, protected by warm clothing, and the soothing action of medicine." Further, he recommends that the abdomen should be exposed, and the foot of the bed raised ten inches; by thus raising the bed, he finds that vomiting is made less frequent and more copious, and believes that the pressure of fluid and its tendency to flow towards the locality of obstruction is diminished.

In cases of more severity, of acute obstruction, he looks to drugs for some assistance; here, of course, he emphatically condemns purgatives of all kinds; of all drugs belladonna is the one in which he appears to place most confidence as a stimulant when a condition of collapse is present; but, such being the case, he objects to its routine use in the treatment of intestinal obstruction. Sedative drugs, in combination with proper food, form the line of treatment which he strongly recommends; opium he regards as the "sheet-anchor," and in this he coincides with the practice now widely and generally established. Alcohol he also finds to be a sedative, which no doubt in a certain sense it is, especially if taken in considerable doses. Vomiting, Mr. Thomas thinks, ought to be controlled when it is excessive, but he believes it to be, "when well managed, a valuable aid to recovery." He has some excellent remarks on the nature of the vomited material; it may, he says, be stercoraceous in colour and odour, stercoraceous in colour only, or non-stercoraceous. When the vomited matter is non-stercoraceous, the difficulty is in the upper part of the small intestine; when it is stercoraceous in colour but not in odour, the obstruction is in the lower portion of the small intestine, or there is nearly complete occlusion of the ileo-cæcal valve; when it is decidedly stercoraceous in colour and odour, the ileo-cæcal valve is either partially closed or floating and incompetent. Mr. Thomas contends that stercoraceous vomiting is caused by a reversed peristalsis, or "retro-peristalsis," and in this he differs from the opinion arrived at by the late Dr. Brinton; his arguments, however, have, we must confess, failed to convince us that Dr. Brinton was wrong, and his experiments can hardly be said to be conclusive, or, indeed, to prove more than that "retro-peristalsis" would produce stercoraceous vomiting with great ease, a proposition which nobody would deny. To Dr. Brinton's argument, drawn from the dilatation always found near the point of obstruction, and attributed by him to the current constantly setting towards that point, the answer given by Mr. Thomas appears to be insufficient, inasmuch as nothing can be predicated of the action of gravitation. It would be extremely difficult to show that it always favoured the passage of fluids and solids towards the rectum, and it must be quite clear that it cannot do so in the ascending colon and in many segments of the small intestine. However this may be, the whole of Mr. Thomas's discussion of the symptoms of obstruction will well repay perusal, on account, not only of what he says, but what he suggests, and the fearlessness with which he criticises doctrines which have long passed current almost without question. His explanation of the mode in which the diminution in the amount of urine is brought about is well worthy of serious consideration, and he gives additional evidence against the theory that the quantity of urine bears a direct relation to the site of the obstruction; that is to say, that the lower the obstruction the more the secretion; there are other factors, he believes, which have a greater influence, and he has found that, where the obstruction is far down in the bowel, and the distension and pressure have been great and prolonged, then the secretion of urine is scanty. Against the use of enemata, Mr. Thomas contends with much force and vehemence; and, if he succeed in teaching his readers to use such remedies in intestinal obstruction very sparingly, if at all, he will have achieved a most useful work, and one that will make us forgive the faults of style and manner which we have felt constrained to point out.

Of Mr. PARKER's chapters of Abdominal Hernia, which are among the most valuable in the book, we have already spoken in a notice of his essay (as separately published), which will be found in the last volume of the BRITISH MEDICAL JOURNAL, page 826.

THE Maryport Urban Sanitary Authority have, upon the resignation of Dr. Pearson as Medical Officer of Health, determined to increase the salary from £25 to £30 a year.

ILLUSTRATIONS OF THE INFLUENCE OF THE MIND UPON THE BODY IN HEALTH AND DISEASE, DESIGNED TO ELUCIDATE THE ACTION OF THE IMAGINATION. By D. HACK TUKE, M.D., etc. Second Edition, 2 vols. 8vo, pp. 335 and 326. London: Churchill. 1884.

THIS interesting work has deservedly reached a second edition. The new edition bears throughout the stamp of critical revision. Fresh illustrations are added, and the most recent advances in mental physiology that bear on the subject are worked into the exposition. We notice also in this edition two diagrams due to Mr. Victor Horsley; they exhibit in an ingenious manner the paths of certain nervous impulses.

Dr. TUKE's book, as is known, is an immense repertory of facts resting on well attested evidence—a fair proportion, indeed, being within the author's own knowledge. This, however, is not the chief merit of the work. The great value of the book lies in the circumstance that the facts are brought into living relation with the laws they exemplify. Though the book is a storehouse of facts, it is not a "fact-heap." An orderly arrangement upon an intelligible principle affords an easy grasp of the subject, and at the same time facilitates reference.

The subject is dealt with by means of a fourfold division. One part is devoted to each of the three leading departments of mind—intellect, emotion, and volition. The remaining part treats of the practical application of the doctrines arrived at.

In each division of mind, the effects of the imagination upon sensation, upon the organic functions, and upon the muscles, voluntary and involuntary, are set forth in detail. Occasionally, and we must say it is only occasionally, we come across a case that might well stagger a robust faith; but even then, *se non è vero, è ben trovato*—if it is not true, it ought to be. What at first sight appears improbable, often turns out on closer inspection to be an unquestionable, though perhaps extreme, instance of the working of a well recognised law. Dr. Tuke relates a remarkable experience of his own. It illustrates the influence of intellect over sensation. Dr. Tuke says: "The writer was on one occasion about to have a tooth extracted under the influence of laughing gas, when, in consequence of an unlooked for *contretemps*, the dentist was unable to administer it. The extraction was, therefore, performed without it; but the operation was rendered almost painless by the writer vividly imagining pleasant ideas, and mentally repeating to himself, 'How delightful! how delightful!'" This, we think, goes to show that, in time, philosophers will learn to bear toothache patiently. It will only be necessary to bottle up in the mind a sufficient store of "pleasant ideas," and, when requisite, to remove the stopper from this mental laughing gas. The difficulty, we believe, will be to prevent leakage, and to get the stopper out when wanted. Our pleasant ideas are not often available when we are about to sit down in the dentist's chair. For the sake of science, however, we trust that this plan will receive an unprejudiced trial. It is even safer than ether.

The employment of the imagination as a therapeutic agent is thoughtfully considered. The subject is one that has not yet received from the general body of medical men the attention due to its importance.

In conclusion, we may say that Dr. Tuke's facts and reasonings deserve to be studied by the general practitioner not less than by the consulting physician. From the pages of this work, a new light often seems to shine on the progress of puzzling cases and on the action of remedies; on the causes of success, and on the sources of failure. While its abundance of classified facts makes it valuable for reference, its pleasant style and fascinating subject might warrant us in placing it amongst the light literature of medicine.

PROSTITUTION UNDER THE REGULATION-SYSTEM, FRENCH AND ENGLISH. By YVES GUYOT, Member of the Municipal Council of Paris. Translated by E. B. TRUMAN, M.D., F.C.S. Pp. 348. London: George Redway. 1884.

THIS book, called by its author "A Study in Social Physiology," is dedicated to Mrs. Butler, "in order that women may understand that this book may and ought to be read by them." The end aimed at by M. Guyot appears to be the condemnation of legal measures of any kind or in any place for restraining the spread of venereal diseases. The French regulations are of course those chiefly referred to, but the English Contagious Diseases Acts are also dealt with, as well as, incidentally, the systems of most foreign towns where preventive measures are in force. And here we may say at once that we can in no way agree with the author that his book ought to be read by women—at least, by English women; for, besides that it is worthless as an impartial guide to the subject of which it treats, there is much unsavoury detail which we feel sure no modest woman would care to read.

With the portion of the work relating to foreign countries, we need not concern ourselves further than to point out, that whatever particular features of any system seemed likely to serve the author's purpose have been picked out, compared, and indiscriminately condemned, in a manner which not only renders the conclusions arrived at of no value, but which is calculated to mislead English readers who are not aware how widely the English Acts differ from the regulations which are in operation abroad.

What M. Guyot has to say on the Contagious Diseases Acts is mostly taken from the evidence given by Dr. Nevins and others before the late Select Committee of the House of Commons. As that evidence was fully noticed in this JOURNAL at the time, it is unnecessary to return to it now. The fallacy of one of the chief points insisted on by M. Guyot—namely, that the report of the minority of that Committee proved that the Acts had been a failure in every respect,—has recently been shown over and over again by the paragraphs which have appeared in this JOURNAL and elsewhere describing the state of affairs in the subjected districts since the suspension of compulsory examination. Only the other day, the Home Secretary replied to a deputation asking for the repeal of the Acts, by producing documents received from the Board of Guardians of Canterbury, from the Recorder and grand jury of Portsmouth, from the vicar and clergy of Portsmouth, from the Town Council of Dover, and from other public bodies, in favour of the Acts, which, they contended, had had an admirable effect. There is one point, however, on which we are in accord with M. Guyot—that, without compulsory examination, the Acts have no *raison d'être*. We would go even further, and say that, without compulsory examination, the Acts are worse than useless. This has been abundantly proved by the results of the utterly absurd combination of voluntary admission with compulsory detention of women in hospital, which is now in force.

In the discussion of any question, only good can arise from a fair consideration of both sides of it; and the opponents of legislation for preventing the spread of contagious diseases have assuredly a perfect right to bring forward any real evidence in favour of their views. Their object, however, is hardly likely to be materially aided by such an one-sided illogical work as this; and we cannot help expressing a word of regret that any English medical man should have thought fit to translate it.

ORGANISATION OF CONVALESCENT AID. First Annual Report of the Convalescent Committee of the Charity Organisation Society. 1884.

THE Charity Organisation Society has done well to take in hand the question of convalescent aid. The report before us enumerates more than two hundred convalescent institutions in England alone, most of them conducted upon the unsatisfactory system of granting "letters" to subscribers. One difficulty in this system is that one time there may be far more applicants for admission than can be received; while, at another time, many beds may be unoccupied, and the resources of the institution so far wasted. Moreover, but little care is usually exercised by the subscriber in the selection of those to whom the letters are given.

The Charity Organisation Society seeks to prevent this waste of power by special arrangements with the institutions in question. By prepayment, it secures the exclusive use of certain beds for a year, or shorter period, and keeps them constantly occupied by a succession of suitable cases, selected by the district committees after due inquiry. It is found that the average annual cost of each bed is [illegible], or about [illegible] per week; but some of the patients sent by the Society are able to defray the whole or part of the charges incurred on their behalf.

The report dwells upon the necessity of caution in the selection and examination of cases, those only being eligible which are likely to derive marked and permanent benefit. It is insisted that, through mistaken kindness, medical certificates not unfrequently understate the gravity of the patient's condition.

Allusion is made to the out-patient department of hospitals as a large field for possible future extension of the [illegible].

Considering the limited means hitherto placed at its disposal, the Committee has good reason to be satisfied with the result of its labours up to the present time, upwards of [illegible] patients having been sent to various country and seaside homes during the first [illegible] months, namely, [illegible] to November, [illegible]. [illegible] support, which it will doubtless receive as its [illegible] become more widely known.

NOTES ON BOOKS.

Facts concerning Vaccination for Heads of Families. National Health Society, 44, Berners Street, W.—If the value of a book or pamphlet may be measured by the number of copies demanded of it by the public, then the value of this capital little pamphlet of the National Health Society must be very highly rated. It is issued at a nominal cost, and its circulation has now to be spoken of in hundreds of thousands; and it appears to have lately renewed its youth in view of the fresh epidemic of small-pox that is hanging over the metropolis through the neglect of revaccination, and of notification of infectious disease. It has on two separate occasions been carefully and exhaustively revised by the medical officers of the Local Government Board, with the assent of two successive Presidents; and its claims to be of official authority on the subject of which it treats are, therefore, well endorsed. No critical review of its contents is called for. It contains the condensed quintessence of the facts of the question, chiefly compiled from the published lecture by Mr. Ernest Hart, the Chairman of the Society, entitled, *The Truth about Vaccination*, and expressed in a dozen canons of vaccination-truth. So far as we can see, it gives all that is material, omitting that which is immaterial. Indeed, looking to the searching and repeated criticism to which it has been exposed, it would be surprising if there were much opportunity for cavil at it in this stage of its history. The idea of the pamphlet will be generally admitted to be essentially good. The minds of uneducated people are easily unhinged with regard to the harmlessness and usefulness of vaccination, by the trash that is industriously disseminated amongst them by antivaccination enthusiasts. A cheap, simple, and efficient antidote to this poison has been much needed. The National Health Society's pamphlet supplies the want. It has attained a great public success, but it is just now opportune in directing the attention of those who have not yet seen it to its value and utility as an incentive to vaccination, and, consequently, as a preventive of small-pox.

Thirty Years' Experience of a Medical Officer in the English Convict-Service. By JOHN CAMPBELL, M.D., Staff-Surgeon R.N. London: T. Nelson and Sons. 1884.—Thirty years' experience in any subject should carry a weight of authority; and Dr. Campbell's observations and opinions claim the respect and consideration of those administering the convict-service. The book is small, of 138 pages, and easily read; and, although dealing chiefly with convicts as invalids, is free from technicalities, and will thus be appreciated by the general reader. The young practitioner, also, who selects the prison-service for his professional career, will find some useful hints to guide him in a practice presenting many features peculiar to itself. Anecdotes of prison-life, interspersed here and there, tend to relieve a subject which in its nature is more or less depressing, but which, nevertheless, seems to have a mysterious attraction for the public.

MESSRS. Baillière, Tindall, and Cox, send us a *Movable Atlas*, showing the bones and ligaments of the human body by means of superposed coloured plates, by Professor G. J. WITKOWSKI, M.D., translated and edited by Mr. Norton, St. Mary's Hospital. This constitutes Part VIII of Dr. Witkowski's very interesting series of illustrated anatomy, and its accuracy and completeness may be taken for granted, looking at the accomplishments of its two authors. We confess, however, that the utility of such an atlas is less apparent in reference to the bones and ligaments than to the viscera and other parts of the body, in consequence of the complication and minuteness of the points to be illustrated.

FROM Messrs. Churchill's, we have Fasciculus 16 of Mr. JONATHAN HUTCHINSON's admirable *Illustrations of Clinical Surgery*. The plates 59-62 included in this fasciculus present coloured illustrations of the fungating forms of rodent cancer, and various examples of fracture of the patella and the femur. The illustrations are extremely well selected, and illustrate various typical conditions, on the pathological character of which the surgeon should be well informed; besides showing, also, some more uncommon forms of fracture which it is important to bear in mind. This fasciculus fully maintains the deservedly high reputation of this splendid contribution to illustrated pathology.

DONATIONS AND BEQUESTS.—"A Friend" has given £1,000 to the London Temperance Hospital.—"W." has given one hundred guineas to the Metropolitan Convalescent Institution.—The General Hospital, and the Queen's Hospital, Birmingham, have each received £100 under the will of Mr. E. Cotterill; and the latter institution has also received £100 under the will of Mr. J. F. West.—The City of Dublin Hospital has received £155 4s. 5d. under the will of Miss Anne Turner.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1884.

SUBSCRIPTIONS to the Association for 1884 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post Office Orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 28th, 1884.

MEDICAL LEGISLATION.

ON Tuesday last, the 24th instant, the Medical Government Bill elicited a discussion on the second reading. This Bill has been so frequently referred to in our columns, that the details do not need further consideration. The Bill provides for the reform of the Medical Council, as Mr. Mundella stated, "by diminishing its numbers, by strengthening its powers, and by giving to the medical profession direct representation." In reference to this point, Sir Lyon Playfair, who followed Mr. Mundella, having stated that the present Bill was the best of more than twenty Bills introduced into that House on that subject, observed: "It was most important to put an end to the harassing of a profession, which was always being offered schemes of reform which were never realised. The essence of the Bill was to strengthen the Medical Council, which, since 1858, had had the charge over the medical education of the country. Formerly, the universities and corporations were represented on that board, but there was no representation of the profession at large. By the Bill, the profession would be represented, and that was a great gain."

With regard to the necessity for direct representation of the profession in the General Medical Council, the profession has never wavered since the year 1831. Sir Charles Hastings, Drs. Forbes, Conolly, Hughes Bennett, and Sibson, with other celebrities too numerous to mention, have supported the profession in demanding it; and so strikingly has opinion ripened in this respect, that *Blackwood's Magazine*, in its late articles on medical reform, suggested a Medical Council, composed exclusively of Crown nominees and direct representatives of the profession in equal numbers, as a panacea for all existing evils.

The great struggle now going on involves the formation of conjoint examining boards, one in each division of the kingdom, to test the attainments in medicine, surgery, and midwifery, of every candidate for admission to the *Medical Register*, and to exclude from it, for the future, those persons who in the past and at present have gained admission to the *Register* by means of partial, or so-called half, qualifications, whereby, as Sir Lyon Playfair put it, "A man might never have passed an examination in surgery, and yet be entitled to amputate a leg, or he might attend a case of measles or midwifery without ever having passed an examination in medicine or midwifery."

The profession, the Royal Commission, the medical press, and the Government, see no other remedy for this great scandal than the compulsory combination of the medical authorities in each of the three divisions of the kingdom in the formation of single examining boards, under the supreme control of a newly constituted Medical Council, whereby all temptation on the part of universities or corporations to underbid each other will cease.

All serious opposition to the Bill will be directed against this provision. Sir Lyon Playfair, certainly in opposition to the views of the great majority of the 3,000 medical graduates, in his parliamentary constituency, proposed that: "The Divisional Board might be asked to send as many assessors as they pleased to co-operate as examiners in the final examinations of the universities who were willng to receive them, or of the conjoint corporations that were willing to receive them." Such a proposition would involve numerous visitations of examinations, and would strike at the very essence of the Bill, and is but a poor return for the efforts made to conciliate the Scotch Universities, whose candidates are to be admitted to the examination of the conjoint board on a greatly reduced fee. Clause 36 provides that: "The fees to be paid by university graduates or undergraduates holding university certificates of having passed the examinations at their university qualifying for admission to the final examination of the board, shall not exceed the portion of the fee leviable as aforesaid for the purpose of supplying funds for the administrative expenses of the board." Sir Lyon Playfair's examination of Dr. Edward Waters before the Select Committee of the House of Commons, July 7th, 1879, in no way led up to such a proposition; and the legislature can hardly concede, as Sir Lyon Playfair proposes, to the Scotch corporations, nor to all the Scotch universities, a privilege which the University of Dublin and the English universities, with rigorous examinations, do not demand. Sir Lyon Playfair asked Dr. Waters (query 1,906) whether he approved that, in the case of the universities, the final examination only should be by the conjoint board; and on Dr. Waters answering in the affirmative, he observed that "the effect of that would be not to make such a very heavy charge upon the university students going for the higher examinations."

We see with satisfaction, however, that Sir Lyon Playfair, speaking for the Scotch Universities, designates the Government Medical Bill as "at least an honest Bill, framed with a view to settle a long vexed question," and that he will support the second reading.

The profession in Lancashire and Cheshire have, at the instance of the Council of that Branch of the Association, recently signed a petition in favour of the Bill, amongst the names attached to which are found those of the professors of the Victoria University attached to Owens College and to the Liverpool College of Medicine, also of the physicians and surgeons of the various hospitals in the district, and of the *élite* of the profession. The signatures are more numerous, about 900, than have ever before been given, and may fairly be taken as evidence of the feeling reigning throughout the country generally in favour of the Bill. This petition, confined to the district, will be brought under the notice of all the members of Parliament connected with the district; every Edinburgh graduate, as far as is known, has signed it, and such a petition cannot be disregarded.

In conclusion, we again urge the Presidents and Secretaries of our Branches, and our members generally, to write to their members of Parliament to support the Government Bill.

The name of Dr. Waters is closely connected with the present legislation; and as proof of the esteem in which he is held, it may be noted that the annual meeting of the Lancashire and Cheshire Branch, at which he took the chair as President last week, was attended by the President of the Council of the Association, Mr. Wheelhouse; by Dr. Chadwick, Dr. de Bartolomé, Mr. A. Baker, ex-presidents; Dr. A. Carpenter, late President of Council; and Sir John W. Reid, K.C.B., Director-General of the Medical Department of the Navy.

THE COUNCIL AND THE FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE new issues raised between the Council and the Fellows of the Royal College of Surgeons of England, is the chief subject of discussion in relation to the coming election for members of Council. We have for many years pointed out the necessity of a liberal representation of country Fellows in the surgical council at Lincoln's Inn, and therefore must confess to a feeling of disappointment that out of nine candidates for five vacancies only one is a provincial surgeon, Mr. O. Pemberton of Birmingham, a most able and vigorous candidate. As the time for nomination of candidates is passed, Mr. Pemberton's chance is strengthened by the absence of any provincial rival, and it is very satisfactory to find that his views are in accordance with the just objects of the new Association of Fellows. Putting aside any questions of disestablishment of the Colleges, it may clearly be said that the present system of government at the College of Surgeons is unpopular with the majority of those who hold its diplomas. The ruling power is a Council, chiefly composed of metropolitan hospital-surgeons; this Council elects examiners and lecturers, and appoints some of its own members to form subcommittees for the management of the College museum and library. A president is elected yearly; and the defenders of the present system believe that this arrangement gives every surgeon, whom the Fellows have elected as a member of Council, the chance of being, for one year, the technical or administrative head of his profession; hence, too, the objection sometimes raised to re-election of a president at the termination of his year of office, as it is contended that such a practice discourages the members of Council who have not passed the chair, leading each to believe that his tenure of the presidency, which is postponed at least for a year, may be so perhaps indefinitely. The Council meets once every month, for the transaction of business, and its members are elected, and re-elected, under well known conditions, by the Fellows of the College.

At first sight, this state of things has much to commend it, and Continental writers often express their approval of the liberty and elasticity of our College regulations. A few weeks since, a series of articles appeared in a German medical contemporary on the profession in Great Britain and Ireland. The colleges received a high meed of praise. The College of Surgeons seemed, to the foreign critic, thoroughly English, with the long row of great names on its past and present councils, and its electoral system by which vacancies in its ranks are filled. But the profession in England knows that the college-system is not what it professes to be. We have repeatedly demonstrated the defects in the manner of election of candidates, by which London surgeons have an extreme predominance, all other conditions being the same, over provincial Fellows, although the law was not framed to give any precedence to Londoners. This it is resolved to abolish; but it has not yet been done. Again, the Council-meetings are held with closed doors; the subjects discussed are often based on questions relating to by-laws of the charter, the president, practically elected by rotation, may be, and often is, a gentleman who has never been engaged in any kind of legislative or administrative work; the same objection applies to many of the other members of Council. In the intervals between the meetings, there is hardly sufficient time for the members to study the by-laws, and their application to subjects immediately under consideration, a task often of very great difficulty, especially to middle-aged men engaged in active private and hospital labours. There remain certain persons who must and do know the by-laws, and who have had practical experience of their working; the secretary, in particular, is among the number of the initiated, and it is evident that the president and Council must, to an unknown extent, rely upon him; it is impossible that it should be otherwise, as that official possesses the requisite knowledge, which is power, and has probably held his appointment longer than any member of the Council. Some better and simpler exposition of the law and practice of the College is much needed; and especially a codification and revision of by-laws and resolutions often conflicting, and of uncertain or unknown import and relative value.

The exertions of the Fellows in the cause of reform are well known to all who have read our pages during the past year. Proxy voting has been gained, and the right of meeting secured. The new Association of Fellows is determined to maintain and extend the rights of those who hold the higher diploma of the College. It is to be anticipated that this Association will pursue its efforts with temperance and judgment. Its members will not, however, we assume, set to work under the [illegible] of the Fellows, and that [illegible] through [illegible] of the Fellows. [illegible] thoroughly effaced, and every Member and Fellow has begun his professional career with the vision of two examinations to be passed at Lincoln's Inn; and, as very many have slight differences with the examiners at the oral test, and not a few have been occasionally, and not always justly, referred to their studies, the name of the College is apt to remain disagreeable to them—a factor, in the individual judgment, which it is not unwise to take into account. Many of the adverse decisions of Council, on resolutions made by the Fellows, are the result of deliberations which have indicated that what the Fellows desire has been contrary to the charter. "Non possumus" and "Non volumus" are terms too easily interchangeable. In framing a new charter, it is much to be hoped that, whilst the privileges for which the Fellows are now contending are granted, some of the recently gained reforms will not be remitted or rescinded. The recognition of the right of annual meeting, and the simultaneous omission of proxy-voting in a new charter, would, for example, be an eminently unsatisfactory conclusion.

There is one matter besides the advantages of a wider provincial representation on the Council, which the new Association has not yet thoroughly taken up, and that is the necessity for more power in a new charter to deal with persons holding College diplomas who professionally misconduct themselves.

The extreme laxity with which the Council systematically regards, or rather disregards, the most flagrant breaches of professional propriety, and the adoption of discreditable forms of quackery and public advertisement by some of its members, is a blot upon the honour of its diploma, a scandal to the profession, and an injury to the public. The patent alliance with advertising quacks; the publication of shameless tractates on infallible cures for severe diseases; the unblushing pursuit of patients by handbills, advertisements, and circulars, are passed over without comment, reproof or penalty. In the main, this is due to want of adequate powers of discipline and repression. It is evident, however, that such inability to prevent, or to punish, palpable and serious professional malpractices, greatly injures the character of the College, and constitutes a default in one of the most important duties which the College can be called to fulfil. Without the exercise of such functions, it becomes a mere examining board and fee-making machine. This should be a capital point in any new charter.

In conclusion, we are glad to learn that the majority of the nine candidates for the present vacancies on the Council are in favour of the desired reforms, and that none have expressed themselves as opponents of the views of the Association of Fellows. But we think this Association would only be wise to require from candidates explicit declarations as to their agreement or disagreement with the main parts of its policy.

LIFE-PEERAGES.

THE creation of life-peerages is a matter in which the medical profession cannot easily take effective federative action. It is one, which they can with advantage put forward politicians to discuss, to decide, and to act upon. A section of the House of Lords has evidently for a long time been of opinion that it would be one of the most efficient means of bringing it into accordance with the feelings of the people, and of restoring it to its ancient activity and usefulness. But the majority cannot see that their condition is such as to require an operation of transfusion, and have declined to listen to the proposal. The partial conviction that it is a necessary step to take was put into a manifest shape so long as fifteen years ago, when Lord Russell, with the concurrence of Lord Salisbury, got a Bill for such creation read a second time by their lordships. And though at the present hour nothing more can be obtained than a minority assent to a mere suggestion of Lord Granville to the same purpose, it is evident that the opinion is gaining ground. The consequence of a refusal to go further is a subject which more immediately concerns the House itself; but one assuredly will follow in the shape of a popular demand that a body which is to a certain extent admitted to be anæmic, and which proves its condition by its deficient alacrity, bluntness of perception, and obstinate persistence in denying that it stands in need of any treatment, should be, under gentle coercion, compelled to do what its soundest advisers consider to be necessary.

In the meantime, we, as a profession, can with advantage give our opinion and advice, especially bearing in mind those points which relate to the health and material well-being of the people, and the means by which we see that they can be most efficiently promoted.

Statesmen as a rule are not men of science. Some, it is true, have distinguished themselves, and thrown lustre upon their class by their achievements. But generally a legislator of any note is in arrear of his age as to the progress of art, science, and literature, and the details of current discoveries. And it cannot be otherwise. He may be conversant with all the intricacies of diplomacy, the import of international relations, and the manœuvres of domestic politics, but his time is so fully occupied that he has no leisure, and his physical powers would fail if he tried, to give to the study of all that other men are doing and the advances they are making. Could Disraeli even have followed up all the registrations and calculations and suggestions of Dr. Farr, and kept himself exactly familiar with averages, death-rates, and proportions of all sorts, and the purpose of such work? Impossible. Could Mr. Gladstone hold pace with the discoveries, cultivations, inoculations, and guarantees of safety accomplished by Pasteur, or even calculate the money-value of the good this eminent man has done in commerce and agriculture, or even find time to throw a self-reproaching glance at the compensations awarded him, and the honours decreed him by an appreciating government? Lord Salisbury, too, must have been astonished when he listened to the recent address of Sir James Paget, upon the relation of personal health to national health, and the disclosures he made as to the national importance of labour, and the national loss by a few weeks of epidemic sickness. Everyone wants coaching when he gets off his own track, and statesmen are obliged to run in many tracks, and in many of them without much warning. They find guide-books always more or less antiquated; and nothing short of a living working man of science, or special skill, clear of comprehension, and facile in explanation, will suffice to do what they want in the exigency. He must find some one to give him a concise and just epitome of actual knowledge—ready and safe advice how that knowledge is to be turned to account. So far as legislation in the House of Lords is concerned, such coaching can be got in two ways—by consultation according to the emergencies with specialists, or by the incorporation of men of science. Commissions, committees, and private members can summon occasional help.

But a great objection to such a proceeding is, that information so inoculated wants a suitable nidus for its propagation, and an indefinite time for its incubation. And one cannot be sure that either or both of these requisites for success shall be forthcoming. Then, again, the urgency may be over before the process is completed, and the pains are all lost. Besides, these impromptu consultations on State medicine give almost as bad a chance of skilled succour as an accident in the hunting-field. Charlatans and self-asserting notorieties always turn up to proffer their services, and often it is Hobson's choice. Then, in parliamentary transactions, if it be a case suddenly uprising, and calling for quick decision—a perplexing question of sanitary police, some extraordinary difficulty in connection with criminal legislation, or some investigation of personal or mental disqualification—who is to be sure that, in the hurry of public affairs, he has found the right man as an adviser? No; the system of haphazard consultation leaves open too many chances for the craft of pretenders to insinuate themselves where they may inflict lasting mischief by evil counsel. At any rate, it throws too great a responsibility upon the persons having to choose a guide.

To us it appears that the only safe alternative is the admission of a professionally elected representative. We know our best men; and, as a profession, have independence, philanthropy, and patriotism enough amongst us to secure a wise election. Who would have objected to the clear head, the moral courage, or the eloquent demonstrative power of the late Sir Thomas Watson? And he being lost to us, and the nation having to regret the not trusting to him on many important occasions, are there not others left who, if not absolutely his equals, are at any rate men who, as they gain his years and experience, will rival him in all the qualifications needed for statesmanship, and to whom the honours of a life-peerage would be equally due?

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M. FALLIERES, the French Minister of Public Instruction, has informed M. Pasteur that the State has offered him a piece of land in the Bois de Boulogne, in order to facilitate his experiments on rabies.

HER Royal Highness the Princess Christian, attended by the Hon. Mrs. Dalrymple, was present at a meeting held on Thursday afternoon, June 12th, at the residence of Earl Cowper, in St. James's Square, to formulate a plan for establishing a convalescent hospital for the working classes of London. Earl Cowper took the chair, and the Earl of Shaftesbury and others spoke on the subject.

M. CAMESCASSE has reissued a circular to the Paris police, clearly setting forth their duties concerning the removal of infectious cases to the hospitals; also the subsequent disinfecting of the carriages used. M. Camescasse states that he repeats the directions given in the circular of October 14th, 1882, because the carriages set aside for the purpose are seldom used.

REMOVAL OF A SOLID OVARIAN TUMOUR.

ON Friday last Mr. Cowell removed, from a patient in Westminster Hospital, a large solid tumour of the right ovary, weighing slightly over fourteen pounds, and apparently fibromatous. The incision was necessarily of considerable length, but there was only one small adhesion to omentum, and no difficulty whatever in the operation. Antiseptics were used, and the broad pedicle was secured by three silk ligatures, the cautery being also applied to the cut surface. The patient has, so far (Tuesday), had no bad symptom. The disease is somewhat rare, and a full account of the case will shortly be published.

NEPHRECTOMY FOR TUBERCULOUS KIDNEY.

ON Saturday, June 21st, Dr. Bantock removed an enlarged tuberculous right kidney from a woman aged 33. A large tumour filled the right side of the abdomen, and the patient's urine had been free from pus. An incision was made in the middle line. The extraction of the kidney proved to be a matter of considerable difficulty, as the capsule was very thick and adherent to surrounding structures, and the glandular substance very soft. The renal artery and vein were plugged, but the vessels passing from the capsule to the gland were much enlarged, and bled freely on division. The ureter was thickened and dilated to an extreme degree; it was divided, and the free surface of the stump was closed by sutures applied to its edges. The dilated calices were filled with a red grumous material, the pelvis contained pus. A drainage-tube was passed into the right loin, after removal of the kidney. The patient was progressing favourably on Thursday morning, June 26th.

THE MACKEREL SCARE.

LAST week we referred to the efforts which have been so industriously made to create a scare about the use of mackerel as food, and were able to state that the report that a warning had been issued by the metropolitan hospitals was a fabrication. Since then, a boy aged 7 has died, and the medical evidence at the inquest was to the effect that death was due to "convulsions from gastric irritation caused by eating mackerel." The facts of the case as reported in the newspapers are somewhat obscure, as five people partook of three mackerel, and two only (the mother and one son) suffered; and the death of the son occurred some days after. The nearest parallel to such a mode of death is to be found in the outbreaks at Welbeck and Nottingham, where a form of specific disease appeared to have been produced by eating pork. This disease may possibly be due to the activity of a micro-organism present in the pork, just as the cases of rapid poisoning after eating pork, beef, or sausages not improbably depend on some alkaloidal poison produced by the activity of other micro-organisms. It is possible that fish is liable to the same accidents; and that, under certain conditions, not yet well understood, dangerous poisons may be produced without any accompanying evidence of decomposition. The subject is interesting, and requires investigation, but it is absurd to get up a scare against mackerel on this account. To be consistent, we ought also to give up the use of beef, pork, brawn, sausages, and all tinned meats. In a letter addressed to Mr. Sayer, of Billingsgate, and published in the daily papers, Professor Huxley has fully confirmed the statement we made last week; he says: "It is perfectly true that mackerel, like all other fish, are more or less infested by parasites, one of which, a small thread-worm, is often so abundant as to be conspicuous when the fish is opened. But it is not true that there is any reason to believe that this thread-worm would be injurious to a man, even if he swallowed it uncooked and alive, and to speak of it as a possible cause of cholera is sheer nonsense. I have no doubt that the 'excessive use of mackerel and mild ale,' whether separately or in combination, would be followed by unpleasant results, not only at this season of the year, but at any other. But I undertake to say that the consequences would be the same whether the fish contained thread-worms or not." At a lecture on parasites in meat and food by Dr. T. Spencer Cobbold, delivered on Wednesday at the Health Exhibition, the question was put by Mr. Birkbeck, M.P., chairman of the late Fisheries Exhibition, as to parasites in fish. In reply, Dr. Cobbold stated that there were fourteen kinds of parasites which attacked fish of all kinds; of these, twelve were intestinal, and two limited their attacks to the gills. In every species vitality was destroyed by a temperature of 115° Fahr. The evil effects attributed to the mackerel parasites consequently must be non-existent.

STREWING POISONED GRAIN.

LAST week, another farmer was heavily fined for unlawfully placing upon his land a quantity of poisoned grain, with intent to destroy birds. Crows are, no doubt, very troublesome to agriculturists, and the desirability of preventing their doing damage to young crops is the excuse which is usually pleaded for scattering abroad quantities of poisoned seeds. But those who want to get rid of crows ought to adopt the good old practice of employing small boys to scare them. The legal penalty for placing poisoned grain on land is justly a heavy one. Such grain may be eaten by pigeons and other birds used for human food, and fatal consequences have been known to result in persons who have eaten the flesh of birds which have fed on poisoned grain.

VACCINATION FROM THE CALF.

THE Animal Vaccine Establishment seems to have rapidly become exceedingly popular with the public. The vaccination-room at 95, Lamb's Conduit Street is crowded, each day that it is open, by adults and by mothers anxious to enjoy the advantages and immunities which vaccination from the calf is believed to confer; the lymph is taken after the expiration of five periods of twenty-four hours, and the vesicles which result are in every way most satisfactory. The experience at Lamb's Conduit Street seems to prove quite conclusively that the increased local and general disturbance, which was formerly supposed to result from the use of calf-lymph, does not occur when the proper precautions, especially to take the lymph at the early date mentioned above, and to reject all doubtful vesicles and any calf which appears to be in ill health, are observed. The demand on the station in Lamb's Conduit Street has been so great as to severely tax the arrangements, from two to three hundred persons being vaccinated on each day; in consequence, a "Station of Ease" has been opened at 86, Southampton Row, and will be reserved for males; attention to this rule will greatly facilitate the work of the vaccinators, and men are less likely to be long detained. The vaccinators attend at both stations every Tuesday and Thursday at 10.30 A.M. The credit of carrying out the arrangements for animal vaccination to so successful a termination belongs to Dr. Robert Cory and Mr. Shirley F. Murphy. The byres at Lamb's Conduit Street are models of cleanliness and comfort, the arrangements for the provision of lymph exactly at the right stage of the vesicle are worked with an almost mathematical exactitude, and the only difficulty has been caused by the extreme popularity of the station during the present epidemic of small-pox.

NEPHRECTOMY AFTER VAGINAL HYSTERECTOMY.

M. **JULES BŒCKEL** of Strasbourg has recently read before the Société de Chirurgie of Paris, some notes of a case of total removal of a cancerous uterus by the vaginal orifice. The patient was forty years of age. The cancerous disease was in its earliest stage; the vagina was free from malignant growth. M. Bœckel performed the operation of hysterectomy on October 26th, 1882. He lowered the uterus by means of Museux's forceps, then incised the posterior cul-de-sac of the vagina, and afterwards dissected out the tissues between the uterus and the bladder. A double ligature was then passed round the broad ligaments, and they were divided without the slightest hæmorrhage. The intestines protruded into the vagina, but were easily replaced. Removal of a gland caused slight hæmorrhage, which was arrested by means of two hæmostatic forceps. Sutures were unnecessary, either vaginal or peritoneal, nor were drainage-tubes required. The vagina was disinfected with carbolic solution, and plugged with cotton-wool and iodoform. The following morning, October 27th, the temperature was 100° Fahr. The two forceps were removed. The general condition of the patient was most satisfactory, but there was an escape of urine into the vagina. An urinary fistula was discovered; it was supposed to result from the pressure of the forceps on the ureter. Nephrectomy was performed, and one kidney was easily removed; it was perfectly healthy. Recovery was rapid. The patient left the hospital six weeks after the first operation, and remained in perfect health during three months, with the exception of polyuria, 1,800 grammes daily. Towards the fourth month, the abdominal glands became cancerous, and the patient died in the seventh month. At the necropsy, parenchymatous nephritis was observed in the remaining kidney; and there was cancerous degeneration of the abdominal glands.

ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A **MEETING** of the Committee of this Association was held on June 24th, to discuss the best mode of giving practical effect to the resolutions which were passed at the general meeting on June 12th. After the minutes had been read, it was proposed that steps should at once be taken to procure the most hearty co-operation of the older Association of Fellows. This was at once agreed to. Some general discussion then took place on the best mode of procedure. It was decided to refer this question to a subcommittee for consideration, so that a general scheme might be brought before the Committee, which they might discuss, adopt, and then lay before a general meeting of the Association. A letter was read from the Secretary of the Association of Members of the Royal College of Surgeons requesting the Association of Fellows to co-operate with it; in reply to which, the secretaries were directed to inform the Members' Association what steps they had taken so far, and cordially to reciprocate the idea of co-operation. The secretaries enumerated the names of subscribers, and mentioned that, although a large number of Fellows had answered Mr. Swain's postcard in the affirmative, it did not appear to be thoroughly understood that, in order to become enrolled as Members of the Association, an entrance fee of five shillings must be forwarded to one of the honorary secretaries, Mr. John H. Morgan, 68, Grosvenor Street; or to Mr. W. Bruce Clarke, 46, Harley Street, who were anxious to prepare a full list of names and addresses. This meeting, held at the house of the Treasurer, Mr. Willett, was very fully attended. Mr. Pollock was in the chair, and the country members were adequately represented.

THE LIBRARY OF THE INTERNATIONAL HEALTH EXHIBITION.

THE Library, which was opened to the public on Monday, June 16th, has been organised by a special Subcommittee, appointed in February last by the Executive Council. The original intention was to refer to this department the articles comprised within the "Literature" class, under each group of the two divisions into which the Exhibition has been divided. But, besides dealing with these exhibits in this way, the Library Subcommittee have brought together a large collection of official reports, central and local, bearing on the administration of sanitary laws at home and abroad. In their endeavours to render this part of their work as complete as possible, they have been much indebted to Her Majesty's Government for valuable assistance rendered by the Secretary of State for Foreign Affairs, who, at the request of the Duke of Buckingham and Chandos, the Chairman of the Executive Council, caused to be issued to British diplomatic representatives abroad circulars inviting them to obtain lists, accompanied by specimens, of reports and works bearing on the administration of the sanitary and education departments of the countries to which they were accredited. The Library Subcommittee have also been in correspondence with the mayors of boroughs and chairmen of local boards, with a view to obtain copies of local sanitary Acts and reports, of which a large number have been received. The Committee have, furthermore, entered into correspondence with the authorities of all the principal health-resorts at home and abroad, in order to obtain a collection of guide-books and medical and popular treatises referring to the climatic and other advantages of these places; and, as a result, an interesting feature of the library will be the varied collection of books and photographs received from a large number of these resorts. Authors and publishers throughout Europe have also been invited to send contributions, and the Committee feel that they are much indebted to them for the ready response made to their appeal. The number of books now received amounts to about 6,000. The room in which the Library has been arranged is in the Albert Hall, overlooking the Conservatory. Its furnishing and decorations have been entrusted to Messrs. Liberty and Co.

TUMOURS OF THE BLADDER.

PRECISELY a year ago, Sir Henry Thompson read before the Royal Medical and Chirurgical Society his paper on twelve cases of tumour of the bladder, ten in the male and two in the female, in all of which an operation was performed for the removal of the growth, with their histories and the results. On June 16th, that distinguished surgeon delivered a lecture on the same subject in the theatre of the Royal College of Surgeons, as part of his present course of lectures on diseases of the urinary organs, which is published this week in our columns. The audience were presented with copies of a printed statistical table of the cases of operation for vesical tumour in the practice of the lecturer; a feature deserving of future imitation being the addition of outlines of the bladder and the tumour to the ordinary information concerning age, operation, result, etc. The lecture was also illustrated by a fine series of microscopical specimens, which were demonstrated by the lecturer and Dr. Heneage Gibbes; they consisted of preparations of the tumours removed by Sir Henry Thompson, and examined by Dr. Gibbes and Messrs. Stanley Boyd, F. S. Eve, and Shattock. When Sir H. Thompson read the communication above-mentioned in June 1883, he described twelve cases with seven recoveries, three being complete, the remainder more or less partial, and five deaths. In his lecture delivered on Monday, he described eight additional cases, all occurring in male patients. Six of these recovered from the operation, and two died, one on the twelfth day, one in the third week. In the last of these cases, diagnosis was effected by removing fragments of the growth by the aspirator, nothing being found in the urinary deposit by simple washing out. In two of the cases, the tumours were myomatous; in one of these, numerous tubes and crypts lined with columnar epithelium were found among the muscular fibres; in the second, numerous small cells were interspersed and there was much long villous growth. There can be no doubt that these operations for the removal of tumours of the bladder are worthy of being classed amongst the most remarkable features of contemporary operative surgery. They are in no way so satisfactory as many of the abdominal operations that have become established in the course of the past twenty years; for, since surgeons have lost the dread of wounding the peritoneum, and have recognised that enlarging an abdominal incision, when necessary, in itself adds little or nothing to the risk of the operation, half the viscera may be overhauled, and enlarged kidneys, spleens, uteri, or ovaries, drawn out into the open air and daylight, so that the surgeon can ascertain there and then if he can safely sever them from their connections; which being performed, he can once more search the neighbouring viscera, and insert his hand, and as many sponges as he likes, into the peritoneal cavity. Removal of a vesical tumour requires manœuvres of a perfectly different kind, under far less favourable conditions, and in a region very troublesome for manipulation. The wound cannot be enlarged; the finger, not the hand, must search for the morbid growth, and must be withdrawn before the forceps is applied. Great as is the necessity for practice and experience in abdominal sections, the need of the same in operations on the bladder is far greater, and still greater manual dexterity is needed. Still, the results are encouraging; and, as Sir Henry Thompson has himself remarked, every recovery is a clear gain, and a fatal issue is simply the natural issue forestalled.

RESIGNATION OF THE STAFF OF THE NORTH-WEST LONDON HOSPITAL.

THE North-West London Hospital is one of the most recent additions to the hospital-resources of the metropolis. It was founded, about five years ago, as a general hospital, to meet the requirements of the poor in the rapidly increasing neighbourhood of Kentish Town. It owes its origin largely to the munificence of three ladies, who presented the premises, and who are referred to, we find in the rules, as the founders of the hospital. The staff consists of Sir Andrew Clark, M.D., and Sydney Ringer, M.D., consulting physicians; Christopher Heath, F.R.C.S., consulting surgeon; and the following members of the acting staff: William Murrell, M.D., F.R.C.P.; Leslie Ogilvie, M.B., B.Sc.; T. Colcott Fox, M.B., M.R.C.P.; George Ogilvie, M.B., B.Sc.; H. Sainsbury, M.D., M.R.C.P.; F. R. Heycock, M.C., F.R.C.S.; Samuel Benton, M.R.C.S.; Charles Stonham, F.R.C.S.Eng. Progressive enlargements of the hospital have taken place during the last five years, under distinguished patronage, and the hospital has now fifty beds and a large out-patient department. The constitution of the hospital is, according to the rules, somewhat peculiar; and recent additions which have been made to the regulations, without consulting the staff and without their being aware of their nature, have given to the three founders and their immediate friends an autocratic power which anyone accustomed to hospital-management would at once have seen to be in the highest degree perilous, as they are altogether unusual, and, indeed, so far as we know, unprecedented. Among the powers thus conferred by the regulations recently inserted is one which makes the three ladies who are founders permanent members of the Committee of Management, one of them being also the Matron; another, which makes three a quorum of the Committee; and a third which gives to the Committee the power of summary dismissal of any of the members of the medical and surgical staff, subject to a right of appeal to a general meeting. Such powers, unless very judiciously wielded, would very soon bring any institution to ruin; and, in the present instance, they have been so used as to lead to a crisis in the affairs of the hospital of which the results can not easily be foreseen. The power of dismissal has been exercised in relation to one member of the staff in a manner and under circumstances which have excited the indignation of the whole staff, who refuse, very properly, to continue in the position in which they find themselves unexpectedly placed, and which they rightly hold to be incompatible with their professional dignity and with the good well-being of any public institution. They did not take office under such conditions, and they rightly refuse to be bound by them, as, indeed, would any medical man of due self-respect. At a recent meeting of the medical staff, the following resolutions were passed.

From the Acting Staff.—"The physicians and surgeons of the North-West London Hospital being dissatisfied with the general management of the institution, and disapproving of the action of the Committee in summarily dismissing a member of the staff without affording him an opportunity for explanation, hereby tender their resignations. (Signed) William Murrell, M.D., F.R.C.P.; Leslie Ogilvie, M.B., B.Sc.; T. Colcott Fox, M.B., M.R.C.P.; George Ogilvie, M.B., B.Sc.; H. Sainsbury, M.D., M.R.C.P.; F. R. Heycock, M.C., F.R.C.S.; Samuel Benton, M.R.C.S.; Charles Stonham, F.R.C.S.Eng. The physicians and surgeons, in taking this step, desire to add that they have the fullest sense of the devotion to the interests of the institution on the part of Mrs. Menzies and the Misses Learmouth. The late medical and surgical staff of the hospital desire it to be understood that they will be pleased to attend any of their patients now in the hospital until such time as their services are no longer required by the patients."

From the Consulting Staff.—"We, the undersigned members of the consulting staff of the North-West London Hospital, understanding that the Committee have given one of the surgeons notice to discontinue his attendance at the hospital without making any specific charge against him, and without giving him an opportunity of meeting any charges which may be brought against him, hereby tender our resignations. (Signed) Andrew Clark, M.D., Sydney Ringer, M.D., Consulting Physicians; Christopher Heath, F.R.C.S., Consulting Surgeon."

It will be seen that these resolutions have been passed without any personal feeling towards the founders, or the members of the Management Committee, but as a matter of principle. Dr. Cullimore, who was unavoidably absent from the staff-meeting, has also signed the protest and tendered his resignation.

SANITATION IN THE RHONDDA VALLEY.

MR. MONTAGUE D. MAKUNA, formerly of the Fulham Small-pox Hospital, who appears to have now settled in the Rhondda Valley, is making a praiseworthy effort to arouse public attention to the unwholesome condition of that region, by the delivery of a series of public lectures on "healthy homes," and by the attempted formation of a local sanitary society on the lines of the London Sanitary Protection Association. There can be no sort of doubt as to the need for increased sanitary activity in the district round about Ystrad; for the health-surroundings of the colliers, who form the bulk of the population, are deplorable in the extreme. The houses are badly built, of improper materials; the water-supply is contaminated by excremental soakage; there is no proper system of drainage or sewerage; and no hospital provision for the sick poor, or infectious cases. In arousing and educating local public opinion upon such matters as these, the proposed sanitary society would find plenty of scope for energy; and we wish its promoters every success in their endeavours towards its formation.

DEVELOPMENT OF THE GREY SUBSTANCE OF THE SPINAL CORD.

M. VIGNAL has studied the formation of the embryonic grey substance of the spinal cord in mammalia. He has never been able to detect, either in this substance or in neighbouring tissues, the karyokinetic changes which nearly all authors who have recently studied cellular reproduction mention as the most perfect and constant evidence of cellular division. M. Vignal, therefore, concludes that, although these appearances are observed in large numbers in the row of cells bordering the central canal of the cord, the embryonic grey substance is developed according to some other process than karyokinesis. In a communication made to the Société de Biologie of Paris, M. Vignal commenced by stating that Kolliker and Hensen describe the embryonic grey substance as formed of fine fibrillæ, intercepting each other at right angles, and also presenting nuclei. M. Renaut believes that it is composed of cells presenting an exoplasm. M. Vignal asserts that the cells which constitute this substance consist of very soft protoplasm; from them rise long prolongations destined to constitute the white substance. These prolongations present the same structure as the protoplasm. He does not agree with M. Boll's statement that these cells represent two varieties, one from which nerve-cells are evolved, the other the cells of the neuroglia. M. Vignal believes that, in the early stages of development, all the cells are alike; differentiation happens subsequently. With regard to the exoplasm described by M. Renaut, M. Vignal denies its existence. This may be observed subsequently, when the nerve-cells and the cells of the neuroglia have nearly reached the limit of their evolution.

THE NEW HOSPITAL AT STRATFORD-ON-AVON.

A HANDSOME new hospital, which has been erected at a cost of upwards of £8,000, was formally opened at Stratford-on-Avon last week. The new hospital is intended to supersede the old infirmary, which has done good work for the last fifty years. The insanitary and overcrowded condition of the old buildings becoming known, Mr. and Miss Gibbins, as we announced some time ago, intimated, through Dr. Kingsley, senior physician of the infirmary, their willingness to subscribe the full cost of a new hospital; and this generous intention has now been completely accomplished. The new hospital, which is in the Elizabethan style of architecture, stands upon four acres of ground, and consists of a central administrative block, with east and west wings, for male and female patients respectively, and a well arranged out-patients' department, approached by a separate entrance. The principal front has an extreme length of 193 feet, with the chief entrance in the centre. A feature of the building is the handsome entrance-hall, which has a polished oak floor and panelled ceiling, and is lighted by a four-light mullioned window, filled with tinted glass. The new hospital affords accommodation for forty in-patients. Strict regard has been paid to sanitary details, which have received the careful personal superintendence of Dr. Kingsley and of Mr. Fosbroke, the local medical officer of health. The building is fitted throughout with electric bells. The out-patient department contains a large waiting-hall, with open timbered roof, and three consulting rooms, and suitable offices. A turret over the administrative block contains a large public clock, with four dials. The grounds are tastefully laid out, and present handsome entrance-gates, giving access to a carriage-drive formed between an avenue of limes. The hospital is built principally of brick, with carved stone dressings. Some picturesque half-timbered work, in unison with the ancient buildings of the town, is inserted in the principal block.

THE ETHICS OF THE SKIN.

MR. MALCOLM MORRIS, one of the ablest and most versatile of our brilliant younger school of dermatologists, has made a decided hit by his sparkling and amusing, but very sensible and useful, lecture, under this head, at the International Health Exhibition. The lecture was a pungent criticism of some of the morbid aspects of modern æstheticism. First, it was shown physiologically how much of a man's individuality lies in the skin. Remove an arm or a leg, or both arms and legs, there is yet left an individual man. But take away the skin, as the author of *Sartor Resartus* took away the raiment, and individuality is gone. The colour of the complexion is due to the pigment-follicles, the red colour of the cheeks to the terminals of the blood-vessels, seen through the transparent skin. The colour of the skin is a test of health. But, within the last few years, we have experienced a remarkable artistic movement. The effects have been evident in the picture-galleries, they have displayed themselves in domestic life. Lastly, there has sprung up a taste that can only be postulated as a taste for disease, decrepitude, and decay. In one school, we find a bevy of woe-begone women, ill, limp, and unwholesome. The men are not more attractive in a sanitary sense. They look like convalescents, ill-fed and out of condition. This school is not very wide in its range, but its influence is felt beyond the limits of its own lines. In the paintings of the older masters are ruddy Madonnas, clear-skinned goddesses, and chubby angels. In the more recent pictures, an etherealised skin is unduly popular. Of course, this repudiation of warm tints suited unhealthy people. One cannot blame them for the master stroke of so advertising this fashion of pale faces, that eminent painters should be willing to depict this pasty complexion in illustration of beauty. But what shall be said of art that lends itself to such deception? When society set its seal upon small bonnets, with what obedience heads began to reduce! This is harmless enough. So, though very ugly, and nothing more than a copy of the wasting in consumption, is the practice of darkening the socket to increase the apparent size of the eye. But when, in addition to these devices, a decree goes forth that powder is to be applied to the cheeks, to the utter destruction of complexion, it is time to speak out. Fashions change; and a time may come when it will be fashionable to be healthy, when normal hair will be popular, and natural skin the rage. When this sanitary millenium is reached, it is possible that the world will recognise that it is not attractive to daub the face with starch and rouge and bismuth and paint after the manner of the heathen; that the bloom upon the peach cannot be beautified by whitewash; and that no chemical process can heighten the tinting of the heather-bell.

TYPHOID FEVER AT BRISTOL.

AT a meeting of the sanitary authority of Bristol this week, an alarming outbreak of typhoid fever was reported to have occurred. At Müller's Orphan Asylum, Ashley Down, where there are fully two thousand children, there have been from 70 to 100 cases of typhoid fever, mostly of a mild type, the temperature reaching about 103°. Five deaths have been certified as from this disease, but others have occurred assigned to causes which hardly offer a satisfactory explanation. The outbreak is clearly traceable to the sanitary arrangements of the establishment, which are not in accordance with the requirements of modern science. The hospital has no separate closets, and the excreta from patients are carried down, after some disinfectant has been added, and poured into the trough-closet which is in common use. There is also no adequate provision for flushing. The city sanitary authority has pointed out the defects, and has advised that a sanitary engineer should be called in, whose report should be submitted to the authority; and there is reason to believe that those responsible for the management of the asylum will readily fall in with this suggestion. It may be added that the water-supply is derived from wells in the lime-stone. This is the third outbreak within recent years.

TOBACCO AND EYESIGHT.

FOR many years it has been known to ophthalmic surgeons that abuse of tobacco may lead to failure of sight. This fact has been made use of by the antitobacconists, who are mostly well-meaning but meddlesome persons, and whose actions have too close a resemblance to those of agitators in the cause of various reactionary measures for the impediment of scientific research, and the obstruction of sanitary legislation. In the report of forty cases of tobacco amblyopia, by Mr. Shears of Liverpool, which we have recently published, it appeared that atrophy of the optic nerves is very rarely met with as the result of excessive smoking, although tobacco is the essential agent in producing failure of sight. Great moderation in smoking, and especially the employment of mild forms of tobacco, is all that is necessary to ensure recovery. Mr. Hutchinson has found that a very small proportion of smokers suffer from amblyopia, and that amongst those who do become subject to impaired vision are many who show an hereditary tendency to that infirmity; many of their relatives, who do not smoke, being similarly afflicted. Workmen in tobacco-factories do not appear to be subject to deterioration of eyesight; in one large manufactory where twelve thousand men and women are employed, Mr. Shears has found that not one single person on the premises suffered from failure of eyesight, although many of the hands had been working there for ten years.

VACCINATION IN THE METROPOLIS.

IN view of the dimensions which small-pox is assuming in the metropolis, the Local Government Board have issued an important circular, dated the 23rd instant, suggesting to the several boards of guardians the special steps which should be taken by them for the promotion of vaccination and revaccination. The Board consider that, in many districts, it will be advisable to appoint a staff of assistant vaccination-officers to make a house-to-house visitation (beginning with any localities in which small-pox has appeared), with the view of securing the vaccination of unvaccinated children, and of inducing persons who have not been already revaccinated to become so. "A statement of the advantages of vaccination and revaccination should be left at each house; and a paper of this kind, which is published at a cheap rate by the National Health Society, may be useful for the purpose." Means should be taken to obtain information from relieving officers, district medical officers, and others, of every fresh case of small-pox; and both the public vaccinator of the district in which it occurs, and the local medical officer of health, should be at once furnished with the name and address of the person attacked. At the same time, special attention should be given to the current work of the vaccination-officer, so that the vaccination of the children whose births have been recently registered may be secured. In addition to the usual weekly attendances of the public vaccinators at the stations (where it is important that all ordinary primary vaccinations and all practicable re-vaccinations should be performed), special evening attendances at the stations should be appointed to suit the convenience of artisans and others who cannot conveniently resort thither in ordinary working hours. These attendances should, for the sake of obtaining fresh lymph, be fixed for the evenings of the days on which the ordinary attendances are given. Attendances oftener than once a week may sometimes usefully be appointed to take place at the stations, and even attendances on every day, at a fixed hour, for the vaccination of persons known to have been exposed to exceptional risk of small-pox. In particular cases where small-pox actually exists in a house (especially in a sublet or tenement house), it will be desirable for the Public Vaccinator or his appointed deputy, immediately on receiving information of the outbreak, to proceed to the infected house and (always with due regard to the functions of any private medical attendant) there perform any needed vaccination or revaccination. This step is especially useful where small-pox has not yet become epidemic. Where a public vaccinator has not appointed a deputy under the Regulations of December 1st, 1859, it is desirable that a deputy, to act as occasion may require for the Public Vaccinator, should be appointed and duly admitted by the guardians. The attention of the district medical officers of the union should be called to Section 13 of the Vaccination Act, 1871, which provides that any district medical officer, in attendance as such medical officer upon a person suffering from small-pox, shall be entitled to payment from the guardians for vaccinating, or, as the case may be, revaccinating any person who is resident in the same house as such sick person, and who could lawfully be vaccinated or revaccinated by a public vaccinator at the public expense. The Board ask to be informed of the steps which the guardians may decide to take in the matter; and it is greatly to be hoped that these bodies will act with promptitude and energy in the direction indicated in the circular, with a view to stamp out the outbreak before it attains epidemic dimensions.

THE Ophthalmological Society holds two meetings next week, on Thursday, July 3rd, at 4 P.M., and on Friday, July 4th, at 8 P.M. These dates have been chosen to suit the convenience of country members who may come up to town for the election of members of Council at the Royal College of Surgeons.

SCOTLAND.

AT the annual meeting of the Trustees of Anderson's College, Glasgow, Dr. James Christie, A.M., M.D., was elected Professor of Physiology.

BEQUESTS TO SCOTTISH MEDICAL CHARITIES.

A SUBSCRIPTION to the Edinburgh Royal Infirmary recently announced deserves special mention, and might act as a hint for the raising of pecuniary help to medical charities all over the country; this was the sum of £100 which had been received from the Edinburgh Football Association, as gate-money from the spectators at the various matches at football, when the Earl of Rosebery's charity cup was competed for. The County and City of Perth Infirmary has benefited to the extent of over £453 by a legacy from the late Mrs. Tasker, widow of the Rev. Mr. Tasker, who was for many years a minister of the Free Church of Scotland in Edinburgh.

ABERDEEN ROYAL INFIRMARY.

THE Queen has sent a copy of her latest book, *More Leaves from the Journal of a Life in the Highlands*, the recent work by the Princess Christian, and the biographical sketch and letters of the Princess Alice, to the managers of the Aberdeen Royal Infirmary, for the use of the patients in the hospital. The value of the Queen's book is enhanced by the addition of Her Majesty's autograph.

THE SPREAD OF INFECTIOUS DISEASES.

A RECENT trial in the Sheriff Court, at Glasgow, furnishes another illustration of the various channels through which disease of an infectious nature is spread amidst the community. The following are the facts of the case as brought out in evidence. The message-boy of a butcher had his fingers severely crushed in a mincing-machine, and for the injuries thus received the lad's father sought damages. With the legal liabilities of the case we have no concern, but the facts revealed in the course of the case have a wider importance than the court of justice where they were disclosed. It came out in evidence that the boy had been kept from school, because fever had broken out in his home. Such a procedure was a very proper one, but it lost much of its value, inasmuch as it seems the lad was allowed to associate as usual with his companions, and was also permitted to act as message-boy to this butcher, doing his errands and carrying parcels of food to his customers. Further, it was shown that from time to time he handled the food that was exposed for sale. This is scarcely a state of matters that can be called satisfactory, and must give rise to some uneasy reflections. To allow a boy from a fever-stricken house, with probably infection hanging about him, to manipulate food exposed for sale, and then carry it to the houses of the unsuspecting buyers, is a state of matters calculated to work untold mischief. As the judge remarked: "Heads of families and their medical men are often puzzled to know how it is that in spite of every precaution infection gets into their houses. It is felt that in such a state of matters as here occurred a clue to the mystery might sometimes be found." Unfortunately it seems that for such disgraceful carelessness as was revealed in this case the law provides no remedy; but it is satisfactory that public attention has been drawn to the matter, for there can be no doubt that the fear of spreading infection which kept the boy from school should have had the same weight in preventing him from carrying parcels, and especially food.

EDINBURGH SCHOOL OF COOKERY.

PROFESSOR DOUGLAS MACLAGAN presided at the annual meeting of the Edinburgh School of Cookery, held on June 20th. In the report submitted it was stated that there is a class of special cookery as related to the sick room for students of medicine, also a class of the same nature for nurse probationers with practical lessons. The chairman said that the report presented, from first to last, a great deal of what was not only of interest, but which was of a very satisfactory character; he looked with peculiar interest on the whole subject of cookery, especially what was called artisan cookery and domestic economy, and it was gratifying to see that on this subject this institution had done so much good work in the very quarters where it was most needed. They would admit that among the wives of the artisan class there was even yet ignorance on the subject of domestic economy, which was not only great but melancholy, and anything that could be or was being done to remove it was of the greatest possible importance. In the Royal Infirmary the class to medical students in which they received demonstration in sick-room and plain cookery, must produce valuable results. The importance of the institution in all its departments was very great indeed, and its success was most gratifying. He did not know of anything that was so apt to drive men of the artisan class into the public-house as the want of knowledge in their homes of how to cook meat and serve it. He wished the institution a long career of success and usefulness, and now had pleasure in moving the adoption of the report. Professor T. R. Fraser seconded the adoption of the report, which was unanimously agreed to.

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IRELAND.

JERVIS STREET HOSPITAL.

Mr. Arthur G. Chance, Resident-Surgeon of this hospital, has been elected to the vacant surgeoncy in it caused by the death of Dr. J. Stannus Hughes.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

Closely connected with the proposition to bring about an amalgamation between the school of the College and the Carmichael College of Medicine, is the election of a successor to the late Professor Stannus Hughes in the Chair of Surgery, held by that gentleman jointly with Mr. Stokes. The candidates announced are Dr. Anthony H. Corley, Vice-President of the College, and Lecturer on Surgery in the Carmichael College; Dr. Edward Hamilton, ex-President of the College, and President of the Dublin Branch; and Dr. William Thomson. Drs. Corley and Thomson are both surgeons to the Richmond Hospital, and Dr. Hamilton is one of the surgeons of Steevens's Hospital, in the lately defunct school of medicine attached to which he was for many years Lecturer on Anatomy, not Surgery, as erroneously stated by a contemporary this week. Apart from the question of the fitness and the merits of the respective candidates—upon which we have no desire to express an opinion—the transference of the present Lecturer on Surgery in the Carmichael School to the same chair in the College would naturally facilitate the carrying out of an amalgamation between the schools, the principle of which we believe all the candidates approve. In order to comply with the College charter, Dr. Corley must resign his vice-presidency and Dr. Hamilton his seat on the Council fourteen days before the election, which is fixed for July 24th. Unless the President is forced—which, under the peculiar circumstances of the case we hope he will not be—there will be no necessity upon him of summoning the Fellows of the College to fill up the vacancies caused by the compulsory resignation of these two candidates until after the election to the professorship. It would be very hard upon Dr. Hamilton if he lost both the professorship and his seat on the Council, and harder still upon Dr. Corley should he lose both the vice-presidency and the chair. If Dr. Thomson be elected, he will have to resign his seat on the Court of Examiners.

THE MEDICAL SCHOOLS OF DUBLIN.

The proposal to amalgamate the medical school of the Royal College of Surgeons in Ireland with the Carmichael College of Medicine, which was under private consideration some two years ago, but led to nothing, has again come forward under circumstances that would seem to afford a more reasonable probability of its being carried into effect. In Dublin, there are, in addition to the School of Physic of Trinity College, and of the King and Queen's College of Physicians, four medical schools. Two of these are proprietary, viz., the Ledwich or Peter Street School and the Carmichael; the others are the School of the Royal College of Surgeons and the Catholic University School. It is notorious, from the total number of students attending these four schools, that their multiplicity necessarily entails a waste of teaching power, with the consequent well understood educational and personal effects. The desirability and even necessity of altering this state of things in the Irish metropolis was recently forcibly pointed out by Dr. Edward Hamilton, in his able address as President of the Dublin Branch at its last annual meeting. Great difficulty necessarily exists, on other grounds than those of vested interests, in carrying out an amalgamation between the schools specified above, although it is desired by, we believe, the majority of those most nearly interested on both sides. The "Carmichael," originally the "Richmond Hospital School of Medicine," received its name in consideration of the munificent bequests of Richard Carmichael and the liberality of his widow; and the merging of a school intended to commemorate the name of so distinguished an Irish surgeon with any other similar institution might possibly be distasteful in an important quarter. However, a "judicious concentration"—as Dr. Edward Hamilton wisely observes—of the teaching power in Dublin by an amalgamation of some of its medical schools, would admittedly be beneficial to all parties concerned, and we doubt not also to the Dublin Medical School at large. For this reason, we are glad to see that a director of one of the proprietary schools, who is at the same time an ex-president of the Royal College of Surgeons in Ireland, and a member of its Council, has given the following notice of motion for the consideration of the latter body at its next meeting: "That it be referred to the Education Committee to ascertain if amalgamation between any of the existing medical schools and the school of the College be possible; and, if so, under what conditions and upon what terms such an amalgamation could be carried out; and to report as soon as possible to the Council." It will be observed from the terms of this notice that, if it should be adopted, it is open to the Committee to consider and report upon the amalgamation of more than two schools—a consummation which the most ardent desirer for concentration could hardly hope to see effected in Dublin at present.

HOSPITAL FOR WOMEN AND CHILDREN, CORK.

The annual meeting was held last week, presided over by the Lord Bishop of Cork. The Board of Management, in their report, referred to the plan for obtaining a new hospital of a kind suitable for the increasing requirements of the institution. A site and buildings have been obtained, which, when altered in accordance with the approved plans, will, it is believed, provide a hospital suitable in every respect for women and children. It is proposed, in the plan that has been adopted, to utilise the whole of the western wing of the existing buildings for the principal wards; but to remove the southern portion, and, instead of it, to erect a new building at right angles to, and adjoining, the northern end of that portion of the old building that is left, thus securing an ample garden, with a southern aspect, for the use of the children. The estimated cost of effecting these alterations is £2,500, while £300 in addition will be required for furniture and other items, making a total sum of £2,800. Of this, £1,731 has been promised, so that it will require a further sum of £1,000 to be collected to start the new hospital free of debt. Considering the advantages of the change, the Board have no doubt but that the necessary funds will be soon contributed. The total number of patients treated during the year was 1,563, of whom 194 were intern cases; and the receipts and expenditure were £670 9s. 1d., and £697 6s. 10d. In the new institution an increased number of lady probationers can be accommodated, the number at present being only four, each of whom pay £20 a-year; and it is gratifying to know that the Board have always a larger number of applicants than they have room to receive.

THE INTERNATIONAL HEALTH EXHIBITION.

II.—SANITARY HOUSE-APPLIANCES.

Pipes now disused for Drains.—An interesting example of a drain-pipe, now no longer used, is exhibited by Mr. John Waldram, C.E. It is a piece of oak, 6 ft. 6 ins. long, about 7½ ins. square, with a hole through the centre from end to end, about 3½ ins. in diameter. This is one of a number of similar pipes recently removed from the site of old Hatchett's Hotel in Piccadilly, after having, for upwards of a hundred years, failed to perform the duty ignorantly put upon them, and against which they had been protesting from the first by habitually depositing the sewage in the surrounding soil instead of carrying it away. This exhibit affords tangible evidence of the lamentable ignorance of sanitary laws that prevailed a century ago.

There does not appear to be on view any other example of old forms of drains now no longer put in, such as brick-drains, tile-drains, and wood box-drains.

The Old London Street, which is one of the most attractive features of the Exhibition, might, with advantage to the interests of health, be supplemented by the basement of an old London house, showing in section the leaky drains and the large cesspools, which, being underground, have not been replaced by modern improvements, as have the low-roomed, gable-roofed, picturesque houses so faithfully reproduced by Mr. George Birch. Thousands of houses in London and other large towns stand on a network of brick, wood, and tile apologies for drains; and, could the occupants of such houses only realise the fearfulness and extent of the dangers which thus surround them, they would not be content to remain a day longer than absolute necessity compelled. An actual representation of the state of things existing under their habitations would be more eloquent than any description from the pen of the ablest writer. No words of the architect are required to demonstrate the necessity of having a protecting rail or balustrade to a nursery balcony; and a like necessity for protection from the imminent danger to life connected with leaky drains and stagnant cesspools, would be evident to the meanest capacity, when once the actual condition of these drains and cesspools was realised.

Pipes now used for Drains.—Drain-pipes are now made of stoneware, concrete, or artificial stone, and iron. Stoneware must always retain its superiority over concrete or iron, as, when well glazed and made of sufficient strength, it fulfils all the requirements of a perfect drain. It is impenetrable by air or water, it permits of perfectly air-tight and water-tight joints being made between pipe and pipe, so that the drain when finished may be practically one pipe; it is imperishable in use and can only be destroyed by absolute breakage. The next best material to stoneware is concrete, or artificial stone, but this material is more suitable for pipes of large size, such as public sewers, than for house-drains. Iron is the least suitable for house-drains, for the reason that the best jointing will not remain perfect, and that the surface of cast iron is not sufficiently smooth to carry away sewage quickly or completely. When iron drains are laid under houses they can only be guaranteed to remain satisfactory when cased with concrete, but with stoneware drains, concrete is only necessary where the soil cannot be depended upon as a foundation. When the house-drains can be kept above the bed of concrete which should cover the area enclosed by the external walls of the house, the drains under the house should be so laid that every pipe and junction may be seen when required, without earth having to be dug away or concrete to be cut through.

In no case should metal pipes be joined to stoneware inside the house, as sooner or later such joints must become defective.

Excellent stoneware drain-pipes are exhibited by the following manufacturers.—Messrs. Bailey and Co., Messrs. Candy and Co., Messrs. Joseph Cliff and Sons, Messrs. J. and M. Craig, Messrs. Henry Doulton and Co., Mr. Joseph J. Ellis, Messrs. W. Ingham and Sons, Mr. George Jennings, Messrs. Sharp, Jones, and Co., Messrs. J. Stiff and Sons, and Messrs. Wilcock and Co.

Well made concrete or artificial stone pipes are exhibited by the Imperial Stone Company, and Messrs. Sharp, Jones, and Co., and Iron drain-pipes are shown by the North British Plumbing Company.

Stanford's well known patent joint for stoneware drains is exhibited by Mr. Henry Ough. No cementing is required with Stanford's patent joint. The joint is formed of a composition which is attached to the stoneware in the factory; each plain end and socket is turned and bored, and a perfect joint is made by the ends and sockets being greased before the pipes are put together.

Two other patent joints are shown, one by Major Francis H. Noott. This joint simply consists of the ordinary socket being formed partly on one pipe and partly on another, so that one pipe is laid on to another instead of into it. There are thus two joints in the socket, and as these joints are square they remain weak points in the drain. Major Noott's patent is really a variation, and not an improvement, of the principle first introduced by Mr. George Jennings, more than twenty years ago, in his patent pipes without sockets, the sockets being formed in separate chair and saddle pieces in which each pipe rested. Jennings's patent drain-pipes have an advantage over the ordinary socket-pipes for export, owing to the great economy of space effected in their stowage, but for good construction and sound work nothing can compare with the ordinary socket-joint pipes. Roberts's patent joint, exhibited by Messrs. Bailey and Co., is an ingenious arrangement. The joint is made by means of a loose collar, tapered on the inside, which is passed over the ends of two pipes having projecting rings to fit the collar. There is no reason why good joints may not be made by this means, but no complicated mode of joining drain-pipes is likely to supersede the simple socket, with a joint of Portland cement or other material that will adhere to stoneware, as that used in Stanford's patent.

Connections with House-Drains.—All connections with house-drains should be outside the house, and the only pipes which should be directly connected to house-drains are soil-pipes and ventilating pipes. Rain-water, waste-water, and surface-drainage should pass into the house-drain through some kind of trap, of which there are many varieties shown. The manufacturers before mentioned all exhibit stoneware siphon gully-traps, which are now, happily, coming into common use in connection with the drainage of even the smallest houses.

One hardly expected to find a place of honour given to the bell-trap, but, in the South Annexe, these enemies to health are exhibited by Mr. R. W. Crosthwaite. These traps are carefully galvanised, so that, where used, they may last as long as possible, and be a permanent source of danger under a friendly guise to the unfortunate inmates of the dwellings in which they are fixed. It was satisfactory to find on reference to the catalogue no mention made of bell-traps in the description of Mr. Crosthwaite's exhibits; and it is to be hoped that the Executive Council will have these old offenders against sanitary laws removed from the Exhibition, or shown only in connection with the unsanitary house.

The "Desideratum" gully, exhibited by Messrs. Bailey and Co., is well made, and of good design, excellently suited for receiving stable-drains, or waste-pipes from scullery-sinks. It is fitted with an iron trough, which retains straw, sand, grease, and other refuse, the removal of which is effected by lifting out the trough.

Strong iron gullies, suitable for warehouses and other places where very great strength is required, are exhibited by Messrs. Frederick Bird and Co.

Dean's patent stoneware-gullies are exhibited by Mr. Henry Dean. These gullies are unusually deep, are fitted with bucket for easy removal of silt, etc., and are very useful on this account.

Reversible inlet-gullies, designed some years ago by Mr. Mark Judge, are exhibited by Messrs. Henry Doulton and Co. They are made in two pieces, the head or receiver fitting into the trap, so that, while the head is fixed square with paving, the trap may be placed at any angle most convenient for connection with the drain. Hellyer's excellent "drain-intercepters," or gullies, are also exhibited by Messrs. Doulton and Co.

The "improved gully," and the "interceptor gully," exhibited by Messrs. Houghton and Co., are excellent traps. The "interceptor" is a specially well designed trap, admirably suited for stables, gravel-paths, etc.

The "Weatherley trap," or gully, is exhibited by Messrs. Stiff and Sons in an improved pattern, in which the inlet and outlet pipes are outside instead of in the well of the trap, and thus the well is free from projections for the lodgment of filth.

Ventilation of House-drains.—Arrangements for providing a free passage of air into drains on the house-side of outfall-traps, to form an air-break or disconnection between sewers and house-drains, are now admitted to be necessary by all sanitary authorities; indeed, the principle involved in their use is the cardinal principle of modern sanitary architecture. By means of the outfall siphon-trap, combined with air-disconnection and outlet ventilation above the roof, a dwelling is thoroughly protected from the ingress of sewer-air. That it is important that the admission of sewer-air to our dwellings should be prevented is universally admitted, even when no infectious disease-germs are present in the sewers; but it is often a matter of life and death. Who, indeed, would be bold enough to assert that the miles of London sewers into which every house is supposed to drain in this great metropolis, with its four millions of inhabitants, are ever free from infectious disease-germs? These sewers drain alike the palace and the worst tenement-dwelling in which poverty and ignorance breed disease and invite death. With perfect house-drains, properly disconnected from the sewer, the inhabitants of a town-dwelling may enjoy the blessings attendant upon cleanliness; but, without such disconnection from the public sewer, the cleanest possible household must share the dangers resulting from the sins of others against the laws of health.

Messrs. Bailey and Co. exhibit siphon-traps, with large inspection-hole for access to sewer, designed by Mr. Rogers Field; also channel-pipes of various forms, by the same engineer, for air-chambers or disconnecting manholes. The inlet to this siphon-trap is at an angle of about forty-five degrees from the level of the water in the trap, so that the area of water is much larger than with traps in which the inlet is vertical. With Mr. Field's channel-pipes, which are extremely good specimens of stoneware manufacture, the air-chamber floors above the channels have to be constructed separately by the workman when building the air-chamber, and are finished in cement, so that the floor is of two materials, and special care has to be taken that the cement-work is well done.

The Birmingham Sanitary Association exhibits the Edinburgh air-chambered trap, admirably made by Messrs. Cliff and Sons, and designed by the late Mr. Robert Potts. This is a good disconnecting arrangement, and, being made of earthenware throughout, the risks attending cement-rendered floors or sides are avoided. Its one defect is the inaccessibility of the trap, which is a serious fault when the trap is fixed at any considerable depth.

Messrs. J. and M. Craig exhibit Mr. Buchan's well known disconnecting siphon-trap, with fresh-air inlet directly over the water in the trap. The air-inlet is the same size as the trap, and, where not fixed at great depth, gives ready access to trap for cleaning purposes.

Messrs. Henry Doulton and Co. exhibit the Kenon air-chamber floor and siphon-trap, designed by Professor Corfield, M.D., and Mr. Mark Judge, to give easy access to siphon and sewer, and to ensure a perfect bottom to the air-chamber or manhole. They are made to leave as little as possible to the workman when building. The inspection-arm of the siphon, giving access to the sewer, is brought through the wall to the face of the inlet to the trap, and the floor forms a complete bottom to the air-chamber, thus no rendering in cement is necessary, and, after fixing siphon and floor on the course of the drain, the workman has simply to build the walls of the air-chamber, put the cover to same, and construct an air-inlet flue in cases where it is not desirable to put a plain open grate over the chamber. Messrs. Doulton and Co. also exhibit the Kenon air-shaft trap, designed by Mr. Judge to provide an accessible and inexpensive substitute for the air-chamber and trap. This trap has two arms for vertical inlet-shafts; the air-inlet is oblong on plan at the bottom, with sides sloping upwards to the socket of the arm, which is made to receive ordinary 9″ stoneware pipes for extending the shaft up to where the inlet-grating is to be fixed. The inspection-arm can be continued up to the ground-level in like manner, thus affording access to the drain on both sides of the trap without excavating the ground.

Messrs. J. and R. Howie exhibit some good disconnecting-traps, which are of exceptionally well finished manufacture.

The North British Plumbing Company exhibit a cast iron air-chamber floor and siphon-trap combined. Where iron drains are used, the floor of the disconnecting-chamber should certainly be of the same material, but the channels should be made to carry the sewage directly into the trap, which is not the case with the side-channels in the floor exhibited.

Ventilation of Drains.—In ordinary practice, the ventilation of house-drains can be effectively secured by continuing the soil-pipes up to the roof, full bore. When fixed inside, these pipes should be of lead, and they should be protected from damage; but, wherever practicable—and in all new buildings of course it is practicable—they should be fixed outside of the house; and in that case, strong iron pipes have an advantage over lead, inasmuch as while, for all practical purposes, they are as good, they are less expensive, and are less liable to be injured by ladders, etc.

All iron used in sanitary work should be protected from rust by galvanising or by Professor Barff's process. Specimens of iron soil-pipes protected by the last-named process are exhibited by the Bower-Barff Rustless Iron Company.

Sanitary authorities are not agreed about the use of cowls in connection with drain-ventilating pipes; while some recommend them, others dispute their use. There can be little doubt, however, that, whether cowls are or are not useful in special cases, they are not necessary for the ventilation of house-drains. A four-inch ventilating pipe open at top, well above the roof, with the sides perforated near the end, is a simple and effective outlet ventilator.

Soil-pipes will be again mentioned in the next paper, which will be upon water-closets and soil-pipes, slop-sinks, and urinals.

EXISTING PROVISIONS FOR DEALING WITH SMALL-POX IN THE METROPOLIS.

On Saturday, June 21st, Sir Edmund Hay Currie, and the members of the Ambulance Committee of the Metropolitan Asylums Board, accompanied by Dr. Thorne Thorne, Dr. Bridges, and Mr. Percival Gordon Smith of the Local Government Board, and by a few friends, proceeded to Long Reach, to inspect the twin-ship *Castalia*, purchased by the managers during the spring of 1883 for the purpose of a hospital-ship, to be used, in conjunction with the *Atlas* and the administrative ship *Endymion*, for the reception and treatment of small-pox patients. On the voyage down, the party landed and inspected Acorn Wharf—also a recent acquisition—on the southern bank of the river; another new wharf—Brown's Wharf—will shortly be opened on the northern bank. The steamer *Red Cross*, which is provided with beds, runs up and down the river from Acorn Wharf to the floating-hospital in Long Reach and back; another steamer will be put on this week, and then a steamer will call at each wharf every two hours. The managers have recently resolved upon an important, and, if judiciously managed, a most commendable, departure from the practice hitherto pursued in the removal of small-pox patients to hospital; patients will be transferred direct from their homes to the hospital-ships, and, in the case of patients suffering from the disease in its milder types, to the camp at Darenth. Hitherto, the practice has been to transfer each and all of the cases as they arise to the metropolitan hospitals, and forward them thence to the wharves for shipment to the *Atlas* at Long Reach. The proposed deviation from this practice will, it is evident, tend to further diminish the number of patients in the London small-pox hospitals, and will doubtless be attended with beneficial results to the community at large.

At the present time, the managers have six small-pox hospitals situated in the metropolis—at Homerton, Plaistow, Hampstead, Fulham, Stockwell, and Deptford respectively. Each of these hospitals is capable of containing 50 cases. In future, only such patients as are suffering from small-pox in its severe and virulent forms will be sent to the small-pox hospitals in London. Immediately, however, the convalescence of the patients is assured, they are transferred, without delay, to the Camp at Darenth, where they remain for not less than three weeks, in order that they may attain the health and strength necessary to enable them to enter upon their different vocations immediately they leave the Camp. In addition to the 300 beds in London, there is now accommodation for 400 cases on board the hospital ships, and further accommodation for 1,000 mild and convalescing cases in the two camps which have recently been established at Darenth. Of the 400 beds in the Floating Hospital, 200 are provided by the *Castalia;* these will be reserved entirely for male cases. This boat, it may be remembered, was built for the Channel service, from designs by Mr. Bessemer, but was for some reason never completely successful. Under the direction of Mr. Adam Miller, she has been gutted, and ten wards, arranged in stories, built in her. She now presents an appearance as unlike a ship as can well be, resembling rather, at a little distance, a row of white-washed cottages in a flood. At the suggestion, we believe, of Deputy Surgeon-General Bostock, C.B., one of the committee, the wards have been built *en echélon*, or obliquely, from side to side; by this device the ventilation will doubtless be facilitated, and the wards are rendered much more cheerful, some of the windows of each ward commanding an extensive view. We must confess to feeling some misgivings as to the amount of space per bed; the wards vary considerably in capacity, and also in shape, being in some cases convenient, and in others most inconvenient, for the arrangement of the beds. Using only the grand totals, we calculate that the floor-area will be 77 feet for each bed, and the cubic space only 789 cubic feet. These dimensions, it must be admitted, are very small; but it is believed that this objection has been overcome by a very efficient system of ventilation. From the ceiling of each ward one or more cylindrical extraction-shafts run above the level of the roof; the shafts are provided with cowls to utilise the extractive force of the wind, and also with a blower to supplement or replace this force when there is no wind—a contingency not likely to be of frequent occurrence, considering the exposed position in which the ship lies. It was stated that the air of the wards could be changed twelve or fifteen times an hour without sensible draughts; this would be tantamount to about 10,000 cubic feet for each patient in each hour—a quantity which ought, theoretically, to be ample. Further, it is not probable that all the wards will ever be full at the same time, but that the usual number of patients will be very limited. The total number of beds now available is 1,700. The greatest number of cases under treatment at any one time, in the epidemic of 1880-81, was 1,650; in the epidemic of 1877-78 (which was a very mild one), 980; and in 1870-71, 2,027. Last week, the total was about 1,400.

Whatever opinion may be held by specialists as to the probable success of this new floating hospital-ship, it will be universally admitted that the greatest credit is due to the Metropolitan Asylums Board for the skill and foresight with which the arrangements for dealing with small-pox in the metropolis have been made, and especially to Mr. Galsworthy and Sir Edmund Hay Currie, for the zeal with which they have devoted themselves to the public service in connection with this matter.

THE CHOLERA AT TOULON.

On Wednesday, June 18th, the French Minister of Marine was informed by telegram that cholera had appeared at Toulon. It appears that, on June 14th, there was a death from cholera; but as cholera is always present in the south of France, especially at Toulon, in a sporadic form, it was not considered serious, more especially as the ships that had last arrived from Tonquin carried clean bills of health. On June 20th two more deaths from cholera occurred. An infantry soldier died at the Sailors' Hospital. A retired sea-captain living in the neighbourhood of Toulon also died. On Sunday, there were three deaths in the Sailors' Hospital, and seven among the civil population.

At present, there are no certain data concerning the origin of the cholera-outbreak at Toulon, whether it be spontaneous or imported. Careful inquiries have been made, and the result excludes the probability that the vessels *Sarthe*, *Mytho*, and *Bien-Hoa*, recently arrived from Tonquin, have imported cholera. Neither of them had cholera cases on board during any part of their voyage, and none of the crews were among the cholera patients.

Toulon has recently been in constant communication with Tonquin and Cochin China, where cholera always exists more or less. A possible source of contagion is suggested by a sale by auction, ordained by the marine authorities, of the clothes and personal possessions of the sailors who had died in Tonquin and Cochin China. The clothes of the sailors who died from cholera were burned at Tonquin; but it is not perfectly certain that some infected articles of clothing have not, by mistake and mischance, found their way into the bundles of the non-choleraic.

Toulon is in a deplorable condition; this has been admitted some time ago, but no remedy has been forthcoming. In the old city there are no sewers; all refuse and excrement are emptied into the gutters, and carried along into the Vieille Darse. Thus, in that part of the port, there is an accumulation of decomposing organic substance, all the more dangerous as the Mediterranean is tideless. The emanations are unendurable. The barracks of the soldiers and sailors were formerly close to this plague-spot.

The incident which most distinctly indicates that cholera has been imported into Toulon is, that the majority of cases have been among the sailors and the marine officials. The retired captain, whose death is noticed above, died in five hours. Another person succumbed in three hours. On Tuesday, June 24th, one death only was recorded; but this decrease does not necessarily augur the disappearance of cholera. In 1865, when cholera raged at Toulon, the statistics presented violent oscillations. Some days, there were an enormous number of deaths; on others, one or two, or none at all.

Every means of disinfection has been adopted. The city is watered with a solution of carbolic acid and chloride of lime. Those who have died from cholera are buried at a great depth immediately [illegible]. Railway [illegible] are sprinkled with carbolic acid solution. The soldiers are encamped outside the town. The sick sailors are put on board the [illegible] to be examined; the cholera-patients are removed to the St. Maudrier Hospital, which is reserved for them. The [illegible] have been placed in vessels at anchor outside the port. The Ministers of War and the Marine have given orders to the authorities of the arsenals to deliver to the civil authorities all the material for encampment that they may require.

MM. Brouardel and Proust arrived on Tuesday, June 24th, at Toulon, with a Ministerial decree to effect whatever measures they judge necessary for the public safety, to ordain the evacuation of entire districts, and of the city itself, if requisite. Dr. Rochaud left Paris for Toulon on Tuesday evening, also MM. Strauss and Roux, in order to continue their scientific researches. They are also commissioned to make a strict inquiry into the origin of the outbreak.

The authorities give every facility to inhabitants to leave Toulon. The Administration of Marine gives twenty days' leave of absence to all who are employed in the arsenal, on application for the same.

The city of Marseilles is busy taking precautions to combat the appearance of cholera. The Municipality has voted 60,000 francs (£2,400) for purchasing disinfecting agents, which will be used for disinfecting the streets, railway stations, omnibus bureaux, public water-closets, etc.

The Administration of the Paris Assistance Publique has placed carriages at the disposal of the public, for removing cholera-patients, should it appear in Paris. This fact has been notified to every medical man practising in the city. A wooden hospital, at Montrouge, is reserved for the use of cholera-patients.

RETROSPECT OF ELECTIONS AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

In anticipation of the election of Members of Council of the Royal College of Surgeons of England, which will take place on Thursday next, it has seemed expedient to present to our readers an abstract of the results of the elections since 1876. The Council is composed of twenty-four members, three of whom retire in rotation every year. By taking the last eight elections, therefore, it will be seen how the present members of the Council come to occupy their posts in that body. Every councillor must retire or seek re-election at the end of his eighth year of office. There are, consequently, at least three vacancies every year. There may be more, in consequence of death or voluntary retirement, before the eighth year is reached. But, if a member retire before his proper term of office expires, the member who fills his place only remains on the Council until the end of what would be the eighth year of such retiring member, if he had continued at his post. This year, the members elected in 1876 go out. As will be seen by reference to the summary below, they were Mr. Holden, Mr. Simon, and Professor Humphry. But Mr. Simon had already resigned in 1880, and Mr. T. Smith was in that year elected to fill his place. Consequently, Mr. T. Smith retires this year. The Council also loses this year the valuable services of Sir Erasmus Wilson and Mr. John Gay, who were both elected in 1878, and who now retire from ill-health. Thus there are five vacancies to be filled next week. Of the successful candidates the three who receive the highest number of votes may remain in office for the full term of eight years; whereas, following the above rule, the fourth and fifth on the list will both have to go out of office, although they may then be eligible for re-election, in 1886, that being the year when Sir E. Wilson and Mr. Gay would both have had to retire in rotation.

The method of election which is in vogue at the College, and which is carried out in accordance with the Charter and By-laws, has not met with the approval of the electorate; and, as it has been the theme of agitation for years, it need not occupy much of our space on this occasion. To be allowed to use voting-papers or vote by proxy has been the great object aimed at by the provincial Fellows, who, like all others, are at present required to attend personally at the College, in order to record their votes. The desirability of a change in this and other respects has at length made itself so very generally felt, that the Council has recently resolved to apply to the Privy Council for such alterations in the Charter and By-laws as may for the future enable Fellows to use voting-papers. At the present election, however, the personal attendance of each Fellow voting still remains compulsory.

In 1876, there were four vacancies in the Council, occasioned by the death in April of that year of Mr. G. Southam, Manchester, and the retirement in rotation of Messrs. Humphry, Holden, and Simon. These three gentlemen offered themselves for re-election, and Messrs. E. L. Hussey, Oxford, Mr. W. Adams, London, and Mr. C. G. Wheelhouse, Leeds, were duly nominated as candidates, the last-named gentleman [illegible] Fellows, asking him to accept the candidature. The following was the result of the election, as declared by the President, Sir James Paget:

Mr. Holden	received	[illegible]	votes,	including	[illegible]	plumpers.
Mr. Simon	,,	139	,,	,,	4	,,
Mr. Humphry	,,	130	,,	,,	1	,,
Mr. Wheelhouse	,,	116	,,	,,	22	,,
Mr. Adams	,,	64	,,	,,	8	,,
Mr. Hussey	,,	35	,,	,,	3	.

The first four candidates were consequently declared to be elected. At the first meeting of Council after the election, Mr. Prescott Hewett was elected President of the College, and Mr. [illegible] and Mr. Simon Vice-Presidents.

In 1877, there were three vacancies, caused by the death of Sir William Fergusson, and by the retirement in rotation of Mr. [illegible] and

Mr. Gay, who offered themselves for re-election. Mr. Adams, Mr. Savory, and Mr. Holmes, were also nominated as candidates.

Mr. Erichsen	received	189	votes, including	31	plumpers.
Mr. Savory	,,	149	,, ,,	10	,,
Mr. Holmes	,,	123	,, ,,	11	,,
Mr. Gay	,,	112	,, ,,	7	,,
Mr. Adams	,,	94	,, ,,	6	,,

Messrs. Erichsen, Savory, and Holmes were consequently elected. Mr. John Birkett became President, and Mr. Simon and Mr. Holden were elected Vice-Presidents, Professor Humphry having declined the latter post. At the election of this year, an appeal in favour of voting by proxy was addressed, through the medical papers, to the Council.

In 1878, there were three vacant seats caused by the retirement, in the prescribed order, of Mr. Erasmus Wilson, Mr. H. Lee, and Mr. Barnard Holt. They all offered themselves for re-election, and Mr. Lister, Mr. Bryant, Sir H. Thompson, Mr. John Wood, Mr. H. Power, Mr. E. Lund, and Mr. John Gay were also candidates. Mr. Lund was requisitioned by over 350 London and provincial Fellows to offer himself as a candidate, whereupon Mr. T. B. Curling published a letter, in which he stated his views as to the inexpediency of provincial Fellows holding seats on the Council. Mr. G. D. Pollock also published some correspondence, in which he reiterated his well known objection to "canvassing" for signatures or support; and voting by proxy was again strongly urged as a concession to the provincial Fellows. Messrs. Lund, Wilson, and Gay were elected, the votes having been recorded as follows.

Mr. E. Lund	received	101	votes, including	24	plumpers.
Mr. E. Wilson	,,	95	,, ,,	3	,,
Mr. J. Gay	,,	92	,, ,,	11	,,
Mr. J. Wood	,,	81	,, ,,	3	,,
Mr. H. Power	,,	78	,, ,,	11	,,
Mr. J. Lister	,,	76	,, ,,	1	,,
Mr. T. Bryant	,,	62	,, ,,	6	,,
Sir H. Thompson		58	,, ,,	6	,,
Mr. H. Lee	,,	38	,, ,,	1	,,
Mr. B. W. Holt		37	,, ,,	2	,,

Mr. John Simon was that year elected President, and Mr. Holden and Mr. Erichsen the Vice-Presidents of the College.

In 1879, the vacancies were four, caused by the death of Mr. John Hilton, and the retirement of Mr. Le Gros Clark, Mr. Spencer Wells, and Mr. Critchett. Of these three, Mr. Spencer Wells alone sought re-election. Mr. John Wood, Mr. H. Power, Mr. T. Bryant, Mr. Bar well, and Mr. J. Hutchinson, were also candidates for the vacant seats. The following was the result of the election.

Mr. Spencer Wells	received	139	votes, including	2	plumpers.
Mr. John Wood	,,	129	,, ,,	11	,,
Mr. Jonathan Hutchinson		129	,, ,,	15	,,
Mr. Henry Power	,,	126	,, ,,	19	,,
Mr. Thomas Bryant		97	,, ,,	9	,,
Mr. Richard Barwell		22	,, ,,	3	,,

Mr. Wells, Mr. Wood, Mr. Power, and Mr. Hutchinson consequently became Councillors. At the first meeting of the new Council, Mr. Holden was elected President, and Mr. Erichsen and Mr. Erasmus Wilson were chosen the Vice-Presidents. The question of voting by proxy was vigorously discussed this year, particularly in connection with a petition to the Council, which was originated by Mr. George Jackson of Plymouth.

In 1880, there were four vacancies, caused by the death of Mr. Hancock, and the retirement in rotation of Mr. G. Busk and Mr. T. B. Curling, and the resignation of Mr. J. Simon. None of these gentlemen sought re-election. The candidates were Mr. W. Cadge (Norwich), Mr. W. Adams, Mr. J. Lister, Mr. T. Bryant, Mr. Sydney Jones, Mr. J. W. Hulke, Mr. T. Smith, and Mr. M. Berkeley Hill. Messrs. Cadge, Bryant, Lister, and Smith were elected to fill the four vacancies. The votes were recorded as follows.

Mr. W. Cadge	received	174	votes, including	14	plumpers.
Mr. T. Bryant	,,	170	,, ,,	15	,,
Mr. J. Lister	,,	169	,, ,,	1	,,
Mr. T. Smith	,,	136	,, ,,	13	,,
Mr. J. W. Hulke	,,	107	,, ,,	6	,,
Mr. W. Adams	,,	87	,, ,,	6	,,
Mr. M. B. Hill	,,	51	,, ,,	6	,,
Mr. Sydney Jones	,,	45	,, ,,	4	,,

Mr. Erichsen was appointed President of the College, and Mr. Erasmus Wilson and Mr. Spencer Wells the Vice-Presidents. Mr. Reginald Harrison was requisitioned by 170 Fellows of the College to allow himself to be put in nomination for one of the vacancies on the Council, but eventually withdrew from the contest, influenced by the desire not to prejudice the position of Mr. Cadge.

In 1881 there were three vacancies to be filled, caused by the retirement, in rotation, of Sir James Paget, Mr. Haynes Walton, and Mr. Wheelhouse, of Leeds. Sir J. Paget and Mr. Walton sought re-election, but Mr. Wheelhouse did not again present himself for election. Four other Fellows were duly nominated, namely, Mr. J. W. Hulke, Mr. J. Croft, Mr. Christopher Heath, and Mr. Reginald Harrison. Sir J. Paget and Messrs. Hulke and Heath were elected. For the various candidates the following votes were recorded.

Sir J. Paget	received	228	votes, including	1	plumper.
Mr. J. W. Hulke	,,	137	,, ,,	8	plumpers.
Mr. C. Heath	,,	133	,, ,,	4	,,
Mr. J. Croft	,,	113	,, ,,	18	,,
Mr. R. Harrison	,,	87	,, ,,	12	,,
Mr. H. Walton	,,	72	,, ,,	5	,,

On this occasion 313 Fellows voted.

At the annual meeting of the Council Mr. Erasmus Wilson was elected President, and Messrs. Spencer Wells and John Marshall were appointed Vice-Presidents.

In 1882 there were three vacancies in the Council, caused by the retirement, in rotation, of Mr. John Marshall, Mr. H. Power, and Mr. Alfred Baker, of Birmingham; all of whom sought re-election. The other candidates were Mr. G. Lawson, Mr. John Croft, and Mr. N. C. Macnamara. The result of the polling was as follows.

Mr. Marshall	received	165	votes, including	5	plumpers.
Mr. Power	,,	144	,, ,,	3	,,
Mr. Croft	,,	103	,, ,,	21	,,
Mr. Baker	,,	72	,, ,,	10	,,
Mr. Lawson	,,	67	,, ,,	9	,,
Mr. Macnamara	,,	48	,, ,,	8	,,

Thus Mr. Marshall, Mr. Power, and Mr. Croft were elected. The rejection of Mr. Baker was much resented by the provincial Fellows. At the annual meeting of the Council, Sir Spencer Wells was elected President, and Mr. J. Marshall and Mr. Cooper Forster, the Vice-Presidents.

In 1883, the three vacancies to be filled were caused by the retirement of Mr. J. Birkett, Mr. Prescott Hewett, and Mr. Cooper Forster. The last-named gentleman alone sought re-election, and was placed at the head of the poll. There were besides eight other candidates. The result of the voting was as follows.

Mr. J. C. Forster	received	181	votes, including	2	plumpers.
Mr. Sydney Jones	,,	125	,, ,,	21	,,
Sir W. Mac Cormac	,,	119	,, ,,	8	,,
Mr. G. Lawson	,,	98	,, ,,	4	,,
Mr. A. E. Durham	,,	91	,, ,,	0	,,
Mr. O. Pemberton	,,	88	,, ,,	7	,,
Mr. R. Harrison	,,	81	,, ,,	1	,,
Mr. N. C. Macnamara		69	,, ,,	2	,,
Mr. R. B. Carter	,,	61	,, ,,	6	,,

The three successful candidates, therefore, were Mr. Forster, Mr. Jones, and Sir W. Mac Cormac. Professor J. Marshall was unanimously elected President by the Council at its annual meeting, and Messrs. Cooper Forster and Savory the Vice-Presidents. The vacancies to be filled next week are five, and the candidates are nine, namely, Mr. Thomas Smith (Fellow, 1858), the only retiring member of Council who seeks re-election, and who has only since 1880 been a Councillor; Mr. R. Barwell (Fellow, 1853); Mr. W. Allingham (Fellow, 1857); Mr. G. Lawson (Fellow, 1857); Mr. M. Berkeley Hill (Fellow, 1859); Mr. A. E. Durham (Fellow, 1860); Mr. F. J. Gant (Fellow, 1861); Mr. G. Cowell (Fellow, 1867); and Mr. O. Pemberton of Birmingham (Fellow, 1878). It will be noticed that, with the exception of the last-named gentleman, all the candidates are resident in London.

TESTIMONIAL TO DR. JOSEPH ROGERS.

The presentation of a handsome testimonial to Dr. Joseph Rogers, Chairman of the Poor-law Medical Officers' Association, took place on Tuesday last at the rooms of the Medical Society, Chandos Street, in the presence of a numerous gathering of ladies and gentlemen. Mr. JOHN A. SHAW STEWART presided.

Mr. J. WICKHAM BARNES (Honorary Secretary of the Fund) spoke of the cordial reception with which the proposition to do honour to Dr. Rogers had been received, and the support which had been given to it by the medical journals, the editors of which had been among the most liberal contributors to the fund.

The CHAIRMAN, in his opening remarks, spoke of Dr. Rogers' work and worth, which were so well known, that little further need be said on those points; but, on an occasion like the present, they should not forget that Dr. Rogers was a sanitary reformer and advocate of sanitation of about forty years' standing, and that matters which were now accepted as facts were then subjects of the fiercest controversy. Dr. Rogers, in conjunction with Mr. George Alfred Walker and others, was the first who successfully advocated the closing of the burial-grounds in cities, and had succeeded in establishing the first public mortuary in London. Those facts alone testified to his energy and ability. Those who were older than the speaker could remember the time when the light of heaven was taxed; and Dr. Rogers, with the late Lord Duncan, was one who worked hard to abolish the window-tax, a more unjust tax than which it was impossible to conceive. He was appointed medical officer of the Strand Union in 1856, at a time when there were no paid nurses, and when the Poor-law officer had to pay out of his small salary for all medicines. Dr. Rogers, with Dr. Anstie and Mr. Ernest Hart, was among the stoutest advocates for the improvement of the workhouse infirmaries; and, aided by the full force of the medical press, the great work was commenced. The first time he (the Chairman), had had the pleasure of working with ladies was in Mr. Ernest Hart's house; he was thankful that now, in all useful social work, ladies came to the front. Dr. Rogers' work led up to Mr. Gathorne Hardy's Act, and his force and determination prevailed so far, that the more expensive medicines were henceforth to be paid for by the guardians, but for a long time the bulk of the drugs supplied was still left as a charge upon the ill-paid medical officer. Dr. Rogers' great and difficult work had been in connection with Poor-law administration. He believed one of the greatest political economists of the day, whom he saw present, would bear him out that political economy and philanthropy went hand in hand when they were employed in energetic and persistent endeavours to arrest disease in its earliest stages. No one could go much about our general hospitals without seeing how very much of the misery and distress of this world were caused by disease. We were subject to a variety of diseases, and diseases meant loss of health, and ultimate loss of life, to the breadwinner, and his widow and children to be cast on the world. Dr. Rogers was subsequently very instrumental in the carrying of the Bill for the superannuation of Poor-law medical officers. Since then, he had visited almost every large town in England, Scotland, and Ireland, with the view of prevailing upon the authorities to carry out improvements lately talked of in the metropolis. Dr. Rogers was a real true specimen of the best sort of Englishman: a man of tenacity, a hard hitter, a staunch friend, and a pertinacious foe.

Mr. G. W. FRASER, Chairman of the Westminster Board of Guardians, said he had long known Dr. Rogers, and it afforded him very great pleasure to find that he was so much respected by those who had had an opportunity of appreciating his valuable work, and the many reforms he had been instrumental in effecting in the Poor-law of this country. He was very much respected by the Board of Guardians of the Westminster Union as at present constituted and before, until he had to draw the attention of the guardians to matters affecting the internal welfare of the workhouse, which action resulted in his being suspended from his duties. All he could say was, there was no logical ground for the course that had been taken. It was a great satisfaction to find that that apparent evil had resulted in some good, for Mr. Wickham Barnes had told them that the treatment which Dr. Rogers then received was instrumental in bringing about the crowning result, to be achieved in the presentation of the testimonial that day. Dr. Rogers had, on several occasions, rendered very valuable services to him (Mr. Fraser) and his colleagues, and he trusted that he might long be spared to fulfil the duties he had hitherto so long and so satisfactorily discharged.

Professor J. E. THOROLD ROGERS, M.P., said it was a matter of great gratification to him to be present on an occasion when the merits of his brother's labours were being recognised with so much unanimity, and in so practical a form, by the profession to which he belonged, and which, he ventured to say, he had always adorned.

Mr. SAMUEL BONSOR, as an old Westminster guardian, spoke of the pleasure it was to him that he had lived long enough to see Dr. Rogers's efforts recognised as they had been

Dr. FARQUHARSON, M.P., said he knew that Dr. Rogers had been a great sanitary reformer, but he was astonished to find that he had been a reformer of so many years' standing. Guardians were apt to go for a hard and fast rule, while medical men, on the other hand, held more towards the sympathetic side; and it was by carrying out their duties in a sympathetic and liberal spirit that medical men often got into great disputes, and great difficulty and trouble. Until recently, these gentlemen, who were often treated cruelly, had no organisation or means by which they could make their grievances known, or obtain any redress whatever. The action of Dr. Rogers and the Association which he had been instrumental in forming, had been the means of often bringing to light cases of oppression, and of obtaining redress for these who had been oppressed. He was sure they might all congratulate Dr. Rogers on being present, not only from the fact that he was going to receive a substantial token of the affection and respect in which he was held by all who knew him, but on the expressions of admiration and esteem which poured in from all directions on that occasion. He hoped Dr. Rogers would long be spared to give the benefit of his shrewdness, his tenacity, and his tact.

Canon WADE (Rector of St. Anne's, Soho) said he had known Dr. Rogers for some years as a man of war. The first thing which drew forth his kindly feeling towards Dr. Rogers was observing the tender and faithful manner in which he supported the case of the sick poor in their workhouses.

The Rev. W. BENHAM said he thought he had known Dr. Rogers and his family longer than anyone else in the room, excepting his brother, and if he was a man of war, as had been stated, it was because no man in the world had a more kindly heart.

The CHAIRMAN, in making the presentation to Dr. Rogers of three handsome pieces of silver plate, in a case, together with a cheque for £150, said he really ought to have the assistance of a lady now, for she would so much more gracefully in their name present that testimonial to Dr. Rogers. The inscription ran: "Presented to Dr. Joseph Rogers, in recognition of his continuous effort in the cause of sanitary and Poor-law medical reform for nearly forty years. June 24th, 1884." The date reminded them that Dr. Rogers' voice had not been that of one crying in the wilderness; his voice had been most usefully and beneficially exercised in the metropolis. With the pieces of plate there was a substantial lining. They hoped that Dr. and Mrs. Rogers would long be spared to enjoy very many blessings. They had met together there with one heart and one mind, to show their appreciation of his excellent qualities both as a public and as a private man. The estimate of his good deeds he (the Chairman) fully believed would never be known till that last day, when the record of his life would be unrolled. They had met to do honour to a good man; let each in his own capacity strive to follow so noble an example, that when that great day came they might have more to record of work done for others and less for themselves.

Dr. ROGERS, who spoke with some emotion, said he felt much difficulty in giving expression to the feelings that actuated him on that occasion; all he would state was that, in his progress through life, if he had recognised an evil, he had done his best to relieve it; and if in the doing of it he had occasionally—and doubtless he had—confronted the prejudices of some, and aroused the antagonism of others, it was the inevitable fate of all who attempted to deal determinedly with wrong-doing, wherever it might exist. He happened to be, as it were, a child of the new Poor-law, because he remembered well when the Bill became law, and his father expressed to him his sense of deep disappointment and dissatisfaction as a Christian man with the way in which that Bill was framed, in regard to its harsh and bitter spirit. They must recognise the fact that the poor would be with us always; and that it was best to deal with them in a spirit of conciliation, moderation, and kindness, and especially in the particular branch of the management of the poor which it had been his lot for many years to be associated, namely, as medical officer of a large metropolitan workhouse. He was perfectly satisfied of one thing, and that was that a judicious administration of poor-relief meant economy. He had studied this question most minutely. He pointed out, 23 years ago, to Mr. Charles Villiers, who presided over a committee on poor-relief in 1861, that a more liberal administration of relief to the poor meant true economy to the ratepayers, because if they cut short the sickness of the poor, if they diminished the amount of deaths that took place among the breadwinners, they would, as the ultimate result, economise expenditure and out-relief. As regarded other subjects that had been referred to, it was to him a matter of immense gratification that he had been associated in those labours that took place about forty-four years ago, initiated by Mr. George Alfred Walker of Drury Lane, and which eventually germinated in the abolition of the most horrible system that ever took place in a Christian kingdom. He could tell them many things terribly showing the horrible evils that arose from keeping the bodies of the dead in the single rooms of the living. He had many times seen the widowed mother and the children dining off the coffin of the dead father, and other scenes which were indescribable in a gathering like that before him. This it was which had prompted his action in the formation of a mortuary at St. Anne's. Dr. Rogers concluded by offering his sincere thanks for the great honour they had conferred on him, and to Mr. Shaw Stewart in coming and speaking so kindly of him as he had done.

Mr. WICKHAM BARNES proposed a vote of thanks to the Chairman, which was seconded by Mr. JABEZ HOGG, and to which the Chairman briefly replied.

SCIENCE AND DISCIPLINE IN THE ARMY MEDICAL DEPARTMENT.

An untoward event in the history of the North-Western Provinces Branch of the British Medical Association has lately taken place which calls for notice in this Journal. Dr. Cuningham, the Sanitary Commissioner with the Government of India, read a paper, some months ago, at a meeting of the Epidemiological Society, "On the Sanitary Lessons of Indian Epidemics." This paper was severely criticised by Surgeon Andrew Duncan, M.D., F.R.C.S., of the Bengal Medical Service, at a meeting of the above-named Branch on the 8th of March, under the presidency of Deputy Surgeon-General J. Hendley, C.B., A.M.D. A discussion followed, and the paper was published in the *Indian Medical Journal* for April 1884, a copy of which is now before us. For the publication of this paper, Surgeon-Major Dr. Boileau, who was officiating as editor of the *Indian Medical Journal*, and the President, Dr. Hendley, were reprimanded; and its author, Dr. Duncan, who had just been gazetted to the medical charge of a regiment of Bengal Lancers, had his appointment cancelled, and was handed up to the Commander-in-Chief for conduct prejudicial to military discipline, for subjecting the action of his official superior to criticism. We have carefully read Dr. Duncan's paper. It is unquestionably written with great ability, and with knowledge of the subjects treated of. The views put forward by Dr. Duncan, we are bound to say, will commend themselves to the minds of the best sanitary and physiological authorities in this country; and, as against Dr. Cuningham, we think the writer's victory in reasoning, in facts, and clearness of statement, is complete. Unfortunately for Dr. Duncan, his antagonist is not a mere literary and scientific opponent, but, being Surgeon-General and Chief of the Medical Department of the Indian Service, is that gentleman's superior officer. Taking this fact into consideration, we are constrained to say Dr. Duncan's paper is not free from indiscretion. It is not that he has differed with his superior on a scientific question, but that he did so in a needlessly offensive way. Throughout the paper, from first to last, there seems an unbecoming tone of contemptuous irony, which, however effective as a literary weapon, was not necessary for his argument, and was disrespectful to an officer in the high position of Dr. Cuningham, and certainly contrary to the letter and spirit of the code of military discipline which Dr. Duncan, in common with all who serve in a military capacity, is bound to obey. It is with regret that this fault has been accentuated by the publication, in a medical journal, of a letter to which Dr. Duncan placed not only his name but his official designation, and in which he wrote of his superior officer in terms we must characterise as quite unjustifiable. We heartily concur with Dr. Duncan's scientific opinions; we cannot endorse his mode of expressing them. But in the name of scientific freedom and professional feeling, we protest against the straining of discipline in repressing even faults of manner and expression in the cause of scientific debate.

As regards the censure passed on Drs. Hendley and Boileau, we think that these officers have been very hardly treated. In the discussion which followed the reading of the paper, Dr. Hendley regretted, and protested against the manner in which it was written; adding, "that he hoped the vein of irony which ran through the paper would be omitted in the discussion, and that those who took part in it would discuss, not the sanitary commissioner, nor the author, but their respective statements and theories." And Dr. Boileau went even further in defending Dr. Cuningham from Dr. Duncan's trenchant form of criticisms. While this Journal has always defended the medical services against unjust treatment, its pages have never been made the vehicle of what has even the appearance of want of respect for service traditions, and for the good order of a great public department.

We venture to hope that we have heard the last of this unpleasant incident. We trust that Dr. Duncan, who is an extremely able man, will be considered to have more than expiated his error in judgment, and that the authorities will not press against him in future a false step that has already been somewhat harshly repressed; and while we hope that medical officers will on all occasions express their opinions on professional questions in courteous terms, it is the manifest duty and interest of the Government to encourage rather than repress free discussion. Any attempt to persecute officers who happen to differ from their official superiors on scientific questions, would soon crush the life out of the service, and reduce it to a condition fatal to its self-respect, and to the purpose it is intended to serve, and would be in the highest degree detrimental to the public interest.

While unable to justify all the phrases in Dr. Duncan's paper, our reason concurs in his arguments, and our sympathies are with his courageous and ardent advocacy of what he holds to be a scientific truth.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A meeting of the Council will be held in the Council-Room of Exeter Hall on Wednesday, the 9th day of July next, at 2 o'clock in the afternoon.

Francis Fowke, *General Secretary.*

161a, Strand, London, June 21st, 1883.

NOTICE OF QUARTERLY MEETINGS FOR 1884: ELECTION OF MEMBERS.

Meetings of the Council will be held on Wednesday, July 9th, and October 15th, 1884. Gentlemen desirous of becoming members of the Association must send in their forms of application for election to the General Secretary not later than twenty-one days before each meeting, viz., September 25th, 1884, in accordance with the regulation for the election of members passed at the meeting of the Committee of Council of October 12th, 1881.

Francis Fowke, *General Secretary.*

GRANTS FOR SCIENTIFIC RESEARCH.

The Scientific Grants Committee of the British Medical Association desire to remind members of the profession engaged in researches for the advancement of medicine and the allied sciences, that they are empowered to receive applications for grants in aid of such research. Applications for sums to be granted at the next annual meeting should be made without delay to the General Secretary, at the office of the Association, 161a, Strand, W.C. Applications must include details of the precise character and objects of the research which is proposed.

Reports of work done by the assistance of Association grants belong to the Association.

Instruments purchased by means of grants must be returned to the General Secretary on the conclusion of the research in furtherance of which the grant was made.

COLLECTIVE INVESTIGATION OF DISEASE.

Cards for recording individual cases of the following diseases have been prepared by the Committee; they may be had on application to the Honorary Secretaries of the Local Committees in each Branch, or on application to the Secretary of the Collective Investigation Committee.

I. Acute Pneumonia.
II. Chorea.
III. Acute Rheumatism.
IV. Diphtheria, clinical.
IVa. Diphtheria, sanitary.
V. Syphilis, acquired.
Va. ,, inherited.
VII. Puerperal Pyrexia.
VIII. Paroxysmal hæmoglobinuria.
X. Habits of Aged Persons.
XI. Albuminuria in the Apparently Healthy.

Note.—The further 150 cases of pneumonia asked for by the Committee have now been received, and will be included in the forthcoming issue of the *Record* in July. The Committee hope that cases will still be communicated, as opportunity may occur, with a view to a further report upon the subject in the future.

An inquiry is being now issued concerning the general condition, habits, and circumstances, past and present, and the family history of persons who have attained or passed the age of 80 years.

The replies to this inquiry will be most valuable when given by a medical man; but the questions have been so arranged, that, with the exception of some on the last page, they may be answered by another person. *Partial information will be gladly received.*

Copies of the form and memorandum relating to Aged Persons, recently printed in the Journal, are ready for distribution through the local Secretaries, and will be forwarded to any one who is willing to fill up one or more of the forms, on application by post-card or otherwise to the "Secretary of the Collective Investigation Committee," 161a, Strand, London.

There is also now being issued an inquiry as to the occurrence of Albuminuria in apparently healthy persons.

Applications should be addressed to

The Secretary of the Collective Investigation Committee,
May 1884. 161a, Strand, W.C.

Notice.—The *Life-History Album* prepared by the Collective Investigation Committee is now ready, and can be ordered of all booksellers, price 3s. 6d.

BRANCH MEETINGS TO BE HELD.

North-Western Provinces and Oudh Branch.—Meetings are held on the first Friday in every month, at half-past nine, after dinner at eight o'clock. Gentlemen wishing to be present are requested to communicate with the Secretaries, Surgeons SHIRLEY DEAKIN and W. A. MORRIS, 8, City Road, Allahabad.

Midland Branch.—The annual meeting of this Branch will be held in Nottingham on Thursday, July 3rd. Notice of papers, etc., to be sent to the Secretary, LEWIS W. MARSHALL, M.D., Nottingham.

Northern Counties (Scotland) Branch.—The annual meeting of this Branch will be held at Elgin, on Wednesday, July 9th; Dr. D. McIntyre, of Fort William, President-elect. Members desirous of bringing forward any communication are requested to intimate the same at once to J. W. NORRIS MACKAY, M.D., Honorary Secretary, Elgin.—June 10th, 1884.

Aberdeen, Banff, and Kincardine Branch.—The annual meeting will be held in the Rooms, No. 198, Union Street, Aberdeen, on Saturday, July 12th, at 1.30 P.M.—ROBERT J. GARDEN, JOHN URQUHART, Honorary Secretaries.

North Wales Branch (R. A. Prichard, Esq., Conway, President.)—The thirty-fifth annual meeting will be held at the George Hotel, Bangor, on Thursday, July 3rd, 1884, at 12.30 o'clock (on the arrival of mid-day trains). Agenda: Consider notice of motion and report of committee upon alterations in the by-laws, to bring these into conformity with the Articles of Association. 1.30, President's Address. Papers: Dr. Hughes, Denbigh: Sanitation and Infection. Dr. Emrys Jones, Manchester. Dr. John Roberts, Chester: 1, On a new Remedy in Diseases of the Skin; 2, A Case of High Puerperal Pyrexia; Recovery. Members desirous of reading papers, or of making communications to the meeting, are requested to notify their subjects to the Honorary Secretary. After the meeting, the members and guests will, as usual, dine together at 4 o'clock. Tickets (inclusive), 10s. 6d. each.—J. LLOYD-ROBERTS, Honorary Secretary, Denbigh.—June 20th, 1884.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE annual general meeting of the Birmingham and Midland Counties Branch of the British Medical Association was held on June 19th in the Medical Institute, Edmund Street, Birmingham. Dr. FOSTER (the retiring president) presided at the commencement of the proceedings.

New President.—Dr. FOSTER said he had to introduce his successor, Dr. NASON, of Stratford-on-Avon, who had been elected president of the Branch for the ensuing year. It gave him great pleasure to be succeeded in the office by a member of the profession who was so well known for his scientific and personal qualities as Dr. Nason, and whose name was so well known and respected.

Dr. NASON then took the chair; and, on the motion of Mr. A. BAKER, seconded by Dr. THURSFIELD, a vote of thanks was passed to the late president, which was suitably responded to by Dr. Foster.

Report of Council.—Dr. RICKARDS read the report of the Council, which congratulated the Branch on its continued prosperity. The total number of members now stood at 313, and, during the past session, 10 new members had been elected, 8 had resigned, and 3 had been removed by death, namely, Dr. Hunt, Mr. Malin Sharman, and Dr. Parsey. Papers had been read by Dr. Sawyer, Mr. Bartleet, Mr. Solomon, Dr. Windle, Dr. Nason, Dr. Whitcombe, Mr. Bennett May, Mr. Lawson Tait, Dr. Savage, Mr. Messiter, Mr. Chavasse, and Dr. Saundby. At a special meeting, Dr. Burney Yeo (London) gave an address on acute pneumonia, one of the subjects chosen by the Collective Investigation Committee for investigation. During the past year, an important change had been made in the construction of the executive of the Association. The body which was formerly called the Committee of Council, was now the Council of the Association. It was constituted to a large extent by the representatives elected by the Branches, the number of representatives from each Branch being in proportion to the number of the members of that Branch. Each Branch now electing its representatives on the governing body of the Association, the Council of the Association as formerly constituted had been abolished. In consequence of these changes, the laws of the Association were altered, and it became necessary to revise those of the Branches, that the two might harmonise. The Council had watched with deep interest the development in the profession of a society for the assurance of medical men against sickness and incapacity from old age. The matter had been taken in hand, and a society had been promoted which promised to be successful, and to meet a long felt want. Dr. Rickards, after serving as secretary for five years, had resigned. The report concluded by referring to the prosperous condition of the parent institution, which now numbered over 10,000 members.

Mr. BARTLEET, in moving the adoption of the report, said it was extremely gratifying to learn that the question of medical assurance had been taken up, and he thought the movement would be of great benefit to the profession. He also regretted the resignation of the secretary (Dr. Rickards), whose place it would be extremely difficult to fill.

Dr. SIMON seconded the motion, and it was carried.

Balance-Sheet.—Mr. OAKES (the treasurer) presented the balance-sheet, which showed that there remained a balance in hand of £35, as compared with £75 last year.

The Reports of the Pathological and Clinical Sections were read by Dr. Saundby and were adopted.

Officers and Council.—The following were elected:—*President-elect:* James Sawyer, M.D. *Treasurer:* A. Oakes, Esq. *Honorary Secretaries:* A. H. Carter, M.D.; and R. Saundby, M.D. *Representatives of Branch in Council of Association:* B. Foster, M.D.; and A. H. Carter, M.D. *Council—Country Members:* S. H. Agar, Esq. (Henley-in-Arden); G. F. Bodington, M.D. (Kingswinford); H. L. Browne, Esq. (West Bromwich); W. C. Garman, Esq. (Wednesbury); J. H. Joy, M.D. (Tamworth); H. R. Ker, Esq. (Halesowen); F. E. Manby, Esq. (Wolverhampton); T. W. Thursfield, M.D. (Leamington). *Town Members:* T. H. Bartleet, M.D.; T. F. Chavasse, M.D.; Jordan Lloyd, Esq.; E. Malins, M.D.; Bennett May, M.B.; E. Rickards, M.B.; T. Savage, M.D.; Priestley Smith, Esq.

President's Address.—The new President, Dr. NASON, then delivered an address.

At the conclusion of the address, a vote of thanks was passed to the President, on the motion of Dr. Wade, seconded by Dr. Malins, and the meeting concluded.

LANCASHIRE AND CHESHIRE BRANCH: ANNUAL MEETING.

THE forty-eighth annual meeting of this Branch was held at the Town Hall, Chester, on Wednesday, June 18th, 1884, at 2 P.M.; present, Dr. LLOYD ROBERTS, President, in the chair, and eighty-five members.

President's Address.—Dr. LLOYD ROBERTS introduced to the meeting Dr. EDWARD WATERS, the new president, who read his address. At the conclusion of the address a vote of thanks, proposed by Mr. LUND, seconded by Dr. BARRON, was carried by acclamation.

Report of Council.—The HONORARY SECRETARY then read the annual report of the Council, as follows.

"Your Council has to report that the condition of the Branch is in every respect a satisfactory one. The meeting of the parent Association in Liverpool last August, coupled with a canvass of every unattached member of the Association residing in the district, has led to a considerable increase in our numbers. During the past year, eighty-three new members have been elected to the Branch; thirty-one members have resigned or left the district, and ten members have died.

"We have again this year to deplore the removal by death of the president of our Branch. Ever since the year 1877, when Dr. Borchardt held the office of treasurer at the meeting of the Association in Manchester, he had, at considerable personal sacrifice, taken an unusually active interest in the welfare of both the Association and the Branch, and it is not too much to say that we have lost in him one of our most valued leaders. At the first council meeting after Dr. Borchardt's death, Dr. Lloyd Roberts, one of the vice-presidents, was elected to act as president during the remainder of the year. We are glad to see him present here to-day, and to be able to congratulate him upon his recovery from his recent severe illness.

"During the past year, two special general meetings of the Branch have been held, the first in Liverpool having been rendered necessary by the changes in the by-laws of the Association, obliging us to revise our Branch by-laws, so as to bring them into conformity with them.

"This revision of the by-laws has been no light task. It was, in the first place, entrusted to a subcommittee, composed not only of members of council, but including the names of many gentlemen who had on previous occasions evinced an active interest in the legislation of the Branch.

"The report of this Revision Subcommittee having received some slight verbal alteration and additions at the hands of the Council of the Branch, a printed copy of the proposed alterations were then sent to every member; the amended rules were then submitted to a special general meeting called for the purpose; they then underwent further slight amendment, and were finally adopted. Since that meeting they have been laid before the Council of the Association for confirmation, and have become law.

"There is no necessity to make special reference to the changes made in the rules, as a copy of the new by-laws has been sent to every member of the Branch, so that none can plead ignorance of these conditions of membership.

"The second special general meeting was held in Manchester, and was called to consider two important questions as to the admission of homœopaths into the Association, and to the retention of those who are already members, with the result that the following resolution was carried unanimously. 'That this Branch is of opinion that the admission of homœopaths as members of the Association is not desirable, but that it would be unwise to take steps for the ejection of any member on the grounds of belief in or practice of homœopathy.'

"An intermediate and highly successful meeting, for the reading of papers and discussion of medical and surgical subjects, was held in Wigan, in the month of April, Dr. Frederick Roberts, of London, reading an address on local treatment in connection with the respiratory organs.

"Your Council has carefully watched the progress of medical legislation during the past year, and has been untiring in its efforts to obtain the passing of the Government Medical Bill. A form of petition in favour of the Bill, signed by your president and secretary on behalf of the Council, was sent to every member of both Houses of Parliament residing in, and connected with, the district, requesting them to support the Bill in its passage through the House. And at last Council meeting it was determined to send a prepaid form of petition to every member of the profession within the limits of Lancashire and Cheshire, with the request that it would be signed and returned without delay. This has been done, 1,838 circulars having been issued, and every post brings in dozens of signatures in its favour.

"Your Council have to announce that they have received a cordial invitation from Southport to hold the next annual meeting of the Branch there.

"The financial condition of the Branch remains good, the subscriptions received this year exceeding the expenditure by about £20. This is not a large margin, and considerable calls will have to be made upon it to meet the expenses consequent upon more frequent intermediate meetings."

Financial Statement for the Year ending December 31st, 1883.

Subscriptions, 1883	£106	5	0
Expenditure, 1883	84	2	7
	22	2	5
Balance from 1882	93	7	10
Cash in hand, January 1st, 1884	115	10	3

Annual Meeting in 1885.—Dr. BARRON read an invitation from the medical men of Southport, inviting the Branch to hold their next annual meeting there. On the motion of Dr. WATKINS, seconded by Dr. CARTER, the invitation was unanimously accepted.

President-elect.—Dr. WATKINS proposed, seconded by Dr. ROYLE, that Dr. Barron be President-elect. This was agreed to.

Office-Bearers, and Representative Members, and Council.——Dr. ROYLE proposed, seconded by Dr. LLOYD ROBERTS, that Dr. Glascott of Manchester be reappointed Honorary Secretary of the Branch for the ensuing year, and that the same gentlemen as before be reappointed Local Secretaries. The ballot was then taken for the representatives in the Council of the Association, and the election of the new Council. The following is a complete list of the officers and Council. *President:* Edward Waters, M.D., Chester. *President-elect:* George Barron, M.D., Southport. *Vice-Presidents:* W. Carter, M.D., Liverpool; J. W. Watkins, M.D., Newton. *Honorary Secretary:* C. E. Glascott, M.D., Manchester. *Local Secretaries:* C. E. Steele, Esq., Liverpool; J. E. Garner, M.B., Preston; J. M. H. Martin, M.D., Blackburn; W. Hall, Esq., Lancaster; J. Taylor, Esq., Chester; D. De Vere Hunt, Esq., Bolton. *Representatives in the Council of the Association:* Geo. B. Barron, M.D., Southport; Alex. Davidson, M.D., Liverpool; Charles E. Glascott, M.D., Manchester; Daniel J. Leech, M.D., Manchester; James Taylor, Esq., Chester. *Fifty Members of Council:* F. J. Bailey, Liverpool; J. Baird, M.B., Congleton; J. A. Ball, M.B., Heaton Norris; J. Barr, M.D., Liverpool; W. C. Barnish, Esq., Wigan; P. Braidwood, M.D., Birkenhead; S. Buckley, M.B., Manchester; J. E. Burton, Esq., Liverpool; A. F. H. Cameron, Esq., Liverpool; C. J. Cullingworth, M.D., Manchester; W. M. Campbell, M.D., Liverpool; J. Corns, M.D., Oldham; J. Dreschfeld, M.D., Manchester; T. B. Eames, Esq., Stoneclough; A. M. Edge, M.D., Manchester; J. Farrar, Esq., Morecambe; W. H. FitzPatrick, M.D., Liverpool; J. E. Garner, M.B., Preston; T. R. Glynn, M.D., Liverpool; F. M. Granger, M.D., Chester; A. Godson, M.B., Cheadle; W. Hall, Esq., Lancaster; J. Hardie, M.D., Manchester; De Vere Hunt, Esq., Bolton; Leslie Jones, M.D., Manchester; A. Jamieson, M.D., St. Helen's; T. Jones, M.B., Manchester; J. Lambert, M.D., Birkenhead; H. R. Ley, Esq., Prestwich; J. Dixon Mann, M.D., Manchester; H. Colley March, M.D., Rochdale; J. M. H. Martin, M.D., Blackburn; E. H. Monks, Esq., Wigan; G. W. Mould, Esq., Cheadle; Chauncey Puzey, Esq., Liverpool; A. Ransome, M.D., Manchester; E. Rayner, M.D., Stockport; D. Lloyd Roberts, M.D., Manchester; T. L. Rogers, M.D., Rainhill; J. Ross, M.D., Manchester; C. Rothwell, Esq., Bolton; J. E. Scowcroft, Esq., Bolton; G. E. Shuttleworth, M.D., Lancaster; C. E. Steele, Esq., Liverpool; G. Thomson, M.D., Oldham; C. Thorp, Esq., Todmorden; J. H. Wallis, M.B., Whittingham; F. P. Weaver, M.D., Frodsham; W. Whitehead, Esq., Manchester; G. A. Woods, Esq., Southport.

The Royal College of Surgeons.—Mr. TAYLOR moved, and Dr. RAYNER seconded: "That the Lancashire and Cheshire Branch of the British Medical Association has heard with regret that the resolutions passed at the meeting, held at the College of Surgeons, on March 29th, have been rejected by the Council, and that they cordially agree with the spirit of these resolutions." This was carried unanimously.

Communications.—The following were read.

1. Mr. Johnson Martin read a paper on Over-education, or the serious and evil effects of the present system of Education.—Dr. Carter, Dr. Edwin Rayner, Dr. Berry, and Dr. Edwin Jackson took part in the subsequent discussion.

2. Mr. Johnson Martin read a paper on Cholera; its cause, prevention, and treatment.

3. Dr. Walter showed a Multilocular Ovarian Cyst he had removed, weighing 8 lbs. 13 oz.

4. Dr. Imlach read a paper on Tubal Abortion, with specimens.

5. Dr. Glynn read a paper on the pathological effects of Friction in Heart-Disease, illustrated by a series of water-colour drawings.

Dinner.—After the meeting, 57 members and visitors dined together in the Council Chamber at the Town Hall. The visitors included Mr. Wheelhouse, Dr. Chadwick, Dr. A. T. H. Waters, Mr. Alfred Baker, Dr. Alfred Carpenter, Dr. Bartolomé, Sir John W. Reid, and the Mayor of Chester.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE annual meeting of this district was held at the Kent and Canterbury Hospital, on May 8th; Dr. ROBINSON, of Dover, in the chair.

The Report of the Collective Investigation Subcommittee was read and received.

The accounts were audited and passed; and the Honorary Secretary re-elected for the ensuing year.

Meetings.—The following places were selected for meetings: October 3rd, Canterbury; President, Dr. Gogarty; conjoint meeting with West Kent District. November 27th, Canterbury; President, Mr. Wacher. March, 1885, Faversham; May, 1885, Canterbury (annual); on Thursday nearest the full moon.

Communications.—The following communications were made.

1. Dr. White showed a living specimen of Myxœdema.

2. Dr. Robinson read a paper on an Outbreak of Epidemic Sore-throat, following the use of Milk from Cows suffering from Aphthous Fever.

3. Dr. Joyce, one on the Communicability of Disease from Animals to Man.

A very animated and lively discussion followed, in which grave doubts were expressed as to the milk-supply being really the only cause of the epidemic in this instance. It was mentioned, however, casually, that a cat to whom some of the suspected milk was given did actually suffer from aphthous fever afterwards.

Dinner.—The members dined together at the Royal Fountain Hotel.

STAFFORDSHIRE BRANCH: GENERAL MEETING.

THE third general meeting of this session was held at the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 29th; present, Dr. C. ORTON, President, in the chair, and thirty-five members; also, by special invitation, Dr. Braxton Hicks, F.R.S. (London), Dr. Strange (Worcester), and Dr. B. Foster, President of the Birmingham and Midland Counties Branch.

Election of Members.—The following gentlemen were elected members of the Branch: Mr. E. Crockett, Wolverhampton; Dr. P. M. Davidson, Congleton; Mr. Geoffrey Stead, Hednesford.

Specimens.—The following specimens were shown.

1. Mr. W. H. Folker: An Ovarian Cyst and Appendages recently successfully removed from a middle-aged female.

2. Mr. W. H. Folker: A Left Eyeball extirpated from a male patient on account of Ossification of the Choroid.

3. Dr. Totherick: A patient, aged 70, suffering from two Pulsating Sarcomatous Tumours. One had been growing for eight years, subsequently to a blow; it was attached to the right clavicle. The second had only been growing nine months, from the sternum close to the fourth left interspace; it was much softer and more pulsating than the other.

4. Dr. Dingley: The Dura Mater of a case of Pachymeningitis, with the new membrane and the hæmorrhages into its substance. The patient, aged 57, was struck on the left temple about the end of March, and suffered from giddiness. On April 25th he had an attack of left hemiplegia, improved for a few days, but then became comatose, and died on May 8th. The membrane was confined to the right side of the brain.

5. Dr. Dingley: A Fibroid Tumour, 7½ inches by 4 by 2, being one of a pair passed *per vaginam* by a woman aged 34, married, with one child. Menstruation was painful but not profuse. Abdominal enlargement had been noticed eight months. The patient died from exhaustion four days after the second tumour was passed. A microscopic section was also exhibited.

6. Dr. W. G. Lowe: An Hypertrophied and Elongated Cervix Uteri successfully removed by the *écraseur.*

7. Dr. C. R. Smith: Three cases of Glaucoma recently operated upon by Iridectomy. Dr. Smith made some general remarks upon the importance of the early detection of glaucoma.

Homœopaths and the British Medical Association.—At the request of the President of the Council, made in a circular letter signed by himself and by Mr. Dix of Hull, the members present were asked to give their opinion with regard to: 1. The admission of homœopaths as members of the Association. 2. The retention of those homœopaths who are already members. To the first question, the reply was, No. To the second question, the reply was, Yes.

Puerperal Pyrexia.—A debate took place upon puerperal pyrexia, the discussion being commenced by Dr. J. Braxton Hicks, F.R.S., Consulting Obstetric Physician to Guy's Hospital. The following gentlemen also spoke: Dr. Millington, Dr. Strange (Worcester), Mr. J. G. U. West, Dr. W. G. Lowe, Mr. J. Hartill, Dr. Clendinnen, Dr. Lycett.

Entertainment to Dr. Hicks.—After the meeting, a number of the members and their friends entertained Dr. Hicks at dinner at the Star and Garter Hotel.

BRITISH MEDICAL ASSOCIATION.

FIFTY-SECOND ANNUAL MEETING.

THE Fifty-second Annual Meeting of the British Medical Association will be held at Belfast, on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1884.

President: A. T. H. WATERS, M.D., F.R.C.P., Senior Physician to the Royal Infirmary, Liverpool.

President-elect: JAMES CUMING, M.D., F.K.Q.C.P., Professor of Medicine in Queen's College, and Physician to the Royal Hospital, Belfast.

An Address in Medicine will be delivered by WILLIAM M. ORD, M.D., Physician and Lecturer on Medicine to St. Thomas's Hospital, London.

An Address in Physiology will be delivered by PETER REDFERN, M.D., Professor of Anatomy and Physiology in Queen's College, Belfast.

An Address in Obstetric Medicine will be delivered by GEORGE H. KIDD, M.D., Consulting Obstetric Surgeon to the Richmond and Hardwick Hospitals, Dublin.

SECTION A. MEDICINE.—*President:* J. W. T. Smith, M.D., Belfast. *Vice-Presidents:* G. F. Duffey, M.D., Dublin; Alexander Davidson, M.D., Liverpool. *Secretaries:* Richard Ross, M.D., 7, Wellington Place, Belfast; Thomas Barlow, M.D., 10, Montague Street, Russell Square, London.

SECTION B. SURGERY.—*President:* Sir William MacCormac, F.R.C.S., London. *Vice-Presidents:* J. K. [illegible], M.B., Downpatrick; J. W. Browne, M.D., Belfast; John Chiene, F.R.C.S.Ed., Edinburgh. *Secretaries:* John Fagan, F.R.C.S.I., 1, Glengall Place, Belfast; Bennett May, F.R.C.S.Eng., 16, Temple Row, Birmingham.

SECTION C. OBSTETRIC MEDICINE.—*President:* Clement Godson, M.D., London. *Vice-Presidents:* Sir William Miller, M.B., Londonderry; William Stephenson, M.D., Aberdeen. *Secretaries:* W. Walter, M.D., 20, St. John Street, Manchester; Brice Smyth, M.B., 13, College Square East, Belfast.

SECTION D. PUBLIC MEDICINE.—*President:* Charles Cameron, M.D., M.P., Glasgow. *Vice-Presidents:* John F. Hodges, M.D., Belfast; David Davies, M.R.C.S.Eng., Bristol. *Secretaries:* H. S. Purdon, M.D., 60, Pakenham Place, Belfast; Shirley Murphy, M.R.C.S.Eng., 158, Camden Road, London, N.W.

SECTION E. OPHTHALMOLOGY.—*President:* W. A. McKeown, M.D., Belfast. *Vice-Presidents:* W. A. Brailey, M.D., London; Edgar Browne, M.R.C.S.Eng., Liverpool. *Secretaries:* Joseph Nelson, M.D., Glengall Place, Belfast; R. N. Hartley, M.B., 38, Cookridge Street, Leeds.

SECTION F. PHYSIOLOGY AND PATHOLOGY.—*President:* W. S. Greenfield, M.D., Edinburgh; *Vice-Presidents:* J. J. Charles, M.D., Cork; D. C. McVail, M.B., Glasgow. *Secretaries:* A. H. Young, F.R.C.S., 96, Mosley Street, Manchester; T. Sinclair, M.D., 15, College Square East, Belfast; R. J. Anderson, M.D., Galway.

SECTION G. PHARMACOLOGY AND THERAPEUTICS.—*President:* Thomas John Maclagan, M.D., London. *Vice-Presidents:* Matthew Hay, M.D., Aberdeen; W. Whitla, M.D., Belfast; Walter G. Smith, M.D., Dublin. *Secretaries:* George Gray, M.D., Castlewellan, County Down; W. Murrell, M.D., 38, Weymouth Street, London.

SECTION H. PSYCHOLOGY.—*President:* G. H. Savage, M.D., London. *Vice-Presidents:* Daniel Hack Tuke, M.D., London; Isaac Ashe, M.D., Dundrum. *Secretaries:* A. S. Merrick, M.D., District Hospital for Insane, Belfast; S. Rees Philipps, M.D., Wonford House, Exeter.

Local Secretaries: John Moore, M.D., 2, Carlisle Terrace, Belfast; Alexander Dempsey, M.D., 26, Clifton Street, Belfast; John W. Byers, M.D., Lower Crescent, Belfast.

Treasurer: William Whitla, M.D., Belfast.

TUESDAY, JULY 29TH, 1884.

2 P.M. Meeting of Council.
3 P.M. General Meeting. Report of Council and other business. Adjourn at 5 P.M.
8 P.M. General Meeting. President's Address, and any business adjourned from meeting at 3 o'clock. Tea and coffee after the meeting.

WEDNESDAY, JULY 30TH, 1884.

9.30 A.M.—Meeting of Council.
11.0 A.M.—Second General Meeting. Address in Medicine.
2 to 5 P.M. Sectional Meetings.
8 P.M.—A *Conversazione* will be given in Queen's College, by the President of the Association, and the Executive Committee.

THURSDAY, JULY 31ST, 1884.

9.30 A.M.—Meeting of Council.
11 A.M. Third General Meeting. Address in Physiology.
2 to 5 P.M.—Sectional Meetings.
6.30 P.M. Public Dinner, which will be held in the Examination Hall, Queen's College.

FRIDAY, AUGUST 1ST, 1884.

10 A.M.—Address in Obstetric Medicine.
11 A.M.—Sectional Meetings.
2 P.M.—Concluding General Meeting.
8 P.M. Reception by the Mayor of Belfast, in the Ulster Hall.

SATURDAY, AUGUST 2ND, 1884.

Excursions.

EXCURSIONS.

The following excursions will take place on Saturday, August 2nd. 1. An excursion to the Giant's Causeway, by special train to Portrush, thence by electric tramway to Bushmills (a distance of six miles), calling at Dunluce Castle on the way. Carriages will convey the visitors from Bushmills to the Causeway, where luncheon will be provided at the hotel. On the return journey, there will be tea at the Northern Counties' Hotel, Portrush. 2. An excursion to Larne and Garron Tower. By train from Belfast to Larne, thence by conveyances to Garron Tower (a distance of eighteen miles), along the most picturesque scenery of the northern coast, passing through the villages of Glenarm and Carnlough. Luncheon will be provided at Garron Tower, and on the return journey there will be tea at the Olderfleet Hotel, Larne. 3. An excursion to Newcastle, County Down. By train from Belfast to Newcastle, where visitors will have an opportunity of visiting this celebrated seaside resort, and the magnificent scenery around; including Donard Lodge, Slieve Donard (the highest of the Mourne mountains), Tollymore Park, and Castlewellan. Luncheon and tea will be provided. 4. Circular trip to Warrenpoint *viâ* Newcastle and Rostrevor. By train from Belfast to Newcastle, thence by cars to Rostrevor, a drive of twenty miles along the sea-coast of County Down. From Rostrevor, tramcars convey visitors to Warrenpoint, thence by train to Belfast or Dublin.

On the mornings of Wednesday and Thursday, there will be short excursions, by which members will have an opportunity of visiting places of interest in the immediate neighbourhood of Belfast. Trip to the Dominion steamship [illegible]. By invitation of Messrs. Flinn, Main, and Montgomery, a steamer will leave the Queen's Quay, Belfast, at 7 A.M., on Friday, August 1st, and proceed down the Lough to Carrickfergus Roads to the steamship [illegible], where breakfast will be provided for 150 members, and an opportunity will be given to visit the newest ship of the Dominion Fleet.

The Secretary of the Excursion Committee is Robert Esler, M.D., Pakenham Place, Belfast.

Annual Museum.

The eighteenth annual exhibition of objects of interest in connection with medicine, surgery, and the allied sciences, will take place in the Exhibition Hall, Botanic Gardens, Belfast (floor-space, over 5,000 square feet), and in the Queen's College, Belfast (floor-space, nearly 4,000 square feet), during July 29th, 30th, and 31st, and August 1st, 1884.

The committee who have been appointed to take charge of the arrangements will be happy to receive as under.

Subsection A.—1. Preparations, diagrams, casts and models of anatomical and pathological objects, microscopes and microscopic preparations (Dr. Lindsay).

Subsection B.—2. Surgical and medical instruments and appliances, thermometers, and other instruments for scientific investigation (Dr. Scott Core).

Subsection C.—3. Foods, drugs, chemicals, and pharmaceutical preparations (Dr. Bingham).

Literary and Sanitary Subsection D.—4. New medical books. 5. Ambulances, carriages, and other means of locomotion for the use of medical practitioners. 6. Sanitary appliances, including drawings, models, and apparatus, illustrative of the ventilation of hospitals, public buildings, and private dwellings. 7. Plans and models of hospitals, public buildings, and private dwellings, constructed upon the most improved hygienic principles. 8. Recent improvements in hospital furniture. (Dr. Henry O'Neill, General Secretary, 5, College Square East, Belfast, to whom all communications with reference to the Annual Museum are to be addressed, prepaid.)

It is intended that the surgical instruments, sanitary appliances, etc., shall be genuine novelties or improvements on those in common use.

The pathological specimens will be arranged in departments.

Exhibition of Instruments and Apparatus. It is intended to arrange for the exhibition of complete series of instruments, electro-therapeutic apparatus, instruments for physical diagnosis, and appliances relating to sanitary science and public health. Facilities will also be afforded, when requested, for the display of instruments in action, or for special explanation by the exhibitors of apparatus.

Catalogue.—It is intended to print a catalogue of the exhibits contained in the museum, and lithograph plan. The Committee request that descriptions, etc., be sent in as early as possible—not later than July 7th, 1884.

Communications, objects intended for exhibition, etc., to be addressed (prepaid) to the Secretary of the Museum Committee, Dr. Henry O'Neill, *5, College Square East, Belfast.*

During the week preceding the meeting, all articles should be sent direct to the Queen's College, Belfast, and addressed to the care of the Curator of the Museum of the British Medical Association.

All expenses of carriage to be prepaid, and all risk to be borne by the exhibitors; but the Committee will exercise every care of the articles entrusted to them. A card bearing the name and address of the exhibitor, with the name of the instruments, etc., to be enclosed in each package ready to be fixed on the outside of the exhibit.

The following discussions and papers are promised up to the present time. Members desirous of reading papers or joining in the discussions are earnestly requested to communicate without delay with the Secretaries of the respective Sections, as the date of the annual meeting is a week earlier than usual.

Section A.—Medicine.

In the Section of Medicine, the following subjects have been chosen for special discussion.

1. Albuminuria: a Practical Summary of its Causes and its Consequences, its Diagnosis and its Treatment. Introduced by Dr. George Johnson. Dr. G. A. Woods and Dr. W. R. Thomas will take part in this discussion.

2. The Causative Relations of Phthisis. Introduced by Dr. Douglas Powell. The following have promised to speak: Professor Gairdner, Dr. Clifford Allbutt, and Dr. Balthazar Foster.

3. Rheumatoid Arthritis. Introduced by Dr. Dyce Duckworth. The following have promised to speak: Dr. Buzzard, Dr. B. Foster, Mr. J. Hutchinson, and Dr. Brachet (Aix les Bains), and Dr. Myrtle.

The following papers have been promised.

Dutton, T., M.D. On the Treatment of Gastric Ulcer by Nutrient Enemata.
Madden, T. More, M.D. Alcoholism in Childhood and Youth.

Section B.—Surgery.

There will be a discussion on Sayre's Plaster Jacket, to be opened by Professor Lewis Sayre (New York), who will give demonstrations. 1. Partial Suspension, and the application of the Plaster-of-Paris Jacket for Pott's Disease. 2. Partial Self-suspension, and the Application of the Plaster Corset for Lateral Curvature.

The following papers have been announced.

Bartleet, T. H., Esq. Operative Treatment of Empyema.
Chiene, John, Esq. Treatment of Wounds.
Cooper, Alfred, Esq. On Syphilis.
Coulson, Walter, Esq. Treatment of Stricture of Urethra by Internal Urethrotomy, with a Review of the Different Methods of Performing the Operation.
Esler, Robert, M.D. Oakum as a Surgical Dressing.
Fagan, John, Esq. Gastrostomy: its Merits as a means of treating Stricture of the Œsophagus, and the best mode of performing the Operation.
Keetley, C. B., Esq. Buried Sutures, with remarks on the importance of Suturing separately, Periosteum to Periosteum, Muscle to Muscle, Deep Fascia to Deep Fascia, and Skin to Skin, after Deep Incisions of all kinds.
Lund, Edward, Esq. On Torsion in its Application to the Treatment of Hæmorrhoids.
Macnamara, C., Esq. Notes on a Successful Case of Gastrostomy for Stricture of the Œsophagus.
Makins, G. H., Esq. Successful Suture of Small Intestine in a Case of Fæcal Fistula.
Norton, A. T., Esq. Gangliar Disease of Joints.
Robson, A. W. Mayo, Esq. On the Treatment of Spina Bifida.
Roeckel, W. J., Esq The Etiology of Internal Hæmorrhoids.
Roth, Bernard, Esq. The Surgical and Orthopædic Treatment of Infantile Paralysis.
Smith, Noble, Esq. The Diagnosis of Disease of the Vertebral Column.
Watson, W. Spencer, Esq. The Use of the Galvanic Cautery in the Treatment of Intranasal Diseases; with exhibition of a new instrument in illustration.
Whitehead, Walter, Esq. Two Hundred Consecutive Cases of Hæmorrhoids Successfully Removed by Excision.
Wright, G. A., M.B. A Note upon the Effects of Bone-lesions upon the Rate of Growth of Limbs.

Section C.—Obstetric Medicine.

The following special discussions will take place.

1. The Pathology and Treatment of Extra-uterine Fœtation. This discussion will be introduced by Mr. Lawson Tait. The following gentlemen have signified their intention to take part in this discussion: Dr. Elder and Dr. W. L. Reid.

2. The Treatment of Intra-uterine Disease, with special reference to the best mode of making Applications to the Intra-uterine Surface. Dr. Atthill will introduce this discussion. The following gentlemen have signified their intention of taking part in this discussion: Dr. Fancourt Barnes and Dr. W. L. Reid.

The following papers are announced.

Barnes, Fancourt, M.D. How often is Craniotomy justifiable in the same Subject?
Croom, J. Halliday, M.D. 1. The Special Advantages of Axis-traction Forceps in the Cavity and at the Outlet. 2. Early Lochia.
Elder, George, M.D. On Alexander's Operation of Shortening the Round Ligaments for the Relief of Retroflexion and Prolapse of the Uterus.
Esler, R., M.D. On Phlegmasia Dolens.
Madden, T. More, M.D. 1. On the Treatment of Intra-uterine Disease. 2. The Treatment of Sterility.
Reid, W. L., M.D. On the Operation (Alexander-Adams) of Shortening the Round Ligaments for Uterine Displacements, with three cases.
Smyly, W. I., M.D. Expression of the Placenta.

Section D.—Public Medicine.

The following topics for papers have been suggested as likely to lead to useful and interesting discussions.

1. Prevention of Epidemics.

2. Inspection of Meat Markets; with special reference to the Causation of Disease in Man by the Consumption of Diseased Meat.

3. Over-pressure in Schools; with special reference to the record of clinically observed facts.

The following papers have been announced.

Cameron, C. A., M.D. On Inspection of Meat Markets.
Cullimore, D. H., M.D. On Quarantine.
Drysdale, C. R., M.D. The Superiority of Animal Vaccine.
Ellis, Richard, Esq. Observations on the Hearing-power of School-Board Children.
Hope, E. W., M.D. On the Latent Period, Infectiousness, and Mortality of Typhus Fever.
Makuna, M. D., Esq. 1. On Mortality in England and Wales during the last Three Decennials. 2. An Examination of the Theory of Aërial Dissemination of Small-pox Infection.
Martin, Johnson, Esq. Overpressure in Schools.
Russell, J. B., M.D. Prevention of Epidemics.
Strachan, J., M.D. Overpressure in Schools.
Sweeting, R. D., Esq. Statistics of Scarlet Fever.
Thudichum, J. L. W., M.D. Inspection of Meat Markets.
Vacher, Francis, Esq. On Inspection of Meat Markets.

Section E.—Ophthalmology.

The following gentlemen, among others, have signified their intention of taking part in the work of this Section: Dr. Wolfe (Glasgow), Dr. Edwyn Andrew, Messrs. C. Macnamara, Frederick Mason, Simeon Snell, Gustavus Hartridge, etc.

A discussion on the following subject will be opened by Dr. Wolfe (Glasgow): Does the Position of the Section in Cataract Operations Influence Suppuration of the Cornea; if so, what part is played by Septic Infection?

Dr. Charles E. Fitzgerald will open a discussion on The Influence of Errors of Refraction on Affections of the Conjunctiva, Cornea, and Iris.

The following papers have been announced.

ANDREW, Edwyn, M.D. On the Use of the Cautery in Eye-practice.
GRIFFITH, A. Hill, M.B. Death following Enucleation of the Eyeball.
EMRYS-JONES, A., M.D. The Dangers of Lead Probes in the Treatment of Lacrymal Obstructions.
JULER, H., Esq. The best methods of Diagnosing and Correcting the Errors of Refraction.
MCKEOWN, David, M.D. 1. Restoration of Vision by Iridectomy in the case of a man aged 62, after Sixty Years' Blindness; good Colour perception. 2. On the Treatment of a Case of Atrophy of the Optic Nerve by Large Doses of Strychnia and Pilocarpin combined.
STORY, J. B., M.B., and BAKER, Arthur, M.B. (joint communication). On the Influence of Syphilis upon the Development of the Teeth, and the Occurrence of Diffuse Interstitial Keratitis.
STORY, J. B., M.B. 1. The Minimum Knowledge of Ophthalmology to be exacted as a Qualification to Practise. 2. A Series of Cataract Operations.
TAYLOR, C. Bell, M.D. 1. Remarks on Four Cases of Sympathetic Ophthalmia, in which Sight was Restored by Repeated Operations. 2. On a New Knife for Cataract-operations. 3. Illustrations of the Formation of New Eyelids by Transplantation of Skin, with Pedicle and without Scar.
WOLFFE, J. K., M.D. 1. On Subconjunctival Meridional Sclerotomy for the Cure of Detachment of the Retina. 2. Demonstration on Conjunctiva Transplantation from the Rabbit to the Human Subject for the Cure of Symblepharon. (Cases shown).

SECTION F.—PHYSIOLOGY AND PATHOLOGY.

One or more of the following subjects will be discussed.

1. Influence of Nervous System on Normal and Abnormal Nutrition.
2. Functions of Leucocytes under Normal and Abnormal Conditions.
3. Physiology and Pathology of Lymph-transudation and Absorption.
4. Skin-absorption.
5. Dr. McVail will open a discussion on the Pathology of Pulmonary Emphysema.

The following papers are announced.

KENNEDY, C., M.D.
MAGUIRE, R., M.D. 1. The Darkening in Colour of certain Urines on Exposure to the Air. 2. On the Micrococcus of Pneumonia.
PAUL, F., Esq. On the Pathology of Rodent Ulcer.
WOODHEAD, G. S., M.D.

SECTION G.—PHARMACOLOGY AND THERAPEUTICS.

The following arrangements have been made.

1. The President will deliver an introductory address, and will move a series of resolutions, supported by the Vice-Presidents, on the subject of the British Pharmacopœia.
2. A debate on Antipyretics will be opened by Dr. Alexander Collie and Professor Quinlan. Dr. Dujardin-Beaumetz (Paris) will read a paper on a new Antipyretic.
3. Dr. Hughes Bennett and Dr. Stevenson will open a discussion on the Therapeutical Applications of Electricity; in the course of which different modes of Electrical Treatment will be illustrated.
4. Dr. Dudley Buxton and Dr. Stockman will give a series of demonstrations illustrating the action of certain Drugs on the Frog's Heart.
5. Dr. W. H. White will open a discussion on Aspiration as a Therapeutic Agent, to which Dr. Finny will reply.
6. There will be a special debate on Indian Drugs, in which it is hoped Sir Joseph Fayrer, Mr. Charles Macnamara, Dr. Waring, Dr. Ewart, and other distinguished authorities will take part.
7. Dr. Shoemaker (Philadelphia), a delegate from the American Medical Association, will give an explanation of the *modus operandi* of the New Oleates in certain Skin-diseases, to which Dr. Colcott Fox will reply.

SECTION H.—PSYCHOLOGY.

In this Section, in addition to the usual papers, the following special subjects have been selected for discussion.

1. Employment of the Insane.
2. Varieties of General Paralysis.
3. Use of Alcohol in Asylums.
4. Moral Insanity and Imbecility.
5. Legal Persecutions by Discharged Patients.

Professor Benedict will demonstrate his method of Craniometry.

The following papers have been announced.

TUKE, D. Hack, M.D. 1. Moral Insanity. 2. [illegible] in British Asylums.

No communication shall occupy more than fifteen minutes, and no person shall be permitted to speak more than once, or for more than ten minutes, during the discussion thereon. A short abstract of each paper must be sent to the secretaries of the Section in which it is to be read, not later than July 23rd.

N.B.—Members who desire to take part in the discussions, or to read papers, are earnestly requested to communicate without delay with the secretaries of the respective Sections.

Dr. Ward Cousins hereby gives notice that at the annual meeting to be held at Belfast on the 29th day of July next, it will be moved that By-law 34 be and it is hereby repealed, and that the following new by-laws be enacted,

The formation of new Branches and the modification and division of the recognised existing Branches shall be subject to the decision of the Council.

The Branches of the Association, as now recognised by the Council, constitute the representative areas. The limits of the area of each Branch must be defined, and an outline of the whole organisation published in the form of a chart.

A. WITHOUT THE LIMITS OF ANY EXISTING BRANCH.

Any number of members not less than 50 residing within, or not less than 25 residing without, the limits of England and Wales may form themselves into a Branch of the Association, subject to such Branch being recognised by the Council.

B. WITHIN THE LIMITS OF ANY EXISTING BRANCH.

In the event of two or more recognised Branches being desirous of uniting to form one Branch, a requisition, specifying the particulars and objects of such union, must be forwarded by each of the Branches to the Council; and, on such union being recognised by the Council, the recognition shall date from the first day of January then next ensuing.

In the event of 100 members, residing in a district of a recognised Branch, being desirous of forming within the area of such district a new and separate Branch of the Association, they shall present a petition to the Council specifying the particulars and objects of the proposed separation. In the event of such separation being recognised, the recognition shall date from the first day of January then next ensuing.

Honorary secretaries of every Branch must forward to the General Secretary an outline of the area of the Branch as recognised by the Council of the Branch.

Mr. DIX hereby gives notice that at the annual meeting to be held at Belfast on the 29th day of July next, a proposal will be made to amend the By-laws so as to provide for the payment from the funds of the Association of the travelling expenses of the representatives of the Branches to the meetings of the Council.

Dr. Bernard O'Connor hereby gives notice that, at the annual meeting to be held at Belfast on the 29th day of July next, it will be moved that

"By-law 17, Subsection (d) be and is hereby repealed;" also that, in the event of this proposition not being carried, it will be moved that

"By-law 17, Subsection (d) be and is hereby repealed, in the case of some one, or in the cases of more than one, of the following Branches, that is to say: North of Ireland Branch, South of Ireland Branch, West of Ireland Branch, Border Counties Branch, Aberdeen, Banff, and Kincardine Branch, Northern Counties of Scotland Branch."

And that, for the purpose of rendering less obscure paragraph 1, By-law 17, it will be proposed that, "after the word 'and of members' (line 3), the words 'of the Association' be added; and that, "after the word 'Branches' (line 5), there be added the words 'whether they are members of a Branch or not.'"

FRANCIS FOWKE, *General Secretary.*

London, June 10th, 1884.

CORRESPONDENCE.

SIR J. PAGET'S ADDRESS ON PUBLIC HEALTH.

SIR,—The address of Sir James Paget in your last issue is intensely interesting and of the greatest importance. There is, however, one influence on national health to which Sir James has not given sufficient prominence. He very properly points out the loss to the nation arising from the inability of men to work during sickness, as, for example, typhoid fever, and from the destruction of life through preventable diseases; and he deplores the loss with [illegible]. He computes that, "of all the loss of work, [illegible] of all the [illegible] weeks sadly spent and sadly wasted, a fourth part might have been saved." Among the chief sources of this waste, he mentions diseases due to intemperance. I shall be able to show that the use of intoxicating liquors alone causes more than "one-fourth" of the waste of health and life by means which are as significant as those on which Sir James bases his conclusions. I say "the use of intoxicating liquors" not intemperance, in the usual acceptation of the term, because I am going to compare the experience of a large teetotal friendly society with that of the Manchester Unity of Oddfellows, as given by Mr. Sutton, and adopted by Sir James Paget; for Sir James says of them; "In respect of health, they may represent the whole population at least as well as any group that could be taken;......they do not, at all events, include many habitual drunkards."

Now, if we wish to know for certain how much of this sickness is due to drink, we must compare the figures given by Sir James with similar statistics of men in the same rank of life, and living under the same conditions, who are abstainers.

I have before me the valuation of the London Grand Division of the Sons of Temperance Friendly Society, as made for the five years 1875-80 by the professional accountants, Messrs. Gomme and Hatton, of Ludgate Circus. The experience is given in detail; but, in order to institute a more exact comparison, I have combined the members of various ages together, as given by Sir James.

Average Sickness per Individual per annum (in Weeks).

Age.	Manchester Unity of Oddfellows.	London Grand Division, Sons of Temperance.
15—20	.666	.39
20—25	.737	.54
25—45	.995	.81
45—65	2.736	.95
15—65	1.314	.68

From these tables, it appears that, while the average time of sickness among a mixed number of males (abstainers, moderate and immoderate drinkers) is 1.314 weeks, or 9.2 days, *per annum*, among male total abstainers it is only .68 week, or 4.76 days—only a very little more than one-half. Even if we leave out of consideration those aged from 45 to 65, on account of the comparatively small number of men of that age in the Sons of Temperance, owing to its having then existed only about fifteen years, the contrast is very striking, being about as 5.6 days to 4 days. In other words, the sickness among abstainers is only five-eighths of that among drinkers of alcohol, between 15 and 45 years of age; three-eighths is due to the use of intoxicating liquors.

Taking this difference as the mean, it follows that, if the whole male population had been abstainers, there would have been 3,634,690 fewer weeks' work lost *per annum*: a result so important as to justify—nay, to require—the most strenuous efforts to bring it about, and a result which can be obtained in proportion to the number of men who can be persuaded to adopt the practice of total abstinence. The cause of total abstinence deserves, therefore, the support of the entire profession, both by example and precept, being founded on a basis of ascertained fact. It is proved that the common use of alcohol, in quantities considerably short of those required to produce palpable intoxication—in fact, the moderate use of alcohol day after day and year after year—produces disease in various ways, and causes premature decay and death.

Mr. Mott, in the *National Review*, endeavours to prove that total abstinence is an imposture. May we not rather say that moderate drinking is an imposture; for, while it leads many to believe that it "does them good" and "promotes their health and longevity," it is surely sapping and mining their constitution, inducing disease, and shortening life?

Is it not, then, the duty of the medical profession to warn men and women against this arch cause of disease and death with even greater earnestness than when simply contending with the comparatively harmless poisons of scarlatina and typhoid fever, especially as the cause is a certain avoidable liquid, and its effects are easily prevented by total abstinence?—I am, sir, yours obediently,

J. James Ridge, M.D.Lond.,
Honorary Secretary, British Medical Temperance Association.
Enfield, June 21st, 1884.

THE LICENTIATESHIP OF THE ROYAL COLLEGE OF PHYSICIANS.

Sir,—Without expressing any opinion about the propriety, or otherwise, of admitting the Members and Licentiates to a share in the administration of the affairs of the College, I wish to comment upon a letter from "L.R.C.P." in the Journal of June 21st, recommending the abolition of the term licentiate.

The writer of this letter cannot have properly considered the conventional and historical meaning of the term to which he forcibly objects.

Can your innovating correspondent be unacquainted with the thrilling works of Le Sage and of Cervantes, in which the licentiates of the Spanish universities are made to play so conspicuous a part?

The word licentiate has an academic ring about it, not appertaining to the word member. It has been, in fact, from time immemorial, a term in use in universities in various parts of the world, where the terms bachelor, licentiate, and doctor, are applied to the three grades in the respective faculties of theology, law, and medicine.—Yours, etc.,

F. Bateman, M.D., F.R.C.P.
Norwich, June 23rd, 1884.

PNEUMONOTOMY.

Sir,—I think the facts that the idea of the application of surgery to the diseases of the lungs occurred to Sir Spencer Wells forty years ago, and to others before him; that all of us engaged in the surgery of the abdomen must have, as I have often done, restlessly discussed the possibility of passing above the diaphragm; and yet that nothing has been done, form a sufficiently trenchant statement of the case. Nothing has been done beyond the drainage of old suppurating pleurisies, and possibly a few gangrenous vomicæ; and I do not think it is likely that we shall go much beyond this, in spite of Dr. Biondi's experiments.

I have had several cases of thoracic disease sent to me, with the tempting request that I should attempt an operation; but I have never seen my way to the effort, they were all so clearly cases of malignant disease.

I cannot imagine that any man in his senses would attempt to remove a human lung with a tumour in it. It would not be resection of parts of four ribs which would permit the removal of a tumour sufficiently large to admit of accurate diagnosis; and I cannot observe, in the literature just at the moment accessible, that any other kinds of tumours occur in the lung, save those of hydatid origin, and those of a cancerous nature. If the tumour were hydatid, the removal of the lung would be unnecessary. If the tumour proved to be an aneurysm, the disaster would be awful.

For phthisis, I imagine removal of the lung would be a still more absurd proposal. If one lung were riddled with vomicæ, the chances of the other lung being affected would amount to certainty. If there were only one large cavity, not of tubercular origin, or very chronic in its history, drainage would suffice.

The facility with which Dr. Biondi has removed lungs, and parts of lungs, from dogs, guinea-pigs, cats, fowls, pigeons, and sheep, and the absence of mortality from such operations, is likely to be a snare rather than a help. It does not need saying, that the removal of a healthy lung, collapsed by the introduction of air into the pleura, would be a very easy matter, and very different from the removal of a diseased and adherent organ. There would be as much difference as there is between normal ovariotomy and removal of a pyosalpinx. It is perfectly clear, that these animals, with their deep and narrow chests, differ very much from us, with our wide and shallow cavities, in their powers of enduring the accident of acute pneumothorax; certainly they would differ from us immensely in the facility with which pneumonotomy may be performed. Their chests are built for the endurance of the special efforts of great speed, and we have lost those physical characters; and I venture to say that, if acute pneumothorax were suddenly inflicted upon sixty-three healthy adult human beings, death would be the immediate result in the great majority of the experiments.

The analogy between nephrectomy and pneumonotomy, of which Sir Spencer Wells makes use, is also a misleading one; for the functions of the kidney may be interfered with to a considerable extent, and even entirely for a considerable period, without apparent trouble; but we have no proof that this is probable in the case of the lung. The only experiment I ever saw in this direction, the result of an accident, resulted in immediate death.

I do not think the severest critic can say of me that I have any tendency to obstruct surgical progress; but it seems to me that neither *a priori* reasoning, nor clinical experience, will lead us further than we have got in pulmonary surgery—drainage, with the useful addition of costal resection in old-standing empyema; and I am quite sure that we may regard Dr. Biondi's experiments as the outcome of the work of an enthusiast, misleading in their tendency, and dangerous for any practicable application which might be made of them.—I am, etc.,

June 12th, 1884. Lawson Tait.

HAY-FEVER AND HAY-ASTHMA.

Sir,—My letter of last week in your columns has elicited so many requests for the formula to which I then alluded, that I shall be glad if you will allow me to place it before your readers, with the warning that, although extremely simple, it is exceedingly difficult to prepare. My only reason for not giving the prescription at first was that I did not wish lay persons to begin purchasing pennyworths of the ingredients, and compounding them in a domestic fashion, as is the common practice when very simple remedies are prescribed. I have been using this "snuff" for some time, and I have no doubt that the prescriptions I have given are already in pretty general circulation. As, however, no good result can be obtained unless the preparation be very carefully made, I venture to hope that those who think it worth while to try it will see that due care is bestowed.

The formula runs thus: ℞ Boracis pulv. gr. xx; capsici pulv. gr. xv; ammoniæ carbonatis gr. x. Misce. Fiat pulvis. The prescriber will, however, get no good result unless he explain. Take of borax, very finely powdered and perfectly dry, twenty grains; of capsicum, which must be recent, and powdered to form a fine dust, after being carefully and quickly dried, fifteen grains. Mix these thoroughly, and be sure that the powder thus formed does not cake. Then add ten grains of finely powdered carbonate of ammonia. Mix again by rubbing and shaking together, and keep in a small bottle not full, so that it may be shaken each time before using it. The point is this: the capsicum must rise with the ammonia. If the ammonia only be taken into the nasal passage, and into the fauces and larynx, no sort of good can be done. The test, subjectively, is that, after the use of the snuff, there comes on rapidly, though generally after a short interval, a peculiar "tingling" in the parts, which differs totally from the sensation produced by inhalation of ammonia-vapour, and resembles nothing so much as the "feeling" caused by touching the mucous membrane with the cork from a bottle containing tincture of aconite. If this sensation be experienced, the powder is well made, and will prove effective. Any medical man who simply writes the prescription for this snuff, and has it made up by two or three chemists, will at once see why I was, and am, anxious to secure its careful preparation. Most dispensers will use what is practically "cayenne pepper," and produce a perfectly useless powder, which irritates, but does not induce that specific exhaustion of, the nerves, without which no good result can be gained.

I am weary of writing letters stating these facts to applicants for the formula, and this must be my excuse for asking you to publish the full directions. At the same time, I feel that by so doing I jeopardise the success of a remedy which I believe to be, when properly prepared, extremely useful. Of course, it will not cure all, or perhaps even one-half, of the cases which have resisted other measures, but it is certainly effectual in a sufficiently large proportion of instances to make its trial in any particular case worthy of thought. I had no notion until the publication of this letter of the great prevalence of hay-fever, and hay-asthma, especially the former, among medical men.—Yours, etc., J. MORTIMER GRANVILLE.

16, Welbeck Street, Cavendish Square, W.

THE MEDICAL SICKNESS, ANNUITY, AND LIFE-ASSURANCE SOCIETY.

SIR,—I have heard from the secretary of the above Society, that medical men resident abroad are not eligible for membership. Would it not be possible to extend the benefits of the Society to us by paying a little extra premium whilst resident abroad? Many of us hope to settle down somewhere and end our days quietly, and it would be no small satisfaction to us to feel that, rolling stones as we are, we had collected a little moss in a society started by our profession on such a sound basis as this appears to be. I have read the numerous letters that have appeared in your JOURNAL on this subject with much interest, but never thought we should be left out in the cold (or rather heat would be more correct just at present). I hope the Committee of Management will be able to frame some rules that will enable us to join the Society, and remain, sir, your obedient servant,

India, May 29th, 1884. FAR AWAY.

⁂ The desire expressed in the above letter is a natural one; and no doubt, were it possible to extend the Society's operations in the manner indicated, the result would be a good one. Unfortunately, however, the desirable is not always also the possible, and the difficulties and dangers of such a plan render it impracticable. In the first place, tables of any value defining the necessary contributions for sickness-risks in India are unattainable; and, even if they were to be procured, they would not be workable unless a sufficient number of Indian residents joined to ensure average results being realised. What is perfectly safe for hundreds of members, becomes mere gambling with the future when the members (as would be probable in this case) can be counted by tens. Cannot, however, the Anglo-Indian members of the profession do something for themselves? There should be a sufficient number to start a society, for, at all events, temporary sickness-assurance. Such society might deal only with the present, perhaps dividing the whole of its reserves yearly, and thus providing for the migratory nature of its membership. Such a plan would not be so perfect and homogeneous as that of the Society already started, but would be better than nothing, and is as well, perhaps, the only possible thing.

SPECIAL CORRESPONDENCE.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

The New Eye Hospital.—Water-Supply.—Medical Sickness, Annuity, and Assurance Society.

TOWARDS the estimated cost of the land and furnishing the new Eye Hospital, about £20,000, the sum of £12,374 has been already subscribed. The corporations of Oldham and Warrington are among the subscribers, as well as numerous friendly and co-operative societies. Mrs. Langworthy, a lady well known for her philanthropy, heads the list with a subscription of £1,000.

Owing to numerous complaints of the bad quality of the water in certain districts, it has been found necessary to abandon two of the reservoirs. It is also announced that a weekly analysis of the water will be made by the public analyst, Mr. Estcourt.

We understand that an energetic local committee has been formed in Manchester with the view of enrolling members, and to assist in the work of the Medical Sickness, Annuity, and Life-Assurance Society. Dr. Brierley, who has been one of the pioneers of the movement, and is a warm supporter, has been appointed chairman, and Dr. Walter and Dr. Emrys-Jones honorary secretaries. There can be no doubt as to the stability of the Society, and it is to be hoped that a large accession to its numbers will be obtained in this district.

BERLIN.

[FROM OUR OWN CORRESPONDENT.]

Baths for the People.—Trichinosis.—University Terms.—Polish Medical Congress.

AT the Berlin Hygiene Exhibition last year Dr. Lassar exhibited a model "People's Bath," which was intended to show that the poor could have an opportunity given them of having a bath, including soap and the use of a towel, at the small cost of ten pfennige, a trifle over a penny. Dr. Lassar has long been trying to carry out this idea, and has at length succeeded in getting over the preliminary difficulties. A meeting was held about a fortnight ago at which a committee was formed, with the Duke of Ratibor as its president, for the purpose of establishing these cheap baths for the poor. Since leaving Berlin, the Grand Duchess of Baden has also consented to add her name as promoter of the movement. It is not to be a speculation, the capital raised being invested in the undertaking, and yielding an ordinary rate of interest. The undertaking is to pay its expenses, and give to the poor of both sexes the chance of obtaining an agreeable warm bath at an extremely low price, about three halfpence or twopence. Several of these bathing establishments are to be put up in various parts of the town. The estimated cost for one containing ten bathing-cells is £45. A financial authority of the highest weight in Berlin has expressed an opinion in favour of the feasibility of the scheme. The only difficulty remaining now is to induce the magistracy of the town, who have been asked to supply the water gratis, to give their final consent by assigning the localities where these valuable bathing establishments may be erected.

Notwithstanding frequent warnings of the danger of eating uncooked pork, the habit of eating smoked raw ham is not on the decrease in this country, and one constantly reads of the evil results of this practice. Within the last two weeks the following cases have been reported. At a village called Pelleningken, five members of a family fell ill from trichinosis from eating raw ham; two of the family lie in a dangerous state. The other case is from Konigsberg, where a man and his son-in-law died from eating the raw meat of a pig they had killed, and three of his friends became seriously ill; his wife, who had eaten from the same animal, but from a portion that had already been cooked, has hitherto not been attacked.

A meeting of medical students of Berlin was held here on June 10th, and resolved to send a petition to the Federal Council, asking that terms kept at all the Austrian universities may be considered as "kept" terms. Hitherto, only terms kept at certain specified Austrian universities have been held valid. The petition is to be sent to all the medical faculties throughout the German Empire. The following figures will show the number of medical students at the chief German universities during this term: Berlin [illegible], including 20 from America, 6 from Asia, and 2 from Africa; Jena 162, Bonn 289, Konigsberg 267, Halle 282, Göttingen 189, Giessen 126, Tubingen 221, Strassburg 172. The autumn cyclus of the holiday course of lectures for practising medical men will take place at Berlin from September 24th to the end of October.

The congress of Polish doctors and natural philosophers, which took place at Posen, came to an end on June 4th. There were three hundred present, some having come from Egypt, India, and other distant parts for the purpose. The next congress will be held at Warsaw or Lemberg.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Tuesday, June 24th.

The Medical Act Amendment Bill.

Mr. Mundella, in moving the second reading of the Bill, said that although this was a great measure of medical reform which was greatly desired by the profession in the public interest, it was not necessary that he should enter at any length into its provisions. This was a case in which reform was demanded from within by the medical profession, and had not been forced upon them from without. The reform demanded included the better government and the higher education of the profession. This demand on the part of the profession was not a new one, inasmuch as an agitation in favour of such a reform had been going on for many years. In 1853, a deputation, headed by Lord Macaulay, Mr. Milner Gibson, Mr. Bright, and others, waited upon Lord Palmerston, and urged upon him the necessity for legislation to secure, first, uniformity of custom; secondly, reciprocity in regard to practice; thirdly, direct representation on the Medical Council; fourthly, a national pharmacopœia; and, fifthly, the registration of legally qualified medical practitioners. The Act of 1858 had dealt only partially with certain portions of the subject, leaving others altogether untouched. The consequence of this failure to satisfy the legitimate aspirations of the profession had been that the agitation, which had been commenced in 1831, had been continued to the present day, and had increased in force and in intensity as time went on, with the result that, during the sixteen years in which he had had the honour to occupy a seat in that House, scarcely a session had passed without a Bill attempting to legislate for the profession being introduced into Parliament. In 1870, Lord Ripon, and in 1878, 1879, and 1880, the Duke of Richmond, had brought in Medical Bills, the last of which was referred to a Select Committee, but was ultimately dropped. In view of these facts the present Government had felt it to be their duty to make an effort to secure a satisfactory settlement of this vexed question, and they were supported in that attempt by the almost unanimous opinion of medical men and by the medical Press of the country. In 1881 the question was referred to a Royal Commission, the members of which had in their report unanimously approved certain leading principles which had been embodied in the present Bill. This measure was, to a large extent, a Consolidation Bill, and it repealed eight Acts of Parliament and portions of nine other Acts, so that the whole of the rules for the government of the medical profession would be found in this Bill. There were at present in existence in this country twenty medical licensing bodies who had the power of conferring sixty registrable medical diplomas. The evidence showed that one of the great evils of the present system was the inequality of the examinations for the licence. This inequality in the test of efficiency was the more unfortunate as every licence equally conferred the right to practise everywhere. Then it was obvious that the easy examination of one licensing body had a tendency to depress the standard of examination in all the rest. In point of fact, students who were unable to pass the examination of the Royal College of Surgeons had no difficulty in going elsewhere and obtaining their diplomas. On February 26th, 1870, the Medical Council passed, with only one dissentient, a resolution to the effect that a joint examination-board ought to be formed in each of the three divisions of the United Kingdom, and that every person who was desirous to be registered on any of the qualifications set forth in Schedule A of the Medical Act should be required to appear before one of those boards and be examined in all the subjects specified. The main principles of the present Bill were contained in a very few clauses. The first had reference to the reform of the Medical Council. This was effected by diminishing its numbers, by strengthening its powers, and by giving to the medical profession direct representation. The next point was an approximation to uniformity of examination; this was accomplished by the establishment in each division of the United Kingdom of a Medical Board, and these Boards would regulate the examinations under the control of the Medical Council. The third, and perhaps the most important of all the provisions, was that, in future, a threefold qualification should be required from every one who was admitted to practise. Clause 3 contained what was really the pith of the question as far as this threefold qualification was concerned. It provided that no person should be entitled to be placed on the *Medical Register* unless he or she had proved, at the final examination, his or her competency in medicine, surgery, and midwifery. Nothing could be more important to the public generally than this clause, and it redounded to the honour of the medical profession that for fifty years they had been advocating the change. The disadvantage of the present number of licensing bodies had been very aptly termed the "downward competition." The Government had no desire to imitate the strict State examinations of Germany and other countries, but they desired that the medical profession in Great Britain and Ireland should rank, as it would rank immediately this Bill was passed, among the very first in Europe. They did not aim by this Bill at an ideal uniformity or an unnecessarily high standard. What they asked for in the public interest was a minimum qualification. He had stated the main principles of the Bill, and he might add that, while adhering to them, they were not pledged pedantically to all the details of the measure. He asked hon. members to consider the Bill fairly, and to allow it to go into Committee as soon as possible, in order that the details might be discussed. There were a number of minor questions—questions of colonial and foreign titles, penalties for misuser of titles, medical education, and other questions of interest and importance to the profession. He approached the question with feelings of the deepest respect and gratitude to the profession, and he hoped that the Bill would settle all those questions in a manner which would add to the dignity and honour of a noble profession.

Sir Lyon Playfair did not expect that the Bill would be reached so soon, and that he would so soon be called upon to speak. He represented a constituency of 6,500, of whom about 3,000 were medical men. Since 1870, more than twenty Bills had been introduced into that House on that subject, and the present Bill was the best of them all. It was most important to put an end to the harassing of a profession, which was always being offered schemes of reform which were never realised. The essence of the Bill was to strengthen the Medical Council, which since 1858 had had the charge over the medical education of the country. Formerly the universities and corporations were represented on that board, but there was no representation of the profession at large. By the Bill, the profession would be represented, and that was a great gain. A man might now enter the profession through nineteen or twenty licensing boards, and once on the *Register* he might practise without any knowledge of his work. A man might never have passed an examination in surgery, and yet be entitled to amputate a leg. He might attend a case of measles or midwifery without ever having passed an examination in medicine or midwifery. The essence of the Bill was to prevent such a possibility in future. No man might, under the Bill, practise as a general practitioner without having been examined in surgery, medicine, and midwifery. That was an enormous gain. There were to be three divisional boards in the three kingdoms, and those boards would, as far as possible, establish an uniform standard throughout England, Scotland, and Ireland. Now, those portals must be sufficiently large to allow the great bulk of the profession to pass through them. A board with pedantic views might fix too high a standard. Suppose, for example, the standard of the University of London was chosen. Then only 40 or 50 men could pass. But each year about 1,600 men entered the profession. Suppose the Scotch standard was applied. Then only about 300 would enter the profession. Therefore, the standard must not be too high. From one cause or another, the profession did not attract a sufficient number of men. It might be that the profession had been too long harassed—perhaps the prospect was not considered hopeful. Between the census of 1851 and that of 1861, the number of medical men positively diminished. In the former year, there were 15,341; whereas, in 1861, there were only 14,684. Between 1861 and 1871, the number increased by two per cent.; but the population increased thirteen per cent. In England, between 1871 and 1881, the profession increased three per cent., while the population increased fourteen per cent. In Scotland, the increase was seven per cent. and eleven per cent. respectively. In Ireland, there was a reduction of 4½ per cent. in the population, and the profession increased by fifty members. If the Bill were wisely framed and wisely administered, the profession might increase its numbers; but, if it were unwisely framed and administered, the result might be the reverse. It was attractive to medical men to have one portal for each kingdom; but, in every profession regulated by examination, the examination became the standard. If the standard were too low, a depressing effect was produced on the profession; if too high, the general wants of the profession and the community suffered. The Royal Commission clearly saw all that. The conditions of medical education in the three kingdoms were widely different. In England, the greater part of the teaching was carried on in the medical schools; and the universities contributed little, although the medical school at Cambridge was greatly improving. The Colleges of Physicians and Surgeons had taken a large part in the training of medical men. In Ireland, the universities had done much more than in England, and trained nearly one third of the profession, In Ireland, too, the corporations were teaching bodies also, which they were not in this country. In Scotland, the universities had taken even a larger part in medical education, and passed 61 per cent. of the profession. The Scotch universities had 2,700 students, of whom 300 became M.D.s and M.S.s. There were, also, certain extramural schools which prepared men for the examinations both of the corporations and of the universities. The Scotch and Irish systems were more like the German, where 6,000 out of 25,000 university students were preparing for the medical profession. The great advantage of universities in this respect was that the members of the profession who passed through them were men of general culture as well as of professional knowledge. It was, therefore, of the highest importance that this training, which existed so largely in Scotland and Ireland, and was growing in England, should still be supplied to a large proportion of the profession. Care was taken to produce that result in the constitution of the three boards under the Bill. In England, the university and non-university members were equal in number. In Ireland, there was a majority of two university representatives, and in Scotland the university members of the board were to be eight, and the corporation members five. It was of no use discussing at present whether those proportions were right, or whether they should be modified. That was a fit subject for Committee, but what was essential was that they should acknowledge the principle which the Royal Commissioners had acknowledged—that an university preponderance was quite fair as giving a definite bias to a liberal professional training as against cram by mere examinations and examining bodies. The universities must preserve their maximum examinations if they were to continue to be honoured. The Bill abolished two of the licensing boards, but it had its three divisional boards; and, therefore, if they were all to examine, the examining bodies would be increased and not decreased. It was of the essence of the Bill that the Medical Council should have the supreme control over the whole qualifications of medical men in the future; it was also of the essence of the Bill that the universities and the divisional boards in each part of the kingdom, acting under that Medical Council, should afford the public the most ample security that those qualifications existed. The divisional board might be asked to send as many assessors as they pleased to co-operate as examiners in the final examinations of the universities who were willing to receive them, or of the conjoint corporations that were willing to receive them. If they were unwilling to receive them, the examinations must be conducted by the divisional board; but he thought he could answer for the University of Edinburgh, and for the other medical authorities in Scotland, that they would welcome the divisional board sending assessors as examiners to the universities rather than have the candidates burdened with a double examination, adding much to the expense and to the harrassment to which the medical profession were subject. He hoped that the minor differences with regard to the Bill might be composed. It was at least an honest Bill, framed with a view to settle a long vexed question. They all desired that, whatever the measure did, it would not promote cram as against training and teaching. It was important that they should prevent men from working down to a minimum standard. If they had a double examination, the bulk of the men would not work up to the maximum standard, and there would be a great falling off in the higher education, which would be extremely unfortunate. The medical profession, as Sir James Paget said, had within that generation rendered enormous services to humanity. In the first place, it had lengthened human life by two years; secondly, it had decreased pain and suffering; and thirdly, it had increased the working power of the people. Some of those results were due, in part, to the improved sanitary laws which Parliament had passed; but both the medical profession and the law-makers were greatly indebted to the advancement of science. The microscope had lately revealed to them those wonderful little organisms which had so much to do with the causation of disease; the stethoscope had enabled them by sounds to trace the working of internal organs, and thrown great light on disease. But these and other means of progress were all due primarily to the advancement of science; and it was of the utmost importance that the scientific training of the medical men of the future should be as complete as it could be. Medical education was now entirely altered. There was a vast deal more practical training than there was formerly. The practical training was given in the hospital, but the scientific training in the laboratory; and the requisite appliances could only exist in fully equipped schools and universities. It was therefore extremely desirable so to adjust their Medical Bill, that there should be no deterioration through the substitution of cram for methodical training and teaching. There was some opposition on the part of the corporations and two of their universities; but it was not offered to the principle of the measure. He trusted that the House would deal with this Bill as being a most important measure for advancing the dignity and efficiency of the medical profession, by insuring for the future that no man should enter the profession who was not thoroughly acquainted with the three great branches of medical learning.

Colonel KING-HARMAN thought that the House and all branches of the medical profession were agreed that this Bill was one which was well worthy of consideration, and would, if passed with proper safeguards, be of great advantage both to the country and to the medical profession. There was, however, a principle involved in it which, in his opinion, ought to be carefully considered. He thought that there was too much of the principle of centralisation in it. The same objections were taken by the corporations, and in a minor degree by some of the universities of Ireland. The corporations in Ireland complained that this Bill aimed to a very great extent at minimising the powers which they had exercised, and no doubt, exercised worthily, and at confiscating their funds. He trusted that the Vice-President of the Council would give his best consideration to the amendments which he intended to place upon the paper with regard to this question. No doubt it was in the power of the Government to pass the Bill in whatever form they liked, but as the object of the Bill was to put an end to agitation, he thought it ought to be passed in a form which would insure that a fresh agitation should not take place.

Mr. BRYCE hoped that the Vice-President of the Council would give them some opportunity for discussion of this Bill upon going into Committee. In moving the second reading, the Vice-President of the Council had mentioned the three main points of the Bill. As to the threefold qualification, he thought that there was no difference of opinion. As to the reform in the constitution of the Medical Council, the right hon. gentleman had dwelt upon the question of the introduction of the representative element. For his own part, he could not see that anything would be gained by this, or that a medical council so constituted would be really more representative of the profession. The third—and, in his opinion, the most important point in the Bill—was the new provision not only for examination, but for the supervision of teaching. Sections 10 and 12 were, he considered, the most critical parts of the Bill, and on this point of it he hoped that they would be able to look for some concessions. He confessed that he did not see quite clearly what was meant by section 10. He hoped that it was not to substitute one official examination for the present one, and so diminish the independence of teaching in the universities. Everyone was aware of how much they owed to the universities of Scotland, and especially to Edinburgh, and they ought to be very careful not to diminish the independence of such institutions. The level of efficiency had risen enormously of late years, and he thought it would be more advantageous to endeavour to secure a good minimum under the present examiners, if necessary, striking off some of the licensing bodies. He submitted to the House that, in the pursuit of uniformity, there was a danger of interfering with and checking the action of such institutions.

Mr. GIBSON said the Vice-President of the Council had expressed much confidence in the future progress of this Bill. He remembered, however, that similar confidence had been expressed with respect to a large number of other Bills. He hoped the right hon. gentleman would remember that the great universities of all portions of the empire had behaved in the best possible way, not only towards this, but towards all preceding Bills, and he trusted that it would not be found that the effect of the present measure would be to lower the standard of medical education. Care must also be taken that it did not encourage cram. The hon. member for the University of Edinburgh, in his most important speech made an interesting suggestion with respect to examinations which he had no doubt would attract much attention. From what had fallen from the Vice-President, it appeared that some opportunity would be afforded of discussing the matter on going into Committee. He trusted this important and extremely interesting Bill would be allowed to proceed.

Mr. [illegible] CAMPBELL did not think that the universities of Scotland regarded the Bill in its present form with favour; but not only the universities, but also the medical corporations of Scotland, were quite agreed that it was desirable to put an end to the system of licensing men without complete qualification. That would be accomplished by the Bill, but it would not be desirable to have a final and additional examination, which would be a serious cause of inconvenience both to students and to the teaching bodies. He trusted that whatever might happen to the Bill, the individual independence both of the universities and of the corporations might be preserved.

Mr. **Gray**, while heartily sympathising with the objects of the Bill, could not avoid regarding it with some apprehension. Its centralising tendency in Ireland he distrusted, and it would probably end by destroying the independance of the local corporations. He did not profess to set himself up as a judge of the medical corporations in England or Scotland, but he maintained that the medical corporations of Ireland did not deserve the fate which this Bill would bring upon them. Many of the eminent members of the medical profession in Ireland shared his views, and were opposed to the proposal of the Government. They believed that the effect of the Bill would be to draw the life-blood away from their own system, and his own belief was that it would lead to the establishment of another Government board in Ireland. From his experience of those boards, he did not regard the establishment of such a board in place of the great medical corporations as an object to be desired. It was proposed to deprive the Apothecaries' Hall of representation on the Council, while the universities would have eight votes, and the medical corporation three votes. He thought the influence of the universities was greater than it should be, and he regretted that the Government should have taken a course which would probably end in the extinction of the Apothecaries' Hall. The examinations of that body might not be as high in their standard as those of the universities, but it by no means followed that they were inadequate. To suppose that a uniform standard of examination ought to be insisted on, both for a skilled specialist and a gentleman supplying the wants of the poorer classes, was absurd.

At this point of the hon. member's remarks, the debate, by the rules of the House, stood adjourned at ten minutes to seven.

On Thursday evening, the discussion on the second reading of the Bill was resumed by Dr. Farquharson, and continued by Mr. Dick Peddie, Dr. Lyons, Mr. Buchanan, and Mr. A. O'Connor. The Bill was then read a second time, and the Committee stage was fixed for Monday next.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

Health of English Towns.—In the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 8,762,354 persons, 6,000 births and 3,133 deaths were registered during the week ending the 21st instant. The annual rate of mortality per 1,000 persons living in these towns, which had been 19.6 and 19.8 in the two preceding weeks, declined to 18.7 during the week ending Saturday last. The rates in the several towns, ranged in order from the lowest, were as follow: Derby 11.3, Brighton 11.5, Norwich 14.4, Hull 15.0, Cardiff 15.6, Leicester 15.7, Nottingham 15.8, Bolton 16.3, Bristol 17.0, Birmingham 17.2, Huddersfield 17.6, Portsmouth 17.6, London 17.8, Sheffield 17.9, Preston 18.4, Newcastle-upon-Tyne 18.6, Birkenhead 18.9, Plymouth 19.4, Salford 19.6, Bradford 19.7, Leeds 20.1, Sunderland 20.3, Blackburn 20.8, Oldham 21.7, Manchester 23.4, Halifax 23.9, Wolverhampton 25.3, and Liverpool 26.6. In the twenty-seven provincial towns, the death-rate last week averaged 19.4 per 1,000, and exceeded by 1.6 the rate recorded in London. The 3,133 deaths in the twenty-eight towns included 148 which resulted from measles, 116 from whooping-cough, 60 from small-pox, 60 from scarlet fever, 55 from diarrhœal diseases, 38 from "fever" (principally enteric), and 18 from diphtheria—in all, 495 deaths were referred to these principal zymotic diseases, against 509 and 508 in the two preceding weeks. These 495 deaths were equal to an annual rate of 3.0 per 1,000; in London the zymotic death-rate was equal to 3.5 per 1,000, whereas it did not exceed 2.5 in the twenty-seven provincial towns, among which it ranged from 0.0 in Brighton and Derby, to 4.8 in Liverpool, and 5.3 in Wolverhampton. The deaths referred to measles, which had been 163 in each of the two preceding weeks, declined last week to 148, and showed the largest proportional fatality in Oldham and Wolverhampton. The 116 fatal cases of whooping-cough showed a further decline from recent weekly numbers; this disease caused the highest rates of mortality in Liverpool and Huddersfield. The 66 deaths from scarlet fever were 6 fewer than in the previous week, but showed fatal prevalence in Halifax and Sheffield. The mortality from fever showed a slight increase, and was highest in Norwich and Newcastle-upon-Tyne. The 18 fatal cases of diphtheria included 11 in London and 2 in Norwich. The 60 deaths from small-pox in the twenty-eight towns exceeded the number in any week since July 1881; 41 were recorded in London (exclusive of 18 of London residents registered in the Metropolitan Asylum Hospitals, situated outside Registration London), 11 in Liverpool, 4 in Sheffield, and 1 each in Manchester, Hull, Sunderland, and Cardiff. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had risen from 148 to 1,238 in the thirteen preceding weeks, further increased to 1,316 on Saturday last; 354 new cases were admitted to these hospitals during last week, against 370, 155, and 332 in the three previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 2.9 per 1,000, and slightly exceeded the average. The causes of 89, or 2.8 per cent., of the 3,133 deaths registered last week in the twenty-eight towns were not certified either by medical practitioners or by coroners.

Health of Scotch Towns.—During the week ending the 21st inst., 954 births and 510 deaths were registered in the eight principal Scotch towns, having an estimated aggregate population of 1,254,607 persons. The annual rate of mortality, which had been 23.3 and 22.7 in the two preceding weeks, declined to 21.1 last week, but exceeded by 2.4 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 14.3 in Greenock, 15.1 in Perth, 17.1 in Leith, 17.8 in Aberdeen, 18.7 in Paisley, 19.6 in Edinburgh, 21.8 in Dundee, and 24.5 in Glasgow. The 510 deaths registered last week in these towns included 83 which were referred to the principal zymotic diseases, against 99 and 88 in the two preceding weeks; of these, 38 resulted from whooping-cough, 14 from measles, 10 from diarrhœal diseases, 9 from diphtheria, 8 from scarlet fever, 2 from "fever," and 2 from small-pox. These 83 deaths were equal to an annual rate of 3.4 per 1,000, which slightly exceeded the average zymotic death-rate in the large English towns. The zymotic death-rates in the Scotch towns ranged from 0.7 and 1.4 in Greenock and Aberdeen to 4.0 in Edinburgh and 4.3 in Glasgow. The fatal cases of whooping-cough, which had been 36 and 28 in the two previous weeks, rose again to 38, and included 19 in Glasgow and 14 in Edinburgh. The 24 deaths referred to measles showed a further decline from the numbers in the two preceding weeks; 8 occurred in Glasgow, and 3 in Dundee. The 10 deaths from diarrhœal diseases were below the average. The 9 fatal cases of diphtheria exceeded by 2 the number in the previous week, and included 3 in Aberdeen and 2 in Glasgow. Of the 8 deaths from scarlet fever, 7 were returned in Glasgow, where also both the fatal cases of small-pox occurred. The mortality from diseases of the respiratory organs in these Scotch towns was equal to 3.1 per 1,000, against 2.9 in London. As many as 65, or 12.7 per cent., of the 510 deaths registered last week in these Scotch towns were uncertified.

Health of Foreign Cities.—It appears from statistics published in the Registrar-General's return for the week ending the 14th instant, that the death-rate was recently equal to 67.2 per 1,000 in Madras and 29.3 in Bombay. Small-pox caused 271 deaths in Madras (against 283 and 280 in the two preceding weeks); and cholera caused 18 deaths in Bombay and 10 in Madras. According to the most recently received weekly returns, the annual death-rate averaged 28.0 per 1,000 in twenty-two of the largest European cities, which exceeded by no less than 8.2 the mean rate last week in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 37.8, and showed a slight increase upon the rates in recent weeks; the 672 deaths included 54 from measles, 23 from "fever," and 18 from diphtheria. In three other northern cities—Copenhagen, Christiania, and Stockholm—the death-rate did not average more than 21.7, and ranged from 15.9 in Christiania to 25.7 in Stockholm, where 2 deaths resulted from diphtheria and croup. The death-rate in Paris was equal to 23.7, showing a further decline from the rates in recent weeks, but exceeding the rate in London by 4.9; 42 deaths resulted from diphtheria and croup, 33 from typhoid fever, and 33 from measles. In Brussels, the rate was 23.9, and the deaths included 7 from small-pox and 9 from croup. The 33 deaths in Geneva, of which 2 resulted from "fever," were equal to a rate of 24.3. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 28.0, the highest rate being 32.2 in Rotterdam; measles caused 19 of the 103 deaths in Rotterdam, and 9 fatal cases of scarlet fever; and 5 of diphtheria were returned in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 29.7 per 1,000, and ranged from 21.4 in Trieste and 25.3 in Berlin to 34.5 and 43.3 in Prague and Buda-Pesth. Small pox caused 14 deaths in Prague; and diphtheria showed more or less fatal prevalence in all these German cities, but more especially in Berlin and Dresden. The death-rate was equal to 26.5 in Turin, and 22.1 in Venice; the 129 deaths in Turin included 5 from diphtheria, 4 from enteric fever, and 3 from small-pox. The 112 deaths in Lisbon, equal to a rate of 28.7, included 4 from small-pox and 2 from diphtheria. In four of the principal American cities, the recorded death-rate did not average more than 20.9, and ranged from 17.1 in Baltimore to 24.1 in New York. Enteric fever caused 12 deaths in Philadelphia, while scarlet fever and diphtheria were somewhat prevalent in each of these American cities.

MEDICAL NEWS.

UNIVERSITY OF CAMBRIDGE.—Examinations for Medical and Surgical Degrees, Easter Term 1884.

First Examination for the Degree of Bachelor of Medicine. Elementary Animal Biology: Examined and approved. Arkwright, Trin.; Ds Armitage, Trin.; Ds Barber, Caius; Barber, Cath.; Barnard, King's; Ds Barton, Caius; Ds W. H. Beaumont, Down; Bickersteth, Trin.; Blakie, Caius; Ds Blaker, Cav.; Mag. Bond, Joh.; Bowen, King's; Bradley, Caius; Brook, Pemb.; Ds E. Browning, Clare; Ds Bulstrode, Emman.; Ds Burd, Caius; Carey, Emman.; Carter, Pemb.; Cutley, King's; Mag. Cocksedge, Caius; Colclough, Caius; E. H. Cooke, Joh.; Cooper, Caius; Copeland, King's; Mag. Cox, Trin.; Creswell, Cav.; Crisp, Caius; G. H. S. Daniell, Caius; Ds Daniels, Trin.; de Jersey, Pemb.; Ds Dickinson, Caius; Ds Dickinson, Down; Dickson, Jesus; Donty, King's; Ds H. W. Dunergue, Corpus; Ds Duncan, Caius; A. C. Dutt, Corp.; Ds England, Caius; Ds Evelyn, Caius; Ds Ferguson, Caius; Ds FitzGerald, Caius; M. G. Foster, Trin.; Fox, Trin.; H. A. Francis, Joh.; Graves, Trin.; Ds Goodman, Joh.; Ds Hamer, Christ's; Hardwicke; Ds Harrison, Joh.; Heberden, Jesus; Hewer; Hiley, Pemb.; Holden, Caius; Hopkinson, Emman.; Ds Hounsell, Caius; Howard, Trin.; E. L. Jones; H. R. Jones, Joh.; W. Kaye, Caius; Kent, Caius; Kidd, Trin.; King, Cav.; Lambert, Pemb.; C. H. Leaf, Trin.; Ds Leslie, Christ's; Light, Clare; Ds Lipscomb, Caius; G. T. Lloyd, Joh.; Lund, Cath.; Ds H. W. Maclure, Pemb.; McConkey, Caius; Ds Macdonald, Jesus; Macpherson, Trin.; Ds Mayo Brown, Down; Ds W. Malden, Trin.; Ds Manby, Cav.; Ds Manners, Pemb.; A. L. Marshall, Clare; May, Trin.; Ds Michell, Caius; Ds Miley, Trin.; Ds Morrice, Trin.; Newton, Pemb.; Ds Nielsen, Caius; Ds Ogilvie, King's; Olive, Joh.; Panting, King's; Ds Parker, Cath.; Ds G. H. Pearce, Cav.; Mag. Penny, Queens'; Ds Pierson, Trin.; C. S. Pollock, Trin.; Ds Prowse; Punch, Joh.; Redmayne, Trin.; Ds Remfry, Christ's; P. J. Roberts; Ds Rowe, Pemb.; Rutherford, Sidney; Ds G. R. Saunders, Caius; F. W. Saunders, Trin.; Savory, Cav.; Ds Scott, Caius; Servaes, King's; Shore, Joh.; Ds Sibley, Pemb.; Ds Skelding, Caius; Mag. Smyth, King's; Ds M. H. Spencer, Trin.; Ds Sprigge, Caius; D. R. P. Stephens, Selwyn; Tatham, Clare; Ds G. Taylor, Pemb.; Ds Van, Cav.; Weber, Trin.; Ds Webster, Caius; F. Westcott, Pet.; Whitby, Emman.; Wilde, Clare; A. H. Williams, Joh.; Ds Winfield-Roll, Christ's; Wynne, Cath.; Yeoman, Pemb.

Chemistry and Physics: Examined and approved. Alexander, Trin. H.; J. W. Allen, Trin. H.; Baker, Trin.; Ds Baker, Christ's; Battersby, Trin.; Beasley, Jesus; C. H. Cayley, Pemb.; W. G. Clark, Cav.; Cobbett, Trin.; Cordeux, Caius; Court, Cav.; C. M. Cradock, Pemb.; Cregeen, Caius; Crosby, Caius; Crump, Emman.; Curwen, Joh.; Day, Christ's; Dewhurst, Trin.; Donaldson, Caius; Drsydale, Joh.; Durham, Christ's; Edgeworth, Caius; Elsmore, Christ's; Freer, Caius; Griffith, Down; Hardwick, Clare; Hawkins, Caius; Heywood, Trin.; Hill, Jesus; Ds Hope, Trin.; Huntsman, Jesus; Jones, Trin. H.; Kelsey, Trin.; Ds Knott, Pet.; C. H. Leaf, Trin.; Low, Caius; J. C. Matthews; Mitchell, Trin.; Molson, Emman.; Muir, Trin.; Murray, Trin.; Musson, King's; Richardson, Caius; L. Roberts, Caius; Rolleston, Joh.; Rouillard, Caius; F. E. Saunders, Caius; C. A. Smith, Joh.; Sortain, Christ's; Stevenson, Christ's; Stringer, King's; S. B. Syfret, Trin. H.; Troutbeck, Caius; Turner, Caius; Veale, Christ's; Walker, Pemb.; Welsford, Caius; Wyman, Trin.; Yeoman, Caius.

Elementary Biology: Examined and approved. Mag. Anson, Trin.; Baker, Trin.; Ds Baker, Christ's; Battersby, Trin.; Beasley, Jesus; Bodington, Caius; Brandt; Cavell, Caius; W. G. Clark, Cav.; Collins, Down; Colvin-Smith, Caius; Cordeux, Caius; Court, Cav.; C. M. Cradock, Pemb.; Cregeen, Caius; Crosskey, Trin.; Crump, Emman.; Curwen, Joh.; Dewhurst, Trin.; Donaldson, Caius; Duigan, Christ's; Durham, Christ's; Edgeworth, Caius; L. J. Fuller, Joh.; Greaves, Caius; Griffith, Down; Hardy, Jesus; Hawkins, Caius; Heywood, Trin.; Ds Hope, Trin.; Kelsey, Trin.; Ds Knott, Pet.; C. H. Leaf, Trin.; Mitchell, Trin.; Muir, Trin.; Murray, Trin.; Musson, King's; Nix, Caius; Reeves, Caius; Richardson, Caius; Roberts, Cav.; Rolleston, Joh.; Rouillard, Caius; F. E. Saunders, Caius; Sortain, Christ's; Stevenson, Christ's; Stringer, King's; S. B. Syfret, Trin. H.; Troutbeck, Caius; Turner, Caius; Usher, Caius; Veale, Christ's; Wakefield, Trin.; Wallace, Cav.; O. F. Waterfield, Trin.; Welsford, Caius; Wyman, Trin.; Young, Caius.

Second Examination for the Degree of Bachelor of Medicine.—Pharmacy and Pharmaceutical Chemistry: Examined and approved. Ds Barber, Cav.; Mag. Bond, Joh.; Ds E. Browning, Clare; Cutley, King's; Ds Daniels, Trin.; Dickinson, Caius; Ds Duncan, Caius; A. C. Dutt, Corpus; Ds Evelyn, Caius; Ds FitzGerald, Caius; Ds Fountain, Pemb.; Ds Goodman, Joh.; Hamer, Christ's; Ds G. A. Heberden, Jesus; Ds Hounsell, Caius; Kent, Caius; Ds Light, Clare; Ds Macdonald, Jesus; Maclure, Pemb.; Ds Manby, Cav.; Marshall, Clare; Ds Miley, Tsin.; Ds Ogilvie, King's; Panting, King's; Mag. Penny, Queens'; Ds Rowe, Pemb.; Ds J. W. Scott, Caius; Ds Skelding, Caius; Ds Sprigge, Caius; Ds Taylor, Pemb.

Anatomy and Physiology: Examined and approved. Mag. Bond, Joh.; Ds Burd, Caius; Carey, Emman.; Ds E. H. Cooke, Joh.; Ds Daniels, Trin.; Donty, King's; Ds Dunergue, Corp.; Hamer, Christ's; Jones, Joh.; King, Cav.; Ds Lipscomb, Caius; Maclure, Pemb.; Ds Mayo Brown, Down; Ds W. Malden, Trin.; Ds Manby, Cav.; May, Trin.; Ds Ogilvie, King's; Ds Rowe, Pemb.; Redmayne, Trin.; Ds Sibley, Pemb.; Ds Skelding, Caius; Ds Sprigge, Caius; Ds Tatham, Clare; Ds Webster, Caius; Ds Winfield-Roll, Christ's.

Third Examination for the Degree of Bachelor of Medicine: Part I.—Examined and approved. Ds Aldred, Caius; Mag. Bryceson, Christ's; Ds R. T. Finch, Pemb.; Ds Jones-Bateman, Caius; Mag. Mackenzie, Emman.; Ds Milnes, Down; Mag. Pash, Pemb.; Ds Rutherford, Caius; Ds Shaw, Sidney; Ds Slater, Joh.; Mag. E. S. Whelpton, Emman.; Ds White-Cooper, Trin. *Part II.* Examined and approved. Ds G. A. Belton, Trin.; Mag. Bryceson, Christ's; Ds G. T. Clapp, Caius; Ds Cotes, Caius; Ds W. Groom, Magd.; Ds Hoffmeister, Caius; Ds Jones-Bateman, Caius; Ds McConnel, Caius; Mag. Manley, Emman.; Ds Milnes, Down; Ds J. Scott, Caius; Ds P. C. Scott, Joh.; Ds Shaw, Sidney; Warwick; Ds G. F. Welsford, Caius; Wigmore, Magd.

Examination for the Degree of Bachelor of Surgery. Examined and approved, Mag. Dowson, Christ's; Mag. G. L. Johnson, Caius; Ds Jones-Bateman, Caius; Ds Pigeon, Christ's; Ds Roberts, Christ's.

UNIVERSITY OF DUBLIN: SCHOOL OF PHYSIC IN IRELAND.—At the Trinity Term Examinations for the Degree of Bachelor of Medicine (M.B.), held on Monday, June 9th, and following days, the successful candidates passed in the understated order of merit.

Messrs. H. T. Bewley, L. J. Werner, John S. Fenton, S. Hickson, W. M. Hewson, T. Smith, D. R. O'Sullivan and H. Shackleton (equal), W. T. Swan, T. Parr, H. A. Ellis, B. G. Frith, W. Grandy, N. C. Ferguson, G. Scarr, G. W. Powell, W. Lacy-Hickey, J. V. Manning.

At the Trinity Term Examination for the Degree of Bachelor of Surgery (B.Ch.), held on Monday, June 16th, and following days, the successful candidates were placed as follows.

Messrs. L. Werner, H. T. Bewley, J. S. Fenton, S. Hickson and T. Parr (equal), W. M. Hewson, W. T. Swan, R. J. Wardle, N. C. Ferguson and R. Morrow (equal), G. W. Powell, H. N. Kenny.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examinations for the licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, June 9th, 10th, 11th, and 12th, the following candidates were successful.

For the Licences to practise Medicine and Midwifery.—C. R. Battersby, Blackrock, co. Dublin; J. J. Bolger, Dublin; F. Brentnall, Southport; D. Gannon, Dublin; J. K. Irwin, Dublin; F. B. Manning, Ballyhaise, co. Cavan; W. C. Neville, M.D., Dublin; A. J. O'Flanagan, Waterford; J. P. O'Riordan, Bruff, co. Limerick; E. C. Stack, Monaghan.

For the Licence to practise Medicine only.—C. E. Fitzgerald, M.D., Dublin; J. B. Mann, Manchester; J. C. Soady, Dublin.

For the Licence to practise Midwifery only.—W. W. Fenton, M.B., Dublin; J. S. Green, M.B., Dublin; J. Lennox, M.D.R.U.I., Kilrea, co. Kerry.

The following Licentiates in Medicine of the College, having complied with the by-laws relating to membership, pursuant to the Supplemental Charter of December 12th, 1878, have been duly enrolled Members of the College.

Messrs. L. H. Ormsby, Lic. Med. 1869, 92, Merrion Square West, Dublin; J. Molony, Lic. Med. 1874, Collooney, co. Sligo.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 19th, 1884.

Anderson, Reginald Bevan, St. Mark's Road, Notting Hill, W.
Bowden, Reginald Treacher, Tenbury, Worcestershire.
Bryan, Frederick, Chantry Road, Brixton.
Crowther, John Woodward, The Villas, Silverdale.
Fooks, Henry, 3, Kempsford Road, S.E.
Hughes-Jones, John, 102, Petherton Road, N.
Weston, George Henry, Sidlaw Terrace, Bognor.

The following gentlemen also on the same day passed their Primary Professional Examination.

Evans, Henry R., St. Thomas's Hospital.
Veness, Arthur William, Westminster Hospital.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.—Acting Physician. Applications by July [illegible].

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon. Salary, 160l. per annum. Applications by July 22nd.

BOSCOMBE PROVIDENT INFIRMARY, Bournemouth.—Resident Medical Officer. Salary, 60l. per annum. Applications by June 28th.

BROWN ANIMAL SANATORY INSTITUTION.—Professor Superintendent. Salary, [illegible] per annum. Applications to the Registrar of the University of London, Burlington Gardens, W., by July 8th.

COUNTY ASYLUM, [illegible].—Assistant Medical Officer for the Second [illegible]. Salary, [illegible] per annum. Applications to the Medical Superintendent by [illegible].

COUNTY AND COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY.—House Surgeon. Salary, [illegible] per annum. Applications to Mr. H. [illegible] by July [illegible].

COUNTY LUNATIC ASYLUM, [illegible].—Assistant Medical Officer. Salary, [illegible] per annum. Applications by July [illegible].

CUMBERLAND INFIRMARY, Carlisle.—Assistant House-Surgeon. Salary, 40l. per annum. Applications by July 8th.

GLASGOW EYE INFIRMARY.—Resident House-Surgeon. Salary, 75*l.* per annum. Applications by July 31st.

HEREFORD GENERAL INFIRMARY.—Dispenser. Salary, 40*l.* per annum. Applications by July 7th.

KENSINGTON DISPENSARY.—Resident Medical Officer. Salary, 125*l.* per annum. Applications to F. Leach, Esq., 26, Stanford Road, Kensington Square, by July 10th.

KINGTON UNION.—Medical Officer and Public Vaccinator. Salary, 30*l.* per annum. Applications by June 30th.

LINCOLN ODDFELLOWS' MEDICAL INSTITUTE.—Assistant Medical Officer. Salary, 96*l.* per annum. Applications to the Resident Medical Officer, Unity Square, Lincoln.

LIVERPOOL ROYAL SOUTHERN HOSPITAL. Second House-Surgeon. Salary, 84*l.* per annum. Applications by July 10th.

LIVERPOOL ROYAL SOUTHERN HOSPITAL.—Third House-Surgeon. Salary, 63*l.* per annum. Applications by July 10th.

MILE-END OLD TOWN.—Dispenser. Salary, 90*l.* per annum. Applications to Mr. Thacker, Guardians' Offices, Bancroft Road, Mile-end Road, E.

NOTTINGHAM FRIENDLY SOCIETIES' MEDICAL INSTITUTION.—Assistant Medical Officer. Salary, 130*l.* per annum. Applications to Mr. J. Lee, 46, Upper Eldon Street, Sneinton, Nottingham, by June 30th.

PARISHES OF NORTHMAVINE AND DELTING, Shetland.—Medical Officer. Salary, 60*l.* per annum. Applications to Mr. Robert Robertson, Inspector of Poor, Delting, Shetland, Lerwick, by June 30th.

PAROCHIAL BOARD OF THE PARISH OF KIRKMICHAEL, Banffshire.—Salary, 100*l.* per annum. Applications to the Inspector by July 10th.

QUEEN'S COLLEGE, Birmingham.—Professor of Anatomy. Salary, 262*l.* 10s. per annum. Applications by June 30th.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields.—House-Surgeon. Applications by June 30th.

SOCIETY OF APOTHECARIES. Examiners in Medicine. Applications by July 12th.

TOWER HAMLETS DISPENSARY, White Horse Street, E.—Medical Officer. Salary, 100*l.* per annum. Applications by July 7th.

WEST LONDON HOSPITAL, Hammersmith, W.—Assistant-Physician. Applications by June 30th.

WOOLWICH UNION.—Resident Medical Officer for the Infirmary at Plumstead, and Medical Officer to the Workhouse. Joint salary, 225*l.* per annum. Applications by July 2nd.

YORKSHIRE COLLEGE, Leeds. Demonstrator of Anatomy. Salary, 150*l.* per annum. Applications by July 2nd.

YORKSHIRE COLLEGE, Leeds.—Professor of Physiology. Guaranteed Stipend not less than 300*l.* Applications by July 2nd.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcements.

BIRTH.

VIVIAN.—On the 21st instant, at Chase Side, Southgate, Middlesex, the wife of R. T. Vivian, M.R.C.S.Eng., of a daughter.

MARRIAGE.

EDGE TRELIVING.—On June 10th, at St. Chrysostom's Church, Victoria Park, Manchester, by the Rev. W. Marsden, M.A., Rector, assisted by the Rev. W. Bedford, M.A., Rector of St. Michael's, Manchester, Abraham Matthewson Edge, M.D., M.R.C.P., of Manchester, to Annie Lilian, only daughter of J. J. Treliving, of Rusholme.

DEATH.

DAYMAN. On the 1st June, at Brooklands, Millbrook, Southampton, Elizabeth Adams, the wife of Henry Dayman, F.R.C.S., and eldest daughter of the late J. W. Chadwick, Esq., of Long Ashton, Somerset.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens, etc., will be shown by Dr. Cleveland, Dr. Walter, Dr. Galabin, Dr. Godson, and Mr. W. S. A. Griffith. Dr. Lediard: Fibro-cystic Myoma of Uterus. Dr. John Williams: 1. Note on a Condition observed in the Navel-cord of a Young Infant; 2. Note on the Involution of the Puerperal Uterus in the Absence of the Ovaries. Dr. Matthews Duncan and Dr. Hurry: On Retroflexions of the Fœtus.

THURSDAY. Ophthalmological Society of the United Kingdom, 4 P.M. Mr. Nettleship: Cases of Retro-ocular Neuritis. Mr. J. B. Lawford: Amblyopia, etc., ending in Recovery. Mr. Adams Frost: Irido-choroiditis; Ciliary Staphyloma; Sympathetic Ophthalmitis after the Excision. Mr. Jonathan Hutchinson: On a Rare Form of Proptosis with Gland-Enlargement.

FRIDAY.—Ophthalmological Society of the United Kingdom, 8 P.M. Living and Card Specimens.—Mr. S. Snell: Bony Tumour of Conjunctiva. Dr. Walter Edmunds: Drawing of Optic Disc from a Case of Tumour of Brain. Dr. Brailey: A Case of Sympathetic Neuro-retinitis. Mr. Anderson Critchett: Operation-Cases. *a.* Conical Cornea; *b.* Tattooing and Iridectomy for Leucoma. Messrs. A. Critchett and Juler: Result of Strabismus-Operation. Communications, 8.30 P.M. Mr. S. Snell: 1. Some Observations on Miners' Nystagmus; 2. On Certain Congenital Defects of the Eye. Dr. Walter Edmunds and Mr. J. B. Lawford: An Analysis of Cases of Intra-ocular Tumour with respect to the Existence of Optic Neuritis. Mr. Spencer Watson: Severe Concussion of the Brain followed with Temporary Blindness with Anosmia. Mr. Nettleship: Case of Hæmorrhagic Glaucoma; Pseudoglioma; Death from Meningitis.

OPERATION DAYS AT THE HOSPITALS.

MONDAY........St. Bartholomew's, 1.30 P.M.—Metropolitan Free, 2 P.M.—St. Mark's, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal Orthopædic, 2 P.M.—Hospital for Women, 2 P.M.

TUESDAY ......St. Bartholomew's, 1.30 P.M.—Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—St. Mark's, 9 A.M.—Cancer Hospital, Brompton, 3 P.M.

WEDNESDAY ..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—St. Peter's, 2 P.M.—National Orthopædic, 10 A.M.

THURSDAY ....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—London, 2 P.M.—North-west London, 2.30 P.M.—Chelsea Hospital for Women, 2 P.M.

FRIDAY ....King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.—St. Thomas's (Ophthalmic Department), 2 P.M.—East London Hospital for Children, 2 P.M.

SATURDAY ....St. Bartholomew's, 1.30 P.M.—King's College, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.—London, 2 P.M.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th.; Dental, M. W. F., 9.30.

GUY'S.—Medical and Surgical, daily, exc. T., 1.30; Obstetric, M. W. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., M.W.F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th. 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S. 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, F., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu., Th. S., 2; o.p., W. S., 9; Eye, Tu. W. Th. S., 2; Ear, M., 2.30; Skin, F., 1.30; Larynx, W., 11.30; Orthopædic, F., 12.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, Th., 1; Throat, M., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W. F., 12.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, Tu., 12.30; Skin, Th., 12.30; Throat, Tu., 12.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetric, M. Tu. Th. F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45; S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3; Eye, M. Th., 2.30; Ear, Tu. F., 9; Skin, Th., 1; Dental, W. S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL should be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

F.R.C.S. (Plymouth.)—You are too late, as the list of stewards was published last week. One hundred and twenty-one Fellows act in that capacity, of whom thirty-seven are from the provinces. Mr. Edward Lund of Manchester will be the chairman. Write at once to Mr. Woodhouse Braine, 56, Maddox Street, Hanover Square, the Honorary Secretary, who will be at the College of Surgeons on the voting-day, with a plan of the dinner-table.

MANAGEMENT OF THE THIRD STAGE OF LABOUR.

SIR,—A letter written by Mr. L. Heneux Blenkarne, in the JOURNAL of May 31st, on "Hour-glass Contraction and the Treatment of the Third Stage of Labour," calls for some comments.

Mr. Blenkarne considers that the first two things to do after the birth of the child are, first, to see whether the uterus is contracted or not; second, to pass a finger into the vagina to see if the insertion of the cord into the placenta can be felt. The first of these rules will probably commend itself to all, but the second is open to grave objections; one is the possible conveyance of infection to the patient by the fingers of the practitioner, especially unless antiseptic washing and the free use of the nail-brush frequently during the progress of the case be adopted; another is, the risk of the admission of air, which might lead to decomposition of the discharges, and perhaps septicaemia. In the vast majority of cases, the placenta can be expressed from the uterus and even from the vagina, which is excited to contraction, by pressure properly applied to the fundus, in a direction slightly backwards and downwards, corresponding to the axis of the pelvic inlet.

In the Rotunda Lying-in Hospital, Dublin, the third stage is conducted as follows: the fundus is grasped gently, to observe its condition; and, if found contracted, the medical attendant removes his hand from the abdomen, and waits for at least twenty minutes before expressing the placenta, taking care to observe at very brief intervals whether the fundus maintains its contraction or not. The tired organ thus gets a rest, and begins to contract clonically again, recovering its vigour, and one of these clonic contractions being followed down by the hand grasping the fundus, the placenta is as a rule expelled easily. If these clonic contractions do not come on of themselves, they may be excited by gentle friction over the fundus with the tips of the fingers, but kneading and keeping the hand constantly on the fundus should be avoided, the former because it tends to cause irregular contraction and dilatation, and the latter because the warmth it causes tends to keep up dilatation. If the uterus do not tonically contract immediately after the birth of the child, examination is made above the pubes as to the condition of the bladder; and, if this be found empty, the friction is employed as above described, and is generally effectual; but if the bladder be full, the catheter must be used, as the uterus is mechanically prevented from contracting by the distended organ.

In an eight months' residence at the Rotunda Hospital, as intern pupil and clinical clerk, I have seen uniformly good results from this method of conducting the third stage of labour; post-partum haemorrhage was very rare indeed, and there was very rarely a case of retained placenta, except when really adherent.

As there is seldom any difficulty in expressing the placenta when pressure is made in the right direction and at the right time, viz., following down a contraction of the uterus; and, as there do exist dangers connected with the introduction of fingers (which may not be aseptic) and air into the vagina, I should hope that other practitioners would hesitate to adopt Mr. Blenkarne's second rule, and would prefer to keep on the safe side by avoiding any unnecessary vaginal examinations; and I venture to say that [illegible] very much more rarely occur [illegible] contraction [illegible] slight [illegible] be made a [illegible] rather than a rule of practice.—Yours, etc.,

Buxton. R. L. M[illegible], M.B., B.A.

THE APPLICATION OF THE LONG MIDWIFERY FORCEPS.

SIR,—Referring to Mr. [illegible] suggestions as to the application of the forceps in midwifery, I would wish to inform him that, [illegible] years ago, Dr. Auchinleck of Dublin was in the habit of advising his class to apply them in the manner described by Mr. [illegible]. Dr. Auchinleck has given this method a fifteen years' trial, and has found it eminently useful, and he would have published it [illegible] midwifery practitioners [illegible] value of it. [illegible] Mr. [illegible] suggestion as to the direction in which traction should be made, I would refer him to Dr. Leishman's [illegible] this matter is fully explained. [illegible] which traction was [illegible] received.—I am, Sir, yours, etc., M[illegible]

ARTIFICIAL RESPIRATION FOR S[illegible] INFANTS.

SIR,—I have read, with [illegible] interest, the [illegible] in your columns, on the subject of artificial respiration in suspended animation. I should [illegible] I attended [illegible] bath [illegible] During the [illegible] methods of artificial respiration, but without any result. On the bath being prepared, I lifted the [illegible] hands [illegible] the head [illegible] floor, whilst the spine was strongly arched backwards. This at once produced a deep inspiration, and I [illegible] repeated [illegible] with the same result [illegible] the child [illegible] the bath [illegible] alternate hot and cold [illegible] in a short time I had the [illegible] health [illegible] Since that time I have had the opportunity of [illegible] four cases of suspended [illegible] the new [illegible] success. [illegible] four corners [illegible] [illegible]

M. B. [illegible] [illegible] appears to be [illegible] Medical C[illegible] [illegible]

[illegible] H[illegible]

A [illegible]

CANCER STATISTICS.

AT the Cancer Hospital, Brompton, 1,974 cases of true cancer were treated either as out-patients or in the wards. Of these, 841 were cases of epithelial cancer, 438 occurring in males, 403 in females; 1,069 were registered as "scirrhus," 54 in males, 1,015 in females; 64 were registered as "soft or medullary cancer," 18 in males, 46 in females. Cases described as "osteoid" and "colloid" are not included in the above computation. The following statistical statements regarding the above cases of scirrhous and epithelial cancer have been prepared at the hospital.

Average duration of disease previous to coming to hospital ..	scirrhus	15.23 months
	epithelial	20.5 months
Had relations previously affected with cancer		81
Average age when attacked	scirrhus	48 years
	epithelial	51 years
Had been previously operated on	scirrhus	158
	epithelial	102
Average lapse of time before disease returned	scirrhus	21 months
	epithelial	20 months
Cases ascribed to blow or injury	scirrhus	60
	epithelial	15

THE FEEDING OF INFANTS.

SIR,—I am sorry to have to disagree with Dr. Beatty as to the necessary strength of artificial food for infants, and the quantity that should be given in the twenty-four hours. Now, as the food we are at variance about is milk in its usual state from the cow, or condensed, let us see how we stand. Dr. Beatty recommends one part of milk to three of water, I recommend two parts of milk to one of water. Now let us take the composition of milk, and then judge as to which approximates nearest in strength to the mother's.

	Woman.	Cow.	Ass.
Casein (cheesy matter), and insoluble salts ..	2.35	4.55	1.70
Fatty matter	3.34	3.70	1.40
Sugar of milk and soluble salts	4.77	5.35	6.4
Water	89.54	86.4	90.5
	100.00	100.00	100.00

From this analysis it will be seen at once that Dr. Beatty's is much too weak. It is estimated that a healthy woman gives three pints of milk in the twenty-four hours; therefore an infant should have at least a quart of cow's milk a day, as much must of necessity be wasted by giving it by the bottle, and I know of no reason, nor have I ever read of any, which shows that a woman's milk is weaker at first than it is in four or five months after parturition.

Now, with regard to condensed milk, "the First Swiss Brand," that is, the unsweetened milk (the only kind that should be used), is four times as strong as ordinary milk from the cow; therefore, a tin would be equivalent to a quart of milk. I say a tin a day is about what should be given, diluted with five times its bulk of water. Dr. Beatty says he orders a teaspoonful(!) to a quarter of a pint of water, at first, and says infants thrive on it; that may be his experience, I regret to say it is not mine.

I have dwelt exhaustively on all these matters in a little book called *[illegible]*, published by Chatto and Windus, to which I would respectfully refer Dr. Beatty for further arguments in support of my view of the early management and the ailments that arise from the artificial feeding of infants improperly conducted.—Yours very faithfully, NATHANIEL EDWARD DAVIES.

[illegible]

MILK-POISONING. AN OBVIOUS SECRET.

SIR,—No wonder foreigners [illegible] milk. As a cow lies down, her teats rest on her own deposits and bedding. The milkman ought to wash the teats and his own hands before milking the cows. His excuse for not doing so is supposed to be the trouble of a double journey for water. [illegible] his cans or pails are made for carrying milk only. If ever cows be brought into the yard, there is an objection to the cowboy entering the dairy-premises to hinder the milkmaid in her work. In milking, the "juice," as the men call it, falls from the lower side of the hand into the milk! This favours, as pabulum, development of disease-germs, or, more popularly speaking, blight, which might prove of a dangerous variety. I beg leave to suggest that each can should have a compartment to hold a sufficient supply of water and balance equally. Care must be taken not to allow any intermixture with the milk. Several patients affected with diphtheria attributed the disease to the offensive breath of the cowman. He had the disease for some time previously. I once saw a case of asthma which might be called milk-asthma [illegible] He had to give up his work [illegible] the paroxysm being [illegible] His widow is alive now. The [illegible] bear witness to the neglect I have described. Do you think a penal clause introduced in the sanitary Bill might prove a remedy? [illegible] has not happened to settle on the [illegible] I am, Sir, yours obediently, SAMUEL W. S[illegible], M.D.

[illegible]

N[illegible] AND M[illegible]

SIR,—[illegible] through [illegible] the JOURNAL if any member [illegible]

[illegible]

M[illegible]

FIRST AID TO THE WOUNDED.

SIR,—I would very much like to get a detailed account of the instruction given to the "police," which enables them to give "first aid" in case of accidents.—I am, etc., CANADIAN.

*** As this question is constantly being asked by members, it may be advisable to give some details. The instruction given to the police generally consists in five or six simple lectures, with practical demonstrations following them. The first lecture is a general description of the body, quite elementary in character, and the demonstration is in the use of Esmarch's triangular bandage. The second lecture is descriptive of the circulation of the blood, and the demonstration following is on the use of improvised tourniquets. The third lecture is on fractures, and the demonstration is on improvised splints. The fourth lecture is on the treatment of drowning, fainting, epileptic or drunken men, poisoning, burns and scalds. The fifth lecture is on carrying and lifting wounded people.

All these lectures are given by medical men; and it is astonishing how well they do it. In most cases, they succeed admirably and waken up much interest in medical work. Various handbooks are used, such as the *St. John's Handbook*, by Dr. Shepherd; Esmarch's *Treatment of Accidents*, by Princess Helena; and there are other books also. At the end of the course, a certificate is given on passing an examination. These classes do much to extinguish quackery, bone-setting, and the like; as it is amongst the completely ignorant that these evils spread.

ANONYMOUS MALICE.

WE have received with great regret a printed paper which is being circulated in Guernsey, purporting to consist of extracts from the JOURNAL of 1871 concerning the Hampstead Small-pox Hospital inquiry of that date. In the course of those articles, we expressed opinions adverse to the discretion of the house-surgeons in reference to some of the matters investigated. Those gentlemen were, however, undoubtedly actuated by the best motives, and all their acts were dictated by a humane zeal for the sick poor entrusted to their charge. The extracts are garbled, and give a very unfair view of the opinions which we then expressed and of the circumstances to which they related. We feel the deepest indignation at finding that, after the end of thirteen years, and for reasons of personal malice, these garbled extracts have been dug up, and are being anonymously circulated in a form evidently intended personally to injure one of the most eminent and respected practitioners of Guernsey, who was at that time connected with the hospital. The document is unfair and misleading, and it cannot be too strongly condemned. We take this opportunity of expressing our entire confidence in the gentleman who is the object of the present attack; and we feel assured that it will not only entirely fail in its obviously mischievous intention, but that the natural repulsion with which such malice must be met by right-minded persons will lead to an extension of the feeling of friendship and respect with which the gentleman aimed at is, we have reason to know, regarded, not only in Guernsey, but by many of the most eminent medical and surgical heads of the profession in England and Scotland.

WOOD-WOOL AS AN ANTISEPTIC.

SIR,—In January last I received a sample of wood-wool, as manufactured by Messrs. Essenger and Neuberger, accompanied by a printed circular, giving its chemical composition, and its combination with resinous matter, and etheric oil, imparting to it powerful antiseptic properties. After carefully reading it over, I determined to try its effects on one or two long-standing cases, which, to say the least, were both troublesome and unpleasant.

My first case was that of J. W., aged 23 years, who was confined to her bed for the past four years, suffering from scrofula of the osseous system. There were numerous profuse discharging sores, scattered all over the body, chiefly around the right elbow and hip-joints. On January 15th I applied wood-wool in its loose state, without gauze, or any other substance, to prevent its coming in direct contact with the raw surface. Its absorbent and antiseptic properties were decidedly better than anything I had used. In ten days the discharges were comparatively little, the wounds assuming a healthy granular appearance, a new and healthy circulation seemed to establish itself, and after several pieces of bone came away from those places to which it had been applied, a rapidly healing process took place, and in seven weeks nothing was to be seen but the cicatrices.

My second case was that of J. G., labourer, aged 42 years, suffering from varicose ulceration of the left leg, occupying the middle two-thirds. A great many remedies, including strapping, bandaging, rest, etc., had been used, both at home and in hospital, but without producing any permanent benefit. On February 4th I applied wood-wool as described. In twenty-three days from that date the leg was quite sound, and my patient expressed himself as feeling better than he had for years. I have applied wood-wool to wounds both incised and lacerated, and find that their tendency to heal by the first intention is greater than under any other antiseptic treatment.

I believe that its use will become general, both in hospital and private practice, for two reasons. First, it is cheap; second, it is clean, and easily applied. In colliery and machinery wounds, where there is generally a great deal of suppuration, and foul discharges in the process of healing, from the great difficulty in cleansing the parts, I should say it is the material which will give most satisfaction. T. A. MITCHELL, L.R.C.S.I.

Catford, S.E.

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